Water and Sediment Quality (WSQ) Subcommittee
Fiscal 2027 Proposals

	PROPOSAL NAME	GRANTEE	TOTAL REQUEST
1.	Health and Performance Monitoring of Green Infrastructure BMPs: A Pathway for High School Intern Career Exploration	AgriLife	$241,966.00
2.	Galveston Bay Water Quality Protection, Watershed Conservation, and Public Access Expansion	Coastal Trust	$285,820.83
3.	Improving Contact Recreation for Galveston Bay	GBF	$110,883.00
4.	Native Channel Revegetation and Habitat Restoration within the Double Bayou Watershed	GTRI/HARC	$123,847.45
5.	How's the Water - Public Health Risk Awareness Outreach Campaign	H-GAC	$99,303.55
6.	Enumeration Methods Comparison and Evaluation of Nature-Based Stormwater Infrastructure to Reduce Microplastic Pollution in Galveston Bay	H-GAC	$249,851.66
7.	Effect of Native Plants on Soils of Constructed Stormwater Drainages: Pilot Study Expansion	UHCL/EIH	$108,957.94
8.	Feasibility Study for a Bioretention Wetland Demonstration Site	UHCL/EIH	$39,273.75
9.	Tracking Pollution Sources to Protect Galveston Bay	UTA	$328,478.00
		TOTAL:	**$1,588,382.18**

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Public Participation and Education (PPE)

Project Name:

Health and Performance Monitoring of Green Infrastructure BMPs: A Pathway for High School Intern Career

Project Previously Funded by GBEP? Yes ☐ No ☒

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

Christie Taylor

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:	DM2CDWR8LAG3
Vendor Identification Number (VIN) or Tax ID:	35555555552049

Contact Information:

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

Amount Requested from GBEP:

$241,966

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$103,787.00
FY 2028 (09/01/2027-05/31/2028)	$138,179.00
FY 2029 (09/01/2028-05/31/2029)	$0.00
Total	$241,966.00

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2026 – May 31, 2028

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

$249,000

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

Much of our leveraging is in-kind equipment and previously secured.

The total project costs include the use of equipment (such as rain gauges, models, infiltration rings, and tools) that we already own. It also includes support from partner organizations for site access, tools, and student intern support. Additionally, we offer in-house printing of up to 18 student research posters for future presentations.

Project Urgency:

This project was ranked as the first alternate (#2) in the FY26 WSQ proposal cycle, underscoring its competitiveness and readiness. The project allows for monitoring of green infrastructure practices installed at various times, from 2012 to 2025 (ranging in age from 1 to 13 years old). The high school intern program is partially supported, aligning with the proposed monitoring timeline. Funding the project during this cycle will replace previously awarded funding for the intern program that was lost, resulting in the cancellation of a summer cohort (and potentially six total cohorts). The timeline will coincide with professional association staff development funding to expand the internship program. The recently installed green infrastructure in Hitchcock city parks presents an opportunity to conduct baseline monitoring – data that will be lost if not captured in the next several months before conditions begin to change.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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:

NPS-1 Support Watershed-Based Plan Development and Implementation
NPS-2 Support Nonpoint Source Education and Outreach Campaigns
NPS-3 Implement Nonpoint Source Best Management Practices
PS-1 Support Stormwater Education Programs
SPO-3 Support Regional Initiatives
SPO-4 Local Government Outreach
PEA-2 Adult Education
PEA-3 K-12 Education Efforts
RES-6 Evaluate BMP Projects
ACS-2 Access to Monitoring and Research Data

With GBEP funding, AgriLife Extension Green Infrastructure for Texas program staff and student interns will perform soil health and vegetation monitoring for multiple rain gardens, vegetated buffers, and stormwater wetlands in the Lower Galveston Bay Watershed (RES-6), including urban and suburban watersheds with approved watershed-based plans (NPS-1). Green stormwater infrastructure practices help reduce nonpoint source pollution and hold stormwater on-site to improve water quality and enhance local habitats. The monitoring coordination, interviews, and white paper produced through this project will engage municipalities and other property owners that are new to these practices or are concerned about organizational capacity, including the budget to maintain them and add or construct additional projects. This assessment will support the continued implementation and maintenance of these structural NPS BMPs to ensure the long-term success of these BMPs and future installations (NPS-2 and NPS-3). Furthermore, this project will promote the use of green infrastructure to mitigate stormwater impacts in multiple watersheds, including several owners and operators of MS4 permits (PS-1). Support the expansion of our existing high school (grades 9-12) program that enables students to obtain NGICP certification after graduation (PEA-3).

Monitoring that evaluates the effectiveness of green infrastructure aligns with H-GAC's Low Impact Development and GLO's Clean Coast Texas initiatives by building capacity to support local decision-makers in furthering the adoption of these best management practices (SPO-3). Local governments own several of the selected green infrastructure locations. One way these local governments will participate in the project is through partner site interviews to inform the white paper. The white paper will be accompanied by outreach messaging to support the distribution of the resource to additional local governments in the region (SPO-4). Monitoring on-the-ground installations and sharing findings through the white paper and student presentations (PEA-3) will provide an enhanced understanding of local green infrastructure that is adult-focused (PEA-2; ACS-2). Data will be made available online and shared with GBEP partners and decision-makers. Through the project, we will monitor both newly installed and older green infrastructure installations in watersheds with impaired waters to increase knowledge about BMP effectiveness for improved water quality in the region. Performance measure: project evaluation white paper. Successful implementation of RES-6 requires coordination with the WSQ Subcommittee of the Council on Action NPS-3.

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.

☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
    ☐ Adaptive management for previously completed projects;
    ☐ Projects that have lost funding from other federal sources; and
    ☐ Nonnative species management.
☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☒ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☒ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☒ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☒ PPE: Conservation and environmental workforce development.
☒ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

This project focuses on assessing the health and function of existing on-the-ground green stormwater infrastructure projects (WSQ-2, M&R-1, PPE-2) with varying maintenance approaches and at various stages of development. Management measures in watershed-based plans addressing nature-based green infrastructure approaches (WSQ-1) often include mention of practices with some description but seldom offer the level of detail necessary to facilitate implementation or measure effectiveness. One existing gap in communicating the benefits of nature-based solutions is the value of soil, its function and ability to support a healthy watershed. Applying soil health principles in suburban and urban landscapes results in increased infiltration, reduced stormwater runoff, and lower NPS loadings.

Monitoring on-the-ground installations by local GIFT high school student interns (PPE-1, PPE-4) under the supervision of GIFT staff and sharing findings through the white paper and other presentations will provide an enhanced understanding of local green infrastructure that is adult-focused (PPE-1).

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

Green stormwater infrastructure practices help reduce nutrient pollution and hold stormwater on-site to improve water quality, public health, and enhance local habitats. Improving soil health principles in suburban and urban landscapes leads to increased infiltration, reduced stormwater runoff, and lower pollutant loads, resulting in improved water quality in the region.

The monitoring coordination, interviews, student-led research, and white paper produced through this project will engage municipalities and other property owners new to these practices or concerned about organizational capacity, including the budget to maintain them and add or construct additional projects. This assessment will **support the continued implementation and maintenance** of these structural stormwater BMPs to ensure the long-term success of existing and future installations.

Furthermore, this project will promote the use of green infrastructure to mitigate stormwater impacts in **multiple watersheds,** while expanding high school intern participation will provide **hands-on technical training** to help build a future-ready local workforce for sustaining nature-based strategies. These efforts strengthen the long-term impact of infrastructure investments and embed resiliency skills in the local economy.

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:

Texas A&M Extension DAR Houston Office GIFT staff propose monitoring and data collection at up to nine existing stormwater BMP sites (including raingardens, vegetated buffers, and stormwater wetlands) and one control regular maintenance site in multiple counties in the Lower Galveston Bay watershed. Monitoring would include soil health, vegetative composition/diversity, succession stages, and other pertinent observations collected by local GIFT high school student interns under the supervision of GIFT staff. Data collected in the field and from interviews with partner organizations would then lead to the creation of a site-specific maintenance checklist for students and partner organizations, the installation of suggested maintenance (as budgets allow), follow-up data collection, and the development of a white paper and other presentations of the findings.

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

To assess the overall health and function of multiple on-the-ground green infrastructure projects with differing maintenance approaches and at various stages of development, the Texas A&M AgriLife Extension Disaster Assessment and Recovery (DAR) Green Infrastructure for Texas (GIFT) team proposes to monitor soil and vegetation for multiple rain gardens, vegetated buffers, and stormwater wetland areas in the Lower Galveston Bay Watershed. Data collection will occur over a nine-month period starting in late February/ March and continuing through November. Samples will be collected by GIFT staff and multiple cohorts of high school interns (up to 18 students). Samples include both field-based metrics, observations, and laboratory analysis:

- Vegetation coverage and species richness
- Soil temperature and moisture (volumetric water content, VWC) - to determine soil saturation conditions (associated with rainfall events) and porosity
- Infiltration rate
- Soil health (Haney) - water extractable organic carbon, water extractable total and organic nitrogen; soil respiration (ppm CO2), organic matter (LOI%), and more. This testing will be completed by qualified contracted laboratory personnel up to twice during the testing period.
- Water holding capacity (WHC), which is also a contracted laboratory test.

Students in each of the three cohorts from February to November will select one of the sites listed below as their project site to monitor soil and/or vegetation changes. Students will work together with their Texas A&M Extension GIFT program staff mentors to create and address a maintenance checklist for their chosen site. They will then continue to collect data for the duration of their 60-hour program. After their 60-hour program, students will create a poster presentation that can be presented at a future event, empowering students to make positive impacts in their communities through scientific literacy. In between cohorts, sites will be monitored and data collected by GIFT program staff.

Permission for monitoring received through ongoing partnerships for the following locations: Rain gardens - Armand Bayou Nature Center (Pasadena), Environmental Institute of Houston (Houston), Houston Community College-Katy Campus, Ghirardi WaterSmart Park (League City), Heritage Park (League City), Joe Moore Park (Hitchcock), South Park Baptist Church (Alvin); Stormwater wetlands – Exploration Green (Clear Lake), multiple sections.

Locations were selected based on their age, availability of design, installation, and maintenance information, and permission from the owner or operator. As a project partner during the installation of each practice, GIFT staff have access to design and construction details for each installation. The practices we propose to monitor were installed at various times (ranging from 1 to 13 years old), allowing us to compare them at different stages.

GBEP funds will allow GIFT staff to –

- Perform soil health and vegetation monitoring at 10 locations (rain garden and stormwater wetland installations and one control/conventional management) over one growing season (February – October 2026), while supervising student interns.
- Allow students to work through maintenance issues through the creation of a checklist for their project site and organize a maintenance workday for each site.
- Hold one-on-one interviews with representatives from each monitoring location on maintenance or management practices and changes to the gardens since installation.
- Develop a white paper to capture project outcomes, including monitoring results, varying levels of maintenance, and performance.
- Deliver up to 18 student presentations to multiple audiences, introducing new audiences to existing projects and BMPs in Galveston Bay.

The white paper will be accompanied by outreach messaging and broadly distributed through established communication channels, including the Galveston Bay Coalition of Watersheds, GIFT partner events and listserv, the Clean Coast Texas Collaborative, the Exploration Green Conservancy, and GBEP partners.

Other Plans Implemented:

Monitoring by AgriLife staff with high school interns and participation in maintenance and management interviews from on-site representatives will occur in multiple watersheds. EPA-accepted Watershed Protection Plan: Highland Bayou Coastal Basin; Watershed Based-Plans: Armand Bayou Watershed Protection Plan, Dickinson Bayou I-Plan and Bacteria Implementation Group I-Plan. High school student monitoring aligns with EPA's Green Infrastructure program, which emphasizes training and capacity-building in stormwater management. Materials and outcomes will be shared with Clean Coast Texas collaborative partners. Clean Coast Texas is included in the Texas Coastal Resiliency Master Plan.

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

☒ Yes
☐ No

The project engages several smaller communities in Brazoria and Galveston counties during monitoring activities, interviews on maintenance and management practices, and to share the white paper. The white paper will inform future implementation actions and contribute information for future WBPs in the region. The project includes coordination with local decision makers to bridge the gap from awareness of these best management practices and improved implementation. Having sites in multiple counties enables us to draw students from multiple schools around the area potentially introducing them to new practices and sites they have not encountered.

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 and EJScreen instructions.

☐ Yes
☒ No

N/A

Latitude/Longitude (Optional):

N/A

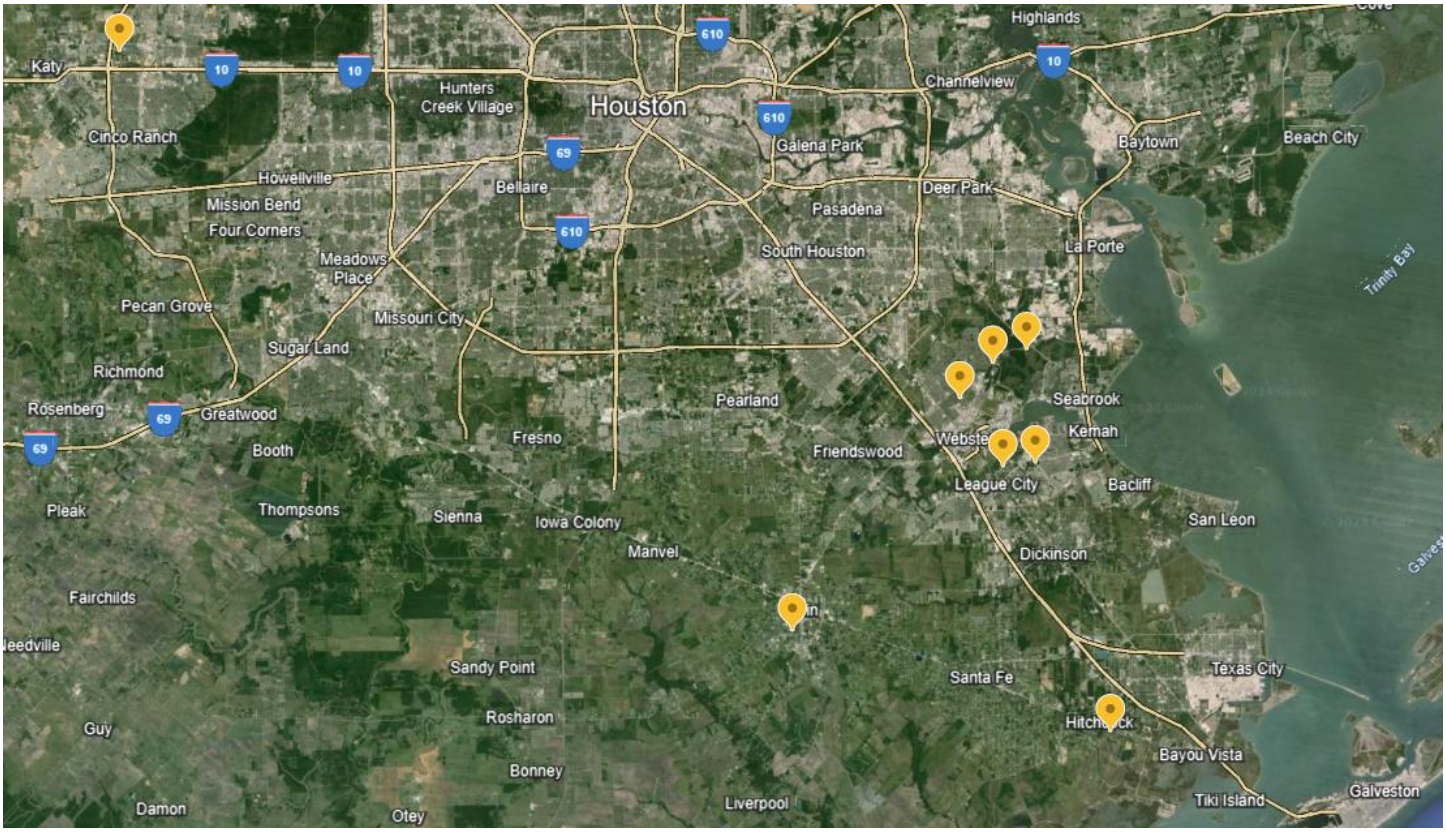
Location:

Site locations in Brazoria, Galveston, and Harris counties (yellow): Armand Bayou Nature Center-Pasadena, Joe Moore Park-Hitchcock, Ghirardi WaterSmart and Heritage Park-League City, Environmental Institute of Houston, Exploration Green-Houston, Houston Community College – Katy Campus, South Park Baptist Church- Alvin.

Partners[1] **and Their Roles**:

The following partners have confirmed they will participate by providing site access, allowing the installation of stationary monitoring equipment, and participating in an interview about maintenance or management practices and any changes since installation: Armand Bayou Nature Center, City of Hitchcock, City of League City, Clear Lake City Water Authority, Environmental Institute of Houston, Exploration Green Conservancy, Houston Community College – Katy Campus, South Park Baptist Church- Alvin. We have previously had student interns from 11 local schools from the following districts: Clear Creek ISD, Houston ISD, and Dickinson ISD.

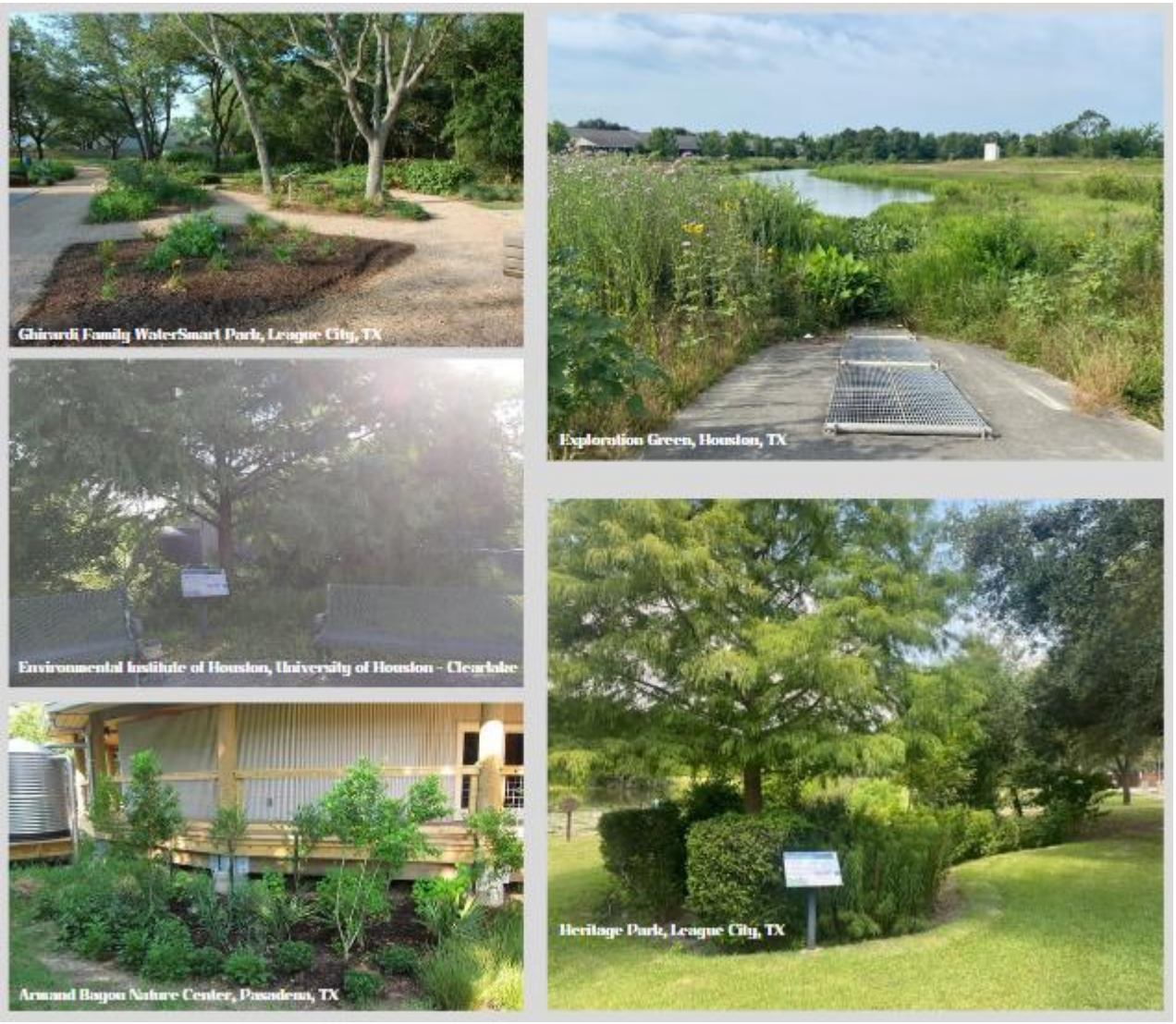
Projects Map



Site locations in Brazoria, Galveston, and Harris counties (yellow).

[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):



Four of the green infrastructure site locations included in the project.

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	$128,516.00
Fringe Benefits **(18.9% plus $1104 insurance)**[2]	$48,148.00
Travel	$1,283.00
Supplies	$4,920.00
Equipment	$0.00
Contractual	$2,000.00
Construction	$0.00
Other	$7,170.00
Total Direct Cost	$192,037.00

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$ 192,037.00
Indirect Cost Rate for Reimbursement	26%
Total Indirect Costs	$ 49,929.00

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 241,966

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

☐ direct salary/wages and fringe benefits

☒ modified total direct costs

☐ Other direct costs 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.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

N/A

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 notify you 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.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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 FY26/27 GBEP WSQ
Project Budget Justification

Health and Performance Monitoring of Green Infrastructure BMPs: A Pathway for HS Intern Career Exploration

Budget Categories –

Personnel Salary: $128,516

Salary ($128,516) requested for Christie Taylor, Extension Program Specialist II at 37% and 40% respectively; Celina Gauthier Lowry, Extension Program Specialist II at 17% and 38% respectively; and Michael Jimenez, Wetland Program Assistant at 20% and 25% respectively.

Fringe: $48,148

Fringe includes a fringe rate of 18.9% plus an insurance rate of $ 1,104. Total fringe requested for Christie Taylor, Extension Program Specialist II; Celina Gauthier Lowry, Extension Program Specialist II; and Michael Jimenez, Extension Program Assistant

Travel: $1,283

Mileage for AgriLife Extension staff is at $0.67 per mile for monitoring and coordination with project partners.

Supplies: $4,920

Project and implementation supplies: soil moisture sensors with data loggers, posts to mount data loggers, enclosure boxes, mounting hardware, tipping bucket rain gauges, temporary signage, additional field supplies for students, such as journals, backpacks, and boots.

Other Expenses: $9,170

Soil laboratory analysis (Haney and water holding capacity), shipping, data management, fleet mileage for transporting student interns, administrative fees, and student stipends.

Total Direct Costs: $192,037

Indirect Costs: $49,929

The negotiated IDC is 26% of Total Direct Costs.

Total Request: $241,966

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1746000531A1

ORGANIZATION:

Texas A & M University - College Station
200 Technology Way
A & M System Bldg, Suite 1281
College Station, TX 77845-3424

DATE:09/02/2022

FILING REF.: The preceding agreement was dated 08/07/2019

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: Facilities And Administrative Cost Rates

RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

	EFFECTIVE PERIOD				
TYPE	**FROM**	**TO**	**RATE(%)**	**LOCATION**	**APPLICABLE TO**
PRED.	09/01/2022	08/31/2023	51.50	On Campus	Organized Research & Instruction
PRED.	09/01/2023	08/31/2025	52.50	On Campus	Organized Research & Instruction
PRED.	09/01/2025	08/31/2026	54.00	On Campus	Organized Research & Instruction
PRED.	09/01/2022	08/31/2026	32.00	On Campus	Other Sponsored Activities
PRED.	09/01/2022	08/31/2026	10.50	Off Campus	IPA Programs
PRED.	09/01/2022	08/31/2026	26.00	Off Campus	All Programs

TYPE	FROM	TO	RATE(%)	LOCATION	APPLICABLE TO
PROV.	09/01/2026	Until Amended			Use same rates and conditions as those cited for fiscal year ending August 31, 2026.

*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 of off site facilities, 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: OFF-CAMPUS DEFINITION: For all activities performed in facilities not owned by the institution and to which rent is directly allocated to the project(s) the off-campus rate will apply. 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, Unemployment Insurance, Health Insurance, Accrued Compensated Absences

APPLICABILITY OF RATES: Texas A&M Research Foundation (EIN: 74-1238434), Texas Engineering Experiment Station (EIN: 74-1974733), Texas Engineering Extension Service (EIN: 74-2270626), Texas Agri-Life Research (FKA as Texas Agricultural Experiment Station) (EIN: 74-6000541), Texas Agri-Life Extension (FKA Texas cooperative Extension) (EIN: 74-6000537), Texas Transportation Institute, (EIN: 74-2270624), Texas A&M University at Galveston (EIN: 74-2125225), Texas A&M Health Science Center (EIN: 74-2907553), Texas Forest Service (EIN: 74-6014065),Texas A&M University System (EIN: 74-2648747), Texas Veterinary Medical Diagnostic Laboratory (EIN: 26-3850570), Shared Services Center Commercialization (EIN: 74-2648747), Texas Division of Emergency Management(TDEM), (EIN: 84-1876045).

