

CLEAN COAST TEXAS FINAL REPORT YEARS 1 & 2

August 2022 | Report: 2022-01



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THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT
TEXAS STATE UNIVERSITY



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TEXAS STATE UNIVERSITY

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LIST OF ACRONYMS

CCT	Clean Coast Texas
CCTC	Clean Coast Texas Collaborative
CDBG	Community Development Block Grant
CDBG-MIT	Community Development Block Grant – Mitigation
CHARM	Community Health and Resource Management
CRMP	Coastal Resiliency Master Plan
CZB	Coastal Zone Boundary
DQO	Data Quality Objectives
FAST	Flow Assessment and Stormwater Technology
GIFT	Green Infrastructure for Texas
GLO	General Land Office
ISD	Independent School District
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NPS	Nonpoint Source Pollution
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QPR	Quarterly Progress Reports
SSM	Sustainable Stormwater Design Manuals
TCC	Texas Coastal Collaborative
TMDL	Total Maximum Daily Load
TST	Texas Stream Team
TXST	Texas State University
WPP	Watershed Protection Plan



ARANSAS BAY, TEXAS ©RON SCUBADIVER, FLICKR

EXECUTIVE SUMMARY

With funding made possible from the Gulf of Mexico Energy Security Act of 2006 (GOMESA) through grant Cycle #25 of Texas Coastal Management Program, Texas State University received a \$1,000,000 Project of Special Merit award to establish the Texas Coastal Collaborative. Now known as the Clean Coast Texas Collaborative, the goal of this program has been defined as “the effective delivery of a Texas Coastal NPS Pollution Control Program initiative at the nexus of water quality, hazard mitigation, and resiliency that builds stronger communities, healthier fisheries and supports ecotourism throughout the Gulf Coast.”

The Clean Coast Texas Collaborative directs a dynamic team of professionals to engage with coastal communities across political and jurisdictional boundaries toward the advancement of environmental outreach and education, comprehensive planning, local/regional policy development, green stormwater infrastructure projects, floodplain management, on-site sewage facility maintenance and funding strategies to support the adoption of Texas Coastal Nonpoint Source (NPS) Pollution Control Program priorities. More information and resources developed for this program can be found on the project website: <https://cleancoast.texas.gov/>.

The Texas General Land Office serves as lead state agency for the Clean Coast Texas Collaborative, which began implementation in January 2021. Program efforts have been spearheaded by Texas State University – The Meadows Center for Water and the Environment in collaboration with Texas A&M AgriLife - Community Watershed Partners, Texas Sea Grant and Doucet and Associates Inc. Extensive reconnaissance and targeted community engagements in 2021 yielded partnership agreements with four coastal bend communities in a wave of grassroots support for the restoration of Little Bay.

Providing more than just technical services, the Clean Coast Texas Collaborative prioritizes relationships, establishing trust with local leaders and key stakeholders by working one-on-one with communities to identify local priorities and opportunities to generate highly visible projects that achieve measurable water quality, flood mitigation and habitat enhancement benefits with findings and approaches that can be easily translated to other communities.

Clean Coast Texas, Years 1 and 2 By the Numbers:

- Over **120 community interactions** by Clean Coast Texas Collaborative team members.
- **17 Clean Coast Texas community workshops and events**. Efforts spanned from training new citizen scientists to supporting coastal communities in hazard mitigation and resiliency planning with green stormwater infrastructure. Highlighted by the successful pilot of a GIS-based Flow Assessment and Stormwater Technology (FAST) workshop in Kingsville, TX on August 10, 2022.
- **1,967 event attendees** including 763 participants for the Clean Coast Texas Lunch and Learn series launched in 2021.
- **4 Comprehensive Plans supported** including the City of Hitchcock, City of Rockport, Willacy County, and Ingleside on the Bay.
- **4 Memorandums of Agreement formalizing Clean Coast Texas partnerships** with Aransas County, City of Rockport, Town of Fulton, and the Aransas County Navigation District. A technical committee has been established to consider updates to local drainage criteria, ordinances, and adoption of Guidance for Sustainable Stormwater Drainage on the Texas Coast



EARLY MORNING IN ROCKPORT, TEXAS ©KIM SMITH, FLICKR

INTRODUCTION

Coastal communities face an elevated risk of habitat loss, storm surge damage, flooding, and water-quality degradation from natural disasters. The Texas Coastal NPS Pollution Control Program recommends that smaller, non-MS4 communities with housing starts exceeding 15 per year serve as the priority group to receive assistance. The Clean Coast Texas Collaborative was established to support communities at the highest risk for ecological and economic loss due to these conditions. These communities often have the motivation but lack the capacity to implement the comprehensive approaches to stormwater management, new development, and public education required to mitigate these hazards. The Clean Coast Texas Collaborative partners with communities to find best-fit solutions to local problems including technical support and funding strategies to revise ordinances and comprehensive plans, optimize OSSF programs, develop outreach efforts and provide incentives for smart growth and sustainable stormwater management.

PROJECT SCOPE AND BACKGROUND

Texas State University led a dynamic team of scientists, educators, engineers, and communication professionals, collectively known as the Clean Coast Texas Collaborative, in a two-year coastwide effort to engage key stakeholders in Texas Coastal NPS target communities. Clean Coast Texas Collaborative team includes The Meadows Center for Water and the Environment, Texas A&M AgriLife – Texas Community and Watershed Partners, Texas Sea Grant, and Doucet and Associates.

The Collaborative team conducted a coastwide survey and applied a scoring matrix to select an initial group of four partner communities (Aransas County, City of Rockport, Town of Fulton, and the Aransas County Navigation District) to receive support and services. These partnerships were formalized first through Memorandums of Understanding and later through revised Memorandums of Agreement to ensure cooperation, clear communication channels and educational opportunities. As a result of sustained engagement by the Clean Coast Texas Collaborative, the four partner communities have begun efforts to consider adoption of the Texas Coastal NPS Pollution Control Program – Guidance for Sustainable Stormwater Drainage on the Texas Coast (also known as the Sustainable Stormwater Manual) as well as updates to local policies and ordinances related to stormwater, drainage, and water quality improvements.

- The Meadows Center utilized an expansive coastal network to administer grant deliverables, facilitate Clean Coast Texas Collaborative programming, build and manage the program website, hire a Coastal Coordinator, and execute citizen science programs including Texas Stream Team Trainings (5), Partner Events (5) and environmental education.
- Texas Community Watershed Partners led a coastwide survey including a regulatory review, partner selection matrix, and community workshops including Green Infrastructure for Texas (GIFT) X 4; GIS-based Community Health and Resource Management (CHARM) X 2; and the Flow Assessment and Stormwater Technology (FAST) program X 1.
- Texas Sea Grant enhanced utility, sustainability, and impact of project deliverables through local comprehensive planning and program facilitation.
- Doucet and Associates provided technical and communication guidance for the Clean Coast Texas Collaborative team, directed engagement with local officials to prepare engineering designs, including 10 community-scale retrofits, develop ordinances, and introductions to the Sustainable Stormwater Manual.

While significant project resources were directed to the four initial partner communities, the Collaborative Team engaged extensively with other coastal communities to lay the groundwork for future partnerships and collaborations.

This project generated highly visible, productive projects with measurable benefits and findings and approaches that can be easily translated to other communities. This universal program laid the groundwork for methods that promote the continued adoption of

- Restoration of coastal natural resources,
- Improved water quality,
- Balance between protection of coastal natural resources and public use of those resources,
- Improved environmental management, and
- Mitigation of coastal erosion

PROJECT TASKS

Task 1 - Data Acquisition and Quality Assurance

OBJECTIVE

TXST will document and implement data quality objectives (DQOs) and quality assurance/control (QA/QC) activities that ensure data of known and acceptable quality are used in and generated by this project. Data acquired for this project will be used for planning, modeling and mapping activities undertaken to improve community decision makers' abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the Texas Coastal Zone. Data intended for regulatory purposes will be acquired in accordance with the agency's standards and preferably under an existing Quality Assurance Project Plan (QAPP). Research and data findings will be disseminated to the scientific research community and coastal managers, ensuring the content is visible, accessible, and independently understandable to general users. A Data Sharing Plan will be established for this project by TXST. TXST will ensure adherence to the Data Sharing Plan by all subgrantee(s)/subcontractor(s). An acquired data summary report for the project will be submitted with the Final Report.

• Data to be acquired:

- Geospatial data for CHARM and FAST workshops
- TCEQ Clean Rivers Program –Water Quality
- Existing stormwater manuals and criteria from coastal region communities
- Watershed Protection Plans (WPP)
 - Monitoring data
 - Outreach efforts
 - Project Plans
- Total Maximum Daily Load (TMDL) reports
 - Monitoring data
 - Outreach efforts
 - Project Plans
- Historic NPS outreach efforts by State of Texas
- Coastal Resiliency Master Plan
- Texas Stream Team /Citizen Science Data

• Deliverables:

- List of data acquired
- Documentation of DQOs and QA/QC protocol for acquired data (Quarter 1)
- Draft Data Sharing Plan (Quarter 2)
- Final Data Sharing Plan (Quarter 3)

Task 2 - Candidate Selection

OBJECTIVE

AgriLife will select four coastal communities to work with.

