

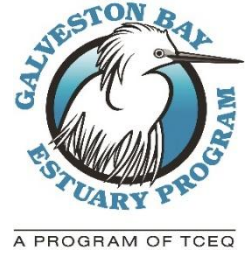
Galveston Bay Estuary Program
Fiscal 2028 Section 320/State Proposals

Water and Sediment Quality (WSQ) Subcommittee Fiscal 2028 Proposals

PROPOSAL NAME		GRANTEE	TOTAL REQUEST
1.	Nature-Based Stormwater Infrastructure Capacity Building Workshops for Lower Galveston Bay Region	AgriLife	\$88,031.00
2.	Regional Water Workforce Pathways	BPA	\$180,849.00
3.	Galveston Bay Water and Sediment Quality Project Database: Spatial and Metric Visualization for WSQ	HARC/GTRI	\$195,871.00
4.	On-Site Sewage Facility Implementation for Watershed-Based Plans	H-GAC	\$99,089.57
5.	Streamlining Pollution Reports from Observation to Response	H-GAC	\$124,177.52
6.	Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements	City of Kemah	\$300,000.00
7.	Design and Performance Metrics Decision Support for Green Infrastructure and Living Shorelines for Coastal Resilience	UH	\$275,747.00
8.	Expanded Evaluation of Micro- and Nanoplastic Pollution through Emerging Methods	UHCL/EIH	\$168,972.00
9.	Informing Contact Recreation Safety: Linking Salinity and Temperature to Fecal Indicator Organism, Enteric Virus, and Vibrio Vulnificus Occurrence in Galveston Bay	UTEP	\$199,433.00
10.	Bayou Greenways Conservation Plan Implementation - Wetlands	HPB	\$86,250.00
TOTAL:			\$1,718,420.09

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Public Participation and Education (PPE)
Secondary Subcommittee (if applicable): Water and Sediment Quality (WSQ)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Nature-based Stormwater Infrastructure Capacity Building Workshops for Lower Galveston Bay Region

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Texas A&M AgriLife Extension Service

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☐ Council of Government ☒ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

<u>Unique Entity ID (UEI) Number:</u>	DM2CDWR8LAG3
<u>Vendor Identification Number (VIN) or Tax ID:</u>	74-6000537

Contact Information:

Project Representative Name	Christie Taylor
Project Representative Phone	979-399-4009
Project Representative Email	Christina.taylor@ag.tamu.edu

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027 – August 31, 2028

Amount Requested from GBEP:

[\$]88,031

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$88,031.00
FY 2029 (09/01/2028-08/31/2029)	\$0.00
FY 2030 (09/01/2029-05/31/2030)	\$0.00
Total	\$0.00

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

[\$]

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

[Please indicate source, amount, and status (secured, potential, etc.)]

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☒ NPS-3 ☒ NPS-4 ☒
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☒ SPO-3 ☒ SPO-4 ☒
PEA-1 ☒ PEA-2 ☒ PEA-3 ☒

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

Workshops and Events (SPO2) is the priority item of the project. Working with subcommittee input to identify communities and areas in existing WBPs to host workshops that support implementation of nature-based stormwater infrastructure. Action areas SPO3 Support Regional Initiatives and SPO4 Local Government Outreach will be supported through the workshops by highlighting existing and new regional resources available for communities to begin implementation of BMPs.

Key Issues Engagement (PEA1) will be created by promoting nature-based stormwater infrastructure discussions in communities, identifying needs, and gaps in education and training in this area and providing an opportunity for training for both adults (PEA2) and high school students grades 9-12 (PEA3).

Supporting implementation of WBPs (NPS-1) and education on BMPs and their continued implementation and maintenance (NPS-3) will broadly support Plan Priority Two: Protect and Sustain Living Resources. Similarly, NPS education (NPS-2) requires coordination with the NRU and PPE subcommittees of the Council, specifically on Action SPO-3 Support Regional Initiatives included under Plan Priority Three: Engage Communities. Expanding understanding and use of BMPs in the region through workshops and speaking engagements (NPS-4) closely aligns with the Activities for Action SPO-2 Workshops and Events and will also be coordinated between the subcommittees.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☒ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☒ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☒ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☒ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

The Workshop series will include multiple topics to support NPS education and implementations of watershed-based plans, the workshops included technical assistance on BMPs and workforce development for adults and 9-12 grade students in the area of nature-based stormwater infrastructure (NbSI). The field day component and youth education workshop will introduce new audiences to existing projects and practices while spotlight some of the work that has happened in the Lower Galveston Bay Watershed. Increased scientific literacy in this field will empower both adults and students make a lasting impact on the environment and their community. We need more people trained in how to design, install and maintenance all types of NbSI.

Does the Project align with any EPA Areas of Special Interest?

- ☐ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

[If yes, please summarize how the proposal addresses EPA Areas of Special Interest.]

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The Texas A&M AgriLife Extension Service Disaster Assessment Recovery (DAR) Mitigation Branch Green Infrastructure for Texas (GIFT) program proposes hosting a minimum of 3 up to 5 workshops and events over the course of 12 months to increase knowledge and awareness of nature-based stormwater infrastructure practices for NPS reduction and community resilience.

Full Project Description (1,000 words or less):

Target Locations: Counties and Communities in the Lower Galveston Bay Region to be determined with input from the Galveston Bay Estuary Program subcommittees.

Target Audience: Elected officials, decision makers, landowners (MUDs, school districts, hospitals, churches, parks departments, etc.), 9-12 grade youth development (students and teachers), and homeowners in the region.

Workshops may include a variety of topics including nonpoint source pollution abatement, nature-based stormwater infrastructure practices and design (including a new professional development training aligned with the National Green Infrastructure Certification Program (NGICP)), soil health, and career development. The goal of these workshops is to raise awareness of the importance of nature-based stormwater management in the region and build capacity by providing more career development opportunities.

Field Day component will introduce new audiences to existing projects and practices in the region through in person visits to various project sites decided with input from Houston Galveston Area Council and other partners.

Scope of Work:

Task 1: Create new workshop material for NGICP PDH workshop presentation. Including presentation slides, handouts, agendas, professional development certificates, youth career development materials. Due December 2027

Task 2: Host a minimum of two (2) up to four (4) workshops in targeted region. Deliverables will include outreach materials, sign-in sheets, agendas, presentations, and photos of each event. Due July 2028

Task 3: Host 1-2 field day trips in the region to showcase demonstrate and introduce new stakeholders to existing practices and their functions in the community. Locations to be determined by subcommittees and WBP stakeholder groups interest. Due July 2028

Task 4: Reporting will be done on a quarterly basis starting in November 2027 and continuing through August 2028. Draft final report will be due end of July 2028 with the final report due August 31, 2028.

Project Urgency:

Building on momentum in the area. The youth career development workshops will be able to introduce more students to careers in the NbSI field than we can currently reach through the GIFT program extending our reach. Provide local PDH for NGICP professionals and promote more certified professionals in the field to better implement these types of BMPs.

Other Plans Implemented:

Workshops can include partners from other programs such as Clean Coast Texas to discuss projects in the areas and their services to local communities. Projects from the Coastal Resilience Master Plan that address NPS topics or implement nature based stormwater management can be included in the discussion of possible field day site visits.

Partners¹ and Their Roles:

TBD: We've talked to other organizations HGAC (to help promote workshops and help with the selection of field day locations) and UH Coastal Center as a possible host location site for workshops but we have not finalized any plans at this time.

Does the Project work with new, smaller communities/partnerships?

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

☐ Yes

☐ No

TBD by subcommittee and local partner discussions.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☐ No

TBD once communities are selected.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

Target counties are Brazoria, Galveston, Harris, Fort Bend, Chambers, Montgomery locations to be determined.

Projects Map

[\[Insert Map Here or Attach as an Appendix if Applicable\]](#)

Supplemental Photos/Graphics (Optional):

[\[Insert Here or Attach as an Appendix\]](#)

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$50,545.00
Fringe Benefits (18.9% plus 1272 ins.) ²	\$12,726.00
Travel	\$1,336.00
Supplies	\$1,665.00
Equipment	\$0.00
Contractual	\$0.00
Construction	\$0.00
Other	\$3,800.00
Total Direct Cost	\$0.00

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 69,072
Indirect Cost Rate for Reimbursement	26%
Total Indirect Costs	\$ 17,959

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 88,031
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

[Description of costs associated with “Other” budget category.]

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

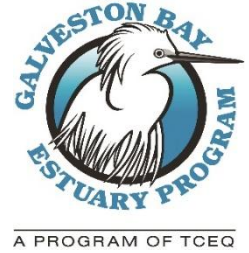
Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

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Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

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SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Public Participation and Education (PPE)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Regional Water Workforce Pathways		
Project Previously Funded by GBEP?	Yes ☐	No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Bayou Preservation Association, Incorporated
--

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

- ☐ Federal, State, or Local Government ☐ Council of Government ☐ Public ISDs or Universities
☒ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:	YVU6BNQ9HGT5
Vendor Identification Number (VIN) or Tax ID:	74-6075031

Contact Information:

Project Representative Name	Brittani Flowers
99Project Representative Phone	713-529-6443
Project Representative Email	bflowers@bayoupreservation.org

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027- May 31, 2030

Amount Requested from GBEP:

\$180,849.00

Federal ☐ State ☐ No Preference ☐
Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$62,238.00
FY 2029 (09/01/2028-08/31/2029)	\$62,238.00
FY 2030 (09/01/2029-05/31/2030)	\$56,373.00
Total	\$180,849.00

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$180,849.00

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

\$0.00

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

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<https://gbep.texas.gov/engage-communities/>

<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☐ NPS-3 ☐ NPS-4 ☐
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☒ SPO-3 ☐ SPO-4 ☐
PEA-1 ☐ PEA-2 ☒ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☒ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

Regional Water Workforce Pathways supports implementation of the Galveston Bay Plan, Second Edition by strengthening the workforce needed to protect water quality throughout the watershed. The project advances actions supporting watershed-based plan implementation, stakeholder collaboration, environmental education, and regional technical capacity by preparing licensed drinking water and wastewater operators and fostering partnerships that strengthen long-term water quality protection.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☒ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☒ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

Regional Water Workforce Pathways directly supports the Water and Sediment Quality Subcommittee priority of strengthening watershed-based plans through workforce development and technical assistance. The project expands the licensed drinking water and wastewater workforce needed to operate and maintain infrastructure that protects water quality throughout the Galveston Bay watershed. Through Regional Water Workforce Roundtables, the project also provides opportunities for utilities, workforce organizations, and other partners to exchange knowledge, strengthen partnerships, and support long-term implementation of watershed protection efforts.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

The project supports protection of water quality and public health by expanding the licensed workforce responsible for operating and maintaining drinking water and wastewater infrastructure.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

Regional Water Workforce Pathways strengthens the workforce needed to protect water quality throughout the Galveston Bay watershed by expanding access to TCEQ Class D Water Operator and Class D Wastewater Operator licenses. Through workforce development, technical assistance, and regional partnerships, the project builds long-term capacity to operate and maintain the infrastructure that supports healthy waterways and implementation of watershed-based plans.

Full Project Description (1,000 words or less):

Regional Water Workforce Pathways will strengthen the workforce needed to protect water quality throughout the Galveston Bay watershed by expanding access to TCEQ Class D Water Operator and Class D Wastewater Operator licensing. The project responds to growing workforce shortages among permitted drinking water and wastewater utilities by reducing barriers to licensure and helping build a pipeline of licensed professionals responsible for operating and maintaining the infrastructure that protects public health and water quality.

Bayou Preservation Association (BPA) will coordinate project implementation, participant recruitment, partner coordination, reporting, and evaluation. Participants will be recruited throughout the Galveston Bay watershed with an emphasis on coastal communities whose drinking water and wastewater systems directly influence the health of Galveston Bay and its tributaries.

Participants will receive guidance throughout the licensing process, including application assistance, enrollment support, tuition assistance, exam preparation, and workforce readiness services. Technical instruction will be provided through the American Water College using TCEQ-approved curriculum. Workforce readiness and career navigation services will be provided through BakerRipley and the Resilient Workforce Collaborative. Utility partners will provide input to help ensure the program remains aligned with regional workforce needs.

Throughout the project, BPA will coordinate with training providers, employers, and workforce partners to monitor participant progress, identify barriers to completion, and improve program delivery. Project performance will be evaluated using enrollment, credential attainment, participant completion, employer engagement, and participant feedback.

By increasing the number of licensed drinking water and wastewater operators entering the workforce, the project will strengthen regional capacity to operate critical water infrastructure, maintain regulatory compliance, support implementation of watershed-based plans, and protect the water quality of the Galveston Bay watershed.

Participant Recruitment and Enrollment

BPA will recruit participants throughout the Galveston Bay watershed using referrals from workforce organizations, community partners, utilities, educational institutions, and targeted outreach. Staff will assist prospective participants with eligibility screening, enrollment, financial assistance, orientation, and training registration to reduce barriers to participation.

Deliverables

- Recruit and enroll eight (8) training cohorts.
- Enroll up to ninety-six (96) participants.
- Conduct eight (8) participant orientation sessions.
- Maintain a participant tracking database documenting enrollment, attendance, and program progress.
- Provide enrollment and tuition assistance to all eligible participants.
-

Class D Water and Wastewater Operator Training

Participants will complete TCEQ-approved Class D Water Operator and/or Class D Wastewater Operator training through approved training providers. BPA will coordinate tuition assistance, registration, licensing guidance, exam preparation resources, and participant support services to improve course completion and credential attainment.

Deliverables

- Complete eight (8) training cohorts.
- Provide tuition assistance for up to ninety-six (96) participants.
- Support participants through completion of TCEQ-approved training.
- Assist participants with registration for state licensing examinations.
- Document the number of participants completing training.
- Document the number of Class D Water Operator and Class D Wastewater Operator licenses earned.
- Achieve a training completion rate of at least 70 percent.
-

Regional Water Workforce Roundtables

BPA will convene Regional Water Workforce Roundtables to strengthen collaboration among water and wastewater utilities, employers, workforce organizations, and other stakeholders. Roundtables will identify workforce needs, discuss industry trends, share best practices, strengthen employer partnerships, and improve alignment between training programs and regional workforce demand. Participants will also receive information on employment opportunities, career advancement, and continuing education resources.

Deliverables

- Host ten (10) Regional Water Workforce Roundtables.
- Engage at least twenty (20) unique utility, employer, training, and workforce partners over the project period.
- Maintain meeting summaries, attendance records, and identified workforce priorities.
- Distribute employment and career resources to all program participants.
- Track employer engagement and participant employment connections resulting from the project.

Project Evaluation and Continuous Improvement

BPA will evaluate project performance throughout implementation to measure participant success, credential attainment, employer engagement, and overall program effectiveness. Participant surveys, employer feedback, training provider input, and performance metrics will be used to identify opportunities for continuous improvement and guide future workforce development efforts.

Deliverables

- Administer participant surveys for each training cohort.
- Collect employer and training provider feedback throughout the project.
- Maintain performance metrics for enrollment, completion, credential attainment, and employment outcomes.

Project Urgency:

Water and wastewater utilities throughout the Galveston Bay watershed continue to face workforce shortages as experienced operators retire and demand for licensed professionals grows. These positions are essential to protecting public health, maintaining regulatory compliance, and operating the infrastructure that safeguards the watershed.

Bayou Preservation Association launched Regional Water Workforce Pathways in 2025 to address this need and to date has received over 340 interest forms from prospective participants. Funding during this cycle will allow BPA to build on this momentum, expand training opportunities, and continue developing the regional workforce needed to protect water quality throughout the Galveston Bay watershed. Delaying implementation risks slowing workforce development efforts at a time when utilities continue to report difficulty recruiting qualified operators.

Other Plans Implemented:

Regional Water Workforce Pathways directly supports implementation of the Galveston Bay Plan, Second Edition, particularly the Water and Sediment Quality priority of supporting watershed-based plans through workforce development and technical assistance. By increasing the number of licensed drinking water and wastewater operators, the project strengthens the technical capacity needed to protect water quality

throughout the Galveston Bay watershed. The project also supports implementation of local Watershed Protection Plans and other watershed-based planning efforts by preparing the workforce responsible for operating and maintaining drinking water and wastewater infrastructure. These licensed professionals are essential to maintaining regulatory compliance, protecting receiving waters, and sustaining long-term investments in watershed protection and restoration.

Partners¹ and Their Roles:

Bayou Preservation Association will administer the project, recruit participants, coordinate partnerships, manage participant support, oversee tuition assistance, monitor project performance, and prepare all required reporting.

BakerRipley will provide workforce readiness services, career coaching, and participant support to improve program completion and successful entry into the workforce.

Resilient Workforce Collaborative will assist with participant referrals, workforce navigation, and regional coordination to strengthen connections between participants and employment opportunities.

American Water College will provide TCEQ-approved Class D Water Operator and Class D Wastewater Operator training and licensing preparation.

Regional drinking water and wastewater utilities will support the project through employer engagement, workforce feedback, and employment opportunities that help ensure the program remains responsive to industry needs.

Does the Project work with new, smaller communities/partnerships?

☒ Yes

☐ No

Regional Water Workforce Pathways serves participants throughout the Galveston Bay watershed and is designed to benefit utilities and communities of all sizes. The project will engage smaller water and wastewater systems, workforce organizations, and regional partners that may have limited capacity to recruit, train, or retain licensed operators independently. Regional Water Workforce Roundtables will provide opportunities for these organizations to share workforce challenges, exchange best practices, and strengthen partnerships while connecting participants with employment opportunities across the watershed.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☒ Yes

☐ No

Regional Water Workforce Pathways will comply with Title VI requirements by providing Spanish-language outreach and participant materials, as appropriate, to ensure meaningful access for individuals with limited English proficiency. Recruitment materials, participant communications, and other key program information will be available in both English and Spanish.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

Regional Water Workforce Pathways will serve participants throughout the lower Galveston Bay watershed where drinking water and wastewater infrastructure directly influences the health of Galveston Bay and its tributaries.

Projects Map

[\[Insert Map Here or Attach as an Appendix if Applicable\]](#)

Supplemental Photos/Graphics (Optional):

[\[Insert Here or Attach as an Appendix\]](#)

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$97,000.00
Fringe Benefits ⁰²	\$0.00
Travel	\$3,000.00
Supplies	\$1,200.00
Equipment	\$0.00
Contractual	\$54,960.00
Construction	\$0.00
Other	\$1,100.00
Total Direct Cost	\$157,260.00

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 157,260.00
Indirect Cost Rate for Reimbursement	% 15
Total Indirect Costs	\$ 23,589.00

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 180,849.00
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☐ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☒ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

Licensing examination fees and miscellaneous meeting expenses.
--

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov



To Whom It May Concern,

BakerRipley is pleased to support Bayou Preservation Association, Inc. (BPA) and its work to protect and restore the health of the Greater Houston region's watersheds. BPA is a longstanding Houston-based nonprofit dedicated to improving regional watershed health through urban water quality monitoring, tributary-based restoration, access to green career pathways, and inclusive community engagement. BPA's work plays a critical role in improving environmental conditions and public health in historically under-resourced neighborhoods across Greater Houston.

BakerRipley and BPA share a commitment to advancing equity, workforce opportunity, and community resilience. BPA's programs align closely with our organizational priorities by strengthening local environmental infrastructure, expanding access to workforce training and career pathways, and supporting community-centered solutions. BakerRipley serves many of the same neighborhoods and residents that BPA's environmental and workforce initiatives reach. When community members gain access to green career pathways and live in healthier, more resilient environments, it advances the same goals we pursue every day — reducing barriers to economic mobility, improving quality of life, and building a more equitable Houston.

BakerRipley believes the approach Bayou Preservation Association is taking to strengthen regional resilience — by connecting residents to high-income, in-demand careers in green infrastructure — will provide meaningful benefit to the Houston region. We value BPA's practical, implementation-focused approach and its strong track record of partnership, accountability, and service to the community.

We are pleased to offer this letter of support for Bayou Preservation Association, Inc. and encourage funders and partners to invest in their important work.

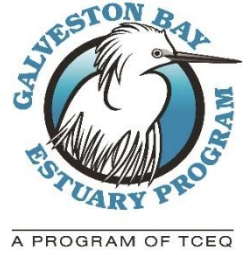
Sincerely,

Ernest Lewis III

Vice President of Community Impact & Vitality

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Monitoring and Research (M&R)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Galveston Bay Water and Sediment Quality Project Database: Spatial and Metric Visualization for WSQ

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Houston Advanced Research Center/GTRI

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☐ Council of Government ☐ Public ISDs or Universities
☒ Nonprofit ☐ Other*

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Unique Entity ID (UEI) Number:	MLKKJ9MNDN6
Vendor Identification Number (VIN) or Tax ID:	17600383156

Contact Information:

Project Representative Name	Erin Kinney
Project Representative Phone	281-364-6040
Project Representative Email	Ekinney@harcresearch.org

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027 – August 31, 2029

Amount Requested from GBEP:

\$195,871

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$109,154.00
FY 2029 (09/01/2028-08/31/2029)	\$86,717.00
Total	\$195,871

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$195,871

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

N/A

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☒ NPS-3 ☐ NPS-4 ☐
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☐ SPO-3 ☐ SPO-4 ☐
PEA-1 ☐ PEA-2 ☐ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

Expansion of the Galveston Bay Estuary Program (GBEP) Implementation Tracking Viewer to include spatial components and metric visualizations like those created for the NRU subcommittee in the [Galveston Bay Habitat Project Database](#).

The dashboards for WSQ will be tailored to the needs of GBEP and the WSQ subcommittee. As a visualization and decision support tool, the project databases will either directly or indirectly support all the priority areas for Plan Priority 1.

Specifically, this project could directly support **watershed-based plan development and implementation (NPS-1)** by providing watershed scale analysis of existing and complementary watershed-based projects. It will also support **NPS education and outreach campaigns (NPS-2)** by making project data easier to access and results easier to view and share with stakeholders.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☐ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

By integrating watershed-based plan (WBP) and best management practice (BMP) information with WSQ project details into an interactive dashboard, the project addresses the following priorities:

Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.

One of the featured maps could display all the watershed-based plans (WBP) in the Lower Galveston Bay Watershed, including those completed by GBEP and those completed by other partners. The WBP feature layer would include attribute information such as the management measures included in the WBPs, links to supporting resources (especially in the case of non-GBEP WBPs). Other projects within those WBPs could also be displayed.

Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.

If identified as a priority by stakeholders, a BMP feature layer could be developed as part of the dashboard. GBEP projects that have implemented and/or evaluated BMPs can be identified and assigned standardized attributes to support filtering, mapping, and future synthesis of BMP implementation activities.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☒ Make Investments that Address Coastal Resiliency
- ☒ Reduce Trash

The project database could be used to support any of these EPA areas of special interest if they are prioritized by the stakeholders by including filters and maps to illustrate projects that reduce nutrient pollution, invest or address coastal resiliency by supporting the Estuary Resilience Action Plan, or reduce trash through litter abatement or other programs.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

HARC and Black Cat GIS propose building an interactive Water and Sediment Quality (WSQ) project database and dashboard, modeled on their existing Galveston Bay Habitat Project Database (GBHPD).

The current implementation tracking viewer (ITV) makes it hard to find project reports, spot data gaps, compare strategies across projects, or evaluate overall progress — limiting trend analysis and priority-setting.

We propose using the GBHPD's existing structure, branding, and Survey123-based data collection framework to keep the new database consistent with the existing NRU GBHPD and allow GBEP staff to update both efficiently in near-real time.

The database will be developed through three main tasks: stakeholder needs assessment, database development and completion, and building the database pages. The completed project will provide GBEP with a sustainable, easy-to-maintain platform that turns project data into a shared, searchable resource, helping GBEP track implementation, spot trends, and plan future priorities strategically.

Full Project Description (1,000 words or less):

Need:

The Galveston Bay Estuary Program (GBEP) has funded or supported hundreds of projects in the Lower Galveston Bay Watershed. The success of GBEP is dependent on the work that supports and executes the Galveston Bay Plan. GBEP's existing implementation tracking viewer (ITV) provides a record of these investments, however GBEP's ability to identify project and data gaps, recognize successful implementation strategies, synthesize information across projects, and evaluate collective progress is limited. Project reports are not always easy to find and may not include GIS files that other projects can leverage and build upon. Enhancing these capabilities through an interactive project database will better inform stakeholder decision making and annual priority setting, ensuring that GBEP's reach will continue to grow intentionally and in-sync across subcommittees.

This project supports WSQ's annual priorities of supporting management measures and watershed-based plans (WPBs) and implementation and evaluation of best management practices (BMPs) that address point and nonpoint source pollution by improving how watershed planning and BMP implementation information is organized, accessed, and synthesized. While this project will not develop new WBPs or conduct BMP evaluations, it will enhance the value of existing planning and implementation efforts by integrating WBPs, management measures, and GBEP-funded BMP projects into an interactive implementation database. The database will enable stakeholders to compare management approaches across watersheds, summarize BMP implementation by category and watershed, identify gaps, and access associated project reports and resources. By providing a regional perspective on WBP and BMP implementation, the dashboard will support adaptive management, facilitate synthesis of lessons learned across projects, and better inform future watershed planning, BMP implementation, and technical assistance efforts.

Methods:

This project will leverage the structure and design of the recently completed Galveston Bay Habitat Project Database (GBHPD) and many of the processes, graphs, and branding elements created for that project. The GBHPD integrates project details with spatial information, supporting datasets and documents, financial and partner information, Plan Priorities supported, and complimentary datasets that provide additional context. The data are maintained and updated easily by GBEP staff through a custom questionnaire supported by ESRI's Survey 123. The GBHPD and the new WSQ database will use the same Survey 123

framework, allowing GBEP staff to update project information efficiently and keep the databases current in real-time.

The exact features and visualizations provided by the new portals would be customized to the needs and priorities of the WSQ subcommittee and GBEP staff. As an ESRI-based platform, the databases will support interactive maps, geospatial datasets, summary statistics, graphs and figures of project overlaps and trends, and fully searchable project details with links to supporting documents and resources.

Task 1: GBEP and Stakeholder Needs Assessment

The dashboard will be designed around stakeholder information needs to ensure the resulting tools directly support subcommittee planning, implementation tracking, and decision making. The team will meet with GBEP stakeholders at subcommittee meetings or in a virtual setting to identify how they want to use the database with questions like:

- What metrics are most important (WBPs and phase [planning, implementation], projects supporting WBPs, point and nonpoint source pollution project locations, monitoring datasets, etc) and what questions do they want to answer?
- What data will help WSQ better understand how they are meeting GBEP priorities?
- What data visualizations will illustrate the value of the WSQ projects?

Task 2: Development of the Database

The team will begin with ITV data, coordinating with GBEP staff to obtain additional project and spatial information and then reaching out to project leads to request missing data, reports, maps, or images. As needed, project files will be converted or updated, back to 2005. Key steps include:

- Gathering project files back to 2005 and completing records as needed
- Identifying which project details will answer the questions most valued by WSQ
- Building a Survey 123 form that will standardize project details to support the maps and visualizations that address the questions from WSQ

Task 3: Building the Database and Dashboard

The team will build a multi-page database framework that supports the information most valued by WSQ subcommittee stakeholders. The database will utilize the same structure and design elements of the GBHPD to facilitate a cohesive user experience and quality of data. The database will be hosted and accessible through the Regional Monitoring Database. Pages will be tailored to the needs of WSQ using the stakeholder suggestions and key questions. Potential pages could include:

- Landing page – including summary statistics of all WSQ projects, a map with WSQ specific features, and some visualizations of the most important metrics (Figure 2)
- Facts and Figures – graphs/charts specific to WSQ and with an annual filter option (Figure 3)
- Example graph – breakdown of projects by plan priority and lead organization (Figure 4)
- Explore Map – including WSQ WBP projects (Figure 5), possibly including GBEP habitat conservation and restoration areas or monitoring locations
- Search Projects – fully searchable list of all projects with specific WSQ key-words available for filtering and downloading in multiple formats (Figure 6)
- FAQ – including virtual tours of each page, downloading instructions, definitions, additional resources, and a contact link to GBEP

Benefits:

The proposed implementation dashboard will provide GBEP with a sustainable, user-friendly platform for organizing, maintaining, and communicating project information. Building on the proven framework of the Galveston Bay Habitat Project Database, the database will increase access to project information, and enable stakeholders to more easily identify trends, synthesize information across projects, and support future planning and priority setting. The standardized Survey123 workflow will allow GBEP staff to efficiently

maintain project information over time while preserving institutional knowledge and ensuring the database remains a valuable decision-support resource for partners, researchers, and stakeholders.