Your next F&A proposal based on actual costs for the fiscal year ending 08/31/2025, is due in our office by 02/28/2026.

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:

Texas A & M University - College Station

(INSTITUTION)

(SIGNATURE)

Joseph Duron

(NAME)

Chief Administrative Officer

(TITLE)

9-14-2022

(DATE)

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

(AGENCY)

Arif M. Karim -S Digitally signed by Arif M. Karim -S Date: 2022.09.13 13:48:14 -05'00'

(SIGNATURE)

Arif Karim

(NAME)

Director, Cost Allocation Services

(TITLE)

9/02/2022

(DATE) 6554

HHS REPRESENTATIVE: Denise Shirlee

Telephone: (214) 767-3261

COMPONENTS OF PUBLISHED F&A COST RATE

INSTITUTION: **Texas A&M University - College Station**

FY COVERED BY RATE: **September 1, 2022 - August 31, 2026**

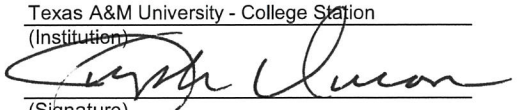
APPLICABLE TO: **ORGANIZED RESEARCH**

RATE COMPONENT:	ORGANIZED RESEARCH & INSTRUCTION FY 23 ON CAMPUS	ORGANIZED RESEARCH & INSTRUCTION FY 24-25 ON CAMPUS	ORGANIZED RESEARCH & INSTRUCTION FY 26 ON CAMPUS	OTHER SPONSORED ACTIVITIES FY 23-26 ON CAMPUS	ALL PROGRAMS FY 23-26 OFF CAMPUS
Building Depreciation	6.6	6.9	7.3	1.0	
Equipment Depreciation	4.4	4.6	4.9	4.0	
Interest	2.7	2.8	3.0	0.1	
Operation & Maintenance	10.3	10.7	11.3	0.9	
Library	1.5	1.5	1.5		
Administration*	26.0	26.0	26.0	26.0	26.0
TOTAL	51.5	52.5	54.0	32.0	26.0

* 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:

Texas A&M University - College Station
(Institution)


(Signature)

Joseph Duron
(Name)

Chief Administrative Officer
(Title)

9-14-2022
(Date)

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Natural Resource Uses (NRU)
Secondary Subcommittee (if applicable): Water and Sediment Quality (WSQ)

Project Name:

Galveston Bay Water Quality Protection, Watershed Conservation, and Public Access Expansion

Project Previously Funded by GBEP? Yes ☐ No ☒

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

The Coastal Trust, Inc.

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:	YQGNQUBLT695
Vendor Identification Number (VIN) or Tax ID:	82-0830961

Contact Information:

Project Representative Name	Michael Roberts
Project Representative Phone	(225) 505-5905
Project Representative Email	michael@thecoastaltrust.org

Amount Requested from GBEP:

$285,820.43

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$118,273.87
FY 2028 (09/01/2027-05/31/2028)	$83,773.48
FY 2029 (09/01/2028-05/31/2029)	$83,773.48

Total	$285,820.43

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2026 through May 31, 2029

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

$285,820.43

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

The Coastal Trust will conduct charitable campaigns and pursue other allowable sources of public funding to support the implementation of this entire scope of work. Work will be scaled up based on funds received. The Internal Revenue Service granted The Coastal Trust 501(c)(3) status on February 10, 2025, and TCT has secured required charitable registrations to conduct fundraising campaigns. This is proceeding immediately. The Coastal Trust is a member of the Greater Houston Partnership and is working through that organization to build a network of donor relationships within the business community in the Houston-Galveston region. Private charitable contributions are being sought as well by TCT to support this scope of work. Funds raised will support future acquisition and conservation costs and due diligence beyond just the Smith Point parcel.

Project Urgency:

Project Representative is willing to work up to full time performing this work immediately. Time is of the essence for land restoration and conservation with tremendous growth facing the region. The Coastal Trust is newly established as a 501(c)(3) public charity and hopes to be able to initiate and sustain operations by securing public funds to benefit the public trust such as these funds applied for through this solicitation.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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:

NPS 1 - Support Watershed-Based Plan Development and Implementation – Identify, prioritize, and help implement projects in Watershed Based Plans to expand sewer systems to address septic contamination.

NPS 3 – Implement Nonpoint Source Best Management Practices – Identify, develop, and implement projects to promote afforestation and reforestation of the Galveston Bay watershed to reduce stormwater pollution.

PS 1 – Support Stormwater Education Programs – Train local governments on stormwater best management practices to maintain MS4 compliance and create integrated stormwater utilities to maximize co-benefits.

PS 2 – Achieve Sanitary Sewer System Capacity and Integrity – Work with sewer utilities to evaluate and expand sewage treatment capacity to accommodate connection of properties with failing septic systems.

PHA 3 – Improve Contact Recreation Safety Through Watershed-Based Plans (WBPs) – Reduce risks of fecal coliform contamination in Galveston Bay through implementation of septic to sewer connection projects.

HC1 – Land Acquisition – Identify, acquire, and conserve private lands of ecological and recreational value. Prioritize land within and adjacent to existing local, state, and federal lands to improve habitat connectivity.

HC-2 – Habitat Restoration – Restore longleaf pine habitat in its historic range to benefit species of concern, sequester carbon, and improve water quality through reductions in stormwater runoff into Galveston Bay.

HC 3 – Habitat Enhancement – Expand public ownership of lands and shorelines to facilitate management measures to enhance fish and wildlife habitat and provide public access to Galveston Bay for recreation.

SC 1 – Native Species Management – Afforestation and reforestation of longleaf pine habitat within historic longleaf pine range to benefit identified fish and wildlife species of concern dependent on this habitat.

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.
☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☒ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
- ☐ Adaptive management for previously completed projects;
- ☐ Projects that have lost funding from other federal sources; and
- ☐ Nonnative species management.

☒ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☒ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

WSQ: Supporting management measures and watershed-based plans.

Stormwater management, septic to sewer connections, land conservation, and forestry work will all support implementation of watershed-based plans that have been developed for the Galveston Bay watershed.

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

Stormwater management, septic to sewer connections, land conservation, and forestry work will all support reduction of point and nonpoint source pollution the Galveston Bay watershed.

NRU: Habitat acquisition.

Project would perform due diligence for the acquisition of 3,375 linear feet of shoreline at Smith Point.

NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.

Forestry component of project will protect habitat for Bachman's Sparrow, Red-cockaded Woodpecker, Louisiana Pine Snake, and Gopher Tortoise, all of which depend on longleaf pine forest for habitat.

NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.

The Coastal Trust through its philanthropic mission will seek to provide as much support as can be generated to support the overall work of the GBEP in its implementation of the Galveston Bay Plan.

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

Reduces nutrient pollution in Galveston Bay through afforestation and reforestation of the watershed, as well as reducing fecal coliform and nutrient pollution through the connection of septic systems to sewers. Reduction in fecal coliform and nutrients in Galveston Bay will improve public health and aquatic habitat.

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 seeks to provide programmatic support to the Galveston Bay Estuary Program in its implementation of the Galveston Bay Plan. Projects include: improve public access to Galveston Bay through land acquisition, improve water quality through stormwater management and septic to sewer connections, and improve fish and wildlife habitat through restoration of longleaf pine habitat within its historic range.

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

Galveston Bay Estuary Program - Water and Sediment Quality Subcommittee - Nonpoint Source Pollution – Ensure Safe Human and Aquatic Life Use – Planning and Implementation of Septic to Sewer Connections

Work with GBEP using existing septic system inventory and water quality monitoring data to target areas surrounding Galveston Bay for septic to sewer connection projects. Work with sewer utilities to plan these projects and advance developed projects to the procurement phase. Serve as a coordinator and technical resource for GBEP and sewer utilities and other relevant partners including the Houston-Galveston Region Bacteria Implementation Group as septic to sewer connection projects are developed and implemented. Estimate project benefits to Galveston Bay in terms of reductions in fecal coliform contamination to determine cost-effectiveness and impacts to sensitive environments to facilitate scientific project prioritization. Help plan for development of necessary addition capacity of local sanitary sewer systems. Support implementation of similar work identified in existing local watershed protection plans.

Galveston Bay Estuary Program - Water and Sediment Quality Subcommittee - Nonpoint Source Pollution – Ensure Safe Human and Aquatic Life Use – Integrated Stormwater Utility Asset Management Development

Work with GBEP to help stormwater utilities in the Galveston Bay watershed develop and implement integrated asset management programs. Provide technical assistance for the development of stormwater utilities to provide sources of funding for stormwater programs. Provide technical assistance for management of these utilities for to maximize effectiveness of programs to ensure integrity and efficiency of use of public funds. Help stormwater utilities identify and pursue opportunities for natural infrastructure to leverage stormwater funds to achieve MS4 compliance and achieve a full range of co-benefits, including improved public health through increased access to public parks for passive recreation, improved urban fish and wildlife habitat, and increases in property value under the proximate principle.

Galveston Bay Estuary Program – Natural Resource Uses Subcommittee – Protect and Sustain Living Resources - East Bay and Trinity Bay Watershed Conservation and Public Access Expansion

Perform due diligence on potential acquisition of Smith Point for permanent preservation and conveyance to Chambers County for the expansion of Robbins Park. Approach landowner and negotiate a potential acquisition or donation of subject property working with interested local conservation partners. Work with U.S. Fish and Wildlife Service to identify potential expansion opportunities for the Moody and Jocelyn Nungaray National Wildlife Refuges. Work with Texas Parks and Wildlife Department to identify potential expansion opportunities for the Candy Cain Abshier Wildlife Management Area. Perform due diligence on identified lands and approach identified landowners to negotiate a potential acquisition or donation of subject properties. Priority acquisition is Smith Point, to add 3,375 linear feet of public shoreline access at Chambers County's James H. Robbins Park from current 500 linear feet that faces heavy recreational use.

Galveston Bay Estuary Program – Natural Resource Uses Subcommittee – Galveston Bay Watershed Longleaf Pine Afforestation and Reforestation Project Identification, Planning, and Implementation

Coordinate between the Galveston Bay Estuary Program, Texas A&M Forest Service, and the Texas Longleaf Team to identify and implement restoration opportunities in historic longleaf pine range in Chambers County, Liberty County, Trinity County, Polk County, and San Jacinto County. Perform comprehensive project planning including identification of potential credits available to landowners for performing restoration. Establish scientific prioritization system for protection of riparian forests along bay tributaries. Will provide added habitat for Texas species of concern such as Red-cockaded Woodpecker, Bachman's Sparrow, Louisiana Pine Snake, and Gopher Tortoise, which depend on longleaf pine forest for habitat.

Galveston Bay Estuary Program – Engage Communities – Local Government Coordination Assistance

At the direction of and representing the Galveston Bay Estuary Program, support and expand existing local GBEP government outreach efforts identified in the Stakeholder and Partner Outreach Action Plan. Train and work with local governments to identify, plan, and implement projects that support the Galveston Bay Plan.

Other Plans Implemented:

Galveston Bay Plan, Texas Longleaf Pine Implementation Team Conservation Plan, Texas Coastal Resiliency Master Plan, Watershed-based plans that have been developed in the Galveston Bay Watershed, Houston-Galveston Area Council septic plans, Houston Stormwater Master Plan, Galveston Master Drainage Plan

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

☒ Yes

☐ No

The Coastal Trust seeks to enhance coordination will all local jurisdictions in the Galveston Bay 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 and EJScreen instructions.

☐ Yes
☒ No

Project does not involve engagement of the general public. It includes targeted outreach and coordination with federal and state agencies and local governments, and landowners with ecologically valuable lands.

Latitude/Longitude (Optional):

29° 32' 47.3274", -94° 47' 19.6362"

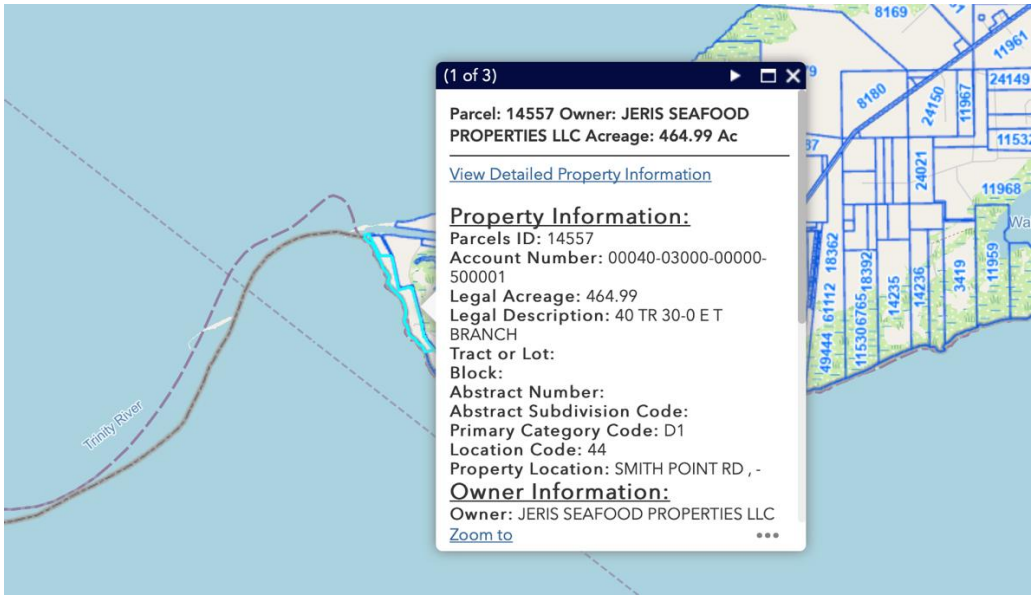
Location:

Smith Point, East Bay Watershed, Trinity Bay Watershed, Municipalities in Galveston Bay Watershed, Chambers County, Liberty County, Trinity County, Polk County, and San Jacinto County.

Partners[1] and Their Roles:

The Coastal Trust will work in coordination with the Texas A&M Forest Service and Texas Longleaf Team on afforestation and reforestation of the watershed. TCT will work in coordination with the Galveston Bay Foundation and Coastal Prairie Conservancy and other interested nonprofits on public access and land conservation. TCT seeks to help build partner capacity through sources outside of Galveston Bay Estuary Program funding to maximize participation in completion of work and increase leverage of GBEP funds. Recruitment of additional partners and development of resources will be a deliberate and ongoing process.

Projects Map

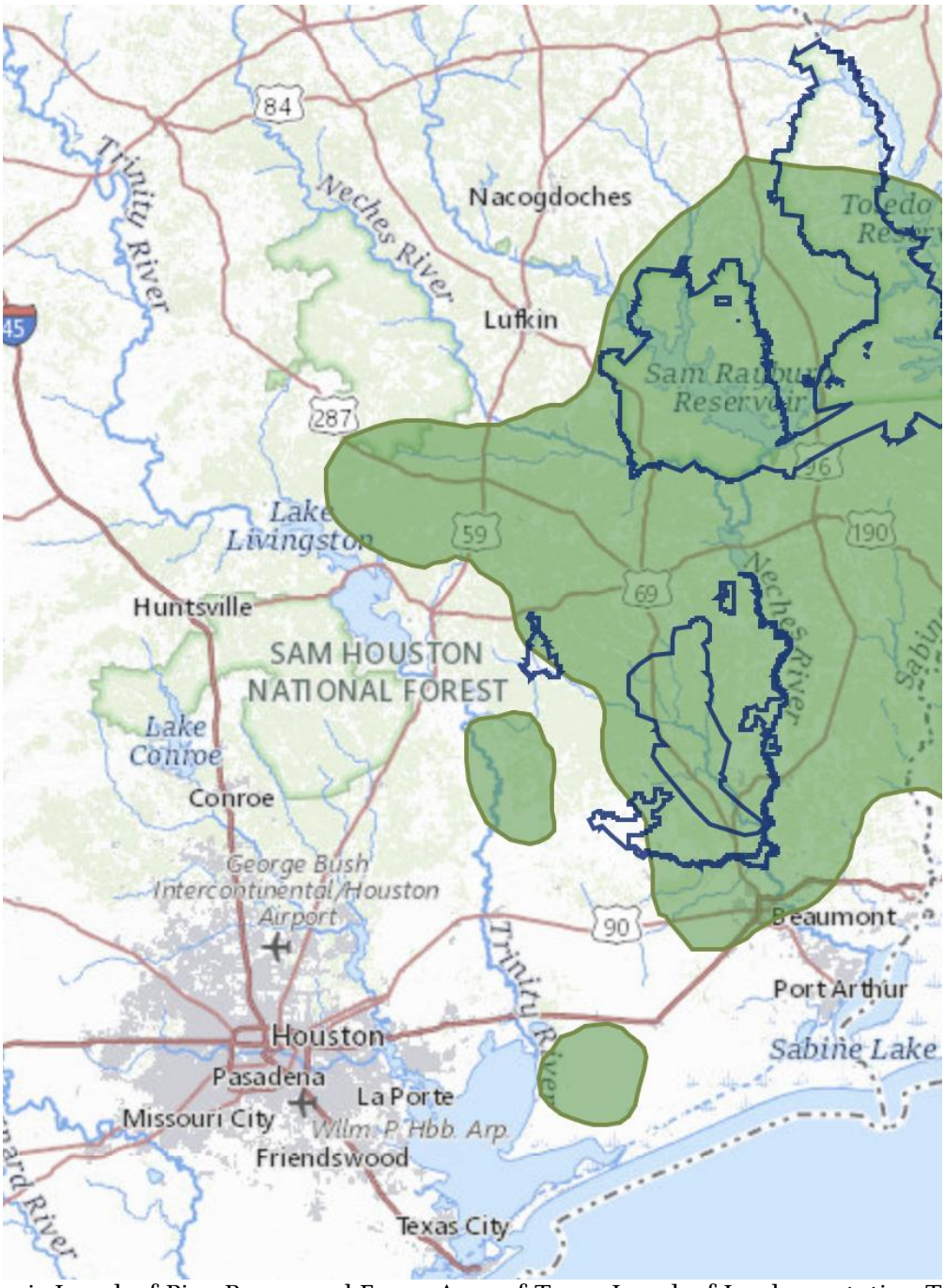


Priority Subject Property for Conservation. Retrieved from Chambers County Appraisal District.

[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):

Aerial view of Smith Point and James H. Robbins Park, photo taken by Michael Roberts on July 16, 2025. Area being pursued for acquisition, conservation, and conveyance to Chambers County outlined in red.



Historic Longleaf Pine Range and Focus Area of Texas Longleaf Implementation Team

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	$183,000.00
Fringe Benefits **(16.55%)**[2]	$30,289.50
Travel	$5,250.00
Supplies	$0.00
Equipment	$0.00
Contractual	$30,000.00
Construction	$0.00
Other	$0.00
Total Direct Cost	$248,539.50

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$ 248,539.50
Indirect Cost Rate for Reimbursement	15%
Total Indirect Costs	$ 37,280.93

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 285.820.43

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

☐ direct salary/wages and fringe benefits

X modified total direct costs

☐ Other direct costs 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.

X **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

[Description of costs associated with "Other" budget category.]

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 notify you 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.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Public Participation and Education (PPE)

Project Name:

Improving Contact Recreation for Galveston Bay

Project Previously Funded by GBEP? Yes ☐ No ☒

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

Galveston Bay Foundation

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:	WQMNK4LCT9N6
Vendor Identification Number (VIN) or Tax ID:	76-0279876

Contact Information:

Project Representative Name	Natasha Zarnstorff
Project Representative Phone	832-536-2274
Project Representative Email	nzarnstorff@galvbay.org

Amount Requested from GBEP:

$107,203

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$57,282
FY 2028 (09/01/2027-05/31/2028)	$53,601
FY 2029 (09/01/2028-05/31/2029)	$0.00

Total	$110,883

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

9/1/2026-8/1/2028

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

$138,003

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

GLO in-kind total: $13,500.00
Beach Watch Promotional Items including:
T-shirts for volunteers: $800
Pet Waste Bags: $1,500
Sunglasses: $4,200
Stickers: $2,000

Existing funding for new Texas Beach Watch Signs in the area: $5,000

Galveston Bay Foundation: $13,620

Existing Monitoring Kits and Lab Equipment for Sample Processing: $13,620

Project Urgency:

This project timing coincides with planed work on website updates by both Texas Beach Watch and Galveston Bay Foundation (GBF). This ongoing work provides the opportunity to leverage time and effort by each organization to ensure resources shared and linked across webpages are up to date and reduce costs of updating resources at a later date.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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:

NPS-1: Support Watershed-Based Plan Development and Implementation

By updating Cease the Grease, Pump Don't Dump, and reworking GBAN contact listing into a new format, the project supports: Clear Creek Watershed Protection Plan (WPP), Upper Gulf Coast Oyster Waters TMDL/I-Plant, Double Bayou WPP, Bacterial Implementation Group, Double Bayou WPP. Additionally, one of the promotional materials Texas Beach Watch will be providing GBF are pet waste bags and dispensers which implement Clear Creek WPP, and Dickinson Bayou WPP and TMDL/I-Plan.

NPS-2: Support Nonpoint Source Education and Outreach Campaigns

The project supports NPS-2 by updating existing NPS campaign outreach materials, developing new materials for these campaigns, and promoting NPS outreach across the Houston-Galveston Region.

PS-1: Support Stormwater Education Programs

Stormwater Impacts Education and Pet Waste Initiatives will be completed under this project through the lens of impacts on contact recreation bacteria levels in Galveston Bay. Information will be provided on what the public can do to help reduce bacteria levels in storm water runoff, and how to view and interpret recent results on Texas Beach Watch.

PS-2: Achieve Sanitary Sewer System Capacity and Ensure Integrity

This project will promote Sanitary Sewer Maintenance via initiatives such as Cease the Grease, by providing funds to update Cease the Grease resources.

PHA-2: Improve Regional Contact Recreation Risk Awareness

The primary goal of this project is to increase public awareness of tools that help beachgoers understand contact recreation standards and access recent water quality testing results. This will be accomplished

through outreach at community events focused on the Texas Beach Watch program, as well as by training and empowering volunteers to effectively explain and promote the tools to the public.

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

By updating Cease the Grease, Pump Don't Dump, and reworking GBAN contact listing into a new format, the project supports: Clear Creek Watershed Protection Plan (WPP), Upper Gulf Coast Oyster Waters TMDL/I-Plant, Double Bayou WPP, Bacterial Implementation Group, Double Bayou WPP. Additionally, one of the promotional materials Texas Beach Watch will be providing GBF are pet waste bags and dispensers which implement Clear Creek WPP, and Dickinson Bayou WPP and TMDL/I-Plan. All of these activities help to reduce bacteria in waterways through reduced SSO's and NPS pollution education.

SPO-1: Stewardship Programs and Volunteer Opportunities

This project will provide opportunities for the community to volunteer through Water Quality monitoring and for volunteer docents to attend events and experience hands-on outreach. Both activities will help to build stewards for Galveston Bay and galvanize individuals to find additional ways to get involved.

SPO-3: Support Regional Initiatives

This project will support updates and outreach for local campaigns including Cease the Grease, Pump Don't Dump, and Texas Beach Watch.

SPO-4: Local Government Outreach

When reaching out to local governments to confirm details to update outreach campaigns GBF will introduce various campaigns and conservation efforts. Based on feedback and questions, they will be introduced to the proper organizations and resources as needed.

PEA-1: Key Issue Engagement

This project will assist with sustaining and enhancing existing programs, including Cease the Grease, Pump Don't Dump, and pollution reporting tools, through ongoing support, updates, and public engagement efforts.

PEA-2: Adult Education

This project will allow for informal education for adults at multiple outreach events. This project will also include advanced formal training for adults via Water Quality Training Workshops. Additional training for adult volunteer docents on Texas Beach Watch will be provided via another proposal.

RES-4: Conduct Monitoring and Research to Address Limits to Contact Recreation

RES-4 will be addressed by monitoring Galveston Bay for Enterococcus levels which will provide data for more formal studies. Bacteria samples have historically been provided to other agencies for FIB tracking studies and the data is integrated into different publicly available datasets.

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.
☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
    ☐ Adaptive management for previously completed projects;

- ☐ Projects that have lost funding from other federal sources; and
- ☐ Nonnative species management.

☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☐ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☒ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☒ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.

☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

WSQ: Supporting management measures and watershed-based plans.
By updating Cease the Grease, Pump Don't Dump, and reworking GBAN's contact list into a new format, the project supports: Clear Creek Watershed Protection Plan (WPP), Upper Gulf Coast Oyster Waters TMDL/I-Plant, Double Bayou WPP, Bacterial Implementation Group, Double Bayou WPP. Additionally, one of the promotional materials Texas Beach Watch will be providing GBF are pet waste bags and dispensers which implement Clear Creek WPP, and Dickinson Bayou WPP and TMDL/I-Plan.

WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.