AgriLife will begin the selection process by looking at stakeholder groups in the 11 target communities and by disseminating a CCTC information packet including a press release, survey and the Coastal SSM developed by the Coastal Zone Program.

Based on the survey results, AgriLife will conduct a regulatory review of six communities and meet with decision makers in those communities to complete a post-survey follow up.

Based on these meetings, AgriLife will create a matrix to select the top four communities that show the most interest and greatest likelihood of success to begin working with.

• Deliverables

- List of stakeholders identified and CCT contact database
- Draft survey and matrix for 11 target communities
- Dissemination of CCT informational packet to 11 target communities
- CCT website and co-branding campaign completed
- Survey results and list of top 4 candidate communities
- Final decision matrix
- Notification of the 4 communities selected

Task 3 - Community Workshops

OBJECTIVE

AgriLife will conduct a series of education and outreach workshops with the four selected communities in an approach that will be easily transferrable to other communities.

Prior to workshop initiation, AgriLife will develop a contact database to track strategic outreach and create a CCT website with branding.

Then, the entire CCTC will conduct 4-6 GIFT workshops on SSM, 4 Texas Stream Team trainings, 4-6 Texas Stream Team partner events with focus on multicultural education for youth and/or adults (ex. H2O-Headwaters to Oceans) and engage and support watershed-based groups/meetings/events with ISDs, counties, etc. on SSM.

CCT will also complete four CHARM workshops (reduced to 2 CHARM per approval from GLO), one FAST workshop and host two to three (as needed) highly directed meetings with key stakeholders in the selected communities to achieve comprehensive plans and resolution/ordinance/SSM adoption goals.

• Deliverables

- Notes from Workshops - GIFT (4-6), CHARM (4), FAST (1)
- Texas Stream Team Training (4);
- Texas Stream Team Partner Events (4-6)
- Notes from meetings with key stakeholders (Quarters 3-8)

Task 4 - Target Community Planning and Adoption of Texas Coastal NPS Program Priorities

OBJECTIVE

After the workshops, CCTC partners will begin directed efforts to create a no-cost resolution in which the four selected communities pledge support of the CCTC. Focus will be on cities, counties, ISDs, NGOs and local media.

CCTC will also start working with the communities to develop SSMs for adoption consideration. This effort will be highly directed by stakeholder meetings and the GIFT, CHARM and FAST workshop input.

CCTC partners will engage with three communities to consider/adopt ordinances supporting the Coastal NPS Program Management Measures CCTC will work directly with community leaders to draft the ordinances.

Additionally, aided by the GIFT, CHARM and FAST workshop input, CCTC partners will engage with 2-4 communities to develop comprehensive plans and prepare 10 community scale retrofits plans (schematic, cost, funding plans).

• Deliverables

- Adoption of no-cost resolutions by 4 Target Communities and supporting municipalities/ organizations
- Notification of SSM consideration (all or partial) by 4 Target Communities
- Notification of Ordinance consideration by 3 Target Communities
- Results from comprehensive planning undertaken by 2-4 Target Communities
- 10 Community Scale Retrofit Plans (includes schematic design, construction cost, funding plan)

Task 5 - Coordination with the GLO's Coastal NPS Program

OBJECTIVE

TXST will provide technical and fiscal oversight of the staff and/or subgrantee(s)/ subcontractor(s) to ensure Tasks and Deliverables are acceptable and completed as scheduled and within budget. Project oversight status will be provided to GLO with quarterly progress reports (QPRs).

TXST will hire a Coastal Coordinator to serve as the primary point of contact for the GLO Project Manager and CCTC partner organizations and communities. The Coastal Coordinator will ensure completion of all project deliverables and report to the Director of Watershed Services.

TXST will participate in monthly conference calls with the GLO Contract Manager and CCTC partners to discuss project status and address any project concerns.

TXST will also coordinate Semi-Annual Team meetings with CCTC subgrantee(s)/subcontractor(s). Notes for the calls/meetings will be provided to the GLO Contract Manager within 7 days.

• Deliverables

- Copy of subgrantee(s)/subcontractor(s) contracts
- Notification of Hire of Full Time Coastal Coordinator
- Monthly Conference Call notes (Monthly X 24)
- Semi-Annual CCTC Team Meeting notes (Semi-annual X 4)



ARANSAS PASS @DANIEL JAMES, FLICKR

Task 6 – Project Monitoring & Reporting

OBJECTIVE

TXST will produce a Final Report summarizing all activities completed and conclusions reached during the project

The Final Report will describe project activities and identify and discuss the extent to which project goals and purposes are achieved, and the amount of funds actually spent on the project.

The Final Report will emphasize successes, failures, lessons learned, and include acquired water quality data, retrofit plans and estimated NPS pollutant load reductions.

The Final Report will summarize all the Task Reports in either the text or as appendices

• Deliverables

- Quarterly progress reports and requests for reimbursement
- Draft final report

RESULTS AND FINDINGS

Task 1 - Data Acquisition and Quality Assurance

- **TXST:** List of data acquired
 - Geospatial data for CHARM and FAST workshops
 - TCEQ Clean Rivers Program –Water Quality
 - Existing stormwater manuals and criteria from coastal region communities
 - Watershed Protection Plans (WPP)
 - Monitoring data
 - Outreach efforts
 - Project Plans
 - Total Maximum Daily Load (TMDL) reports
 - Monitoring data
 - Outreach efforts
 - Project Plans
 - Historic NPS outreach efforts by State of Texas
 - Coastal Resiliency Master Plan
 - Texas Stream Team /Citizen Science Data
- **TXST:** Documentation of DQOs and QA/QC protocol for acquired data (Quarter 1)
- **TXST:** Draft Data Sharing Plan (Quarter 2)
- **TXST:** Final Data Sharing Plan (Quarter 3)

Task 1 has been fully executed for the project period as of June 23,2021.

The first deliverable, a list of data acquired, was submitted by TXST on March 1, 2021. Second, documentation of DQCs and QA/QC for acquired data were obtained and used to construct a draft Quality Assurance Project Plan document (deliverable 3), which was submitted for GLO review on April 6, 2021. The QAAP, which including the Data Sharing Plan (Section B) was submitted for GLO signatures on June 23, 2021. All deliverables are available in Appendix A – Task 1.

Task 2 - Candidate Selection

- **ALL (list various workshops/meetings/etc.):** conduct a series of education and outreach workshops with the four selected communities in an approach that will be easily transferrable to other communities.
- **AgriLife (Matrix)/TXST (Contact Database):** contact database to track strategic outreach
- **TXST:** create a TCC website with branding
- Then, the entire TCC group will conduct 4-6 GIFT workshops on SSM, 4 Texas Stream Team trainings, 4-6 Texas Stream Team partner events with focus on multicultural education for youth and/or adults (ex. H2O-Headwaters to Oceans) and engage and support watershed-based groups/meetings/events with ISDs, counties, etc. on SSM. **ALL**
- CCTC will also complete four CHARM workshops, one FAST workshop and host two to three (as

needed) highly directed meetings with key stakeholders in the selected communities to achieve comprehensive plans and resolution/ordinance/SSM adoption goals **AgriLife**

As of July 29, 2021, Task 2 has been completed.

Deliverable 1, [a list of stakeholders](#), was compiled by the CCTC and GLO and submitted on March 1, 2021. Deliverable 2, [draft survey](#) and [draft matrix](#) were submitted on March 31, 2021, and were then under further refinement for distribution with Clean Coast Texas informational packet. Deliverable 3, [Dissemination of CCTC informational packet](#) to 11 target communities – 3rd edition of Sustainable Stormwater Manual is now available [online](#) and 100 copies were printed and 100 thumb drives with a digital version of the manual were purchased. CCT informational packets were mailed to 84 stakeholders in the 11 target communities. Deliverable 3 was completed by June 20, 2021. Deliverable 4, the CCTC website and co-branding campaign – The Clean Coast Texas website, www.cleancoast.texas.gov hosted by the GLO has been made live. Though the website is complete, the maintenance is ongoing.

Survey results and a list of the top 4 candidate communities (Deliverable 5) were completed by June 30, 2021. The survey, promoted by an [email campaign](#), received a total of 60 responses. Based on the responses, Texas Community Watershed Partners conducted a [regulatory review](#), which explored demographic changes, planning initiatives, relevant organizations, CHARM or GIFT passed or planned workshop events, relevant zoning and ordinances, CDBG activities, and more. With this information, the final decision matrix (Deliverable 6) was completed by June 30, 2021, and the top 4 candidate communities were selected (Rockport, Fulton, Aransas County, and Aransas County Navigation District) and sent to GLO review. By July 29, 2021, Deliverable 7 was completed as the City of Rockport, the Town of Fulton, Aransas County, and the Aransas County Navigation District were notified via email and physical mail that they were selected to be part of the Clean Coast Texas Program. Appendix B – Task 2 contains the CCTC Contact Database and the Matrix with the survey results and regulatory review.



