Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

Public Participation Education

Project Name:

Watershed Connections Continued – Engaging K- 8th grade students in sustained watersmart nativescaping, habitat restoration, and experiential learning developed in Pasadena, Galveston, and Bolivar

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer:

The Artist Boat, Inc

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Amy Neblett
Project Representative Phone	409-632-0388
Project Representative Email	operations.director@artistboat.org

Amount Requested:

$115,000

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$115,000.00
FY 2026 (09/01/2025-08/31/2026)	$0.00
FY 2027 (09/01/2026-05/31/2027)	$0.00
Total	$0.00

Total Project Cost:

$210,908.74

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

1 year

Project Urgency:

Project Urgency: [Please indicate the need for receiving funding during this cycle; such as loss of other funding secured, loss of opportunity to implement project, potential of breach, etc.]

Watershed Connections Continued – Engaging K- 8th grade students in sustained watersmart nativescaping, habitat restoration, and experiential learning developed in Pasadena, Galveston, and Bolivar will enable continued environmental education services and programming by Artist Boat on 12 campuses in the Galveston Bay Watershed that have received substantial investments in environmental education, stewardship, and conservation since 2019. Through funding from EPA Gulf of Mexico Program, Pasadena ISD, Galveston ISD, and national Apex magnet grants these campuses, students and teachers have received Eco-Art Workshops, Eco-Art Adventures (kayaking and birding), installed watersmart nativescapes on their campuses, restored acres of coastal prairies and dunes, received professional development to teach outdoors and utilize campus habitats or nativescapes, developed and approved habitat management plans, and assisted with development of curriculum specific to the Galveston Bay watershed and their local environments. Previous sources of funding to develop, implement, and deliver these services are not eligible for reapplication (Environmental Protection Agency and National Education Agency) and it is critical to leverage these investments with continued delivery of programming to students that provides experiential learning in the watershed through Eco-Art Workshops and Adventures (kayaking, walking, or birding), stewardship based learning through sustaining nativescapes on their campuses and restoring endangered coastal prairie habitat. This request will support 12 campuses, 76 distinct classes, 1,900 students (K-8th grades), sustain 12 nativescapes, and restore 10 acres of coastal prairies at the Coastal Heritage Preserve. Since 2019 $135,000 has been invested in campus nativescapes, over $60,000 has been invested in curriculum and training, annually over $75,000 was invested in field experiences, 76 teachers have been trained in specific curriculum related to native ecosystems and outdoor learning, and 12 principals have received tremendous scaffolding resources from Artist Boat to integrate watershed education into their campus curriculum and field education. For the proposed request Artist Boat and its partners will provide $95,340 in match toward the total project cost of $210,908.74 (requesting $115,000 award from PPED).

Leveraging (in-kind and/or cash): [Please indicate source, amount, and status (secured, potential, etc.)]
Total Budget: $210,908
Request of GBEP PPE: $115,000
Pasadena ISD:
$10,000 cash (secured)
$18,000 Bus Transportation in-kind (secured)
$9,000 Substitute Teachers in-kind (secured)
$1,000 District Curriculum Director in-kind (secured)
Crenshaw School of Environmental Studies and Oppe Elementary School Magnet Campus of Coastal Studies
$4,800 Bus Transportation in-kind (secured)
$4,680 Substitute Teachers in-kind (secured)
$1,000 District Curriculum Specialists in-kind (secured)
$4,000 Nativescaping supplies cash (potential)
The Children's Center Community Youth Development
$5,220 cash (potential to assist with service costs of salaries for Oppe)
Artist Boat
$30,000 value of kayak fleet annually in-kind
Citgo Caring for our Coast $9,640 cash (annual grant for habitat restoration supplies to grow 10,000 prairie plants and for port o let rentals)

Partners and Their Roles:

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

Artist Boat will partner with two campuses in Galveston ISD (Oppe Elementary School and Crenshaw School of Environmental Studies) and ten campuses in Pasadena ISD to implement and deliver the program to 76 classes of K-8th grade students, with CITGO and The Children's Center to support the Habitat Restoration Adventures. Artist Boat will conduct the evaluation internally utilizing tools and methods developed by the external evaluator, Dr. Michelle Peters at University of Houston, via paper instruments, on-site observations by the operations director and program manager, and via survey monkey.

Pasadena ISD is partnering to serve 10 intermediate school campuses to deliver 50 Eco-Art Workshops (2-hours per), 50 Eco-Art Kayak Adventures (4-hrs to Armand Bayou), 50 Habitat Restoration Adventures (4-hrs to Coastal Heritage Preserve), and 50 campus nativescaping workdays by providing coordination with each campus's principals, teachers, and site staff; providing funds and paying for required buses and subs; and providing $10,000 in cash match to support the program. Pasadena ISD is committed to this program and will assist with the mechanisms for program evaluation (pre-post surveys for each component by 75% of students).

Galveston ISD (Oppe Elementary School and Crenshaw School of Environmental Studies) is partnering to deliver 26 Eco-Art Workshops (2-hours per), 26 Eco-Art Walking Adventures (4-hrs to Coastal Heritage Preserve or Audubon Sites in Bolivar), 26 Habitat Restoration Adventures (4-hrs to Coastal Heritage Preserve), and 34 campus nativescaping workdays by providing coordination with each campus's principals, teachers, and site staff; providing funds and paying for required buses and subs; and providing $4,000 in cash match to support the program. Galveston ISD is committed to this program and will assist with the mechanisms for program evaluation (pre-post surveys for each component by 75% of students).

The Children's Center is providing support for the Habitat Restoration Adventures by providing $5,220 in salary support at Oppe.

CITGO Corporation is providing support for the Habitat Restoration Adventures by providing $8,500 in supplies and materials for the prairie plant greenhouse and nursery to grow 10,000 prairie plants and $1,114 for Port O Let Rentals at the plant nursery and at the kayak pavilion at the Coastal Heritage Preserve.

Artist Boat is providing $30,000 in-kind match of Kayak Fleet, Kayak Pavillion Fleet, and Trailers (landscaping and kayak).

SECTION TWO: GALVESTON BAY PLAN, 2ND EDITION IMPLEMENTATION

Galveston Bay Plan, 2nd Edition References
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/

[Please state how the project implements actions of the Engage Communities Action Plans selected. Please cite other specific action items, if applicable.]

Watershed Connections Continued – Engaging K- 8th grade students in sustained watersmart nativescaping, habitat restoration, and experiential learning developed in Pasadena, Galveston, and Bolivar will address the priorities of the Galveston Bay Plan, 2nd edition to:
a) "develop new and support existing stewardship programs and volunteer opportunities for stakeholder" by providing experiences for 76 classes of students at 12 campuses to learn about the watershed (from headwaters to the Gulf of Mexico), explore the watershed (from their campus to Armand Bayou, West Bay, Bolivar Peninsula, East Bay, and High Island migratory bird destinations), steward and restore watersmart nativescapes on their campuses (Galveston Island, Pasadena, and Bolivar Peninsula), and steward and restore endangered coastal prairies at the Coastal Heritage Preserve. The program will be evaluated to determine the percent increase in knowledge content, percent changes in attitudinal and behavioral shifts, and to demonstrate the EPA Environmental continuum from taking learners from awareness to stewardship (knowledge, awareness, behavior, involvement, attitude).
b) "develop new and support existing K-12 Galveston Bay estuary related curricular materials for regional use" as these campuses have engaged in development of curriculum to train teachers to nativescape and development of additional site-specific curriculum to utilize outdoor campus natural resources (habitats and/or nativescapes) for teaching K-8th grade. This program will build on this training and keep teachers engaged in the use of the nativescapes, habitats, and curriculum and plans built. These items are on Artist Boat's website for use by any teacher. This program will provide continued and hands-on mentoring and scaffolding of teachers on all campuses to determine with them the actions taken on their nativescape on campus, where their use of lessons will occur during the school year and assess other needs of the campus. This allows for support and frequently new ideas of needs for the teachers to really be engaged in environmental education and the Galveston Bay watershed. Most importantly, this program provides and sustains 20 years of K-12 bay-related STEAM (science, technology, engineering, art, and math) education that brings students through knowledge acquisition to purposeful action and stewardship that improves the environmental quality of Galveston Bay. By following the EPA's Environmental Literacy Spectrum to design the program this aligns with the crucial elements to successfully engage communities to preserve Galveston Bay.
c) This program addresses "building communities and community leaders to foster sustainable behavior change" as superintendents, principals, and teachers are the people who build community and are community leaders. They oversee actions across a lot of land and buildings that can change and impact the watershed through retention and filtering abilities of water running of the campus, modeling resilience and sustainability on campus through implementation of sustainable activities (watersmart nativescaping, plastic bottle use/disuse, and more). By engaging these districts and campuses annually over the past 4 years in much bigger ways they are determined to bring environmental literacy to their campuses to engage learners in STEAM and to have multiple resources for teachers to utilize (Galveston Bay and Ecosystem curriculum, nativescape habitat management plans, Artist Boat Workshops and Adventures and Habitat Restoration). With these resources the schools' magnet designations have been achieved, outdoor classrooms have been built. Superintendents allocated time in the school day for these programs and have grown to expect these programs and express how vital they are to their campus communities. Students and families are a part of communities. With annual services for environmental literacy communities and people are growing to be better stewards of Galveston Bay. Students and campuses have initiated water refill stations, distribution of seed balls to entire campuses of students, hosting community workdays to create more nativescapes. With this support more can be done and sustained. Artist Boat's continued presence on the campuses will mean that the next generation of teachers and students will also commit to sustainable behavior changes. This program will serve urban and rural communities, small and big campuses, and weave together communities from the upper Galveston Bay, West Bay, and East Bay.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

[[Please state the action and output addressed and how the project contributes to implementing the output.]
Eco-Art Workshop
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
This classroom hands on Eco-Art Workshop explores coastal prairies and the Galveston Bay Watershed through science and art. Students will be introduced to large scale maps of the Galveston Bay Watershed and encouraged to label parts they know and assisted in labeling parts they do not. The location of their school will be accentuated to help students understand their part in the watershed. Students will participate in freshwater, saltwater, brackish water experiments to describe the differences between rivers, oceans and everything in between. Students will use a model to locate and identify areas where people live, work and play and how that impacts the Bay. They will participate in hands on demonstrations of Non-Point Source (NPS) and Point Source (PS) pollution, marine debris and water movement, and learn the ecosystem service where by marshes and prairies mitigate impacts of human pollution and natural disasters. Students will use a marsh model and a prairie grass model to understand how storm surge and excess rain can be absorbed and held by the roots and soils. They will increase their Art Literacy by learning techniques for watercolor portraits of a native species. Students will leave with the knowledge and awareness that is needed for a behavioral shift. Additionally, they leave with tools to translate knowledge about the Bay to their families.

Eco-Art Kayak Adventure
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
This place-based adventure takes Pasadena ISD students out of the classroom and immerses them in wild spaces of Armand Bayou (their watershed bayou) as they learn the basics of paddling on a tandem kayak with a partner and develop comfort and self-confidence as they practice their paddling and communication skills. They will use their scientific knowledge and vocabulary as they observe wildlife interactions, ecosystem services, subsidence, sea level rise, human uses and human impacts in areas of the Galveston Bay watershed. They will use knowledge from the classroom to identify PS and NPS pollution. Students will collect water samples and data measurements according to GLOBE standards including water temperature, dissolved oxygen, salinity, nitrate, pH, and turbidity using scientific tools to better understand storm water runoff and pollution. Students will identify areas that have been returned to their natural state and areas in progress of restoration. These immersions will lead to discussions of the Galveston Bay watershed and the uniqueness of the area. Students will leave with a deep connection to the area, an attitudinal shift and a feeling of stewardship of the local land and water from a young age. Students learn about Blue Carbon and the four function of wetlands. Students create a plein air landscape painting of the place providing the next tool to share with family and friends to translate knowledge and experiences about the place and the Bay.

Eco-Art Walking Adventure
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
This place-based adventure takes Oppe Elementary students out of the classroom and immerses them in the almost 900 acres of Coastal Heritage Preserve land on the West end of Galveston Island. They will identify the predator prey relationships happening right here on the preserve, catch and identify marine organisms while learning three different types of netting skills, and make predictions, interpret data and draw conclusions based on endoskeletons and exoskeletons of organisms. These immersions will lead to discussions of the Galveston Bay watershed, the importance for erosion control and flood mitigation for the animals and plants here and the uniqueness of the area encouraging involvement in and stewardship of the local land and water from a young age. Students will leave with a deep connection to the area, an attitudinal shift and a feeling of stewardship of the local land and water from a young age. Students learn about Blue Carbon and the four function of wetlands. Students create a plein air landscape painting of the place providing the next tool to share with family and friends to translate knowledge and experiences about the place and the Bay.

Birding adventure SPO 2, PEA3
SPO1 Stewardship programs and volunteer opportunities
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
This place-based adventure takes Crenshaw students out of the classroom and brings them to the tremendous natural ecosystems for migratory birds at Horseshoe Marsh, Bolivar Flats, and High Island. They will learn why their area is unique for the bird migration, and what habitat is needed for local and migrating birds. They will learn to categorize their birds based on their shape, size, behaviors, habitat and

field marks. They will make predictions, interpret data and draw conclusions based on those categories. They will understand what birds are seen where and why they are in these ecosystems on Galveston Bay. Additionally, they will learn where on their campuses 22 acres these birds may be found and when. These immersions will lead to discussions of the differences and similarities in different areas of the Galveston Bay watershed and the uniqueness of their peninsula, encouraging involvement in and stewardship of their home campus nativescape and local birding areas. Students will create a work of art in their classrooms related to this experience through the Bolivar Habitat Curriculum with their teachers.

Nativescapeing
SPO1 Stewardship programs and volunteer opportunities
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
Campus nativescaping lessons take all students out of the classroom and into their own nativescaped watersmart habitats on each of our 12 campuses. They will be reintroduced to their campus nativescape watersmart habitat area. They will learn which plants were planted there and what purpose they serve. In addition, they will learn which plants are invasive, why they are unwanted in this area and how to remove them. They will learn to identify any animals benefiting from the nativescape and what their contribution is to the area. Students will learn how their school's nativescape functions to increase water conservation and reduce storm water run-off to the Bay. This will increase awareness of the causes and consequences of poor water quality in the Galveston Bay. The students will participate in renewal workdays within their existing gardens to encourage ownership of the area as they weed, repair, replant and refurbish. These outdoor experiences will lead to discussions of how the school fits into the Galveston Bay watershed and encourage stewardship of the school area, the neighborhoods and local waterways. Each local action improves the water quality and quantity of Galveston Bay. Students will understand how local and small actions add up to improve or degrade watersheds and estuaries. Teachers will be engaged to plan improvements, renovations, and additions to their campus nativescapes with a minimum of $2,000 each for these activities on each campus.

Habitat Restoration
SPO1 Stewardship programs and volunteer opportunities
SPO2 Workshops and Events
PEA 3 K-12 Education Efforts
Habitat Restoration adventures will bring all 76 classes to the Coastal Heritage Preserve to participate in the planting of 10 acres of endangered coastal prairie habitat. In the spring students will plant 10,000 native coastal plants restoring 10 acres of coastal prairie habitat while learning about the coastal prairie ecosystem and how it holds freshwater and saltwater marshes together and serves as a middle ground for the plants and animals that live there. Each student will leave with a deep connection to this area, knowledge that they helped to bring it back to its original purpose and the internalized self-worth that connection brings. These outdoor experiences will lead to stewardship of Galveston Bay ecosystems, improvement of biodiversity and translate into the need to protect areas closer to their homes. Students will learn that the Houston Galveston Region was predominately coastal prairies, fresh and saltwater wetlands, and bayous. Students create a pastel landscape painting of the place providing the next tool to share with family and friends to translate knowledge and experiences about the place and the Bay.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☒ WSQ (Ensure Safe Human and Aquatic Life Use)

☒ NRU (Protect and Sustain Living Resources)

☒ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

[Please explain in detail how project addresses other Galveston Bay Plan Priority Area Actions (be specific; NPS-1, SPO-3, etc.) or subcommittee priorities.]

Eco-Art Workshop

NPS2 Support nonpoint source education and outreach campaigns.
NPS 4 Host nonpoint source workshops
PS1 support stormwater education programs
FWI3 water conservation and education

- **NPS2**- Students will use a model to locate and identify areas where people live, work and play. They will participate in hands on demonstrations of NPS and PS pollution, marine debris movement and how marshes mitigate those problems.
- **NPS4** – This is a workshop focused and designed around understanding NPS and PS.
- **PS1**- Students will be introduced to large scale maps of the Galveston Bay Watershed and encouraged to label parts they know and assisted in labeling parts they do not. The location of their school will be accentuated to help students understand their part in the watershed and how storm water runoff impacts the watershed. Students will use a marsh model and a prairie grass model to understand how storm surge and excess rain can be help by the roots and soils.
- **FWI3-**Students will participate in freshwater, saltwater, brackish water experiments to describe the differences between rivers, oceans and everything in between.

Eco-Art Kayak Adventure

NPS2 Support nonpoint source education and outreach campaigns.
HC2 habitat restoration
FWI3 water conservation and education

- **NPS2**- While paddling students will observe wildlife, ecosystem services, subsidence, sea level rise, human uses and human impacts in areas of the Galveston Bay watershed. They will use knowledge from the classroom to identify PS and NPS pollution.
- **FWI3**- Students will collect water samples and data measurements according to GLOBE standards including water temperature, dissolved oxygen, salinity, nitrate, pH, and turbidity using scientific tools. Students will understand how these measurements indicate water quality and parameters for plants and animal health. Additionally, they learn how human actions change water chemistry and temperature.
- **HC2**- Students will learn to identify areas that have been returned to their natural state and areas in progress of restoration and understand the methods and needs for restoration of wetland ecosystems on Armand Bayou, West Bay, and at High Island.

Nativescapeing

NPS2 Support nonpoint source education and outreach campaigns.
PS1 support stormwater education programs
HC2 habitat restoration
SC1 native species management
SC2 invasive species management
FWI3 water conservation and education

- **HC2, SC1, SC2**- Students will be reintroduced to their campus native garden area. They will learn which plants were planted there and what purpose they serve. In addition, they will learn which plants are invasive, why they are unwanted in this area and how to remove them. They will learn to identify any animals benefiting from the nativescape and any that might need to be removed.
- **NPS2, PS1, FWI3**- Students will learn how their school's native scape functions to increase water conservation and reduce storm water run-off to the Bay. This will increase awareness of the causes and consequences of poor water quality in the Galveston Bay and how they are linked to non-point source pollution.