The primary goal of this project is to raise awareness about tools available to beachgoers for understanding contact recreation standards and accessing recent water quality testing results. This will be achieved through outreach efforts featuring the Texas Beach Watch program at public events and by equipping volunteers with the knowledge and resources needed to effectively discuss the tool with the community.

PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.

Informal education for adults will be delivered through outreach events, while formal and advanced training will be provided through Water Quality Training Workshops and related events. Additional training for volunteer docents on the Texas Beach Watch program will be covered under a separate proposal.

PPE: Connects new audiences to existing/completed projects or the natural habitat.

By increasing education and awareness around contact recreation concerns, more members of the public will feel confident in making informed decisions about safely accessing Galveston Bay.

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 Special Interest Areas by supporting outreach materials and programs focused on nonpoint source (NPS) pollution. It aims to increase public understanding of the impacts of NPS pollution on Galveston Bay and associated public health risks. Educational tools will be distributed to communities implementing watershed-based plans to help reduce nutrient levels entering local waterways and, ultimately, Galveston Bay. Additionally, the project promotes public health by educating beachgoers on contact recreation standards to better assess potential risks and provides funding to support expanded monitoring of *Enterococcus* levels in the Bay.

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 raise public awareness of contact recreation standards and the available resources that help individuals make informed decisions about where to safely recreate in local waterways. This will be achieved by expanding the reach of existing tools, translating educational materials into additional languages, and empowering community members to serve as stewards and advocates for water quality protection efforts.

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

Galveston Bay and its surrounding beaches receive millions of visitors a year based on estimates from Galveston County[1] and Galveston Park Board[2] reports. Visitors are drawn to the natural beauty, fishing opportunities, boating, and of course, beaches and swimming. While recreation opportunities are vast, there are risks associated with contact recreation activities such as wading, swimming, surfing, and more. The risks associated with exposure to waterborne pathogens can include gastroenteritis, diarrhea, fever, colds, and other illnesses. There are ongoing monitoring efforts of Enterococcus bacterial levels within the bay and recreational waters as well as tools to share current measurements with the public. Even with multiple ways for people to learn more about contact recreation risks and select a recreational area that aligns with their risk level, many still are unsure about where to find this information. There is a lack of awareness with visitors from out of state, as well as residents of the Houston-Galveston area.

Texas Beach Watch, the statewide recreational water monitoring program, is planning a significant website update starting in Fall 2025. As part of this update, the program will begin incorporating data from partner organizations that routinely sample coastal waters using EPA-approved methodologies. This expanded data network will include contributions from Padre Island National Seashore and Galveston Bay Foundation's (GBF) citizen science program. By linking Texas Beach Watch with other data platforms, such as Swim Guide, the project will enhance the accessibility and interconnectivity of water quality information across the Texas coast. These improvements will make it easier for the public to find current, reliable data relevant to their recreational activities.

Currently, Texas Beach Watch includes 71 monitoring sites from Surfside to High Island and into Galveston Bay, with only four located within the Bay itself. In contrast, GBF manages 53 additional monitoring sites within the Bay, which are sampled monthly by trained citizen scientists following Texas Stream Team's Quality Assurance Project Plan (QAPP) methodology. Currently, 32 of the 53 sites are actively monitored by these volunteer citizen scientists, with 17 sites being monitored for Enterococcus bacteria using IDEXX methodology. Citizen scientist monitoring for *Enterococcus* are required to complete addition training on top of the Standard Core training and must have been sampling without issues in data collection prior to being invited to complete training to collect *Enterococcus* samples. To help share its data with the public quickly and transparently, GBF currently uses Swim Guide, a global water safety platform supported by over 126 partner organizations. By integrating Swim Guide with the updated Texas Beach Watch site, users will be able to access bacteria data more easily—whether they are exploring Texas beaches or traveling to other states.

This funding would provide support for the following work to increase awareness and engage communities to become stewards for their waterways:

Citizen Science Support: Galveston Bay Foundation (GBF) will continue its robust citizen science water quality monitoring program, with a focus on filling gaps at currently unmonitored sites and expanding bacterial monitoring efforts. Additional training sessions will be offered to recruit new volunteers and to equip existing volunteers with the skills needed to incorporate *Enterococcus* sampling into their routine monitoring.

To further enhance outreach and education, GBF will integrate Texas Beach Watch content into its Standard Core, Bacteria Sampling, and Laboratory training modules. These updates will prepare volunteers to confidently discuss contact recreation standards and water quality tools—such as Texas Beach Watch—with community members they encounter during fieldwork.

To support public engagement, Texas Beach Watch will provide branded T-shirts for volunteers to wear while sampling. These shirts will help volunteers stand out in the field and serve as a conversation starter, creating opportunities to raise awareness about water quality issues and available public resources.
As part of its ongoing Volunteer Notebook webinar series, GBF will also host a dedicated session focused on recreational contact standards and the use of tools like Texas Beach Watch. This educational event will be open to current volunteers, Docents in Training, and partner organizations to further expand community knowledge and involvement in local water quality stewardship.

Signage and Outreach Materials

Galveston Bay Foundation (GBF) will collaborate with Texas Beach Watch to translate selected outreach materials into Spanish and Vietnamese. The materials chosen for translation will be based on historic requests from local partners and those deemed most valuable for their communities. GBF will also update its existing outreach materials to include cross-promotion of Texas Beach Watch and ensure accuracy for other current resources. These materials may include, but are not limited to, *Cease the Grease*, *Pump Don't Dump*, and general water quality websites and flyers.

In addition to translating select resources into Spanish and Vietnamese, GBF will explore the development of new outreach materials to address identified gaps. Potential new materials may include an interactive Texas Beach Watch demonstration sign for outreach tables, customized signage for GBF monitoring sites, and updated flyers or brochures.

Outreach
In addition to training volunteers to become proponents for Texas Beach Watch and data tools in their routine representation of GBF though monitoring efforts, Galveston Bay Foundation Staff and volunteers will attend up to 13 outreach events per year to promote contact recreation tools.

Project Outcomes

The overall reach for this project is expected to be around 1,300 individuals through in-person outreach. Additional reach will occur through signage and social media posts. Estimated exposure to the Texas Beach Watch name will be over 29,000 individuals based on attendance at events GBF plans to focus on bacteria monitoring outreach. The number of monitoring sites may increase by up to 20 new sites routinely monitored by trained citizen scientists for Standard Core water quality parameters around Galveston Bay. Up to 10 new sites may be monitored for Enterococcus bacteria and data shared on Swim Guide and linked to Texas Beach Watch though hosting training sessions for existing volunteers. Existing volunteers will also attend QC training sessions to ensure proper sampling techniques are maintained.

[1]Galveston Park Board of Trustees FY2024 Annual Report
[2]Galveston County Visitor Study, 2009

Other Plans Implemented:

Governors' Action Plan IV for Healthy and Resilient Coasts (2021 – 2026)
Gulf of Mexico Alliance
The Plan's Education and Engagement Team Initiatives and Water Resource Team Initiatives align with this project. For the Education and Engagement Team this project enacts the focus area's Collaborative educational partnerships by enhancing stewardship outreach efforts through collaboration between multiple organizations and increasing capacity. It also enacts the Water Resources team's focus area of monitoring threats to human health and supporting implementation efforts to reduce the risks to human health. As citizen science this part of this project GBF's efforts align with the impact to water quality focus area, specifically on actions that support data collection and pollutant reduction efforts. Additionally, in alignment with the water resource protection area of the plan, GBF will work to increase awareness and engage communities to become stewards for their waterways and understand the value of healthy water resources.

Watershed Protection Plans
By updating Cease the Grease, Pump Don't Dump, and reworking GBAN contact listing into a new format, the project supports: Clear Creek Watershed Protection Plan (WPP), Upper Gulf Coast Oyster Waters TMDL/I-Plant, Double Bayou WPP, Bacterial Implementation Group, Double Bayou WPP. Additionally, one of the promotional materials Texas Beach Watch will be providing GBF are pet waste bags and dispensers which implement Clear Creek WPP, and Dickinson Bayou WPP and TMDL/I-Plan

Does the Project work with new, smaller communities/partnerships?
☐ Yes
☐ No

Galveston Bay Foundation will determine if there are potential new partners to work with during this project and pursue as possible.

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 and EJScreen instructions.

☒ Yes
☐ No

A key component of this project is the translation of outreach materials into Spanish and Vietnamese, in response to requests from municipalities seeking to better inform their constituents about contact recreation risks. While some of Galveston Bay Foundation's materials are already available in Spanish and/or Vietnamese, this project will expand the accessibility of critical information across a broader range of resources. Translation on site during outreach events or water quality training sessions will be provided either by qualified bilingual language volunteers, staff, or a hired intern depending on the language required.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

Galveston Bay and the Greater Houston-Galveston Area

Partners[1] and Their Roles:

Texas Beach Watch will support this proposal by providing outreach materials to be utilized by Galveston Bay Foundation staff and volunteers throughout the duration of this project. Ongoing work by Texas Beach Watch will complement the efforts of this proposal, including additional website updates and signs installed at new locations throughout Galveston Bay.

Projects Map

Map of Galveston Bay Foundation water quality monitoring sites in 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):

Please see 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	$60,000
Fringe Benefits (##%)[2]	$12,000
Travel	$1,420
Supplies	$14,600
Equipment	$0.00
Contractual	$2,000
Construction	$0.00
Other	$6,400
Total Direct Cost	$96,420

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$96,420
Indirect Cost Rate for Reimbursement	% 15 of modified total direct costs
Total Indirect Costs	$ 14,463

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 110,883

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

☐ direct salary/wages and fringe benefits

☒ modified total direct costs

☐ Other direct costs 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

[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 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 fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

[Description of costs associated with "Other" budget category.]

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 notify you 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

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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:

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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 25, 2025 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
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Programmatic Projects
Lisa.Marshall@tceq.texas.gov

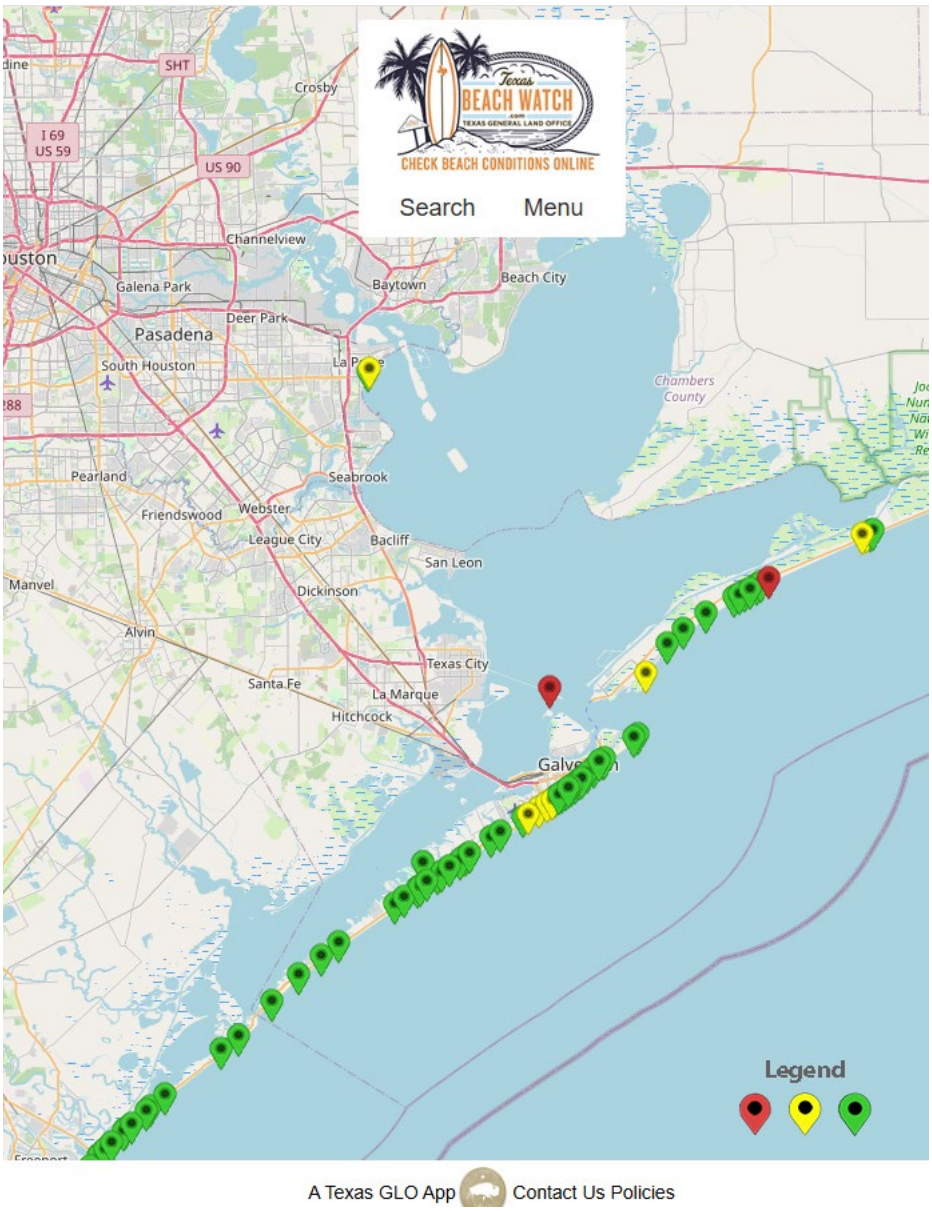


Figure 1: Map of Texas Beach Watch website and sites in Galveston Bay area.

Figure 2: Photo of Bacteria Outreach at Armond Bayou Earth Day event

Figure 2: Photo of Bacteria Outreach at San Jacinto College Earth Day event

TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

To Whom It May Concern, 7/24/2025

The Texas Beach Watch Program is pleased to provide this letter of commitment in support of the Galveston Bay Foundation's grant proposal focused on expanding water quality monitoring and public outreach across the Texas coast.

As the state's recreational beach monitoring program, Texas Beach Watch is committed to protecting public health by tracking bacterial water quality along our beaches. We fully endorse the Foundation's efforts to elevate community engagement through volunteer-based citizen science, multilingual outreach materials, and integration of complementary data showcased on the Texas Beach Watch website. These enhancements directly align with Texas Beach Watch's mission and represent a meaningful expansion of our public-facing resources.

Texas Beach Watch will support this collaborative initiative by:

- **Providing program representation** in outreach materials, signage, and events to promote awareness of bacterial water quality risks and available tools for safe contact recreation.
- **Furnishing branded volunteer apparel**, including Texas Beach Watch T-shirts, to encourage community interaction and foster volunteer visibility during monitoring activities.
- **Collaborating on outreach material translation** into Spanish and Vietnamese to ensure inclusivity and extend our reach among communities historically underserved by English-only resources.
- **Incorporating partner data** from Galveston Bay Foundation's volunteer monitoring program into our upcoming website update, increasing the number of publicly accessible sites within Galveston Bay.
- **Participating in training opportunities** that educate volunteers on contact recreation standards and empower them to serve as knowledgeable stewards during field activities.

These commitments demonstrate Texas Beach Watch's full support of Galveston Bay Foundation's initiative and our shared goals for improved public access to water quality data, expanded monitoring capacity, and enhanced community stewardship.

We are excited about the potential impact this project will have on our coastal communities and look forward to continuing this valuable partnership.

Sincerely,

Lucilla Flores

Lucy Flores

Texas Beach Watch Project Manager

512.463.5134

lucy.flores@glo.texas.gov

www.texasbeachwatch.com

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

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

Project Name:

Native Channel Revegetation and Habitat Restoration within the Double Bayou Watershed

Project Previously Funded by GBEP? **Yes** ☐ No ☐

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

Geotechnology Research Institute (GTRI)/Houston Advanced Research Center (HARC)

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*

N/A

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

Contact Information:

Project Representative Name	Dr. Ryan Bare
Project Representative Phone	281-364-6050
Project Representative Email	Rbare@HARCresearch.org

Amount Requested from GBEP:

$123,847

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$65,405.51
FY 2028 (09/01/2027-05/31/2028)	$58,441.94
FY 2029 (09/01/2028-05/31/2029)	$0.00

Total	$123,847.45

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2026 – August 31, 2028

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

$625,882

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

Texas State Soil and Water Conservation Board, Double Bayou Watershed Protection Plan Implementation Phase III federal NPS 319 funding, **$342,634**, Secured
GTRI/HARC, Double Bayou Watershed Protection Plan Implementation Phase III, in-kind, **$101,801**, Secured
Trinity Bay Conservation District, in-kind, **$50,600**, Secured (estimated)
Wildlife Habitat Federation, Natural Resource Conservation Services, in-kind, **$7,000**, Potential (estimated)

Project Urgency:

This project is ready to begin during the September 1, 2025 to May 31, 2027 grant period with FY26 state funds. There is a potential loss of opportunity to implement if coordination does not align with the Trinity Bay Conservation District's planned clearing schedule at the channel revegetation site. An earlier start date would allow for continuation of coordination efforts with the District that began during proposal development. Additionally, there is a risk of losing leveraged funds due to the three-year project period tied to the Texas State Soil and Water Conservation Board's Double Bayou Watershed Protection Plan Implementation Phase III NPS Program 319 funding, which ends August 31, 2028.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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 aligns with and advances actions under the Galveston Bay Plan, 2nd Edition, by implementing watershed-based restoration activities that reduce nonpoint source (NPS) pollution, improve contact recreation safety, and restore priority coastal prairie habitat within the Double Bayou Watershed.

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

NPS-1: Support Watershed-Based Plan Development and Implementation
This project directly supports the implementation of the Double Bayou Watershed Protection Plan (WPP) by addressing pollutant load reductions through targeted restoration activities. The project team will coordinate efforts to advance the WPP, including the application of vegetation-based BMPs and stakeholder engagement strategies. The project is designed to serve as a demonstration for scaling implementation throughout the Watershed.

- **NPS-3: Implement NPS Best Management Practices**
  The project implements BMPs that address FIB, nutrients, and sediment from agricultural runoff, domestic animals, and wildlife. Restoration activities include the revegetation of bayou channel banks with native grasses, as well as the conversion of former agricultural land to native coastal prairie. These practices filter surface runoff, stabilize soil, reduce erosion, and improve water quality in the Double Bayou system.
- **PHA-3: Improve Contact Recreation Safety Through Watershed-Based Plans (WBPs)**
  Water quality impairments in the East and West Forks of Double Bayou, particularly for FIB, pose risks to safe contact recreation. By implementing the WPP through BMPs that reduce bacteria loading, this project contributes to improved water quality and safer conditions for swimming, fishing, and other recreational uses, directly supporting the goals of PHA-3.

Plan Priority 2: Protect and Sustain Living Resources

- **HC-2: Habitat Restoration**
  The project restores a total of 60 acres of native coastal prairie habitat—10 acres along bayou channel banks and 50 acres that is currently dominated by low-value grasses. These restoration efforts enhance ecological function, support pollinators and wildlife, and reestablish critical habitat within the Northern Humid Gulf Coastal Prairies Ecoregion. The project's collaborative approach with private landowners and local stakeholders also promotes long-term stewardship of restored habitats.

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.
☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
  ☐ Adaptive management for previously completed projects;
  ☐ Projects that have lost funding from other federal sources; and
  ☐ Nonnative species management.

☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☐ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

This project directly supports the Water and Sediment Quality Subcommittee's fiscal year priorities by advancing the implementation of the Double Bayou Watershed Protection Plan through targeted restoration and the deployment of best management practices (BMPs) that address nonpoint source (NPS) pollution. By restoring 60 acres of native coastal prairie vegetation including 10 acres of bayou channel banks and a 50 acre site the project contributes measurable progress toward WPP goals related to water quality improvement, habitat enhancement, and stakeholder engagement.

The pilot effort to reseed cleared bayou channel banks with native coastal prairie vegetation represents an innovative NPS BMP tailored to the region's hydrologic and ecological context. Native vegetation improves water quality by filtering runoff, reducing fecal indicator bacteria (FIB) and nutrient loads, and stabilizing soils to minimize erosion and sedimentation into water bodies. These improvements address key pollutant concerns in the watershed and support enhanced safety for contact recreation in impaired segments of the East and West Forks of Double Bayou, which are listed for elevated FIB under the 2024 Texas Integrated Report.

In addition, the restoration of former agricultural land to native prairie directly supports habitat restoration and enhancement objectives by reestablishing critical coastal prairie ecosystems within the Northern Humid Gulf Coastal Prairies Ecoregion. These habitats benefit pollinators, birds, and other wildlife while contributing to improved soil health, infiltration, and long-term watershed health.

Together, the implementation of these practices not only addresses existing impairments but also strengthens the local capacity for watershed stewardship through demonstration-based learning, stakeholder engagement, and documentation of scalable, cost-effective restoration strategies.
The project contributes to long-term water quality improvements in the Trinity Bay and Galveston Bay systems, strengthens community partnerships, and demonstrates an innovative, locally relevant strategy for protecting Texas' coastal watersheds.

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 supports two EPA Areas of Special Interest by implementing strategies that reduce NPS and enhance coastal watershed resilience. While not solely focused on nutrient reduction, the project is expected to provide co-benefits that contribute to water quality improvements and long-term ecosystem stability.

Reduce Nutrient Pollution to Protect Water Quality and Public Health
Although nutrient pollution reduction is not a primary objective, it is an anticipated outcome of this project. The restoration of native coastal prairie vegetation along bayou channel banks and upland areas is expected to reduce surface runoff, enhance soil infiltration, and filter pollutants, including nutrients, before they enter adjacent waterways. These practices support the protection of public health by addressing bacterial impairments identified in the Watershed.

Make Investments that Address Coastal Resiliency
This project represents a forward-looking investment in coastal resilience by piloting the use of native vegetation in drainage infrastructure management. Naturally vegetated channels offer multiple resilience benefits, including reduced flood risk, improved shoreline and streambank stabilization, habitat enhancement, and improved water quality. By demonstrating a scalable, cost-effective alternative to conventional vegetation management, the project builds local capacity that supports long-term ecological and community resilience in the Galveston Bay 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 implements best management practices, in support of the Double Bayou Watershed Protection Plan, by restoring 60 acres of native coastal prairie vegetation through streambank and upland habitat restoration to reduce nonpoint source pollution, including fecal indicator bacteria and nutrients. By piloting the use of native vegetation for channel revegetation, the project demonstrates a scalable, cost-effective approach that improves water quality, supports public health, and enhances coastal protection through erosion control, habitat restoration, and flood risk reduction.

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

This project proposes to advance the projection of nonpoint source pollution (NPS) water quality in the Double Bayou Watershed (the Watershed) through a collaborative effort with the Trinity Bay Conservation District (TBCD), the Wildlife Habitat Federation (WHF), the Geotechnology Research Institute (GTRI)/Houston Advanced Research Center (HARC), and stakeholders. The project supports implementation of the Double Bayou Watershed Protection Plan (WPP) and implements best management practices (BMPs) that address NPS. The project will result in the restoration of 60 acres of native coastal prairie habitat at two sites within the Watershed. This will be accomplished through two integrated strategies: piloting the reseeding of bayou channel banks with native vegetation following routine maintenance clearing, and restoring a 50-acre site owned by a private landowner to native coastal prairie. The goal is to restore habitat to improve water and environmental quality while demonstrating a scalable, cost-effective approach for enhancing overall watershed health.

The Double Bayou Watershed is on the Upper Texas Gulf Coast and encompasses 98 square miles (61,445 acres) of predominantly rural and agricultural land. It drains into Trinity Bay and ultimately Galveston Bay, serving as an important natural and economic resource for the region (Figure 1). However, both the East and West Forks of Double Bayou face persistent water quality impairments. The 2024 Texas Integrated Report (303(d) List) identifies the West Fork (Segment 2422B) as impaired for low dissolved oxygen and elevated levels of fecal indicator bacteria (FIB), and the East Fork (Segment 2422D) as impaired for FIB. These impairments are attributed primarily to NPS from domestic animals, wildlife, and failing septic systems. The Watershed is within the Northern Humid Gulf Coastal Prairies Ecoregion, a historically rich mosaic of native grasslands, oak mottes, and maritime woodlands.

TBCD is a conservation and reclamation district responsible for managing over 1,400 miles of drainage infrastructure in East Chambers and portions of West Jefferson counties, with a focus on stormwater conveyance and flood risk reduction. This drainage network, which includes the East and West Forks of Double Bayou, is currently maintained through periodic mechanical vegetation clearing and herbicide application (Figure 6). To support bank stabilization, TBCD recently initiated a reseeding program using annual ryegrass at select sites that have been cleared. As an alternative, this project will restore 10 acres of cleared bayou streambanks with native coastal prairie vegetation - piloting an innovative approach to channel revegetation that preserves flood conveyance while providing long-term ecological benefits.

In addition to the pilot site, WHF will lead the restoration of a 50 acre tract of former agricultural land along the East Fork of Double Bayou. TBCD has coordinated with the project partners to select a 10 acre site, which includes both stream banks along a tributary of the East Fork, near to Double Bayou Park (Figures 2, 4, and 5). The 50-acre tract owned by a private landowner was selected because the property has bayou frontage along the East Fork, and is currently coastal Bermuda grass, which offers inadequate water quality or habitat value (Figures 3, 7, and 8). WHF has been in coordination with the landowner who has provided permission for the work to be performed.