By bringing WBPs, management measures, and BMP implementation into a common decision-support framework, the WSQ database will help stakeholders learn from past projects, strengthen planning, and accelerate the implementation of effective water quality solutions throughout the Galveston Bay watershed.

Project Urgency:

Currently, it is difficult to show off the project accomplishments of GBEP and the subcommittees. Summary statistics, changes over time, and integration of plan priorities, metrics, and project area are difficult, if not impossible, to display with current tools. GBEP and the stakeholders' will benefit from the ability to visually show and explain the impacts of their work to secure grant funding.

Other Plans Implemented:

N/A

Partners¹ and Their Roles:

HARC will manage the grant, budget, subcontract, communications with GBEP, and reporting. HARC will host the complete database on the Regional Monitoring Database website where the current NRU Galveston Bay Habitat Project Database is hosted. HARC will create and host the virtual tours on their Vimeo channel.

Black Cat GIS will gather project information from GBEP and stakeholders, identify and fill data gaps through further research, creation of GIS files, and standardization of metrics. They will create project information forms in Survey 123, and build the database and figures, graphs, and maps.

Both organizations will gather information on stakeholder and GBEP needs and preferences, review designs for data visualizations, troubleshoot the final database, identify and gather supplemental information for visualizations, and optimize the user experience.

Does the Project work with new, smaller communities/partnerships?

☐ Yes

☒ No

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☒ No

Latitude/Longitude (Optional):

N/A

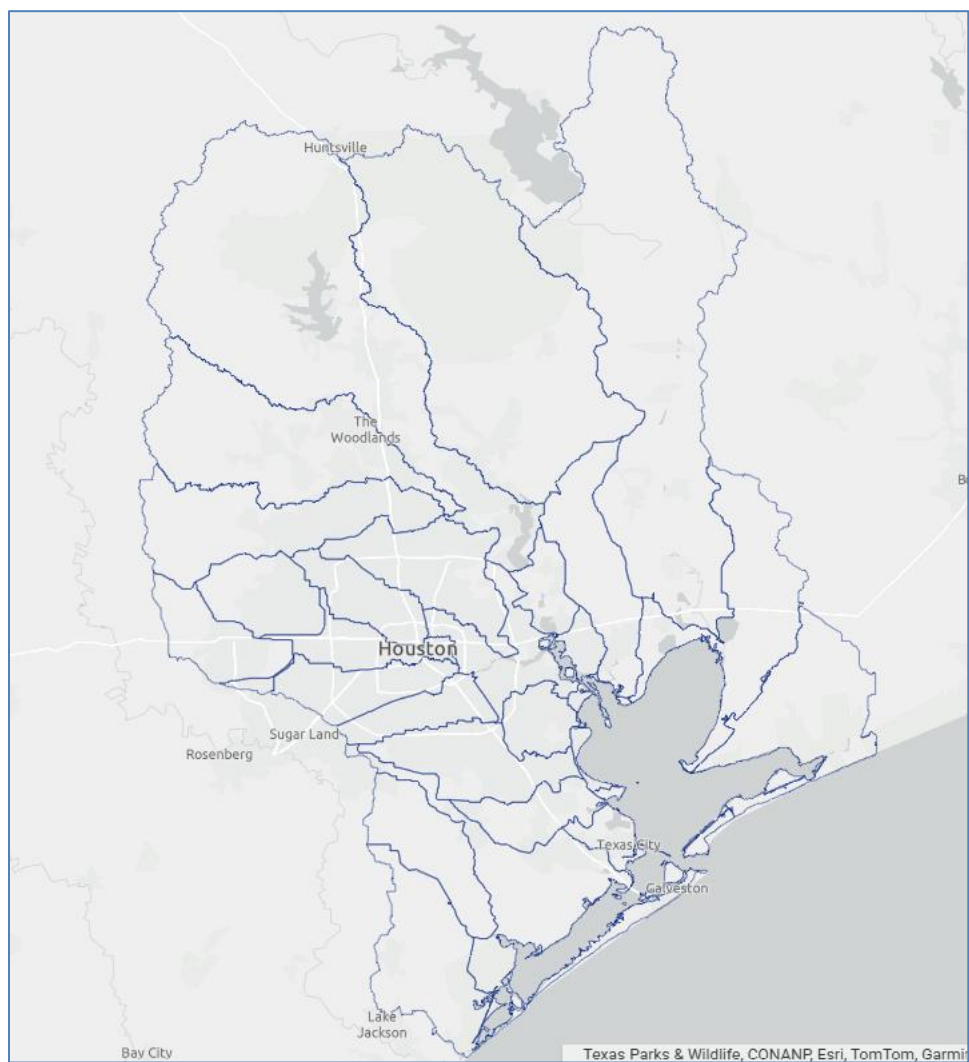
Location:

All GBEP service area: Lower Galveston Bay Watershed

Projects Map

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

Map 1. The Lower Galveston Bay Watershed with GBEP subwatersheds.



Supplemental Photos/Graphics (Optional):

Figure 1. Screen shot of GBEP Implementation Tracking Viewer and its features. The project locations are displayed as dots over the GBEP subwatersheds map, and a dialog box with project title and brief summary can be viewed.

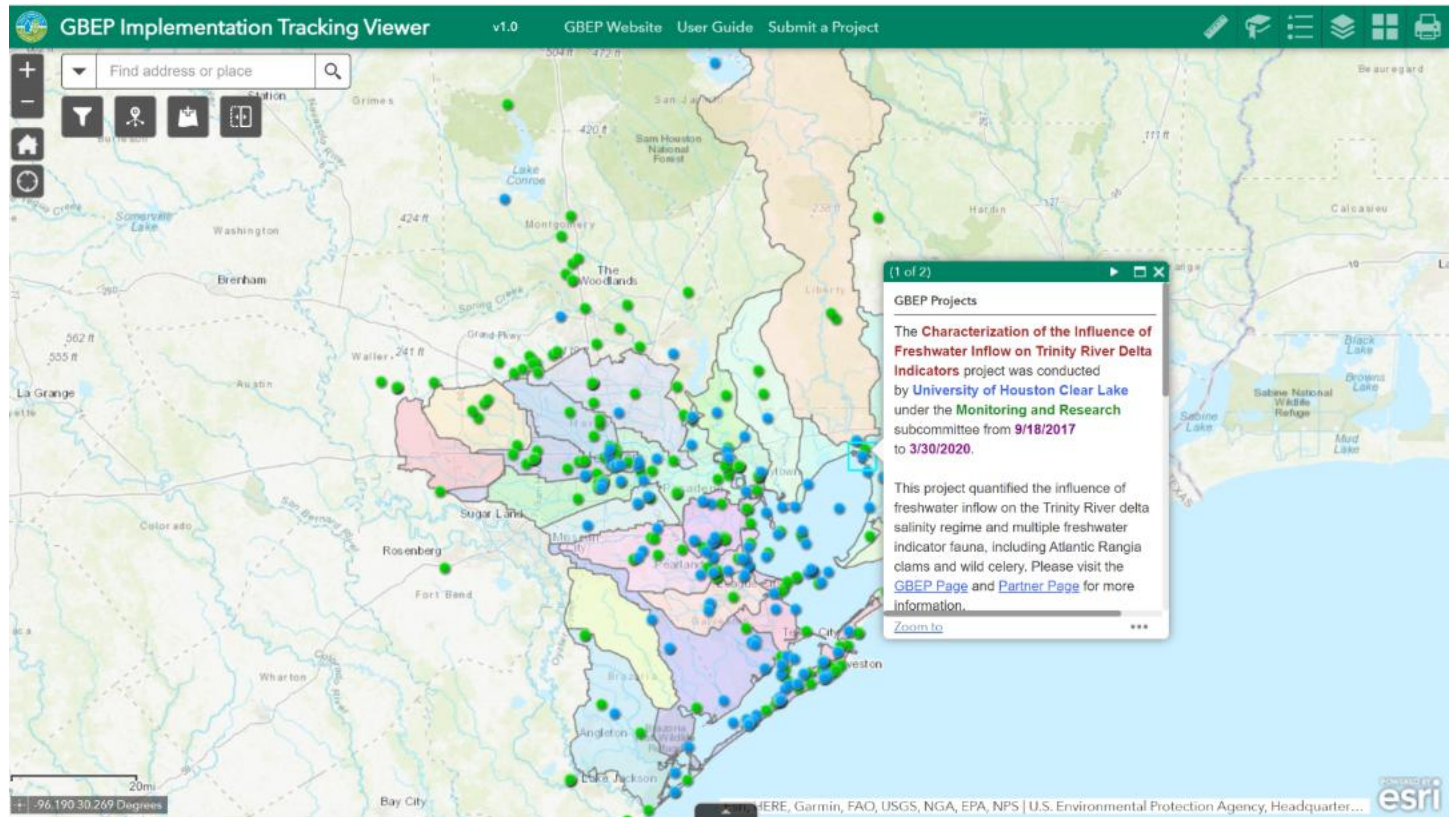


Figure 2. Screen shot of Home page of Habitat Project Database created for and with the NRU Subcommittee. This page includes features and metrics that were most important to the NRU subcommittee stakeholders, including acres impacted, focal species, and number of projects by subwatershed.

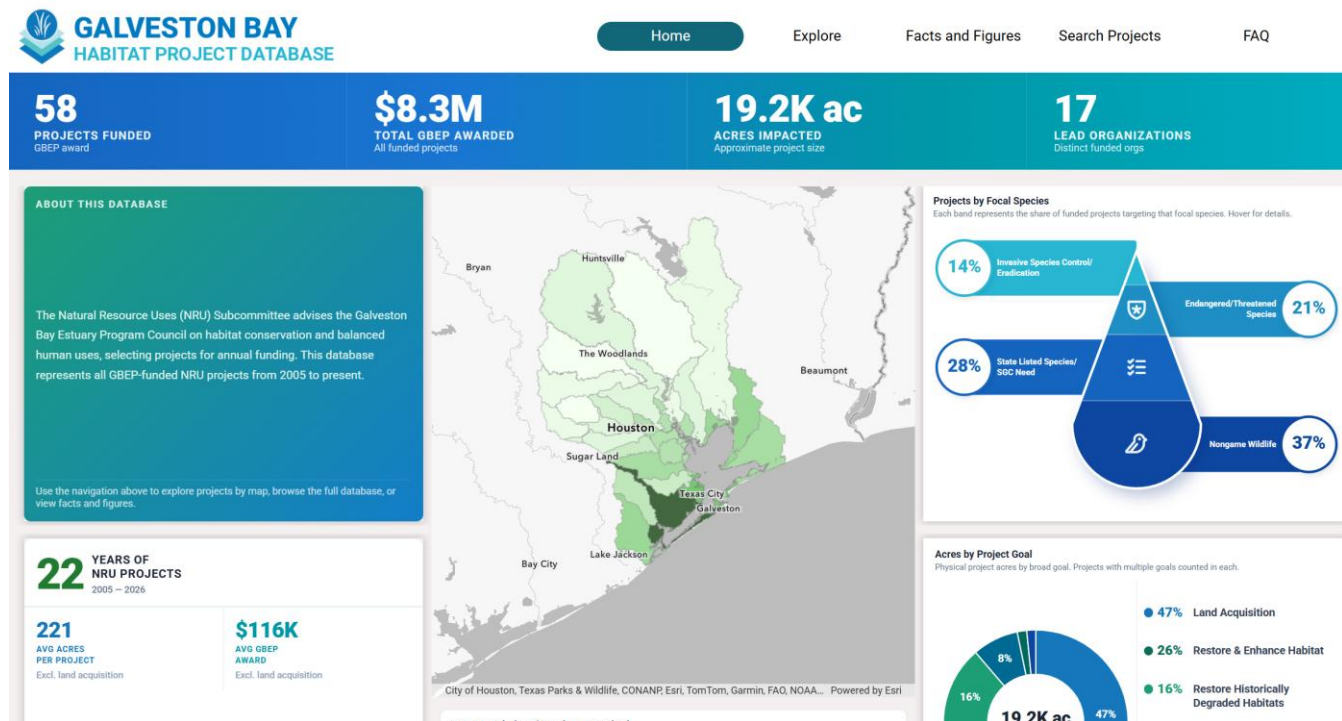


Figure 3. Screen shot of the NRU Facts and Figures page. The years displayed can be adjusted at the top and there are currently eight graphs/figures covering a range of NRU-specific metrics. This graph shows how many projects involved different combinations of habitat types. It could be altered to fit WSQ specific metrics.

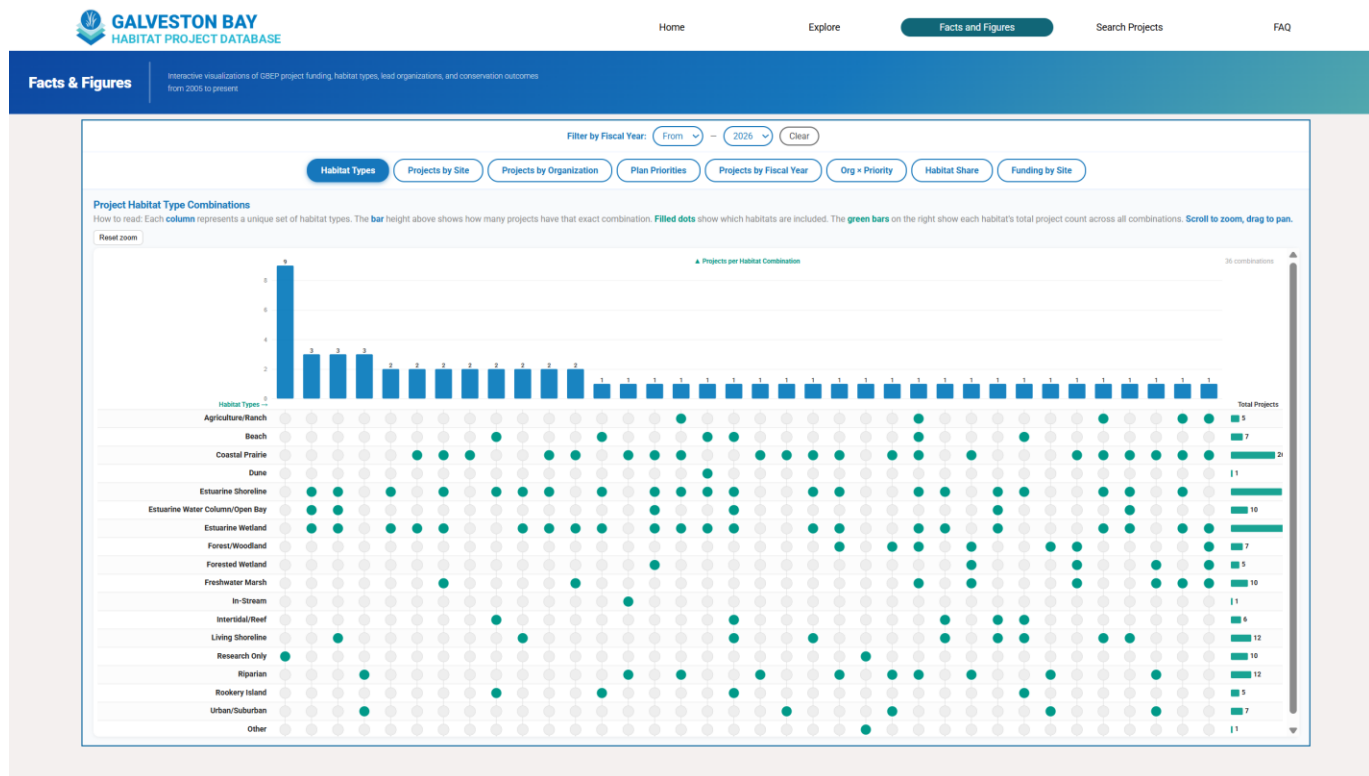


Figure 4. Screen shot of the Plan Priorities figure from the Facts and Figures page of Habitat Project Database created for and with the NRU Subcommittee. This graphic identifies how many of each of four Plan Priorities and ten Action Plans were supported by NRU projects between 2005 and 2026.

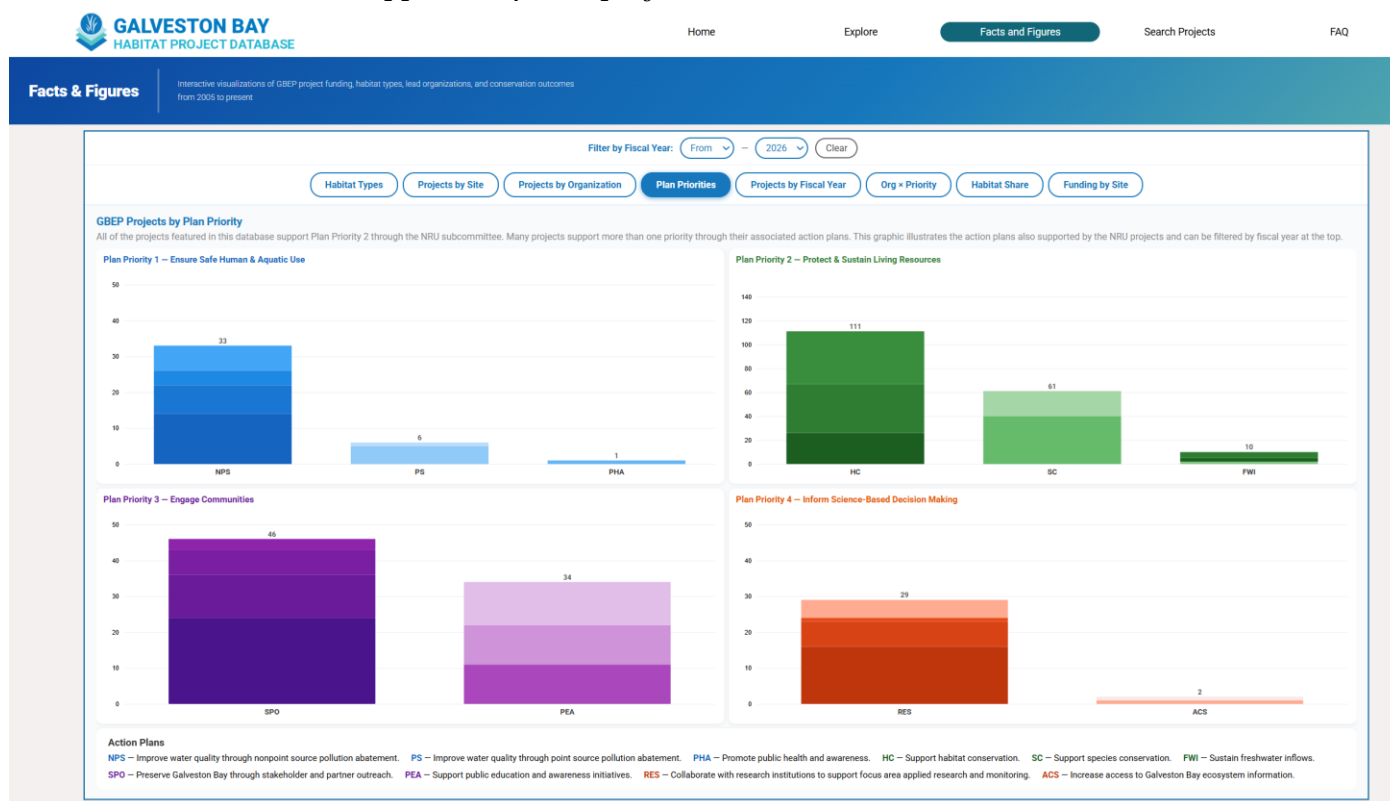


Figure 5. Screen shot of the Explore page, which shows a map of NRU projects along with complimentary datasets like restored oyster reefs and parkland. This would be customized with WSQ projects and supporting datasets.

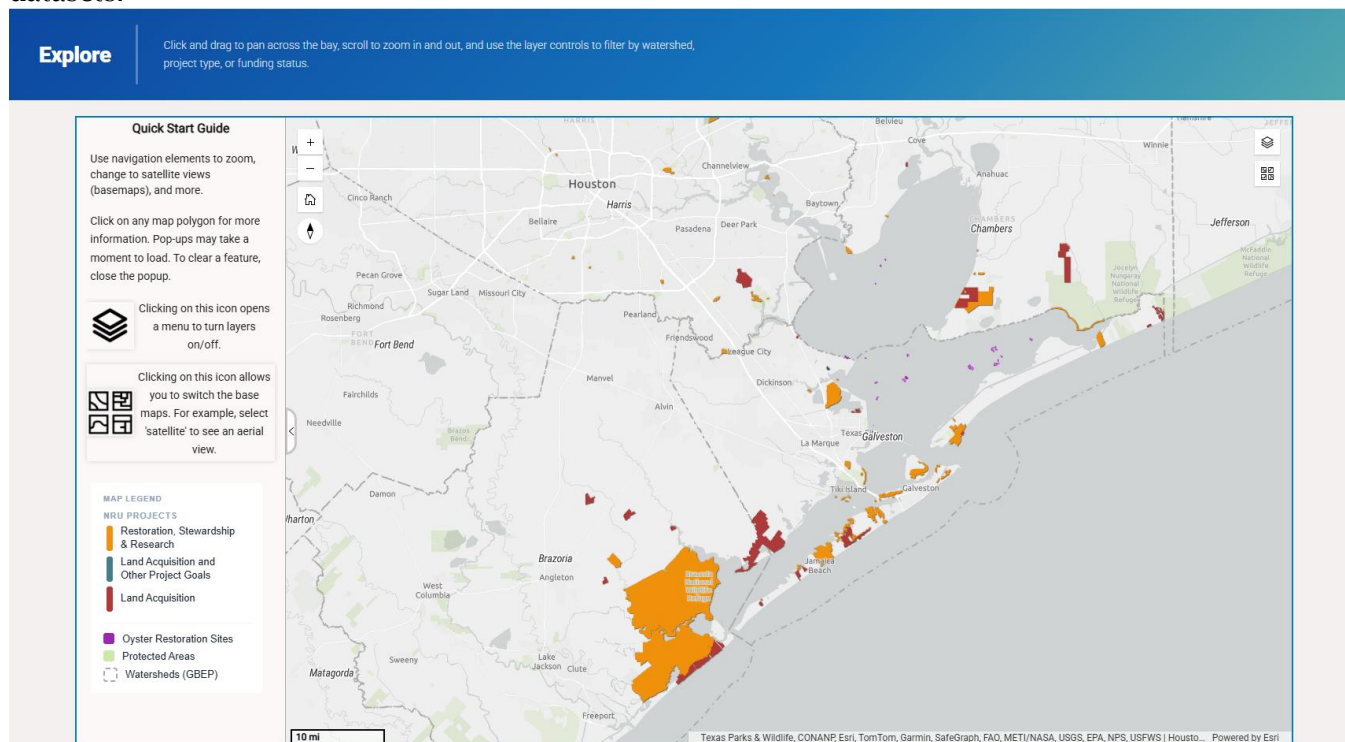


Figure 6. Screen shot of the NRU Search Projects page, which shows all NRU projects back to 2005. Project details have been added from the original GBEP files along with additional information including supplemental documents, GIS files, and custom keywords. From this page, the projects can be filtered, sorted, and searched by keyword, including: habitat types, project type, phase of completion, and GBP Plan Priorities and Action Plans supported. It also includes a reflections and outcomes sections for easy reference to lessons learned.

Galveston Bay HABITAT PROJECT DATABASE

Home Explore Facts and Figures **Search Projects** FAQ

Search Projects Browse, filter, and download all GBEP-funded NRU projects. Search by organization, habitat type, fiscal year, or project goal.

Search by name or organization... **Search** **Clear all** 58 projects **Filters**

58 projects Sort: Award **CSV** **GeoJSON**

North Deer Island Protection and Restoration Project Phase II
Texas Parks and Wildlife Department
\$650K **FY 2006** **75 ac**
awarded year area
Beach Estuarine Shoreline Estuarine Wetland
Rookery Island Physical Project Galveston

Conservation Assistance Program
Galveston Bay Foundation
\$600K **FY 2011** **10K ac**
awarded year area
Agriculture/Ranch Beach Coastal Prairie
Estuarine Shoreline Estuarine Wetland
Forest/Woodland Freshwater Marsh Riparian
Physical Project Land Acquisition Brazoria

9th Addition to the Coastal Heritage Preserve
Texas Parks and Wildlife Department
\$576K **FY 2024** **148 ac**
awarded year area
Coastal Prairie Estuarine Shoreline
Estuarine Wetland Freshwater Marsh
Physical Project Land Acquisition Galveston

Middle Armand Bayou Protection Project
Armand Bayou Nature Center
\$500K **FY 2022** **1K ac**
awarded year area
Coastal Prairie Forest/Woodland
Forested Wetland Freshwater Marsh Riparian
Physical Project Land Acquisition Harris

Salt Bayou Acquisition and Restoration Project
Galveston Bay Foundation
\$390K **FY 2022** **25 ac**
awarded year area
Coastal Prairie Physical Project
Land Acquisition Galveston

Herman Brown Park Riparian Restoration and Community Engagement Project

North Deer Island Protection and Restoration Project Phase II
North Deer Island

\$650K **\$2.3M** **FY 2006** **75 ac**
GBEP AWARD TOTAL PROJECT COST FISCAL YEAR APPROX. ACRES

Beach Estuarine Shoreline Estuarine Wetland Rookery Island Physical Project Completed ACTION PLANS: HC-1 HC-2 HC-3 SC-1 SPO-1 SPO-2

PROJECT ABSTRACT
This was the final phase of a larger effort to the entire perimeter of North Deer Island, the most important colonial waterbird rookery in the Galveston Bay System, through a system of onshore and offshore breakwater structures. Partners barged in 24,100 tons of rock from a quarry in Missouri using the Mississippi River and the Intracoastal Waterway as a route to create 6,450 feet of stone breakwater and armored shoreline. The planning, engineering, and construction costs for the eight-year endeavor totaled more than \$3.2 million dollars. The partners worked for nine years to armor approximately 1.7 miles of North Deer Island's rapidly eroding shoreline. Erosion was destroying highly-productive habitat for up to 30,000 nesting pairs of birds using this island, including the brown pelican, and two priority bird species the threatened reddish egret and white-faced ibis- plus 16 other bird species on the Audubon Society's bird island sanctuary.

PROJECT DETAILS

Counties impacted Galveston
General location West Bay, Galveston County
Lead organization Texas Parks and Wildlife Department
Lead implementer type Federal, State, or Local Government
Organization link [Open link](#)
Current stage Completed
GBEP contract number 582-06-77782

FUNDING

GBEP award \$650K
Total project cost \$2.3M
Cash leveraging \$683,300
Leveraging notes \$653,300- USACE Coastal Wetlands Planning, Protection and Restoration Act \$30,000 - USFWS Texas Coastal Program

CONSERVATION FOCUS

Broad project goals Restore/Enhance Habitat
Landscape / habitat type Beach, Estuarine Shoreline, Estuarine Wetland, Rookery Island
Project scale Physical Project
Approx. project size 75 ac
Focal species targeted Endangered/Threatened Species, State Listed Species/Species of Greatest Conservation Need, Nongame Wildlife

IMPLEMENTATION

Key design elements Placed 24,100 tons of limestone to create 1.7 miles of durable erosion control structures. 40 Volunteers planted smooth cordgrass during Marsh Mania. Erosion along the steep northwestern shoreline will be stanchied by a rock revetment built directly on the bank. Along the northern shoreline, seven rock "groins," jetties protruding perpendicular to the shore, will lessen erosion by disrupting parallel longshore currents. The southern and southwestern shorelines will be protected by continuation of the breakwaters constructed during Phase I, totaling 4,600 and 3,600 feet of protection, respectively. In addition to erosion mitigation, these rock structures also provide substrate for oyster spat and other encrusting organisms, leading to further reef development. Along the southwestern shoreline, sediments leftover from dredging of the breakwater channel will be deposited between the breakwater and the island shoreline and graded to an elevation suitable for marsh development.