Walking Adventure
NPS2 Support nonpoint source education and outreach campaigns.
PS1 support stormwater education programs
HC2 habitat restoration
SC1 native species management
SC2 Invasive Species Control
FWI3 water conservation and education

- **FWI3**- Students will collect water samples and data measurements according to GLOBE standards including water temperature, dissolved oxygen, salinity, nitrate, pH, and turbidity using scientific tools.
- **HC2**- Students will learn to identify areas that have been returned to their natural state and areas in progress of restoration based on the animals and plants in the area.
- **PS1**- Students will learn the functions of a prairie such as erosional control, flood mitigation, water quality, habitat, and carbon storage. They will experience the difference between a freshwater marsh and a saltwater marsh and how the two habitats overlap in our endangered coastal prairies.
- **NPS 2, PS1, FWI3** – Students will participate in an interpretive tour of the Coastal Heritage Preserve during which the classroom knowledge will be translated into real world situations for NPS pollution and how marshes absorb and retain storm water runoff.
- **SC1, SC2-** Students will look for predator prey relationships and habitat resources among the organisms in the Coastal Heritage Preserve. We will discuss the native wild animals and the effects of non-native and escapee animals on the preserve. Students will identify native, non-native and invasive plants and discuss the need to encourage the growth of natives, discourage the growth of non-natives and take measures against the invasives.

Habitat Restoration
NPS2 Support nonpoint source education and outreach campaigns
PS1 support stormwater education programs
HC2 habitat restoration
SC1 native species management
SC2- invasive species management
FWI3 water conservation and education

- **HC2, SC1**- students will restore ten acres of coastal prairies by planting 10,000 native coastal prairie seedlings throughout the year, work as a horticulturist, learn how to treat the seedlings, and how to care for plants to ensure successful planting
- **NPS 2, PS1, SC2, FWI3** – Students will participate in an interpretive tour of the Coastal Heritage Preserve during which the classroom knowledge will be translated into real world situations for NPS pollution and how marshes absorb and retain storm water runoff. They will identify native, non-native and invasive plants and discuss the need to encourage the growth of natives, discourage the growth of non-natives and take measures against the invasives. They will experience the difference between a freshwater marsh and a saltwater marsh and how the two habitats overlap in our endangered coastal prairies.

Birding adventure

NPS2 Support nonpoint source education and outreach campaigns
HC2 habitat restoration

- **NPS2**- Students will discuss the effects of NPS pollution on the bird populations as we are looking at their habitats and identifying NPS situations. We will discuss DDT and the Brown Pelican to point of the effects of Point Source Pollution and how stewardship can bring a species back from the brink of endangerment.
- **HC2**- Students will experience different ecosystems and what birds are seen where and why they are there. Additionally, they will learn where on their campus' 22 acres these birds may be found and when.

Other Plans Implemented:

[Texas Coastal Management Plan, Texas Coastal Resiliency Master Plan, Texas Wetland Conservation Plan, GCJV Conservation Plans, etc.]

Texas Natural Resource/Environmental Literacy Plan
NOAA BWET MWEE framework
NOAA Ocean Literacy Principals 1ADEGH, 2CDE, 3EFG, 4A, 5EFHI, 6ACDEFG
TEKS
Next Generation Science Standards

SECTION THREE: SUBCOMMITTEE PRIORITIES
PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☒ Place based and immersive programing (K-12)
☐ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☐ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

[Please explain in detail how project addresses priorities selected. Attachments may be submitted via email in conjunction with this application.]

Over the last 20 years, since its formation in 2003, the Artist Boat has provided environmental education programs and projects serving over 200,000 participants in the Galveston Bay area including high risk youth, a diverse spectrum of economic classes, and spanning generations. Its environmental education programs have been recognized through selection to present at prestigious national conferences (NAAEE and Restoring America's Estuaries) and through multiple grant awards from highly competitive programs (NOAA BWET and EPA). The Eco Art Workshop and Kayaking adventure has been used in numerous districts across the Galveston Houston area. These programs are well developed and well loved by teachers.

The Watershed Connections Continued project would allow two of those previous districts and 12 of those previous schools to continue participating in the established classroom Eco-Art Workshop and in the place based immersive kayak (Armand Bayou and Coastal Heritage Preserve), walking (Coastal Heritage Preserve), birding (Coastal Heritage Preserve and Bolivar Peninsula Audubon sites), nativescaping (at each of the 12 campuses) and habitat restoration (at Coastal Heritage Preserve) adventures that allow the science learned in the classroom to be used in a real world situation and create the deep connections to nature that are needed for our next generation of environmental stewards.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?
tools: June 26, July 28 – 320/state

Off campus adventures and in class presentations cost school districts money and often the schools with high economically disadvantaged students are unable to provide those opportunities that all students should have access to. The Watershed Connections Continued project would allow Pasadena and Galveston schools the continued access to Eco Art Workshops, place-based adventures, and habitat restoration and nativescaping that their school budgets cannot cover. All schools within Pasadena ISD are Title 1 designated. The student population is predominantly Hispanic (82.8%) and economically disadvantaged (79.34%). All schools within Galveston ISD are Title 1designated. The student population at Oppe is 54% Hispanic and 54.4% economically disadvantaged while Crenshaw students are 72.1% economically disadvantaged and 40.4% Hispanic.

EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes
Does the Project work with new, smaller communities/partnerships?
☒ Yes
☐ No

All 12 schools in this project are Title 1 designated schools.

According to the CEJST tool, students at Crenshaw are considered disadvantaged because of the effects of climate change, flood risk, energy costs, health risks including diabetes and heart disease in addition to the low income of many of the residents. 55.9% of students are considered at risk and 72.1% are economically disadvantaged.

Oppe Elementary is open enrollment from all of the Galveston ISD zone and has students in areas that are considered disadvantaged because of natural disasters, flood risk, diabetes, low life expectancy, lack of green space and indoor plumbing, in addition to the low income of many of the residents. 53.7 % of students are considered at risk and 54.4% are economically disadvantaged.

Pasadena ISD students are in areas with unhealthy air, hazardous waste facilities and superfund sites, flood risks, housing issues, noise pollution, lack of adult education, low life expectancy, in addition to the low income of many of the residents. 69.4% of students are considered at risk and 79.4% are economically disadvantaged.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

[In 1-2 sentences, please describe the objective of your proposal.]
Watershed Connections Continued – Engaging K- 8th grade students in sustained watersmart nativescaping, habitat restoration, and experiential learning developed in Pasadena, Galveston, and Bolivar will enable continued environmental education services and programming by Artist Boat on 12 campuses in the Galveston Bay Watershed that have received substantial investments in environmental education, stewardship, and conservation since 2019. Students (1,900), teachers (25) and campuses (12) will be engaged in experiential learning in the watershed through Eco-Art Workshops and Adventures (kayaking, walking, or birding), stewardship based learning through sustaining 25+ acres of nativescapes on their campuses and restoring 10 acres of endangered coastal prairie habitat.

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

[In 1,000 words or less, please provide a summary of the scope of your proposal.]

Watershed Connections Continued will serve 76 classes (2 districts, 12 schools, 1,900 students) in Pasadena and Galveston ISDs.

All classes will participate in the two-hour ***Eco-Art workshop*** designed to engage students in hands-on activities and models in science and art to understand the values and functions of bays and wetlands, pollution, the value and functions of blue carbon ecosystems, and how to paint a native wetland animal. The workshop teaches students where they live in relationship to Galveston Bay, how non-point source pollution travels through watersheds and affects water quality, chemistry and salinity regimes of estuaries, and the ecosystem services of wetlands. The workshop also teaches basic watercolor techniques by painting a portrait of a native species found in the wetlands of Galveston Bay.

The ***Eco-Art Kayak Adventure*** (4 hrs) will be attended by Pasadena ISD on Armand Bayou Paddling Trail. This place based adventure will introduce students to the basics of paddling with a partner; allow them to observe wildlife and look for clues to understand ecosystem services, human uses and impacts; involve collection of water samples and data measurements; allow them a first-hand look at subsidence and sea level rise; identification of birds and plants; and identification of the characteristics of a blue carbon ecosystem. The Eco-Art Kayak Adventure is key for students to build upon the concepts and vocabulary required to discuss global temperature rise and blue carbon as well as to further develop their artistic skills. A landscape watercolor painting using traditional tools of artists and artistic techniques to create scale, distance, and point of view will be completed. Through these adventures, students will create a deeper connection to the wild spaces near them, develop comfort and ease of paddling skills, and gain a greater understanding of the water quality results.

Galveston ISD Oppe students will participate in a 4-hour **Eco-Art Walking Adventure** at CHP. Students will participate in hands-on science lessons to teach the form and function of prairie plant anatomy; how roots and soil combine to create a healthy environment to provide nutrients and water to plants; how photosynthesis creates food for plants; and how the coastal prairie hosts biodiversity, creates resiliency during floods, and holds carbon in place, mitigating the rise in global temperature. They will use scientific investigation and reasoning to explore and understand the coastal prairie by collecting water quality data and identifying plant and animal samples. Students will discuss the functions of a prairie such as erosional control, flood mitigation, water quality, habitat, and carbon storage. Art literacy will be increased as students develop the basic components of traditional artists approaches and methods using pastel techniques. This place-based adventure takes students out of the classroom and immerses them in wild spaces near their home, encouraging stewardship of the local land and water from a young age.

Galveston ISD's Crenshaw students have the honor of being at the epicenter of the bird migration each spring and fall and will participate in **Birding Adventures.** These students learn ways to categorize and group birds based on their shape, size, behaviors, habitat, and field marks. They will master binocular and field guide use as they use their eyes and ears to scan the Bolivar Flats and Marshes and High Island birding areas. Students will explore ecosystems specific to Bolivar and East Bay understanding where and why certain birds are found in salt marshes, freshwater marshes, coastal prairies, shorelines, and motts. They will learn the functions of these various ecosystems. This will lead to discussions of the Galveston Bay watershed and why their stewardship of this unique area is important.

Each school in our grant request already has a nativescape area on campus varying in size and mission and will participate in **Nativescaping** events to restore or enhance their habitats. These areas require annual rejuvenation, improvements, and work. Additionally, the teachers need support to plan and feel comfortable in the outdoors. Our expert educators can answer questions, model safety and fun, and help explore the habitat fluidly with students. Artist Boat will assist with the design, goals, and delivery of workdays. This assures training of new teachers, restores and expands nativescape habitats, and helps teachers and students learn. Artist Boat will work with each school to plan renewal workdays and nativescape lessons specific to the campus. Crenshaw will have 16, Oppe 18 and Pasadena ISD 50 days of class participation in restoration and enhancement.

On site nativescape habitat lessons will include the flora and fauna found within and how their school's nativescape functions to increase water conservation and reduce storm water run-off to the Bay. This will build awareness of the causes and consequences of poor water quality in the Bay, develop critical thinking skills necessary to mitigate pollution and marine debris, and create action to increase water conservation

and reduce storm run-off from campuses Students think critically about where their school fits into the greater Galveston Bay watershed, estuaries near them, and the impact that humans have on estuarine and ocean ecosystems. Renewal workdays provide hands on action projects for the students to steward Galveston Bay. Students will become reacquainted with their school's water smart native habitat as they weed, repair, replant and refurbish their area.

All 76 classes will participate in **Habitat Restoration Adventures** at CHP. Students will work as horticulturists, prepare seedlings, care for plants to ensure successful planting and plant 10,000 appropriate coastal prairie plants, collectively restoring 10 acres of coastal prairie habitat. After the planting, students will engage in an interpretive tour of the prairie learning about ecosystem services, identification of organisms, and how CHP hosts saltwater and freshwater marshes held together with coastal prairie. Finally, students will create a plein-air pastel drawing of the landscape. Stewardship begins by developing student's sense of place. Through the Habitat Restoration Adventure, students will interact with Galveston's ecosystems, learn how stewardship of living things can result in environmental benefits to larger systems, and learn how to implement personal choices in behavior that will lead to preservation or restoration of local or regional ecosystems.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

[Description of area(s) of Galveston Bay watershed addressed by proposal]

Crenshaw Environmental Magnet School in Galveston ISD on Bolivar Peninsula (8 grades, 200 students), all 8 grades and 200, which has 22 acres of master planned and managed nativescape habitat on the campus, an outdoor classroom, a companion Bolivar Habitat Preserve Field and Curriculum Guide, and Wildlife Identification Charts, developed with Artist Boat.

Galveston ISD's Oppe Coastal Studies Magnet School Elementary (18 classes, 450 students) where they have completed a .05 acre master planned and managed watersmart nativescape habitat in summer 2023, and provided professional development for their teachers with Artist Boat.

At Pasadena ISD (10 intermediate schools, 50 classes,1250 students). Each of these schools has a nativescape in place (installed from 2019-2023) and teachers previously participated in professional development with Artist Boat. Pasadena ISD school's nativescapes are part of the Armand Bayou watershed, flowing into Clear Lake, and Vince Bayou, flowing into the Houston Ship Channel.

The Armand Bayou Paddling Trail follows Armand Bayou from near its confluence with Clear Lake, upstream through the Armand Bayou Nature Center to Horsepen Bayou. Much of the area is part of the Armand Bayou Coastal Preserve that is managed by Texas Parks and Wildlife Department. The preserve travels through two increasingly rare ecosystems – a riparian coastal flatwoods forest and a coastal tall grass prairie.

The Artist Boat Coastal Heritage Preserve currently encompasses a 898-acre conservation area on West Galveston Island. Artist Boat's goal is to preserve and restore 1,400 contiguous acres from bay-to-beach. The Preserve is adjacent to West Bay, part of the Galveston Bay system – an estuary of national significance. The conservation area is one of the largest unfragmented, single-owner, undeveloped properties of its kind on Galveston Island. The Preserve is located approximately midway along the 32-mile barrier island.

At the Crenshaw 22-acre nativescape habitat on Bolivar Peninsula between East Bay and the Gulf of Mexico, students are invited to interact with the coastal environment in a variety of ways, including walking trips to collect specimens, nature investigations along the one-of-a-kind wetlands boardwalk and outdoor classroom, maintenance of a the coastal prairie native habitat, and highly engaging field experiences designed to expose students to conservation and coastal careers.

Projects Map, Supplemental Photos/Graphics (Optional) **Please see attachement for our photos and maps**

SECTION FIVE: BUDGET DETAILS **Please see Budget Table for full Budget with Matching Sources)** (

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$65,036.00
b.	Fringe Benefits	$4,051.20
c.	Travel	$9,129.80
d.	Supplies	$30,463.00
e.	Equipment	$0
f.	Contractual	$0
g.	Construction	$0
h.	Other*	$6,320.00
i.	Total Direct Costs (Sum a - h)	$115,000
j.	Indirect Costs	$0.00
k.	Total (Sum of i & j)	$115,00.00

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

Indirect Cost Agreement N/A

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is N/A% of (check one):

☐ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☐ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]
N/A

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by
August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

PPE

Project Name:

Engaging Diverse Communities in Conservation

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer:

Bayou Preservation Association (Bayou Preservation), as leader of a cooperative partnership with Armand Bayou Nature Center (ABNC), Greens Bayou Association (GBA), and Brays Bayou Coalition (BBC)

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Brittani Flowers, President
Project Representative Phone	(713)529-6443
Project Representative Email	bflowers@bayoupreservation.org

Amount Requested:

$64,140

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$49,000
FY 2026 (09/01/2025-08/31/2026)	$15,140
FY 2027 (09/01/2026-05/31/2027)	$0.00
Total	$0.00

Total Project Cost:

Contributions being sought to leverage/expand the scope & timing of the proposed project.

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

18 months

Project Urgency:

The urgent need for funding arises from the necessity to go beyond tokenistic recruitment of people of color to fulfill diversity quotas. Instead, it is crucial to foster a positive environment that shares education, resources, information, and financial access. BIPOC community stakeholders often face limitations in addressing the issues they strive to resolve. This project requires immediate funding to bridge the gap between recruiting BIPOC members and equitably engaging diverse communities in conservation efforts, ensuring meaningful and sustainable impact.

Leveraging (in-kind and/or cash):

Port Houston, $3,000, funded
Union Pacific, $2,000, funded
The William Stamp Farish Fund, $15,000 anticipated

Partners and Their Roles:

Armand Bayou Nature Center (ABNC), Brays Bayou Association (BBA), Greens Bayou Coalition (GBC), Coastal Prairie Conservancy (CPC) roles will be to;
- Support steward-led educational experiences
- Leverage financial support for stewards to organize conservation-focused educational events and workshops in their communities.
- Provide ongoing mentorship and guidance to the stewards to ensure the success and sustainability of their initiatives.

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

Galveston Bay Plan, 2nd Edition References
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/

SPO-1 Output: New BIPOC community stakeholders will be engaged in stewardship and outreach campaign activities with links to Galveston Bay.

SPO-2 Output: Training opportunities will be supported to create more informed and effective public education for Galveston Bay-related topics.

SPO-3 Output: Through the regional cooperative partnership, new entities will become partners in GBEP programming and more BIPOC communities will be involved.

PEA-2 Output: Engagement, education and awareness of underserved geographies and communities will be increased.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

SPO-1 Action: Each participating group will support and/or expand existing stewardship programs and engagement opportunities to increase collaboration between underserved BIPOC communities and each participating group.

SPO-2 Action: Scholarships will be provided for each participating group to send one BIPOC community member to a training workshop for them to become Certified Interpretive Guides, Certified Texas Master Naturalist and Texas Stream Team Core Water Quality and Riparian Evaluation certified.

SPO-3 Action: This partnership of ABNC, BBA, CPC, GBC, and Bayou Preservation, is a regional initiative that includes watersheds in each of the four Harris County Precincts, as well as watersheds in Montgomery and Waller Counties, with an added focus on culturally diverse and underserved communities.

PEA-2 Action: Adult participants (16 years & older) will be engaged in stewardship and volunteer activities, with a focus on culturally diverse and underserved communities. Training to become Watershed Stewards will enable greater engagement of the BIPOC public in conservation activities.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☐ WSQ (Ensure Safe Human and Aquatic Life Use)
☐ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

Programs building capacity to target and partner with underrepresented communities that encourage diversity, equity, and addresses language barriers implementing one or more the following Action Plans in the Galveston Bay Plan, 2nd Edition: SPO-1, SPO-3, PEAN-2, PEA-3, NPS-2, PS-1, FWI-3.