WHF will lead the planning, site preparation, and implementation of restoration activities, providing technical guidance to ensure the use of best practices for successful establishment and long-term maintenance of native habitat. Restoration efforts will include an initial herbicide application as well as a follow-up treatment to control invasive and non-native vegetation, followed by seedbed preparation across both the 10-acre channel pilot site and the 50-acre restoration site. WHF will utilize a no-till drill to plant a custom native seed mix specifically selected to match local soil characteristics and hydrologic conditions. TBCD will support site preparation by clearing brush from the 10-acre pilot area as part of their routine maintenance operations. Post-planting follow-up treatments and supplemental reseeding will be conducted as needed during the first year to ensure adequate establishment. A habitat management plan has been established in coordination with the private landowner to guide the restoration approach, long-term stewardship, and maintenance practices. Monitoring and evaluation will include permanent photo points and periodic surveys of vegetation composition to assess restoration progress and ecological outcomes. Results will be documented to inform adaptive management and support future scaling of the approach across the Watershed, with the goal of incorporating native channel revegetation into TBCD's standard operating procedures in alignment with the WPP's water quality objectives and local conservation priorities.

HARC and WHF will collaborate to facilitate stakeholder engagement and knowledge transfer through an interactive field event focused on hands-on learning. This educational field day will invite participants such as landowners, agency staff, local partners, and stakeholders to visit the restoration sites and engage in technical demonstrations, including infiltration testing, soil characterization, erosion risk assessment, and vegetation and biodiversity surveys. To further extend outreach, HARC will develop project materials highlighting objectives, key findings, and outcomes for distribution through the Double Bayou Watershed Partnership newsletter, stakeholder meetings, and the project website (https://www.doublebayou.org/). Together, the field event and outreach efforts will build regional technical capacity and foster a shared understanding of ecological functions, site conditions, and the role of native vegetation in watershed health.

The project will result in 60 acres of native coastal prairie restoration across two sites, demonstrating improvements in erosion control, sediment reduction, and NPS water quality. It will generate new knowledge on native vegetation performance in channel environments and guide recommendations for scaling this BMP across the Watershed. The educational component will raise stakeholder awareness of the role of native vegetation in water quality protection and provide practical training in monitoring and land management. Through collaboration and demonstration-based learning, the project will help restore portions of the bayou system to well-functioning prairie habitat, advancing the goals of the Double Bayou WPP and the broader Galveston Bay ecosystem.

Other Plans Implemented:

Double Bayou Watershed Protection Plan, Texas Coastal Management Plan, Texas Coastal Resiliency Master Plan, and an established WHF Habitat Management Plan.

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

☐ Yes
☒ No

N/A

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 and EJScreen instructions.

☐ Yes
☒ No

[TBD.]

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

Two locations within the Double Bayou Watershed. See Figures 2 and 3 for site location details.

Partners[1] **and Their Roles**:

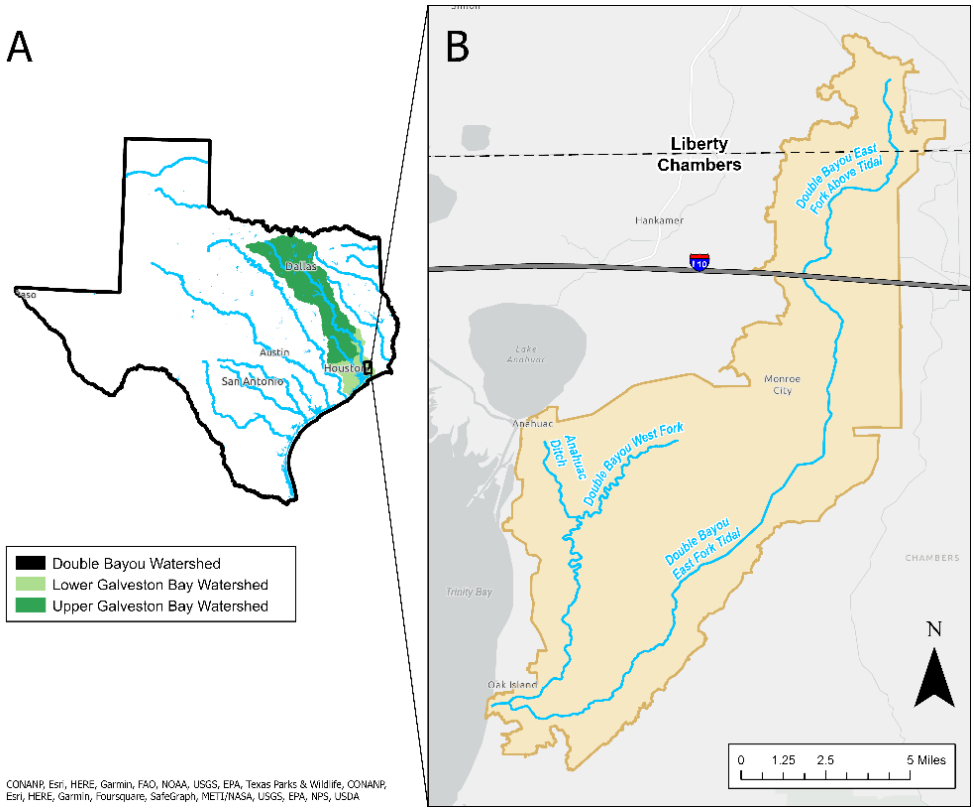
HARC will lead overall project administration and coordination, support planning and execution of the stakeholder field day, develop public outreach and educational materials, and ensure alignment with the Double Bayou WPP and stakeholder engagement efforts.

WHF will provide technical guidance and lead the implementation of habitat restoration activities. This includes oversight of seedbed preparation and native seed installation, post-establishment vegetation monitoring, and short-term maintenance. Long-term management recommendations can be provided through a WHF Habitat Management Plan. WHF will also contribute to the design and delivery of the field event and support public education components.

TBCD will assist with site preparation by clearing brush and preparing the seedbed at the 10-acre channel pilot site as part of its routine maintenance operations. TBCD will also support post-planting maintenance at the pilot site to ensure successful establishment and alignment with long-term drainage district management practices.

Projects Map

Figure 1. The Double Bayou Watershed.



[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.

Figure 2. TBCD Native Channel Revegetation Site along a tributary of the East Fork (10 acres).

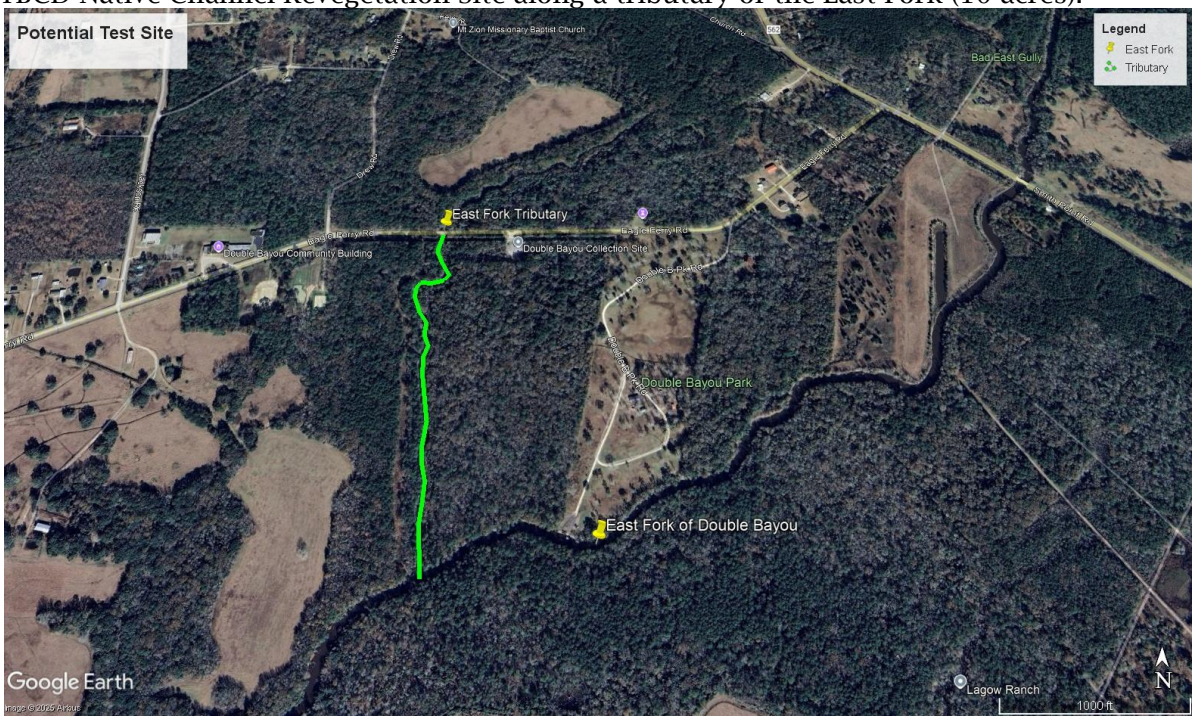


Figure 3. Habitat Restoration site on private lands along the East Fork of Double Bayou (50 acres).

Supplemental Photos/Graphics (Optional):

Figure 4. TBCD Native Channel Revegetation Site – North Side.

Figure 5. TBCD Native Channel Revegetation Site – South Side.

Figure 6. Example of recently cleared channel site with no follow up seeding or habitat restoration.

Figure 7. Habitat Restoration Site on Private Lands – Property on the East Fork of Double Bayou.

Figure 8. Habitat Restoration Site on Private Lands – East Fork of Double Bayou Parallel to Property Line.

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	$12,393.17
Fringe Benefits **(48%)**[2]	$5,948.73
Travel	$357.84

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

Budget Category	Cost for Work to be Performed
Supplies	$0.00
Equipment	$0.00
Contractual	$65,634.00
Construction	$0.00
Other	$2,028.00
Total Direct Cost	$86,361.74

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$ 70,727.75
Indirect Cost Rate for Reimbursement	53%
Total Indirect Costs	$ 37,485.71

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 123,847.45

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

☐ direct salary/wages and fringe benefits

X☐ modified total direct costs

☐ Other direct costs base

If other direct cost base, identify:

The indirect cost rate is (check one):

X☐ **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 fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally

[3] Please attach Indirect Cost Agreement as an appendix if applicable

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

N/A

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 notify you 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 25, 2025 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

Wildlife Habitat Federation
PO Box 75
Cat Spring, TX 78933
(210)422-1600
garry.stephens@whf-texas.org

July 16, 2025

Galveston Bay Estuary Program
Water and Sediment Quality Subcommittee
FY 2027 CWA Section 320 and State Funding

Letter of Commitment for TBCD Native Channel Revegetation and Habitat Restoration on Private Lands Project within the Double Bayou Watershed in Chambers County, Texas

To Whom It May Concern:

On behalf of Wildlife Habitat Federation (WHF), I am pleased to offer our full commitment to provide planning, implementation, and monitoring of the proposed project within the Double Bayou Watershed. This effort represents a forward-looking strategy that supports long-term watershed health and aligns with WHF's priorities, including effective stormwater conveyance and the enhancement of local natural resources.

WHF is committed to serving as a core partner on this project, which aligns with our mission to provide on-the-ground restoration and management for the benefit of resilient prairies and healthy watersheds. In coordination with the Houston Advanced Research Center (HARC) and Trinity Bay Conservation District (TBCD) through the Double Bayou Watershed Protection Plan, WHF will participate in this project by providing:

- Planning activities necessary for project sites and conferring with all parties involved
- Seedbed preparation on a total of 60 acres including the TBCD native channel revegetation site and habitat restoration site on private lands (TBCD will be responsible for clearing brush on 10 acre site prior to seedbed prep)
- Acquisition and planting of a custom native seed mix onto project sites
- Oversight to projects during implementation of services
- Evaluation and monitoring the success of planting at project sites and offering management recommendations
- Any necessary follow-up treatments and/or reseeding to project sites within a year after initial planting
- Collaboration in a stakeholder engagement/field day event and supporting outreach materials and/or activities

The use of native seed mixes is a timely and practical approach that offers multiple benefits, including improved erosion control, enhanced wildlife habitat, and reduced nonpoint source pollution. The knowledge gained and lessons learned from this collaborative effort will help inform future channel management activities implemented by TBCD and provide 50 acres of restored coastal prairie habitat to private lands.

We are enthusiastic about the opportunity to participate in this project and are committed to its success.

Sincerely,

Garry Stephens
President & CEO
Wildlife Habitat Federation

Established 1949

Trinity Bay Conservation District

P.O Box 599 Stowell, Texas 77661, Tel (409) 296-3602, Fax (409) 296-1055

Trinity Bay Conservation District
P.O. Box 599
Stowell, TX 77661
409-296-3602
jerry@tbcd.org

July 2, 2025

Galveston Bay Estuary Program a Program
Water and Sediment Quality Subcommittee
FY 2027 CWA Section 320 and State Funding

Letter of Support for Native Channel Revegetation Pilot Project in the Double Bayou Watershed

To Whom It May Concern:

On behalf of the Trinity Bay Conservation District (TBCD), I am pleased to offer our full support for the proposed project to demonstrate native coastal vegetation reseeding as an alternative to traditional bank stabilization methods in the Double Bayou Watershed. This effort represents a forward-looking strategy that supports long-term watershed health and aligns with TBCD's priorities, including effective stormwater conveyance and the enhancement of local natural resources.

TBCD is committed to serving as a core collaborator on this project, which aligns with our mission as a conservation and reclamation district established by the Texas Legislature in May 1949. Our primary responsibilities include providing stormwater drainage as well as water and sewer services for most of East Chambers County and portions of West Jefferson County in Southeast Texas. In coordination with the Wildlife Habitat Federation (WHF) and the Houston Advanced Research Center (HARC) through the Double Bayou Watershed Protection Plan, TBCD will support this project through the following key roles:

- Site selection for pilot implementation,
- Conducting site preparation and clearing prior to reseeding,
- Coordination with WHF to integrate maintenance activities into our operations after establishment of the native vegetation demonstration,
- Providing post-planting maintenance and site management support.

The use of native seed mixes is a timely and practical approach that offers multiple benefits, including improved erosion control, enhanced wildlife habitat, and reduced nonpoint source

Established 1949

Trinity Bay Conservation District

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pollution. The knowledge gained and lessons learned from this collaborative effort will help inform future channel management activities implemented by TBCD.

We are enthusiastic about the opportunity to participate in this project and are committed to its success.

Sincerely,

Jerry Shadden
General Manager
Trinity Bay Conservation District

Department of Energy
Golden Field Office
15013 Denver West Parkway
Golden, Colorado 80401-3393

NEGOTIATED INDIRECT COST RATE AGREEMENT

July 15, 2021

Houston Advanced Research Center
ATTN: Robert Travis
8801 Gosling Road
The Woodlands, TX 77381

PREAMBLE

The purpose of this Agreement is to establish indirect cost rates for use in award and management of Federal contracts, grants, and other assistance arrangements to which Code of Federal Regulations (CFR) 2 CFR 200 applies. It consists of four parts: I -Rates and Bases; II - Particulars; III -Special Remarks; and IV - Approvals. This Agreement has been negotiated by the Department of Energy on behalf of the Federal Government pursuant to the authority granted to the Cognizant Agency.

BILLING RATE: FRINGE

TYPE	EFFECTIVE PERIOD FROM	TO	RATE (%)	ALLOCATION BASE *
FINAL	01/01/20	12/31/20	47.4	(a)
PRED	01/01/21	12/31/21	48.0	(a)
PRED	01/01/22	12/31/26	48.0	(a)

INDIRECT BILLING RATE: Overhead

TYPE	EFFECTIVE PERIOD FROM	TO	RATE (%)	ALLOCATION BASE *
FINAL	01/01/20	12/31/20	69.7	(b)
PRED	01/01/21	12/31/21	69.7	(b)
PRED	01/01/22	12/31/26	53.0	(b)

* BASIS FOR ALLOCATION:
(a) Total Labor Costs
(b) Modified Total Direct Costs

The following fringe elements are included in the fringe benefit pool:
Medical and Dental Insurance, Paid Leave, Workers Compensation Insurance, Payroll Taxes, Retirement, Severance and Other Insurance Benefits.

SECTION II -PARTICULARS

SCOPE:

The indirect cost rates contained herein are for use with grants, and other financial assistance agreements awarded by the Federal Government to the above department or agency and subject to the rules and regulations under 2 CFR 200. Due to legal constraints, predetermined rates are not permitted for contracts which are governed by the Federal Acquisition Regulations unless 48 CFR § 52.216-15 is an applicable clause. The billing rates may be used for Agency grants and/or cooperative agreements.

LIMITATIONS:

Application of the rates contained in this agreement is subject to all statutory or administrative limitations on the use of funds, and payments of costs hereunder, are subject to the availability of appropriations applicable to a given grant or contract. Acceptance of the rates agreed to herein is predicated on the following conditions: (a) no costs other than those incurred by the Recipient were included in the entity's indirect cost pools as finally accepted, and that such costs are legal obligations of the Recipient and allowable under the governing cost principles; (b) the same costs that have been treated as indirect costs are not claimed as direct costs; (c) similar types of costs have been accorded consistent accounting treatment; and (d) the information which was provided by the agency, and which was used as a basis for acceptance of rates agreed to herein, is not subsequently found to be materially incomplete or inaccurate.

CHANGES:

Final and Predetermined rates contained in this agreement are based on the accounting system in effect at the time the agreement was negotiated. When changes to the method of accounting for cost affect the amount of reimbursement resulting from the use of this rate, the change will require the prior approval of the authorized representative of the Cognizant negotiation agency. Such changes include, but are not limited to, changing a particular type of cost from an indirect to a direct charge. Failure to obtain such approval may result in subsequent cost disallowances. The Cognizant negotiating agency must also be notified of any changes to the State's or Locality's organizational structure, which affect the amount of reimbursement resulting from the use of the rates.

RATE(S):

FINAL: The Final rate(s) contained in this Agreement are based on the actual, allowable costs incurred for a preceding fiscal period. In accordance with applicable Federal regulations under 2 CFR 200 governing indirect cost rates for your award(s), provisional rates are not to be construed as determinative of the indirect costs to be distributed or of the bases of distribution to be used in the final settlement of your award(s).

PREDETERMINED: Public Law 87-638 (76 Stat. 437) as amended (41 U.S.C. 4708) authorizes the use of predetermined rates in determining the "indirect costs" applicable under research agreements. The stated objectives of the law are to simplify the administration of cost-type research and development contracts (including grants), to facilitate the preparation of budgets, and to permit more expeditious closeout of such contracts when the work is completed. Predetermined rates are not subject to adjustment during the time period which this agreement covers.

NOTIFICATION TO OTHER FEDERAL AGENCIES:

Copies of this document may be provided to other Federal agencies as means of notifying them of the Agreement contained herein.

ADJUSTMENTS TO REIMBURSEMENTS:

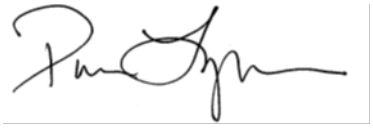
Current reimbursements for indirect costs to the above department or agency by means other than the rates set forth in this agreement should be adjusted to reflect the use of these approved rates within 30 days of the effective date of this agreement. These rates shall be applied to the appropriate base to identify the proper amount of indirect costs allocable to the Federal awards covered by this agreement.

SECTION III -SPECIAL REMARKS

1. This agreement is effective on the date of approval by the Federal Government.

2. Questions regarding this agreement should be directed to the Federal Government negotiator referenced in Section IV.

SECTION IV –APPROVALS

For the Organization:	For the Cognizant Negotiation Agency on Behalf of the Federal Government:
Houston Advanced Research Center, LLC	**U.S. Department of Energy**
Mustapha Beydoun	
Signature	Signature
Mustapha Beydoun	Pamela T. Lavergne
Name	Name
VP/COO	Contracting Officer
Title	Title
8/4/2021	July 15, 2021
Date	Date
	240-562-1474
	Telephone

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Public Participation and Education (PPE)

Project Name:

How's the Water - Public Health Risk Awareness Outreach Campaign

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.] N/A

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

Amount Requested from GBEP:

$99,303.54

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$40,945.58
FY 2028 (09/01/2027-05/31/2028)	$58,357.97
FY 2029 (09/01/2028-05/31/2029)	$0.00

Total	$99,303.54

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2026 – August 31, 2028

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

$274,075.40

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

Tasks 4-6 of the H-GAC Texas Clean Rivers Program contract is for 4) Data Management, 5) Data Analysis and Reporting, and 6) stakeholder Participation and Outreach. These tasks support the Water Resources Information Map (WRIM) which will serve as the publicly accessible, interactive website to support data visualization and education materials. Outreach materials will point users to the WRIM. A conservative estimate of the cost for these tasks combined is $174,771.86.

Project Urgency:

The proposed project directly addresses several subcommittee identified priorities specific to this funding cycle. The need for this type of project is long-term, but with the recent redesign of the H-GAC's Water Resources Information Map (WRIM) to a more interactive and user-friendly format that incorporates educational content, it is the perfect time to make a concerted effort to make the region aware of this resource while also expanding the public's risk awareness of contact recreation and/or seafood consumption impairments and advisories.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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 public outreach project directly or indirectly supports 12 Action Plans across three Plan Priorities ("Ensure Safe Human and Aquatic Life Use", "Engage Communities", "Inform Science-Based Decision Making") of The Galveston Bay Plan, 2nd Edition, by fulfilling specific objectives and activities related to risk communication, education, community engagement, access to information, and adaptive program evaluation.

Plan Priority 1: Ensure Safe Human and Aquatic Life Use

Promote Public Health and Awareness (PHA)

- **PHA-1: Improve Seafood Advisory Awareness**
  The proposed project will focus on informing communities about fish consumption advisories directly contributes to this action by increasing public understanding of when/where it is safe to eat caught fish.
- **PHA-2: Improve Regional Contact Recreation Risk Awareness**
  The proposed project will address health risks associated with water recreation—especially for those living near impaired waterbodies—through multilingual, accessible messaging.
- **PHA-3–5: Improve Safety through WBPs (Watershed-Based Plans)**
  The proposed project will result in the creation of educational materials and signage that supports these efforts, as they will promote behaviors and knowledge that improve public health relative to contact recreation and fish consumption. Focus areas will include those with watershed-based plans in or near the implementation phase.

Improve Water Quality through Nonpoint Source Pollution Abatement (NPS)

- **NPS-2: Support Nonpoint Source Education and Outreach Campaigns**
  The proposed project is a direct implementation of an NPS education and outreach campaign, targeting communities adjacent to impaired waterbodies with clear, actionable information.

Improve Water Quality through Point Source Pollution Abatement (PS)

- **PS-1: Support Stormwater Education Programs**
  The proposed project will relate indirectly by raising awareness of how behaviors contribute to water quality problems.

Plan Priority 3: Engage Communities

Preserve Galveston Bay Through Stakeholder and Partner Outreach (SPO)

- **SPO-1: Stewardship and Volunteer Opportunities**
  By involving the community in the design and feedback of materials (signs, surveys), the proposed project cultivates stewardship.
- **SPO-2: Workshops and Events**
  The proposed project could be coupled with local events, meetings, or workshops to directly engage community members.
- **SPO-3: Support Regional Initiatives**
  Expanding and supporting initiatives like the proposed project will, and incorporating community feedback, aligns with this action. The educational information provided may also highlight regional initiatives (e.g.: pump don't dump, or no wipes in the pipes) related to improving water quality.

Support Public Education and Awareness Initiatives (PEA)

- **PEA-1: Key Issue Engagement**
  The proposed project specifically seeks to engage the public on water quality and health risk issues tied to their lives.
- **PEA-2: Adult Education**
  The proposed project focuses on changing behaviors and attitudes in adults via education.

Plan Priority 4: Inform Science-Based Decision Making

Increase Access to Galveston Bay Ecosystem Information (ACS)

- **ACS-2: Access to Monitoring and Research Data**
  The proposed project's impact survey and outreach results contribute to tracking public understanding and behavior, which can feed into data-driven decision making. It will also highlight the publicly accessible data on H-GAC's Water Resources Information Map (WRIM).
- **ACS-3: Track Galveston Bay Plan Implementation**
  Measuring and reporting the reach and effectiveness of the outreach campaign via pre/post surveys supports plan tracking and adaptive management.

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.
☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☒ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
  ☐ Adaptive management for previously completed projects;
  ☐ Projects that have lost funding from other federal sources; and
  ☐ Nonnative species management.
☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☐ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☒ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

The proposed project addresses subcommittee priorities by:

WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.

- Develops and deploys a public outreach campaign focused on water quality issues (e.g., pathogen indicator bacteria, PCBs, dioxins) that pose a risk to contact recreation (swimming, boating, fishing) and seafood consumption in Galveston Bay watersheds.
- Provides easy-to-understand, culturally and linguistically relevant materials about health risks, advisories, and actions that individuals can take to improve water quality to affected communities.
- Installs signage or distributes information at key locations where fishing, swimming, and other high-contact activities occur to directly inform the public where they are.

PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.

- Increases environmental and scientific literacy among adults (and potentially K-12 students if engagement is extended), by explaining water quality data, public health risks, and how individuals and communities can help improve conditions.
- Uses surveys and participatory feedback—plus location-based outreach—to involve the community in both the assessment and improvement of the campaign, fostering a sense of empowerment and stewardship.
- Encourages actions and behaviors that can reduce exposure risks and protect local water quality based on a clearer understanding of scientific information.

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

N/A

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 develop and implement a community-centered public outreach campaign that increases awareness and understanding of water quality impairments and health advisories among communities in the lower Galveston Bay watershed. Focus will be given to watersheds with impairments and/or advisories, and with high rates of contact recreation and wild-caught fish consumption, to empower residents to make informed risk decisions and take actions to improve water quality.

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

A healthy aquatic ecosystem in the Galveston Bay Estuary provides substantial cultural and economic value, especially for communities who live, work, and recreate near its waters. The estuary supports diverse recreational activities and sustains a robust commercial and subsistence fishing culture, both of which are deeply tied to local identity and livelihoods.

Galveston Bay and its tributaries serve as key locations for contact recreation, including swimming, kayaking, and boating. These activities foster community engagement, support mental and physical health, and preserve coastal traditions (GBEP, 2023). Access to clean, safe water is crucial for residents who rely on the bay for family outings and nature-based experiences. Additionally, the estuary plays a role in local food traditions centered around Gulf seafood, reinforcing the region's culinary identity. Importantly, fish consumption from Galveston Bay is a critical resource for many subsistence fishers, particularly in marginalized communities. Locally caught fish provide a low-cost source of protein. However, these benefits are only fully realized when water quality supports safe fish consumption, free from contaminants like mercury or PCBs (TCEQ, 2022).

In the Houston-Galveston region, one of the most significant water quality issues faced is elevated levels of pathogen indicator bacteria in our local waterways. State pathogen indicator bacteria standards are set based on the level of recreational use assigned to the waterbody. *44% of the assessed stream miles in our region are impaired for recreational use due to elevated levels of pathogen indicator bacteria (Oakley et al. 2025).* High bacterial concentrations may cause gastrointestinal illnesses or skin infections in swimmers or others who come into direct contact with the water. Even where the concentration of pathogen indicator bacteria is less than the standard, there can still be a risk of contracting waterborne diseases.

PCBs, or polychlorinated biphenyls, and dioxins are broad groups of synthetic organic compounds developed for industrial purposes or are by-products of industrial processes. PCBs and dioxins are toxic and carcinogenic. PCBs and dioxins are legacy pollutants, meaning they can remain in the environment long after they are introduced. Both accumulate in the fatty tissue of marine life, and humans can be exposed through consumption of contaminated fish and shellfish. 68% of the assessed tidal streams and bays in our region are impaired for PCBs and dioxins *(Oakley et al. 2025).*

While there are public-facing programs such as Texas Beach Watch and the Clean Rivers Program that monitor water quality and publish results summarizing when bacteria levels exceed EPA thresholds, there are no robust estimates of how many Houston-region residents are aware of recreation impairments. A study conducted on Georgia beachgoers examined public awareness of beach water quality advisories and found that only 36.1 % of respondents were aware that the water quality was monitored, and recreation advisories were issued (Jones et al. 2024). Several studies have evaluated fish consumption advisory awareness among Gulf residents and depending on the location and surveyed group just 30% to 55% were aware of advisories (Katner et al. 2011, Karouna-Renier et al. 2008, Lincoln et al. 2010, Simon-Friedt et al. 2016). There is a clear need for targeted communication strategies to increase advisory visibility and equitable outreach in coastal communities—especially those who rely heavily on local seafood.

The proposed project will develop and deploy a public outreach campaign focused on raising awareness and understanding of contact recreation impairments and health advisories in the lower Galveston Bay watershed. Focus areas will include those with watershed-based plans in or near the implementation phase, particularly where there are high levels of contact recreation and wild-caught fish consumption. The campaign will connect audiences to new and existing resources on impairments and advisories and provide educational materials so they can make informed personal risk decisions and take steps to improve water quality. The proposed campaign will use simple, visual, action-oriented and location-based messaging, and will tie back to H-GAC's newly updated Water Resources Information Map (WRIM) that makes water quality data submitted to TCEQ for assessment publicly available. The updated WRIM is designed to be more intuitive and user-friendly and to include educational information to help users make sense of the data in relation to their local waterway and their connection to it.

Certain aspects of the proposed campaign will include generalized messages delivered through wide-reaching avenues (e.g. news media outlets). Particular focus will be given to one to three watersheds identified as 1) having impairments or advisories, 2) likely to see high levels of contact recreation and/or wild-caught seafood consumption, and 3) having a watershed-based plan in or nearing the implementation

phase. In these areas additional outreach measures will be implemented and tailored to community needs and waterway uses. Possible additional outreach methods include but are not limited to: targeted mail-outs, billboard or digital signage opportunities, physical signage near high use areas, and public workshops.

The proposed project will also utilize a combination of pre and post surveys. Pre-surveys will be utilized in the targeted watershed(s) to determine current awareness levels and inform campaign messaging and distribution methods. Post-surveys will be made available to a wider audience to determine post-campaign awareness and understanding and quantify impact.

Literature Cited see "Appendix 2 – How's the Water Literature Cited.pdf"

Other Plans Implemented:

The proposed project addresses the following third-part conservation plans by:

Texas Coastal Resiliency Master Plan:

- Advancing community resilience, equitably engaging coastal residents, making critical water quality and public health information accessible, and fostering an adaptive approach to risk communication and stewardship, which are key pillars of coastal resilience as outlined in the TCRMP.

Bacteria Implementation Group:

- Directly implementing targeted public outreach on bacteria impairments and associated health risks in recreational waters, which aligns with BIG's outreach and education goals.
- Providing simple, visual, multilingual educational materials and signage to inform residents—especially those near impaired waterbodies—about safe recreation and bacteria advisories, advancing BIG's strategy to increase awareness and change behaviors.
- Using surveys to track changes in public awareness, measuring the effectiveness of outreach, and informing ongoing adaptive management in line with BIG's implementation priorities.

Galveston Bay Coalition of Watersheds:

- Engaging and empowering local communities—especially underserved and at-risk populations—using culturally relevant, inclusive outreach about water quality issues, which advances the Coalition's mission of community-driven stewardship and education.
- Connecting residents to existing monitoring programs and advisories, and involving them through multi-pronged outreach and participatory signage, contributing to broader coalition efforts to build public engagement and awareness.
- Fostering a shared sense of responsibility and stewardship that supports both watershed protection and the coalition's collaborative approach.

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 and EJScreen instructions.

☒ Yes

☐ No

Materials designed to be shared in communities with LEP will be translated as required.

Latitude/Longitude (Optional):

N/A

Location:

The campaign will target the lower Galveston Bay watershed, with priority given to sub-watersheds where watershed-based plans are currently being implemented or are nearing implementation. Additional focus will be placed on areas with documented water quality impairments or public health advisories, particularly where there are high levels of contact recreation and wild-caught fish consumption.

Partners[1] and Their Roles:

H-GAC will develop and implement the proposed campaign. No other partners will have a direct role. However, H-GAC will coordinate with watershed-based plan coordinators and key stakeholder groups in identified focus watersheds.

Projects Map

N/A

Supplemental Photos/Graphics (Optional):

N/A

[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	$39,106.20
Fringe Benefits **(47.02%)**[2]	$18,387.74
Travel	$210.00
Supplies	$5,050.00
Equipment	$0.00
Contractual	$18,600.00
Construction	$0.00
Other	$11,498.79
Total Direct Cost	$92,852.72

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$57,493.94
Indirect Cost Rate for Reimbursement	11.22 %
Total Indirect Costs	$6,450.82

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	**$99,303.54**

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

*Please see attached "**Appendix 1- 2025 HGAC IDC Agreement**" for the federally negotiated indirect cost agreement for the Houston-Galveston Area Council which is 11.22% of the Salary / Wages and Fringe Benefits budget categories.*

☒ direct salary/wages and fringe benefits

☐ modified total direct costs

☐ Other direct costs base

If other direct cost base, identify:

[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

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 fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

The Other category includes H-GAC allocations for items such as leased space and utilities, internal services (personnel or payroll related functions, centralized purchasing and office operating function, and printing operations), network and GIS Administration (such as standard office software, hardware, and information technology support, and telephone and communication systems).

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 notify you of the meeting's time and location indicating whether attendance is mandatory.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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

RE Proposal: How’s the Water - Public health risk awareness outreach campaign

Jones J, Aslan A, Nazaruk D, Zeki S. 2024. Beachgoers' responses to beach health advisories. J Water Health. 22(3):565-571. doi: 10.2166/wh.2024.306.

Karouna-Renier NK, Ranga Rao K, Lanza JJ, Rivers SD, Wilson PA, Hodges DK, Levine KE, Ross GT. 2008. Mercury levels and fish consumption practices in women of child-bearing age in the Florida Panhandle. Environ Res. 108(3):320-6. doi: 10.1016/j.envres.2008.08.005.

Katner A, Ogunyinka E, Sun MH, Soileau S, Lavergne D, Dugas D, Suffet M. 2011. Fishing, fish consumption and advisory awareness among Louisiana’s recreational fishers. Environmental research, 111(8), 1037-1045.

Lincoln RA, Shine JP, Chesney EJ, Vorhees DJ, Grandjean P, Senn DB. 2011. Fish consumption and mercury exposure among Louisiana recreational anglers. Environmental Health Perspectives, 119(2), 245-251.

Oakley JW, Johnston S, Casillas J, Guidroz K, Underwood E, Windham R, Wadman J, Running T. 2025. Basin Highlights Report: Watershed Characterization of the Luce Bayou Watershed. Houston-Galveston Area Council, Houston, Texas. Pp95

Simon-Friedt BR, Howard JL, Wilson MJ, Gauthe D, Bogen D, Nguyen D, Frahm E, Wickliffe JK. 2016. Louisiana residents' self-reported lack of information following the Deepwater Horizon oil spill: Effects on seafood consumption and risk perception. J Environ Manage. 180:526-37. doi: 10.1016/j.jenvman.2016.05.030.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

COGNIZANT AGENCY
NEGOTIATION AGREEMENT

Houston-Galveston Area Council
Houston, Texas

Date: June 12, 2025
Filing Ref: February 22, 2024

The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget 2 CFR 200 applies, subject to the limitations contained in the Circular and in Section II, A below.

SECTION I: RATES

Type	Effective Period Start	End	Rate	Base	Location	Applicable To
FIXED						
Indirect	1/1/2025	12/31/2025	11.22%	(a)	All	All Programs
Fringe Benefit Rate	1/1/2025	12/31/2025	47.02%	(b)	All	All Programs

Basis for Application

(a) Direct salaries and wages, including applicable fringe benefit costs.
(b) Direct chargeable salaries and wages. The fringe benefit rate should not be applied to any release time (vacation, sick, holiday, and other paid absences).

Treatment of Fringe Benefits: Fringe benefits and release time (vacation, sick, holiday, and other paid absences) applicable to direct salaries and wages are included in the fringe benefit rate cited above.

SECTION II: GENERAL

A. LIMITATIONS: The rates in this Agreement are subject to any statutory and 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 department/agency or allocated to the department/agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the department/agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the department/agency 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. CHANGES. The fixed rate contained in this agreement is based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in the organizational structure or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate in this agreement, require the prior approval of the authorized representative of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowances.

C. THE FIXED RATE contained in this agreement is based on an estimate of the cost which will be incurred during the period for which the rate applies. When the actual costs for such a period have been determined, an adjustment will be made in the negotiation following such determination to compensate for the difference between the cost used to establish the fixed rate and that which would have been used were the actual costs known at the time.

D. NOTIFICATION TO FEDERAL AGENCIES: Copies of this document may be provided to other Federal agencies as a means of notifying them of the agreement contained herein.

E. SPECIAL REMARKS: Please confirm your acceptance of the terms of the indirect cost rate agreement by signing and returning this letter to me. Please retain a copy for your records.

SECTION III: ACCEPTANCE

The undersigned official warrants that he/she has the proper authority to execute this agreement on the behalf of the State Agency:

_____
(Signature)

Christina Ordóñez-Campos, CPA
(Name)

Chief Financial Officer
(Title)

Houston Galveston Area Council
(Agency)

06/13/2025
(Date)

By the Cognizant Federal Agency:

_____
(Signature)

National Policy, Training and Compliance Division
U.S. Environmental Protection Agency

Negotiated by: Jacqueline Smith
Telephone: (202) 564-5055

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Monitoring and Research (M&R)

Project Name:

Enumeration Methods Comparison and Evaluation of Nature-Based Stormwater Infrastructure to Reduce Microplastic Pollution in Galveston Bay

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.] N/A

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

Amount Requested from GBEP:

$ 249,851.66 (note: current funded project = federal funds)

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$155,484.34 (FY26)
FY 2028 (09/01/2027-05/31/2028)	$94,367.32 (FY27)

FY 2029 (09/01/2028-05/31/2029)	$0.00
Total	$249,851.66

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2025 – August 31, 2027
Ideally this project will utilize the funds available as of FY26, but it can be delayed by 1 year if needed.

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

$471,779.66

Is this an estimate? ☒

Leveraging (in-kind and/or cash):

This project will be an expansion of a FY26-27 GBEP funded project "Evaluation of Nature-Based Stormwater Infrastructure to Reduce Microplastic Pollution in Galveston Bay" which has an approved budget of $221,928.00

Project Urgency:

The proposed study is a timely expansion of an ongoing project collecting baseline data on microplastic pollution in Galveston Bay watersheds and assessing the effectiveness of nature-based stormwater infrastructure in reducing microplastic runoff into surface waters. This expansion will add a methods comparison component, recognizing the urgent need for standardized and quantitatively comparable microplastic enumeration techniques. Without this standardization, it is impossible to reliably compare data between studies with differing processing and enumeration techniques, which limits our ability to fully understand microplastic concentration and distribution in the Galveston Bay Estuary and to benchmark our findings against other coastal systems globally.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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 Plan Priority 1: Ensure Safe Human and Aquatic Life Use Galveston Bay Plan Priority Area Actions.

Improve Water Quality Through Nonpoint Source Pollution (NPS)

NPS-1 Support watershed-based plan development and implementation: Understanding baseline microplastic concentrations is the first step to evaluating potential impacts to human and aquatic life. Results from this methods study could allow for a more complete understanding of microplastic pollution to be presented in existing and upcoming total maximum daily load I-plans and watershed protection plans 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 microplastic concentration data providing a more holistic review of pollutants discussed within the watershed.

NPS-2 Support nonpoint source education and outreach campaigns: The results of the proposed study will be used to inform public education and outreach materials for inclusion in social media campaigns and integration in existing nonpoint source education and outreach campaigns such as Bay to Schools, SPLASH, and Trash Bash.

NPS-3 Implement nonpoint source best management practices: The results of the proposed methods study will allow for a more complete review of watersheds with the highest microplastic loading which will inform where future nature-based stormwater infrastructure projects may provide the most impact in terms of microplastic treatment of stormwater entering Galveston Bay and provide another metric for stormwater retention and treatment best management practices to consider. The output of the number of best management practice projects will not be impacted by the proposed project, but the design and potential for treatment for another pollutant, microplastics, can be considered for future nature-based stormwater infrastructure projects.

Improve Water Quality Through Point Source Pollution Abatement (PS)

PS-1 Support stormwater education programs: The anticipated results from the proposed study will provide more complete and comparable data to illustrate that stormwater events result in increased loading of microplastics to Galveston Bay. The results can be integrated into stormwater education programs as one more pollutant of concern in stormwater and provide the community with recommendations of how they can help to reduce microplastic pollution into our waterways.

Promote Public Health and Awareness (PHA)

PHA-4 & 5 Improve the safety of human shellfish and finfish consumption from bay waters: The proposed methods study will bring awareness to the concentration of microplastic pollution in the waters that flow into Galveston Bay by providing more readily comparable results between existing data sources. Plastics have been found in all trophic levels of marine organisms, ranging from filter-feeding invertebrates like oysters to finfish and the humans that consume them. Quantifying the ability of nature-based stormwater infrastructure projects to reduce microplastic loading in Galveston Bay will inform future best management practices that can improve water quality and therefore improve the safety to human shellfish and finfish consumption from bay waters. While microplastics are not currently a water quality standard that is regulated by resource management agencies, the results from this methods study may provide baseline data that are useful in future oyster waters TMDL and I-plans related to consumption safety of aquatic organisms and inform future microplastic monitoring design.

The proposed project will implement the following **other** Galveston Bay Plan Priority Area Actions.

Protect and Sustain Living Resources – Demonstrate the treatment potential of nature-based stormwater infrastructure projects to reduce microplastic pollution and recommend future long-term monitoring methods and best management strategies to monitor and reduce microplastic pollution.

HC-3: The results of the proposed methods research will evaluate different enumeration processes allowing for comparison of results of different studies and make recommendations of future monitoring methods. It will result in identifying watersheds with the highest contribution of microplastic pollution to Galveston Bay and recommend deployment of green infrastructure projects which include habitat enhancement in stormwater conveyance and detention with treatment potential for removing microplastics from stormwater.

Engage Communities – Support existing and new stewardship programs, volunteer opportunities, and public outreach to engage the public in a dialogue about the methods to enumerate and monitor the concentration of microplastics in surface waters flowing into Galveston Bay and ways that they can help reduce microplastic pollution.

SPO-1: The results of the proposed project can be used to support stewardship programs and volunteer opportunities by informing participants of the microplastic pollution in Galveston Bay and providing ways that they can reduce plastic pollution empowering them to become ambassadors of Galveston Bay.

SPO-2: The results of the proposed project will be presented at the State of the Bay Symposia and can be used to support workshops and events providing opportunities for the public to receive education on the microplastic pollution in Galveston Bay and ways that they can help reduce plastic pollution.

SPO-3: The results of the proposed project can be used to support existing or develop new regional initiatives and campaigns aimed at reducing plastic pollution in Galveston Bay.

Inform Science-Based Decision Making – The proposed project will support monitoring design including enumeration methods focused on microplastic pollution and evaluate applied research to inform the watersheds for future investment of nature-based stormwater infrastructure projects designed to reduce microplastic pollution.

RES-1: Conduct Biological Stressor Monitoring and Research – The proposed applied research will provide baseline data and methods comparison needed for future understanding of the emerging contaminant: microplastics and associated hydrophobic toxins on the aquatic life of Galveston Bay.

RES-6: Evaluate Best Management Practice (BMP) Projects – The proposed project will evaluate the treatment potential of nature-based stormwater infrastructure projects for stormwater treatment to remove microplastics from surface waters of the Galveston Bay area. It will identify watersheds with the highest microplastic pollution and recommended them for future best management practices to reduce microplastic pollution and inform future monitoring design including enumeration methods to ensure consistent and comparable results.

ACS-2: Access to Monitoring and Research Data – The project team will disseminate the methods comparison, monitoring, and research results realized for the proposed project through a variety of outreach activities for different audiences, including GBEP partners, decision makers, bay user groups, and the public as opportunities present.

ACS-3: Track Galveston Bay Plan Implementation – The project team will work with the 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.

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.
☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
    ☐ Adaptive management for previously completed projects;
    ☐ Projects that have lost funding from other federal sources; and
    ☐ Nonnative species management.
☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☐ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☒ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☒ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

WSQ: Supporting management measures and watershed-based plans.
The proposed project will provide a methods comparison allowing for comparison among different microplastic enumeration techniques within the Galveston Bay Estuary and among other coastal systems worldwide. These data will be used to evaluate the effectiveness of nature-based stormwater infrastructure stormwater management systems to remove microplastics from surface waters entering Galveston Bay watersheds.

WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
The proposed project will evaluate microplastic enumeration methods to make recommendations for better monitoring of microplastic concentrations and loading in major watersheds that flow into Galveston Bay. There are currently no agency-mandated water quality standards or standardized methods for enumerating microplastics in surface waters. This critical research will add to the knowledge base needed to understand baseline microplastic concentrations and standardize microplastic enumeration methodology to one day inform the development of water quality standards for microplastics in surface waters.

M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
This proposed project will compliment a study that is already funded for FY26/27 to evaluate Microplastic loading and the treatment efficiency of nature-based stormwater infrastructure for removing microplastics from surface waters. The addition of the methods comparison component will leverage funds for the field collection of microplastic water samples allowing for collection of field duplicate samples greatly reducing the overall cost of a methods comparison while expanding the impact of the existing project.

M&R: Assessment, Exposure, and Response to stressors, including but not limited to emerging contaminants.
The proposed applied research will provide methods comparison needed to inform future monitoring programs and allow for better comparison between our study and others in the region and world-wide expanding our understanding of the emerging contaminant: microplastics and associated hydrophobic toxins on the aquatic life of Galveston Bay.

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

Understanding the quantity and characteristics of microplastic pollution in an area is the first step in developing methods to combat the problem. With some nature-based stormwater infrastructure projects already in place, there is opportunity to measure the treatment efficiency of created wetlands in stormwater detention basins to remove microplastics from surface waters flowing into Galveston Bay.

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 study will expand on a current-funded project to collect baseline microplastic loading data in Galveston Bay watersheds and quantify the treatment potential of green infrastructure projects to reduce microplastic loading in surface waters from stormwater runoff. The proposed expansion will integrate a methods comparison objective onto the existing study providing critically needed standardization of and comparisons among microplastic enumeration methods to gain a more wholistic understanding of the concentration and distribution of microplastics in the Galveston Bay Estuary.

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

Although numerous studies have monitored microplastic pollution in the Galveston Bay Estuary and other coastal systems worldwide, there is currently no widely recognized standardized method for microplastic identification and enumeration. Existing research has employed a variety of approaches, including visual enumeration with high-powered stereoscopic microscopes (Oakley et al. 2024) and advanced techniques such as fluorescent dye and infrared microscopy, which show promising results (Maes et al. 2024; McEachern et al. 2019). Each method offers unique advantages and limitations, but the lack of standardization hinders direct comparison across studies and reduces the utility of monitoring data (Lv et al. 2019).

Regular monitoring of water and sediment microplastics should be continued to begin to understand temporal and spatial patterns of this pollutant type in Galveston Bay. The state and federal agencies charged with routine monitoring of water quality should adopt standardized methods to monitor microplastic concentration in water. Ensuring that preferred methods are technologically accessible for a wide-range of monitoring groups, including citizen scientists, but reduce observer bias and can be successfully compared are critical considerations.

The proposed project will leverage the already-funded project to conduct baseline monitoring to quantify microplastics loading in Galveston Bay watersheds and quantify the treatment potential of nature-based stormwater infrastructure projects to reduce microplastic loading in surface waters from stormwater runoff. Field duplicate water samples will be collected as part of this ongoing work, and these samples will be used to directly compare visual enumeration via brightfield microscopy to fluorescent microscopy methods (Labbe et al. 2020; Kukkola et al. 2023; Kalaronis et al. 2022). Samples will be collected across all sites and under varying conditions to ensure robust comparisons.

By providing this critically needed, side-by-side methods comparison, the proposed project will directly inform the future standardization of microplastic enumeration techniques. This foundation is essential for building a holistic understanding of microplastic concentrations and distributions in the Galveston Bay Estuary and will allow for meaningful comparisons with other coastal watersheds around the world.

Literature Cited:

Kalaronis, D., N.M Ainali, E. Evgenidou, G.Z. Kyzas, X. Yang, D.N. Bikiaris, and D.A. Lambropoulou. 2022. Microscopic techniques as means for the determination of microplastics and nanoplastics in the aquatic environment: A concise review. Green Analytical Chemistry, *3*, 100036.

Kukkola, A., S. Krause, Y. Yonan, L. Kelleher, U. Schneidewind, G.H.S. Smith, ... and I. Lynch. 2023. Easy and accessible way to calibrate a fluorescence microscope and to create a microplastic identification key. MethodsX, *10*, 102053.

Labbe, A. B., C.R. Bagshaw, and L. Uttal. 2020. Inexpensive adaptations of basic microscopes for the identification of microplastic contamination using polarization and Nile Red fluorescence detection. Journal of Chemical Education, 97(11), 4026-4032.

Lv, L., X. Yan, L. Feng, S. Jiang, Z. Lu, H. Xie, S. Sun, J. Chen, and C. Li. 2019. Challenges for the detection of microplastics in the environment. Water Environment Research. 93(1): 5- 15. https://doi.org/10.1002/wer.1281

Maes, T., R. Jessop, N. Wellner, K. Haupt, and A.G. Mayes. 2017. A rapid-screening approach to detect and quantify microplastics based on fluorescent tagging with Nile red. Science. Rep. 7, 44501.

McEachern, K., H. Alegria, A.L. Kalagher, C. Hansen, S. Morrison, and D. Hastings. 2019. Microplastics in Tampa Bay, Florida: Abundance and variability in estuarine waters and sediments. Marine Pollution Bulletin. 148:97-106.