PARTNERS

Figure 7. Screen shot of the NRU FAQ page, which includes links to virtual tours for each page of the Habitat Database, downloading instructions, information on GBEP, definitions, and contact information for questions.

Galveston Bay HABITAT PROJECT DATABASE

Home Explore Facts and Figures Search Projects **FAQ**

Frequently Asked Questions (FAQ) Answers to common questions about Galveston Bay Estuary Program projects, funding, and how to use this site.

Virtual tour

HARC has prepared several virtual tour videos to highlight the features of the Galveston Bay Habitat Project Database. Click on the page name below to get a brief explanation of features and how-to tips.

- [Home Page and Frequently Asked Questions \(FAQs\)](#)
- [Explore Page](#)
- [Facts and Figures Page](#)
- [Search Projects](#)

Exporting data

- [How do I export data?](#)
- [I just want an Excel file - how do I download that?](#)

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$44,4486.00
Fringe Benefits (48%) ²	\$21,353.00
Travel	\$377.00
Supplies	\$0.00
Equipment	\$0.00
Contractual	\$58,650.00
Construction	\$0.00
Other	\$6150.00
Total Direct Cost	\$131,017.00

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 122,367.00
Indirect Cost Rate for Reimbursement	53%
Total Indirect Costs	\$ 64,854.00

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$195,871
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☒ **Other:** **Modified Total Direct Cost (MTDC)** means all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$50,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs, and the portion of each subaward in excess of \$50,000.

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

N/A

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

Black Cat GIS and Biological LLC

Amanda Hackney

Owner/ Consultant
3907 Spring Circle Dr E
Pearland, TX 77584
(936)554-9033
a.hackney@blackcatgis.com

7/17/2026

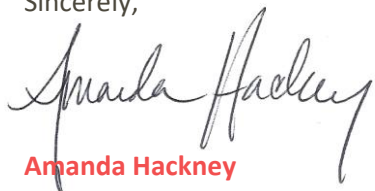
Dear Galveston Bay Estuary Program Proposal Review Committee,

On behalf of Black Cat GIS and Biological, we express our commitment to partnering with the Houston Advanced Research Center (HARC) as a partner on the **Spatial and Metric Visualization Project Databases for WSQ and M&R** project proposal.

Black Cat was proud to partner with HARC previously on the recently completed Galveston Bay Habitat Project Database highlighting the projects of the Natural Resource Uses (NRU) subcommittee. We are excited to replicate the success of the Habitat Project Database by working on sister databases for other subcommittees. We will provide the same support/ roles to HARC as before: 1) collaborating with HARC to write and edit the QAPP; 2) obtaining datasets by coordinating with GBEP staff to obtain relevant spatial information; 3) reaching out to additional partners to request spatial data, associated reports, or images; and 4) building the portal framework using the stakeholder suggestions and incorporating the updated shapefiles, project dataset, and other spatial datasets that complement the GBEP datasets.

Black Cat has collaborated with HARC for several years on multiple GIS projects and we would be honored to work on this project should it be awarded funding. We agree to committing our resources and staff as outlined in HARC's proposal.

Sincerely,



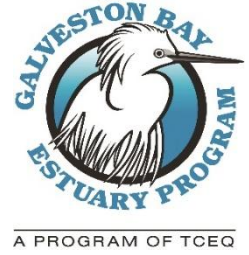
Amanda Hackney

Owner, Black Cat GIS and Biological LLC
a.hackney@blackcatgis.com



Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Choose an item.
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

On-site Sewage Facility Implementation for watershed-based plans
Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Houston-Galveston Area Council

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☒ Council of Government ☐ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:	VZFJDZCKG8C7
Vendor Identification Number (VIN) or Tax ID:	1-74-155-7575

Contact Information:

Project Representative Name	Kendall Guidroz
Project Representative Phone	713-993-2469
Project Representative Email	Kendall.guidroz@h-gac.com

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

2-3 years

Amount Requested from GBEP:

\$99,089.57

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$99,089.57
FY 2029 (09/01/2028-08/31/2029)	\$0.00
FY 2030 (09/01/2029-05/31/2030)	\$0.00
Total	\$99,089.57

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$99,089.57

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

H-GAC has a Supplemental Environmental Project (SEP) from the TCEQ to repair or replace failing OSSFs as part of the Homeowner Wastewater Assistance Program. While the funding is inconsistent, participants in this project who have a failing system and qualify for the program can be added to the waitlist to received assistance.

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☒ NPS-3 ☒ NPS-4 ☒
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☒ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☒ SPO-3 ☐ SPO-4 ☒
PEA-1 ☒ PEA-2 ☒ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 Support Watershed-Based Plan Development and Implementation

- H-GAC leads the development and implementation of multiple watershed protection plans and total maximum daily load projects in the region. Failing and malfunctioning OSSFs have been identified in all of the region's watershed-based plans and the *Houston-Galveston Regional Water Quality Management Plan* as a major contributor of fecal coliform bacteria and nutrients to local waterways. Part of the implementation of these plans includes addressing these failing wastewater systems. While this project would not be able to fund repairs or replacements of OSSFs it would directly implement recommendations from these watershed-based plans through workshops for homeowners, a course for realtors, and providing for no-cost system pumpouts for systems.

NPS-2 Support Nonpoint Source Educations and Outreach Campaigns, and NPS-4 Host Nonpoint Source Workshops

- H-GAC provides education and outreach throughout the Houston-Galveston region as part of its existing Homeowner Wastewater Assistance Program. Education programs, such as H-GAC's homeowner OSSF education course, teach homeowners how to properly operate and maintain their on-site sewage facilities. In addition, H-GAC would work with project communities to make them aware of current outreach materials and encourage their utilization, helping to adapt the resources for the community as needed. This project would also allow H-GAC to update a course specifically for realtors so they would be more aware when discussing properties with potential sellers or buyers, and to create a template for outreach/education materials they could share with clients or HOAs.

NPS-3 Implement NPS Best Management Practices

- The repair or replacement of failing on-site sewage facilities, or connection of households to service lines, has been identified as a recommended Nonpoint Source Best Management Practice in numerous watershed protection plans and TMDL I-Plans. While this project does not provide enough funding for system repairs and replacements, it would provide system pumpouts for qualifying homeowners. OSSF pumpouts are a critical component of proper OSSF maintenance and can help to delay full system failure.

PHA-3 Improve Contact Recreation Safety Through Watershed-Based Plans

- There are currently nearly two dozen watershed-based plans in the Houston-Galveston region that are completed or in process. These plans address bacteria impairments due to elevated levels of fecal indicator bacteria. Failed or malfunctioning on-site sewage facilities have consistently been identified as one of the leading potential sources of fecal coliform bacteria entering local waterways through nonpoint sources.

Plan Priority 3: Engage communities

SPO-2 Workshops and Events

- Homeowner education is a key component of H-GAC's Homeowner Wastewater Assistance Program. H-GAC provides a homeowner education course that provides information such as the components of an on-site sewage facility, the operations and maintenance of these systems, and symptoms of failure. As part of this project, homeowners will be required to attend one of these courses to be eligible for a system pumpout. H-GAC will also work to finalize and receive TREC approval of a course specifically for real estate agents.

SPO-4 Local Government Outreach

- This project would have a community focus and work in at least two different communities. H-GAC will coordinate with staff and representatives from local governments (city or county) or other partner agencies in these communities to promote the project and to provide educational resources for the communities to distribute, including those previously created under the Coastal Communities project. Additional partner agencies may include management districts or HOAs.

PEA-1 Key Issue Engagement

- Proper maintenance is critical for the continued operation of an on-site sewage facility. Failure to properly operate and maintain these systems can result in malfunctions that may release untreated or partially-treated sewage. This surfacing sewage can then contaminate groundwater or enter local waterways through runoff. H-GAC's homeowner education programs focus on the proper maintenance of these systems, recognition of signs of failure, and behaviors to be implemented to prevent failure of these systems (i.e., water conservation, proper disposal of fats/oils/grease, household chemicals, etc.). The course specifically educates residents on the impact of improperly treated sewage on local water quality, including the effect on contact recreation and public water supply uses of these water resources.

PEA-2 Adult Education

- Educating homeowners on the proper operation and maintenance of their on-site sewage facilities is an important component of H-GAC's work in the region. Education programs on this topic are offered in coordination with various watershed-based plans as well as projects such as the Coastal Communities program. By working with real estate agents, the project would also aim to develop resources to educate new homeowners who may not be familiar with OSSFs.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☒ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

This project will implement the best management practices of addressing failing OSSFs through community education workshops and direct assistance through OSSF pumpouts for qualifying homeowners. Technical assistance will be offered with outreach and education materials for community partners. The development of an OSSF course for realtors will also provide future education for these professionals.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

In addition to the bacteria load reductions from addressing failing OSSFs, which is often the focus of watershed-based plans, failing OSSFs are also a source of Nitrogen, Phosphorus, and Total Suspended Solids loading into a watershed.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

This project will work to implement watershed-based plans in the lower Galveston Bay watershed by addressing the key issue of failing on-site sewage facilities. Implementation efforts will include OSSF Educational Workshops for homeowners and the development of one for realtors, coordination with community leaders to increase OSSF awareness, and direct assistance through no-cost system pumpouts for qualifying homeowners in project communities.

Full Project Description (1,000 words or less):

Throughout the region, one of the most significant water quality issues faced is impairments due to elevated levels of bacteria. Many affected water bodies are unsuitable for contact recreation activities. Numerous watershed-based plans (WBPs) are in place or in development to address these issues.

On-site sewage facilities, or OSSFs, are decentralized wastewater treatment options for those who are unable to connect to a centralized sewer collection system. H-GAC's OSSF permit database contains 42,526 permit records for on-site sewage facilities in the Lower Galveston Bay Watershed, with an estimated 58,851 unpermitted ("grandfathered") systems (101,377 total). With a statewide estimated failure rate of 12%, that would suggest potentially 12,166 failed or malfunctioning on-site sewage facilities within the Lower Galveston Bay watershed. With such a significant number of failed OSSFs, these systems are a major contributor to fecal bacteria and nutrients in our waterways. Failing OSSFs are identified in the *Regional Water Quality Management Plan* and all regional WBPs as a major contributor to the area's water quality issues. However, due to the cost associated with repairing or replacing failing OSSFs, and the logistics required for permitting and installation, it is a best management practice that is often difficult to implement.

H-GAC operates a successful Homeowner Wastewater Assistance Program (HWAP) that assists vulnerable residents, specifically low-to-moderate-income homeowners, by covering the full cost to repair or replace a failing OSSF. The cost to repair a malfunctioning OSSF can cost over \$8,000 and installation of a new OSSF ranges from \$15,000 to \$25,000. This can prevent many homeowners from being able to address a failing system without assistance, but unfortunately funding for the HWAP is limited and the program currently has a long waitlist while need for assistance with failing systems continues to grow in our area.

While covering the full costs of repairs or replacements is not feasible for this funding source, this project proposes to address OSSFs and reduce the risk of failure through both direct and indirect strategies. Project work would be community-focused and take place in communities inside watersheds with approved watershed-based plans. Within at least two of these communities, H-GAC would:

Coordinate with local partners to distribute educational/outreach materials

H-GAC will coordinate with local partners, including city or county governments, nonprofits, or management districts in project communities, to host the homeowner workshops and provide resources for homeowner education. Resources may include those available through the Coastal Communities website, the EPA, or other partners. Depending on community need, new resources may be developed or existing Coastal Communities resources may be edited.

Host Homeowner Education Workshops

H-GAC will coordinate with local partners to provide at least 1 Homeowner Education Workshop in each of the communities this project works with. Additional workshops may be provided if needed or upon request in the project communities as funding allows.

Provide no-cost OSSF pumpouts for qualifying workshop attendees

H-GAC will provide up to 50 OSSF pumpouts at no cost to residents who reside in the project communities, attend a workshop, and meet HWAP requirements. While pumpouts do not remove a failing OSSF as a pollution source, they are a critical part of routine maintenance that can keep a system from failing, or buy older systems more time before they fail. Systems that require more assistance can also be added to the HWAP waitlist after the pumpout.

Additionally, new homeowners not familiar with OSSFs are a potential audience that needs to be better engaged to prevent failures, so with this project H-GAC will:

Update an OSSF course specifically for realtors

H-GAC will create an OSSF course specifically for realtors that meets requirements of the Texas Real Estate Commission (TREC). Getting TREC approval for the course will allow H-GAC to offer education credits for the course and encourage realtors to attend workshops and become more knowledgeable so they can better inform future homebuyers of the factors to consider when purchasing a home with an OSSF.

Develop a packet with information about OSSFs for new homeowners

This packet would include information on OSSFs, maintenance needs, potential costs, and other relevant information. The packet could then be distributed to new homebuyers with OSSFs by realtors, development companies, HOAs, cities, or counties.

Together, these efforts can reduce the risk of future OSSF failures and work toward reducing fecal bacteria loads in local waterways.

Project Urgency:

N/A

Other Plans Implemented:

Specific watershed-based plans in the Lower Galveston Bay watershed include:

- The Bacteria Implementation Group (BIG) TMDL and I-Plan
- Chocolate Bay (Chocolate Bayou, Mustang Bayou, and Halls Bayou TMDLs) TMDLs and I-Plan
- Cotton Bayou TMDL (in development)
- Dickinson Bayou TMDL and I-Plan
- Upper Texas Gulf Coast Oysters TMDL and I-Plan
- Armand Bayou WPP
- Bastrop Bayou WPP
- Brays/Sims Bayou WPP (in development)
- Cedar Bayou WPP
- Clear Creek WPP
- Dickinson Bayou WPP
- Double Bayou WPP
- Greens Bayou WPP (in development)
- Highland/Marchand Bayou WPP
- Westfield Estates WPP

Addressing OSSFs is also a primary aspect of Houston-Galveston Region Water Quality Management Plan, and OSSFs are listed as a significant source of NPS pollution in the Texas Coastal Management Plan.

Partners¹ and Their Roles:

N/A

Does the Project work with new, smaller communities/partnerships?

☐ Yes

☒ No

Project communities have not yet been chosen, and might include new or smaller communities and partnerships, but that cannot be guaranteed at this time.

Is the project subject to Title VI requirements?

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☒ Yes

☐ No

The OSSF Homeowner Education Course, as well as educational and promotional materials are available in both English and Spanish, and only location-specific edits would require further translation. If necessary, in-person translation services can be secured for the workshops.

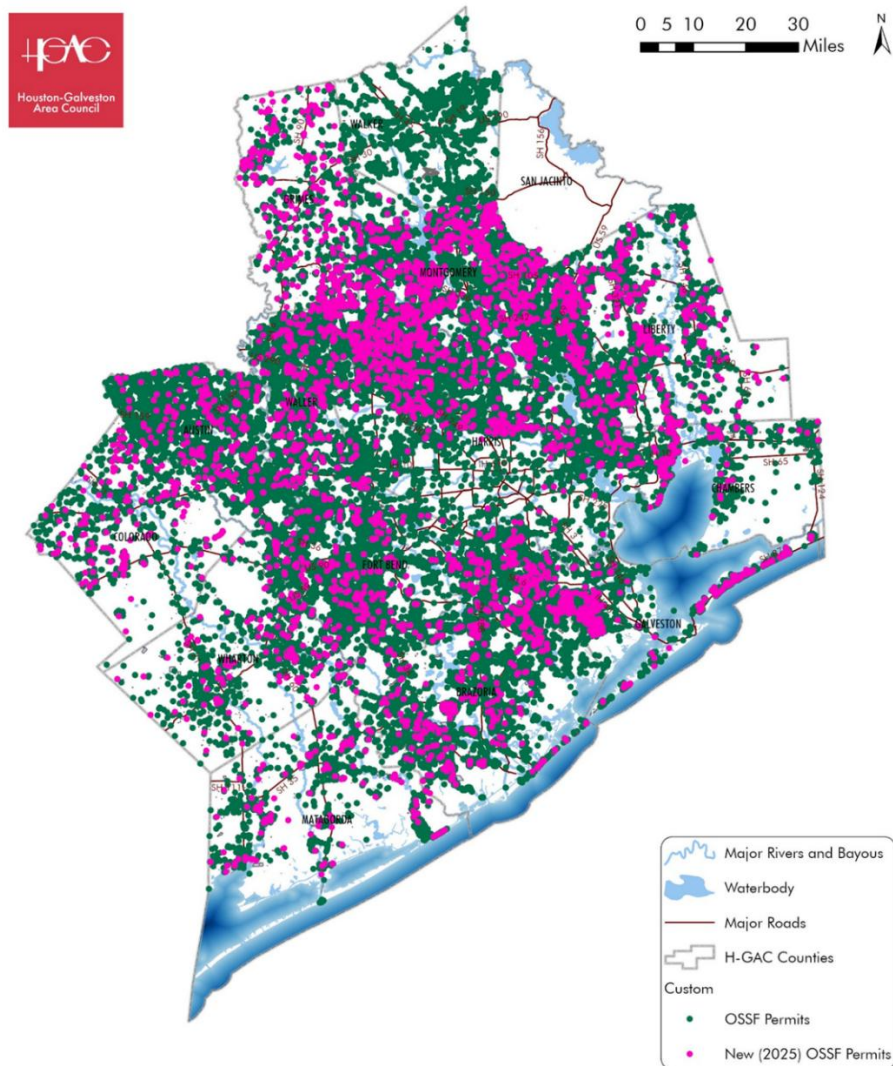
Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

This project will address OSSFs in watersheds within the lower Galveston Bay watershed that have approved watershed-based plans addressing impairments related to high bacteria levels. Watersheds will be prioritized based on OSSF concentrations and other implementation efforts.

Projects Map



Supplemental Photos/Graphics (Optional):[\[Insert Here or Attach as an Appendix\]](#)**SECTION SIX: BUDGET DETAILS**

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$32,165.90
Fringe Benefits (46.94%) ²	\$15,098.67
Travel	\$500.00
Supplies	\$100.00
Equipment	\$0.00
Contractual	\$35,000.00
Construction	\$0.00
Other	\$1,695.87
Total Direct Cost	\$84,560.44

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 47,264.57
Indirect Cost Rate for Reimbursement	30.74%
Total Indirect Costs	\$ 14,529.13

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 99,089.57
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

☒ direct salary/wages and fringe benefits

☐ modified total direct costs

☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

[Description of costs associated with “Other” budget category.]

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

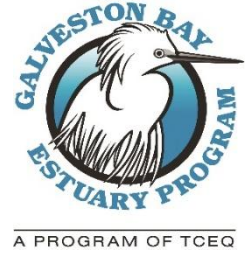
Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Choose an item.
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Streamlining Pollution Reports from Observation to Response

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Houston-Galveston Area Council

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☒ Council of Government ☐ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:	VZFJDZCKG8C7
Vendor Identification Number (VIN) or Tax ID:	17415575756

Contact Information:

Project Representative Name	Jenny W. Oakley
Project Representative Phone	713-499-6660
Project Representative Email	Jenny.Oakley@h-gac.com

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027 – August 31, 2029

Amount Requested from GBEP:

\$124,177.52

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$ 56,958.52
FY 2029 (09/01/2028-08/31/2029)	\$ 67,219.00
FY 2030 (09/01/2029-05/31/2030)	\$0.00
Total	\$124,177.52

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$176,402.25

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

Participation by regional agencies and organizations in the phase-1 stakeholder committee and phase-2 workshop will be in-kind and is estimated based on 40 regional government/agency staff and 5 regional NGO staff at an hourly rate of \$36.14 for a total of 24 hours (government/agency staff) and 16 hours (NGO staff) in year 1 and 8 hours in year 2 totaling \$52,224.73
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SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☐ NPS-3 ☐ NPS-4 ☐
PS-1 ☐ PS-2 ☒ PS-3 ☒
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☒ SPO-2 ☒ SPO-3 ☒ SPO-4 ☒
PEA-1 ☒ PEA-2 ☐ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☒ RES-3 ☒ RES-4 ☒
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☒ ACS-3 ☐

Plan Priority Area Actions Detail:

The proposed project directly or indirectly addresses three of the four plan priorities 6 of the action plans and 12 of the actions.

Action Plan Priority 1: Ensure Safe Human and Aquatic Life Use

- NPS-1: Support Watershed-Based Plan Development and Implementation - Improving reporting of and response to pollution within Galveston Bay Watersheds is an implementation strategy that will improve water and sediment quality.
- PS-2: Achieve Sanitary Sewer System Capacity and Integrity - Improving reporting of and response to pollution events involving sewage from failing on-site sewage facilities (OSSFs), illicit discharges, and sanitary sewer overflows will improve the integrity of the sanitary sewer system within Galveston Bay Watersheds.
- PS-3: Increase Wastewater Treatment Facility Compliance - Improving reporting of and response to pollution events involving sewage from malfunctioning wastewater treatment facilities will result in earlier detection of compliance issues improving the wastewater treatment systems within Galveston Bay Watersheds.

Plan Priority 3: Engage Communities

- SPO-1: Stewardship Programs and Volunteer Opportunities - Providing a central resource for community members to use for pollution reporting provides a sense of ownership and/or responsibility for the health of Galveston Bay. This tool can be implemented in new and existing stewardship programs.
- SPO-2: Workshops and Events - At the culmination of the proposed project a workshop targeted toward NGOs and community organizations on the use and functionality of the produced tool will be given. Additionally the tool will be presented and promoted at the next State of the Bay Symposium and other workshop and events for stakeholders when possible.

- SPO-3: Support Regional Initiatives – The proposed tool can be integrated into new and existing regional initiatives such as Back the Bay and Cease the Grease campaigns. It is meant to replace the GBAN reporting tool.
- SPO-4: Local Government Outreach – Phase-1 of the project will involve convening a committee of local governments, agencies, and municipalities that are involved in environmental investigations and response efforts. This will connect up to 40 different regional organizations (counties, cities, agencies) in the collaboration of developing a regional tool to connect environmental pollution reports with the correct responding authority.
- PEA-1: Key Issue Engagement – The proposed tool will engage the public to take an active role and ownership in the health of the bay by providing a means to report observed pollution events, increasing environmental awareness.

Plan Priority 4: Inform Science-based Decision Making

- RES-2: Conduct Geochemical Stressor Monitoring and Research – By improving the pollution reporting and compiling/making publicly available the reports submitted through the tool, we will improve our knowledge of and response to geochemical stressors (such as spills) within the Galveston Bay Watersheds.
- RES-3: Conduct Physical Stressor Monitoring and Research – By improving the pollution reporting and compiling/making publicly available the reports submitted through the tool, we will improve our knowledge of and response to physical stressors (such as litter and illegal dumping) within the Galveston Bay Watersheds.
- RES-4: Conduct Monitoring and Research to Address Limits to Contact Recreation – By improving the pollution reporting and compiling/making publicly available the reports submitted through the tool, we will improve our knowledge of and response to events that result in elevated bacteria levels (such as failing OSSFs, SSOs, and illicit discharges) within the Galveston Bay Watersheds.
- ACS-2: Provide Access to Monitoring and Research Data – Basic information from the submittals to the reporting tool will be accessible to the public, providing access to the data collected GBEP partners, responding agencies, Bay user groups, and the public.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☐ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☒ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☒ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☒ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.

- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☒ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☒ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☒ Emerging contaminants; and
 - ☒ Legacy contaminants.

Subcommittee Priority Detail:

The proposed project directly or indirectly addresses 5 of the subcommittee identified priorities.

Water and Sediment Quality

- Improve knowledge and accessibility of pollution reporting tools to empower the community. The proposed project directly addresses this priority by making pollution reporting easier to understand and more accessible for community members who may not know which agency to contact. By first bringing agencies, local governments, industry, and partners together to clarify roles and coordination needs, the project will reduce confusion, delays, and misdirected reports. The resulting simple, intuitive reporting tool will empower residents to report pollution more effectively while improving agency response coordination and public confidence.
- Implementation and/or evaluation of best management practices that address point and nonpoint source pollution. The proposed project supports this priority by creating a coordinated, accessible reporting system that helps communities and agencies more quickly identify, route, and respond to point and nonpoint source pollution events.

Public Participation and Education

- Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects. The proposed project empowers adults and community members to positively impact their local environment by increasing their understanding of pollution reporting pathways and providing an accessible tool that enables them to identify, report, and help address local pollution concerns.
- Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics. The proposed project will include three working committee meetings bringing together local governments, MUDs, state and federal agencies, and other environmental responders such as industry to collaborate and develop an intuitive reporting tool designed to empower residents to report pollution more effectively while improving agency response coordination and public confidence. A final workshop will be offered with a focused audience of NGOs, volunteer organizations, and other environmentally-focused groups to show them how the tool works and train them to be ambassadors of the tool, bringing it to their stakeholders and community members to ensure it is widely used and understood.

Monitoring and Research

- M&R: Assessment, Exposure, and Response to stressors, including but not limited to: contact recreation standards, emerging contaminants, and legacy contaminants. The proposed project addresses assessment, exposure, and response to environmental stressors by creating a coordinated reporting system that helps community members identify and report pollution events more effectively, enabling agencies to respond more quickly to potential contaminant exposures and environmental threats such as sewage overflows, chemical spills, and dumping.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☒ Reduce Trash

The proposed project addresses two of the three EPA Areas of Special Interest.

- **Reduce Nutrient Pollution to Protect Water Quality and Public Health:** The proposed project supports nutrient pollution management by improving how community-reported pollution events, including illicit discharges, sewer overflows, dumping, and stormwater failures that may contribute excess nutrients to waterways, are identified and routed to the appropriate response agencies. By convening partners across agencies, local governments, industry, and organizations, the project strengthens the collaborative coordination needed to assess and address nutrient issues within the watershed. The resulting accessible reporting tool will help improve response efficiency, support watershed protection efforts, and empower the public to participate in reducing pollution impacts.
- **Reduce Trash:** The proposed project supports trash and plastic waste reduction priorities by creating a clearer, more accessible pathway for community members to report dumping, debris, and other pollution events that may contribute trash loadings to inland and coastal waterways. The stakeholder committee will improve coordination among agencies and partners, helping clarify roles for responding to trash-related incidents and supporting future mitigation, outreach, and monitoring efforts. The resulting reporting tool will strengthen public engagement and enable faster, more effective responses to pollution reports that threaten clean water and shoreline health.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The objective of this proposal is to improve pollution event reporting by first coordinating stakeholders to clarify agency roles, reporting needs, and long-term support options, then using those findings to develop a simple, accessible reporting tool. The tool will help community members reach the right responders more quickly, reduce misdirected reports, improve interagency coordination, and build public confidence in the reporting process.

Full Project Description (1,000 words or less):

Project Need and Background

The Lower Galveston Bay watershed covers approximately 4,000 square miles, includes 21 watersheds, and touches 11 counties and numerous municipalities across the greater Houston-Galveston region. It is home to dense urban development, major ports and shipping channels, petrochemical and refining industries, wastewater systems, construction activity, agriculture, recreation, and sensitive coastal habitats. The region faces a wide range of pollution events including oil or chemical spills, dumping, illicit discharges, sanitary sewer overflows, and stormwater violations. Together, these conditions create a complex pollution reporting and response landscape in which detailed coordination is essential to ensure timely and appropriate action.

Community members who witness pollution events often face a confusing and fragmented reporting landscape, with multiple state, county, city, industry, and other entities responsible for different types of incidents depending on location, source, and environmental impact. As a result, reporters may contact the wrong agency, experience delays, or submit the same report to multiple agencies at once in hopes of receiving a response. This can reduce public confidence and create frustration when reporters feel their concerns are not being addressed. Similarly, responding agencies often expend resources fielding calls, reviewing reports, or redirecting complaints that fall outside their jurisdiction. When the same report is submitted to multiple agencies, duplication of effort can occur, unnecessarily diverting resources from other responses, investigations, or agency needs.