Programs that address adult engagement in science literacy focused on the Galveston Bay estuary and watershed. Programs that are meaningful and stipend to attract a more diverse group of people. Programs that may encourage careers in, but not limited to, natural resource management, formal and informal education and outreach, and environmental communication and address one or more of the following Action Plans in the Galveston Bay Plan, 2nd Edition: SPO-1, and PEA-1.

Other Plans Implemented:

~ EPA FY2022-2026 Equity Action Plan – By working with the Galveston Bay Estuary Program on this project, which receives funding from the U.S. EPA, the cooperative partnership will be advancing EPA's objective to establish "community-based work as a routine means of achieving EPA's mission and [helping] to build the capacity of… community partners."

~ 2023-2028 Diversity and Inclusion Strategic Plan– The cooperative partnership could seek TPWD involvement in planning or participating in outreach events for this project, which would help address this plan's Recruitment and Stewardship Pillars.

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☐ Place based and immersive programing (K-12)
☐ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☒ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

~ Continuation or expansion of established education, outreach, or engagement programs. Targeted outreach and recruitment in BIPOC communities associated with each of the collaborating partners will expand the reach and effectiveness of existing education, outreach, engagement, and stewardship programs. Collaboration among the partners will also allow them to learn from each other for greater effectiveness.

~ A scholarship/stipend program for Bayou Steward training and initiative implementation will enable each of the collaborating partners to build their capacity to engage with underrepresented community stakeholders, by covering travel, life expenses, and initiative implementation expenses for a BIPOC representative from each group to be trained, expenses which could preclude someone from participating in science education and literacy.

~ The scholarship-supported Bayou Steward training will increase science and conservation literacy for diverse individuals with a focus on the lower Galveston Bay Watershed. Such training and its subsequent implementation amongst the organizations will also create a pipeline of diverse leaders that will enhance the organizations' ability to increase access to all their constituents while also creating opportunities for non-traditional Bayou Stewards to assume a leadership role in conservation fields.

The cooperative partnership seeks to provide stewardship training, professional mentorship, and educational opportunities to underrepresented community stakeholders of the lower Galveston Bay watershed. A scholarship/stipend program for training will provide a means of offsetting some of the barriers encountered by BIPOC communities, to render the program more equitable in access.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Environmental Justice Research indicates, BIPOC communities often face various barriers when trying to advance in the environmental and conservation industry. Some of these barriers include: Lack of representation and diversity, Access to education and opportunities, Unconscious bias, Networking and connections, Lack of mentorship and support, and Perceived lack of expertise. By addressing four of the six listed barriers, the EDCC projects takes an intentional approach to promote diversity, equity, and inclusion. It includes actions that provide access to accredited certifications, mentorship, networking, inclusive and supportive cohorts.

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

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

☒ Yes
☐ No

Brays Bayou Association, Greens Bayou Coalition, additional TBD

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

Bayou Preservation's Bayou Stewards for Engaging Diverse Communities in Conservation program is an innovative initiative aimed at empowering community stakeholders and fostering meaningful connections between conservation efforts and diverse communities in the Galveston Bay area. Over the course of 18 months, this program will recruit, select, and train 4 dedicated community stakeholders to become watershed stewards, equipped with the knowledge and skills to drive science-based impactful change. One of the key objectives of this program is to promote equity and remove financial barriers for community stakeholders from diverse backgrounds. The host nonprofits, with direct support from BPA, will actively work towards advancing equity by providing mentorship opportunities and support to selected Bayou Stewards. This mentorship will enable the stewards to develop interpretive programming tailored to target audiences, emphasizing the interdependence between the well-being of their communities and the preservation of native habitats. Additionally, cultural relevance will be integrated into the engagement experiences, ensuring that they resonate deeply with the diverse communities they serve.

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

Armand Bayou Nature Center, Brays Bayou Association, Coastal Prairie Conservancy, Greens Bayou Coalition, under the coordination of Bayou Preservation Association, have formed a cooperative partnership to provide more effective stewardship and pipelines for under-resourced adults seeking opportunities to engage in the conservation field across the Houston region to Galveston Bay. The partnership will create equitable opportunities for deeper and broader interorganizational collaboration between nonprofits and community groups led by black, indigenous, and other people of color (BIPOC) communities, as well as educational institutions and agencies that serve historically underrepresented communities. The partnership will provide for the extension of community members' roles from passive participant to active facilitator through a watershed stewards training program and cohort strategy.

This project will engage the expertise of guides and trainers certified through the National Association of Interpretation (NAI), Texas Master Naturalist, and The Meadows Center for Water and the Environment (Meadows Center). Each partner organization will host and provide 6 months of professional development mentorship for one person from a BIPOC community. The trained Watershed Steward will serve as a liaison to their respective host-nonprofit and develop relevant conservation and engagement experiences that advance the mission of their community-based efforts, their host non-profit and the greater Galveston Bay plan. This will result in a network of resource rich and professionally connected watershed stewards of diverse backgrounds that bridge watershed advocacy and education to the concerns and interests of their respective communities.

I. Project Overview
The main objective of this project is to recruit and train four dedicated Watershed Stewards from diverse backgrounds in the Lower Galveston Bay watershed. These stewards will undergo comprehensive training, equipping them with essential science literacy and skills necessary to develop meaningful conservation experiences for their local communities. The project will focus on building lasting relationships, fostering a sense of ownership, and encouraging active participation in conservation activities.

II. Goals and Objectives
a. Goal 1: Build a team of Watershed Stewards (BPA lead)
- Objective 1.1: Collaborate with local community stakeholders and organizations to identify potential stewards from diverse backgrounds.
- Objective 1.2: Recruit four dedicated individuals with a passion for conservation and a strong connection to their respective communities.

b. Goal 2: Provide comprehensive training (BPA lead)
- Objective 2.1: Develop a training schedule covering key component from each accredited certification program.
- Objective 2.2: Organize workshops and training sessions to empower stewards with the knowledge and tools required to effectively communicate environmental issues to diverse audiences.

c. Goal 3: Support steward-led educational experiences (ABNC,BBA, GBC,CPC lead/ BPA support)
- Objective 3.1: Offer financial support to the stewards to organize conservation-focused educational events and workshops in their communities.
- Objective 3.2: Provide 6 months (+) mentorship and guidance to the stewards to ensure the success and sustainability of their initiatives.

III. Project Activities
1. Steward Recruitment: Engage with local organizations, schools, and community centers to identify potential stewards who possess a genuine commitment to conservation and a desire to lead change in their communities.
2. Training Workshops: Develop a comprehensive training program for the selected stewards, covering environmental science, watershed management, community outreach, and effective communication strategies.
3. Educational Events: Assist the stewards in organizing educational events, workshops, and interactive sessions that target specific conservation issues relevant to their communities.
4. Volunteer Events: Assist the stewards in organizing volunteer events with their host organizations to engage communities in on-the-ground efforts to improve watershed health.
5. Outreach and Promotion: Utilize social media, community gatherings, and local media outlets to promote the project's activities and raise awareness about the importance of conservation and community engagement.
6. Monitoring and Evaluation: Establish a robust monitoring and evaluation framework to assess the impact of the project, track progress, and identify areas for improvement.

V. Project Timeline
Phase 1: Project Preparation and Steward Recruitment
- Months 1-3

Phase 2: Training and Capacity Building
- Months 4-10

Phase 3: Steward-led Educational and Volunteer Events
- Months 11-14

Phase 4: Evaluation and Sustainability Planning
- Months 15-18

VI. Budget
The project budget will cover expenses related to:
- Steward stipends and training materials
- Educational event logistics and materials
- Associated training cost (trainer fees, certification fees, travel, facility fees)
- Outreach and promotional activities
- Monitoring and evaluation efforts
- Administrative and project management costs

VII. Conclusion
"Engaging Diverse Communities in Conservation" seeks to foster a sense of environmental stewardship and responsibility within diverse communities in the lower Galveston Bay watershed. By creating a cohort of dedicated Watershed Stewards and empowering them with the necessary knowledge and support, this project will lay the groundwork to increase adult science literacy.

To support the implementation of these experiences, Bayou Preservation will administer a training scholarship and project support to each Bayou Steward via the host nonprofit. This funding will empower the stewards to plan and execute a range of engaging initiatives that align with the mission of their community-based efforts, host nonprofits, and the greater Galveston Bay plan. The host nonprofits will play a crucial role in supporting the cohort through meaningful mentorship.

Throughout the 18-month program, Bayou Preservation will remain committed to the implementation and administration of this program, underscoring the importance of the stewards' work in advancing conservation efforts and community engagement. By empowering these dedicated individuals, Bayou Preservation aims to create a ripple effect, where the stewards inspire and mobilize their communities towards a sustainable future for Galveston Bay.

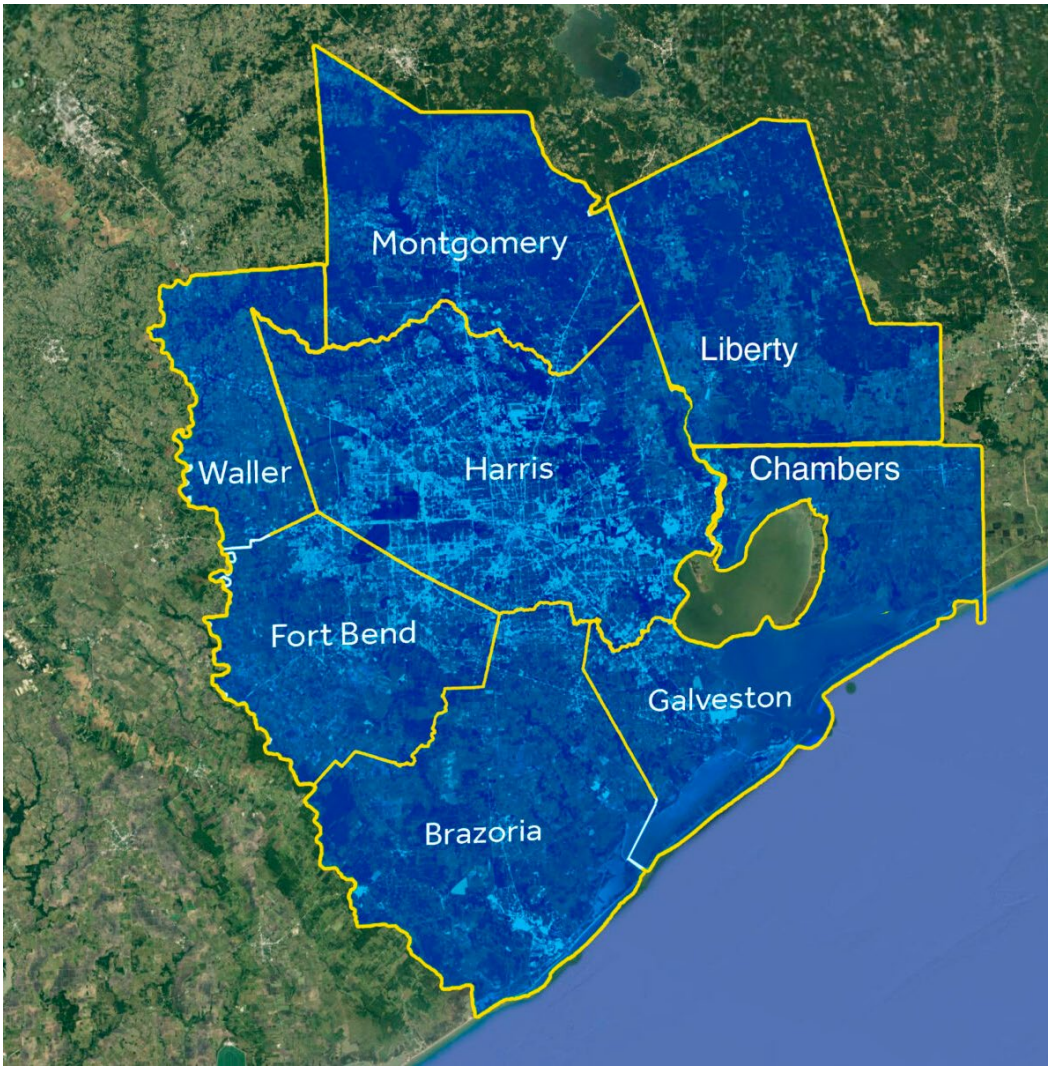
Latitude/Longitude (Optional):

Ranging from upper reaches of Houston region streams, across Harris County and parts of Montgomery and Waller counties, to the waters of Galveston Bay.

Location:

Lower Galveston Bay. See attached draft map of project area.

Projects Map



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

Supplemental Photos/Graphics (Optional):

[Insert Here or Attach as an Appendix]

SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	14,160
b.	Fringe Benefits	980.00
c.	Travel	
d.	Supplies	4,000
e.	Equipment	
f.	Contractual	45,000
g.	Construction	
h.	Other*	
i.	Total Direct Costs (Sum a - h)	
j.	Indirect Costs	
k.	Total (Sum of i & j)	64,140

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

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 0 % of (check one):

☒ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☐ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☒ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

PPE

Project Name:

Wetland Connections

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer:

Galveston Bay Foundation

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Cindy Wilems
Project Representative Phone	281-332-3381 ext. 219
Project Representative Email	cwilems@galvbay.org

Amount Requested:

$173,300

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$86,650
FY 2026 (09/01/2025-08/31/2026)	$86,650
FY 2027 (09/01/2026-05/31/2027)	$0.00
Total	$0.00

Total Project Cost:

$223,300 for 2 years of program implementation

This proposal requests funding for2 years of project planning & implementation and providing stipends for participating teachers each year. The total project cost also includes expected $50,000 in funding from Scott's Miracle Gro ($25,000 each year) that will provide bus transportation reimbursement to schools as well as additional salary costs.

Is this an estimate? ☒

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

2 years: September 1, 2024-August 31, 2026

Project Urgency:

Funding for continuing existing and successful programs is difficult to find outside of small corporate funding. Currently we must charge schools a program fee to participate, however we aim to provide full scholarships to as many schools as possible when funding arises. GBEP funding will allow us to provide full scholarships to all schools who need it, renew aged field supplies, include career-related teacher professional development workshops in the yearly programming, and allow GBF to use other, expected, funding to supply bus transportation reimbursements to schools.

Leveraging (in-kind and/or cash):

Cash:
Scott's Miracle Gro has been funding a portion of Wetland Connections for 7 years via a grant through Restore America's Estuaries ($25,000 per year toward salary costs and school bus transportation costs). We expect this to continue through this grant period (2024-2026).

In-Kind:
Approximately 100 hours of volunteer time is expected each year of programming, for a total of $3,180 each year ($31.80/hour as per Independent Sector).

Partners and Their Roles:

Teachers and School Administrators:
Without participating teachers and school administrators who support and provide assistance throughout the year, Wetland Connections would not be a successful program. Teachers and school administrators are by far, the most important partner any education program can have. For all of their support, teachers will receive a $500 stipend each year of programming to be used to facilitate learning in their classrooms.

Education Volunteers:
Volunteers are integral partners to this program. GBF-trained volunteers assist during the program's field experiences.

Community Partners:
Environmental scientists from the college, federal, state, and corporate arenas, local recreation and tourism business owners, and representatives from community & 4-year colleges will participate in the June teacher workshops. Their primary role is to lead presentations where they discuss various career pathways and describe how a healthy ecosystem is important to their career. Although not fully planned out, identified community volunteer partners that have confirmed their participation are Dr. Jamie Steichen with Texas A&M University Galveston and Dr. Jen Leo with NOAA Marine Fisheries.

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

Galveston Bay Plan, 2nd Edition References
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/

Wetland Connections directly implements actions described in PEA-3 by actively providing place-based environmental education to schools across the Houston region, reaching over 1400 students and teachers each year. In addition, videos created during the WC Career Teacher Workshop will be available for all teachers to use in their classrooms, expanding our reach exponentially. The teacher workshop also implements actions described in SPO-1 by creating volunteer opportunities for industry professionals, college recruits, local businesses, and more to share potential conservation and environmental career pathways with teachers.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

SPO-1: Support and fund new and existing stewardship and volunteer programs
PEA-3: Support and fund existing and new K-12 programs
PEA-3: Support existing and build new relationships with ISD, Professional Educator Groups, Resource Developers, etc.

Wetland Connections contributes to the above-mentioned actions by directly serving over 1400 6-12th grade students via multiple hands-on and place-based education activities and teacher professional development opportunities each year. Relationships will be strengthened with participating schools and ISDs. Through these events, educators and students will gain knowledge of the Galveston Bay estuary, discuss the importance of estuarine environments, and propose solutions to environmental and human impacts on the region. Additionally, industry partners will facilitate the conversation of potential conservation and environmental career pathways during the teacher workshops.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☒ WSQ (Ensure Safe Human and Aquatic Life Use)
☐ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

NPS-2: Develop and support NPS education and outreach campaigns.

Wetland Connections contributes to the above-mentioned action by incorporating nonpoint source education into the fabric of the program. Each workshop, lesson, and event implemented throughout the year includes information/discussion about topics such as nonpoint source pollution, wetland filtration benefits, bioaccumulation within the food web, and human impacts on the ecosystem to ensure students receive a well-rounded understanding on the topic.

Other Plans Implemented:

North American Association for Environmental Education Guidelines of Excellence; Texas Essential Knowledge and Skills

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☒ Place based and immersive programing (K-12)
☒ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☐ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

Place-based and immersive programing (K-12)
Wetland Connections is the epitome of place-based and immersive programming. Students gain a connection to the local ecosystem while getting hands-on education in and out of the classroom. GBF educators interact with students four times each year via classroom workshops and field experiences at GBF's Sweetwater Preserve in Galveston and teachers are provided multiple resources to extend student learning. Participating schools range all over the Houston-Galveston region. Over 1400 students and teachers are reached each year, totaling 2800 students and teachers during this grant period. Quotes from participating teachers include:

- "Thank you so much! This is an invaluable program! Every school in Galveston and in Houston should participate!"
- "It is an amazing way to connect them to their world! They see the science and work with data all year and then experience everything firsthand to really personalize and internalize it for them in a way they would never get learning about the same things virtually or hypothetically."
- "I want to thank you all for the opportunity of being a part of this educational program. Not only did my students learn new concepts that relate to their content, I learned how to make a better connection to teach them. My students need more than a worksheet to complete. This program has given me so many ideas to make my lessons more applicational."