Oakley, J.W., G. Guillen, J. Steinhaus, E. Cox, M. Sager, and M. Huette. 2024. Microplastics in the Galveston Bay Watershed: The Big Impacts of Tiny Pollution, Final Report. (Report No. EIH24-002). Prepared for the Galveston Bay Estuary Program (Contract Number 582-21- 10096). 57 pages.

Other Plans Implemented:

The proposed project aligns with the following plans and strategies.

The Gulf of Mexico Alliance's Governor's Action Plan: Aligns with the priority issue item: Threats to Human Health and Aquatic Life. *"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 (such as harmful algal blooms, bacteria, microplastics, etc.) provide critical information to support improvements within Gulf of Mexico waters."*

The Save Our Seas Act of 2018: Also known as the *"Marine Debris Act"*, aligns with the priority goal of: "*Conduct and support research to address the most critical research needs related to microfiber 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 Galveston Bay Report Card: Litter and trash are scored as "I" for insufficient data because *"there is no systematic bay-wide monitoring"* to evaluate this kind of pollution.

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

☐ Yes

☒ No

[TBD.] *N/A*

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 and EJScreen instructions.

☐ Yes
☒ No

[TBD.] *N/A*

Latitude/Longitude (Optional):

Multiple, see Location for details.

Location:

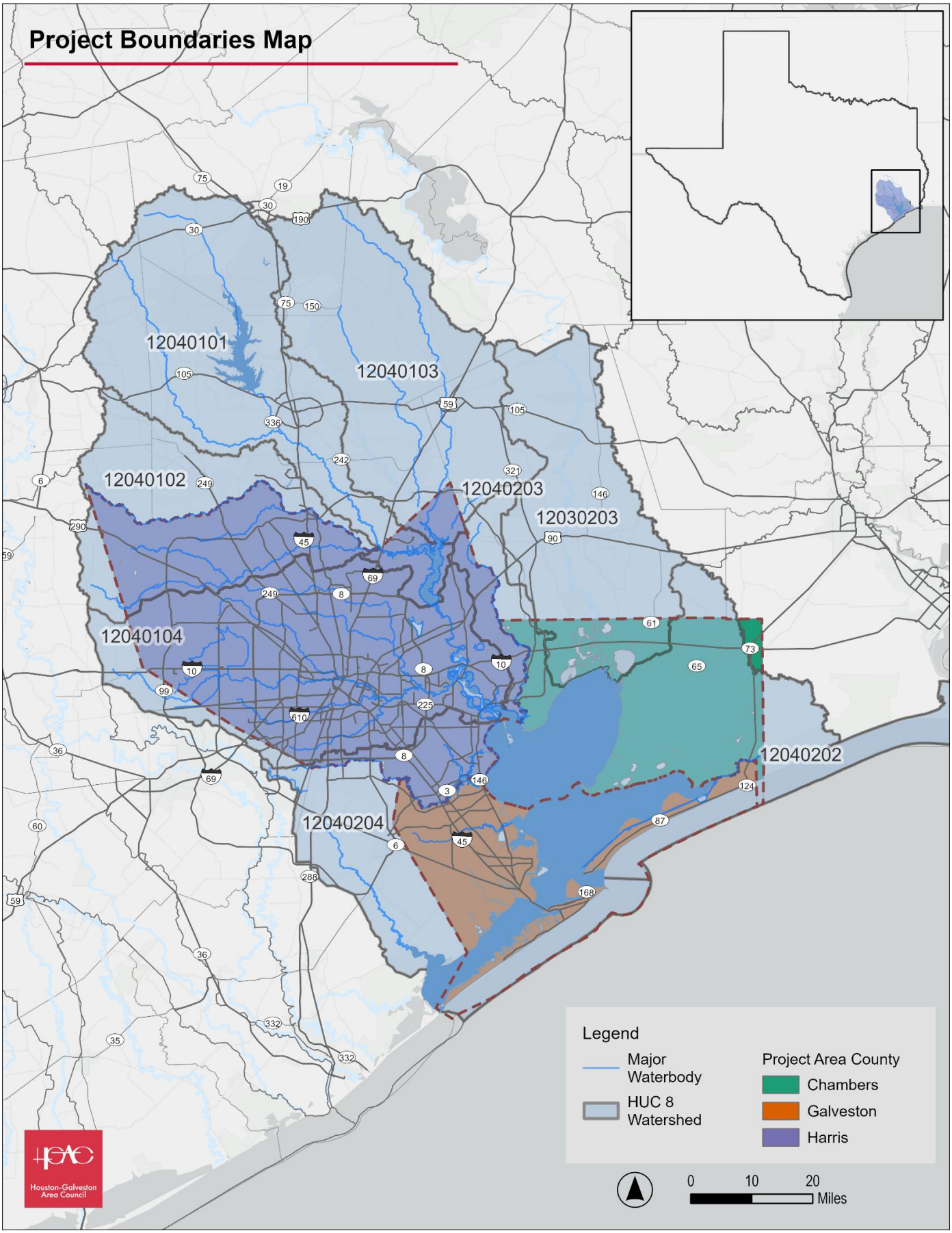
Project activities will take place in the greater Houston Region. All work will be completed within in the following HUC 8 watersheds which flow into Galveston Bay: 12030203, 12040101, 12040102, 12040103, 12040104, 12040202, 12040203, and 12040204. The study area includes the following counties: Harris, Galveston, and Chambers (see Projects Map).

Partners[1] and Their Roles:

The contract laboratory to conduct the additional microplastic enumeration has not been determined yet. If funded, we will work with the other researchers in the region to ensure that the methodology used best represents the microplastics data collected to date within the Galveston Bay Estuary.

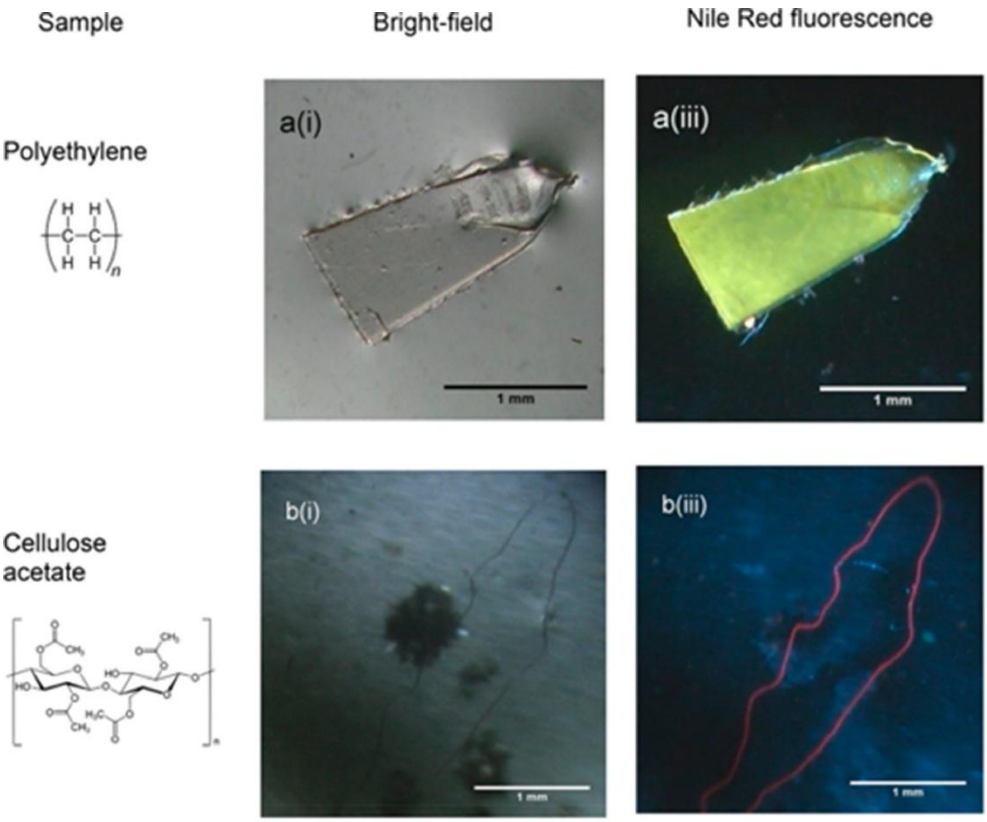
[1] If partners are subgrantees completing work reimbursable under GBEP funding, a letter of commitment from the partner must be submitted as an appendix with the application.

Projects Map



Supplemental Photos/Graphics (Optional):

Example of microplastics under brightfield and fluorescence stereoscopic microscopy. Modified from Labbe et al. 2020



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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	$49,087.68
Fringe Benefits (47.02%)[2]	$23,081.03
Travel	$1,776.04
Supplies	$19,375.84
Equipment	$62,000.00
Contractual	$72,000.00
Construction	$0.00
Other	$14,433.74
Total Direct Cost	$241,754.33

b. Indirect Costs[3]

Distribution Base Amount *(salary and fringe)*	$72,168.71
Indirect Cost Rate for Reimbursement	11.22%
Total Indirect Costs	$8,097.33

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	**$249,851.66**

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

N/A

☒ direct salary/wages and fringe benefits

☐ modified total direct costs

☐ Other direct costs 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.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

N/A

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 notify you 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.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

COGNIZANT AGENCY
NEGOTIATION AGREEMENT

Houston-Galveston Area Council
Houston, Texas

Date: June 12, 2025
Filing Ref: February 22, 2024

The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget 2 CFR 200 applies, subject to the limitations contained in the Circular and in Section II, A below.

SECTION I: RATES

Type	Effective Period Start	End	Rate	Base	Location	Applicable To
FIXED						
Indirect	1/1/2025	12/31/2025	11.22%	(a)	All	All Programs
Fringe Benefit Rate	1/1/2025	12/31/2025	47.02%	(b)	All	All Programs

Basis for Application

(a) Direct salaries and wages, including applicable fringe benefit costs.
(b) Direct chargeable salaries and wages. The fringe benefit rate should not be applied to any release time (vacation, sick, holiday, and other paid absences).

Treatment of Fringe Benefits: Fringe benefits and release time (vacation, sick, holiday, and other paid absences) applicable to direct salaries and wages are included in the fringe benefit rate cited above.

SECTION II: GENERAL

A. LIMITATIONS: The rates in this Agreement are subject to any statutory and 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 department/agency or allocated to the department/agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the department/agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the department/agency 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. CHANGES. The fixed rate contained in this agreement is based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in the organizational structure or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate in this agreement, require the prior approval of the authorized representative of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowances.

C. THE FIXED RATE contained in this agreement is based on an estimate of the cost which will be incurred during the period for which the rate applies. When the actual costs for such a period have been determined, an adjustment will be made in the negotiation following such determination to compensate for the difference between the cost used to establish the fixed rate and that which would have been used were the actual costs known at the time.

D. NOTIFICATION TO FEDERAL AGENCIES: Copies of this document may be provided to other Federal agencies as a means of notifying them of the agreement contained herein.

E. SPECIAL REMARKS: Please confirm your acceptance of the terms of the indirect cost rate agreement by signing and returning this letter to me. Please retain a copy for your records.

SECTION III: ACCEPTANCE

The undersigned official warrants that he/she has the proper authority to execute this agreement on the behalf of the State Agency:

_____
(Signature)

Christina Ordóñez-Campos, CPA
(Name)

Chief Financial Officer
(Title)

Houston Galveston Area Council
(Agency)

06/13/2025
(Date)

By the Cognizant Federal Agency:

_____
(Signature)

National Policy, Training and Compliance Division
U.S. Environmental Protection Agency

Negotiated by: Jacqueline Smith
Telephone: (202) 564-5055

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Natural Resource Uses (NRU)

Project Name:

Effect of Native Plants on Soils of Constructed Stormwater Drainages: Pilot Study Expansion

Project Previously Funded by GBEP? Yes ☐ No ☒

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

University of Houston-Clear Lake; Environmental Institute 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*

N/A

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 (Amanda) Gordon
Project Representative Phone	281-283-3794
Project Representative Email	gordon@uhcl.edu

Amount Requested from GBEP:

$108,957.94

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$ 108,957.94
FY 2028 (09/01/2027-05/31/2028)	$ 0.00
FY 2029 (09/01/2028-05/31/2029)	$ 0.00

Total	$ 108,957.94

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

09/01/2025-08/31/2026 if funded for FY26
09/01/2026-08/31/2027 if funded for FY27

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

Current project:	$ 108,957.94
Funded pilot study :	$ 30,000.00
Project total:	**$ 138,957.94**

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

In coordination with the Harris County Soil and Water Conservation District (HCSWCD) and Harris County Flood Control District (HCFCD) the Environmental Institute of Houston (EIH) at the University of Houston-Clear Lake (UHCL) is currently conducting a pilot study in four stormwater treatment drainages within the Lower Galveston Bay watershed. The current pilot study is funded for $30,000. The currently proposed study aims to further expand this pilot study to cover a larger area of interest within the Lower Galveston Bay Watershed. Data and results from the HCSWCD and HCFCD study will be used to guide decisions for study design and implementation of the currently proposed study, and therefore maximize costs from GBEP, if awarded.

Project Urgency:

This project would be an extension of a current pilot study funded by the HCSWCD and HCFCD which is scheduled to end December 31, 2025. While urgency is not required to start in FY26, the sampling protocols between the existing and the expansion studies would be the same. Expanded survey sites locations have been discussed with project partners, but will not be finalized until funding is secured. Because of the ongoing collaboration, this project is ready to start as soon as possible (e.g., in FY26).

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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:

NPS-3: Implement nonpoint source best management practices
The proposed project will expand on an ongoing study evaluating soil composition in relation to native planted versus naturally recruiting vegetation in areas of nonpoint source influence. The study sites are located within stormwater detention basins or directly adjacent to canals constructed to affect stormwater inflows. The study areas are already considered BMPs and this project would provide monitoring of their effectiveness or impact on the surrounding habitat. The results from the expanded study could guide further refinement of stormwater and nonpoint source water quality improvements.

HC-3: Habitat Enhancement
While the current study does not directly enhance habitats, we will be monitoring and evaluating the effectiveness of previously enhanced habitats. Specifically, we are evaluating the effects that enhanced habitats have on soil composition, which can be indicative of long-term changes in habitat quality.

SC-1: Native Species Management
The stormwater treatment habitats in this study have been purposefully planted with native vegetation and this study design aims to compare soil health of the planted areas to adjacent areas allowed to naturally recruit vegetation which may also lead to establishment of invasive or non-native species. The results can be used by resource managers to make better informed decisions in the future for refining vegetation structure in stormwater treatment areas. In the created stormwater treatment areas, periodic culling of non-native or non-planted species occurs which will allow for direct comparison to natural recruitment in the non-managed areas.

FWI-2: Freshwater Inflows Research and Management
The study sites are areas specifically created to improve stormwater quality and the quantity of freshwater inflow with improved waters. The effect on soil composition that these native plant created habitats have on waterways in this region is largely unknown and this study aims to fill knowledge gaps to better inform future BMP decisions.

RES-1, RES-2, and RES-3: Conduct Biological, Geochemical, and Physical Stressor Monitoring and Research
The purpose of these enhanced stormwater treatment areas is to aid in improvements to stormwater quality and consequently the receiving water bodies within the Lower Galveston Bay watershed. The proposed work is designed to evaluate the effect of vegetation structure on soil composition and while this work does not directly monitor any specific type of biological, geochemical, or physical stressor, we will collect valuable information about how created stormwater treatment infrastructure ultimately is affected by these types of stressors. By evaluating this stormwater treatment infrastructure that is intended to alleviate effects of stressors on downstream systems we aim to fill knowledge gaps pertaining to the relationship between native habitat restoration and water quality.

RES-6: Evaluate Best Management Practice Projects
This proposed study intends to add to available applied research and monitoring data that aid in the understanding of Galveston Bay ecosystem components. While the study sites were constructed utilizing current BMPs, this study will evaluate their effectiveness on soil health. The results from the expanded study could guide further refinement of stormwater and nonpoint source water quality improvements. Results will be shared with city planners and resource managers.

ACS-2: Provide Access to Monitoring and Research Data
The results will be shared with city planners and resource managers as well as integrated into the Galveston Bay Regional Monitoring Database, aligning with GBEP's goal to improve accessibility and synthesis of environmental indicators.

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.
☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
- ☐ Adaptive management for previously completed projects;
- ☐ Projects that have lost funding from other federal sources; and
- ☐ Nonnative species management.

☒ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☒ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.

☐ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

WSQ: Evaluation of best management practices that address nonpoint source pollution.
Stormwater treatment enhancements are innately a BMP for nonpoint source pollution mitigation and the proposed study aims to evaluate the effects of existing BMPs for planting native vegetation on soil composition, which may serve as a proxy for long-term habitat changes.

NRU: Benefit to native fish and wildlife.
An innate benefit of improving stormwater quality is the improvements made to the habitats utilized by native fish and wildlife. By planting native vegetation, native species have access to improved habitat and food sources. Soil also provides important resources to native fish and wildlife through nutrients, providing habitat to food sources, and attracting beneficial soil bacteria and invertebrates.

WSQ: Supporting management measures and watershed-based plans.
The data from the proposed study will directly support evaluation of management measures. The evaluation of potential long-term indicators of stormwater quality improvement can also aid in future planning for watershed-based plans.

NRU: Brings multiple Priority Area/Subcommittee benefits to the program.
The proposed study addresses multiple priority areas of the Galveston Bay Plan and the GBEP Subcommittees.

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

N/A

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:

In 2025, EIH partnered with the HCSWCD and HCFCD to implement a pilot study evaluating the soil composition in two bioswales and a retention basin planted with native vegetation. Due to limitations in funding, only one set of paired-soil samples at each site was included as part of the study design to effectively and efficiently gather baseline data. Here, we propose expanding the pilot study survey efforts to address HCSWCD and HCFCD's primary goal of gathering data related to stormwater quality benefits based on soil composition in areas with native plant communities.

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

The Houston-Galveston Metroplex represents one of the largest urbanized areas in the United States. As urban development and impervious surface cover has expanded, stormwater runoff into the surrounding bayous and waterways has measurably impacted water quality (U.S. EPA, 2025). These water quality impacts have caused a decrease in biodiversity and increase in hypoxic areas or encroachment of invasive species of concern (Adla et al., 2022; Dubrovsky et al., 2010). To combat the negative impacts of stormwater runoff, the Harris County Flood Control District (HCFCD) has taken efforts to plant and cultivate native wetland, prairie, and woody vegetation communities along areas where drainage channels and detention basins have been developed. While these efforts have led to improvements in water quality, the effects of these native plants on soil composition in HCFCD managed areas remain largely unknown.

In 2025, the Environmental Institute of Houston (EIH) partnered with the Harris County Soil and Water Conservation District (HCSWCD) and HCFCD to implement a pilot study evaluating the soil composition in two bioswales and a retention basin planted with native vegetation. The goal of this pilot study was to determine if soil properties in locations where native plants were purposely cultivated varied when compared to areas where vegetation was allowed to recruit naturally. Due to limitations in funding, only one set of paired-soil samples at each site was included as part of the study design to effectively and efficiently gather baseline data.

Here, we propose expanding the pilot study survey efforts to address HCSWCD and HCFCD's primary goal of gathering data related to stormwater quality benefits based on soil composition in areas with native plant communities. We aim to achieve this through the following objectives:

Objective 1: Investigate differences in soil parameters based on plant community composition.

Objective 2: Provide data-driven feedback on potential impacts of soil parameters to stormwater quality, flood management, or both.

Including the four sites currently under evaluation, seven study areas owned by HCFCD have been identified for the proposed study. We propose to conduct 14 sampling events (two per site) in each of these areas to evaluate trends in sediment composition based on presence or absence of planted native vegetation. Sampling will be conducted during the index period (e.g., March 15th through October 15th), while plant development is at its peak. At each site, we will perform vegetation plot surveys to determine community composition, estimate root density, and determine percent cover within each plot. At each site, two soil pits will be excavated to a depth of 60-cm to evaluate surface soil zonation: one within the natively vegetated planted area and the other in an adjacent natural recruitment area. Each horizon identified will be evaluated for soil color, texture, percent root composition, and particulate concentration. The surface (within the top 10-cm, regardless of horizon structure) and bottom (within the bottom 10-cm, regardless of horizon structure) of each pit will be sampled for chemical composition, micronutrients, organic matter, salinity, and texture through the Texas A&M University Agrilife Extension Soil, Water, and Forage Testing Laboratory. Additionally, each soil pit location will be assessed for water infiltration rates. Sample protocols will follow similarly to those used in the EPA's National Wetland Condition Assessment and following the U.S. Army Corps of Engineers Field Indicators Hydric Soils.

The proposed work will allow for a expansion of the ongoing soil composition study in relation to presence or absence of planted native vegetation and will strengthen the results of ongoing work already being conducted in the Galveston Bay area. By working directly with the HCSWCD and HCFCD on this expanded

study, recommendations will be provided to resource and city managers to make informed decisions on improving water quality from stormwater runoff in the future.

Literature Cited

Adla, K., K. Dejan, D. Neira, and Š. Dragana. "Chapter 9-Degradation of ecosystems and loss of ecosystem services (JC Prata, AI Ribeiro, & TBT-OH Rocha-Santos." (2022).

Dubrovsky, N. M., Burow, K. R., Clark, G. M., Gronberg, J. M., Hamilton, P. A., Hitt, K. J., ... & Wilber, W. G. (2010). The quality of our Nation's waters—Nutrients in the Nation's streams and groundwater, 1992–2004. US geological survey Circular, 1350(2), 174. http://pubsdata.usgs.gov/pubs/circ/1350/index.html

U.S. EPA (2025) https://www.epa.gov/caddis/urbanization-stormwater-runoff

Other Plans Implemented:

N/A

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

☐ Yes

☒ No

N/A

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 and EJScreen instructions.

☐ Yes

☒ No

N/A

Latitude/Longitude (Optional):

Sites included in ongoing pilot study:

- Addicks Bioswale: 29.701350, -95.662730
- Beamer Created Wetland (2 locations in wetland): 29.573070, -95.208710
- Katy Bioswale: 29.859990, -95.692520

Location:

Gulf Coast Prairie and Marshes Ecoregion → San Jacinto-Brazos Coastal Basin → Lower Galveston Bay Watershed

Partners[1] and Their Roles:

Internal Project Personnel

Mandi Gordon (gordon@uhcl.edu); EIH, UHCL; Senior Biologist and Interim Associate Director, Research Programs – Mandi will serve as Lead-PI for the proposed project. Mandi's primary roles will be to provide administrative oversight, assist with study design and implementation, manage contractual obligations, conduct data analyses, and reporting.

TBD; EIH, UHCL; Senior Research Associate – A Senior Research Associate will be hired onto the project as Key Personnel. The Senior Research Associate's primary role will be day-to-day project management, assist the Lead-PI with administrative tasks, facilitate communications with project partners, conduct data analysis, and reporting.

Kaylei Chau (chau@uhcl.edu); EIH, UHCL; Research Associate – Kaylei will serve as the Co-PI for the proposed project. Kaylei's primary role will be to assist with day-to-day project management, oversight of field data collection, personnel training, assisting with data analysis, and report development.

Hanah Martin (martinha@uhcl.ed); EIH, UHCL; Research Technician – Hanah will serve as Key Personnel on the project. Hanah's primary role will be to assist with field data collection, data entry, checks for quality control, data analysis, and report development.

Debbie Bush (bush@uhcl.edu); EIH, UHCL; Outreach Coordinator - Debbie will serve as key personnel on the project. Debbie's primary role will be to assist with outreach activities related to the project (through EIH social media channels and the UHCL website).

Richard Dotter (dotterr@uhcl.edu); EIH, UHCL; Equipment Coordinator – Richard will serve as key personnel on the project. Richard's primary role will be maintenance and repairs of project equipment, including vehicles.

TBD; EIH, UHCL; Graduate Research Assistant – A Graduate Research Assistant will be hired onto the project as Key Personnel. The Graduate Research Assistant's primary roles will be to assist the project PI's in day-to-day project management, data compilation, dissemination, and coordination with project partners. The graduate student will also use data collected through the proposed project to develop a Master's thesis project in completing of a M.S. degree program through UHCL.

TBD; EIH, UHCL; Undergraduate Research Assistant – An Undergraduate Research Assistant will be hired onto the project as Key Personnel. The Undergraduate Research Assistant's primary roles will be to assist project staff with data compilation, checks for quality control, dissemination, and other activities as needed. The undergraduate student may also use data collected through the proposed project in completion of an undergraduate practicum course requirement or as an undergraduate research project.

[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.