This proposal seeks to address both community and responding agency barriers through a two-phase approach. In Year 1, H-GAC will convene a Stakeholder Committee with representatives from relevant agencies, local governments, industry, and partner organizations to identify reporting needs, clarify roles, responsibilities, explore agreements such as MOUs, and develop a practical plan for an efficient, effective, and sustainable pollution reporting tool. The committee will also examine options for long-term support to ensure the tool can remain accurate, updated, and available beyond the life of this project.

During Year 1, H-GAC will facilitate three committee meetings and a one-on-one meeting with each responding agency. The first committee meeting will confirm committee representation, define the project scope, and establish goals and objectives. H-GAC will then meet individually with each participating agency or organization to better understand its jurisdiction, responsibilities, challenges, needs, policies, and

procedures. The second committee meeting will be a workshop to review summaries of the meetings to date, discuss a proposed path forward, and collaboratively redefine the scope, structure, function, and reach of the tool. The final committee meeting will present the proposed plan for the tool, gather feedback, and plan for long-term sustainability of the tool and committee.

In Year 2, guided by the committee's findings, H-GAC will develop an intuitive, simple, and accessible reporting tool that improves response coordination and increases public confidence in the pollution reporting process. Because specific features and workflows will be informed through the stakeholder process, the final design may vary. At this stage, H-GAC anticipates developing a tool that collects critical information about pollution events using ArcGIS Survey123 for data collection, visualizes information through ArcGIS Dashboards or Experience Builder, and uses a large language model- (LLM) assisted classification workflow, with human review to help determine the appropriate responding agency based on the information provided by the reporter.

Depending on the approved level of integration with each responding agency, the tool may directly submit reports to the appropriate contact or database, or it may provide the reporter with contact information and further reporting instructions. In either scenario, the tool will provide a single starting point for pollution reporting in the greater Houston region.

The Survey123 form will allow users to submit reports from a web browser or mobile device. The form will be designed to be simple enough for public use while still collecting the information needed by participating organizations. Survey123 is well-suited for this because it supports form-based surveys, web and mobile collection, skip logic, multilingual support, and secure upload of records and photo attachments into ArcGIS Online or ArcGIS Enterprise. Submitted responses will be stored in a hosted feature layer or enterprise geodatabase, depending on organizational requirements.

The project may also include a public-facing dashboard using ArcGIS Dashboards or ArcGIS Experience Builder, that displays near real-time data such as general report locations and report categories, as well as an internal dashboard for responding agencies that includes more detailed information including sensitive fields, such as reporter contact information or internal response notes. Sensitive information will be excluded from public view.

An LLM-assisted workflow will be developed to automate initial classification of submitted reports. The model will use structured form responses, free-text descriptions, location information, and the participating organizations' responsibility matrix to classify each report. The workflow will be designed as a decision-support tool rather than a replacement for agency judgment. Human review, quality control, and stakeholder-approved routing rules will be incorporated before reports are transmitted or instructions are provided to the public. The LLM-assisted routing workflow will be thoroughly tested before deployment. Historical reports, pilot submissions, and manually created test cases will be used to evaluate whether the model correctly identifies the appropriate responding agency. Testing will also evaluate emergency conditions and cases requiring referral to multiple agencies.

Depending on the level of coordination and participation by the responding agencies, Power Automate with ArcGIS Online (or similar program) can be used to route the report to the correct organization. Where direct agency integration is not feasible, the tool will still improve the reporting process by directing the reporter to the correct contact, required information, and recommended next steps.

Upon completion of the tool, H-GAC will host a workshop with regional nonprofit organizations, monitoring partners, master naturalists, and other interested parties to introduce the tool, explain how it works, and share materials such as handouts and stickers with the tool. H-GAC will also use newsletters, its agency website and social media, and, when possible, local media coverage to share the tool with the community. This outreach will build public awareness, increase appropriate use of the reporting tool, reduce misdirected reports, and strengthen community participation in protecting the Lower Galveston Bay watershed.

Project Urgency:

The proposed project was developed specifically for the Water and Sediment Quality Subcommittee priority “Improve knowledge and accessibility of pollution reporting tools to empower the community” which is a unique priority to this funding cycle.

Other Plans Implemented:

The proposed project will advance the implementation of the [Regional Solid Waste Management Plan 2022-2042](#). Specific goals and objectives that will be addressed are:

- 3 - Act as a vehicle for coordination to take advantage of opportunities for economies of scale and partnerships
 - 3.B - Encourage cooperative outreach campaigns
 - 3.C - Support partnerships and interjurisdictional cooperation on a full range of materials management activities
- 4 - Support programs that encourage environmental protections and minimize safety risks
 - 4.C - Support planning efforts to abate illegal dumping and litter
 - 4.E - Support the enforcement of illegal dumping/disposal of solid waste
- 8 - Develop, support, and maintain partnerships with private industry and nonprofit organizations
 - 8.A - Encourage coordination of public and private interests in addressing solid waste problems

The proposed project will support the [Texas Clean Rivers Program](#) by coordinating local partners around water quality: convening local governments, industry, and organizations involved in pollution response while improving public outreach related to water quality. One of the anticipated end users of the reporting tool are the professional water quality monitoring partners and community scientists that monitor through the Texas Stream Team programs. These water quality monitors will be invited to the final workshop where the tool will be explained, demonstrated, and materials provided to encourage usage.

The proposed project will support implementation of the [Texas Nonpoint Source Management Program 2022](#) by:

- Improving coordination among entities and watershed-level stakeholders.
- Supporting watershed action planning by providing jurisdictional clarity, pollution event data, geographic report patterns, and producing an agency responsibility matrix.
- Providing education and outreach to motivate behavior that reduces NPS pollution.
- Preventing or reducing NPS pollution: while the tool does not directly remove pollutants, it can accelerate response and cleanup, identify reoccurring problems, and support enforcement or corrective action.

The proposed project will support implementation of the [Watershed Based Plans](#) including but not limited to: The Bacteria Implementation Group’s implementation plan, Galveston Bay Coalition of Watersheds, etc.

The proposed project may indirectly support the goals and objectives of the [Texas Coastal Management Program](#) by: Protecting coastal natural resource areas, provide information/data relevant to coastal resource condition, and support coastal community resilience and response capacity. While the tool does not directly protect natural areas, faster and better-routed pollution reports can reduce duration and spread of pollution affecting coastal habitats, wetlands, bayous, bay waters, and wildlife.

Partners¹ and Their Roles:

The Galveston Bay Foundation (GBF) will be a project partner and sub-contractor in the proposed project. They will play a critical role in advising the tool development and functionality using their past experience with the Galveston Bay Action Network (GBAN) tool. Upon the completion of the new tool the GBF will update their established outreach and volunteer materials to replace GBAN with the new reporting tool. They will also provide training for up to 6 volunteer docent guides on the new tool so they can provide outreach on the new reporting system.

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

The H-GAC Project team includes Jenny Oakley (Senior Water Resources Scientist) and Steven Johnston (Principal Planner) who will act as Co-PIs and facilitate the management of the contract, stakeholder meetings, and tool development. Jessica Casillas (Senior Planner and Data Manager) will lead the public-facing tool development and design while Megha Shrestha (Senior Data Analyst) and Durga Joshi (GIS Analyst) will lead the back-end tool development.

Does the Project work with new, smaller communities/partnerships?

- ☒ Yes
☐ No

Although the complete list of stakeholders that will be involved in the first phase of the project is not finalized, we anticipate that a number of local governments (cities and counties), non-profit organizations, and river authorities that are not regular participants in the Galveston Bay Estuary Program's sub-committees will participate in the proposed project.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

- ☒ Yes
☐ No

Using whole-county census data for the 11-counties within the Lower Galveston Bay Watershed we estimate that 16.8% of the population "speak English less than very well". Among that group, about 80% speak Spanish, which is the only shared language that makes up more than 5% of the population within the project area. The reporting tool as well as the landing webpage will be provided in alternative languages per the user's preferences utilizing built-in program or browser features. Any distributable materials (fliers and stickers) will be printed in both English and Spanish.

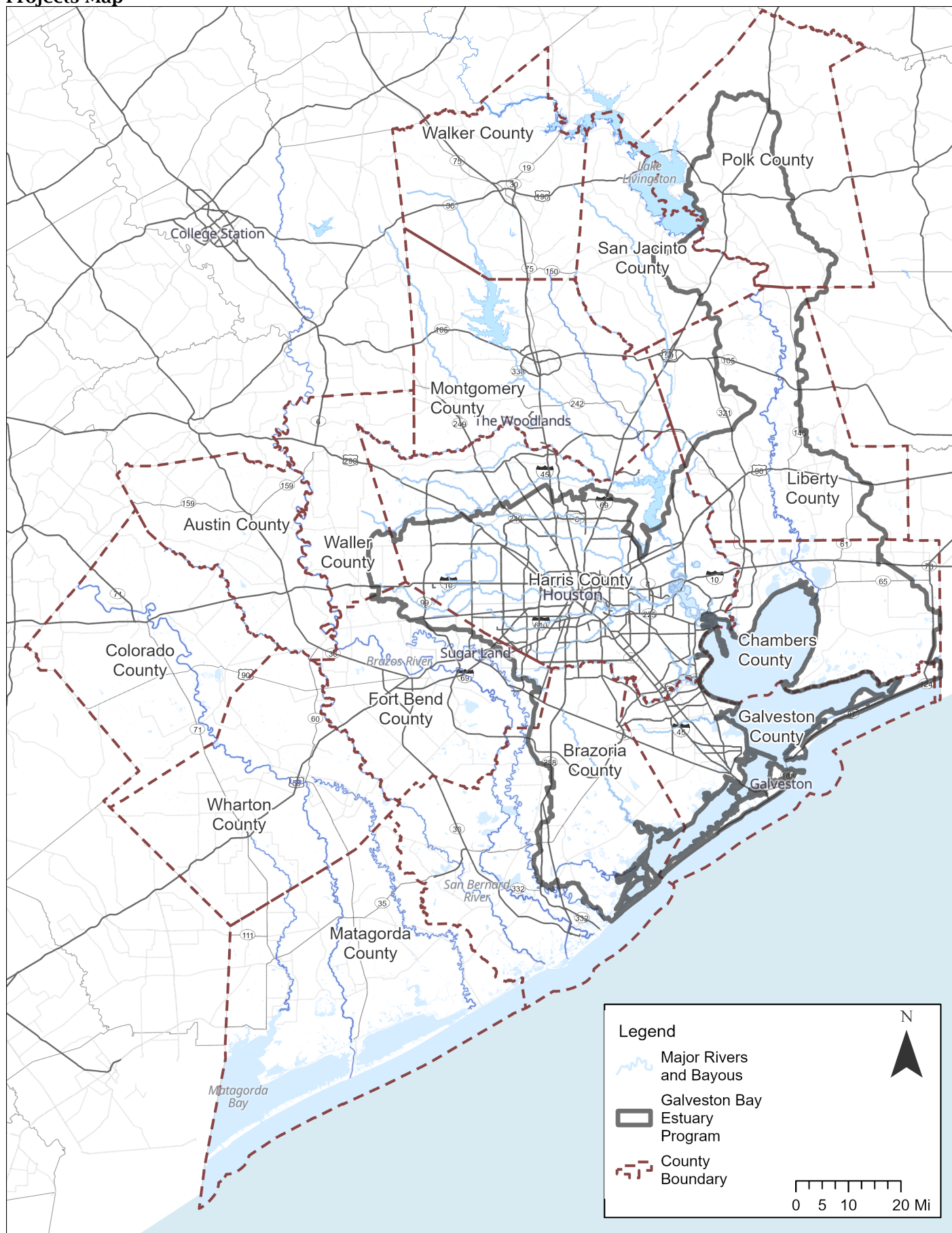
Latitude/Longitude (Optional):

N/A

Location:

The project area includes the 13-county H-GAC region, plus Polk and San Jacinto Counties, to cover the entire Lower Galveston Bay Watershed.

Projects Map



Supplemental Photos/Graphics (Optional):

N/A

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$53,190.85
Fringe Benefits (46.94%) ²	\$24,967.78
Travel	\$525.00
Supplies	\$2,200.00
Equipment	\$0.00
Contractual	\$15,000.00
Construction	\$0.00
Other	\$4,267.93
Total Direct Cost	\$100,151.56

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 78,158.63
Indirect Cost Rate for Reimbursement	% 30.74
Total Indirect Costs	\$ 24,025.96

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$124,177.52
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

☒ direct salary/wages and fringe benefits

☐ modified total direct costs

☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

N/A

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting’s time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:
Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov



GALVESTON BAY FOUNDATION

July 21st, 2026

Galveston Bay Estuary Program
Water and Sediment Quality Subcommittee
Attn: Christian Rines
1002 Gemini Street, Suite 214
Houston, TX 77058

RE: Letter of Commitment for “Streamlining Pollution Reports from Observation to Response” submitted by Dr. Jenny Oakley (Houston-Galveston Area Council)

Greetings WSQ Subcommittee,

The Galveston Bay Foundation (GBF) is committed as project partners in the proposed project titled “Streamlining Pollution Reports from Observation to Response” submitted by Dr. Jenny Oakley from the Houston-Galveston Area Council for consideration under the Galveston Bay Estuary Program’s Fiscal year 2028 Section 320/State funding cycle.

Our mission is to preserve and enhance Galveston Bay as a healthy and productive place for generations to come. We work to facilitate forward-thinking solutions to challenges confronting Galveston Bay with programs in 6 broad categories: land preservation, habitat restoration, water quality, education, research, and advocacy. The proposed upgrades align with GBF’s mission and commitment to the Bay’s health for a sustainable and high-quality environment. The proposed work will improve pollution event reporting by helping community members reach the right responders more quickly, reduce misdirected reports, improve interagency coordination, and build public confidence in the reporting process. The product will build on and replace the Galveston Bay Action Network (GBAN) reporting tool, which filled an important role in pollution reporting, but has become outdated and difficult to maintain. GBF will play a critical role in advising the tool development and functionality using our past experience. Upon the completion of the new tool, GBF will update our established outreach and volunteer materials to replace the GBAN materials with the new reporting tool. GBF will then deliver up to 8 events reaching up to 400 participants.

GBF staff have been in coordination with the H-GAC project team on proposal and budget development. Please do not hesitate to reach out should you require any additional information. Thank you for your consideration of this proposal which will improve knowledge and accessibility of pollution reporting to empower the community.



GALVESTON BAY

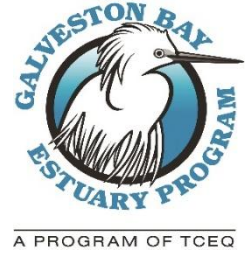
FOUNDATION

Sincerely,

Natasha Zarnstorff
Water Protection Manager
Galveston Bay Foundation
nzarnstorff@galvbay.org

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee:	Water and Sediment Quality (WSQ)
<i>Secondary Subcommittee (if applicable):</i>	Public Participation and Education (PPE)
<i>Tertiary Subcommittee (if applicable):</i>	Choose an item.

Project Name:

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements
Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

City of Kemah

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

- ☒ Federal, State, or Local Government ☐ Council of Government ☐ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:	SZ7QJK746KW5
Vendor Identification Number (VIN) or Tax ID:	74-1607242

Contact Information:

Project Representative Name	Cesar Garcia, City Administrator
Project Representative Phone	409-941-9651
Project Representative Email	cgarcia@kemahtx.gov

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027-May 31, 2030

Amount Requested from GBEP:

\$300,000

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$50,000
FY 2029 (09/01/2028-08/31/2029)	\$200,000
FY 2030 (09/01/2029-05/31/2030)	\$50,000
Total	\$300,000

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$300,000 in GBEP-funded project costs, plus additional in-kind technical assistance from Clean Coast Texas partners; the value of those contributions has not yet been quantified.

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

Please see the attached application response questions.

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☒ NPS-3 ☒ NPS-4 ☒
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☒ SPO-3 ☒ SPO-4 ☒
PEA-1 ☐ PEA-2 ☐ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

Please see the attached application response questions.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☒ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

Please see the attached application response questions.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☒ Make Investments that Address Coastal Resiliency
- ☒ Reduce Trash

Please see the attached application response questions.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The City of Kemah proposes to upgrade its existing stormwater pump station near the Clear Creek outfall by installing a sediment-control forebay, reinstalling the low-flow sump pump, constructing an approximately 1,500-square-foot submerged gravel wetland, and installing a wetland outlet control device. Together, these improvements will improve pump-station maintenance and provide nature-based treatment of urban stormwater runoff by capturing sediment, debris, and floatable litter and supporting nutrient removal before discharge through the receiving channel toward Clear Creek and the Galveston Bay estuary.

Full Project Description (1,000 words or less):

Please see the attached application response questions.

Project Urgency:

Funding during this cycle is needed to address documented operational and maintenance deficiencies at the existing pump station while implementing a water-quality BMP at a stormwater outfall near Clear Creek. During the March 2026 site visit, only two of the station's three primary pumps were operational; the low-flow sump pump had been removed in 2023; accumulated sediment restricted maintenance access; and the outfall lacked a control mechanism to prevent higher-salinity receiving water from moving back toward the station. These conditions limit the City's ability to properly maintain the facility and support implementation of the proposed submerged gravel wetland. The project also presents a timely opportunity to coordinate the improvements with the planned [Hwy 146 Linear Park](#) and nearby public-access improvements. The Linear Park is planned adjacent to the pump station, with its northern terminus near the project site. Advancing the pump-station improvements during this period will allow the City to coordinate the water-quality improvements with development of the surrounding public corridor and integrate stormwater and watershed education into the site.

Other Plans Implemented:

Implementation Plan for Eleven Total Maximum Daily Loads for Bacteria in Waters of the Upper Gulf Coast (2015); Texas Coastal Management Program; and Texas Coastal Resiliency Master Plan.

Partners¹ and Their Roles:

Please see the attached application response questions.

Does the Project work with new, smaller communities/partnerships?

☒ Yes

☐ No

Yes. The City of Kemah is a small coastal municipality, and the proposed Clean Coast Texas technical-assistance workshop is intended to include officials and staff from other local governments and coastal communities, extending the project's technical-assistance benefit beyond Kemah.

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☒ No

Based on review of the most recent available U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates for the City of Kemah, no specific Limited English Proficiency (LEP) language group was identified at a concentration requiring a separate LEP designation for this response. The City will continue to provide reasonable language assistance, as needed, to ensure meaningful access to programs and services.

Latitude/Longitude (Optional):

29°32'49.78"N, 95° 1'18.92"W

Location:

The project is located near the downstream end of the Clear Creek watershed in Kemah and will address urban stormwater quality before discharge through the receiving channel to Clear Creek and ultimately the Galveston Bay estuary.

Projects Map

Project Maps and Location/Vicinity Maps are provided as attachments in the supplemental PDF packet.

Supplemental Photos/Graphics (Optional)

Supplemental project-site photographs are provided in the attached PDF packet. Additional site videos are available electronically via the provided Dropbox link.

<https://www.dropbox.com/scl/fo/emt8djh8zhpul3aqjkms5/ALnuCyCB5YsY4Zy9oL-ldTO?rlkey=mr10hzoexjznb7uj9tbyrdgsj&dl=0>

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$0.00
Fringe Benefits (%) ²	\$0.00
Travel	\$0.00
Supplies	\$0.00
Equipment	\$0.00
Contractual	\$40,500
Construction	\$259,500
Other	\$0.00
Total Direct Cost	\$300,000

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 0.00
Indirect Cost Rate for Reimbursement	0%
Total Indirect Costs	\$0.00

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$300,000
--	-----------

Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☐ modified total direct costs
☒ other direct cost Base

If other direct cost Base, identify:

Not applicable—no indirect costs are requested; indirect cost rate is 0%

The indirect cost rate is (check one):

☐ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☒ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

Not applicable. The “Other” budget category is \$0.00.
--

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements

Application Responses Attachment

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Leveraging (in-kind and/or cash):

Cash: \$0

In-kind: Dollar Amount is undetermined at this time.

- Clean Coast Texas (CCT) has funding through 2028 from TGLO and is providing pre-construction engineering plans (anticipated to be completed before September 2027) and technical assistance as part of a larger MOU with the City of Kemah. These in-kind services are separate from construction-phase professional services included in the GBEP budget. CCT partners will provide in-kind support as follows:
 - Texas A&M AgriLife Extension - staff time for project meeting participation, progress report review, educational sign design, wetland design/plant species list, nature-based stormwater infrastructure wetland maintenance education, and grant funding assistance for future project phases.
 - Texas A&M – Corpus Christi – Harte Research Institute – staff time for project meeting participation, educational sign design, and educational sign production.
 - Texas General Land Office – staff time for project meeting participation.

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Plan Priority Area Actions Detail: [Please identify action items and state how the project implements actions of the *Galveston Bay Plan, 2nd Edition* Action Plans.]

The project, located at the Kemah Stormwater Pump Station, is situated south of the Clear Creek Channel and to the west of the Kemah Boardwalk Marina Channel. The project will implement the following *Galveston Bay Plan 2nd Edition* Action Plans as follows:

- **NPS 1 - Support Watershed-Based Plan Development and Implementation.** The project supports the Stormwater Runoff Recommendations in the Implementation Plan for Eleven Total Maximum Daily Loads for Bacteria in Waters of the Upper Gulf Coast (2015) by treating urban stormwater runoff that ultimately discharges to Upper Galveston Bay (TCEQ Segment 2421).

The project will reduce sediment, debris, floatable litter, phosphorus, and nitrogen in urban stormwater runoff discharged through the receiving channel toward Clear Lake Channel

(Segment 2421A) and ultimately Upper Galveston Bay (Segment 2421). It also supports broader bacteria-reduction objectives for downstream Galveston Bay waters.

Water quality improvement will be accomplished by installing nature-based stormwater infrastructure at the pump station site. An approximately 1,500-square-foot submerged gravel freshwater wetland at the southern end of the pump station outfall will provide treatment through biological uptake and filtration, including removal of phosphorus, nitrogen, and sediment. The system will also support capture of debris and floatable litter.

Additional pump station infrastructure improvements are necessary for the wetland to perform effectively and are included in this funding request. They include: (a) inlet area improvement by designing and building a forebay to capture sediment and debris and allow for safe maintenance; (b) sump pump reinstallation to allow for dewatering of the forebay area for (i) sediment and debris removal (ii) to provide adequate flows to the wetland, and (iii) system maintenance; and (c) installation of a wetland outlet control device to maintain proper salinity conditions in receiving channel and for freshwater wetland plant health.

- **NPS 2 – Support Nonpoint Source Outreach and Education Campaigns.** Due to its location near the popular Kemah Boardwalk, the project can support NPS outreach and education via GBEP’s Back the Bay and complementary campaigns, Clean Coast Texas (CCT) outreach via Internet ([Clean Coast Texas | Texas General Land Office](#)) and in-person workshops, and City of Kemah communications. Through a Memorandum of Understanding with the City of Kemah (see attached), CCT will assist the city with design and installation of watershed, pollution, and pollution control educational signage at the project site.

The project area is next to a Kemah Boardwalk parking lot, from which a boat ferries visitors across the Kemah Boardwalk Marina Channel. The City has also adopted the concept design for the Hwy 146 Linear Park, a planned multi-use pedestrian corridor adjacent to the pump station. Its northern terminus is planned near the project site, creating an opportunity for future residents and visitors to observe the wetland, signage, and nature-based stormwater treatment features.

- **NPS 3 - Implement Nonpoint Source Best Management Practices.** This project will improve water quality through installation of nature-based stormwater infrastructure at the pump station site. An approximately 1,500-square-foot submerged gravel freshwater wetland at the southern end of the pump station outfall will provide treatment through biological uptake and filtration.
The project will reduce sediment, debris, floatable litter, phosphorus, and nitrogen in urban stormwater runoff discharged through the receiving channel toward Clear Lake Channel (Segment 2421A) and ultimately Upper Galveston Bay (Segment 2421). It also supports broader bacteria-reduction objectives for downstream Galveston Bay waters.

- **NPS 4 – Host Nonpoint Source Workshops.** Clean Coast Texas partner, Texas A&M AgriLife Extension Service (Extension) will provide a nature-based stormwater infrastructure maintenance workshop to City of Kemah officials and staff. Officials and staff from other areas, cities, and counties will be invited, thus leveraging the technical assistance/knowledge value to the environmental health of Galveston Bay.
- **SPO 2 – Workshops and Events.** Clean Coast Texas partner Texas A&M AgriLife Extension Service (Extension) will provide a nature-based stormwater infrastructure maintenance workshop to City of Kemah officials and staff. Officials and staff from other areas, cities, and counties will be invited, extending the technical assistance benefit to other Galveston Bay communities.
- **SPO 3 – Support Regional Initiatives.** Due to its location near the popular Kemah Boardwalk, the project can support NPS outreach and education via GBEP's Back the Bay and complementary campaigns, Clean Coast Texas (CCT) outreach via Internet ([Clean Coast Texas | Texas General Land Office](#)) and in-person workshops, and City of Kemah communications. Through a Memorandum of Understanding with the City of Kemah (see attached), CCT will assist the city with design and installation of watershed, pollution, and pollution control educational signage at the project site.
- **SPO 4 – Local Government Outreach.** Through the Clean Coast Texas partnership and the MOU with the City of Kemah, Texas A&M AgriLife Extension and participating CCT partners will provide continued outreach and technical assistance to help the City improve stormwater quality and build upon the Kemah Stormwater Pump Station project. Activities may include citizen outreach materials and online educational resources about the project and its goals.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Subcommittee Priority Detail: [Please explain in detail how project addresses priorities selected.]

- **WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.** The project supports the Stormwater Runoff Recommendations in the Implementation Plan for Eleven Total Maximum Daily Loads for Bacteria in Waters of the Upper Gulf Coast (2015) by treating urban stormwater runoff that ultimately discharges to Upper Galveston Bay (TCEQ Segment 2421). It will reduce sediment, debris, floatable litter, phosphorus, and nitrogen and support broader bacteria-reduction objectives for downstream Galveston Bay waters.
Clean Coast Texas partner Texas A&M AgriLife Extension Service will provide technical assistance via nature-based stormwater infrastructure maintenance workshops to City of Kemah officials and staff. Officials and staff from other areas, cities, and counties will be invited, thus leveraging the technical assistance/knowledge value to the environmental health of Galveston Bay.
- **WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.** This project's main goal is to improve water quality by constructing an approximately 1,500-square-foot submerged gravel freshwater wetland at the southern end of the pump station outfall. The wetland will provide treatment through biological uptake and filtration and reduce sediment, phosphorus, and nitrogen in runoff discharged toward Clear Lake Channel (Segment 2421A) and Upper Galveston Bay (Segment 2421).
- **PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.** Once constructed, the project will provide an on-the-ground demonstration of nature-based stormwater infrastructure near the Kemah Boardwalk and planned Hwy 146 Linear Park. Through the City's MOU with CCT, project partners will assist with educational signage addressing watersheds, pollution prevention, and stormwater treatment.

The project area is adjacent to a Kemah Boardwalk parking area and near the planned Hwy 146 Linear Park. The adopted Linear Park concept would create a multi-use pedestrian corridor adjacent to the pump station, providing an opportunity for future residents and visitors to observe the constructed wetland and educational signage and learn about nature-based stormwater infrastructure and water quality.

- **PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.** Clean Coast Texas partner Texas A&M AgriLife Extension Service will provide nature-based stormwater infrastructure maintenance education to City of Kemah officials and staff. Officials and staff from other areas, cities, and counties will be invited, thus leveraging the technical assistance/knowledge value to the environmental health of Galveston Bay.

Does the Project align with any EPA Areas of Special Interest? [If yes, please summarize how the proposal addresses EPA Areas of Special Interest.]