Conservation and environmental workforce training
Career pathways is a topic that participating teachers are highly interested in, and we try to include more each year of Wetland Connections programming. Qualitative and quantitative data collection skills are featured throughout the year, allowing students to gain these critical skills that will assist them in any career they're interested in. Additionally, GBF educators discuss potential career paths during the spring field experience and students are given a link to additional resources. With this funding, we will be able to include Career Teacher Workshops each June (2025 & 2026) that provides a space for teachers to connect with college representatives (community and 4-year colleges) as well as industry leaders from the private sector, government, researchers, recreational/tourism/fishing business owners, and more. During the teacher workshops, presenters will share their current career and the path they took to get them there. Furthermore, connections between healthy wetlands and each career will be discussed. GBF will film throughout the workshops and create two videos (one each year) as resources for participating teachers as well as teachers across the region.

Continuation or expansion of established program
GBF has conducted environmental education programs in various forms since 1987. Although Wetland Connections was created in 2021, the core of the program was taken from a former GBF program called Get Hip to Habitat. Get Hip to Habitat (established in 2006) was updated and renamed to ensure relevancy to current school/teacher needs as well as create a more well-rounded program that connects students to the local wetland ecosystem in a variety of approaches – hence the name "Wetland Connections".

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

Demographics & Scholarships
68.6% of Wetland Connections participants in the 2022-2023 school year were from an underrepresented ethnicity and 56% of participating schools were considered low income, with 8 out of 17 being Title 1. GBF provides schools from underserved communities priority admissions and scholarships in order for them to equitably participate in Wetland Connections. Additionally, if funded from GBEP, other funding from RAE/Miracle Gro will be able to be used for transportation reimbursement for school field trips. As one participating teacher said, "Because of the scholarships we have received from the Galveston Bay Foundation, students have become more involved in their community, have been exposed to new careers, and have developed a sense of pride about the bay. This program has helped some of my lowest-achieving students gain self-confidence in ways I couldn't have ever imagined. With your scholarship, we can continue giving all students a sense of pride and ownership in caring for our bay."

Emotional & Physical Needs
"I learned that mud isn't scary!" For many, participating in Wetland Connections is their first true encounter with nature, and having a positive experience is crucial for the future of the region. Many students lack access to nature in their home life, causing an overall disconnect from the environment around them. Exposing students to nature and providing them with environmental education both inside and outside the classroom is a vital step in getting them to care about environmental issues now and in the future. GBF provides field supplies to ensure student comfort, including wading booties, changing rooms, shade structures, gloves, insect repellent, and more. Furthermore, GBF educators meet participants where they are and create a safe place for everyone to learn, grow, and experience the wonders of Galveston Bay.

Increasing Diversity
Workshop presenters should represent the students that participate in Wetland Connections. Emphasis will be placed on inviting a diverse group of volunteers to participate in the WC Careers Teacher Workshop, including professions that do not need college degrees as well as historically Hispanic Serving Universities, such as San Jacinto College.

Final Impact
In the end, it is our hope that Wetland Connections students will leave us with an understanding of how impactful a healthy wetland ecosystem is and have the skills to enact change within their own community. Additionally, teachers will have a better sense of how to connect students with diverse conservation and environmental careers.

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

A majority of participating schools return each year, however, there is always the opportunity for new schools to apply to the program. Many participating schools are in smaller communities around the region. Additionally, we expect to bridge new partnerships with community partners in implementing the two teacher workshops.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

Wetland Connections is a year-long program that connects 6-12th grade students to the bay through nature journaling and data collection with mini-campus wetlands, a series of STEM classroom workshops highlighting the importance of wetlands and human impacts on them, and a spring field experience at a local wetland on Galveston Bay. This proposal is for two years of funding, including two teacher workshops where teachers learn about various conservation and environmental career pathways from experts in their fields.

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

Overview

Wetland Connections (WC) is a school-year-long place-based education program for 6-12th grade students developed to promote environmental/STEM/climate literacy, strengthen student connections to local wetland ecosystems and environmental career pathways, and empower students to become true environmental stewards. GBF educators connect with students four times over the school year, intentionally building relationships needed to empower students to become life-long advocates for the bay.

WC is open to 18 schools across the Houston area through an application process. It is unlike any other environmental education program in the region and is well-received by students and teachers alike – with most schools returning each year. Students are provided a well-rounded view of the entire bay ecosystem while completing the program, increasing their connection and stewardship to the bay. "I underestimated the importance of wetlands until I participated in WC as I never understood their true purposes...I grew to comprehend the significant role these wetlands play in everyday life, especially for preserving species diversity and maintaining a healthy overall environment."– Student Participant.

Components

Through WC, students are introduced to the wetland ecosystem with classroom and field activities concerning the ecology of wetlands, data collection, nature journaling, conservation engineering principles, and water quality while imparting a sense of ownership and responsibility for the local ecosystem. Classrooms receive four mini-wetland habitats, water quality testing supplies, curriculum, three classroom STEM workshops, and a field experience at GBF's Sweetwater Preserve.

After their initial pre-test, students are provided a variety of GBF-created videos that introduce qualitative and quantitative data collection methods and the importance of wetlands. During the first classroom workshop, students participate by actively conducting those monitoring techniques on their mini-wetland habitats while being introduced to their wetland plant: smooth cordgrass. Quantitative data includes water quality (pH, dissolved oxygen, salinity), the number and height of plant stems, and the overall health of the habitat. Students learn scientific qualitative data collection by drawing and labeling components of their habitat and organisms that are present. Students collect these qualitative and quantitative data metrics once a month and graph changes seen throughout the year. Sustained environmental data collection such as this is part of the TEKS standards for many science classes.

To strengthen student learning, teachers are given access to a Google drive complete with data collection sheets, related classroom curriculum, and qualitative journaling prompts. GBF staff conduct Zoom meetings at least twice a year to review program components and answer any questions teachers may have. All components of the program are differentiated to ensure proper student achievement and engagement. Fall through winter, students receive the following hands-on classroom workshops to strengthen their knowledge of the wetland ecosystem:

1. Engineering Shoreline Workshop: During this workshop, students act as engineers to build coastal resilient shorelines around Galveston Bay. Middle school students test a variety of shoreline protection methods to see which one will withstand increased wave action and examine coastal resiliency whereas high school students act as restoration engineers to design a shoreline protection method for specific sites around Galveston Bay and test for coastal resiliency. Students engage with hands-on engineering concepts and long-term resiliency planning during this inquiry-based lab investigation.
2. Animal Adaptations Workshop: During this workshop, students observe a variety of bay/estuarine animal specimens and predict the adaptations that the animals possess to survive in the bay ecosystem. Upper level/honors classes use case studies and small group discussions to identify evidence of evolution and current population threats in order to create a management plan to conserve these vital species. Students leave with an understanding of the adaptations animals use to survive in the bay ecosystem, how these animals interact with each other, and conservation initiatives to ensure population health.

In the spring, students travel to GBF's Sweetwater Preserve in Galveston, a salt marsh wetland, to immerse themselves in the ecosystem to culminate the program. Throughout the day, students conduct water quality testing to determine the health of the bay and hypothesize organisms they should encounter on site, identify wetland and coastal prairie plants via quadrats and discuss ecological differences, conduct aquatic species sampling via seine nets, and identify various coastal birds and behaviors seen during a short hike on the property. Volunteers assist in discussing professional techniques used by researchers and future career

paths. During their experience, students complete a field journal documenting qualitative and quantitative data, bridging the work they did with their mini wetlands at school with the true wetland habitat. In the end, they take time to reflect via drawings and storytelling to share their experience in the program with their classmates. Students ultimately leave the site, and the program, with a deeper understanding of why wetlands are such an important ecosystem to the region.

The WC Careers Teacher Workshop will be held each June, aimed to allow teachers to learn more about conservation and environmental career pathways within the region. Year 1 will focus on environmental science related careers (colleges, research, project managers, private industry, etc.) while Year 2 will focus on careers benefited by healthy wetland ecosystems (fishing, recreation, tourism, etc.). Experts in their field will be invited to participate in these workshops and videos will be created for teachers to share with their classes.

Outcomes and Evaluation
The outcomes and success of WC are determined via student pre- and post-tests and teacher post-surveys. During the pre/post-tests, students are asked multiple-choice and open-ended questions regarding wetland knowledge, connection to the Bay and future careers, stewardship, demographics, and overall program experience. During the post-survey, teachers are asked questions regarding the program's impact on their students, alignment with teaching standards and curriculum, and the effectiveness of program activities. Open-ended questions are included to allow teachers to express their thoughts, possible improvements, and other comments.

Expected outcomes for each school year include:

1. Reaching over 1400 students and teachers 4 times.
2. 10% increase in student knowledge of wetlands.
3. Increased student outlook on and connection with wetlands.
4. An overall experience of 4.8 out of 5.
5. Reaching 25 teachers via the WC Careers Teacher Workshop.

Latitude/Longitude (Optional):

n/a

Location:

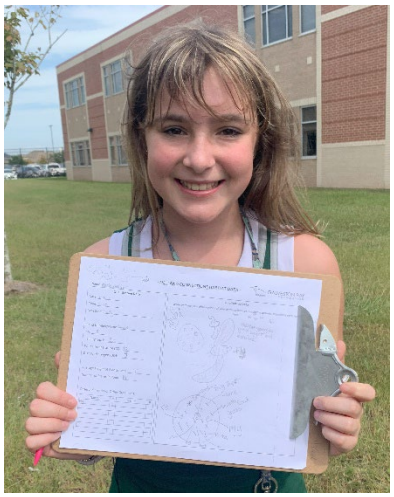
Schools are across the Galveston-Houston region. The Field Experience component takes place in Galveston at GBF's Sweetwater Preserve.

Projects Map

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

Supplemental Photos/Graphics (Optional):

Wetland Connections Program Photos



SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$80,160
b.	Fringe Benefits	$16,032
c.	Travel	$7,000
d.	Supplies	$17,403
e.	Equipment	$0
f.	Contractual	$0
g.	Construction	$0
h.	Other*	$20,000
i.	Total Direct Costs (Sum a - h)	$140,595
j.	Indirect Costs	$32,705
k.	Total (Sum of i & j)	$173,300

*Other: If Budget Category "Other" is greater than $25,000 or more than 10% of budget total, identify the main constituents: Funds will be used for teacher stipends each year of programming (estimated $500 per teacher at 20 teachers each year).

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 34% of (check one):

☒ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☒ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

PPE

Project Name:

Regional Coordination of the River, Lakes, Bays 'N Bayous Trash Bash®

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer:

Houston-Galveston Area Council

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

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

Amount Requested:

$10,000.00

Is the project scalable? ☐

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$10,000.00
FY 2026 (09/01/2025-08/31/2026)	$0.00
FY 2027 (09/01/2026-05/31/2027)	$0.00
Total	$10,000.00

Total Project Cost:

$10,000.00; for project coordination assistance, not the total cost of the event.

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

One-year request for Trash Bash 2025.

Project Urgency:

Having funding dedicated to helping offset the year-round coordination costs of Trash Bash® is vital to the continuity of the event, and maintenance and expansion of event education and outreach. While Texas Conservation Fund works yearly to secure funding for the event, most of the funds go directly into the event costs and logistics, and the sources are heavily dependent on the state of the economy.

Leveraging (in-kind and/or cash):

Trash Bash® has multiple funding streams, including a TCEQ SEP, and cash and in-kind donations from individuals, businesses, corporations, and organizations, through the Texas Conservation Fund, combining to make the event possible each year. The amount of funding raised each year is dependent upon the state of the economy – especially the oil/gas and chemical industries. The Houston-Galveston Area Council also provides some additional logistical personnel support through water quality and solid waste projects. In 2023, 14 sponsors donated at least $5,000 in cash or in-kind donations.

Partners and Their Roles:

The Gulf Coast Authority provides administrative/management oversight, the Texas Conservation Fund handles the fundraising function, and the Houston-Galveston Area Council provides regional coordination for Trash Bash®.

Project partners include the Galveston Bay Foundation, Bayou Preservation Association, Gulf Coast Authority, City of Houston Health Department Bureau of Pollution Control and Prevention, Greater Northside Management District, Greater Houston YMCA, Harris County Flood Control District, Sam Houston Area Council of Boy Scouts, Girl Scouts of San Jacinto Council, several Keep Texas Beautiful affiliates, local governments, civic organizations, and nearly four dozen businesses and corporations.

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

Galveston Bay Plan, 2nd Edition References
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/

SPO-1 Stewardship Programs and Volunteer Opportunities: Trash Bash is one of the oldest and most well-known stewardship and volunteer programs in the region. When new Trash Bash® sites are proposed, several factors are considered before approval, including if the site would serve a new or underserved community.
SPO-2 Workshops and Events: GBEP has been a supporter of Trash Bash for at least the past 10 years, getting big returns in outreach and education for a minimal investment.
SPO-3 Support Regional Initiatives: Trash Bash GBEP funding includes maintenance of educational materials about nonpoint source pollution – used at Trash Bash and outreach events throughout the rest of the year, and available for loan out to local governments, schools, nonprofits and other entities. These materials identify and support other regional campaigns and have been translated into Spanish and Vietnamese. An instructional guide is available, and since 2017 these materials have been part of more than 117 events tracked by H-GAC and partners.
PEA-1 Key Issue Engagement: Trash Bash is an excellent resource for engaging the public on litter and illegal dumping, plastic pollution, and non-point sources of pollution. Engagement occurs through the cleanup as well as the interactive exhibits on pet waste, FOG, low-impact development, and litter prevention. The goal is to have the cleanup, combined with the education, better instill the information about how small actions can have a positive impact on the health of local waterways and Galveston Bay.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

While each year Trash Bash® can address multiple plan priorities, the FY 2025 proposal would focus on SPO-1 Output of "seeing a measurable increase in existing program participation".

The Trash Bash regional coordinator works with the steering committee and new interested communities to determine if cleanup locations need to be changed or added based on trash collected, interest from community partners, and proximity of other sites. The goal is to make sure all sites continue to have a measurable impact on trash in the community while maintaining dedicated volunteer levels and engaging new audiences. However, while the events post-pandemic have successfully removed similar amounts of trash, volunteer numbers have been down. This project would allow the coordinator and committee to try and address that and increase volunteer participation to previous levels, particularly at two long-standing sites located in predominantly Hispanic neighborhoods.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☐ WSQ (Ensure Safe Human and Aquatic Life Use)
☒ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

NPS-1 Outputs:

- Support implementation of WBPs

Trash Bash is included as a support or implementation measure in several watershed-based plans.

Other Plans Implemented:

Trash Bash® sites are written into the scope of work for a number of Houston-Galveston Area Council and partner watershed-based plans in the Galveston Bay watershed. As it is possible for additional sites to be created where there is need and community interest, this can continue to be true for future plans.

Trash Bash® is an integral part of the removal goal of the Partners in Litter Prevention Action Plan for litter and marine debris.

Trash Bash® is one of the Galveston Bay Foundation Report Card suggested actions to reduce marine litter.

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☐ Place based and immersive programing (K-12)
☐ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☐ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

The 2025 River, Lakes, Bays 'N Bayous Trash Bash® will mark the 31st annual cleanup event at multiple locations across the Galveston Bay watershed. The event is more than just a standard litter cleanup – individual sites are coordinated by local groups, with Trash Bash® providing or coordinating cleanup and safety supplies, lunch and t-shirts for participants, educational exhibits, transportation if needed, sanitation stations, and waste disposal for each site. The positive impact of the event resonates with volunteers and sponsors and has led to ongoing support and partnerships. However, most of the sponsorship and other funding goes directly into the event. Regional coordination is a year-long process, with significant time dedicated to the event each year, and additional funding is necessary to help maintain these efforts. Besides maintaining the event, Trash Bash® would like work toward increasing volunteer participation back to pre-pandemic levels and expanding the resources for general event information that are available in Spanish to better reach communities around certain sites that have seen reduced numbers in the past few years.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

This project would specifically look to expand general event resources available in Spanish to better reach communities with limited English proficiency directly surrounding several Trash Bash® sites.

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

Trash Bash® would love to find and work with local partners in the targeted communities, but at this time that has not been confirmed to be part of the project.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

The River, Lakes, Bays 'N Bayous Trash Bash® - the largest, single day volunteer-based waterway cleanup – is set to celebrate its 31st annual event in 2025. This proposal seeks support for coordination of the event to allow for continuation of its award-winning cleanup efforts in the lower Galveston Bay watershed and it efforts to reach more audiences through the event and its educational materials.

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

The River, Lakes, Bays 'N Bayous Trash Bash® will celebrate its 31st annual litter cleanup event in March 2025. Consistent and responsive coordination and organizational support has been vital to the event's longevity and growth. There are a lot of moving parts to both the coordination and implementation of the event. The Texas Conservation Fund manages Trash Bash® and the Gulf Coast Authority provides leadership and financial management. A steering committee made up of volunteers representing industries and corporations, nonprofit and civic organizations, local government and school districts, and private citizens interested in cleaner waterways helps to make decisions and manage individual sites. Thousands of volunteers of all ages come out each year (some of them every year) to donate their time and effort to removing trash from the Galveston Bay watershed. The Houston-Galveston Area Council helps to bring all of these efforts together by providing regional coordination and planning for all aspects of Trash Bash®.

The H-GAC regional coordinator handles a variety of tasks to implement Trash Bash® and although the peak planning time is September through April, the coordination of the event is a year-round process. The ongoing planning, maintenance and coordination tasks include (percentages indicate an estimation of the time required for each category):

- Working with site coordinators – 20%
- Outreach, public relations, and volunteer retention – 20%
- Working with vendors, ordering supplies, and researching options – 20%
- Planning and executing event and committee meetings – 10%
- Miscellaneous administrative duties – 10%
- Working with sponsors – 10%
- Program inventory and maintenance, including educational displays – 10%

Supporting the personnel costs of the H-GAC regional coordinator for Trash Bash® helps ensure continuity in the coordination process and consistency from year to year for the fun, family-friendly, and meaningful litter cleanup event that volunteers are used to. However, Trash Bash® is more than just a litter cleanup event. The mission of Trash Bash® is "to promote environmental stewardship of our watershed through public education by utilizing hands-on educational tools and by developing partnerships between environmental, government, and private organizations." Promoting environmental stewardship goes beyond a single-day event and requires behavior changes beyond not littering or illegal dumping to help protect a clean water future. To foster these behaviors, Trash Bash® has expanded over the years to include educational outreach and interactive exhibits, posters, and pledges at every cleanup site. The educational items promote everyday changes volunteers can make at home to improve water quality: picking up pet waste; disposal of fats, oils, and grease; preventing common sources of pollution and reducing runoff; and proper disposal for commonly littered items. The educational signage and give away items also highlight other reginal campaigns like Cease the Grease and use of the Galveston Bay Action Network.