FIGURE 1. CLEAN COAST TEXAS LAND PAGE: [HTTPS://CLEANCOAST.TEXAS.GOV/](https://cleancoast.texas.gov/).

Task 3 - Community Workshops

- **AgriLife/TXST:** contact database and initial workshops
- **AgriLife:** Notes from Workshops -
 - GIFT (4) - Rockport May 2021, Aransas Pass December 2021, Kleberg County May 2022, Dickinson June 2022.
 - CHARM (2) - Aransas Pass August 2022, and Ingleside on the Bay August 2022
 - FAST (1) - Kingsville August 2022,
- **TXST:** Texas Stream Team Training (4);
- **TXST:** Texas Stream Team Partner Events (4-6)
- **ALL:** Notes from meetings with key stakeholders (Quarters 3-8)

Task 3 has been completed, though some revisions were required for the CHARM workshop deliverables. AgriLife staff developed CHARM models for Rockport, Aransas Pass, Ingleside on the Bay, and Kingsville, and CHARM workshops were held with Aransas Pass and Ingleside on the Bay in August 2022. As described in a July 8, 2022, memo, difficulties caused by the COVID pandemic for outreach and public events made it not possible to complete the final 2 CHARM workshops before the contract expires. TCWP is dedicating staff time to enhance CHARM capabilities to better implement Clean Coast Texas' mission in future cycles and developing an exercise focused on the Guidance for Sustainable and Resiliency Site Design content in Chapter 2 of the "Guidance for Sustainable Stormwater Drainage on the Texas Coast" technical manual to help communities assess conservation design through hands-on exercises. This will result in a new exercise, facilitation guidance, and supporting exercise collateral for participants. This updated workshop format will be delivered in years 3 and 4 of the CCT Collaborative. GLO approved the changes on July 11, 2022.

As shown in Table 1, 14 community workshops/events were held during the project period. The CCTC held 5 Texas Stream Team Training events and 5 Partner Events during the project period (Appendix C – Task 3). Four GIFT workshops were also completed, and two CHARM and one FAST Workshops are scheduled.

Regarding the notes from key stakeholders, CCT recorded over 110 interactions as shown in the "Engagements and meetings with key stakeholders" table in Appendix C – Task 3. Appendix C also contains Events and Attendance tracking as well as detailed Texas Stream Team event tracking.



FIGURE 2. JASON PINCHBACK PRESENTED AT THE GIFT WORKSHOP IN KLEBERG COUNTY ON MAY 12, 2022

TABLE 1. TASK 3: COMMUNITY WORKSHOPS DURING THE PROJECT PERIOD

EVENT NAME	DATE	LOCATION	DOCUMENTS
TST – Training – Riparian Evaluation	October 15, 2020	Virtual	Here
TST – Training – E. coli Bacteria	March 27, 2021	Virtual	Here
GIFT Workshop	May 12, 2021	Rockport	Attendance
TST – Partner Event – Arroyo Watershed Meeting	July 13, 2021	Virtual	Here
TST – Training – Standard Core	August 14, 2021	Palacios	Here
TST – Partner Event – Little Bay Stream Team Meeting	October 9, 2021	Rockport (+ virtual)	Here
TST – Partner Event – Stream Team Fest	October 12-14, 2021	Virtual	Here
TST – Partner Event – Los Fresnos CISD	November 22, 2021	Virtual	Here
GIFT Workshop	December 7, 2021	Aransas Pass (+ virtual)	Attendance
TST – Training – Standard Core	December 18, 2021	Rockport	Here
TST – Partner Event – Little Bay Monitoring Kick-off	December 27, 2021	Rockport	Here
GIFT Workshop	May 12, 2022	Kleberg County	Attendance
TST –Training Probe Core w/ Little Bay	May 14, 2022	Rockport	Here
GIFT Workshop	June 25, 2022	Dickinson	Attendance
CHARM Workshop	August 9, 2022	Ingleside on the Bay	Here
FAST Workshop	August 10, 2022	Kingsville	Here
CHARM Workshop	August 24, 2022	Aransas Pass	Here



FIGURE 3. PROBE CORE WATER QUALITY CITIZEN SCIENTIST TRAINING–LITTE BAY STREAM TEAM HELD AT THE ARANSAS COUNTY NAVIGATION DISTRICT ON MAY 15, 2022.



FIGURE 4. TEXAS STREAM TEAM CORE TRAINING IN PALACIOS, TEXAS ON AUGUST 14, 2021.



FIGURE 5. PARTICIPANTS IDENTIFY AND DISCUSS STORMWATER ISSUES IN KINGSVILLE AT THE FAST WORKSHOP ON AUGUST 10, 2022.

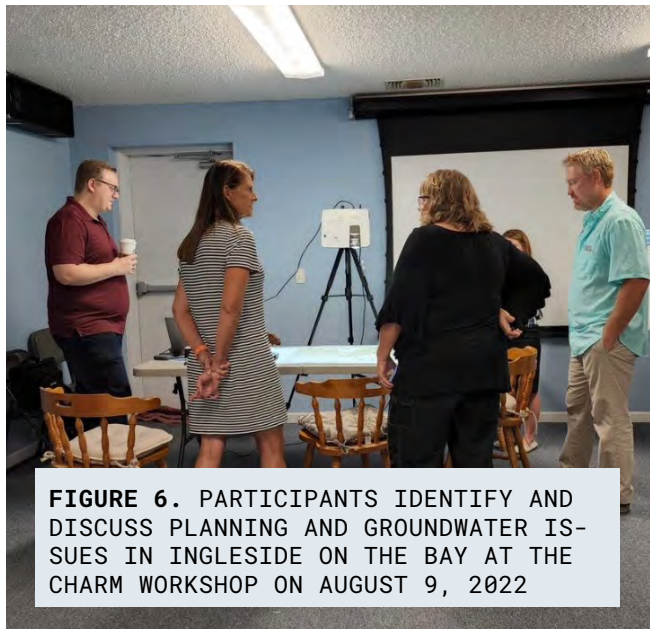


FIGURE 6. PARTICIPANTS IDENTIFY AND DISCUSS PLANNING AND GROUNDWATER ISSUES IN INGLESIDE ON THE BAY AT THE CHARM WORKSHOP ON AUGUST 9, 2022

Task 4 - Target Community Planning and Adoption of Texas Coastal NPS Program Priorities

- Adoption of no-cost resolutions by 4 Target Communities and supporting municipalities/organizations TXST
- Notification of SSM consideration (all or partial) by 4 Target Communities Doucet/TXST
- Notification of Ordinance consideration by 3 Target Communities Doucet/TXST
- Results from comprehensive planning undertaken by 2-4 Target Communities Sea Grant
- **Doucet:** 10 Community Scale Retrofit Plans (includes schematic design, construction cost, funding plan)

Task 4 is complete. Memorandum of Agreements (MOAs) were executed with the Little Bay partner communities that specify roles and responsibilities for the project team and the local governments. These agreements recognize the consideration of the SSM and water quality ordinances by Aransas County, Rockport, Fulton, and the Aransas County Navigation District.

The CCTC presented at the Aransas County Stormwater Subcommittee meetings in May and June to present MOAs and establish a technical team of representatives for updating drainage criteria via the SSM and begin ordinance development.

Texas Sea Grant has worked with the City of Rockport (Comprehensive plan, adopted), Willacy County (Comprehensive plan, approved), and Ingleside on the Bay received planning help and created their first ever comprehensive plan in association with the CHARM program. More details on these efforts are provided below.

Also, Texas Sea Grant established a Coastal Bend Stormwater Advisory Group of key stakeholders and technical experts. Meetings have been held monthly since February 2022. This group shares updates and is now in the process of planning a meet and greet event to showcase how GLO CDBG-MIT funds can incorporate green infrastructure projects.

Doucet completed 10 Community Scale Retrofit Plans, which include schematic design, construction cost, and funding plan. The Retrofit Plans, MOUs, and MOAs are located in Appendix D – Task 4.

The image is a promotional poster for a 'MEET & GREET' event. The main title is 'CDBG-MIT Funds for Coastal Resiliency' in large blue font. Below it, 'MEET & GREET' is written in a slightly smaller blue font. The subtitle reads 'Happy hour-style networking event focused on green stormwater infrastructure'. A decorative blue wavy line separates the subtitle from the event details. The date and time are 'SEPTEMBER 1, 2022 | 3-5PM'. The location is 'TEXAS SURF MUSEUM, 309 N Water Street, Corpus Christi, TX 78401'. The RSVP information is 'RSVP AT: CCTX-MEET-GREET.EVENTBRITE.COM'. At the bottom, there are logos for several partner organizations: Coastal Bend Stormwater Advisory Group, RRP (Regional Resilience Partnership), Doucet & Associates, Anchor OEA, The Meadows Center for Water and the Environment at Texas State University, and HALFF.