- **Reduce Nutrient Pollution to Protect Water Quality and Public Health.** The constructed submerged gravel wetland will remove phosphorus and nitrogen from the outfall discharge through biological uptake.
- **Make Investments that Address Coastal Resiliency.** The project incorporates nature-based stormwater treatment into an existing coastal drainage facility and addresses saline backflow that can interfere with freshwater wetland performance. The wetland outlet control device will help maintain freshwater conditions while accommodating high-flow events. The forebay and reinstalled sump pump will also improve maintenance and system functionality while intercepting sediment, debris, and floatable litter before discharge.
- **Reduce Trash.** Through construction of a newly designed inlet forebay, debris and floatable litter will be intercepted and removed by city staff before stormwater exits the pump station. The submerged gravel wetland will also catch litter for removal.

Full Project Description:

Project Background

The City of Kemah owns and operates a low-head pump station that lifts stormwater from a small sump and discharges into a channel that drains toward Clear Creek near TX 146. The pump station is located at the northern end of a peninsula, between the marina and the Clear Creek outfall. The City has identified needed improvements to improve functionality, reduce maintenance burdens, improve site conditions, and improve water quality.

Texas A&M AgriLife Extension, through its ongoing role with Clean Coast Texas (CCT), evaluated the site to identify potential upgrades that could improve stormwater discharge quality through nature-based stormwater infrastructure while improving pump-station functionality. The pump station services stormwater runoff from the Kemah Lighthouse District. Runoff enters through a large inflow pipe and holding area before reaching the pump station. The station consists of three primary pumps, only two of which were operational during the March 2026 site visit.

Extension and CCT partner Halff Engineering then met with City officials and staff at the site to further assess possible solutions to the issues, with the major focus being water quality improvement using nature-based stormwater infrastructure that can work with existing gray infrastructure.

Project Proposal

Sediment capture area. Install a sediment capture area (forebay) at the upstream end of the sump pump to capture sediment and debris in one location and support City maintenance needs. This would save significant time and effort cleaning up trash, sediment, and debris that enters the facility.

Reinstall the sump pump. A critical component of the pump station is the low-flow sump pump, which was removed in 2023. Reinstallation will allow the system to dewater for proper maintenance and support a functional submerged gravel wetland. By reinstalling the sump pump, water levels can be controlled to maintain appropriate wetland conditions and continued nutrient uptake. The City received two replacement estimates ranging from \$16,000 to \$18,000.

Divert some flow into a submerged gravel wetland. A submerged gravel wetland is proposed for the southern end of the outfall of the pump station. This small-scale filter uses wetland plants and rocks to provide water quality treatment. Pollutant removal is achieved through biological uptake from algae and bacteria growing within the rocks, as well as from the wetland plants. (Source: Maryland Department of the Environment Submerged Gravel Wetland Fact Sheet, https://mde.maryland.gov/programs/Water/StormwaterManagementProgram/Documents/Fact%20Sheets/MDE_Fact_Sheet_ESD_SGW.pdf)

This nature-based stormwater infrastructure feature is proposed to help improve water quality in the area and can serve as an education tool for the public. By removing sediments, phosphorus, and nitrogen from the runoff, the City of Kemah will be taking steps to improve downstream water quality.

Install a Wetland Outlet Control Device. At the downstream end of the receiving channel, 60-inch reinforced concrete pipe outfalls to receiving waters. There is currently no backflow-prevention mechanism, allowing higher-salinity water to move upstream toward the pump station. Halff recommends a wetland outlet control device to limit saline backflow and maintain freshwater conditions needed for the submerged gravel wetland. The device will include provisions for high-flow events consistent with final engineering design.

For a detailed explanation of how the project addresses subcommittee priorities selected, please see SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS on page 3 of the application attachment.

Future Phase – Not Included in This Grant Application

Desilt the receiving channel. The channel leading from the pump station toward the outfall has accumulated significant sediment. A future phase may include desilting and contouring the receiving channel to improve water quality and flow. Final depths and modifications would be established during future design and are not included in this GBEP funding request.

Create an additional treatment wetland near the outfall. A future phase may include an additional treatment wetland near the downstream end of the receiving channel, immediately upstream of the 60-inch RCP outfall, to further improve water quality, wildlife habitat, and site aesthetics. This future phase is not included in this GBEP funding request.

Partners and Their Roles: [Please identify project partners and detail what roles they will play in project implementation.]

Clean Coast Texas (CCT) partnership:

- Texas General Land Office – funding for pre-construction project design and engineering through Clean Coast Texas, project meeting participation, and technical feedback
- Halff Engineering – conceptual plan/recommendations/cost estimates, project design/engineering through Clean Coast Texas, project meeting participation, technical feedback, and progress report review as applicable
- Texas A&M AgriLife Extension – CCT outreach lead and primary point of contact for the City of Kemah, project meeting participation, technical feedback, progress report review, educational sign design, wetland plant species list, nature-based stormwater infrastructure maintenance education, and grant funding assistance for future phases
- Texas A&M – Corpus Christi, Harte Research Institute – project meeting participation, technical feedback, progress report review, educational sign design

TABLE OF CONTENTS - SUPPORTING ATTACHMENTS

City of Kemah

FY 2028 Galveston Bay Estuary Program Project Proposal

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements

Attachment	Document
Attachment A	Halff Engineering - Kemah Pump Station Site Visit Memorandum, Recommendations, Concept Exhibit, and Cost Estimate
Attachment B	Project Location Maps
Attachment C	Attorney Title Opinion - Kemah Stormwater Pump Station Property
Attachment D	Executed Memorandum of Understanding - City of Kemah and Texas A&M University-Corpus Christi / Harte Research Institute, Clean Coast Texas
Attachment E	Supplemental Site Photographs - Existing Pump Station, Forebay, Receiving Channel, and Proposed Improvement Area



Memorandum

To: Scott Jones, Texas A&M AgriLife Extension
Charriss York, Texas A&M AgriLife Extension
Date: May 22nd, 2026
Revised: July 23rd, 2026

From: Rachel Herr, PE, CFM
Troy Dorman, PH.D., PE, CFM, ENV SP
AVO: 42207.001

Email: rherr@halff.com
tdorman@halff.com

Subject: Kemah Pump Station – Recommendations

INTRODUCTION

The City of Kemah owns and operates a low-head pump station that lifts stormwater from a small sump and discharges into a channel that drains into Clear Creek near TX 146. The pump station is located at the northern end of a peninsula, between the marina and the Clear Creek outfall. The City of Kemah has noted that the pump station requires some improvements to perform better, reduce maintenance costs, and be improved aesthetically. The Texas General Land Office (GLO), through Clean Coast Texas and the Texas A&M AgriLife Extension, is investigating the site to propose potential upgrades to promote Green Infrastructure and increase the functionality of the pump station.

The full drainage area of the pump station is unknown, but it is generally believed to drain the Lighthouse District. This area has many drainage issues, likely stemming from undersized and/or broken pipes.

The drainage enters the pump station area via a large inflow pipe. The runoff then enters a holding area, similar to a forebay, before it drains to the pump station. The pump station consists of 3 pumps, only 2 of which were operational at the time of the site visit. When the system is full, Public Works staff indicated that it takes approximately 45 minutes to drain when the pumps are turned on. The pumps are hooked up to a generator in case of loss of power.

SITE VISIT

On March 19th, 2026, a representative from Halff attended a site visit at the Kemah pump station. The purpose of this visit was to gain an understanding of the challenges and opportunities associated with redesigning the pump station area. In attendance that day were:

- Scott Jones (Texas A&M AgriLife Extension)
- Charriss York (Texas A&M AgriLife Extension)
- Isaac Muniz (City of Kemah Engineer)
- Re'chard Loftis (Public Works Supervisor)
- Oscar Carrillo (Assistant Public Works Supervisor)
- Caesar Garcia (City Administrator)
- Rachel Herr (Halff)



The site is located at the end of a peninsula within the City of Kemah. It is surrounded on three sides by marinas and the outfall of Clear Creek into Galveston Bay. The pump station services stormwater runoff from the Lighthouse District. At the time of the visit, two of the three pumps were operational. The public works staff opened the gates to allow the station to drain. The pump station visit included looking at the inflow area, the pump station, and along the outfall channel.

Public Works staff indicated that the site has many maintenance issues. Among those, the generator, radiator, and sump pump all require replacement. Also, access to the site is very difficult for staff. The inflow area where water ponds is full of sediment and treacherous to navigate. Without the low flow sump pump operational, the team cannot dewater the facility to perform proper maintenance. Some large pieces of trash were noticed in the facility that cannot be removed by the staff. Public Works staff would like to see the inflow area replaced with concrete lining to facilitate proper maintenance.

The inflow into the facility often appears to be contaminated. Although it is standard for stormwater runoff to pick up some oil, dirt, and debris, large amounts of oil and grease have been noticed in the inflow. Much of this grease appears to come from local restaurants, who rinse out their dumpsters and the runoff reaches the sump pump area. It was noted that the City of Kemah is under an MS4 permit, which could help grant authority to address some of these issues.

Once the water is pumped to the outfall area, it enters into a channel. From there, it runs parallel to the peninsula and to a 60" RCP that leads into the body of water surrounding the peninsula. There is no backflow preventor or other mechanism to stop storm surge from flowing back into the channel towards the pump station.

Utilities noted at the site include overhead power lines that power the pump station and a water line. A fire hydrant was noted at the end of the peninsula, indicating that the area does contain a water line. The City noted that this area is serviced by Municipal Utility District (MUD) 12.

The area west of the pump station is currently TxDOT right of way. The agency utilized the area during its construction of the TX 146 flyover. At this time, the area is blocked off from public entry. However, the eventual plan is for the agency to turn the right of way over to Kemah when the construction is complete.

RECOMMENDATIONS

Based on the findings of the site visit, as well as conversations with the City of Kemah representatives, Halff has several recommendations for the site.

- **Meet with City Council.** Based on conversations with the staff, the City Council does not have a clear understanding regarding what the sump pump does, or why continued maintenance should be performed. Halff recommends that the City Administrator or City Engineer meet with the Council to give an understanding on what service the pump station is providing.
- **MS4 enforcement.** It appears that dumpsters close to the pump station are regularly rinsed out, leading to polluted runoff. As the City is under an MS4 ordinance, they can work with TCEQ on educating restaurant owners and staff on proper grease disposal.
- **Grease capture devices.** As mentioned, grease runoff is a problem near the sump pump areas. The City of Kemah could require installation of grease capture devices at the inlets near the restaurants to capture any residue that would otherwise discharge into the storm drain system and towards the sump pump. It should be noted that these devices would likely be on private property, and therefore costs cannot be captured by grant funding. A line item for these devices is not included in the provided cost estimate.

- **Sediment capture area.** Install a sediment capture area at the upstream end of the sump pump to allow sediment and debris to be captured in one location. This can be done by designing a forebay. The City staff indicated that they would like a concrete inflow area to support their maintenance efforts. This would save them significant time and effort cleaning up trash, sediment and debris that enters the facility. Although an inlet capture device was originally proposed, space considerations would likely make that prohibitive. The capture device would also need to be serviced by a vacuum truck, which the City does not own. A contract could be signed with a provider, which would incur additional expenses. This could be added down the road save the public works crew time and hassle attempting to clean out the entrance area.
- **Re-install the sump pump.** A critical component to the pump station is the sump pump, which was removed in 2023. The sump pump should be re-installed. In addition to allowing the system to properly dewater and allow for proper maintenance, the sump pump is critical to creating a functional wetland. By re-installing the sump pump, the water level can be controlled, which will allow for the wetland to remain at a consistent level. Otherwise, plants in the wetland may die, preventing proper nutrient uptake and removal. The City of Kemah received two estimates for a sump pump replacement, ranging from \$16,000 to \$18,000. Although a costly component of the system, the sump pump is critical to the functionality of the associated wetland.
- **Divert some flow into a submerged gravel wetland.** A submerged gravel wetland is proposed for the southern end of the outfall of the pump station. A submerged gravel wetland is a small-scale filter using wetland plants and rocks to provide water quality treatment. Pollutant removal is achieved through biological uptake from algae and bacteria growing within the rocks, as well as from the wetland plants.¹ The wetland has not been sized at this time, but based on aerial estimates, would be approximately 50' by 30' (an area of 1,500 square feet). This Green Infrastructure feature is proposed to help improve water quality in the area and can serve as an education tool for the public. By removing sediments, phosphorous, and nitrogen from the runoff, the City of Kemah will be taking steps to improve water quality in the downstream reaches.
- **Desilt the downstream channel.** The channel that leads from the pump station to the outfall has collected significant sediment. To improve water quality and flow, desilting the channel is proposed. The depth and final modifications would be proposed during future design efforts.
- **Create a treatment wetland at the outfall.** On the downstream end of the channel, there is a 60" RCP that outfalls into the receiving waterbody. There is no backflow preventor on the downstream end of the pipe. Therefore, water with a higher salinity can flow back into the channel and towards the pump station. Halff recommends adding a wetland outlet control device and converting the area to a treatment wetland on the upstream end of the pipe to prevent water interaction and keep the upstream water closer to freshwater than brackish. The wetland outfall control device would have an opening for high flow events to prevent water from overflowing the channel.

These proposed recommendations, including their locations, are outlined in the attached Exhibit.

¹ Source: Maryland Department of the Environment Submerged Gravel Wetland Fact Sheet, https://mde.maryland.gov/programs/Water/StormwaterManagementProgram/Documents/Fact%20Sheets/MDE_Fact_Sheet_ESD_SGW.pdf



COST ESTIMATE

A high-level conceptual cost estimate was completed for this project. At this time, the current estimated cost is \$300,000². A breakdown of the estimate is provided as Attachment A.

CONCLUSION

By enacting some or all of these recommendations, the City of Kemah should see an increase in pump station performance and appearance, all while implementing Green Infrastructure and improving water quality in the area.

² Does not include the cost of the proposed oil and grease trains in the vicinity of the project.

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Attachment A: Cost Estimate

Kemah Pump Station		
Cost Verification Controls must be in place to assure that construction costs are reasonable and consistent with market costs at the time and place of construction.		
Applicant/Subrecipient: City of Kemah, Texas		
Upgrades to the Kemah Pump Station to		
Site/Activity Title: Incorporate Green Infrastructure		
Eligible Activity: Submerged Gravel Wetland		
Project Element		Construction Cost
Proposed Inlet Area Improvements		\$24,000.00
Sump Pump Re-Installation		\$50,000.00
Submerged Gravel Wetland		\$76,000.00
Wetland Outlet Control Device		\$12,000.00
Total Material Cost		\$162,000.00
Mobilization	10%	\$ 16,200.00
Barricades	3%	\$ 4,860.00
Prep Right-of-Way	4%	\$ 6,480.00
Material Testing	1%	\$ 1,620.00
Engineering	15%	\$ 24,300.00
Administration	3%	\$ 4,860.00
Environmental (Permitting and SW3P)	6%	\$ 9,720.00
Project Cost		\$ 230,040.00
Contingency	30%	\$ 69,012.00
Total Cost		\$ 299,052.00
Rounded Cost		\$ 300,000.00

Project Location Map

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Sources: Esri, Microsoft, TomTom, Garmin, FAO, USGS, OpenStreetMap contributors, City of Kemah, Texas Parks & Wildlife

ATTORNEY TITLE OPINION
(for construction or acquisition projects)

Please print, completely fill out, obtain signature, and submit this form electronically with the application.

Date: 7/23/26

Re:

Austin Watershed Protection - Clean Coast Texas
(MUST MATCH PROJECT TITLE ON APPLICATION FORM)

I hereby certify that I am a member in good standing of the State Bar of Texas and have been requested to determine record of ownership for the parcel(s) of property on which the above-referenced project will be constructed.

Raw Land - See Attached

(name or brief description of land)

After thoroughly examining the public land records or other appropriate records in accordance with the laws of Texas, I certify that the record title to the parcel is held by:

City of Kemah, Texas

in (check one):

(name of entity)

- ☒ fee simple absolute
☐ other (specify)

I have determined that there are (check one):

- ☒ no easements or encumbrances on the property.
☐ easements or encumbrances on the property, but they would not interfere with its being used for the Coastal Management Program project which is the subject of this grant. (Attach documentation.) They are:

- ☐ easements or other encumbrances on the property that may interfere with its being used for the Coastal Management Program project which is the subject of this grant. (Attach documentation.) They are:

- ☐ easements or other encumbrances on the property that have been secured. (Attach documentation.) They are:

Signature

Name

Kyle Dickson

Address

2200 Space Park Drive, Ste 350

City

Houston

State

TX

Zip

77058

Bar Number

05841310

Phone Number

281-488-0630



Memorandum of Understanding

This Memorandum of Understanding ("MOU") is entered into and shall become effective final signature (the "Effective Date"), by and between **Texas A&M University - Corpus Christi ("TAMU-CC")** on behalf of its Harte Research Institute for Gulf of Mexico Studies ("HRI"), an agency of the State of Texas and a member of The Texas A&M University System, and the **City of Kemah, Texas** ("Collaborator" and/or "City"). Member and Collaborator are sometimes hereafter referred to as "Party" individually and as "Parties" collectively.

This MOU consists of two articles. Article 1 is a non-binding portion of this MOU containing the general understandings and intentions of the Parties. Article 2 contains terms to which the Parties agree to be bound. The Parties agree as follows:

Article 1

- 1.1 This Article 1 is not intended to be legally binding on either Party.
- 1.2 The Parties desire to collaboratively identify best practices for floodplain and water pollution management in the City of Kemah, Texas and develop an effective organizing framework to enhance cooperation and coordination between both parties.
- 1.3 HRI has a contract with Texas General Land Office dated September 27, 2024 (GLO Contract No. 24-099-002-E376) titled "The Clean Coast Texas Collaborative, Years 5 and 6". This MOU between TAMU-CC/HRI and the City of Kemah, Texas supports GLO Contract No. 24-099-002-E376 in collaborating to develop the policies, plans, and critical infrastructure needed in coastal communities to assist with managing economic and environmental risks associated with coastal hazards. HRI and the City find that the Texas General Land Office, Clean Coast Texas Collaborative program shall serve as the platform for this MOU. HRI and the City find that efforts under this MOU shall serve to benefit the water quality in the surrounding waters of City.
- 1.4 No direct funds are to be committed by the City or required on behalf of the City in the fulfillment of this MOU.
- 1.5 HRI, through the Clean Coast Texas Collaborative, intends to:
 - 1.5.1 Provide services, staff, and resources to City elected officials, staff, homeowners, businesses, residents and other stakeholders to support best practices for a comprehensive suite of hydrologic and water quality improvements which may include benefits to floodplain management, stormwater management, point source and nonpoint source water pollution management.

- 1.5.2 Deliver workshops, planning services, and/or presentations to the City which may include: sustainable stormwater management, water pollution management, floodplain management, regulatory and non-regulatory approaches to protect water resources, comprehensive planning/smart growth, and/or community resilience at times and locations mutually agreed to by HRI and the City.
- 1.5.3 Provide technical assistance to the City which may include: engineering strategies and/or engineering design services that address water pollution and seek sustainable stormwater management solutions.
- 1.5.4 Provide assistance to the City in pursuit of strategic funding and financing services that support The Clean Coast Texas Collaborative goals for water pollution and sustainable stormwater management.
- 1.5.5 Facilitate information sharing and new partnerships for the City that promote water pollution management education, training and management.
- 1.6 Collaborator intends to:
 - 1.6.1 Share publicly available information and data with HRI that will aid in the evaluation or development of future water pollution management and Clean Coast Texas Collaborative projects and programs, upon request.
 - 1.6.2 Respond in a timely manner to communication between HRI through its key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the City.
 - 1.6.3 Facilitate opportunities for TAMU-CC through its HRI to provide Clean Coast Texas Collaborative updates /reports/actions/approvals to City Council and/or other City sponsored committees, boards, commissions, etc. as mutually agreed to by HRI and the City.
 - 1.6.4 Consider the formal adoption of all or selected sections of: GUIDANCE FOR SUSTAINABLE STORMWATER DRAINAGE ON THE TEXAS COAST (For Nonpoint Source Pollution and Flood Management).
 - 1.6.5 Consider new ordinance(s) or selected revisions to existing ordinance(s) that address water pollution and/or flood management while promoting the goals of both the City and HRI through the Clean Coast Texas Collaborative.
 - 1.6.6 Assist HRI with the development of grant applications and other financial strategies in support of future Clean Coast Texas Collaborative projects, programs and/or initiatives that demonstrate clear benefits to the City. Assistance from the City may include letters of support, resolutions, project reports, financial reports, other documents, etc.

Article 2

- 2.1 This Article 2 is intended to be legally binding on the Parties.
- 2.2 Each Party acknowledges that neither Party will have any legal rights or obligations as to the understandings and intentions in Article 1, and neither Party should or may take any action or fail to take any action in detrimental reliance on Article 1.
- 2.3 The Parties anticipate that under this MOU it may be necessary for a Party (the "Disclosing Party") to transfer information of a confidential nature ("Confidential information") to the other Party (the "Receiving Party"). The Disclosing Party shall clearly identify Confidential information at the time of disclosure by (i) appropriate stamp or markings on the document exchanged, or (ii) written notice, with attached listings of all material, copies of all documents, and complete summaries of all oral disclosures (under prior assertion of the confidential nature of the same) to which each notice relates, delivered within thirty (30) days of the disclosure to the other Party.
- (a) "Confidential information" does not include information that: (i) is or becomes publicly known or available other than as a result of a breach of this MOU by the Receiving Party; (ii) was already in the possession of the Receiving Party as the result of disclosure by an individual or entity that was not then obligated to keep that information confidential; (iii) the Disclosing Party had disclosed or discloses to an individual or entity without confidentiality restrictions; or (iv) the Receiving Party had developed or develops independently before or after the Disclosing Party discloses equivalent information to the Receiving Party.
 - (b) The Receiving Party shall use the same reasonable efforts to protect the Disclosing Party's Confidential information as it uses to protect its own confidential information of a similar nature. The Receiving Party may use Confidential information only for the Purpose under this MOU and may disclose Confidential information only to its directors, regents, officers, employees, agents, consultants, advisors, or other representatives ("Representatives") having a need to know the Confidential information for the Purpose, provided that they are subject to confidentiality obligations not less restrictive than those set forth herein, and that the Receiving Party remains responsible for its Representatives' compliance with such obligations.
 - (c) If the Receiving Party is legally required to disclose Confidential information, the Receiving Party shall, to the extent allowed by law, promptly give the Disclosing Party written notice of the requirement so as to provide the Disclosing Party with a reasonable opportunity to pursue appropriate process to prevent or limit the disclosure. If the Receiving Party complies with the terms of this Section, disclosure of that portion of the Confidential information, which the Receiving Party is legally required to disclose, will not constitute a breach of this MOU.

(d) The Receiving Party shall, upon request of the Disclosing Party, promptly return or destroy all materials embodying Confidential Information other than materials in electronic backup systems or otherwise not reasonably capable of being readily located and segregated without undue burden or expense, except that the Receiving Party may securely retain one (1) copy in its files solely for record purposes. The Receiving Party's obligations as to Confidential Information will survive the termination or expiration of this MOU for a period of three (3) years.

2.4 Each Party acknowledges that all rights in any trademarks, service marks, slogans, logos, designs, and other similar means of distinction associated with that Party (its "Marks"), including all goodwill pertaining to the Marks, are the sole property of that Party. Neither Party may use the Marks of the other without the advance written consent of that Party, except that each Party may use the name of the other Party in factual statements that, in context, are not misleading or imply an endorsement by that Party or its employees. The Parties will mutually agree in advance upon any public announcements, or communications to the media regarding this MOU to be provided pursuant to this MOU.

2.5 Each Party shall be responsible for its own costs, risks, and liabilities as a result of its activities under this MOU without expectation of reimbursement from the other Party. There will be no exchange of funds or other resources among the Parties.

2.6 This MOU commences on the Effective Date through September 30, 2027, with an option to renew an additional two (2) years (the "Term"), unless sooner terminated as provided herein. Initial Term with renewal(s) may not exceed a final expiration date of no later than September 30, 2029.

Should GLO Contract No. 24-099-002-E376 terminate during any period that this MOU is in effect due to loss of funding or GLO determines that the Grant Project has been completed in their estimation and terminates Contract No. 24-099-002-E376, TAMU-CC or HRI will notify the City immediately and this MOU will automatically terminate effective upon GLO Contract termination

Either Party may terminate this MOU effective upon thirty (30) days' written notice to the other Party. Either Party may terminate this MOU effective upon written notice to the other Party if the other Party materially breaches any term of this MOU and fails to cure such breach within ten (10) days after receiving written notice of the breach.

2.7 Each Party shall conduct all activities in connection with this MOU in compliance with all applicable federal, state, and local laws, rules, and regulations.

2.8 The validity of this MOU and all matters pertaining to this MOU, including but not limited to, matters of performance, breach, remedies, procedures, rights, duties, interpretation or construction, shall be governed and determined in accordance with the laws of the State of Texas. Pursuant to Section 85.18(b), Texas Education Code, mandatory venue for all legal proceedings against TAMU-CC is to be in the county in which the principal office of TAMU-CC's governing officer is located.

- 2.9 Any notice required or permitted under this MOU must be in writing and in English, and is deemed given: (a) three (3) business days after it is deposited and post- marked with the United States Postal Service, postage prepaid, certified mail, return receipt requested, (b) the next business day after it is sent by overnight carrier, **(c) on the date sent by email transmission with electronic confirmation of receipt by the party being notified**, or (d) on the date of delivery if delivered personally. Parties can change their respective notice address by sending to the other Party a notice of the new address. Notices should be addressed as follows:

(a) TAMU-CC: Greg Stunz, Senior Executive Director
Harte Research Institute
6300 Ocean Drive, Unit 5869
Corpus Christi, Texas 78412
Email: greg.stunz@tamucc.edu

With an electronic copy to: Texas A&M University- Corpus Christi
Attn: Contracts Administration
Email: contracts@tamucc.edu

(b) Collaborator: Cesar Garcia
City Administrator
1401 State Highway 146, Kemah, TX 77565
cgarcia@kemahtx.gov

- 2.10 This MOU is not intended to create a partnership or joint venture between the Parties. Neither party may bind the other or otherwise act in any way as the representative of the other, unless specifically authorized, in advance and in writing, to do so, and then only for the limited purpose stated in such authorization.
- 2.11 This MOU contains the entire understanding of the Parties as to its subject matter and supersedes all other written and oral agreements between the Parties as to that subject matter.
- 2.12 This MOU is assignable only with the written consent of both Parties.
- 2.13 Each provision of this MOU is severable. If any provision is rendered invalid or unenforceable by statute or regulations or declared null and void by any court of competent jurisdiction, the remaining provisions will remain in full force and effect if the essential terms of this MOU remain valid, legal, and enforceable.
- 2.14 Neither Party is liable or responsible to the other Party for any loss or damage or for any delays or failure to perform under this MOU due to causes beyond its reasonable control, including, but not limited to, acts of God, employee strikes, epidemics, war, riots, flood, fire, sabotage, terrorist acts or any other circumstances of like character (force majeure occurrence).
- 2.15 Member is an agency of the State of Texas and under the Constitution and the laws of the State of Texas possesses certain rights and privileges, is subject to certain limitations and restrictions, and only has authority as is granted to it under the Constitution and the laws of

MOU between TAMU-CC and the City of Kemah, Texas

(OGC template effective 10/5/23)

Clean Coast Texas

(updated 11/3/23)

the State of Texas. Collaborator expressly acknowledges that Member is an agency of the State of Texas and nothing in this MOU will be construed as a waiver or relinquishment by Member of its right to claim such exemptions, remedies, privileges, and immunities as may be provided by the Constitution and the laws of the State of Texas.

- 2.16 Prior to performing any specific projects or work contemplated by this MOU, the Parties will enter into a separate agreement containing definitive statements of work and associated budgets. Notwithstanding the foregoing, this MOU does not bind the Parties to negotiate or consummate any such later agreement(s).

Each Party enters into this MOU as of the Effective Date.