Previous TCEQ.GBEP funding has allowed Trash Bash® to expand these efforts further by translating the educational posters and brochures used at events into Spanish and Vietnamese and creating a streamlined user guide for the educational materials. This proposal would assist with the maintenance or repair of these items as necessary.

In addition to maintaining the educational materials and coordinating the event, with this proposal H-GAC is hoping to address the reduced participation that certain sites have seen post-pandemic. While the volunteer numbers for most sites were down a little since returning to in-person cleanups in 2022, a few sites stand out. Notably, the Sims Bayou site (Glenbrook, Reveille, and Stuart Parks) and the Brays Bayou site (Mason Park) have seen only about half of their pre-pandemic numbers in 2022 and 2023. While sites can be removed when volunteer levels drop, both of these sites are in predominantly Hispanic neighborhoods and areas where H-GAC's Regional Equity Tool identifies large numbers of either limited proficiency in English or non-English speakers. Before removing these sites from the event and limiting their opportunity to participate and remove litter in their communities, H-GAC would like to determine if there are resources that need to be developed to better 1) make them aware of the event, and 2) more confidently participate in the event. These resources might include creating or improving Spanish translations of event invitations or registration and general information resources, the strategic distribution or promotion of these resources in those communities, and improvement of the Spanish section of the event website. While these two Trash Bash® sites have been identified as having the most need for these efforts, several others would also benefit, including the sites on Little White Oak Bayou (Near Northside), Greens Bayou (Crowley Park), and White Oak Bayou (Ermel Elementary).

Success of these efforts would be determined by comparing the number of volunteers at the sites against previous years. The number of Spanish language waiver forms turned in and visits to the Spanish section of the event website would also be considered, though that is not a metric that has previously been collected for comparison.

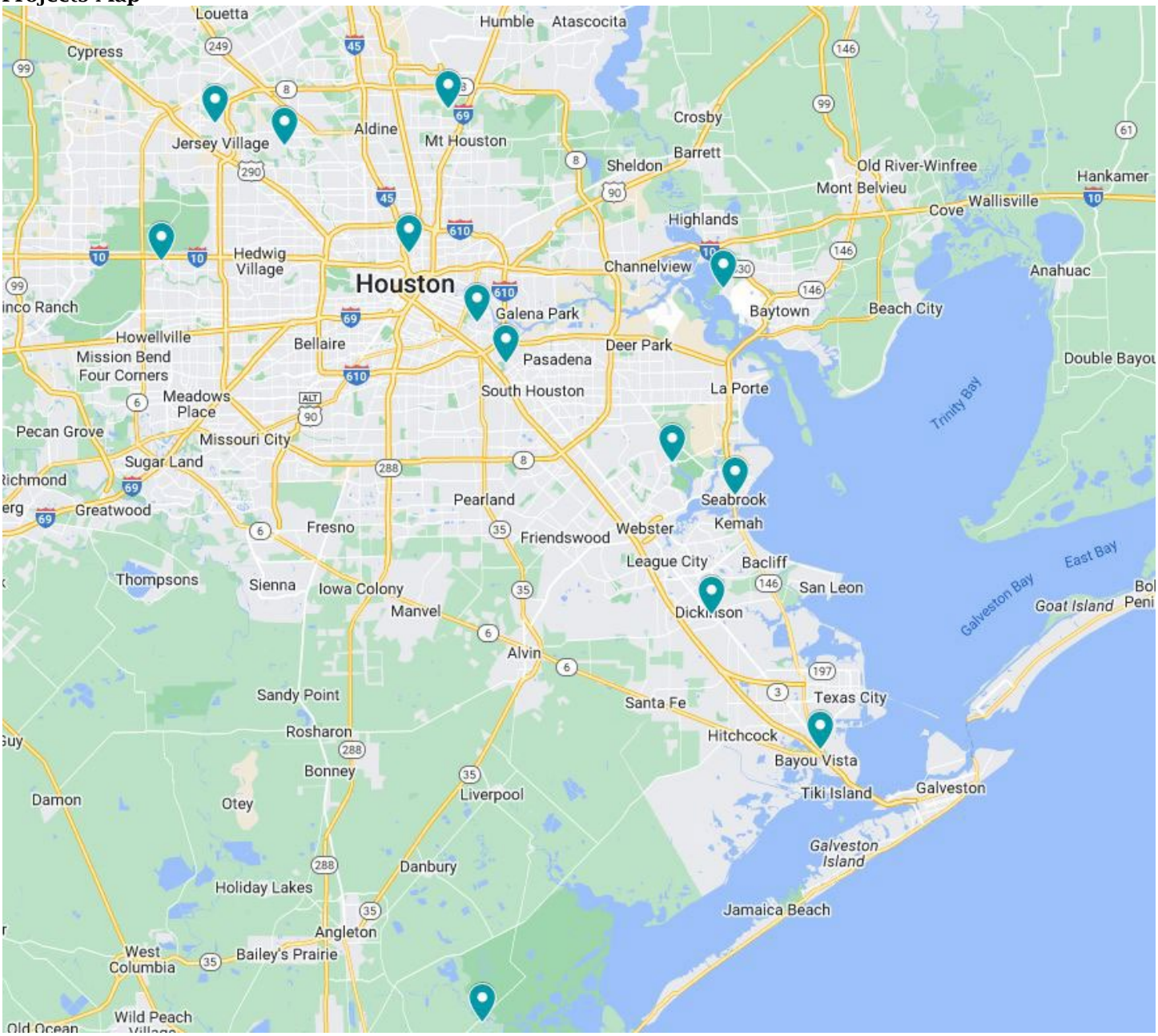
Latitude/Longitude (Optional):

Location:

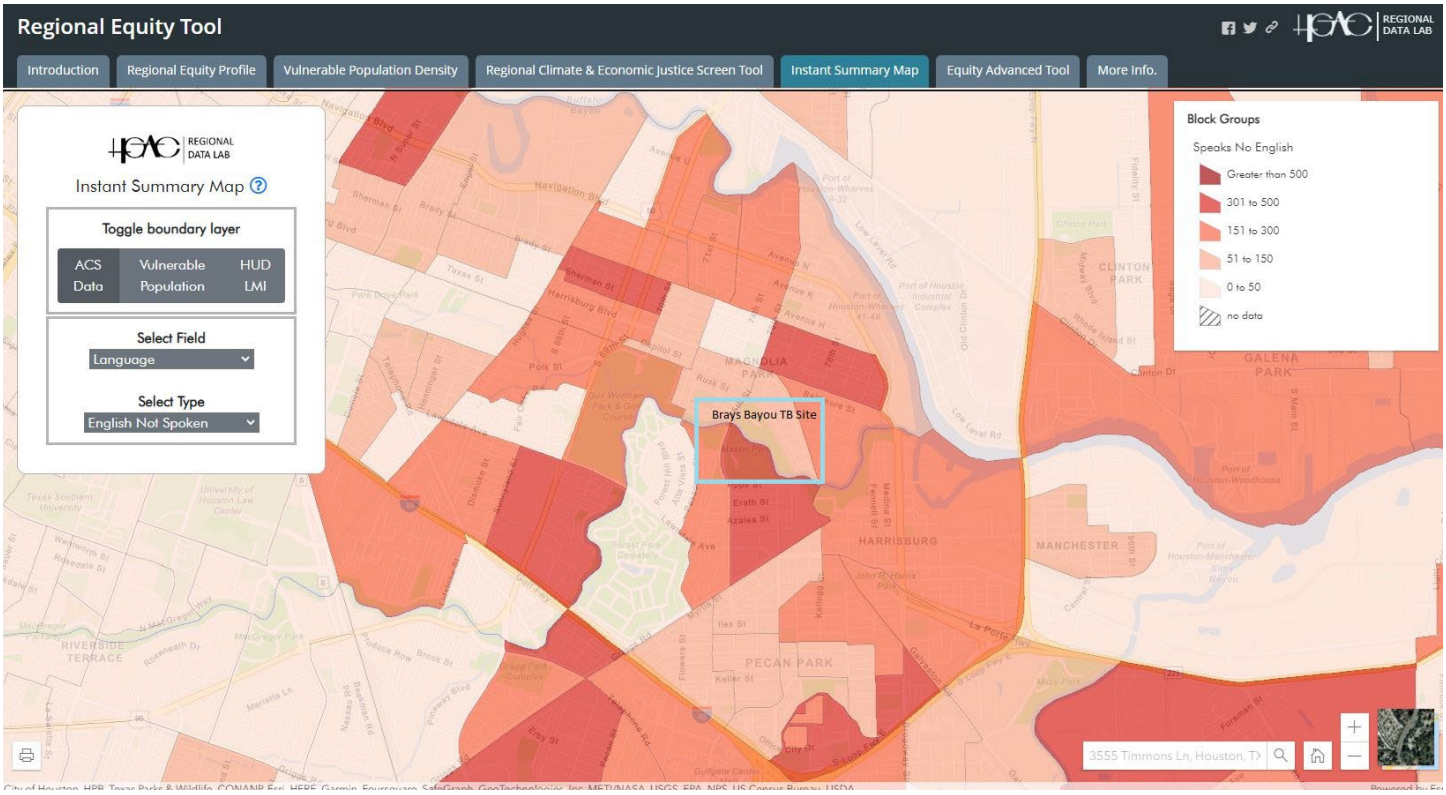
Trash Bash® has multiple cleanup locations across the region. In 2023 there were 14 locations (see map below). The sites range from urban, to suburban, to rural, drawing volunteers from six counties. Sites are located along bayous, rivers, bays, and lakes. The only areas Trash Bash® does not clean are beaches. Many sites have satellite locations that are not shown on the map. Attendance and trash volume trends at each site are evaluated yearly to determine if new locations are required or if it is possible to clean different locations from existing sites using satellite locations.

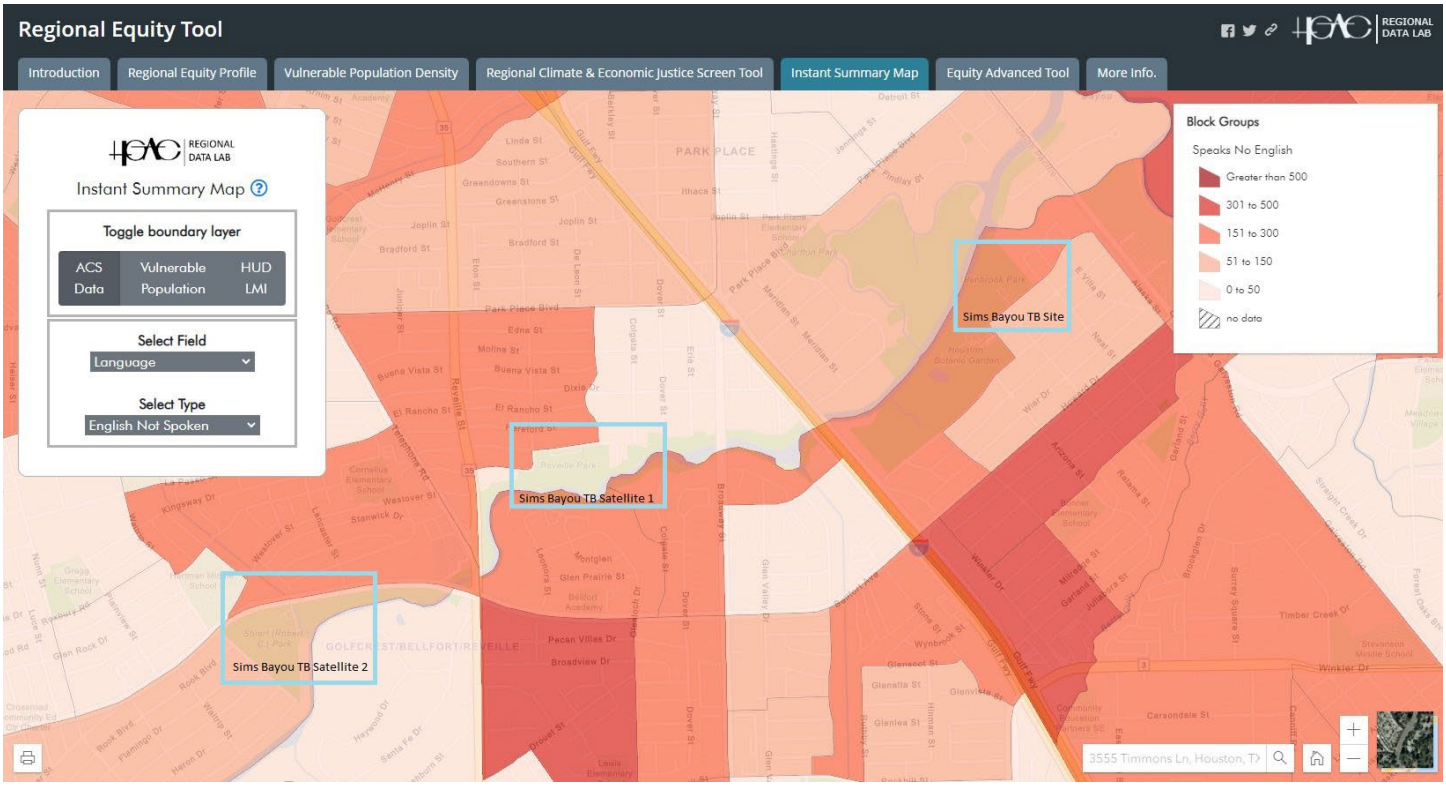
The focus for this effort is expected to be on the sites for Brays Bayou (Mason Park), Sims Bayou (Glenbrook, Reveille, and Stuart Parks), Greens Bayou (Crowley Park) and Little White Oak Bayou (Moody Park/Near Northside) and their surrounding communities.

Projects Map



Supplemental Photos/Graphics (Optional):


Regional Equity Tool
REGIONAL DATA LAB
Introduction
Regional Equity Profile
Vulnerable Population Density
Regional Climate & Economic Justice Screen Tool
Instant Summary Map
Equity Advanced Tool
More Info.
Instant Summary Map
Toggle boundary layer
ACS Data
Vulnerable Population
HUD LMI
Select Field
Language
Select Type
English Not Spoken
Block Groups
Speaks No English
Greater than 500
301 to 500
151 to 300
51 to 150
0 to 50
no data
Brays Bayou TB Site
HARRISBURG
MANCHESTER
PECAN PARK
GALENA PARK
CLINTON PARK
MAGNOLIA PARK
RIVERSIDE TERRACE
3555 Timmons Ln, Houston, TX


Regional Equity Tool
REGIONAL DATA LAB
Introduction
Regional Equity Profile
Vulnerable Population Density
Regional Climate & Economic Justice Screen Tool
Instant Summary Map
Equity Advanced Tool
More Info.
Instant Summary Map
Toggle boundary layer
ACS Data
Vulnerable Population
HUD LMI
Select Field
Language
Select Type
English Not Spoken
Block Groups
Speaks No English
Greater than 500
301 to 500
151 to 300
51 to 150
0 to 50
no data
Sims Bayou TB Site
Sims Bayou TB Satellite 1
Sims Bayou TB Satellite 2
PARK PLACE
GOLFCREST/BELLFORT/REVEILLE
3555 Timmons Ln, Houston, TX

SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$4,286.00
b.	Fringe Benefits	$1,994.00
c.	Travel	$300.00
d.	Supplies	$500.00
e.	Equipment	$0.00
f.	Contractual	$0.00
g.	Construction	$0.00
h.	Other*	$2,200.00
i.	Total Direct Costs (Sum a - h)	$9,280.00
j.	Indirect Costs	$720.00
k.	Total (Sum of i & j)	$10,000.00

*Other: If Budget Category "Other" is greater than $25,000 or more than 10% of budget total, identify the main constituents: Includes translation services, maintenance and repair of games, and department allocations.

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 11.46% of (check one):

☒ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☒ Predetermined Rate—an audited rate that is not subject to adjustment. **This is an annual rate for the period of January – December. A new approved rate is issued each year.**
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

PPE

Project Name:

Mobilizing the Environmental Education Community through Prairie Education

Project Previously Funded by GBEP? Yes ☒ No ☐

Lead Implementer:

Native Prairies Association of Texas

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Della Barbato
Project Representative Phone	832-283-0383
Project Representative Email	Della_barbato@texasprairie.org

Amount Requested:

$80,210

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$40,105
FY 2026 (09/01/2025-08/31/2026)	$40,105
Total	$80,210

Total Project Cost:

$80,210

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

September 1, 2024 – August 31, 2026 (2 years)

Project Urgency:

As funding for environmental education is slowly returning after the pandemic, school programs need to leverage limited funds to do the greatest good. Environmental justice is also in the national spotlight, as is the need for more outdoor education programs. With new information based on research by EcoRise that identifies which districts are underserved in environmental education in our region, we have an action plan to deliver high quality programs to students and teachers in these districts.

Leveraging (in-kind and/or cash):

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

TPWD COOP grant = $60,000 (potential, application opens Nov. 2 2023)

Matagorda Bay Mitigation Trust = $60,000 (secured)

NPAT Education Fundraisers = $39,259 (secured 2023),
$40,000 (planned and potential each year, 2024-2025)

Texas Master Naturalists = $5,000 (secured 2023)

Partners and Their Roles:

University of Houston-Clear Lake's Environmental Institute of Houston (EIH) strives to provide access to environmental information to objectively expand the knowledge base of Houston's diverse communities. Outreach activities include the creation and dissemination of information via public presentations, educational displays, lay-language reports, and environmental data analysis. EIH staff provide the community with a source of knowledge through seminars and workshops to citizens and technical audiences oriented to the conservation of biodiversity and non-renewable and renewable resources.

Native Prairies Association of Texas (NPAT) is dedicated to the conservation, restoration, and appreciation of native prairies, savannas, and other grasslands in Texas. We bring the appreciation aspect to life by educating Texans about native prairies, plant communities, grassland birds, wildlife, and sustainable land-use practices. We support the important role of grassland and wetland habitats in climate stabilization and in water-quality resources and conservation. We promote awareness of the natural and cultural heritage of prairies in Texas.

Lawther-Deer Park Prairie (LDPP) is a 51-acre, never-plowed, native prairie remnant that is an exceptional example of one of the most endangered ecosystems in North America. LDPP is home to more than 350 native plant species of grasses and wildflowers. Less than 1% of the original 9 million acres of coastal prairie remains. Very few of these prairies can be found within an urban area. Because of their pure genetics, seeds from Deer Park Prairie are planted at more than 20 pocket prairies in the Houston area.

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

Galveston Bay Plan, 2nd Edition References
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/

Environmental literacy is achieved by building awareness of the critical issues influencing Galveston Bay, including habitat and water conservation, protecting native Bay species, and preventing Non-Point Source (NPS) pollution.