Projects Map

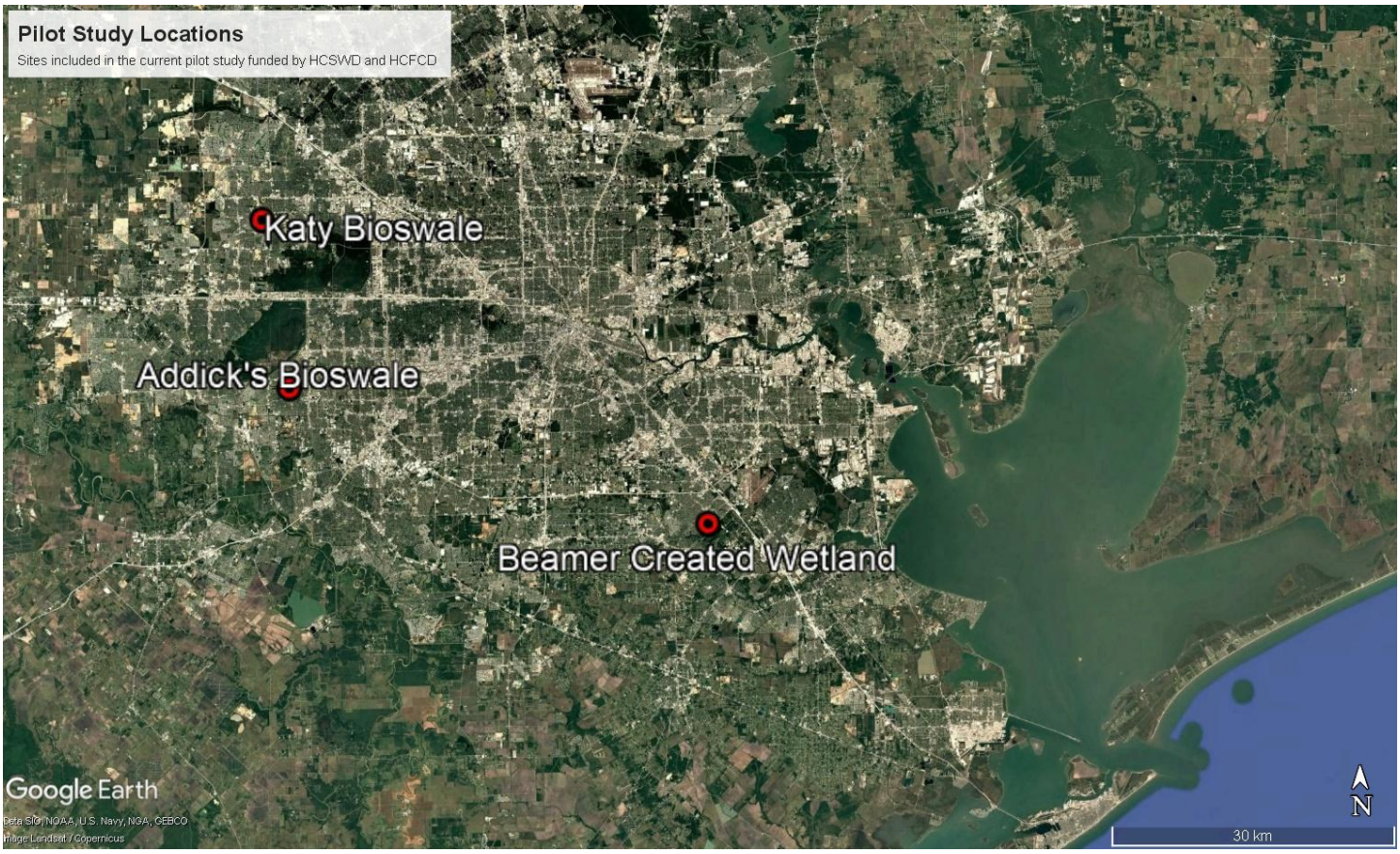

Figure 1 Distribution of survey locations included in the ongoing pilot study.

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	$ 54,006.25
Fringe Benefits **(24%)**[2]	$ 13,163.67
Travel	$ 2,000.00
Supplies	$ 3,190.63
Equipment	$ 0.00
Contractual	$ 0.00
Construction	$ 0.00
Other	$ 4,609.00
Total Direct Cost	$ 76,969.55

*Fringe rates = 36% for staff, 15% for students; average rate applied to budget = 24%

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$ 72,969.55
Indirect Cost Rate for Reimbursement	43.8%
Total Indirect Costs	$ 31,988.39

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 108,957.94

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

☐ direct salary/wages and fringe benefits

☒ modified total direct costs

☐ Other direct costs 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.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

N/A

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 notify you 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.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Natural Resource Uses (NRU)
Secondary Subcommittee (if applicable): Public Participation and Education (PPE)

Project Name:

Feasibility Study for a Bioretention Wetland Demonstration Site

Project Previously Funded by GBEP? Yes ☐ No ☒

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

Sandra Metoyer, Environmental Institute of Houston at UHCL

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*

Unique Entity ID (UEI) Number:	74-6001399 (University of Houston-Clear Lake)
Vendor Identification Number (VIN) or Tax ID:	

Contact Information:

Project Representative Name	Sandra Metoyer
Project Representative Phone	281-283-3961
Project Representative Email	Metoyer@uhcl.edu

Amount Requested from GBEP:

$39,273.75

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

Amount Requested per year (if applicable):

FY 2026 (09/01-2025-08/31/2026)	$39,273.75
FY 2027 (09/01/2026-05/31/2027)	$0.00
FY 2028 (09/01/2027-05/31/2028)	$0.00
FY 2029 (09/01/2028-05/31/2029)	$0.00
Total	$39,273.75

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 30, 2025 – June 30, 2026 (9-month period)

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

$39,273.75

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

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

White Oak Bayou Association is offering consulting services to advise on nature-based solutions at no cost to the grant. Estimated cost of services is up to 20 hours at an estimated cost of $1.500.

Project Urgency:

Urgent. Utilizing the results, developing new collaborations, and establishing estimated costs of the feasibility study funded by GBEP, EIH at UHCL will apply for the Texas General Land Office's Coastal Management Program as a Project of Special Merit in June of 2026. With a robust feasibility study, accurate cost analysis, permissions obtained, and conceptual sketches/drawings, the proposal to the Texas GLO to complete a conversion of a drainage basin on campus at UHCL to a demonstration site will be more competitive and more likely to be funded.

If we are unable to complete a feasibility study with costs and permissions by April of 2026, we will miss the opportunity to submit a competitive proposal with accurate and correct information to the GLO Coastal Management Program. The GLO-CMP program could potentially provide up to $5 million in funding for a demonstration, teaching, research, and public-invited space at UHCL for "protecting and sustaining living resources in the Galveston Bay" and the space would (once completed) inform science-based decision-making among students (K-12 formal, informal, undergraduate, and graduate), communities, and other stakeholders.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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 immediate priority area that the feasibility study will address is HC-3 (Habitat Enhancement).

However, if we are successful in securing GLO funding for converting an under-utilized retention basin located on the campus of the University of Houston-Clear Lake into a bioretention storm water wetland that will be used as a demonstration site, research and training site, and public-invited green space; we (GBEP and UHCL partners) will also accomplish priorities across the four GB Plan Priorities.

Once the under-utilized retention basin is converted, the EIH-UHCL demonstration & research site will achieve the priorities of "collaborate with research institutions to support focus area applied research and monitoring" (RES); inform science-based decision making; and stakeholder and partner outreach (SPO).

This small and relatively low-cost feasibility study could potentially have a very large return on investment (ROI) with one site serving many functions across GBEP subcommittees and plan priorities. As a primarily undergraduate institution (PUI), UHCL is in a unique position among the GBEP partners to authentically deliver on applied research supporting education, and vice versa.

Note the boxes checked above indicate the potential. The feasibility study alone addresses SPO-3 (regional initiative); SPO-4 (local government outreach); and stakeholder and partner outreach (SPO) goals in general.

Without the seed funds from GBEP to conduct the proposed feasibility study, the other priority area actions are unlikely to be achieved.

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.
☐ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
    ☐ Adaptive management for previously completed projects;
    ☐ Projects that have lost funding from other federal sources; and
    ☐ Nonnative species management.
☐ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☒ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☒ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☒ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☐ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☐ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

The proposed feasibility study is the first step. Priorities that directly apply to the feasibility study were selected. Other priorities could be addressed if EIH at UHCL is able to convert the under-utilized retention basin located on the campus into a bioretention storm water wetland. The new bioretention storm water wetland will be used as a demonstration site, research and training site, and public-invited green space.

The potential return on investment of this proposed NRU feasibility project is a perfect for, “Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.”

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

Not directly applicable to the proposed feasibility study.

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:

Summary: The Environmental Institute of Houston at University of Houston Clear Lake proposes a 9-month feasibility study under the Natural Resources Use (NRU) subcommittee of the Galveston Bay Estuary Program.

The study will determine the feasibility, scope, and cost of converting an under-utilized retention basin located on the campus of the University of Houston-Clear Lake into a bioretention storm water wetland that will be used as a demonstration site, research and training site, and public-invited green space.

Full Project Description (1,000 words or less): (165 words)

Summary: The Environmental Institute of Houston at University of Houston Clear Lake proposes a 9-month feasibility study under the Natural Resources Use (NRU) subcommittee of the Galveston Bay Estuary Program. The study will determine the feasibility, scope, and cost of converting an under-utilized retention basin located on the campus of the University of Houston-Clear Lake into a bioretention storm water wetland (Bioretention Wetland) that will be used as a demonstration site, research and training site, and public-invited green space.

Bioretention Wetland: Sitting on the campus of University of Houston-Clear Lake directly behind the Environmental Institute of Houston's temporary building, there is an under-utilized retention basin (see image). At one time, the plan was to dual purpose the area as a soccer field and a retention basin. Although that did not work out (too wet for soccer), the basin provides the perfect location for a demonstration, research, and teaching site for nature-based solutions, bioremediation strategies, soil science, exploring changes to nutrient loads, coastal wetlands, native plants, birding, etc. In addition to using this space for education and research, we seek to create a space that is not just open to the public but is a public-*invited* green space. To encourage the public (e.g., students, staff, faculty, community) to engage with the green space, we will incorporate nature-based playscape that will entice the public to use nature as their playground.

Logistics and Timeline: We have gathered a team of consultants and EIH staff with unique distributed expertise in habitat restoration and water mitigation strategies. The team includes a "stream builder", landscape architect, playscape expert, ecologist, plant experts, restoration experts, Master Naturalists, urban wildlife habitat experts, and educators. The team will meet in person at the kick-off (early October) to brainstorm ideas for this space. The core team (listed in budget) will then build the ideas into a master plan for converting the basin into a bioretention wetland. After the kick-off brainstorm, core team members will work individually on their areas of focus with once-per-month core team video calls. PI Metoyer will coordinate with the individuals and communicate progress, next steps, and follow-up among the team.

The core team will meet again in person at the beginning of the spring (mid-January) to share progress and to begin the process of bringing the parts together into a master plan. By late March 2026, a detailed master plan with cost estimates and renderings will be ready to present to the University's President, Dr. Walker. With the President's approval of the master plan, the core team will finalize the master plan and complete development of the proposal to submit to the Texas GLO-CMP in early June 2026 (contingent upon continued funding of the GLO-CMP program).

Education and Outreach: Throughout the process, EIH will leverage the activity around the drainage basin project to provide outreach, education, and awareness of land-use challenges and land-based interconnections between resources. The project allows us to explore multiple uses of land and consider how creative land-use can support a sustainable future.

Budget and Budget Justification: Funds requested will support a 9-month project for the development of the scope of work and detailed quotes among four project partners. Time and effort during the 9-month project period will be used to develop and define the scope of work, determine the engineering needs and landscape design, investigate permits and permissions required, and develop a proposal for submission to the Texas GLO.

Personnel and Fringe:
EIH at UHCL for research, education, and outreach consulting and project administration ($2,422.50 salary and fringe representing 0.25 of one calendar month (2%) for PI Metoyer).

Contractual: Contracted experts and their time on the project include:
(1) Restoration Environmental Services (RES) for engineering and ecological services (160 hours at $101.63 for engineer, ecologist, and project manager hours (total = $16,260),
(2) Fab Abounds for nature-based playscape services (60 hours at $100.00 for consulting services),
(3) White Oak Bayou Association for nature-based solution consulting (20 hours at no cost to the grant)

Travel: An additional $500 per partner is requested to reimburse regional travel expenses for up to 4 in-person team meetings ($1,500).

IDC: UHCL's federally negotiated on-campus IDC rate is 50% of BASE. IDC is $13,091.25.

Total Cost: Total cost of the feasibility study with IDC of 50.0% is $39,273.75.

Outcome: The product of this feasibility study will be a competitive proposal submitted to the Texas General Land Office's Coastal Management Program as a Project of Special Merit in June of 2026.

Project Period: Proposed project period is September 30, 2025 – June 30, 2026 with final invoice and report submitted by August 31, 2026.

Other Plans Implemented:

The goal of this project is to produce a competitive proposal informed by data, permissions, and realistic quotes (e.g., cost) to be submitted to the Texas General Land Office in June 2026.

The proposal with quote, based on the GBEP-funded feasibility study, will be submitted to GBEP as a project product and will be the property of GBEP and UHCL to be utilized as desired – regardless of the outcome of UHCL's proposal to Texas GLO.

Does the Project work with new, smaller communities/partnerships?
☒ Yes
☐ No

As an outcome of EIH's collaboration with Bayou Preservation Association (CEO, Brittani Flowers) and our participation in their 2025 spring symposium; EIH has developed new partnerships with RES (Jack Fitch), Fab Playgrounds (Hannah Corson), and White Oak Bayou Association (Mark Steuer). In addition, EIH has

involved an early career scientist (EIH Staff) and a UHCL student in the design and planning for this project. Once the retention basin is converted, the potential for new partnerships on and off-campus is expansive.

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 and EJScreen instructions.

☐ Yes
☒ No

Latitude/Longitude (Optional):

29.58 Latitude/-95.10 Longitude

Location:

Located a half-hour from downtown Houston, University of Houston-Clear Lake's campus resides on 524-acres of riparian, coastal grassland, and wetland habitat.

Partners[1] and Their Roles:

Sandra Metoyer, Ph.D. (Environmental Institute of Houston at UHCL) is the grant administrator, PI, budget manager, and primary liaison between UHCL and GBEP. She has fiscal and reporting responsibility for the grant and leads the project, oversees the invoicing, and leads the reporting to GBEP.

All other project partners are listed as contractual and none are subgrantees.

Partners
Mark Steuer, White Oak Bayou Association
Jack Fitch, RES (Engineering & Restoration)
Hannah Corson, FabAbounds (Nature Playscape Services)

See attached email communications to confirm commitments and agreed rates.

Projects Map – Not Applicable

[Insert Map Here or Attach as an Appendix if Applicable]

[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):

Figure 1. Image of the retention basin. Approximately 153 meters long X 39 meters wide.
Source: Google Earth 07/2025.

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	$1,781.25
Fringe Benefits **(36%)**[2]	$641.25
Travel (regional 3 X $500)	$1,500.00
Supplies	$0.00
Equipment	$0.00
Contractual	$22,260.00
Construction	$0.00
Other	$0.00
Total Direct Cost	$26,182.50

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$ 26,182.50
Indirect Cost Rate for Reimbursement	% 50.0
Total Indirect Costs	$ 13,091.25

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$ 39,273.75

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

☐ direct salary/wages and fringe benefits

☒ modified total direct costs

☐ Other direct costs 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

[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 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 fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

Not Applicable.

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 notify you 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

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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

Outlook

Steuer Commitment

From Mark Steuer <bigbendgeo@gmail.com>
Date Fri 7/25/2025 1:43 PM
To Metoyer, Sandra <Metoyer@UHCL.edu>

Sandra,
Please let this letter serve as my confirmation
to commit to the EIH's proposed feasibility study under the Natural Resource Use (NRU) subcommittee of the Galveston Bay Estuary Program to determine the feasibility, scope, and cost of converting a retention basin located on the campus of the University of Houston-Clear Lake into a bioretention storm water wetland that will be used as a demonstration site, research and training site, and public-invited green space.

Thank you,

Mark Steuer, Ph.D.
President, White Oak Bayou Association
713 702 8411

Sent from my iPhone

Outlook

Re: Feasibility Study Proposal - Next Steps

From Mark Steuer <bigbendgeo@gmail.com>
Date Sun 7/20/2025 8:39 PM
To Metoyer, Sandra <Metoyer@UHCL.edu>

Hey Sandra,
Any help I can provide to your effort will not require any remuneration. Thanks.
Mark

Sent from my iPhone

> On Jul 16, 2025, at 1:51 PM, Metoyer, Sandra <Metoyer@uhcl.edu> wrote:
>
> Dear All,
>
> I have talked with each of you individually and worked out some details for this proposal.
>
> I have asked you to share a rough estimate of a budget for your time/services to assist EIH with the feasibility study. Please have this estimate to me by this Friday. The proposal is due next Friday (July 25th).
>
> I have developed a rough budget (below) based on my conversations with you and will revise this with more detail as I receive your estimates. Note I have received Hannah's estimate.
>
> I propose we keep the costs down but sufficient to do the work so that the GLO proposal is competitive. A quality feasibility study will be used to submit a proposal to the Texas GLO for the actual work to be completed. Detailed scopes of work will be required for the proposal to the GLO (likely due date of June 2026) and the feasibility study will be used to create a detailed scope of work with associated costs.
>
> I would also like to introduce Ralph and Sarah with Terracon to the team!
>
> Please call or email me with any questions or ideas.

Feasibility Study Budget

Partner	Role	Cost
EIH	PI/Project Mng	$2,500
White Oak Bayou Assoc.	NBS Consulting	$1,500

Outlook

RE: Feasibility Study Proposal

From Metoyer, Sandra <Metoyer@UHCL.edu>
Date Wed 7/16/2025 2:34 PM
To Hannah Corson <hannah@fabplaygrounds.com>

That works!

Thank you, Hannah.

I'll share the final budget document with all once it is finalized.

Sandra

From: Hannah Corson <hannah@fabplaygrounds.com>
Sent: Wednesday, July 16, 2025 10:29 AM
To: Metoyer, Sandra <Metoyer@UHCL.edu>
Subject: Feasibility Study Proposal

Good morning Sandra,

I'll be honest, I've never given a proposal for a feasibility study before and from what I'm seeing it typically falls ~2% of total project costs. If I'm going with that for the play portion only of this project based on the directive to create something that would draw the public into this space, my costs should fall somewhere around $6K total.

However, at that rate, I am unsure how to budget for estimated monthly trips (increasing in frequency as you mentioned) meetings down at the site location as well as research and additional collaborative meetings on my part.

I would say that if we are prioritizing monthly meetings (August-May with increasing frequency, and some virtual) my price is **$12K**. If we can do bimonthly meetings (August-May with increasing frequency, and some virtual) my price is **$6K.**

Let me know if this all makes sense, if you have an input or direction (I'd like to figure out how to make this work!), and if you need me to send an official proposal - very happy to do that.

Thanks Sandra!

Hannah Corson
Architect Specialist
832-808-2507
114 Venice Street
Sugar Land, TX 77478
hannah@fabplaygrounds.com
www.fabplaygrounds.com
Schedule a meeting
Connect with me on LinkedIn

From: Jack Fitch <jfitch@res.us>
Sent: Friday, July 18, 2025 3:06 PM
To: Metoyer, Sandra <Metoyer@UHCL.edu>
Subject: RE: Follow-up - Rough Quote for RES Part - Feasibility Study

Sandra,

I spoke with our Engineer/ Stream Designer as well as an Ecologist who were both excited about the project. Our engineer agreed that 80 hrs of his time would be enough for site visits, desktop work, and developing a design for the proposal. I have our ecologist for 40 hrs to help develop a restoration approach that ties in with the engineers design. I've included 40 hrs for myself to manage the project and general writing and submittals. This comes out to **$16,260.00.**

Also, in the meantime before September if you have any construction material or design documentation on the detention basin it would be helpful for us to look over prior to meeting in September.

Thank you,
Jack Fitch
Project Manager
RES | res.us
M: 713.653.4150

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1741792163
ORGANIZATION:
University of Houston at Clear Lake
2700 Bay Area Blvd.
Houston, TX 77058-1098

Date: 05/21/2024
FILING REF.: The preceding agreement was dated 03/23/2021

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: Facilities And Administrative Cost Rates

RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

	EFFECTIVE PERIOD				
TYPE	FROM	TO	RATE(%)	LOCATION	APPLICABLE TO
PRED.	09/01/2020	08/31/2024	48.00	On Campus	All Programs
PRED.	09/01/2020	08/31/2024	22.00	Off Campus	All Programs
PRED.	09/01/2024	08/31/2028	50.00	On Campus	All Programs
PRED.	09/01/2024	08/31/2028	16.00	Off Campus	All Programs
PROV.	09/01/2028	Until Amended			Use same rates and conditions as those cited for fiscal year ending August 31, 2028

*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). Actual costs will be apportioned between on-campus and off-campus components. Each portion will bear the appropriate rate.

FRINGE BENEFITS:
FICA
Retirement
Worker's Compensation
Life Insurance
Unemployment Insurance
Health Insurance

DUE DATE:
The next indirect cost rate proposal based on actual costs for the fiscal year ending 08/31/2027 is due in our office by 02/28/2028.

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 at Clear Lake
(INSTITUTION)

(SIGNATURE)

Dr. Sherry Hawn
(NAME)

Associate Vice President
(TITLE)

5/24/24
(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: 2024.05.22 13:12:52 -05'00'
(SIGNATURE)

Arif Karim
(NAME)

Director, Cost Allocation Services
(TITLE)

05/21/2024
(DATE)

HHS REPRESENTATIVE: Olulola Oluborode
TELEPHONE: (214) 767-3261

Galveston Bay Estuary Program
Fiscal 2027 Project Proposal

Please complete this proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by July 25, 2025. 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 TWO: SUBMITTAL – GENERAL INFORMATION

Primary Subcommittee: Water and Sediment Quality (WSQ)
Secondary Subcommittee (if applicable): Monitoring and Research (M&R)

Project Name:

Tracking Pollution Sources to Protect Galveston Bay

Project Previously Funded by GBEP? Yes ☐ No ☒

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

The University of Texas at Arlington (UTA)

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:	LMLUKUPJJ9N3
Vendor Identification Number (VIN) or Tax ID:	75-6000121

Contact Information:

Project Representative Name	Habib Ahmari, Associate Professor	
Project Representative Phone	817-272-6588	
Project Representative Email	habib.ahmari@uta.edu	

Amount Requested from GBEP:

$328,478

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

Amount Requested per year (if applicable):

FY 2027 (09/01/2026-05/31/2027)	$124,217
FY 2028 (09/01/2027-05/31/2028)	$124,791
FY 2029 (09/01/2028-05/31/2029)	$79,470

Total	$328,478

Project Dates / Duration (beginning no earlier than September 1, 2026 – ending no later than May 31, 2029) [see 30 TAC § 14.7(5)]:

September 1, 2026 – May 31, 2029

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

$328,478

Is this an estimate? ☐

Leveraging (in-kind and/or cash):

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

Project Urgency:

Galveston Bay is a critical ecological and economic resource for Texas, supporting commercial fisheries, recreational activities, and diverse wildlife habitats. However, the bay is increasingly threatened by pollutant loads originating from urban, industrial, and agricultural sources within its contributing watersheds. Timely identification of these pollutant sources is essential to mitigate further degradation of water quality, protect sensitive habitats, and support Total Maximum Daily Load (TMDL) implementation efforts.

Delays in source identification risk compounding environmental impacts, increasing the cost of future restoration, and undermining regulatory compliance and community health outcomes. Given the rapid pace of urban development and the frequency of extreme weather events, immediate action is needed to develop and apply effective methodologies for locating and addressing pollutant sources. Accelerating this work is vital to preserve the long-term resilience of Galveston Bay and meet the goals of regional and state water quality initiatives.

SECTION THREE: *GALVESTON BAY PLAN, 2ND EDITION* IMPLEMENTATION

Grant recipient activities to be funded must implement the Plan, but proposals implementing the Fiscal 2027 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

This project improves monitoring and prediction of water quality in Galveston Bay and its contributing watersheds, specifically addressing NPS-1 and NPS-2 to tackle critical water quality challenges affecting the safe use of Galveston Bay for both humans and aquatic life. The project team will develop a satellite imagery–based method enhanced with machine learning to identify and track critical source areas for sediment, nutrients (phosphorus and nitrogen), and other water quality parameters within the Galveston Bay watershed. This approach aims to improve water quality in rapidly urbanizing regions.

Field data collection will play a key role in model development and validation, directly supporting Watershed Protection Plan (WPP) implementation. This includes identifying priority sites for Best Management Practices (BMPs) and evaluating their effectiveness (NPS-1). Additionally, the project will include outreach and education programs to provide technical support to local stakeholders and agencies, facilitating model adoption and application (NPS-2).

Expected outcomes include improved water quality monitoring capabilities, enhanced watershed management practices, and measurable reductions in pollutant loads from sources discharging into Galveston Bay.

Plan Priority 2: Protect and Sustain Living Resources

HC-3: Habitat Enhancement

Galveston Bay is experiencing growing environmental challenges, most notably elevated levels of E. coli contamination. The presence of E. coli in surface waters poses significant public health risks—such as gastrointestinal illnesses in humans—and can disrupt aquatic ecosystems by affecting species diversity and

habitat quality. As a result of these ongoing concerns, Galveston Bay and several of its tributaries have been classified as Priority Waters in the latest EPA-approved Texas Nonpoint Source (NPS) Management Program.