Texas A&M University-Corpus Christi

City of Kemah, Texas

By: Catherine Rudowsky
Provost & VP for Academic Affairs
Dated: _____

Digitally signed by Catherine Rudowsky
Date: 2025.08.20 16:14:55 -05'00'

By: _____
Cesar Garcia
City Administrator
Dated: 7/30/2025

Recommended by:

By: _____
Michael Wetz
HRI Endowed Chair
Coastal Ecosystem Processes
Dated: 8/18/2025

Signed by:

Michael Wetz

57180F275089418

Michael Wetz

HRI Endowed Chair

Coastal Ecosystem Processes

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Photo 8. Existing forebay/inlet area with ponded water and visible sediment accumulation upstream of the pump station.



Photo 9. Existing pump station access stairs and elevated equipment platform.



Photo 10. Existing forebay/inlet area showing standing water, exposed sediment, and the drainage box culvert.



Photo 11. Pump station discharge area and receiving channel immediately downstream of the pump station.

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Photo 12. Receiving channel downstream of the pump station adjacent to the elevated SH 146 corridor.



Photo 13. Existing primary pump equipment on the elevated pump station platform.



Photo 14. Existing pump equipment and maintenance platform area.



Photo 15. Wide view of the three primary pump units and elevated operating platform.

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Photo 16. Existing generator and electrical/mechanical equipment serving the pump station.



Photo 17. Pump station discharge structure and receiving channel with SH 146 immediately adjacent to the site.



Photo 18. Vegetated area beside the receiving channel near the proposed nature-based stormwater improvement area.



Photo 19. Existing vegetation and channel-side conditions within the proposed improvement area.

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Photo 20. Exterior downstream view of the pump station structure and surrounding vegetation.



Photo 21. Exterior view of the pump station and vegetated receiving-channel area.



Photo 22. Pump station and receiving channel viewed from the south, showing existing channel-bank conditions.



Photo 23. Receiving channel looking toward the pump station, showing existing vegetation and accumulated material.

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



Photo 24. Close view of receiving-channel water, sediment, and bank vegetation.



Photo 25. Receiving channel near the downstream end with emergent vegetation and accumulated sediment.



Photo 26. Existing downstream culvert/outfall area near the proposed outlet-control improvement location.



Photo 27. Receiving-water context beneath SH 146 near the downstream end of the project area and Clear Creek.

Supplemental Site Photos

Kemah Stormwater Pump Station Nature-Based Stormwater Infrastructure and Water Quality Improvements



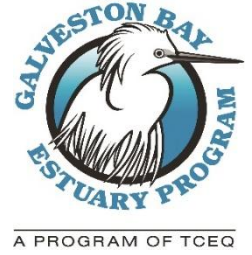
Photo 28. Downstream outfall area beneath SH 146 showing the existing pipe outlet, shoreline vegetation, and receiving-water conditions.



Photo 29. Additional view of the downstream outfall pipe and shoreline, documenting existing bank vegetation and receiving-water conditions.

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Monitoring and Research (M&R)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Design and Performance Metrics Decision Support for Green Infrastructure and Living Shorelines for Coastal Resilience

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

University of Houston

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

- ☐ Federal, State, or Local Government ☐ Council of Government ☒ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number: QKWEF8XLMTT3

Vendor Identification Number (VIN) or Tax ID: 746001399

Contact Information:

Project Representative Name	Hanadi Rifai
Project Representative Phone	713-743-4271
Project Representative Email	rifai@uh.edu

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

24 months

Amount Requested from GBEP:

[\$]275,747

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$142,121.00
FY 2029 (09/01/2028-08/31/2029)	\$133,626.00
FY 2030 (09/01/2029-05/31/2030)	\$0.00
Total	\$275,747.00

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

\$275,747.00

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

None.

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:

<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>

<https://gbep.texas.gov/protect-and-sustain-living-resources/>

<https://gbep.texas.gov/engage-communities/>

<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒ NPS-2 ☐ NPS-3 ☒ NPS-4 ☐
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☒
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☐ SPO-3 ☐ SPO-4 ☐
PEA-1 ☒ PEA-2 ☒ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☒ RES-7 ☒ RES-8 ☒
ACS-1 ☒ ACS-2 ☒ ACS-3 ☒

Plan Priority Area Actions Detail:

Green infrastructure (GI), nature-based solutions, best management practices and living shorelines (collectively referred to as GI) have received increasing interest as mitigation and adaptation strategies for ecosystem and human health. While several implementations are underway, there is a need for a comprehensive framework for the Galveston Bay system that identifies, classifies, and ranks the potential implementations that reduce risks and increase resilience to multiple stressors such as flooding, extreme heat, drought, and environmental quality. The project develops a risk-based decision support framework for GI with design and performance metrics that fills this gap. The proposed project implements several Galveston Bay actions including evaluating best management practices (RES-6), evaluating ecosystem services and economic valuation (RES-7), and completing coastal resiliency and acclimation studies (RES-8). Additionally, the project increases access to Galveston Bay ecosystem information (ACS) via the accessible decision support tools that are proposed. The project engages communities and contributes to ensuring safe human and aquatic life use and protecting and sustaining living resources based on the benefits and value added in GI implementation.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☒ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☒ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☐ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☒ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☒ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☒ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☒ Contact recreation standards;
 - ☒ Environmental parameters;
 - ☒ Emerging contaminants; and
 - ☒ Legacy contaminants.

Subcommittee Priority Detail:

The project encompasses the entire Galveston Bay watershed system and adopts a systems level decision support framework development approach thereby responding to overall priorities and subcommittee priorities of the Galveston Bay Plan. By emphasizing resilience and mitigation and adaptation benefits, incorporating community and stakeholder input, and providing tools that can be customized at any scale and for multiple jurisdictions, the project addresses multiple priorities for each subcommittee. GI have water quality benefits (thereby allowing an assessment of impacts on environmental parameters and emerging and legacy pollutants), they reduce coastal erosion and other vulnerabilities, and available data from existing implementations provide examples of meaningful and effective monitoring. Incorporating existing and potential GI as is proposed in the project will contribute to a baseline assessment of large-scale, man-made changes to Galveston Bay at various time scales and geospatial resolutions. As a readily accessible and easy-to-use data, models, and decision-support tools, the proposed project supports management measures and watershed plans, improves knowledge and accessibility and evaluation of best management practice for addressing point and non-point sources of pollution.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☒ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

The project is directly aligned with EPA interests and direct focus on GI for improving water quality. For Areas of Special Interest, GI can play a key role in enhancing water quality particularly in terms of reducing nutrient pollution by capturing stormwater runoff and enabling plant uptake and soil filtration. Some GI will reduce the overall runoff volume, thereby reducing mass fluxes and loads. Additionally, the project aligns with EPA's priority of making investments that address coastal resilience. This is because GI use natural systems and living shorelines to absorb storm surge, reduce wave energy and erosion, and manage stormwater runoff. The project focuses on natural buffers (e.g. wetlands, dunes, oyster reefs) and soft environmental infrastructure in comparison or for use in conjunction with hardened infrastructure such as storm surge concrete barriers. The proposed project facilitates decision-making and an evaluation of the benefits and associated investments of various GI implementation strategies while taking into consideration public perception and acceptance.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The proposed project develops a prioritization and ranking decision-support system for identifying the most beneficial Green Infrastructure for the lower Galveston Bay Watershed using a systems-based approach where multiple GI types are evaluated individually and collectively in the context of mitigating multiple stressors that include extreme rainfall, extreme heat, drought, erosion, air, sediment and water quality degradation, storm surge and sea level fluctuations

Full Project Description (1,000 words or less):

Green infrastructure (GI), inclusive of nature-based solutions, best management practices and living shorelines continues to gain traction as a mitigation and adaptation strategy to address environmental quality and natural hazard stressor impacts. Despite their popularity, however, their implementation and performance assessment has lagged behind hard infrastructure. This is partly due to the lack of a comprehensive framework for integrating them into resilience and watershed action plans. In such a framework, the plausibility of a specific GI would be balanced by the benefits gained from its form and function. Importantly, and within the context of systems planning, the integration of multiple GI within a watershed would be evaluated whereas they are often evaluated in isolation. While many examples of individual GI exist, a key knowledge gap remains in terms of overall integration into resilience planning and developing standards for assessing their singular and compound performance as a resilience strategy. The proposed project addresses this gap and develops a prioritization and ranking decision-support system for identifying the most beneficial GI for Galveston Bay using a systems-based approach where multiple GI types are evaluated individually and collectively in the context of mitigating multiple stressors that include extreme rainfall, extreme heat, drought, erosion, air, sediment and water quality degradation, storm surge and sea level fluctuations. The proposed GI framework includes data, models and a decision-support user interface. The 2-year project includes six tasks:

Task 1 (year 1). Develop a GIS-based mapped database of current and potential locations for GI within the Galveston Bay Watershed (both landscape scale and relatively small-scale) including any data associated with their current or projected design and performance. The task also includes developing a curated bibliography of GI implementations and guidance manuals at the local and national scales.

Task 2 (year 1). Develop a knowledge base of the various types of GI and the criteria for their selection as a mitigation and adaptation technology in a relatively simplified and visual format to enhance accessibility to communities and stakeholders. The knowledge base would answer: What is it? What problem(s) does it solve? How does it help under existing and future conditions? The knowledge base will include examples of GI and provide communities and stakeholders with instructions/recommendations for GI projects. The knowledge base also qualitatively ranks GI in terms of their performance in a watershed using a matrix approach. Additionally, the knowledge base would be organized around benefits and not engineering types of GI and would emphasize the multiple benefits of each GI as appropriate (for example, flood reduction, water quality improvement, heat mitigation, habitat restoration, recreation, carbon sequestration, coastal resilience)

Task 3 (years 1&2). Develop a risk-based ranking decision support tool for exploring implementation of various GI within a watershed and the associated benefits from different perspectives including environmental and societal benefits. The tool would include topographic and hydrologic information (e.g. flood maps) and any other relevant information to inform GI implementation. The GIS-based tool enables users to set their required performance thresholds (or metrics) and assess the GI that would meet their established goals. So, for example, using the proposed tool, a watershed planner can display all available green space within their watershed, select the areas suitable for a specific GI, establish a specific performance

threshold and observe the outcome. They can also layer different types of GI and evaluate their system performance in achieving the designated threshold.

Task 4 (year 2). Develop demonstration case studies using three pilot watersheds: coastal, rural and urban and several types of GI: rainwater harvesting, drainage infrastructure, wetlands, retention and detention ponds, permeable pavements, urban forests, living shorelines, and green roofs. A current and future visualization of various implementation schemes illustrate possible approaches for design and implementation of GI for mitigation or adaptation. This will be accomplished using mapped visualizations of ‘before’ and ‘after’ given specific performance thresholds (e.g., constructed wetlands for improving water quality to meet established standards for bacteria).

Task 5 (year 2). Develop the overarching decision support risk-based management framework that enables integrating GI within watershed action plans and/or resilience plans for specific geographies and jurisdictions. Implementing GI at the watershed scale is different than individual installations. Watershed level integration involves coordinating many interventions across multiple jurisdictions, land uses, and stakeholders to achieve measurable watershed-scale outcomes. The proposed overarching framework would encompass approaches that address the technical, institutional, economic, environmental, and social considerations for GI (e.g., governance, funding, maintenance) implementation at the watershed scale. Assessing the synergy of multiple GI implementations for watershed-scale outcomes will be enabled via weighted calculations that considers the various criteria; the weighting coefficients are based on community/stakeholder inputs and can be readily updated over time. At this level the approach would encompass an expanded qualitative ranking and matrix-based approach.

Task 6 (years 1&2). Develop an understanding of community perceptions and acceptance of GI at the community and watershed scales, both current and projected in light of resilience plans for the region and the focus on multiple stressors. This will be accomplished via stakeholder focus groups within the selected pilot watersheds, stakeholder interviews, and/or relatively simple web-based form surveys that emphasize establishing what people know about GI, what they value in terms of GI performance, what concerns them, and what would motivate them to advocate for GI within their communities and watersheds.

The outputs include a mapped database of current and potential GI within Galveston Bay, a GI knowledge database, a system-level risk-based decision support tool for GI ranking, three pilot demonstrations, a risk-based management framework for integrating GI within watershed action plans and/or resilience plans, and an assessment of stakeholder knowledge and acceptance of GI. Important critical outputs include time and cost: the time it takes for completing a GI project along with the differential in implementing GI and/or non-GI project (capital and maintenance); this at community and/or the watershed scales.

The outcome is re-shaping the conversation about GI from individual projects to an integrated distributed, interconnected network of natural and engineered systems that reduces multiple risks simultaneously while considering community and stakeholder perceptions and acceptance.

Project Urgency:

Almost all proposed mitigation projects for our region will take several years, if not decades, to complete. GI offer immediately realizable benefits at a relatively low level of investment. Understanding how to leverage the GI opportunities in the region to address multiple stressors is a unique feature for this class of mitigation and adaptation strategies. Delaying the project may jeopardize the potential to access state and federal funding for GI implementation projects.

Other Plans Implemented:

The Texas Water Development Board recently made available for public comment their guidance document on Nature Based Solutions indicating the increasing interest in flood resilience enhancements of GI. Other

plans include the General Land Office Texas Coastal Management Plan, and their Texas Coastal Resiliency Master Plan. The project also benefits watershed action plans within the Galveston Bay System that address specific pollutant criteria.

Partners¹ and Their Roles:

The Galveston Bay Foundation (GBF) is a key partner in the proposed project based on their dedicated focus on GI and their expertise in designing, implementing, and assessing performance of these systems. Mr. Jeffrey Fato will lead GBF engagement in the project throughout all proposed activities and will guide the project team in developing the decision support framework and pilot demonstrations. Mr. Fato will facilitate community engagement and knowledge dissemination.

Does the Project work with new, smaller communities/partnerships?

☒ Yes

☐ No

The goals of the project include guidance for communities of all sizes to leverage GI implementation for resilience of their community. While specific communities have not been identified, 3 pilots are proposed as demonstration case studies.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☒ No

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

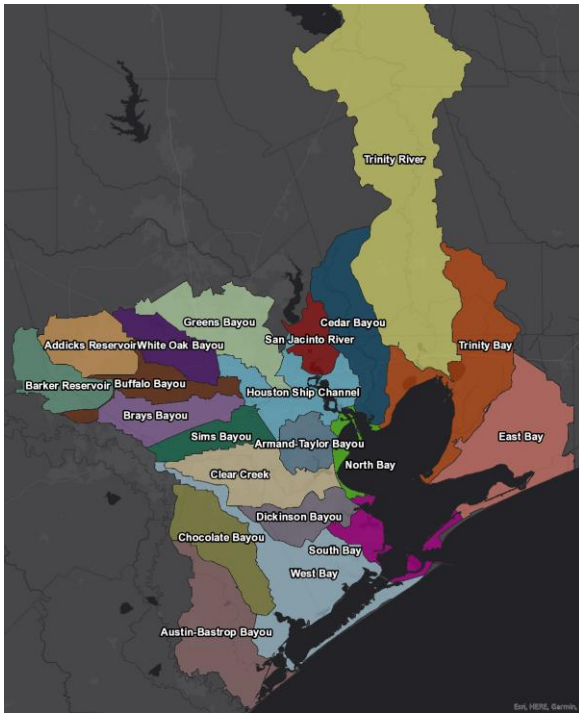
Location:

The entire Galveston Bay watershed is addressed by project.

Projects Map

Map of Galveston Bay System (source: <https://www.stateofgalvbay.org/overview/overview-of-galveston-bay>)

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.



Supplemental Photos/Graphics (Optional):
Not applicable

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$122,788.00
Fringe Benefits (##%) ²	\$13,293.00
Travel	\$5,000.00
Supplies	\$0.00
Equipment	\$0.00
Contractual	\$40,000.00
Construction	\$0.00
Other	\$0.00
Total Direct Cost	\$181,081.00

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 166,081.00
Indirect Cost Rate for Reimbursement	% 57

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

Total Indirect Costs	\$ 94,666
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c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 275,747
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

[Description of costs associated with “Other” budget category.]

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Appendices
GBF Letter of Commitment
Fringe Benefits
Indirect Cost Agreement Documentation



GALVESTON BAY FOUNDATION

PROTECT TODAY. PRESERVE TOMORROW.

July 23, 2026

Galveston Bay Estuary Program (GBEP)

RE: Letter of Support

Design and Performance Metrics Decision Support for Green Infrastructure and Living Shorelines for Coastal Resilience

Dear GBEP Officials,

The Galveston Bay Foundation (GBF) is pleased to support the University of Houston in the development of the *Design and Performance Metrics Decision Support for Green Infrastructure and Living Shorelines for Coastal Resilience* project.

GBF is a conservation non-profit organization founded in 1987. Our mission is to preserve and enhance Galveston Bay as a healthy and productive place for generations to come. We work to facilitate forward thinking solutions to challenges confronting Galveston Bay with programs in five broad categories: land conservation, habitat restoration, water quality, education, and advocacy.

GBF is heavily vested in Green Infrastructure and living shorelines and has in-house hands-on expertise and connectivity to the Galveston Bay System (GBS) and its constituencies. We plan to support all aspects of the proposed project by providing guidance, access to communities and stakeholders via our established relationships, and reviewing all proposed products, outputs, and outcomes. The proposed project is a natural fit for GBF efforts in this space and will enable GBF to strengthen the conversation with sponsors and funding agencies for additional implementations in the GBS.

Sincerely,

Bob Stokes
President
Galveston Bay Foundation
bstokes@galvbay.org

Fringe Benefits

Sponsored awards are responsible for the actual fringe benefit costs incurred by each employee working on the project. Fringe benefit costs have been estimated based on actuals using the UH Fringe Benefit calculator located on the UH website. However, actual costs for fringe benefits are charged (billed) to the sponsored project at the time the cost is incurred, based on salary, selected benefits package and other variables applicable to the individual employee.

<https://www.uh.edu/human-resources/benefits/benefits-glance/>



DEPARTMENT OF HEALTH & HUMAN SERVICES

Program Support Center
Financial Management Portfolio
Cost Allocation Services

1301 Young Street, Suite 1140
Dallas, TX 75202
PHONE: (214) 767-3261
FAX: (214) 767-3264
EMAIL: CAS-Dallas@psc.hhs.gov

August 3, 2023

Lavonda Lockett
Interim Executive Director, Financial Reporting
University of Houston
5000 Gulf Freeway, Tech. Bldg. 1, Room. 231
Houston, TX 77204-0912

Dear Ms. Lockett:

A copy of the facilities and administrative (F&A) cost Rate Agreement is being sent to you for your signature. This agreement reflects an understanding reached between your organization and a member of my staff concerning the rate(s) that may be used to support your claim for F&A and fringe benefit costs on grants and contracts with the Federal Government.

Please have the agreement signed by an authorized representative of your organization and return within ten business days of receipt. The signed agreement can be sent to me by email to CAS-Dallas@psc.hhs.gov, while retaining the copy for your files. Only when the signed agreement is returned, we will then reproduce and distribute the agreement to the appropriate awarding organizations of the Federal Government for their use.

The Office of Management and Budget (OMB) has requested that we reach an agreement with each institution on the components of the published F&A rates. The attached form is provided for that purpose. Please sign the form and email it back with the original Rate Agreement.

F&A cost proposal, together with the supporting information, are required to substantiate your claim for indirect costs under grants and contracts awarded by the Federal Government. The next F&A rate proposal based on actual costs for the fiscal year ending 08/31/2026, is due in this office by 02/28/2027.

Sincerely,

Arif M. Karim -S

Digitally signed by Arif M. Karim -
S
Date: 2023.08.10 23:09:27 -05'00'

Arif Karim
Director
Division of Cost Allocation

Enclosures

PLEASE SIGN AND RETURN A COPY via email to CAS-Dallas@psc.hhs.gov

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1746001399A3
ORGANIZATION:
University of Houston
5000 Gulf Freeway
Tech. Bldg. 1, Room 231
Houston, TX 77204-0912

Date: 08/03/2023
FILING REF.: The preceding
agreement was dated
12/17/2019

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES

RATE TYPES:		FIXED	FINAL	PROV. (PROVISIONAL)	PRED. (PREDETERMINED)
<u>EFFECTIVE PERIOD</u>					
<u>TYPE</u>	<u>FROM</u>	<u>TO</u>	<u>RATE(%)</u>	<u>LOCATION</u>	<u>APPLICABLE TO</u>
PRED.	09/01/2020	08/31/2023	55.00	On Campus	Organized Research
PRED.	09/01/2019	08/31/2023	33.00	On Campus	Other Sponsored Activities
PRED.	09/01/2019	08/31/2023	26.00	Off Campus	All Programs
PRED.	09/01/2023	08/31/2024	55.00	On Campus	Organized Research
PRED.	09/01/2024	08/31/2027	57.00	On Campus	Organized Research
PRED.	09/01/2023	08/31/2024	35.00	On Campus	Other Sponsored Activities
PRED.	09/01/2024	08/31/2027	37.00	On Campus	Other Sponsored Activities
PRED.	09/01/2023	08/31/2027	26.00	Off Campus	All Programs
PROV.	09/01/2027	Until Amended			Use same rates and conditions as those cited for fiscal year ending Aug 31, 2027

*BASE

Modified total direct costs, consisting of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are specifically identified to each employee and are charged individually as direct costs. The directly claimed fringe benefits are listed below.

TREATMENT OF PAID ABSENCES:

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

OFF-CAMPUS DEFINITION: The off-campus rate will apply for all activities: a) Performed in facilities not owned by the institution and where these facility costs are not included in the F&A pools; or b) Where rent is directly allocated/charged to the project(s). Grants or contracts will not be subject to more than one F&A cost rate. If more than 50% of a project is performed off-campus, the off-campus rate will apply to the entire project.

FRINGE BENEFITS:

FICA

Retirement

Worker's Compensation

Life Insurance

Health Insurance

Unemployment Insurance

Severance Pay

Tuition Remission

A next proposal based on actual costs for the fiscal year ending 8/31/26, will be due no later than 2/28/27.

Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds \$5,000.

SECTION III: GENERAL

A. LIMITATIONS:

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost pools as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:

The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

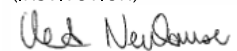
E. OTHER:

If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

University of Houston

(INSTITUTION)



(SIGNATURE)

Claudia Neuhauser

(NAME)

Interim Vice Chancellor/Vice President for Research

(TITLE)

8/11/23

(DATE)

ON BEHALF OF THE GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

(AGENCY)

Arif M. Karim -S

Digitally signed by Arif M. Karim -S
Date: 2023.08.10 23:08:36 -05'00'

(SIGNATURE)

Arif Karim

(NAME)

Director, Cost Allocation Services

(TITLE)

08/03/2023

(DATE)

HHS REPRESENTATIVE: Denise Shirlee

TELEPHONE: (214) 767-3261

COMPONENTS OF PUBLISHED F&A COST RATE

INSTITUTION: **University of Houston**

FY COVERED BY RATE: **September 1, 2023 - August 31, 2027**

APPLICABLE TO: **ORGANIZED RESEARCH**

<u>RATE COMPONENT:</u>	<u>ORGANIZED RESEARCH FY 24 ON CAMPUS</u>	<u>ORGANIZED RESEARCH FY 25-27 ON CAMPUS</u>	<u>OTHER SPONSORED ACTIVITIES FY 24 ON CAMPUS</u>	<u>OTHER SPONSORED ACTIVITIES FY 25-27 ON CAMPUS</u>	<u>ALL PROGRAMS FY 24-27 OFF CAMPUS</u>
Building Depreciation	8.8	9.4	1.6	1.8	
Equipment Depreciation	7.1	7.6	0.9	1.0	
Interest	1.7	1.8	0.3	0.4	
Operation & Maintenance	10.4	11.2	6.0	7.6	
Library	0.5	0.5	0.2	0.2	
Utility Cost Adjustment	0.5	0.5			
Administration*	26.0	26.0	26.0	26.0	26.0
TOTAL	<u>55.0</u>	<u>57.0</u>	<u>35.0</u>	<u>37.0</u>	<u>26.0</u>

* Reflects provisions of Appendix III to Part 200 of Uniform Guidance—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education (IHEs), C.8. dated December 26, 2013.

CONCURRENCE:

University of Houston
(Institution)


(Signature)

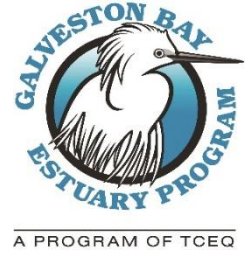
Claudia Neuhauser
(Name)

Interim Vice Chancellor/Vice President for Research
(Title)

8/11/23
(Date)

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Monitoring and Research (M&R)
Secondary Subcommittee (if applicable): Water and Sediment Quality (WSQ)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Expanded Evaluation of Micro- and Nanoplastic Pollution through Emerging Methods
--

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Public University: University of Houston-Clear Lake

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☐ Council of Government ☒ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:	RD74AUNCTZJ1
Vendor Identification Number (VIN) or Tax ID:	State: 3-75975-9759-2; Federal: 74-6001399

Contact Information:

Project Representative Name	Mandi Gordon
Project Representative Phone	281-283-3794
Project Representative Email	Gordon@uhcl.edu

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027 – August 31, 2029 (24 months)

Amount Requested from GBEP:

\$168,972 *See notes about scalability in Total Project Costs section below

Federal ☐ State ☒ No Preference ☐

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$ 82,026
FY 2029 (09/01/2028-08/31/2029)	\$ 86,947
FY 2030 (09/01/2029-05/31/2030)	\$ 0
Total	\$ 168,972

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

Requested funds:	\$168,972 (43% of total project costs)
Current study (FY26-FY28):	\$221,928 (full amount awarded to H-GAC; \$96,231.36 sub-award to UHCL)
Total project costs:	\$390,900
<i>*Notes about scalability:</i> The primary costs for the proposed project expansion are in salary and fringe, especially related to student participation (currently included at 100% support for two years of graduate thesis work and includes a stipend for the graduate student). Should the project be scaled down or costs reduced, student participation can be reduced or removed completely. If removed completely, the total requested funds are reduced to	

\$91,338. Below are updated calculations for the minimum cost of the project expansion. Note that if GBEP or the related subcommittees would still like to prioritize student support and/or workforce development in some capacity, estimated amounts can be provided for partial support of a student(s) in the project.

Requested funds (if scaled down to minimum):	\$ 91,338 (29% of total project costs if scaled down)
Current study (FY26-FY28):	\$ 221,928
Total project costs (if scaled down to minimum):	\$ 313,266

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

The proposed study expands upon the FY26-28 GBEP funded Nature-based Stormwater Infrastructure Pollution Project, administered through the Houston-Galveston Area Council (HGAC), which provides \$221,928 in directly applicable in-kind and cash support, including sample collection, processing, and analysis infrastructure that the proposed project builds upon. **These leveraged funds represent 57% of the total project costs, if the proposed project is funded at the full requested amount.** The requested funds are to add Differential Scanning Calorimetry (DSC) and Pyrolysis-Gas Chromatography-Mass Spectrometry (Py-GC-MS) as supplemental methods for micro- and nanoplastic (MNP) quantification and to support a graduate student thesis project for two years.

In addition to these leveraged funds, EIH at UHCL houses remnant MNP samples from other projects related to microplastic enumeration (totaling over \$550K in grant funding) and UHCL personnel provide over 15+ combined years of experience working on MNP-focused research. Remaining samples, equipment, and refined protocols resulting from previous projects may be used to test and guide methods used in the proposed study, which represents a large cost savings in man-hours and supplies should these test samples been collected as part of the proposed work. Long-term storage for samples is also provided by UHCL at an average cost of \$10,000 per year. Costs for the proposed study are minimized based on existing supplies and personnel expertise and, while these costs are not calculated into the total leverage amount, they are relevant and necessary for keeping costs for the proposed project at a minimum.