Our environmental education curriculum and programs focus on science, technology, engineering, art, and math (STEAM), essential components for protecting and sustaining Galveston Bay.

Many residents do not understand how their actions can negatively impact this endangered ecosystem and the Bay. Environmental stewardship is achieved through a sense of connection to a place and the awareness of the actions that positively or negatively impact it. This should motivate a change in behavior.

The Lawther – Deer Park Prairie Education Program aligns well with and implements actions of the Engage Community Action Plans through:

- **outreach and environmental stewardship education** for students, teachers, and other adults throughout the Houston metro area.
- **delivering experiential learning opportunities** through field trips and lessons at our rare remnant prairie, classroom lessons, volunteer workdays, and a dynamic Girls on the Prairie summer camp.
- **collaborating with other regional conservation partners** to organize and/or take part in workshops, conferences, and community events, sharing a cohesive message about "Back the Bay" and the importance of Galveston Bay to the health of our environment and overall well-being.
- **engaging and communicating with** local school districts, colleges and universities, community groups, and municipalities to support their environmental education and awareness interests for our mutual benefit.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

SPO-1, Stewardship Programs and Volunteer Opportunities: NPAT and EIH were part of the previous grant utilizing resources of EcoRise which identified underrepresented schools lacking in environmental education resources. We will now be using these results as a reference guide. This project will create a plan to provide educational programs and stewardship opportunities for underserved schools.

SPO-2, Workshops and Events: The project supports SPO-2 by providing measurable workshops for teachers and administrators, field trips and Girls on the Prairie summer camps for students.

SPO-3, Support Regional Initiatives: Project supports multiple regional environmental education programs and initiatives, including Gen:Thrive, Texas Association of Environmental Educators (TAEE) and the Environmental Educators Exchange (EEE), Houston Environmental Resources for Educators (HERE in Houston), and Texas Children in Nature Network (TCiNN). Prairie education supports the "Back the Bay" campaign because students, teachers and administrators learn why prairies are important and should be protected. This leads to awareness of how prairies improve water quality and Galveston Bay's overall health.

SPO-4, Local Government Outreach: As part of the training and learning experiences with accompanying resources for teachers and administrators, this project develops, distributes, and promotes resource materials for local government (School Districts) use and reference.

PEA-1, Key Issue Engagement: Project will bring awareness to the Galveston Bay watershed community by focusing on prairie ecosystems and the ecological services they provide.

PEA-2, Adult Education: The project supports PEA- 2 by offering workshops to teachers and administrators in underserved communities and geographies.

PEA-3, K-12 Education Efforts: This project will support K-12 education by offering student field trips, girls summer camps and prairie education programs to K-12 teachers and administrators.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☐ WSQ (Ensure Safe Human and Aquatic Life Use)
☒ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

NRU: Our project protects and sustains living resources by teaching about prairie restoration, benefits and habitat management. NPAT is also committing over multiple years almost $400,000 into the management of our 51-acre Deer Park Prairie and the remodeling of the Prairie Education Center infrastructure on site. UHCL is restoring or committing prairie habitat restoration on 24 acres of the campus.

Other Plans Implemented:

Our project, through the teaching of prairie restoration, benefits and habitat management, also implements the Texas Coastal Management Plan, the Texas Coastal Resiliency Master Plan and the Texas Wetland Conservation Plan. NPAT is also committing over multiple years almost $400,000 into the management of our 51-acre Deer Park Prairie and the remodeling of the Prairie Education Center infrastructure on site.

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☒ Place based and immersive programing (K-12)
☒ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☒ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

Place based and immersive programing (K-12)

We will use data compiled in the summer of 2023 and collected by EcoRise to locate high risk/need areas and includes demographics, test scores, and environmental risk assessments. The data was scaled up to encompass a wider area with more school districts and community partners and will be used as a community engagement tool.

Conservation and environmental workforce training

The summer camps and student field trips give students opportunities to interact with members of the environmental community and explore environmental careers. One day of the summer camp will be devoted to environmental career studies with at least four ladies in STEM careers describing their career path, additionally UHCL will present a STEM program from their career counseling office. Students will also learn from community leaders through field trip volunteers.

In year 1, the prairie program will target 4 underrepresented schools based on data provided by EcoRise. In year 2, the program will target an additional 4 underrepresented schools in underserved communities as identified by EcoRise data. Programs will be tailored to meet the expressed needs of the community.

Continuation or expansion of established education, outreach, or engagement programs

The established prairie education programs that were delivered with the 2022 grant will be expanded for the upcoming grant periods. These include the teacher and administrator workshops, student field trips and the Girls on the Prairie summer camp.

Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

This will be accomplished with the teacher and administrator workshops. Concepts such as ecosystem services, retention of flood waters, habitat management, wildlife and pollinators, careers in STEM, improvement of water quality through extensive root absorption, point and non-point source water pollution are covered. TEKS aligned student activities are offered so that teachers can bring them to their students in the classroom or school pocket prairie.

NPAT and EIH will also continue to apply the PPE subcommittee priorities of the FY 2022 grant by:

- using the mapping/database from EcoRise that identifies underrepresented communities and a needs assessment for volunteer and stewardship opportunities for those communities.
- expanding our program capacity to target and partner with underrepresented communities that encourage diversity, equity, and addresses language barriers.
- sharing and promoting career opportunities in the environmental field to high school-aged youth, young adults in college, and young professionals.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

NPAT is currently working with Black Women Who (CEO Tanya Walker), an organization that gets black women outside, and Latino Outdoors, an organization that gets the Latino population outdoors. We are expanding our prairie education outreach to these communities and their children.

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

☒ Yes
☐ No

Our new partners will be the new, underserved schools and districts that we will work with identified by EcoRise. We will also partner with the Region 4 Science Solutions' Science Leadership Network Manager, Dodie Resendez. She has science lead contacts in all 48 school districts and 41 charter schools in the region.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

NPAT and EIH will provide quality prairie education to underserved audiences in the Houston-Galveston region. Prairies are one of the most endangered ecosystems in North America and they play an important role in the Galveston Bay watershed. They are often overlooked and undervalued. They have disappeared because of the ease in which they can be destroyed through agriculture and development. NPAT and EIH were part of the previous GBEP-PPE grant utilizing resources to identify underserved school districts (and students) that do not currently receive (and could greatly benefit from) quality informal environmental education programming.

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

The University of Houston-Clear Lake's Environmental Institute of Houston (EIH) and Native Prairies Association of Texas (NPAT) will facilitate prairie education programs to increase knowledge and awareness of the ecological services provided by native coastal prairies and wetlands for K-12 students, educators, and the community at large. This two-year project seeks to address the low science and math test scores and workforce development of students in Texas Region 4 communities by providing STEM activities on the Deer Park prairie and at EIH through field trips, summer camps, and teacher/administrator workshops. Activities can be adapted to virtual formats if needed.

Summary of Activities

Year 1: activities will focus on four of the newly identified undeserved schools in the Houston/Galveston area. The curriculum includes prairie ecology, flood mitigation and the importance of preserving our native plants, wildlife and pollinators. Outdoor activities include a guided tour of the prairie, bird watching, seed collection, seed ball creation and an insect sweep and study. On-the-prairie TEKS-correlated lessons teach objectives such as animal adaptations, insect life cycles, the flow of energy and the prairie food web. Applications to science, technology, engineering and math (STEM) include hydrology and soil quality activities and lessons. The program also teaches the rich history of the native coastal prairie, preserving our Texas Native Heartland. This curriculum will be used in on-site prairie programs described below.

Teacher/Administrator Workshops: These will take place at Deer Park Prairie and provide an interdisciplinary approach to learn about prairies and the history of the coastal prairies in this area. The workshop focuses on the Prairie Activity Trunk, history, ecology, flood mitigation, the importance of preserving native wildlife and pollinators and how to create a pocket prairie. Additional topics may include hydrology, water quality, animal adaptations, insect life cycles, the flow of energy, the prairie food web, and applications to STEM.

Field Trips: Teachers who participate in workshops will be invited to take their classes on field trips to learn STEM lessons on prairie ecology, flood mitigation, hydrology, and water quality. They will also learn our local Texas history and the importance of preserving our native wildlife and pollinators.

Girls on the Prairie Summer Day Camp: Each camp will serve a minimum of 10 underrepresented minority girls. The five-day camp will be held at DPP and EIH. Three days of the camp will focus on the STEAM curriculum including the Enviroscape (3-D model depicting benefits of a prairie), and technology such as iNaturalist and Google Earth. One day will be devoted to environmental career opportunities such as land and wildlife conservation, natural resource management, formal and informal education and outreach and environmental communication.

Year 2: prairie programs will repeat and will focus on four different schools also identified in the research.

Timeline

- Fall 2024 –recruit/solicit educators to participate in the teacher workshop; order supplies, materials, finalize agenda; conduct teacher workshop; organize teacher field trip.
- Fall 2024/Spring 2025 – conduct four half-day field trips for students
- Summer 2025 – host weeklong day camp for high school girls.
- Fall 2025 –recruit/solicit educators to participate in the teacher workshop; order supplies, materials, finalize agenda; conduct teacher workshop; organize teacher field trip.
- Fall 2025/Spring 2026 – conduct four half-day field trips for students
- Summer 2026 – host weeklong day camp for high school girls.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

NPAT's Lawther – Deer Park Prairie, Deer Park, Texas; the campus of the University of Houston Clear Lake; and the Environmental Institute of Houston, also on the campus of UHCL.

Projects Map

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

Supplemental Photos/Graphics (Optional): [Insert Here or Attach as an Appendix]

SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$58,200
b.	Fringe Benefits	$20,010
c.	Travel	
d.	Supplies	$2,000
e.	Equipment	
f.	Contractual	
g.	Construction	
h.	Other*	
i.	Total Direct Costs (Sum a - h)	$80,210
j.	Indirect Costs	
k.	Total (Sum of i & j)	

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

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is % of (check one):

☐ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☐ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

Public Participation & Education (PPE)

Project Name:

Resilience in Schools and Communities (RiSC)

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer:

National Wildlife Federation

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Dominique Bertrand
Project Representative Phone	512-610-7770
Project Representative Email	BertrandD@nwf.org

Amount Requested:

$200,000

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$80,000
FY 2026 (09/01/2025-08/31/2026)	$80,000
FY 2027 (09/01/2026-05/31/2027)	$40,000
Total	$200,000

Total Project Cost:

$408,130

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

2.5 years; 9/1/2024 – 03/31/2027

Project Urgency:

Resilience in Schools and Communities (RiSC), formerly Student Climate Resilience Ambassadors (SCRA), relies on outside funding sources to achieve its goal. We have secured $50,000 for the 2024-2025 school year from NOAA, but no other funds for the project period of Sept 2024-May 2027 have been raised.

Leveraging (in-kind and/or cash):

National Wildlife Federation (NWF) is committed to the continuation of RiSC. For the project period of 9/1/24 – 03/31/27 we have $50,000 in-hand to support 9/1/24-8/31/25 from the second year of our NOAA B-WET award. Additionally, throughout the 2.5-year period, we plan to request renewed support from several key, long-time funders: The Powell Foundation, The George & Josephine Hamman Foundation, and HEB. While we have confidence in our ability to secure these funds, they support a broader reach of NWF Texas Education programs and not RiSC specifically. We will also continue to reach out to recently engaged foundations and new foundations to seek their renewed support for RiSC. We also have robust partnerships who help provide in-kind support for RiSC: TBG Partners, Houston Parks & Rec, Galveston Bay Foundation. We continue to expand our partner network as well.

Partners and Their Roles:

Houston ISD (HISD). NWF has a robust partnership with HISD, the largest Texas school district. In 2019, NWF signed a 5-year agreement with HISD that positions NWF as a primary partner of sustainability with the District. HISD will help NWF recruit schools and teachers from marginalized communities to participate in the program. They will help ensure NWF has access to campuses for project work days and consultation, provide space for professional development, and review lessons to make recommendations to ease integration into teachers' required learning objectives. We realize it may be challenging to renew our 5-year agreement given the fact that the Texas Education Association has appointed a Board of managers to oversee Houston ISD and is introducing a new education system in many of its schools. We are thankful, however, that we enter this new era in HISD with a long-standing partnership with the school district (since 2002), strong relationships with district staff both in the curriculum department and the facilities department, and the confidence in NWF as an organization leader in the PK-12 environmental education space to navigate this evolving space. We are also working with Title I schools in the greater Houston area – not just HISD.

Nature Heritage Society (NHS). NHS is a Houston non-profit committed to environmental justice and creating nature heritage development infrastructures for underserved, urban population communities. NHS will serve as the community liaison for two of the following communities (TBD): Sunnyside, East Houston, Edgebrook, the 5th Ward. NHS will help to recruit schools from these communities, facilitate engagement sessions in the communities and recruit a community liaison from each community to participate on one of the high school RiSC teams. NHS will also help students with their outreach to these communities during the implementation of the community projects in Year 2 of the program.

Galveston Bay Foundation (GBF). GBF will offer watershed subject matter expertise as well as expertise of Galveston Bay through teacher presentations at NWF's professional developments, through student workshops to each class of students participating in the program, and through outdoor field experiences on Galveston Bay to up to 70 students from each school participating in the program. GBF will educate teachers, students, and community members about the Galveston Bay Report Card which presents a yearly analysis of the health of Galveston Bay and the Galveston Bay Action Network, an interactive tool for reporting pollution.

Houston Parks and Recreation Department (HPARD). HPARD is a long-term partner with NWF on the Climate Resilience Program and will host bayou restoration Environmental-Action-Projects (EAPs) each year HPARD staff will educate students, teachers and community members about the important role that bayous play in the watershed, how bayous that are restored to their natural state can help with climate resilience, the impacts of flooding and storm water run-off on water quality, and flood mitigation.

TBG Partners (TBG). TBG Partners Houston will offer expertise in green infrastructure and nature-based solutions to flooding that are scalable and replicable. They will educate teachers how to conduct a campus vulnerability/site assessment, will facilitate a design charette with each school community design a nature-based solution to flooding for their community, and lead student workshops on each campus and campus and neighborhood field experiences where students and community members will learn how to identify and map areas that are vulnerable to flooding and how to identify viable nature-based solutions to help mitigate flooding.

Bayou City Waterkeepers (BCWK). BCWK works to protect and restore the integrity of the lower Galveston Bay's watershed's bayous, rivers, streams, and the bays through advocacy, education, and action. They will present at a teacher workshop and do classroom presentations to students focused on environmental justice issues and water.

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

Galveston Bay Plan, 2nd Edition References
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/

RiSC implements the following actions of Engage Communities:
Stakeholder and Partner Outreach Action Plan (SPO)
Public Education and Awareness Action Plan (PEA)

RiSC implements SPO by increasing a sense of responsibility in the health of Galveston Bay through carefully curated lessons, field experiences, and action projects that intentionally enhance feelings of environmental stewardship with an environmental justice lens, especially for the local Houston region watershed and Galveston Bay.

RiSC implements PEA by ensuring the public receives the knowledge necessary to preserve Galveston Bay in high school and middle students through Texas Essential Knowledge and Skills aligned curriculum paired with project-based learning; in teachers through carefully designed professional development using a variety of tools from NOAA, Galveston Bay Foundation, and others; and in community members through thoughtfully prepared listening sessions, which allow us to tailor our knowledge of watershed health based on the needs of each specific community.

RiSC also implements additional actions through service learning which helps to connect the restoration work they do along bayous in partnership with Houston Parks and Recreation Department to their environmental system studies.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

SPO-1 – Support existing stewardship programs. RiSC is an environmental stewardship program for middle and high school students launched in Houston in 2018 in response to the increasing intensity of storms due to climate change and the devastation of Hurricane Harvey, the importance of watershed health to climate resilience, and the disproportionate effects of flooding events in Houston and in the Galveston Bay watershed on people of color. Participants learn about the Bay's varied ecosystems, its inhabitants, and how they are connected to it via inquiry-based (Place-Based and Project-Based) activities designed to stimulate questioning and a sense of curiosity in participants

SPO-2 – Support workshops and events that facilitate stakeholder involvement. RiSC hosts multiple hands-on resilience projects on school campuses, in the community, and along waterways. Students also hold community forums on their campus to help build awareness in their neighboring school community about the benefits of green infrastructure as a means to mitigate flooding and improving water quality and we will hold a Resilience in Schools and Communities symposium where teachers, students, community leaders and decision makers will come together to share their work, learn from each other and identify key resources to further their education.

PEA-1 – Support new programs to engage the public in dialogue about key Galveston Bay issues. While RiSC began in 2018, fall 2023 marks the first year for us to intentionally engage the public about key Galveston Bay issues. Community leaders will attend trainings and field experiences to better understand climate resilience work and nature-based solutions to help mitigate flooding.

PEA-2 – Support existing adult education programs that change behaviors and attitudes. Thanks to our partner NHS and BCWK, we will identify local community leaders interested in learning about climate resilience and watershed health, and these leaders will help us engage the community at large in resilience projects.

PEA-3 – Support existing K-12 curricular programs and educator professional development. Using NWF Eco-Schools USA's WOW (Wetlands, Oceans and Watersheds https://www.nwf.org/Eco-Schools-USA/Pathways/WOW) pathway, students apply critical thinking skills to investigate storm resilience problems facing Houston, determine the impact of those issues on water quality, and create practical green infrastructure solutions that help mitigate flooding in their community. Our curriculum is Texas Essential Knowledge & Skills (TEKS) aligned to help reduce the burden on educators. Additionally, teachers receive carefully curated professional development including resources such as NWF's RiSC watershed audit (a Place-Based and Project-Based lesson – please see attached document). They also learn how to engage their students in a study of the health of their watershed, help students understand the impact that different watershed development projects and conservation patterns have on a watershed, learn how watersheds are interconnected and how actions students take on their campus or in their community will ultimately affect those downstream of them including the habitat and wildlife in the Galveston Bay watershed and Galveston Bay itself. Teachers also learn how to use Place-Based Education and Project-Based Learning to assess the vulnerability of their campus to flooding and how to mitigate flooding on their campus and in their community using nature-based solutions to flooding.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☐ WSQ (Ensure Safe Human and Aquatic Life Use)
☐ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

[Please explain in detail how project addresses other Galveston Bay Plan Priority Area Actions (be specific; NPS-1, SPO-3, etc.) or subcommittee priorities.]