Additionally, harmful algal blooms (HABs) in the bay have resulted in fish kills and have been associated with mild to moderate health impacts, including respiratory irritation and skin rashes. These events often trigger beach advisories and restrict recreational activities, especially following stormwater runoff. Swimmers and boaters are particularly at risk during and after rainfall events that increase pollutant loading.

To address these issues, the project will develop a satellite imagery–based monitoring approach enhanced with machine learning to identify pollutant sources and track their movement across the watershed. This data-driven method directly supports Plan Priority 2 by enabling more effective pollution management and helping reduce contaminant loads in the bay.

By applying the model across subwatersheds within the Galveston Bay watershed, the project will advance habitat protection and restoration efforts (HC-3). More specifically, it will inform the implementation of Best Management Practices (BMPs) and support ongoing conservation and water quality improvement initiatives. Ultimately, the project will contribute to sustaining the ecological integrity of Galveston Bay and protecting the health of both human and aquatic life.

Plan Priority 3: Engage Communities

SPO-2 Workshops and Events
SPO-3 Support Regional Initiatives
SPO-4 Local Government Outreach

This project will conduct comprehensive outreach and education efforts to promote the use of the pollutant source identification and tracking model among local stakeholders, ensuring broad accessibility and understanding. These efforts directly support SPO-2 through SPO-4, as outlined below:

Organizing Workshops: The project team will collaborate with local government agencies, including the Houston-Galveston Area Council (H-GAC), to plan and conduct workshops tailored to various audiences—such as municipal officials, city planners, environmental organizations, and community groups. These workshops will provide training on the model's methodology, application across the Galveston Bay watershed, and its benefits in improving water quality and pollutant management.

Developing Training Materials: The team will prepare clear and comprehensive training materials, including user guides, instructional videos, and case studies, to support the effective transfer of knowledge about the model's capabilities and functions.

Providing Technical Support: Technical assistance will be offered to stakeholders to ensure successful implementation of the model. This will include one-on-one consultations to address site-specific questions, troubleshooting support, and follow-up communications to support long-term adoption.

These outreach efforts also align with SPO-4 by supporting local governments and water quality management agencies in adopting and applying the model developed in this study. This will aid in achieving measurable reductions in pollutant loads throughout the Galveston Bay watershed.

Plan Priority 4: Inform Science-based Decision Making

RES-4: Conduct Monitoring and Research to Address Limits to Contact Recreation

The proposed project supports Plan Priority 4 by implementing actions under RES-4. It will involve the collection of water quality data from rivers and creeks discharging into Galveston Bay to address critical data gaps needed for effective source identification modeling. This monitoring will help identify pollutant sources and evaluate the effectiveness of implementation activities across the watershed. Water samples will be analyzed for key water quality parameters, including total suspended solids (TSS), turbidity (Tu), phosphorus, nitrogen, chlorophyll-a, and organic matter (RES-4). The project team will collaborate closely with the Water and Sediment Quality (WSQ) and Monitoring and Research (M&R) subcommittees to ensure coordination and successful implementation of these research and monitoring.

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.
☒ WSQ: Implementation and/or evaluation of best management practices that address point and nonpoint source pollution.
☐ WSQ: Public health risk awareness outreach campaigns related to contact recreation and/or seafood consumption.
☐ NRU: Habitat acquisition.
☐ NRU: Enhancement of existing or ongoing restoration/conservation efforts with special emphasis on:
  ☐ Adaptive management for previously completed projects;
  ☐ Projects that have lost funding from other federal sources; and
  ☐ Nonnative species management.
☒ NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife.
☐ NRU: Brings funding, work leverage, or multiple Priority Area/Subcommittee benefits to the program.
☐ NRU: Project urgency: Project must be completed in next 24 months or opportunity is lost
☐ PPE: Empowers K-12 students and/or adults to positively impact their local environment through increased scientific literacy and community projects.
☐ PPE: Connects new audiences to existing/completed projects or the natural habitat.
☒ PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics.
☐ PPE: Conservation and environmental workforce development.
☒ M&R: Meaningful and effective monitoring of existing, past, and new projects (NRU: especially species of concern, WSQ, PPE).
☒ M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay.
☐ 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.
☐ Investigate ecosystem services and economic valuation of bay resources.

Subcommittee Priority Detail:

WSQ: Supporting management measures and watershed-based plans

The project will support existing watershed-based plans by identifying pollutant hotspots and tracking their sources using satellite imagery and machine learning techniques. This approach aligns with the goals of watershed-based planning by enabling more precise, data-informed management strategies that reduce pollutant loads to Galveston Bay and its adjacent coastal waters.

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

By identifying critical source areas for pollution, this project enables the implementation and future evaluation of targeted BMPs. These measures will focus on controlling runoff, reducing pollutant loads, and improving the effectiveness of ongoing and planned restoration activities.

NRU: Benefit to native fish and wildlife, including federal and state listed species, Species of Greatest Conservation Need, or nongame wildlife

The project will develop a satellite-based model to identify and track pollutant sources contributing to Galveston Bay. This innovative tool will support targeted efforts to reduce pollutant loading across the watershed. Enhancing water quality will lower aquatic life exposure to harmful bacteria, excess nutrients, and algal toxins. Reducing these stressors contributes to habitat enhancement and helps protect critical nursery areas for native fish and wildlife, including species of conservation concern. Collectively, these outcomes will improve ecosystem resilience and promote long-term biodiversity in the Bay.

PPE: Opportunities for GBEP and partners to host workshops/networking for education and outreach practitioners on key topics

The project includes the development and delivery of workshops and training sessions for local government officials, watershed managers, and community groups. These events will serve as platforms for sharing technical knowledge, model applications, and lessons learned, offering GBEP and its partners ongoing opportunities to engage with stakeholders and expand awareness of water quality issues.

M&R: Baseline assessments for large-scale, man-made changes to Galveston Bay

The integrated satellite-based machine learning model developed through this project will generate baseline data by tracking pollutant loads across subwatersheds and assessing their impacts on Galveston Bay. This baseline will serve as a vital reference for future evaluations of development, land use changes, and infrastructure modifications within the watershed.

M&R: Assessment, Exposure, and Response to stressors

- *Contact recreation standards:* The project addresses exceedances of pollutant in recreational waters, supporting efforts to meet contact recreation criteria and reduce public health risks.
- *Environmental parameters*: Water quality parameters such as total suspended solids, turbidity, phosphorus, nitrogen, chlorophyll-a, and organic matter will be monitored to assess ecosystem health.
- *Emerging contaminants*: Although the primary focus is on sediment and nutrient pollutants, the modeling approach can be adapted for future inclusion of emerging contaminants using remotely sensed indicators.
- *Legacy contaminants*: Satellite monitoring and historical trend analyses will help assess areas that have experienced long-term degradation, supporting the evaluation of legacy pollution impacts.

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 Nutrient Pollution to Protect Water Quality and Public Health

The project directly supports this priority by identifying and tracking sources of pollution—such as sediment, nutrient—using a satellite-based machine learning model. These data-driven insights will enable targeted mitigation efforts to reduce nutrient loading into Galveston Bay, which in turn helps lower the occurrence of harmful algal blooms, improve dissolved oxygen levels, and protect aquatic ecosystems and public health.

Make Investments that Address Coastal Resiliency

By establishing baseline pollutant load data and enabling more effective watershed-based planning, the project enhances the region's ability to adapt to future stressors such as land use changes, urbanization, and climate-driven events (e.g., extreme storms and sea level rise). Improved water quality and habitat protection also bolster the ecological resilience of the Bay, supporting long-term sustainability of coastal resources.

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 develop a satellite imagery–based method, enhanced with machine learning, to identify, track, and monitor pollutant source areas contributing to Galveston Bay from upstream watersheds. The proposed approach will enable targeted pollution mitigation strategies by pinpointing critical pollutant sources, thereby improving water quality and protecting aquatic ecosystems. Additionally, the model will provide valuable insights to support science-based watershed management, planning, and regulatory decision-making across the Galveston Bay watershed.

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

Galveston Bay is one of Texas's most critical ecological and economic assets, providing habitat for a wide range of marine species, supporting commercial and recreational fishing, and sustaining industrial and urban development in the Houston-Galveston region. However, the Bay faces increasing threats from pollution originating in its vast upstream watersheds. Urbanization, impervious surface expansion, population growth, and stormwater runoff have led to elevated levels of pollutants such as E. coli, nutrients (notably nitrogen and phosphorus), and suspended sediments. These pollutants threaten aquatic ecosystems, human health, and the overall water quality of the Bay. This project, led by the University of Texas at Arlington (UTA) and funded by GBEP, proposes to address this critical issue through the development of an innovative, integrated pollutant source tracking methodology that leverages high-resolution satellite imagery and machine learning algorithms.

The core objective of the project is to identify pollution sources across the sub-watersheds that drain into Galveston Bay, track the transport pathways of contaminants, and ultimately model how pollutants travel into the Bay and the adjacent Gulf region. Unlike traditional approaches, which often rely solely on field-based monitoring, this project combines remote sensing technologies and data-driven modeling to improve spatial and temporal resolution, increase efficiency, and reduce monitoring costs.

Pollutant transport in riverine and coastal systems is a complex, dynamic process affected by a multitude of variables. Episodic events such as hurricanes and flash floods, alongside long-term changes such as land use conversion and climate shifts, contribute to increased variability and unpredictability in pollutant behavior. For example, flood events can cause rapid mobilization of contaminated sediments, flushing pollutants from tributaries directly into the Bay. Predicting these behaviors requires a detailed understanding of both the sources and the mechanisms by which pollutants are transported. Furthermore, pollutant concentrations are not necessarily proportional to watershed size. Smaller, urban watersheds can yield disproportionately high contaminant loads due to high runoff volumes, concentrated sources of pollution, and limited natural filtration systems.

The need for advanced pollutant monitoring was highlighted during Hurricane Harvey, when widespread flooding disrupted monitoring infrastructure and overwhelmed existing data collection methods. Many gauge stations were rendered inoperable, and sediment and pollutant inputs to Galveston Bay had to be inferred post-event using indirect methods. Retrospective analyses estimate that Harvey deposited 131 million tons of sediment into Galveston Bay and the San Jacinto Estuary—a load equivalent to three decades of typical sedimentation. This included over 5 tons of mercury, the bulk of which originated from legacy industrial deposits in Buffalo Bayou and Patrick Bayou. Such extreme pollutant transport events reinforce the need for models that can operate even when traditional monitoring fails.

Satellite remote sensing technologies provide a powerful alternative. Multispectral imagery from satellites such as Landsat 5, 7, and 8, Sentinel-2, and MODIS enables estimation of surface reflectance values that correlate with key water quality indicators, including turbidity, chlorophyll-a, and suspended sediment concentrations. Machine learning techniques can analyze these satellite data in conjunction with in-situ measurements to predict pollutant levels and track their spatial distribution. This approach allows for

consistent and comprehensive monitoring across large geographic areas and time periods, even during extreme events.

The project proposes the development of two separate machine learning models: a riverine model and a coastal model. The riverine model will focus on pollutant behavior in narrow, upstream channels that require high spatial resolution for effective monitoring. Landsat and Sentinel-2 imagery will be used in these areas. The coastal model, on the other hand, will utilize MODIS imagery to cover broader estuarine and nearshore zones. Both models will be trained using a combination of historical datasets and field data collected during this study. Once validated, the two models will be integrated into a unified modeling framework capable of simulating pollutant dynamics across the entire watershed-to-coast continuum.

Field validation will be a critical component of model development. Water quality samples will be collected during biased flow conditions, such as after rainfall events, when pollutant loads are likely to peak. These samples will be analyzed at the UTA Environmental Laboratory for parameters including total suspended solids (TSS), nutrients, organic matter, and chlorophyll-a. This data will be used both for model calibration and for verifying satellite-derived estimates.

Key activities of the project include:

1. *Compilation of Water Quality Data and Satellite Imagery*: Gathering historical in-situ water quality measurements from USGS, TCEQ, and other sources, and acquiring satellite data from multiple platforms to establish a comprehensive dataset for analysis.
2. *Water Quality Monitoring*: Collecting new field data during critical flow conditions to validate and enhance model accuracy.
3. *Development of Integrated Machine Learning and Remote Sensing Models*: Building, training, and integrating separate models for riverine and coastal systems to create a global predictive tool for pollutant tracking.
4. *Outreach and Education*: Conducting workshops, developing training materials, and providing technical support to local stakeholders and agencies to facilitate model adoption and application.

The anticipated outcomes of the project are substantial:

- *Improved Monitoring and Prediction of Water Quality*: The integrated model will offer a more accurate, timely, and cost-efficient means of assessing water quality conditions throughout the Galveston Bay watershed.
- *Support for TMDL and Watershed Protection Plans*: Model outputs will inform regulatory efforts such as Total Maximum Daily Load (TMDL) implementation and guide targeted pollution control strategies.
- *Enhanced Stakeholder Capacity*: Local and regional agencies will gain access to a powerful decision-support tool, along with the knowledge and training required for effective use.
- *Public Awareness and Engagement*: Outreach initiatives will foster greater understanding of nonpoint source pollution among community members and promote collaborative action to improve water quality.
- *Foundation for Long-Term Monitoring*: The modeling framework developed will be adaptable to other watersheds and scalable to broader geographic contexts, supporting future expansion and sustained monitoring efforts.

Ultimately, this project will result in a validated, replicable methodology for pollutant source identification and transport modeling that enhances environmental stewardship across Texas coast. By bridging the gap between advanced technologies and practical management tools, it promises to significantly advance water quality protection in Galveston Bay and beyond.

Other Plans Implemented:

[Please identify any third-party conservation plans this project implements, such as the Texas Coastal Management Plan, Texas Coastal Resiliency Master Plan, watershed-based plans, etc.]

N/A

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 and EJScreen instructions.

☒ Yes
☐ No

TBD

Latitude/Longitude (Optional):

95º 6' W, 29º 54' N
94º 6' W, 30º 7' N
95º 3' W, 29º 46' N
95º 3' W, 29º 34' N

Location:

The project area encompasses the lower portion of the Galveston Bay watershed, Galveston Bay itself, and its surrounding estuaries. This region includes several sub-watersheds that directly or indirectly drain into the Bay, such as the lower Trinity River, the San Jacinto River, and numerous ungauged creeks and tributaries, as illustrated in Figure 1.

Partners[1] and Their Roles:

The UTA team has previously partnered with local communities and organizations in the region—such as Brazoria County and the Friends of the San Bernard—through projects funded by the Texas General Land Office (GLO). In recent proposals, UTA received letters of support and in-kind contributions from Matagorda County, the Matagorda Bay Foundation, and the Houston-Galveston Area Council (H-GAC) for GLO-funded initiatives. For the current proposal, we will continue collaborating with local communities and agencies, including H-GAC, to access water quality data, collect field observations, and plan and conduct targeted workshops.

[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.

Projects Map

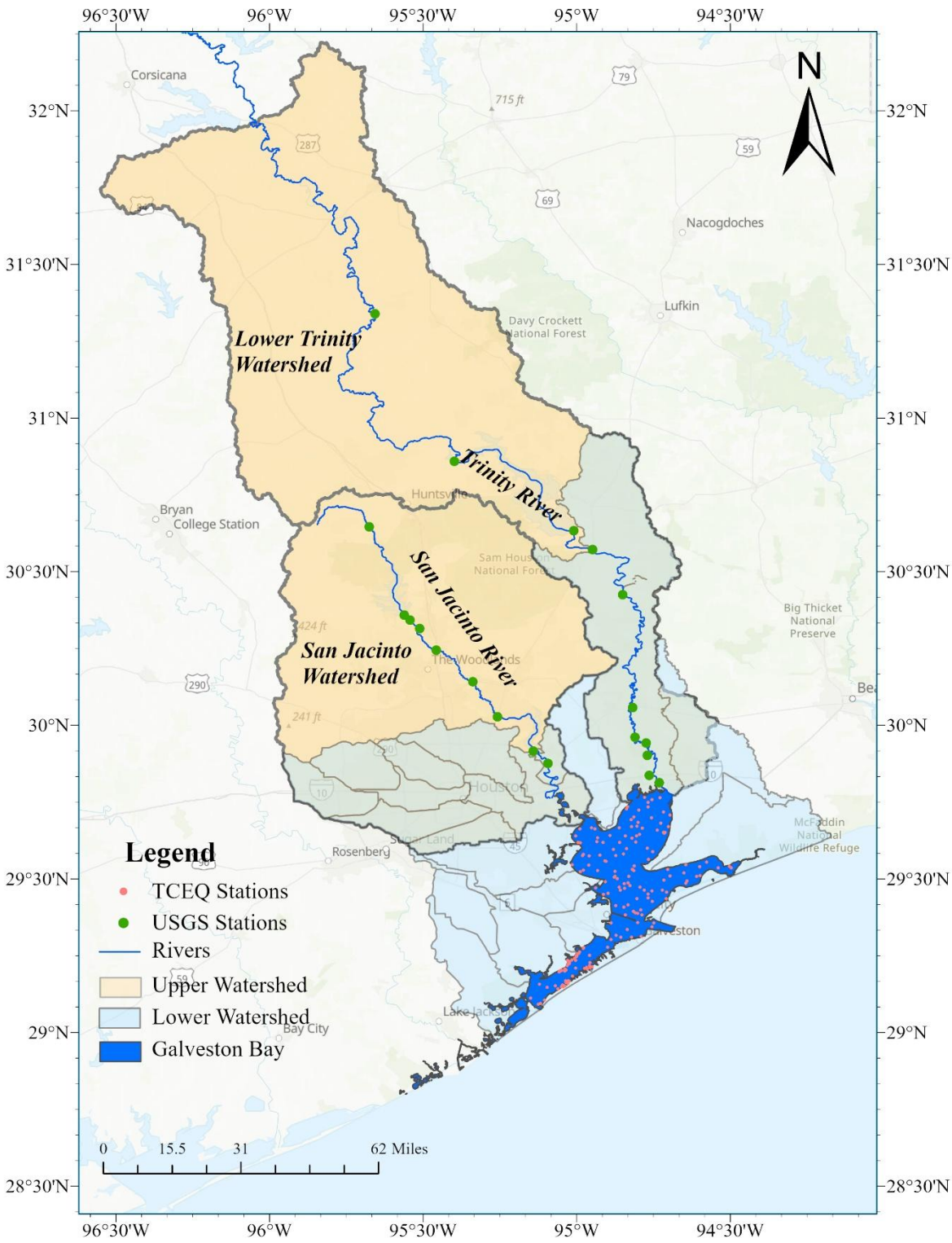

Figure 1. Study area including the Lower Galveston Bay Watershed, the bay itself, and the adjacent coastal waters. The TCEQ and USGS stations that will be utilized in the model development are also shown. highlighted

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	$130,375
Fringe Benefits **(30% faculty and staff, 20% graduate students)**[2]	$32,513
Travel	$12,500
Supplies	$12,000
Equipment	$0
Contractual	$0
Construction	$0
Other	$36,152
Total Direct Cost	$223,540

b. Indirect Costs[3]

Distribution Base Amount *(identify Base type below)*	$187,388
Indirect Cost Rate for Reimbursement (56% MTDC)	104,937
Total Indirect Costs	104,937

c. Maximum Authorized Reimbursement

Maximum Authorized Reimbursement (Direct and Indirect Costs)	$328,478

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

☐ direct salary/wages and fringe benefits

☒ modified total direct costs

☐ Other direct costs 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.

☐ **De Minimis Rate**— if Performing Party does not have a current negotiated indirect rate, Performing Party may use a standard rate of fifteen percent of Modified Total Direct Costs (MTDC)[4] 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. [If this is a Partial Provisional Rate, include the following language: "This is a Partial Provisional Rate. Any adjustment is subject to the requirements of Article 9 of this section; however, no adjustment will be made unless the finally determined actual indirect costs are lower than the Partial Indirect Cost reimbursement made under the Contract."]

☐ **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 section.]

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

[Description of costs associated with "Other" budget category.]

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 notify you 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.

[4] https://www.ecfr.gov/current/title-2/part-200/section-200.1#p-200.1(Modified%20Total%20Direct%20Cost%20(MTDC))

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 25, 2025 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

Appendix A: Indirect Cost Agreement

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1756000121A1
ORGANIZATION:
University of Texas at Arlington
The University of Texas System
Office of Accounting & Business Svc
P.O. Box 19136
Arlington, TX 76019-0136

Date: 06/07/2024
FILING REF.: The preceding agreement was dated 10/05/2023

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)

	EFFECTIVE PERIOD				
TYPE	FROM	TO	RATE(%)	LOCATION	APPLICABLE TO
PRED.	09/01/2020	08/31/2022	54.00	On Campus	Organized Research
PRED.	09/01/2022	08/31/2023	54.50	On Campus	Organized Research
PRED.	09/01/2023	08/31/2025	56.00	On Campus	Organized Research
PRED.	09/01/2020	08/31/2021	51.50	On Campus	Instruction
PRED.	09/01/2021	08/31/2025	52.50	On Campus	Instruction
PRED.	09/01/2020	08/31/2021	34.00	On Campus	Other Sponsored Programs
PRED.	09/01/2021	08/31/2025	35.00	On Campus	Other Sponsored Programs
PRED.	09/01/2020	08/31/2025	26.00	Off Campus	All Programs
PROV.	09/01/2025	Until Amended			Use same rates and conditions as those cited for fiscal year ending Aug 31, 2025

*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 I: FRINGE BENEFIT RATES**

TYPE	FROM	TO	RATE(%)	LOCATION	APPLICABLE TO
FIXED	9/1/2023	8/31/2024	1.70	All	All Employees
FIXED	9/1/2024	8/31/2025	1.98	All	All Employees
PROV.	9/1/2025	Until Amended			Use same rates and conditions as those cited for fiscal year ending August 31, 2025.

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:

Salaries and wages.

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:
Certain fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. FICA, Retirement, Disability Insurance, Worker's Compensation, Life Insurance, Unemployment Insurance, Health Insurance, Vision Care, and Dental Insurance are specifically identified to each employee and are charged individually as direct costs. The fringe benefit charged using the rate(s) listed in the Fringe Benefit Section are listed below:

Leave Payouts

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). Actual costs will be apportioned between on-campus and off-campus components. Each portion will bear the appropriate rate.

*This Rate Agreements reflect a new Fringe Benefit Rate only. *

Your next fringe benefit proposal for the fiscal year ended 08/31/2024 is due in our office by 02/28/2025.

Your next F&A proposal based on actual costs for the fiscal year ending 08/31/2024, is due in our office by 02/25/2025.

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 the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or $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 indirect cost pool 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 indirect 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 indirect 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 indirect 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 indirect costs allocable to these programs.

BY THE INSTITUTION:

University of Texas at Arlington The University of Texas System
(INSTITUTION)

(SIGNATURE)

John Davidson
(NAME)

Vice President & CFO
(TITLE)

10/08/2024
(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: 2024.06.13 19:21:01 -05'00'
(SIGNATURE)

Arif Karim
(NAME)

Director, Cost Allocation Services
(TITLE)

06/07/2024
(DATE)

HHS REPRESENTATIVE: Olulola Oluborode
TELEPHONE: (214) 767-3261

Appendix B: Fringe Calculation

The University of Texas at Arlington estimates fringe benefits rates for the purpose of proposal budgeting. Upon award, direct charges for actual expenses incurred for each employee are made to the allocable funding source with the exception of Leave Payouts which are charged at a negotiated rate. We estimate fringe benefit rates for full-time staff/faculty 30%, Graduate Students 20%, and part-time staff/faculty and undergraduate students 8.3%. Estimates for Graduate Students were recently increased from 10% to 20% due to the addition of health insurance to the fringe benefit package offered to this class of employee. Estimates are based on the following:

Fringe Benefits	**Employer Contribution**
OASI (Social Security)	6.2%
OASI (Medicare)	1.45%
Unemployment Compensation Insurance (UCI) - Calendar Year	0.37%
Worker's Compensation Insurance (WCI)	0.13%
Teacher Retirement wages paid on or after 09/01/2023	8.25%
Teacher Retirement Pension Surcharge (if applicable)	16.5%
Optional Retirement	8.5%
Vacation and Sick Leave Assessment	1.66%

Additionally, health insurance costs vary by employee based the on coverage selected:

Level of Coverage	UT Select State Monthly Cost to Employee	UTA Covered Premium Share
Premium Sharing - Employee Coverage	$0	$780.24
Premium Sharing - Empl/Spouse Coverage	$335.94	$1,189.20
Premium Sharing - Empl/Child Coverage	$351.36	$1,041.90
Premium Sharing - Empl/Family Coverage	$661.56	$1,453.34

This information can be found on our website at https://www.uta.edu/business-affairs/faculty- staff/payroll/fringe-benefits

To reiterate, we use the above stated estimates for budgeting purposes. Actual expenses attributable to each employee paid on a project are direct charged to the award.