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☒	NPS-2 ☐	NPS-3 ☒	NPS-4 ☐
PS-1 ☐	PS-2 ☐	PS-3 ☐	
PHA-1 ☐	PHA-2 ☐	PHA-3 ☐	PHA-4 ☒ PHA-5 ☒

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐	HC-2 ☐	HC-3 ☐
SC-1 ☐	SC-2 ☐	
FWI-1 ☐	FWI-2 ☐	FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐	SPO-2 ☐	SPO-3 ☐	SPO-4 ☐
PEA-1 ☐	PEA-2 ☐	PEA-3 ☐	

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☒ RES-2 ☐ RES-3 ☐ RES-4 ☐
 RES-5 ☒ RES-6 ☒ RES-7 ☐ RES-8 ☐
 ACS-1 ☐ ACS-2 ☒ ACS-3 ☒

Plan Priority Area Actions Detail:

The proposed project will implement the following Galveston Bay Plan Priority Area Actions:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

Improve Water Quality Through Nonpoint Source Pollution Abatement (NPS)

NPS-1 Support watershed-based plan development and implementation: Understanding baseline environmental MNP concentrations is a critical step in evaluating potential impacts to human and aquatic life. Results from this study can be incorporated into existing and upcoming total maximum daily load (TMDL) I-Plans and watershed protection plans (WPP) in the Galveston Bay area. The output of the number of watershed-based plans would not be impacted by the proposed project, but the resulting knowledge could be used in future watershed-based plans to include baseline MNP concentration data, providing a more holistic review of pollutants discussed in the watershed.

NPS-3 Implement nonpoint source best management practices (BMPs): The proposed project extends the existing microplastic study to the nanoplastic fraction, which microscopy-based monitoring is unable to capture in the ongoing project. The results will directly inform MNP loads entering Galveston Bay through freshwater inflows and provide another metric for BMPs to consider. The output of the number of BMPs will not be impacted by the proposed expansion, but the added evaluation of nanoplastics, a contaminant not previously measured in these systems, can be considered for future infrastructure projects.

Promote Public Health and Awareness (PHA)

PHA-4 and PHA-5 Improve the safety of human shellfish and finfish consumption from bay waters: Plastic contaminants have been found in all trophic levels of marine organisms, including filter-feeding invertebrates like oysters and finfish, ultimately affecting the humans that consume them. Nanoplastics are of particular concern due to their sub-micron size which allows them to cross biological membranes and be incorporated into soft tissues or organs. While the proposed study does not directly influence these priorities, results from this work will bring expanded awareness to the concentration of MNP pollution in the waters entering Galveston Bay and provide baseline data for MNP loading which could affect the safety of human shellfish and finfish consumption.

Plan Priority 4: Inform Science-Based Decision Making

Collaborate with Research Institutions to Support Focus Area Applied Research and Monitoring (RES)

RES-1 Conduct Biological Stressor Monitoring and Research: The proposed applied research will provide baseline data needed for future understanding of an emerging contaminant on the aquatic life of Galveston Bay, building on the microplastic stressor data already being generated in the region.

RES-5 Conduct Monitoring and Research to Address Limits to Seafood Consumption: Similarly to PHA-4 and PHA-5, results of this expanded study will bring expanded awareness to the concentration of MNP pollution in the waters entering Galveston Bay and provide baseline data for MNP loading which could affect the safety of human shellfish and finfish consumption. Though the proposed project does not directly address this action, the resulting baseline data will be critical for establishing these criteria in the future.

RES-6 Evaluate Best Management Practice (BMP) Projects: The proposed project will expand ongoing water quality monitoring focused on microplastic pollution to the nanoplastic fraction through new and emerging technologies (e.g., DSC and Py-GC-MS). Results of the applied research will be used to inform watershed managers, especially in watersheds identified to have elevated MNP concentrations.

Increase Access to Galveston Bay Ecosystem Information (ACS)

ACS-2 Access to Monitoring and Research Data: The project team will disseminate study results through a variety of outreach activities for different audiences, including GBEP partners, decision-makers, bay user groups, the public (as opportunities are presented), and the scientific community (through conference presentations, peer-reviewed manuscripts, and/or graduate theses).

ACS-3 Track Galveston Bay Plan Implementation: The project team will work with GBEP and its partners to integrate the proposed project results into the Comprehensive Conservation and Management Plan for the Galveston Bay estuary and share it with the Council and stakeholders, as needed.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☒ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☐ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☒ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☒ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☒ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

The proposed project builds directly on the existing GBEP funded project extending the established work into the sub-micron nanoplastic fraction using the same samples, sites, and sampling events. Below are the additional FY28 subcommittee priorities that this project expansion addresses.

Water and Sediment Quality Subcommittee Priorities

Implementation and/or evaluation of best management practices that address point and nonpoint source pollution: As part of the ongoing study, microscopy-based monitoring captures only the microplastic fraction. By expanding the study to include emerging technologies such as DSC and Py-GC-MS we will be able to measure the nanoplastic fraction that current methods cannot detect. This will directly supplement the results to provide quantitative pollutant data across major watersheds within the lower Galveston Bay watershed which can inform prioritizing location or design of future nonpoint source BMPs.

Monitoring and Research Subcommittee Priorities

Meaningful and effective monitoring of existing, past, and new projects: The proposed work directly expands an existing GBEP funded monitoring project and incorporates emerging methods for MNP quantification and evaluation. Rather than initiating a standalone effort, the proposed expansion adds a nanoplastic measurement capability to the established monitoring framework, maximizing the value of the prior investment and producing a continuous micro-through-nano dataset from the same sampling design.

Assessment, Exposure, and Response to stressors, including but not limited to emerging contaminants: Nanoplastics are an emerging contaminant for which very few baseline data exist in Galveston Bay. The proposed project expansion establishes baseline nanoplastic concentrations in major contributing waterways under dry- and wet-weather conditions, supplementing a growing dataset for microplastic contaminant quantities in the lower Galveston Bay watershed.

Does the Project align with any EPA Areas of Special Interest?

- ☐ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☒ Reduce Trash

Reduce Trash: Generally, MNPs are a central focus of EPA's Trash Free Waters program and its Draft National Strategy to Prevent Plastic Pollution. By quantifying nanoplastic loading to Galveston Bay, the project supports EPA's objectives to increase measurement of trash loading into waterways (informing management interventions).

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The proposed project builds directly on the existing GBEP funded project, extending the established work into the sub-micron nanoplastic fraction using the same samples, sites, and sampling events. This expanded effort will enable quantification of baseline nanoplastic loading in major contributing waterways. The results will identify priority watersheds for future BMP recommendations and provide an expanded baseline MNP dataset to inform science-based decision-making.

Full Project Description (1,000 words or less):

Anthropogenic debris, including plastics, is a pervasive global environmental issue (Rochman, 2020). Plastics are non-biodegradable by design; rather than breaking down, they weather into progressively smaller particles over time (Martin et al., 2017). Microplastics are defined as plastic particles less than 5 millimeters in diameter, and nanoplastics as those less than 1 micrometer (μm). Large coastal urban areas such as the Houston-Galveston complex are among the most critical settings for plastic-pollution research: Galveston Bay hosts most of the country's plastic manufacturers (Tunnell et al., 2020; Shruti et al., 2021) and supports the most economically important fishery in Texas. Microplastics have been documented at an average concentration of 44.5 pieces per liter in surface waters of Galveston Bay (Oakley et al., 2024) and have been found in tissues across all trophic levels of marine organisms including Galveston fish and oysters (Vegter et al., 2014; Avio et al., 2017; Mortuza et al., 2025). Because plastics are petroleum-derived, they adsorb hydrophobic contaminants such as polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) (Bakir et al., 2014), which can be transferred and amplified through the food web (Miller et al., 2020). These concerns are magnified at the nanoplastic scale: nanoplastics' high surface-area-to-volume ratio makes them more efficient vectors for adsorbed contaminants, and their sub-micron size allows them to cross biological membranes that larger microplastics cannot (Al-Mezrakchi et al., 2026; Yee et al., 2021). Despite this, essentially no baseline nanoplastic data exists for Galveston Bay, because conventional microscopy-based monitoring cannot detect the nanoplastic fraction.

Traditional visual enumeration methods, such as vacuum filtration and microscopy, are effective for quantifying microplastics but are fundamentally limited to particles above the optical resolution of the method and cannot detect or characterize the nanoplastic fraction. This is a critical gap: a 2025 study measuring nanoplastic concentrations across the North Atlantic found that nanoplastics may comprise a large fraction of marine plastic pollution by mass, suggesting that visual enumeration alone substantially

underrepresents the true extent of plastic pollution in aquatic systems (Ten Hietbrink et al. 2025). Detecting and quantifying this sub-micron fraction requires analytical methods capable of resolving particles below the optical range, such as DSC and Py-GC-MS, which have been established and refined for nanoplastic quantification in environmental and water samples (Al-Mezrakchi et al., 2026; Okoffo et al., 2022; Gahn et al., 2026). It is necessary to continue validation of DSC and Py-GC-MS for environmental sample analysis as these technologies become more readily available.

The proposed project builds directly on the existing GBEP funded project. Due to funding limitations, the ongoing study utilizes novel techniques for evaluation of microplastic particles but does not allow for assessment of nanoplastic particle presence or composition. Here, we incorporate novel and emerging analysis methods to leverage GBEP's investment by adding DSC and Py-GC-MS analyses to the same samples, sites, and sampling events included in the ongoing study. Rather than initiating a standalone study, the project completes the picture by capturing the full micro-through-nano size spectrum from a single, already-established sampling design, ultimately maximizing GBEP's return on investment. The proposed study will provide critical data on baseline nanoplastic loading in Galveston Bay watersheds, addressing the following objectives:

- Monitor background levels of MNP pollution in major contributing waterways to Galveston Bay.
- Compare concentrations between dry-weather (base flow) and wet-weather freshwater inflows.
- Identify sub-watersheds with the highest MNP loading for future BMP recommendations.

Using sites from the existing GBEP funded study, six (6) baseline monitoring sites will be located near the downstream extent of the non-tidal portion of major sub-watersheds. Water grab samples will be collected during a target of four dry-weather and four wet-weather events over one year. Should the proposed project expansion be funded, an additional water grab sample will be collected at each sampling event for expanded analyses. For DSC analyses, water samples will be passed through a large pore (e.g., 5 mm or greater) sieve and digested with hydrogen peroxide, then the filtrate will be dried. The residual remaining sample will be analyzed through DSC. For Py-GC-MS analyses, water samples will be digested with hydrogen peroxide then vacuum filtered through a 24-mm diameter 0.7 μm pore size glass filter. Filters will then be processed through the Py-GC-MS for analysis. Nanoplastic loading will be calculated from measured concentrations and discharge for each site and added to the database from the ongoing study to create a unique continuous micro-to-nanoplastic dataset within the lower Galveston Bay watershed. Results from these additional grab samples will be used to determine total MNP loads in a singular grab sample, without the added processing of additional filtration steps, staining, and microscopic enumeration, as is planned for the current GBEP funded study. Additionally, should the project expansion be funded, filtrate remaining from the samples collected as part of the current GBEP funded study will be retained so if we are able to analyze the remaining filtrate through either DSC, Py-GC-MS, or both methods, we will be able to assess the quantity of MNP particles which escape the existing study design.

The proposed project expansion addresses multiple emerging techniques for MNP enumeration, quantification, and identification. This expansion directly strengthens the currently funded GBEP study in adding quantification protocols to the nanoplastic fraction and evaluating the effectiveness of two methods for enumerating nanoplastic quantities (e.g., DSC and Py-GC-MS). Expansion of the existing project will allow us to better understand how these methods can be used in tandem to develop a holistic dataset for MNP concentrations in freshwaters flowing into the Galveston Bay estuary, as well as improving our ability to compare results from the Galveston Bay watershed to other waters at the national, and potentially global, scale. Additionally, comparative statistics among contributing drainages will identify the sub-watersheds with the greatest potential MNP pollution. Finally, the expansion also aids in workforce development by supporting an additional graduate student thesis, if funded in full.

Literature Cited provided as a separate attachment.

Project Urgency:

Building directly on the existing GBEP funded project (anticipated project end date is March 31, 2028), the proposed project expansion takes the next step to characterize the nanoplastic fraction of plastic pollution (e.g., the sub-micron particles that current microscopy-based monitoring cannot detect). To maximize GBEP's current investment and project efficiencies, the proposed study expansion is dependent on samples collected under the existing microplastic monitoring effort, for which field work begins in early FY27. Under the established protocol, the sub-micron filtrate must be retained and processed alongside the microplastic samples it is derived from, so the value of this expansion is greatest while the parent project is actively

collecting samples in the field. Funding in this cycle allows nanoplastic characterization to proceed on the same samples, sites, and storm events already being monitored, preserving a continuous micro-through-nano dataset from a single sampling design. **Delaying to a later cycle would forfeit this alignment and require a separate, more costly standalone effort to recreate the baseline already being generated.**

Other Plans Implemented:

The Gulf of America Alliance's Governor's Action Plan: The proposed study expansion aligns with the priority issue item Threats to Human Health and Aquatic Life, which calls for Gulf-wide efforts to collect data, monitor water resource conditions and trends, and identify linkages between water quality and threats to human health or aquatic life, including plastic pollution, to support improvements within the Gulf waters. By generating the region's first continuous baseline micro-through-nanoplastic dataset, the proposed project directly advances this monitoring and data-collection priority.

The Save Our Seas Act of 2018 (Marine Debris Act): The proposed study expansion aligns with the priority goal to conduct and support research addressing the most critical research needs related to microfiber and MNP pollution, as defined in the Marine Debris Report to Congress by NOAA's Marine Debris Program and the EPA's Trash Free Waters Program. The proposed characterization of the sub-micron plastic fraction addresses a research need not met by existing monitoring programs.

The Galveston Bay Report Card: Litter and trash are currently scored as "I" for insufficient data because there is no systematic bay-wide monitoring to evaluate this kind of pollution. The proposed study expansion helps address this gap by extending systematic monitoring to the nanoplastic fraction, for which regional data is scarce.

EPA Draft National Strategy to Prevent Plastic Pollution: The proposed study expansion supports Objective C (preventing trash and micro/nanoplastics from entering waterways) specifically the sub-objectives to increase measurement of plastic loadings into waterways (C3) and to fund research and demonstration of technologies that capture micro/nanoplastics in stormwater (C2).

Partners¹ and Their Roles:

Mandi Gordon, Lead PI - gordon@uhcl.edu; Environmental Institute of Houston (EIH), University of Houston-Clear Lake (UHCL); Associate Director, Research Programs

Ms. Gordon will provide administrative oversight, assist with project design and implementation, manage contractual obligations, and provide continuity with the existing GBEP-funded microplastic monitoring effort, of which she is a co-PI and listed as the Project Manager in the existing Quality Assurance Project Plan (QAPP).

Dr. Ruaa Al-Mezrakchi, Co-PI - almezzrakchi@uhcl.edu; College of Science and Engineering, UHCL; Assistant Professor of Mechanical Engineering

Dr. Al-Mezrakchi brings expertise in nanomaterials, polymers, and innovative MNP analyses. She leads the nanoplastic characterization effort at UHCL, providing access to and analytical direction for DSC protocols. Dr. Al-Mezrakchi will also serve as the primary mentor for the student(s) associated with the project.

Dr. Asif Mortuza, Co-PI - mortuza@uhcl.edu; EIH, UHCL; Research Associate

Dr. Mortuza will provide day-to-day project management, coordination with project partners (including staff at Texas A&M University at Galveston), facilitate sample processing (including Py-GC-MS), conduct nanoplastic analysis, and be responsible for data management, statistical analysis, and report development. Dr. Mortuza will extend his role as Field and Laboratory Supervisor in the current QAPP to the proposed project expansion.

Dr. Jenny Oakley, Co-PI - jenny.oakley@h-gac.com; Houston-Galveston Area Council; Senior Water Resources Scientist

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

Dr. Oakley serves as the Lead-PI for the current GBEP funded project. In the proposed expansion, she will serve as a subject matter expert and participate in study design development and oversight. Dr. Oakley's participation in the study expansion is integral to the continuity of the two projects.

Does the Project work with new, smaller communities/partnerships?

☒ Yes

☐ No

This project is led by the University of Houston-Clear Lake (UHCL), a Hispanic-Serving Institution, and supports graduate student research assistantships in the analysis of nanoplastic pollution. It brings a new cross-disciplinary partnership between UHCL's Environmental Institute of Houston and its College of Science and Engineering, pairing environmental monitoring with nanomaterials and polymer characterization expertise. The project also leverages the ongoing GBEP-funded microplastic monitoring effort administered by the Houston-Galveston Area Council, building on that established partnership to expand regional capacity into nanoplastic measurement.

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☒ No

The proposed work expands an existing study and outreach is beyond the scope of the expanded work.

Latitude/Longitude (Optional):

N/A

Location:

See Figure 1. Sampling locations will be concurrent with the ongoing GBEP funded project. Samples will be collected from sub-watersheds distributed throughout the lower Galveston Bay watershed.

Projects Map

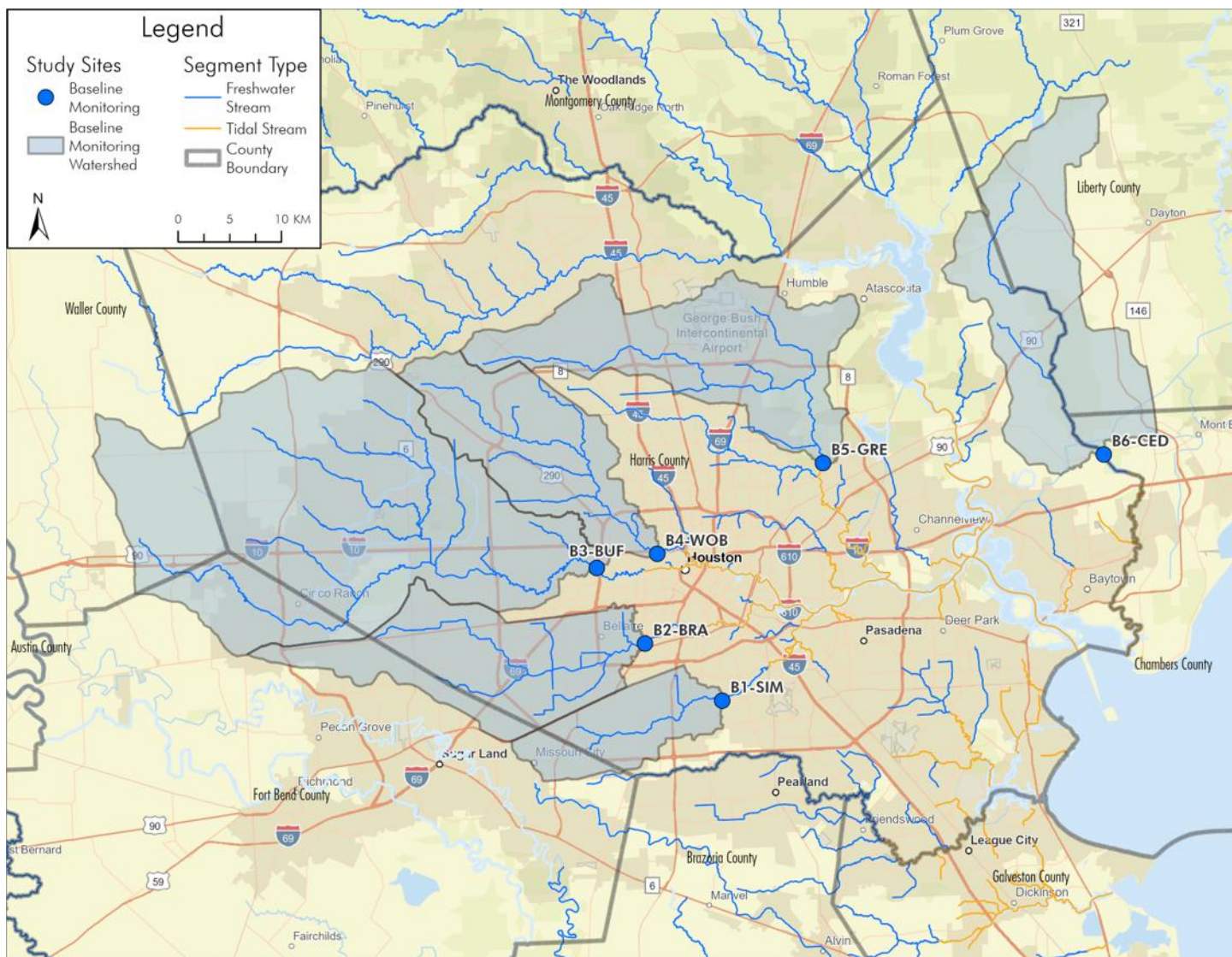


Figure 1 Project area map showing the study sites and corresponding sub-watersheds for micro- and nanoplastic assessment in the Houston-Galveston region.

Supplemental Photos/Graphics (Optional):

N/A

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$ 106,849
Fringe Benefits (###%) ²	\$ 23,720
Travel	\$ 2,600
Supplies	\$ 5,000
Equipment	\$ 0.00
Contractual	\$ 0.00
Construction	\$ 0.00
Other	\$ 8,600
Total Direct Cost	\$ 146,769

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 146,769
Indirect Cost Rate for Reimbursement	16 %
Total Indirect Costs	\$ 22,203

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 168,972
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Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

N/A

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting’s time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may,

in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.

- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Literature Cited

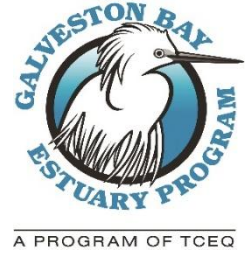
Proposal: “Expanded Evaluation of Micro- and Nanoplastic Pollution through Emerging Methods”

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Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Monitoring and Research (M&R)
Secondary Subcommittee (if applicable): Water and Sediment Quality (WSQ)
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Informing contact recreation safety: linking salinity and temperature to fecal indicator organism, enteric virus, and *Vibrio vulnificus* occurrence in Galveston Bay

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Lauren Kennedy

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☐ Council of Government ☒ Public ISDs or Universities
☐ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UED) Number:

C1DEGMMKC7W7

Vendor Identification Number (VIN) or Tax ID:

74-6000813

Contact Information:

Project Representative Name	Nicole Setzu
Project Representative Phone	915-747-6274
Project Representative Email	osp@utep.edu

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

09/01/2027-05/31/2030 (2yrs 9m)

Amount Requested from GBEP:

[\$] 199,433

Federal ☒ State ☐ No Preference ☐

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$74,844
FY 2029 (09/01/2028-08/31/2029)	\$97,006
FY 2030 (09/01/2029-05/31/2030)	\$27,583
Total	\$199,433

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

[\$] \$199,433

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

NA

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☐ NPS-2 ☐ NPS-3 ☐ NPS-4 ☐
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☒ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☐ HC-3 ☐
SC-1 ☐ SC-2 ☐
FWI-1 ☐ FWI-2 ☐ FWI-3 ☐

Plan Priority 3: Engage Communities

SPO-1 ☐ SPO-2 ☐ SPO-3 ☐ SPO-4 ☐
PEA-1 ☐ PEA-2 ☐ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☒
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☒ ACS-3 ☐

Plan Priority Area Actions Detail:

This project will primarily address RES-4 Conduct Monitoring and Research to Address Limits to Contact Recreation but also contributes to PHA-3 Improve Contact Recreation Safety Through Watershed-Based Plans and ACS-2 Access to Monitoring and Research Data.

RES-4: This project will evaluate how fecal indicator bacteria and waterborne pathogens (enteric viruses, and the naturally occurring pathogen *Vibrio vulnificus*) occurrences vary across salinity and temperature gradients relevant to contact recreation in the Galveston Bay watershed. Thus, data on waterborne pathogens that are relevant to contact recreation in the Galveston Bay watershed will be produced. In addition, controlled laboratory experiments will replicate salinity and temperature conditions observed in the Galveston Bay watershed to compare the persistence of fecal indicators and *Vibrio vulnificus*. Together, the field and laboratory components will help determine when traditional fecal indicator monitoring may not fully characterize contact recreation risks. Thus, this project supports RES-4's priority issue that there is a lack of applied research monitoring data that prevents addressing the limits to human uses and helps to fill this knowledge gap. The project deliverables include a decision support tool, a white paper and a presentation to GBEP stakeholders of results. These outputs align with RES-4 by producing materials that inform contact recreation management in the Galveston Bay Watershed.

PHA-3: Watershed-based plans often rely on only fecal indicator bacteria to identify waters impaired by pathogen pollution and to make management decisions. This project will help determine when local environmental conditions, such as salinity and temperature, may indicate concern for enteric viruses and *Vibrio vulnificus*. The deliverables will inform development and implementation of watershed-based plans.

ACS-2: Finally, all data and code produced from the project will be publicly available through GitHub and Zenodo. By producing a transparent dataset and workflow, this project will increase access to recreational water quality data for watershed managers, public health agencies, and researchers.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☐ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☐ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☐ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☐ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☒ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☒ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

This project addresses the M&R priority of Assessment, Exposure, and Response to stressors, with a specific focus on contact recreation standards. Current recreational water quality monitoring in Texas relies primarily on fecal indicator bacteria to assess fecal contamination and to inform beach advisories. However, fecal indicator monitoring may not capture all waterborne pathogen risks, including naturally occurring pathogens of concern in the Gulf, like *Vibrio vulnificus*. This project will produce preliminary monitoring data to evaluate whether salinity and temperature could help explain differences between fecal indicator bacteria, enteric viruses, and *Vibrio vulnificus* occurrences across the Galveston Bay watershed. These environmental variables are relevant because the Galveston Bay has a salinity gradient from freshwater inflows mixing with Gulf water and prior studies have shown that *Vibrio vulnificus* occurrence is associated with warm temperatures and brackish waters. The project will support interpretation of contact recreation standards by evaluating whether environmental conditions such as salinity and temperature, provide useful context for interpreting fecal indicator bacteria thresholds. By identifying conditions under which fecal indicator organism monitoring may not fully represent risks from enteric viruses and naturally occurring pathogens, this project will provide watershed managers with guidance to better assess public health risks in the Galveston Bay Watershed.

Does the Project align with any EPA Areas of Special Interest?

- ☐ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☒ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

This project addresses EPA's area of special interest related to coastal resiliency by improving our understanding of how changing environmental conditions, particularly salinity and temperature, influence recreational water quality and risks to the public in Galveston Bay. Warmer waters, changing freshwater inflows, and salinity variability can affect the occurrence and persistence of fecal indicators, enteric viruses, and naturally occurring pathogens such as *Vibrio vulnificus*. By producing a decision support tool for watershed managers, the project will help recreational water quality programs better anticipate and respond to pathogen risks under changing coastal conditions. These efforts support coastal resilience by strengthening public health preparedness and by improving interpretation of contact recreation risks in a changing estuarine environment.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The objective of this project is to produce monitoring and applied research data that improve interpretation of contact recreation risks from fecal indicator organisms, enteric viruses, and *Vibrio vulnificus* across salinity and temperature gradients in the Galveston Bay watershed. The project will translate findings into practical tools that support watershed planning and recreational water quality management.

Full Project Description (1,000 words or less):

Recent monitoring found that 94% of Texas beaches tested had fecal indicator bacteria levels above the Environmental Protection Agency's Beach Action Value at least once in 2024. Such contamination can result in gastrointestinal illness and other adverse health outcomes among recreators. In the Houston and Galveston region, public health officials have also provided guidance about the naturally occurring pathogen *Vibrio vulnificus* that can cause severe wound infections after exposure to warm, brackish water. Unlike most fecal pathogens, *Vibrio vulnificus* can increase under favorable environmental conditions. Because it is not routinely monitored by recreational water quality programs, environmental conditions associated with elevated exposure risk are not captured by fecal indicator monitoring alone.

Prior Galveston Bay and Gulf Coast studies have shown that *Vibrio vulnificus* occurs in warm and brackish waters. However, much of this work has focused on seafood safety rather than contact recreation. In contrast, recreational water quality programs typically rely on fecal indicator bacteria such as *Enterococcus*. While these indicators are useful for identifying fecal contamination, they do not reflect public health risks posed by all pathogens. For example, in some cases, enteric viruses persist longer than indicator bacteria, and naturally occurring pathogens, such as *Vibrio vulnificus*, replicate independent of fecal contamination. We want to assess whether easily-measured environmental variables can help identify when fecal indicator monitoring could be missing increased risks from enteric viruses or naturally occurring pathogens.