FIGURE 7. COASTAL BEND STORMWATER ADVISORY GROUP PLANS COMMUNITY ENGAGEMENT EVENT FOR CDBG-MIT FUNDS

CITY OF HITCHCOCK COMPREHENSIVE PLAN ADOPTED

As a result of the Galveston Bay Task Force, the City of Hitchcock in nearby West Bay which shares waters with Galveston Bay became involved. The City of Hitchcock in Galveston County is a low-capacity community of roughly 7,914 residents that lacks the resources and expertise to properly plan and zone the city. Hitchcock was among the communities devastated by Hurricane Harvey in 2017, which sustained damage to over 50% of structures in the community. In 2018-2019, Texas Sea Grant worked collaboratively with the City of Hitchcock and its leaders to create planning initiatives and set a community vision and goals for future development. City employees were educated on the use of ArcGIS software to develop zoning maps and gather data, allowing the city to direct development away from high-risk and environmentally sensitive areas. Texas Sea Grant also worked with Hitchcock to update the city's ordinances so businesses can consider future developments in the floodplain, parks, and waste disposal. As a result, Texas Sea Grant improved Hitchcock's capacity by providing training and educational outreach opportunities to the officials and residents, reducing the need to pay for outside contractors. Further, Hitchcock completed its Comprehensive Plan document in 2019, which addressed the city's future growth, including a land-use map, development scenarios, transportation needs, environmental considerations, and improvements to community facilities. The City of Hitchcock adopted the comprehensive plan in 2020.

- **Partners:** Texas A&M Department of Landscape and Urban Planning, Texas Target Communities, City of Hitchcock
- **Report:** 2020 City of Hitchcock Comprehensive Plan 2020-2040: <https://bit.ly/3R0foKW>

CITY OF ROCKPORT UPDATED COMPREHENSIVE PLAN ADOPTED

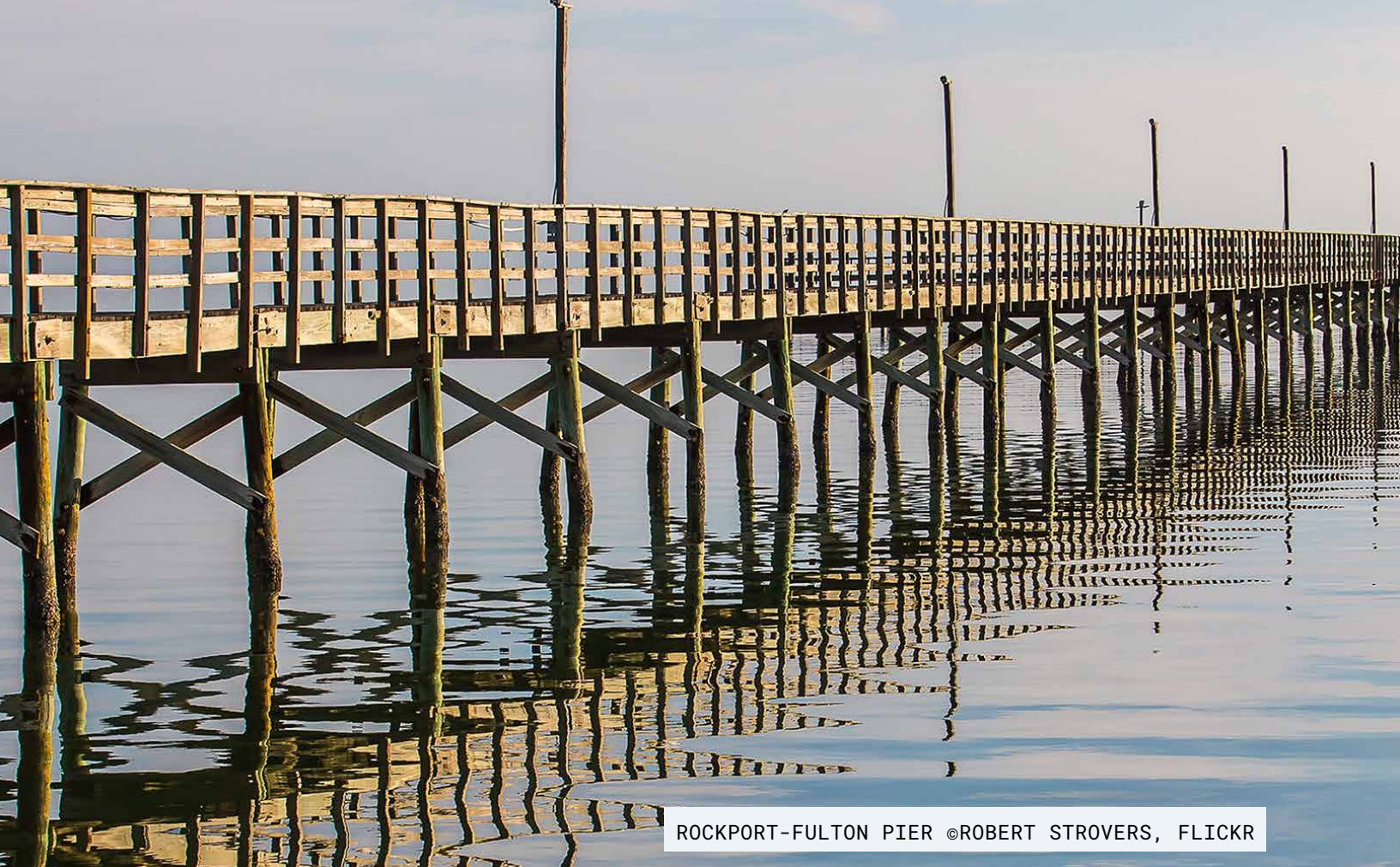
In collaboration with Texas Target Communities under Texas A&M University, Texas Sea Grant worked with the community of Rockport to update their comprehensive plan as part of an effort to increase their resilience to coastal hazards. The process included extensive public outreach and research and was completed in September of 2019. The plan received a Resilience award from the Texas APA foundation in November 2019. It was adopted by the community in April 2022.

- **Partners:** Texas A&M Department of Landscape and Urban Planning, Texas Target Communities, City of Rockport
- **Report:** 2020 City of Rockport Comprehensive Plan 2020-2040 <https://bit.ly/3CIJL4n>

2021 WILLACY COUNTY COMPREHENSIVE PLAN DEVELOPED

Willacy County is part of the Rio Grande Valley, one of the fastest growing regions in Texas. However, the county differs from its neighboring counties in that it is more rural and consists of very small communities. There was no county-wide plan to accommodate for growth, environmental impacts, and socio-economic needs. In 2019, Texas Sea Grant and CRC partners kicked off the planning process with a State of Community report and a public meeting. In 2020, the CRC planning team and graduate students mentored by the CRC team facilitated two public and three stakeholder meetings, with over 110 total attendees, and gathered input for the comprehensive plan. Due to the pandemic, the final public meeting was conducted virtually with a great response from the community. Throughout 2020, planning specialists from Texas Sea Grant and partners compiled the goals, objectives, and recommendations with information from the State of Community report for a draft comprehensive plan document. In 2021, planners shared the completed draft plan with elected officials and residents. Willacy residents are still in the process of determining whether to adopt the plan.

- **Partners:** Department of Landscape Architecture and Urban Planning; Texas Target Communities, Willacy County
- **Report:** Not publicly available



ROCKPORT-FULTON PIER ©ROBERT STROVERS, FLICKR

INGLESIDE ON THE BAY RECEIVES FUNDS TO SUPPORT COMPREHENSIVE PLANNING

Planning specialist Ashley Bennis has collaborated with Ingleside on the Bay since 2018. In 2022 the community received funding to acquire technical support for a comprehensive plan using the services of Texas Community Watershed Partners. These funds allow Ingleside on the Bay to guide their community development, receive mapping and data collection assistance and apply for funds to enhance and protect their community.

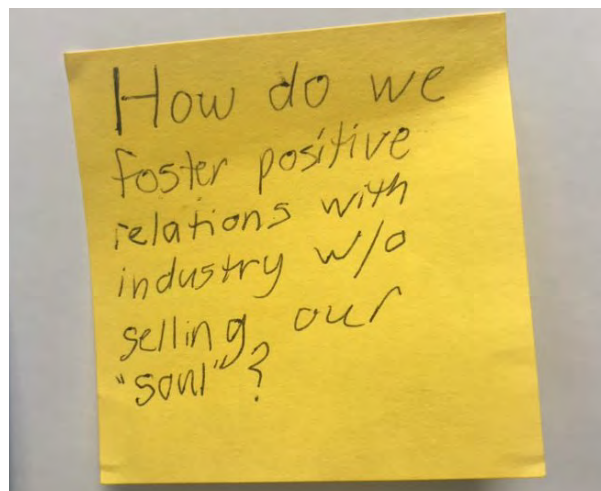


FIGURE 8. A KEY INFORMANT IN THE COMPREHENSIVE PLANNING PROCESS POSES A DIFFICULT QUESTION.