N/A

Other Plans Implemented:

RiSC aligns with 1. Gulf of Mexico Alliance - Increase collaborative educational partnerships to build capacity and expand local, regional, and national learning-in-action opportunities and stewardship. Specifically: A. Address needs of the education network through professional development and training through RiSC's paid teacher professional development, and B. enhance and establish collaborative partnerships to support environmental stewardship outreach efforts through RiSC's local community partnerships and time reimbursement approach.

RiSC also aligns with 2. NOAA Education Strategic Plan 2021-2024 – Goal 1: Science & Informed Society through RiSC's teacher paid professional development, curriculum embedded MWEEs, and informed community outreach; Goal 2: Conservation & Stewardship through RiSCs outdoor field experiences and EAPs, & Goal 3: Ready, Responsive, Resilient through all RiSC efforts including and especially the student-led community forum.

RiSC also aligns with the Houston Resilience Strategy. Chapter 1, Goal 1: We will support Houstonians to be prepared for an uncertain future; Chapter 2, Goal 6: We will ensure that all neighborhoods are healthy, safe and climate ready; Chapter 3, Goal 8: We will live safely with water and Goal 9: We will embrace the role of bayous as Houston's front yard; Chapter 4, Goal 12: We will advance equity and inclusion for all.

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☒ Place based and immersive programing (K-12)
☐ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☒ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

Place based and immersive programing (k-12) – Through RiSC, NWF aims to empower students and teachers in marginalized communities to be watershed stewards, and to build environmental literacy and environmental stewardship through place-based and project-based learning occurring both outdoors and in the classroom. Our work is place-based because it occurs where teachers and students have identified from a vulnerability assessment. Our work is project-based because it is a hands-on experience.
Please see attachments 1-5.

Continuation or expansion of established education, outreach, or engagement programs- RiSC pairs in-school and outdoor student education with community engagement to help support the public spread of knowledge needed to keep the watershed and Galveston Bay healthy.
Please see attachments 6-9.

Adult engagement in science literacy focused on the Galveston Bay estuary and watershed – RiSC provides professional development for teachers geared towards improving science literacy connected to keeping Galveston Bay healthy. And, unique to RiSC, we center our program in equity by serving the communities surrounding our partner Title I schools. Community leaders also received science literacy training and attend each hands-on, place-based project to learn more about how natural infrastructure can be a benefit to the Bay.
Please see attachments 10 & 11.
Note: RiSC was formerly known as "Student Climate Resilience Ambassadors – SCRA". All references to that program should be considered as the same as RiSC. We are officially rebranding in fall 2023.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

EJ is deeply embedded into RiSC. We identify communities disproportionately affected by environmental hazards using EPA's EJ Tool. These communities join us for charrettes so that RiSC participants can learn each community's environmental and cultural history, listening to their needs, and introducing the students' resilience work. Additionally, the majority of our students come from diverse backgrounds in low income neighborhoods. NWF is committed to becoming an anti-racist organization and has taken bold steps both internally and externally to move towards this goal.

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes
Does the Project work with new, smaller communities/partnerships?
☒ Yes
☐ No

NWF will work with our local Houston EJ partner, the NHS, to help establish a relationship in two communities where our schools reside.

SECTION FOUR: PROPOSAL DETAILS
Project Summary:

RiSC will use project-based learning and place-based education via environmental learning experiences to empower middle/high school students, teachers, and community members in marginalized communities to be watershed stewards by designing nature-based solutions to flooding that will reduce storm water run-off and the associated pollutants from entering the water supply. Participants will build environmental literacy and environmental stewardship through project-based and place-based projects occurring both outdoors and, in the classroom, which will focus on how their hands-on efforts to make Houston more resilient to real and increasing threats of flooding will also contribute to the health of Galveston Bay and the watershed as a whole. Year 1 student projects are campus-based, and Year 2 projects enhance existing projects by increasing the biodiversity of the site and adding elements such as benches, tables, white boards, etc. to help make the site more accessible as an outdoor classroom. Additionally, thanks to NOAA funding, we are piloting an intentional community engagement component with two of our Year 1 schools during the 2023-2024 school year. These schools will be implementing projects in their neighboring school communities during the 2024-2025 school year at the same time as we bring on a new set of Year 1 schools. We will continue this model through the 2025-2026 school year.

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

Resilience in Schools and Communities (RiSC) encourages students and teachers in Title I middle and high schools to apply critical thinking skills to investigate storm resilience problems facing Houston, determine the impact of those issues on water quality, and create practical green infrastructure solutions that help mitigate flooding in their community. RiSC is designed to support schools throughout two academic years.

During the 2024-2027 project period, NWF will engage up to 16 secondary schools (8 Year-1 and 8 Year-2) and up to 1,200 under-served secondary school students, up to 48 teachers, and up to 200 community members in the Greater Houston area. The majority of the schools we work with have student populations that are largely of color (91% average) and economically disadvantaged (79%).

Year-1 (4 Year-1 schools/4 Year-2 schools)

Teachers receive paid professional development to introduce them to TEKS aligned science concepts focused on healthy watersheds and climate resilience. Schools form campus-based teams comprised of students and teachers to perform watershed audits and receive in-person education from our project partners TBG, GBF, and one of our environmental justice (EJ) partners, BCWK. These teams design a nature-based solution to flooding on their campus and, with the help of TBG, they install their solution before the end of the school year. Year-1 school teams also have the opportunity to attend an Environmental-Action-Project on a local bayou and plant native plants and trees with our partner HPARD. In the spring, students will hold community forums on their campus, including rain garden tours, as a way of creating community awareness of the need for a healthy watershed and the purpose of green infrastructure as a means of providing climate resiliency.

While creating the next generation of environmental stewards is our goal, our community-specific objective in Year-1 of the program is to build relationships and to learn the environmental and cultural history of the greater school community of two of our campus partners, ensuring that EJ is embedded into our programming and setting the stage to work with these communities during the following school year (when they are Year-2) schools to implement a nature based solution to a community identified flood-vulnerable site. This will be done through three community engagement sessions facilitated by one of our EJ partners NHS.

Year-2 (4 Year-1 schools/4Year-2 schools)

Schools have the opportunity to network through professional development provided by NWF where they reflect on the first year with the program, discuss challenges and successes, and share resources, including their favorite lessons from Year-1 and any modifications they made throughout the program. Year-2 teachers receive paid professional development to learn how to engage their students in a biodiversity audit of their existing site and how to use the results of the audit to inform an action plan for enhancements to their campus projects and to their watershed. Year-2 students create iNaturalist collection projects for their campus so they can engage in citizen science, contribute to national research on biodiversity, and keep a pictorial inventory of biodiversity change on their campus over time. They strengthen their connection to nature through an exploration in Galveston Bay to heighten their awareness of watershed connectivity and the importance of watershed stewardship that extends beyond their local community.

Overall: RiSC is on-the-ground and scalable. **Students** will exercise leadership skills as they work alongside the community to apply what they learned regarding climate change, EJ, watersheds, stormwater runoff, and water quality**. Teachers** will learn how to educate their classes with Place-Based Education and Project-Based Learning focused on climate resilience. **Community Members** will learn how to identify and map areas that are vulnerable to flooding, and they will problem solve solutions with TBG partners and student leaders, identifying viable nature-based solutions to help mitigate flooding. **Students and community members** will use the findings of their vulnerability assessment to select a project location and type. With the help of TBG, NWF, and teachers, **student leaders from each campus** will host community design charrettes at the identified project location in each community. **Community members will assist students** with the design and implementation of the project. **Through this, students will help community members learn how making their neighborhood more resilient to flooding will contribute to stewardship of Galveston Bay**. In fall 2026, NWF will hire a Fellow to create a creative story map of the RiSC program highlighting specifically the community engagement work and successful implementation of community-based climate resilience projects.

Goal 1 - Increase the environmental literacy and environmental stewardship of HISD/Greater Houston area students through watershed climate resilience planning and practice that will help mitigate stormwater runoff and flooding and contribute to cleaner water for all.
Goal 2 - Engage HISD/Greater Houston area schools, teachers, and surrounding communities in watershed climate resiliency efforts pertaining to flooding and improved water quality.
Goal 3 - Equip participating schools with training and funds needed to plan and implement a nature-based solution to render their campus and community more resilient to flooding.
Goal 4 - Learn the environmental and cultural history of the greater school community of each campus we work with. To help build relationships and trust with the communities, where we will be implementing pilot community-based climate resilience projects, our local EJ project partner will facilitate community engagement sessions in each community we work with during their first Year with the project for up to 10 community members/leaders from each of the communities.
Goal 5 – Engage communities in climate resilience planning, design and the implementation of community-based climate resilience projects.
Goal 6 – Create a creative story map highlighting the RiSC climate resilience work on campuses and communities in the greater Houston area.

Impacts & Application of Results

NWF uses in-depth interviews and questionnaires to assess program success, including the number of completed nature-based solutions, green infrastructure projects, community members engaged in both the implementation of the projects and through student outreach, goals aligned with the Houston Resilience Strategy, and RiSC Watershed Audits completed. We collect student surveys, community interviews, and an end-of-year focus group with teachers and project partners.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

RiSC focuses on Title I schools in the Greater Houston area and our outdoor projects occur on these school campuses, in the communities surrounding each school, and along local waterways and bayous, including Galveston Bay.

Projects Map

Map available upon request.

Supplemental Photos/Graphics (Optional):

Please see Attachments labeled A & B. Note: RiSC was formerly known as "Student Climate Resilience Ambassadors – SCRA". All references to that program should be considered as the same as RiSC. We are officially rebranding in fall 2023.

SECTION FIVE: BUDGET DETAILS

	BUDGET CATEGORIES:	Budget
a.	Personnel/Salary	$82,269
b.	Fringe Benefits	$24,624
c.	Travel	
d.	Supplies	
e.	Equipment	
f.	Contractual	

g.	Construction	
h.	Other*	$68,100
i.	Total Direct Costs (Sum a - h)	174,993
j.	Indirect Costs	25,007
k.	Total (Sum of i & j)	200,000

*Other: If Budget Category "Other" is greater than $25,000 or more than 10% of budget total, identify the main constituents:
SubGrants to Partners
Houston Parks and Rec $5,000
Galveston Bay Foundation $2,800
Bayou City Waterkeeper $2,500
Nature Heritage Society $7,000
TGB Partner in class presentations $9,600

Project Grants
School Grants Year 1 RiSC Program Projects $12,000
School Grants Year 2 RiSC Schools $4,000
School Grants Year 2 Schools for Community Projects $10,000

Participants Support Costs (Stipends/Honorarium/Participants Travel costs)
Teacher Stipends workshop 1 $2,400
Teacher Stipends workshop 2 $2,400
Teacher Stipends RiSC $2,400
Teacher LEAD Stipends RiSC $8,000

Indirect Cost Agreement
Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 15.65% of (check one):
☐ salary and fringe benefits
☒ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☒ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

Please see Attached Letter.

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

Public Education and Awareness (PEA) and Stakeholder and Partner Outreach (SPO)

Project Name:

Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer:

Promoters of Education, Awareness & Community Engagement

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Diane Olmos-Guzman
Project Representative Phone	832-419-1001
Project Representative Email	Peace1001.newadventures@gmail.com

Amount Requested:

$115,364.00

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$115,364.00
FY 2026 (09/01/2025-08/31/2026)	$115,364.00
FY 2027 (09/01/2026-05/31/2027)	$76,909.00
Total	$307,637.00

Total Project Cost:

$307,637.00

Is this an estimate? ☐

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

2.5 years

Project Urgency:

P.E.A.C.E. wasn't awarded a 2023 Port of Houston Authority Community grant to continue Meaningful Watershed Environmental Experience (MWEE) educational programs at East End public schools within the Houston Ship Channel area. Our urgency is to move into Phase 2 of the MWEE program with high school students from underserved Hispanic communities. These students would receive an opportunity to pursue STEM Environmental Studies careers with dual college credit courses and workforce training at Houston Community College Southeast Campus. The control group of students would graduate from high school with an Ecological Ambassadors certificate of completion.

Leveraging (in-kind and/or cash):

PEACE -- PROMOTERS OF EDUCATION, AWARENESS & COMMUNITY ENGAGEMENT ANNUAL BUDGET FOR YEAR ONE OF SEAS PROGRAM

		Variance
Income		
Contributions	$5,000.00	$ -
Grants	$35,000.00	$ -
In-Kind	$3,000.00	$ 2,000.00
	$43,000.00	**2,000.00**

***Anticipated Funding**

Partners and Their Roles:

Partnerships include:

1. Houston Community College Southeast Campus in the role of providing a venue for dual credit classes, workshops, and community events.

2. League of United Latin American Citizens East End Council 22503 for In-Kind community outreach and stewardship support

3. Blackcat GIS & Biological, LLC for data analytics and GIS analyses

4. P.E.A.C.E.—Promoters of Education, Awareness & Community Engagement for a 501(c)(3) nonprofit status

5. GO Strategic Consulting & Management for Projects Management and Contract Compliance professional services.

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

Galveston Bay Plan, 2nd Edition References
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/

PEACE implementation Action Plan will enhance environmental protection awareness that is meaningful for public engagement and a student control group known as the Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers.

PEACE will recruit and implement a SEAs group for a real-world research project. Student recruitment will be from local high schools within the East End of Houston, Ship Channel area. SEAs students will be in stewardship training for expressing the student voice, while preparing for a STEM career in Environmental studies and the Green Industry. Students will engage in a fact-finding mission to collect information from companies along the Houston/Galveston Ship Channels. They will research companies, plants, and industries collecting International Standards Organization (ISO 14001) Environmental Management Systems and EPA policies and procedures. Additionally, students will receive an Environmental Literacy and Critical Thinking course, and Project Management workforce training.

To assist with data collection and analysis, Blackcat GIS, LLC will assist students with their project analysis. Blackcat GIS, LLC will provide workshops in environmental literacy and critical thinking for the project analysis to become accurate public information. PEACE will involve the Sustainable Ecological Ambassadors (SEAs) at public forums, community events, and adult education at Houston Community College Southeast. PEACE programs management will provide awareness events about public perception assessments from student research. Written material and other marketing collateral will be developed for public forums, and community workshops in Spanish and English.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

PEA 1: PEACE will develop a Houston East End community collaborative for support of the Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers program. This collaborative will be the intermediary to engage the public in a dialog of key public issues and increase public awareness of GBEP existing potential implementers. PEACE will aim at closing the gap in public awareness and for inclusion of the Hispanic Community with the following partnerships.

1. Houston Community College Southeast Campus in the role of providing a venue for dual credit classes, workshops, and community events.

2. League of United Latin American Citizens East End Council 22503 for community outreach and stewardship support to the Hispanic Community needing additional education and awareness programs.

3. Blackcat GIS & Biological, LLC for data analytics, GIS analyses, and student training. Blackcat GIS will assist with a student research project, which will be documented for public information and perception.

4. Public perception will be measured with communications tools and public relations best practice compiled into a database designed and developed by Blackcat GIS, LLC.

5. District "I" Decontamination Unit is a partnership that conducts East End Community Cleanups.

PEA 2: PEACE will engage the Hispanic East End Community with an action plan addressing specific goals determined from a gap-analysis. As a priority, the Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers program will assist with public engagement and public relations. PEACE will also work with Houston Community College to develop an adult-learning certification in environmental protection and conservation.

PEA 3: Rooted at the core of the Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers program, PEACE aims to develop high school students to become ambassadors of environmental protection and conservation, while working towards a STEM degree in Environmental studies or a Workforce Training program within the Green Industry. SEAs will conduct a real-world project and introduce it for public perspective value to change behavior and attitudes for positive influence in lasting success in environmental stewardship. PEACE will promote positive influence with state and local leadership for environmental literacy and critical thinking in public education. PEACE will document key performance indicator to closing the gap for community stewardship and for Latino enrollment STEM careers.

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☐ WSQ (Ensure Safe Human and Aquatic Life Use)

☐ NRU (Protect and Sustain Living Resources)

☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

PEACE INCLUDES SPO-1. To increase stakeholders' and partners' sense of responsibility in the health of Galveston Bay by promoting new and existing stewardship and volunteer opportunities for local watersheds by increasing the number of events and workshops about plastic debris in watersheds.

The PEACE Sustainable Ecological Ambassadors (SEAs) for Stewardship & STEM Careers program will increase partnerships for public engagement, in which, we will promote new and existing stewardship and volunteer opportunities in the watershed. Events include watershed cleanups with the District "I" Decontamination Unit, and PEACE will support the GBEP partnership programs and campaigns to connect with the East End Hispanic Community.

PEACE will continue to build upon its partnerships and work with existing relationships, new community groups, and community leaders to enhance community support for the GBEP priorities.

Other Plans Implemented:

[Texas Coastal Management Plan, Texas Coastal Resiliency Master Plan, Texas Wetland Conservation Plan, GCJV Conservation Plans, etc.]

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☒ Place based and immersive programing (K-12)
☒ Conservation and environmental workforce training

☒ Continuation or expansion of established education, outreach, or engagement programs
☒ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

PEACE community impact projects include goals for reducing plastic debris from flowing into Houston watersheds.

An attachment by email includes the photos from the latest project completed by PEACE, "A-Heart-4-Recycling." A community collaboration included the City of Houston, Department of Neighborhoods, Houston Community College Southeast, Houston Parks & Recreation Department, State Representative District 145 Christina Morales, the Morales Foundation, Councilman Robert Gallegos, District "I," HISD Yolanda B. Navarro Middle School, MWEE's Club afterschool program, and the District "I" Decontamination Unit.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

YES. PEACE includes working with Title 1 Schools and partners with Houston Community College, a Hispanic Serving Educational Institute.

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

PEACE partners with the Greater Houston Coalition for Justice to inform and educate the community, educators, parents, and students about educational civil rights and the inclusion of diversity.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

PEACE proposes to develop a new quality education plan that provides educator training in community stewardship, environmental literacy, critical thinking, and will provide support for the core group of high school students to enroll in dual credit college courses, while in high school to prepare for ecological careers or workforce training within the green industry. This program will be measured for long-term results with high school student enrollment into STEM careers after high school graduation.

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

The PEACE Sustainable Ecological Ambassadors (SEAs) program for Stewardship & STEM Careers aims to develop high school students to become ambassadors of environmental protection and conservation. These students will be prepared to acquire college credit from dual credit courses while in high school. Beginning in the 9th grade year, students will be recruited and selected for the program from a core group that will be offered the opportunity to major in STEM careers, in particular, Environmental studies. Subjects like Math and Science are dual credit courses necessary for STEM careers that will be offered with tutor assistance as part of action plan 2 of 2, Support Public Education and Awareness Initiative.