Galveston Bay provides an ideal system to evaluate and to benefit from these relationships because it includes salinity gradients due to the freshwater inflows from the Trinity and San Jacinto Rivers mixing with seawater from the Gulf. In addition, increasing water temperatures affect pathogen persistence and occurrence and they may also modify how pathogens respond to salinity. Quantifying these relationships could allow watershed managers to use environmental conditions, and fecal indicator organism data, to identify periods where risks of contact recreation may not be fully captured by traditional monitoring alone.

We hypothesize that salinity and temperature can help identify when fecal indicator bacteria do not adequately reflect the occurrence and persistence of enteric viruses and *Vibrio vulnificus*. To test this hypothesis, we will i) Determine whether temperature and salinity help explain differences between fecal indicator bacteria, enteric viruses, and *Vibrio vulnificus* across the Galveston Bay watershed; ii) Quantify the effects of salinity and temperature on the persistence of *Enterococcus faecalis* and *Vibrio vulnificus* under controlled conditions; and iii) Translate findings into a decision support tool and white paper for watershed managers as well as peer reviewed publications to help the academic community build on the findings.

Objective i: Determine whether temperature and salinity help explain differences between fecal indicator bacteria, enteric viruses, and Vibrio vulnificus across the Galveston Bay watershed.

Task 1.1: Existing salinity monitoring and modeling data will be used to identify accessible shoreline locations spanning the natural salinity gradient of the Galveston Bay estuary. For example, candidate sites include McCollum Park, Sylvan Beach Park, Bayshore Park, Seawolf Park, and Jamaica Beach. Final sites will be selected after confirming expected salinity ranges and safe shoreline access for sampling.

Task 1.2: Water samples will be collected from 10 locations across the Galveston Bay watershed on four dates, including two summer and two winter sampling events to capture seasonal temperature differences. InnovaPrep will be utilized to concentrate samples in the field. Eluted samples will be transported on dry ice and stored at -80°C until analysis. *Enterococcus* will be assessed on the day of sampling using IDXX Enterolert assays. General water quality parameters including temperature, pH, and salinity will be assessed onsite. Molecular methods will be used to screen samples for a panel of microbial targets including norovirus, adenovirus, pepper mild mottle virus, crAssphage, *Enterococcus*, *Vibrio vulnificus*, *Escherichia coli*, and MS2. Targets with sufficient detection frequency will be quantified in all samples using droplet digital polymerase chain reaction (ddPCR).

Objective ii: Quantify the effects of salinity and temperature on the persistence of *Enterococcus faecalis* and *Vibrio vulnificus* under controlled conditions.

Persistence experiments will be conducted using *Enterococcus faecalis* and *Vibrio vulnificus* to represent fecal indicator bacteria and a naturally occurring pathogen of concern for contact recreation. Water samples will be collected from a low-salinity and a high-salinity sampling location in the Galveston Bay watershed and transported back to the lab on ice. To generate a salinity and dissolved solids gradient, the high-salinity water will be diluted with the low-salinity water to generate conditions to approximate conditions observed across the Galveston Bay watershed. The organisms will be inoculated into duplicate reactors across salinity (~5 ppt, 15 ppt, and 25 ppt) and temperature conditions (15°C and 30°C) in dark conditions to minimize photoinactivation and focus on salinity and temperature. Persistence will be measured over one week using selective culture-based methods.

Objective iii: Translate findings into a decision support tool and white paper for watershed managers as well as peer reviewed publications to help the academic community build on the findings.

Task 3.1: We will conduct a targeted literature review and meta-analysis following PRISMA guidelines of persistence studies of enteric viruses that report salinity, temperature, and water matrix conditions. This review will be used to contextualize occurrence patterns of enteric viruses observed in Objective i and to help identify environmental conditions under which viral persistence may differ from fecal indicator bacteria.

Task 3.2: To make the project findings accessible for watershed planning, we will develop a decision support matrix that identifies combinations of salinity, temperature, and *Enterococcus* concentrations associated with the increased likelihood of *Vibrio vulnificus* (informed by Objectives i and ii) and enteric virus occurrence (informed by Objective i and Objective iii, task 3.1). The tool will be designed to help watershed managers and recreational water quality programs interpret environmental conditions that may warrant additional caution. Instructions for its use will be included a white paper, which, if appropriate, will be presented at the State of the Bay Symposium. Finally, the results will be incorporated into peer-reviewed publications, and all data and code will be made publicly available via GitHub and Zenodo.

Project Urgency:

NA

Other Plans Implemented:

NA

Partners¹ and Their Roles:

NA

Does the Project work with new, smaller communities/partnerships?

☐ Yes

☒ No

[TBD.]

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☐ Yes

☒ No

[TBD.]

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

This project will focus on shoreline recreational waters across the Galveston Bay watershed, with sampling locations selected to span the natural salinity gradient in the bay. This includes lower salinity water (e.g., areas near Trinity Bay) and higher salinity waters (e.g., areas near West Bay). Candidate shoreline sampling locations include McCollum Park, Sylvan Beach Park, Bayshore Park, Seawolf Park, and Jamaica Beach.

Projects Map

[\[Insert Map Here or Attach as an Appendix if Applicable\]](#)

Supplemental Photos/Graphics (Optional):

[\[Insert Here or Attach as an Appendix\]](#)

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$69,590
Fringe Benefits (17.03% Faculty Fringe) (0.88% Student Fringe)	\$11,341
Travel	\$10,000
Supplies	\$30,000
Equipment	\$0.00
Contractual	\$0.00
Construction	\$0.00
Other	\$13,804
Total Direct Cost	\$134,735

b. Indirect Costs²

Distribution Base Amount (<i>identify Base type below</i>)	\$ 120,931(MTDC)
Indirect Cost Rate for Reimbursement	% 53.5
Total Indirect Costs	\$ 64,698

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 199,433
--	------------

Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☐ direct salary/wages and fringe benefits
☒ modified total direct costs
☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

☒ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of 15 percent of Modified Total Direct Costs (MTDC) in lieu of determining the actual indirect costs of the service. Costs must be consistently charged as either indirect or direct costs.

² Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Partial Reimbursement Rate** — a reimbursement rate agreed to between TCEQ and Performing Party that is less than the rate authorized under TxGMS or, where applicable, 2 CFR Part 200. Performing Party contributes all of its unreimbursed indirect costs to the successful performance of the project or projects funded under this Contract, in accordance with Article 9 of this section.

☐ **Other:** [Examples: De Minimis Rate with a base of direct salary and wages (less than or equal to actual indirect costs) or Provisional Rate. If this is a Provisional Rate, include the following language: Provisional Rate: The subsequent adjustment of the indirect cost rate is subject to the requirements of Article 9 of this (Cost Budget) section.]

Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

PhD Student Tuition Remission Benefit

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

- By submitting this Project Proposal, you acknowledge that, if you become a successful grant recipient selected for a grant award, you must enter into a signed grant agreement or contract with TCEQ following the announcement of that award.

SECTION EIGHT: ACKNOWLEDGMENTS

Please read and understand the following:

- By submitting this Project Proposal, you acknowledge that information on how grant payments will be made is contained in the Budget Details section describing direct and possibly indirect costs. You further acknowledge that grant payments will be reimbursements on the basis of allowable costs incurred and that selected recipients will receive contract documents addressing allowable costs, unallowable costs, and reimbursement.
- By submitting this Project Proposal, you acknowledge your understanding that Project Proposals do not require matching funds and that a TCEQ director does not need to adjust or waive any matching funds requirement.
- By submitting this Project Proposal, you acknowledge that, if GBEP elects to hold a pre-submittal meeting relating to this Project Proposal, GBEP will post notification of the meeting's time and location indicating whether attendance is mandatory.

SECTION NINE: QUESTIONS AND PRE-SUBMITTAL MEETINGS [see 30 TAC § 14.7(13) and 30 TAC § 14.7(14)]:

- There are no pre-submittal meetings scheduled.
- For requests for additional, pre-submittal information [see 30 TAC § 14.7(13)], please contact the corresponding Subcommittee Coordinator listed on this page.

SECTION TEN: ADDITIONAL INSTRUCTIONS

In submitting your Project Proposal, please refer and adhere to the following instructions and guidelines concerning materials and information required to be submitted by potential grant recipients:

- GBEP intends to accept only complete Projected Proposals in a layout and format constituting a filled version of this proposal document with all applicable sections therein addressed; however, GBEP may, in its sole discretion, consider and accept nonconforming Project Proposals in the best interest of the state.
- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

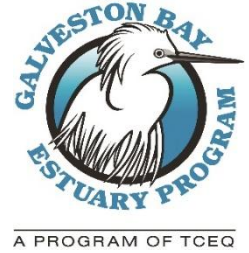
Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov

Galveston Bay Estuary Program

Fiscal 2028 Project Proposal



Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by **July 24, 2026**. No late submittals will be considered for funding.

This Call for Project Proposals complies with 30 Texas Administrative Code (TAC) § 14.7, which lays out requirements for a competitive solicitation by TCEQ for grant awards. For convenience, specific citations to 30 TAC § 14.7 are identified in the text.

SECTION ONE: INTRODUCTION

Purpose [required by 30 TAC § 14.7(1)]: The purpose of the proposed grant from the Galveston Bay Estuary Program (GBEP), a program of the Texas Commission on Environmental Quality (TCEQ), is to implement *The Galveston Bay Plan, 2nd Edition* (the Plan), a comprehensive conservation and management plan falling under Section 320, of the Federal Water Pollution Control Act (33 U.S.C. Section 1330), for a designated national estuary in the State of Texas.

Objective and Allowable Activities [see 30 TAC § 14.7(4)]: The objective of this grant is to implement the GBEP stakeholder developed priorities for fiscal 2028 (FY 2028) Priority Area Actions that were developed by GBEP subcommittees for FY 2028 at the June 2026 meetings. Any proposal implementing the Plan may be submitted, but proposals implementing the FY 2028 Priority Area Actions will be considered above others.

Authority [see 30 TAC § 14.7(2)]: Grants issued by GBEP under this solicitation are authorized by: the Federal Water Pollution Control Act (Clean Water Act) § 320 (33 UNITED STATES CODE § 1330), commonly referred to as the National Estuary Program; TEX. WATER CODE § 5.124; and 30 TAC ch. 14.

Match Requirement [see 30 TAC § 14.7(10) and 30 TAC § 14.7(11)]: No matching funds are required. Therefore, there is no need to adjust or waive any matching funds requirement.

Multiple Awards [see 30 TAC § 14.7(7)]: GBEP anticipates awarding funds for multiple proposals. GBEP intends to award grants to that combination of proposals which best implements the Plan, factoring in all criteria identified in this Call for Project Proposals, the availability of funds, and the most effective division of funds between awards.

Timeline of Proposals:

Task	Date Due
Release of Request for Proposals	June 22, 2026
Proposals Due	July 24, 2026
Send Proposals to Subcommittees Members for Review	August 12, 2026
Present Proposals to Subcommittees for Council Recommendation	September 2, 2026 (NRU and PPE) September 9, 2026 (M&R and WSQ)
Present Proposals to B&P Subcommittee for Final Recommendation	September 30, 2026
Present Proposals to Galveston Bay Council for Approval	October 14, 2026

SECTION TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Natural Resource Uses (NRU)
Secondary Subcommittee (if applicable): Choose an item.
Tertiary Subcommittee (if applicable): Choose an item.

Project Name:

Bayou Greenways Conservation Plan Implementation - Wetlands

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer / Categories of Eligible Recipients [see 30 TAC § 14.7(3)]:

Houston Parks Board

The lead implementer must be in one of the following categories of eligible recipients. Please indicate which category applies to your entity. If the proposing party is not already paired with a lead implementer in one of the categories listed below, the proposing party will need to partner with an eligible recipient in one of these categories to be selected for funding. Please reach out to GBEP staff with any questions.

☐ Federal, State, or Local Government ☐ Council of Government ☐ Public ISDs or Universities
☒ Nonprofit ☐ Other*

[If other, please identify pass-through partner.]

Unique Entity ID (UEI) Number:

Vendor Identification Number (VIN) or Tax ID: 74-1860046

Contact Information:

Project Representative Name	Marissa Llosa
Project Representative Phone	713-808-5819
Project Representative Email	Marissallosa@houstonparksboard.org

Project Dates / Duration (beginning no earlier than September 1, 2027 – ending no later than May 31, 2030) [see 30 TAC § 14.7(5)]:

September 1, 2027 – August 31, 2028

Amount Requested from GBEP:

\$86,250

Federal ☐ State ☐ No Preference ☒

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2028 (09/01/2027-08/31/2028)	\$86,250.00
FY 2029 (09/01/2028-08/31/2029)	\$0
FY 2030 (09/01/2029-05/31/2030)	\$0
Total	\$86,250.00

Total Project Cost (including Leveraging Amounts, if any; provide leveraging information where indicated below):

[\$]136,250

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

HPB staff time and maintenance costs will be in kind, totaling \$50,000

SECTION THREE: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the FY 2028 Subcommittee Priorities (Section Four) will be considered above others. This selection criteria provides for the selection of multiple recipients as needed.

The *Galveston Bay Plan, 2nd Edition* Action Plans are found at:
<https://gbep.texas.gov/ensure-safe-human-and-aquatic-life-use/>
<https://gbep.texas.gov/protect-and-sustain-living-resources/>
<https://gbep.texas.gov/engage-communities/>
<https://gbep.texas.gov/inform-science-based-decision-making/>

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1 ☐ NPS-2 ☐ NPS-3 ☐ NPS-4 ☐
PS-1 ☐ PS-2 ☐ PS-3 ☐
PHA-1 ☐ PHA-2 ☐ PHA-3 ☐ PHA-4 ☐ PHA-5 ☐

Plan Priority 2: Protect and Sustain Living Resources

HC-1 ☐ HC-2 ☒ HC-3 ☒
SC-1 ☒ SC-2 ☒
FWI-1 ☐ FWI-2 ☐ FWI-3 ☒

Plan Priority 3: Engage Communities

SPO-1 ☒ SPO-2 ☐ SPO-3 ☐ SPO-4 ☐
PEA-1 ☐ PEA-2 ☒ PEA-3 ☐

Plan Priority 4: Inform Science-based Decision Making

RES-1 ☐ RES-2 ☐ RES-3 ☐ RES-4 ☐
RES-5 ☐ RES-6 ☐ RES-7 ☐ RES-8 ☐
ACS-1 ☐ ACS-2 ☐ ACS-3 ☐

Plan Priority Area Actions Detail:

HC-2 Habitat Restoration + HC-3 Habitat Enhancement

The proposed project will enhance two existing wetlands along Brays and Greens Bayous respectively. Both sites have been impacted by storm events, change in species diversity, and encroaching development of the surrounding areas which has significantly and negatively impacted the plant community.

We will enhance the sites through the removal of non-native and invasive species, utilizing herbicide where necessary and replacing unwanted plant species with a diverse native palette along these wetlands. This project will also fund the upkeep and maintenance of both sites during the grant term.

SC-1 Native Species Management + SC-2 Invasive Species Control

The proposed project will install a diverse mix of wetland species which will provide natural habitat and resources for wildlife.

Specifically, we will remove invasive species, like Elephant Ear and Vasey grass, and remediating algal growth as needed. Natives will be installed to stabilize and revitalize the wetland edges and shelves.

FWI-3 – Water Conservation and Education + PEA-2 Adult Education + SPO-1 Stewardship Programs

The proposed project will include the creation of a Mason Park Storymap, highlighting the history of the park, the wetland work HPB is doing, and the subsequent benefits for the people and wildlife. Additionally, Thomas Bell Foster improvements will be added to the HPB Conservation Wetlands Storymap.

The proposed project will aim to engage the public in long-term stewardship and awareness via the Mason Park Storymap that will be linked on signage near the site. Thomas Bell Foster Park tidal wetland will also have signage that links to the Conservation Wetlands Page.

Volunteer opportunities will exist at both sites as part of the Conservation Green Team opportunities.

SECTION FOUR: SUBCOMMITTEE PRIORITIES / FACTORS TO BE USED TO SELECT AWARDS [see 30 TAC § 14.7(6)]

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority. This selection criteria provides for the selection of multiple recipients as needed.

Subcommittee Identified Priorities:

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

- ☐ WSQ: Supporting management measures and watershed-based plans through adaptive management, workforce development, and technical assistance.
- ☐ WSQ: Improve knowledge and accessibility of pollution reporting tools to empower the community.
- ☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
- ☐ NRU: Habitat Acquisition.
- ☒ NRU: Enhancement of existing or ongoing restoration-conservation efforts. Special emphasis on:
 - ☒ Adaptive management for previously completed projects; and
 - ☐ Projects that may have lost/delayed funding from other federal sources.
- ☒ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
- ☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost.
- ☐ PPE: Connecting new audiences to existing/completed on-the-ground projects in the watershed.
- ☐ PPE: Empowering K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
- ☐ PPE: Opportunities to host workshops/networking events to provide technical assistance for local leadership (local governments, MUDs, schoolboards, the public) on key topics.
- ☐ PPE: Conservation and environmental workforce development.
- ☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially research and monitoring for diamondback terrapin and best management projects, WSQ, PPE).
- ☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay at an adequate timeline and spatial range to provide useful information.
- ☐ M&R: Assessment, Exposure, and Response to stressors, including but not limited to:
 - ☐ Species of greatest conservation need;
 - ☐ Contact recreation standards;
 - ☐ Environmental parameters;
 - ☐ Emerging contaminants; and
 - ☐ Legacy contaminants.

Subcommittee Priority Detail:

[Please explain in detail how project addresses priorities selected. Attachments may be submitted via email in conjunction with this application.]

Both proposed project sites are previously completed wetland restoration projects which have experienced significant impacts altering the plant community. Our efforts are intended to provide critical interventions (re-establish native vegetation) to realign the restoration in a positive direction.

Does the Project align with any EPA Areas of Special Interest?

- ☒ Reduce Nutrient Pollution to Protect Water Quality and Public Health
- ☐ Make Investments that Address Coastal Resiliency
- ☐ Reduce Trash

[If yes, please summarize how the proposal addresses EPA Areas of Special Interest.]

The Mason Park project site is a treatment wetland by its original design. The proposed interventions would allow the system to continue providing inline water quality improvements by removing sediments and nutrients from inflows into Brays Bayou.

SECTION FIVE: PROPOSAL DETAILS

Grant recipient activities must implement the Plan. Additional recipient selection criteria includes whether a project addresses a subcommittee priority.

Project Summary:

The proposed project will enhance two existing wetlands, totaling 4.45 acres, along major Houston waterways (Brays and Greens Bayous), restoring the native plant community. Upon completion of the project, HPB will be able to maintain the sites as part of our existing maintenance program and ensure the project sites continue to function properly.

Full Project Description (1,000 words or less):

Public access spaces are vital to many communities across Houston, providing a place to explore, learn, and immerse yourself in nature. Houston Parks Board (HPB) will restore two wetlands, in separate parks and bayous, to improve water retention, revitalize wildlife habitat, and provide enhanced natural places for people to be in nature.

The Mason Park wetland ponds, originally created as a treatment wetland, will be restored by removing invasive species and algae from the surface of the pond, thus enhancing the aquatic system and surrounding habitat. Native plants will be reestablished along the shoreline to improve water quality and reduce erosion from localized flooding. The original wetland project was a multi-agency effort as part of the larger federal flood reduction project to demonstrate the effectiveness of inline wetlands as part of a floodway. The wetland provided significant treatment of stormwater prior to entering Brays Bayou. This proposal will return the wetland to its original treatment capacity with removal of excess and noxious material.

Similar to Mason Park, the Thomas Bell Foster Park (TBF) tidal wetland was established to reduce pollutants entering Greens bayous due to localized flooding and major stormwater events. This project funding will support enhancement of the site to increase plant diversity and improve water retention.

The invasive removal, native plantings, and ongoing maintenance are included into the project cost to ensure the success of the restoration sites. HPB will engage our Green Team volunteers to participate in the restoration work, in addition to the support from other HPB staff and contractors.

HPB has previously hosted successful large-scale planting efforts at Thomas Bell Foster Park and would add an additional public planting opportunity as part of this project. HPB would reach out to the surrounding communities and invite them to join in this stewardship event. At the last TBF planting HPB hosted, over 40 volunteers installed nearly 1,600 plants. Similar efforts will be created for the Mason Park project site.

While HPB aims to provide on-site improvements for community members to enjoy these wetlands, we will also provide online access to the projects using GIS StoryMaps and signage. These resources will highlight the importance of wetland restoration, the local and downstream impacts, and provide real life examples for Houstonians to visit in person. Continual community engagement and stewardship are main pillars of Conservation work, and these online resources will be shared to broaden our impact and audiences.

Project Urgency:

There is no immediate or pressing deadline for the proposed project.

Other Plans Implemented:

This project implements aspects of the Texas Coastal Resiliency Master Plan, through the ecological resiliency strategy of wetland planning, restoration and monitoring.

Partners¹ and Their Roles:

¹ If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

HPARD (Landowner), all proposed restoration activities will be vetted directly with the landowner for the Mason Park location. HPB is the landowner for the Thomas Bell Foster Park location.

Does the Project work with new, smaller communities/partnerships?

☐ Yes

☒ No

[TBD.]

Is the project subject to Title VI requirements?

To meet federal nondiscrimination guidance and laws (Title VI), TCEQ requires information and services to be provided in languages other than English when significant numbers of beneficiaries are of limited English-speaking ability (LEP). If 5% or more of the population within your project area is LEP and share a common language, then you are required to provide outreach in the alternative language. For statewide projects, Spanish language outreach is required. As Title VI compliance could impact the project budget, please reach out to the primary subcommittee coordinator for this application with questions on determining applicability.

☒ Yes

☐ No

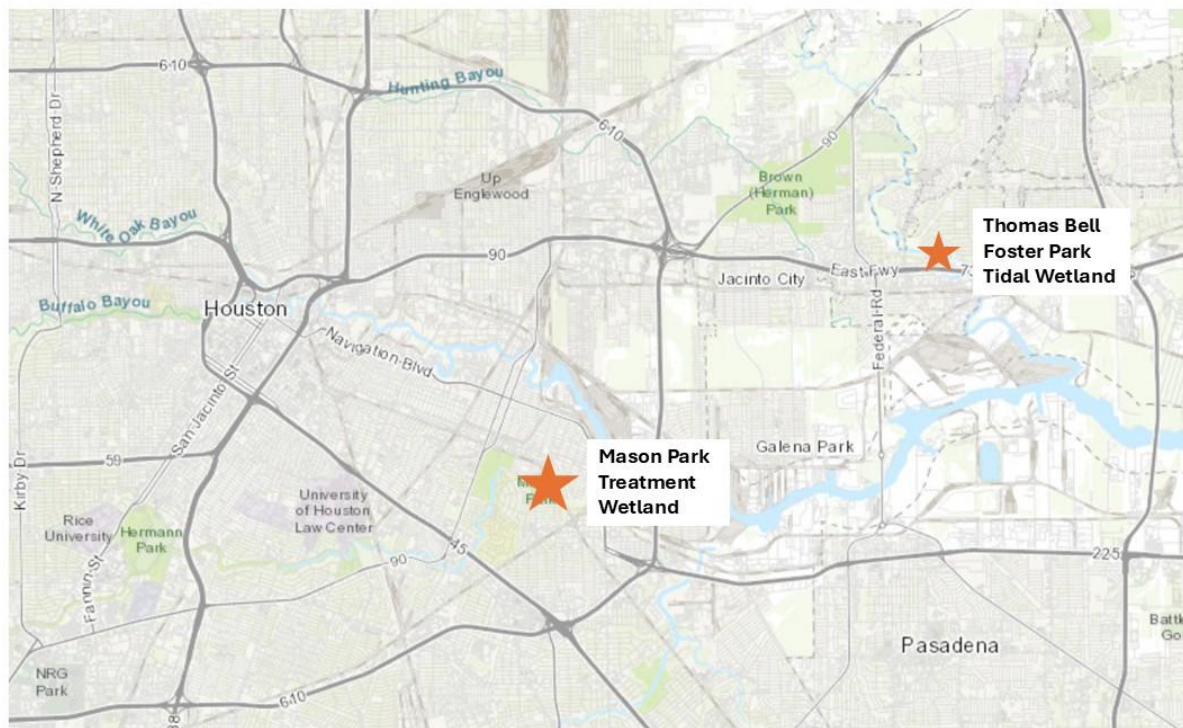
Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

Brays Bayou at Mason Park; Greens Bayou at Thomas Bell Foster Park

Projects Map



Supplemental Photos/Graphics (Optional):

Mason Park, Treatment Wetland overgrowth, July 2026



Thomas Bell Foster overgrowth, July 2026



SECTION SIX: BUDGET DETAILS

Grant Payments [see 30 TAC § 14.7(12)]: All grant payments will be made on the basis of reimbursement for allowable costs (as defined in 2 CFR Part 200, Subpart E). All payments for awarded proposals will be reimbursements of allowable costs incurred after both parties have entered (signed) a grant agreement for the project.

Budget. Authorized budgeted expenditures for work performed are as follows:

a. Direct Costs

Budget Category	Cost for Work to be Performed
Salary / Wages	\$0.00
Fringe Benefits (##%) ²	\$0.00
Travel	\$0.00
Supplies	\$34,000.00
Equipment	\$0.00
Contractual	\$41,000.00
Construction	\$0.00
Other	\$0.00
Total Direct Cost	\$75,000.00

b. Indirect Costs³

Distribution Base Amount (<i>identify Base type below</i>)	\$ 75,000.00
Indirect Cost Rate for Reimbursement	% 15
Total Indirect Costs	\$ 11,250

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	\$ 86,250
--	-----------

Indirect Cost Distribution Base. The Distribution Base above is (check one):

- ☒ direct salary/wages and fringe benefits
- ☒ modified total direct costs
- ☐ other direct cost Base

If other direct cost Base, identify:

The indirect cost rate is (check one):

² If fringe is not a single rate, please attach calculation or explanation as an appendix.

³ Please attach Indirect Cost Agreement as an appendix if applicable

☐ **Predetermined Rate**— an indirect rate that is negotiated between the Performing Party and its federal cognizant agency and supported by a current Negotiated Indirect Cost Rate Agreement (NICRA) letter. A Predetermined Rate is not subject to adjustment except as provided by 2 Code of Federal Regulations (CFR) § 200.411.

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Other. If Budget Category “Other” is greater than \$25,000 or more than 10% of budget total, identify the main constituents:

[Description of costs associated with “Other” budget category.]

Travel. In order to be reimbursable, travel costs must be specifically authorized in advance of the travel. Travel costs will be reimbursed only in the amount of actual costs, up to the maximum allowed by law for employees of the State of Texas at the time the cost is incurred.

Budget Categories. The Budget Categories above are representative of the items of cost found in TxGMS and 2 CFR Part 200, and have the definitions, requirements, and limitations found therein. Construction costs are not reimbursable without prior, specific written authorization from TCEQ.

SECTION SEVEN: CONTRACT REQUIREMENT [see 30 TAC § 14.7(15)]:

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Please read and understand the following:

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- Unless otherwise specified by GBEP, formal signatures are not required on Project Proposals.
- Unless otherwise communicated or implied, GBEP requires 1 (one) completed copy of your Project Proposal per corresponding Subcommittee Coordinator.
- Project Proposals must be received electronically, through the email address of the relevant Subcommittee Coordinator listed on this page, by the deadline listed on both this page and the first page of this Project Proposal document.

Submittal Process and Deadline [see 30 TAC § 14.7(8) and 30 TAC § 14.7(9)]:

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by **July 24, 2026 to the relevant Subcommittee Coordinators below:**

WSQ Subcommittee: Christian.Rines@tceq.texas.gov
NRU Subcommittee: Lindsey.Lippert@tceq.texas.gov
PPE Subcommittee: Zoe.Gapayao@tceq.texas.gov
M&R Subcommittee: Jenelle.Estrada@tceq.texas.gov
Programmatic Projects: Lisa.Marshall@tceq.texas.gov