Task 5 - Coordination with the GLO's Coastal NPS Program

- **TXST:** Copy of subgrantee(s)/subcontractor(s) contracts
- **TXST:** Notification of Hire of Full Time Coastal Coordinator
- **TXST:** Monthly Conference Call notes (Monthly X 24)
- **TXST:** Semi-Annual TCC Team Meeting notes (Semi-annual X 4)

All deliverables for Task 5 have been accomplished. In March 2021, the subcontracts with AgriLife, Sea Grant, and Doucet were fully executed Appendix E – Task 5), a full-time Coastal Coordinator was [hired](#) (Deliverable 2), and the CCTC team began biweekly meetings with [notes](#) (Deliverable 3).

Over the course of the project period, CCTC meetings continued to be held biweekly except for three cancellations and a few rescheduled meetings due to holidays and community workshop scheduling conflicts. TXST also held biweekly meetings with Texas Stream Team staff to ensure training and partner event deliverables.

Additional activities included the following:

- CCTC attending the Texas Coastal Resiliency Master Plan workshop on November 5, 2021;
- A semi-annual CCTC meeting was held on April 20, 2022, which included team building activities, strategic planning and future funding discussions;
- AgriLife participated in the CRMP Technical Advisory Team meeting in League City on June 2, 2022; and
- TXST participated in CRMP Technical Advisory Team meetings in Victoria on June 9, 2022, and Corpus Christi on June 29, 2022.

Near the end of the project period in July 2022, a new Coastal Coordinator was hired to replace the outgoing coordinator.



Task 6 – Project Monitoring & Reporting

- **TXST:** Final report summarizing activities, successes and failures, budget
- The [deliverables spreadsheet](#) (General > Task 6 > Project Administration > Support files > Deliverables) was updated and maintained for coordination of deliverables and primary points of contact for all tasks.
- The [community interactions spreadsheet](#) (General > Task 6 > Project Administration > Support files > CCT_Record_Community_Interactions) was maintained and updated to document collaborative partner's interaction with participating or interested communities.
- File sharing, storage, and documentation system maintained for monitoring and reporting.
- [Notes](#) from biweekly meetings with CCT Collaborative partners shared with partners and stored in Teams folder (Teams > Documents > General > Task 6 > Project Administration > Meeting Notes).
- [Fully executed MOAs](#) with project partners to serve as notification of SSM consideration and ordinance adoption.
- [Notes, agendas, presentations and sign in sheets](#) from workshops.
- [BMP Design Report](#) including engineering schematics for 10 retrofits.

Task 6 is complete as all project monitoring and reporting were conducted in a timely manner with the [quarterly progress reports](#). In addition, communication between the CCTC and GLO was open and effective throughout the project period.

DISCUSSIONS

Lessons Learned

TEXAS STREAM TEAM

Hosting events on different topics and in different modalities during the pandemic offered key takeaways for Texas Stream Team staff around (1) virtual issues, (2) efficiency, and (3) accomplishments.

Texas Stream Team staff were not short of virtual issues and lessons learned during the transition to virtual citizen scientist trainings. One of the first virtual Riparian Evaluation Trainings took place during the 2020 Texas Master Naturalist Annual Conference on October 15, 2020 via the Webex platform. Texas Stream Team staff encountered a snag in the interactive session component as the conference was set up to prohibit attendees from using the chat, microphone, and video functions to limit disturbances from large audiences. This hindered the response-required interactive session from attendees in order to earn their certificate. Instead, answers and responses for the training had to be submitted via a question function. By the time the training was nearing the final interactive component, the question feature started to freeze from too many entries. If the training were to be held again on this platform, staff would ensure a chat function could be utilized. Another fully virtual training in March 2021 for E. coli Bacteria garnered a lesson in best practices. Because the E. coli training is highly involved and requires management and observation of processes, 10 participants were found to be the appropriate number that Texas Stream Team staff felt could be successfully trained in a virtual setting, unless more trainers are present than the standard two.

Texas Stream Team staff have crafted trainings to be more efficient in several ways. First, staff conducted research, testing, and revisions of the Standard Core and Probe Core water quality monitoring procedures to accommodate coastal area saltwater monitoring. The kits were updated with a refractometer for measuring salinity because the conductivity meter that accompanies the Core kits cannot measure the higher salinity waters of the Texas Gulf coast. The field guide was updated to include protocols for calibrating and use of the refractometer to measure salinity and the online equipment list was also updated to include vendor and purchasing information for the refractometer. Second, by requiring the

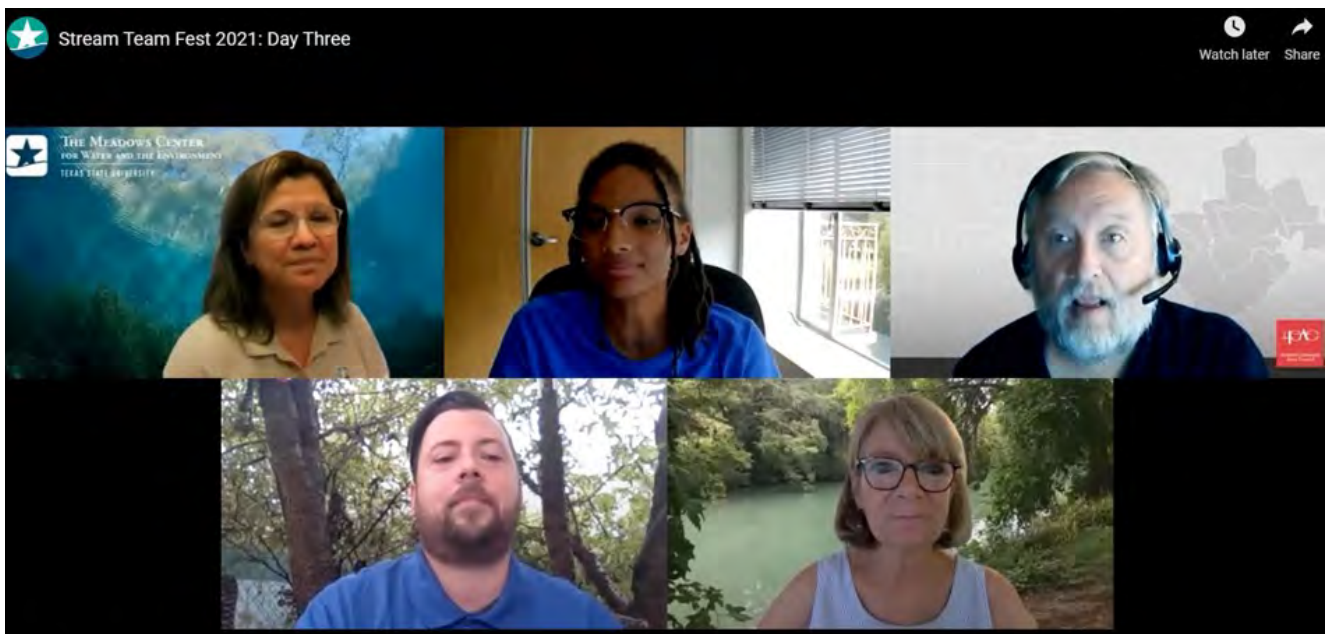


FIGURE 9. VIRTUAL STREAM TEAM FEST - A SNAPSHOT OF SPEAKERS

Standard Core participants for the August 14, 2021, training to complete a prerequisite online module that covers the background information, trainees were able to reference the material before and after the training — and the in-person training session was reduced by at least one hour. Additionally, the location of the training event was highly efficient for training purposes with bay access for conducting the Secchi disk transparency measurement, determining tide stage, and collecting the bucket grab. Other similar locations should be considered for future coastal trainings.

In terms of efficiency and coordination with Clean Coast Texas, Texas Stream Team staff efficiently prepared all supplies and materials for trainings over one week before the events. For the December 18, 2021, Standard Core training, all the supplies were transported to the training location one week before via the Coastal Coordinator. This allowed supplies to arrive in time for the training. Texas Stream Team staff also emailed all trainees before the event with the training location, training time, prerequisite requirements, and introduced them to Bill Balboa with the Matagorda Bay Foundation (the lead trainer for the event).

Texas Stream Team staff held a series of successful trainings and partner events for Clean Coast Texas. The various training events attracted folks from Rockport, Victoria, Port Aransas, Houston, Inez, Port Lavaca, and members from the coastal Texas Master Naturalists chapters. Partner events, like Stream Team Fest, had participation from coastal entities: Texas Master Naturalist, Houston-Galveston Area Council, Sabine Neches Texas Master Naturalist Chapter, Galveston Bay Estuary Program, Heartwood Texas Master Naturalist, Center for Coastal Studies (TAMUCC), Buffalo Bayou Partnership, and Oak Ridge HS Environmental.