PEACE offers a well-rooted community Sustainable Ecological Ambassadors (SEAs) program that aims to develop and put into practice the high school students as environmental protection and conservation ambassadors. The SEAs will learn workforce training consisting of project management to conduct a real-world project. The SEAs student ambassadors will conduct a business practice inquiry with the knowledge of ISO 14001 business related standards of Environmental Management Systems. Students will conduct and produce their research findings of companies and industries in and along the Houston Ship Channel. The project results of the student research study will be presented for public perspective value. Blackcat GIS, LLC will assist the students with their project and will provide data compilation expertise to manage well-documented project results. Blackcat will provide workshops for students and adults about the data. Factual project results and GBEP information will be used at public forums and in public relations and marketing materials.

PEACE will also address priority SPO-1 goal to support existing stewardship programs or develop new volunteer opportunities to achieve positive behavior and attitudes change for lasting environmental stewardship. Key performance indicators identified will be used to add value, provide positive influence, and to promote environmental literacy and critical thinking in public education.

PEACE will manage the Sustainable Ecological Ambassadors (SEAs) program for Stewardship & STEM Careers with the goals and objective from the Public Education and Awareness Action Plans PEA 1, 2, and 3. Further, PEACE will adapt and align to SPO-1 goals and objectives for increasing public awareness about the health of Galveston Bay and watersheds.

Documentation and reporting of Key Performance Indicators will assist in closing the gaps in education. PEACE will assist the GBEP to create new inroads for relationships with the Latino Community and to increase Latino student enrollment in STEM Careers Environmental studies and Green industry workforce training.

PEACE SCOPE OF WORK:

1. Develop the PEACE Action Plan with PEA-1, PEA-2, PEA-3 and SPO-1 goals.
2. Design, develop, and implement program.
3. Recruit and select a core group of 15, 9th grade high school students from Title 1 Schools, Hispanic Serving Educational Institutions in Houston East End.
4. Develop a student tracking system through high school graduation.
5. Preparation of progress reports and best practice methods will be developed to measure and document lessons learned and Key Performance Indicators in a repository manner.
6. Develop the Sustainable Ecological Ambassadors (SEAs) research project and communication methods and tools to document results.

7. Prepare Student stewardship activities to activate the student voice opportunities in the community and to support GBEP community relations.

Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

The students will be recruited from East End area public high schools located near the Houston Ship Channel. PEACE central office is in the East End for quick access to schools and collaborators.

Projects Map

[Appendix "A"] Emailed

Supplemental Photos/Graphics (Optional):

[Appendix "B"] Emailed

SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$50,000.00
b.	Fringe Benefits	0
c.	Travel/Student Transportation	$4,000.00
d.	Supplies	$4,500.00
e.	Equipment	0
f.	Contractual	$32,200.00
g.	Construction	0
h.	Other Instructors/Tutors	$20,160.00
i.	Total Direct Costs (Sum a - h)	$110,860.00
j.	Indirect Costs	$4,504.00
k.	Total (Sum of i & j)	$115,364.00

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

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 10% of (check one):

☐ salary and fringe benefits
☐ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☒ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

[Insert Indirect Cost Agreement or Attach as an Appendix if Applicable]

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov

Galveston Bay Estuary Program
FY 2025 PPE Project Proposal

Please complete the proposal form and submit to the appropriate Subcommittee Coordinator (end of form) by August 4, 2023. No late submittals will be considered for funding.

SECTION ONE: GENERAL INFORMATION

Subcommittee:

PPE

Project Name:

Green Infrastructure HS Intern Program Expansion and Learn Now Green Infrastructure Courses

Project Previously Funded by GBEP? Yes ☐ No ☒

Lead Implementer:

Texas A&M AgriLife

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

* If lead implementer not listed above, the proposing party will need to partner with an interlocal/interagency entity to be selected for funding. Please reach out to GBEP staff with any questions.

Contact Information:

Project Representative Name	Christie Taylor
Project Representative Phone	9793994009
Project Representative Email	Christina.taylor@ag.tamu.edu

Amount Requested:

$138,023

Is the project scalable? ☒

Amount Requested per year (if applicable):

FY 2025 (09/01/2024-08/31/2025)	$78,882.00
FY 2026 (09/01/2025-08/31/2026)	$59,201.00
FY 2027 (09/01/2026-05/31/2027)	$0.00
Total	$138,023.00

Total Project Cost:

$167,486

Is this an estimate? ☒

Project Duration (beginning no earlier than September 1, 2024 – 2.5 year maximum project length):

24 months September 2024 – August 2026

Project Urgency:

EPA funding will be ending in December 2024, and this additional funding will allow the program to continue to the end of the school year 2024-25 and add the 2025-26 school year adding up to 30 more students to the program. Online courses will be able to reach many more students.

Leveraging (in-kind and/or cash):

$23,763 salary & fringe covered by EPA grant and CLCWA contract secured.
$4,300 in supplies covered by NOAA Planet Stewards grant secured.
Support from Exploration Green Conservancy Education Committee secured
Potential fees collected from online course creation to continue future course creation.

Partners and Their Roles:

CLCWA and Exploration Green provide the nursery site location for the interns to work. Provide plants for individual projects and allow us to tour the site.
Exploration Green Education Committee promotion on website and with other school district contacts, and location/facilities support.
Galveston Bay Foundation is one of our current field trip sites; we've been working with Natasha to give tours of the green infrastructure on-site and talk about rainwater harvesting. We also purchase rain barrel kits from GBF for students' individual projects.
League City Parks Department, we tour some of the green infrastructure demonstration projects in their parks and help with maintenance by picking up trash and adding plants as necessary. They also provide space for some of our outreach to teachers and school districts.
Green Star Wetland Farms providing tours of the commercial nursery location and providing education on plants and propagation styles.
AgriLife Digital Learning team in College Station to do the video editing, online course creation, outreach materials, course completion certificates and handouts.

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

Galveston Bay Plan, 2nd Edition References
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/

This program promotes students working in their communities, schools and watersheds to complete their individual projects. It increases their connection to the watershed by seeing how different practices work together to accomplish the goals of water quality improvement and flood reduction. Interns support local events by hosting planting events and stewardship activities at Exploration Green.
This program is designed for 8th- 12th grade students in public, private and homeschool curriculum. Most of the students come from local school districts including title 1 schools.

Galveston Bay Plan Priority Area Actions Addressed:

Plan Priority 3: Engage Communities

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

Plan Priority Area Actions Detail:

PEA 3: Promote HS student engagement in career development programs in green infrastructure. Survey students as to the amount of green infrastructure knowledge pre- and post- program and discuss any gaps they see in their current studies. Working with local educators and after school groups to promote high school intern program. Create new courses with Texas A&M AgriLife Extension digital learning to increase the number of students that we can reach with the material. Potential to translate courses for other language groups in the future.

SPO1: Internship program has stewardship components built into the program as hands-on learning experiences and field trips. Students have opportunities to maintenance various green infrastructure practices and volunteer with local stewardship programs.

SPO 2: Students help to promote events that foster stakeholder engagement like planting events, invasive species removal events, and prepare materials for workshops and promotional events (such as native seed packets, seed balls, etc.)

Does the project implement any other Galveston Bay Plan Priority Area Actions, or the other Subcommittee priorities?

☒ WSQ (Ensure Safe Human and Aquatic Life Use)
☐ NRU (Protect and Sustain Living Resources)
☐ M&R (Inform Science-based Decision Making)

Other Subcommittee Detail:

Green infrastructure practice and soil health education and training as a way to improve water quality and water quantity management.
Activities that support watershed-based plans.

Other Plans Implemented:

EPA Environmental Literacy Plan for Green Infrastructure Career Development in grades 9-12.

SECTION THREE: SUBCOMMITTEE PRIORITIES

PPE Subcommittee Identified Priorities
Proposals must address one or more of the following actions:

☐ Place based and immersive programing (K-12)
☒ Conservation and environmental workforce training
☒ Continuation or expansion of established education, outreach, or engagement programs
☐ Adult engagement in science literacy focused on the Galveston Bay estuary and watershed

Subcommittee Priority Detail:

Conservation and environmental workforce training this program is designed as a career development introduction to the types of jobs and training needed to work in green infrastructure and resource management. The program provides stipend that students can use to further their education or take the NGICP (National Green Infrastructure Certification Program) upon graduation from high school. Continuation and expansion of established program. To date the program has had 13 participants from 7 schools in at least 3 districts representing 5 sub watersheds of Galveston Bay. We are entering our second year of programing expecting 20 more students. The increased funding would potentially reach 30 more students in person and many more virtually with the creation of the online courses.

Applications that focus on EJ/DEI will be prioritized higher by the PPE subcommittee. How does the Project Address Issues/Geographies Related to Environmental Justice or Diversity, Equity, and Inclusion?

Tools: June 26, July 28 – 320/state
EJ, CEJST, Title I Schools, Hispanic Serving Universities/Institutes

All the surrounding school districts Houston, Pasedena, Laporte, CCISD, Dickinson, Santa FE, Hitchcock, Alvin, and Pearland including Title 1 schools.

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

☒ Yes

☐ No

TBD by applications received from students.

SECTION FOUR: PROPOSAL DETAILS

Project Summary:

The objectives of this project are to engage high school students in green infrastructure projects to build job skills and interest in green industry jobs through hands-on experiences in the internship program. Additionally, we want to reach more students through the online course options that can be self-sustaining and extend the length and reach of the program.

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

This proposed project would build on the existing Green Infrastructure High School Intern Program, currently funded through EPA until December 2024. Funding request would allow for

1. HS intern support for another 1-3 cohorts (up to 30 students) from local area high schools. Support includes field trips to local GI sites like GBF offices, Ghirardi Family Watersmart Park, Green Star Wetland Farms, Exploration Green, League City Nature Center.
2. Nursery supplies (hand tools, field notebooks, project supplies, and soil) for nursery work at Exploration Green. We have supplemental funds for some of these purchases from other grant sources, such as the NOAA Planet Stewards grant and Exploration Green Conservancy partnership.
3. 2-3 Learn Now online courses created through AgriLife Digital Education unit (example: Learn Now: Raingardens for High School Career Development Program). Course creation is the largest part of the budget; this includes up to 3 hours of content creation, a total of 20 minutes of edited video demonstrations, graphic design, handouts of course materials, and course completion certificates.
4. Continuing Education Resources in the form of a monthly newsletter for program alumni. A total of 12-24 newsletters are to be distributed to 30-plus students.
5. Subsidized fees for 30 students to complete the online course and completion of a green infrastructure certification course for AgriLife staff working with students.
6. Partial salary for 2 staff.

Scope of Work and Timeline

Task 1: Continuation of GIFT High School Internship Program through Cohorts 6-9.

1. Provide copies of outreach materials (fliers, social media links, weblinks, application, etc.)
   Due date: September 27, 2024
2. Provide map of student participation/ project location by sub watershed in Lower Galveston Bay.
   Due date: June 30, 2026
3. Provide pre- and post- program surveys after each cohort.
   Due date: semi- quarterly until June 30, 2026.
4. Photos from field trips, projects, nursery activities and presentations submitted quarterly beginning December 15, 2024.
   Due date June 15, 2026

Task 2: Online Course creation of three 1-hour courses working with AgriLife Digital Education Team.

1. Contract and timeline established with digital education.
   Due date: September 16, 2024
2. Course 1 to be created and launched.
   Due date: February 3, 2025
3. Course 2 to be created and launched.
   Due date: July 31, 2025
4. Course 3 to be created and launched.
   Due date: February 18, 2026

Task 3: Outreach Plan

1. Creation of a monthly e-newsletter for program alumni the details upcoming continuing education opportunities, promotes NGICP course completion and workforce training, and other volunteer opportunities specifically to those students who have participated in the program.
   Due date: November 12, 2024
2. Provide copies of fliers, social media posts, and email blast lists for outreach to launch new online courses beginning February 15, 2024, and continuing quarterly until end of contract.
   Due date: July 15, 2026.
3. Promote HS internship program and online courses through other outreach activities such as GIFT workshops, EcoFest, Earth Day events, etc.
   Due date: quarterly until July 14, 2026
4. Subsidize one online course completion for 30 students to get course feedback and promotion. Report feedback quarterly beginning in March 2025 until the end of the contract.
   Due date: August 15, 2026
5. Present abstract on program results at State of the Bay Symposium or other workshop event.
   Due date: February 13, 2026

Task 4: Reporting

1. Quarterly progress reports on the 10th day after each quarter beginning December 10, 2024, and continuing until the end of the contract, August 10, 2026.
   Due date: December 10, March 10, June 10, Sept. 10
2. Draft final report
   Due date: August 14, 2026
3. Final report and grant closeout form
   Due date: August 31, 2026

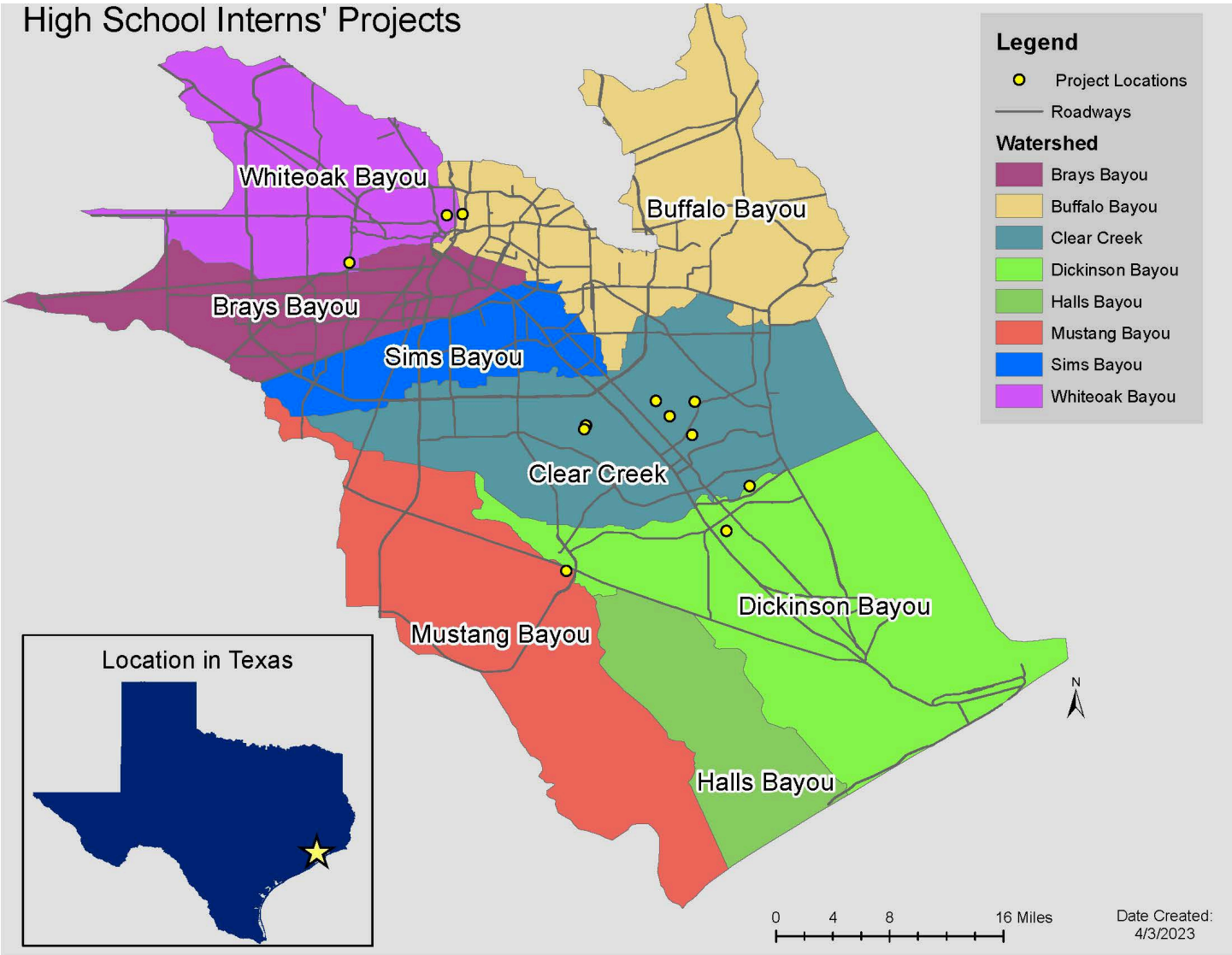
Latitude/Longitude (Optional):

[degrees, minutes, and seconds format]

Location:

To date student particpants and projects are located on the west side of Galveston Bay including Clear Creek, Dickinson, Mustang, White Oak, Buffalo, and Armand Bayou Watersheds.

Projects Map



Supplemental Photos/Graphics (Optional):


Rain Garden


What did we do?


VOTING is

SECTION FIVE: BUDGET DETAILS

BUDGET CATEGORIES:		Budget
a.	Personnel/Salary	$35,649
b.	Fringe Benefits	$14,923
c.	Travel	$0
d.	Supplies	$1,850
e.	Equipment	$0
f.	Contractual	$0
g.	Construction	$0
h.	Other*	$57,120
i.	Total Direct Costs (Sum a - h)	$109,542
j.	Indirect Costs	$28,481
k.	Total (Sum of i & j)	$138,023

*Other: If Budget Category "Other" is greater than $25,000 or more than 10% of budget total, identify the main constituents: 3- 1hr interactive online courses with a maximum of 6 handouts and completion certificates (6 weeks time) created, hosted, fee collection and management, maximum of 30 minutes of edited video clips (up to 6 six days for filming) for course content. Subsidize one Learn Now course for a maximum of 30 students.

Indirect Cost Agreement

Indirect Cost Reimbursable Rate: The reimbursable rate for this Contract is 26% of (check one):

☐ salary and fringe benefits
☒ modified total direct costs
☐ other direct costs base
If other direct cost base, identify:

This rate is less than or equal to (check one):
☒ Predetermined Rate—an audited rate that is not subject to adjustment.
☐ Negotiated Predetermined Rate—an experienced-based predetermined rate agreed to by Performing Party and TCEQ. This rate is not subject to adjustment.
☐ Default rate—a standard rate of ten percent of salary/wages may be used in lieu of determining the actual indirect costs of the service.

Please Submit Project Proposals (Microsoft Word Only – No PDFs) by August 4, 2023 to:

WSQ Subcommittee
Christian.Rines@tceq.texas.gov

NRU Subcommittee
Lindsey.Lippert@tceq.texas.gov

PPE Subcommittee
Kari.Howard@tceq.texas.gov

M&R Subcommittee
Cassandra.Taylor@tceq.texas.gov