Texas Stream Team successfully helped launch the Little Bay Stream Team Group, which currently monitors 12 sites in Little Bay and Tule Creek (small drainage into Little Bay). Two teachers will be directing students monitoring in Tule creek and other folks will be monitoring various sites around Little Bay. In these training sessions for Little Bay, Bill Balboa was able to start his advanced trainings for E. coli and Probe, which will help grow monitoring efforts in the Matagorda Bay area. What is more, Texas Stream Team staff have been working to revive Texas Stream Team activities in the Rio Grande Valley with Los Fresnos CISD with the hope of reviving monitoring activities within the next Clean Coast contract.

GREEN INFRASTRUCTURE FOR TEXAS

Four GIFT workshops were held, each with the same basic structure, but also different to meet the local needs. May 2021 in Rockport, the workshop was small due to covid concerns and we incorporated a field trip that allowed attendees to be outdoors and discuss potential GI project in their community.



FIGURE 10. SMALL GROUP DISCUSSION AT THE DICKINSON GIFT WORKSHOP

The Aransas Pass workshop in December 2021 was a hybrid event, so attendees joined both in person and on Zoom at the same time. For the final two workshops in Kingsville, and Dickinson we returned to in-person only. Tom Hegemier with Doucet Engineers, who presented the Sustainable Stormwater Manual at each workshop also began creating conceptual designs specific to our host city to bring the concepts home and work to create local buy-in. Finally, at the Dickinson workshop, we piloted a small group discussion activity where attendees were given a map of the town and asked to think about where green infrastructure practices could work in their community.

These workshops have been a way to build relationships and plant seeds. Each one also served a different purpose in building relationships with partner communities. For example, Aransas Pass is not a partner community but Clean Coast Texas is working with neighboring communities (i.e. Rockport). Partnering with Aransas Pass allowed us to expand the circle of partnership and help educated neighboring communities, setting the stage to affect regional change. The Kingsville workshop was a step forward in partnership building and moving the community forward in the area of GI. And finally, the Dickinson workshop was held to plant seeds. To look down the road for possible future partner communities, and it also spread the reach of Clean Coast Texas up the coast. As a closing note, AgriLife staff often receive requests for additional green infrastructure resources following a GIFT workshop. These follow-up discussions have resulted in continued correspondence with local contacts on various stormwater efforts.

COMMUNITY HEALTH AND RESOURCE MANAGEMENT (CHARM)

The CHARM workshops are highly tailored to each community and their unique local issues, and existing CHARM exercises focus heavily on planning for development and flood hazard mitigation. Accordingly, staff time leading up to a workshop requires careful attention to facilitation and data collection to support local dialogue about the relevant planning issues.

The two CHARM workshops were held in communities that are currently addressing planning issues by reviewing or preparing updated comprehensive plans. The Ingleside on the Bay CHARM workshop was held in conjunction with an open house sharing AgriLife’s planning work products. This allowed participants to review planning information and provide direct feedback about the proposed plan principles and goals using sticky notes and use CHARM’s interactive mapping exercises to identify issues such as damaged drainage infrastructure, code enforcement issues, and drainage issues.

The Aransas Pass CHARM workshop targeted city staff and appointed officials that will be involved in an upcoming comprehensive plan update and supported dialogue about planning priorities and issues. AgriLife staff facilitated both workshops: the Ingleside on the Bay workshop utilized a drop-in format and did not have table assignments for facilitators or attendees; the Aransas Pass workshop had

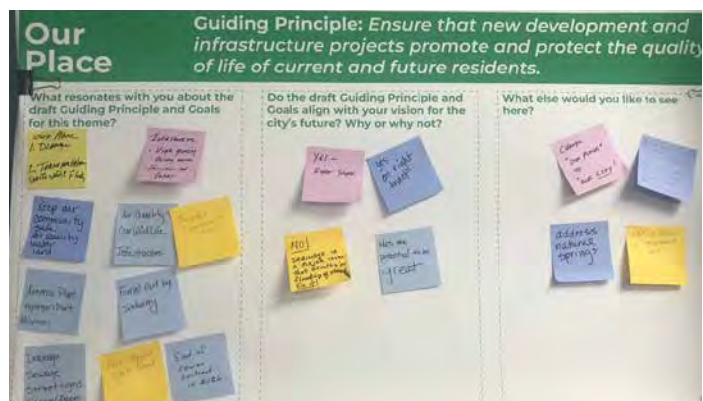


FIGURE 11. KEY INFORMANTS RESPOND TO PLANNING PROMPTS AT INGLESIDE ON THE BAY



FIGURE 12. ARANSAS PASS CHARM PARTICIPANTS DISCUSS LOCALIZED FLOODING ISSUES AT THE AUGUST 24, 2022 WORKSHOP.

facilitators and a group of participants assigned to each table to allow for notetaking and dialogue.

The CHARM workshop formats were planned in partnership with the communities to allow the local champions to provide feedback on stakeholder outreach and focuses. Ingleside on the Bay Planning and Zoning Commissioners worked with AgriLife staff to identify times for the open house and advertise the open house/workshop on local social media as well as through a blurb mailed to residents in their water bills. Aransas Pass staff shared workshop information with distribution lists and appointed officials.

Planning the workshops in partnership with the community allowed AgriLife staff to develop workshop exercises and materials that responded directly to local priorities and supported important discussions about growth, water quality, and local policy implementation.

FLOW ASSESSMENT STORMWATER TOOL (FAST)

The FAST workshop was the first of its kind in Texas. It utilized an ArcGIS model with the flowpath extension as well as CommunityViz software that presents charts and graphs in an easy-to-understand format. The model depicts how surface flow and the community's storm drain system move water through the community in both small and large storm events based on a 10ft x 10ft grid. Hyper local information about drainage projects in the City of Kingsville Master Drainage Plan was also incorporated. This model was presented to small groups of attendees through a facilitated discussion using a weTable, (interactive table top display). Each group evaluated two small study areas within the city boundaries, one primarily residential, and one with a mix of commercial development and multi-family homes. The task was to reduce the total runoff volume by up to 30% using green infrastructure practices such as swales, rain barrels, bioretention, and pervious pavement. Despite the heavy use of technology for mapping, one goal of this workshop is to focus on the discussions around the table and to use the data to support these conversations. The data cannot tell a community the correct answer, but it can help them explore outcomes from various scenarios.

At the workshop, each group had its own approach to reducing runoff volumes, some used one practice at a large scale to achieve a reduction, while others mixed multiple practices to achieve the goal. During the final debrief, each group shared some of their outcomes and takeaways from the workshop. Overall attendees were pleased with the workshop saying that it... “helped me make bigger picture connections”, “leaves me wanting more, it got my creative juices flowing, there is a lot of potential” and even “it was fun!”



FIGURE 13. CRAIG ROGERS, A FAST PARTICIPANT, SHOWCASES HIS GROUP'S APPROACH TO REDUCING STORMWATER RUNOFF DURING THE DEBRIEF

Recommendations

TEXAS STREAM TEAM

Regarding training events, it is highly recommended to continue using the prerequisite module to cover the background information as this approach reduced the training duration by at least one hour, and all trainees were able to reference the material before and after the training at their leisure.

Moving forward with Clean Coast Texas, Texas Stream Team staff recommends incorporating deliverables to include not only trainings and outreach events but all partner engagement activities such as brainstorm meetings, planning meetings, and the like that go into establishing a new group as this process, though highly valuable, is time intensive. Doucet sees value in community outreach and engagement to aid in the success of Clean Coast Texas and Texas Stream Team. As the project moves forward, one of Doucet's recommendations includes events that have trackable metrics for both participation and community impact.

GREEN INFRASTRUCTURE FOR TEXAS

Hybrid workshops (in person and virtual at the same time) require additional coordination, but also yielded a higher attendance. Assistance from offsite staff (i.e. managing the chat box) was essential to ensuring a good experience for virtual attendees. Because virtual attendees can join the workshop from any location, having a speaker who provides a local perspective is difficult, for future hybrid workshops we should reconsider this presentation and who we recruit to fill that role.

Overall, making small changes to each workshop to tailor it to the community is worth the extra effort and brings added value to the host community. It also keeps the workshops fresh for the project team and helped keep the group energized when hosting multiple workshops.

COMMUNITY HEALTH AND RESOURCE MANAGEMENT (CHARM)

Outreach and community selection for the CHARM workshops should consider communities' identified planning needs and the timing of planning projects. While CHARM workshops are educational by the nature of the discussion, they have an elevated impact on local plan implementation when they can be combined with an actual project. This was exemplified by the additional interest from the cities of Ingleside on the Bay and Aransas Pass who were able to also incorporate the CHARM workshops into their planning processes.

CHARM workshop scheduling may also benefit from earlier outreach and in-person demonstrations in conjunction with other Clean Coast Texas events. Having the new conservation design exercise will allow CHARM to more clearly tie in to the water quality and green infrastructure planning aspects of the Clean Coast Texas program. This exercise could also lead to a new CHARM workshop format focused on conservation subdivision design that could include additional speakers with design backgrounds.

FLOW ASSESSMENT STORMWATER TOOL (FAST)

This workshop format requires extensive interaction and input from the city, it is essential to work with a community who is willing and able to provide this interaction. The more local information and context that is provided, the better the model reflects real conditions. The debrief and share out at the end of the workshop provides valuable insight into how each group approached the objective and should be continued. Attendees suggested that information on GI cost by practice should be added to the model.

TCWP staff conducted intensive outreach for this workshop and even so, more outreach probably could have been done. Sending one or two emails in a town like Kingsville will not yield attendance. We saw the best results when our local partners shared the invitation with their contacts, or when TCWP reached out in multiple ways (mail, email, and phone calls). For future workshops, we recommend using these methods while also adding more such as attending County Commissioners Court or City Council meetings and signing up to speak about the workshop and personally inviting the elected officials to attend.



PORT ARANSAS, TEXAS ©TOJOIII, FLICKR

SUMMARY

During Years 1 and 2, the CCTC made significant progress in developing and implementing the Clean Coast Texas program. Despite the pandemic, the CCTC successfully engaged with over a hundred stakeholders/entities and reached nearly 2,000 individuals through various community engagement events and programs.

Much of the success can be attributed to the innovative nature of the CCTC team. Creativity, consistency, and flexibility allowed the group to practice reflexivity in workshop preparation and execution, craft a novel systematic approach to identifying target communities, consistently engage with community champions and decision-makers, and develop regional partnerships, like the Coastal Bend Stormwater Advisory Committee.

The CCTC's community-first, synergistic approach culminated in formalizing four community partners: Rockport, Fulton, Aransas County, and Aransas County Navigation District through Memorandums of Agreement executed in 2022. This effort demonstrates an effective approach on which to build for future collaborations, revised ordinances and adoption of the SSM.



FIGURE 14. NICK DORNAK CLOSES THE FAST WORKSHOP BY DISCUSSING NEXT STEPS FOR CCT ENGAGEMENT WITH KINGSVILLE

APPENDIX A - TASK 1

1. List of Acquired Data
2. Data Acquisition and Quality Assurance Project Plan

Task 1: Data Acquisition and Quality Assurance
Texas Coastal Collaborative Environmental Data Acquisition Sources

Data Type	Monitoring Project/Program <i>(provide hyperlink to data source if available)</i>	Collecting Entity	Dates of Collection	QA Information	Data Use(s)
Water Quality Monitoring					
Surface Water Quality Monitoring Data (Field measurements : Temperature, dissolved oxygen, pH, etc.)	TCEQ (SWQM, CRP TMDL, NPS) https://www80.tceq.texas.gov/SwqmisPublic/index.htm	TCEQ	Most recent available for entire project area	TCEQ SWQM QAPP; CRP Partner QAPPs, TMDL QAPPs, NPS QAPPs	Summary statistics, trend analysis, and assessment
Groundwater Quality	TWDB Statewide Program: Groundwater Data Texas Water Development Board	TWDB	Most recent available for entire project area	TWDB QAPP	Summary statistics, trend analysis, and assessment
Streamflow	United States Geological Survey (USGS) http://waterdata.usgs.gov/tx/nwis/sw	USGS	For the period of record collected by the USGS; Station nos. 08075400 – Sims Bayou at Hiram Clarke St., Houston, TX 08072300 – Buffalo Bayou near Katy, TX 08114000 – Brazos River at Richmond, TX, others	USGS QAPP; USGA database	Flow duration curves, Loading calculations

Precipitation Data	National Weather Service (NWS): AHPS Precipitation Analysis (weather.gov)	NWS	Most recent available for entire project area	NWS Website	Summary statistics, trend analysis, and assessment
Texas Stream Team Citizen Scientist Water Quality Monitoring Data	Texas Stream Team https://www.meadowscenter.txstate.edu/Leadership/TexasStreamTeam/Dataviewer-and-Datamap.html	TST	1991 - 2021	Texas Stream Team QAPP	Education and Outreach, Supplemental TCEQ water quality data
Geospatial Data Sources					
TCEQ Segment Shapefile	TCEQ GIS Data Download Page https://www.tceq.texas.gov/gis/download-tceq-gis-data	TCEQ	Latest available shapefile(s) - Polylines	Metadata available with download	Watershed maps
TCEQ Surface Water Quality Monitoring Station Locations	TCEQ GIS Data Download Page https://www.tceq.texas.gov/gis/download-tceq-gis-data	TCEQ	Latest available shapefile(s) - Points	Metadata available with download	Watershed maps
Census Data	TNRIS: TNRIS DataHub	TNRIS	Most recent available for entire project area	Individual organization QA procedures	GIS mapping/analysis
Climatic Data	NCEI: Access National Centers for Environmental Information (NCEI) (noaa.gov)	NOAA	Most recent available for entire project area	Individual organization QA procedures	Characterization of historical and recent climatic conditions associated with routine and storm monitoring events

Groundwater Levels	TWDB Statewide Program: Groundwater Data Texas Water Development Board	TWDB	Most recent available for entire project area	TWBD QAPP	Analysis of recharge, Desired Future Conditions, Trend analysis of groundwater level fluctuations
Hydrography	USGS NHD: National Hydrography Dataset (usgs.gov)	USGS	Most recent available for entire project area	USGS Data Standards	GIS mapping/analysis
Hydrologic Unit Code (HUC)	USGS NHD: USGS Water Mission Area NSDI Node	USGS	Most recent available for entire project area	USGS Data Standards	GIS mapping/analysis
Land Cover	USGS National Land Cover Databas (NLCD): National Land Cover Database (usgs.gov)	USGS	Most recent available for entire project area	USGS Data Stabdards	GIS mapping/analysis
Soils	USDA NRCS: Soil Surveys by State NRCS Soils (usda.gov)	USDA	Most recent available for all project stations	USDA NRCS	GIS mapping/analysis
Stormwater Manuals and Criteria					
Statewide	Texas Coastal Resiliency Master Plan	TGLO	2016-2019	TGLO	Project selection, development, and implementation

Aransas County	<p>County LID Stormwater Guidance Manual- https://cpbus-el.wpmucdn.com/wp.txstate.edu/dist/4/2239/files/2020/03/Aransas-County-LID-Stormwater-Guidance-Manual-.pdf</p> <p>2011 Stormwater Management Plan- https://www.aransascounty.org/stormwatermanagement/e-docs/FINAL20110308%20Open%20House%20-%20AC%20SWMP.pdf</p>	Aransas County	2011-2020	Aransas County	Project selection, development, and implementation
Corpus Christi	<p>Low Impact Development Guide: https://www.tceq.texas.gov/assets/public/waterquality/nps/projects/90473CorpusChristiLIDGuidance.pdf</p> <p>Port of Corpus Christi- Stormwater Management Plan in development with Plummer Associates, INC Announcement- https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/510309/Comm Memo Plummer-Final.pdf</p>	TCEQ	2011 2021	TCEQ/City of Corpus Christi	Project selection, development, and implementation
Rio Grande Valley (RGV)	<p>RGV Stormwater Management https://rgvstormwater.org/about-us/stormwater-taskforce/</p>	RGV Stormwater Management Taskforce	2019	RGV Stormwater Management Taskforce	Project selection, development, and implementation

Cameron County	Erosion Response Plan and Dune Protection/Beach Access Plan https://www.glo.texas.gov/coast/coastal-management/forms/files/cameron.pdf	Cameron County Commissioners Court	2018	Cameron County Commissioners Court	Project selection, development, and implementation
South Padre Island	Shoreline Master Plan and Erosion Response Plan https://www.myspi.org/department/index.php?structureid=21	City of South Padre Island	2018	City of South Padre Island	Project selection, development, and implementation
<p>Watershed Protection Plans and Total Maximum Daily Load Reports texas-wpps.pdf (Updated: February 2021) Nonpoint Source Project Viewer (arcgis.com) (Updated: Dec 2020)</p>					
WPP	Arroyo Colorado Watershed Protection Plan https://www.tceq.texas.gov/assets/public/waterquality/nps/watersheds/ArroyoColorado/WPPFINAL_optimized.pdf	TCEQ	2017	TCEQ	Full WPP Updated
TMDL	Oso Bay Total Maximum Daily Load https://www.tceq.texas.gov/waterquality/tmdl/67-osobaybacteria.html#documents	TCEQ	2005-2014	TCEQ	Implementation
WPP	LLM/Brownsville Ship Channel https://www.tceq.texas.gov/assets/public/waterquality/nps/projects/80206-10161-laguna-madre-brownsville-wpp.pdf https://arroyocolorado.org/media/zqjpi1e0/l	TCEQ	2020	TCEQ, TSSWCB	Model building; continuing development of WPP

	m_wc_102618_forstakeholderreview.pdf http://www.cameroncounty.us/lmbssc/				
WPP (characterization)	Characterization of Northern and Central RGV Watersheds https://rgvstormwater.org/tceq-319-characterization-of-northern-and-central-rio-grande-valley-watersheds/	TCEQ	2020	TCEQ	Characterization
WPP	San Fernando and Petronila Creek WPP https://twri.tamu.edu/our-work/restoring-protecting/petronila-san-fernando-creeks-watershed-planning/meetings/	TWRI	2021	TSSWCB; EPA	Preliminary stages
TMDL, WPP	Mission Aransas TMDL and now WPP https://www.tceq.texas.gov/waterquality/tmdl/42-copano.html	TSSWCB	2016	TSSWCB	Implementation
TMDL	Carancahua Bay TMDL-bacteria https://www.tceq.texas.gov/assets/public/waterquality/tmdl/108carancahua/108-Carancahua-bacteria-tmdl-proposed.pdf	TCEQ	2020	TCEQ	Implementation
WPP	Carancahua Bay WPP-DO http://matagordabasin.tamu.edu/carancahua-bay/	TCEQ/TWRI	2019	TCEQ/TWRI	Collaborating with stakeholders
WPP (Characterization)	Hidalgo Main WPP https://rgvstormwater.org/tceq-319-characterization-of-northern-and-central-rio-grande-valley-watersheds/	TCEQ	2014	TCEQ	Characterization
WPP	Lavaca River Watershed (WPP) http://matagordabasin.tamu.edu/lavaca/	TCEQ/TWRI	2018	TCEQ/TWRI	Development
TMDL	Tres Palacios https://www.tceq.texas.gov/assets/public/waterquality/tmdl/108trespalacios/108b-trespalacios-bacteria-tmdl-adopted.pdf	CMP and TCEQ	2018	TMDL QAPP	TMDL adopted; Implementation ongoing

Texas Coastal Collaborative (also known as the Clean Coast Texas Collaborative)

Task 1: Data Acquisition and Quality Assurance Project Plan (QAPP)

Texas State University
The Meadows Center for Water and the Environment
San Marcos, Texas 78666

Texas Coastal Nonpoint Source Pollution Program
Prepared in cooperation with the Texas General Land Office
Contract # 21-060-020-C810

Effective Period: Duration of contract period

Questions concerning this QAPP should be directed to:

Adriana Mendez-Jimenez
Coastal Coordinator
(512) 245-9200
adrianamendezj@TXSTATE.edu

601 University Drive
Texas State University
San Marcos, TX 78666

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A3 Distribution List

TXSTATE will secure written documentation from project participants stating the organization’s awareness of and commitment to requirements contained in this QAPP and any amendments or

revisions of this plan. TXSTATE will maintain this documentation as part of the project’s quality assurance records.

A4. Project/Task Organization

TEXAS STATE UNIVERSITY (TXSTATE)

The Meadows Center for Water and the Environment

Adriana Mendez-Jimenez

Project Manager

Responsible for ensuring tasks and other requirements in the contract are executed on time and are of acceptable quality. Monitors and assesses the quality of work. Coordinates attendance at conference calls, trainings, meetings, and related project activities with the Texas Coastal Collaborative (TCC) and GLO. Responsible for verifying the QAPP is followed and the project is producing deliverables of known and acceptable quality. Ensures adequate training and supervision of all project participant activities. Complies with corrective action requirements.

Sandra S. Arismendez

Quality Assurance Officer (QAO)

Responsible for coordinating development and implementation of the quality assurance (QA) program. Responsible for maintaining records of QAPP distribution, including amendments. Responsible for identifying, receiving, and maintaining project quality assurance records. Responsible for coordinating the preparation of a Data Sharing Plan and ensuring adherence to the Data Sharing Plan by all subgrantee(s)/subcontractor(s). Responsible for coordinating with the MCWE Project Manager to resolve QA- related issues. Notifies the MCWE Project Manager and documents particular circumstances which may adversely affect the quality of contract deliverables. Facilitates, conducts, and documents readiness reviews and/or technical systems audits.

AGRILIFE

Texas Community and Watershed Partners

Charriss York

Extension Program Director

Responsible for coordinating among TCC partners and AGRILIFE system resources/network the ongoing planning efforts in target communities. Responsible for coordinating Green Infrastructure for Texas (GIFT), Sustainable Stormwater Manual (SSM), Community Health and Resource Management (CHARM), and Flow Assessment and Stormwater Technology (FAST) workshops in target coastal communities. Communicates acquired data and sources to MCWE QAO for inclusion and documentation in the QAPP. Provides updated data sources as necessary. Notifies the QAO of circumstances which may adversely affect the quality of contract deliverables.

SEA GRANT

Texas A&M University

Morgen Ayers

Natural Resources Specialist

Responsible for coordinating among TCC partners and Sea Grant system resources the ongoing planning efforts in target communities. Responsible for enhancing utility, sustainability, and the impact of project deliverables through local comprehensive planning and program facilitation. Responsible for supporting activities that lead to ordinance adoption, *Sustainable Stormwater* manual “adoption” and reduced pollutants, hazards, and flooding by leading pre-development watershed protection plan (WPP) activities, providing technical assistance on ordinance development, providing technical assistance on aspects of comprehensive planning, and participating in NPS educational opportunities. Communicates acquired data and sources to MCWE QAO for inclusion and documentation in the QAPP. Provides updated data sources as necessary. Notifies the QAO of circumstances which may adversely affect the quality of contract deliverables.

DOUCET

Doucet & Associates

Tom Hegemier

Senior Project Manager

Responsible for coordinating among TCC partners and Doucet & Associates resources the ongoing planning efforts in target communities. Responsible for relationship building, obtaining city commitments, project development, and planning and conceptual design among TCC partners and target communities. Lead engagement with local officials regarding engineering designs, develop ordinances and regulations, and adopt SSMs. Communicates acquired data and sources to MCWE QAO for inclusion and documentation in the QAPP. Provides updated data sources as necessary. Notifies the QAO of circumstances which may adversely affect the quality of contract deliverables.

A5. Problem Definition/Background

Coastal communities face an elevated risk of water quality degradation, habitat loss, storm surge damage, and flooding resulting from natural disasters. Smaller communities are even more at risk as they often lack technical and financial resources to develop policies and plans and critical infrastructure needed to manage the economic and environmental risks associated with coastal hazards. The Texas Coastal Nonpoint Source (NPS) Pollution Program (Coastal NPS) identifies 11 rapidly growing, non-MS4 municipalities within the CZB that would benefit from receiving technical and financial assistance to implement sustainable stormwater management practices. These communities include Jamaica Beach, Beach City, Port Lavaca, Fulton, Aransas Pass, Port Aransas, Ingleside, Rockport, Port Isabel, Laguna Vista and South Padre Island. Other target communities may also be considered.

TXSTATE will lead a dynamic team of scientists, educators, engineers and communication professionals, collectively known as the Texas Coastal Collaborative (TCC), in a two-year coastwide effort to engage key stakeholders in these target communities. Other target communities may also be considered. TCC partners include The Meadows Center for Water and the Environment (TXSTATE), Texas Community and Watershed Partners (AgriLife), Texas Sea Grant (Sea Grant), and Doucet and Assoc. (Doucet). The TCC will select four communities from the list of 11 and work closely with them to deliver customized local workshops. The workshops

will help the communities create ordinances to consider for adoption, write or modify existing SSMs for adoption and regulatory program development, develop comprehensive NPS plans specific to their communities and create conceptual designs to construct green NPS infrastructure or retrofit existing infrastructure.

AgriLife will lead the community workshops that will include utilizing Green Infrastructure for Texas (GIFT) workshop information, Community Health and Resource Management (CHARM) mapping and piloting the Flow Assessment and Stormwater Technology (FAST) program. Doucet will direct engagement with local officials to prepare engineering designs, develop ordinances and regulations and adopt SSM. Sea Grant will enhance utility, sustainability and impact of project deliverables through local comprehensive planning and program facilitation.

The Meadows Center will utilize an expansive coastal network to facilitate TCC programming, support citizen science programs and implement innovative school and community-based environmental education.

A6. Project/Task Description

The goal of this project is to develop a program that supports Coastal Management Program's mission to reduce NPS pollution loading, enhance coastal resiliency, mitigate hazards, and improve floodplain management. The TCC project, a dynamic approach to hazard mitigation resiliency and NPS control, will generate highly visible, productive projects in non-MS4 municipalities within the CZB with measurable benefits, findings and approaches that can be easily translated to other communities. This universal program will lay the groundwork for methods that promote the continued adoption of: 1) Restoration of coastal natural resources, 2) Improved water quality, 3) Balance between protection of coastal natural resources and public use of those resources, 4) Improved environmental management, and 5) Mitigation of coastal erosion. All activities will be co-branded with the Coastal NPS program. Tasks associated with this project include:

Task 1: Data Acquisition and Quality Assurance

TXSTATE will document and implement data quality objectives (DQOs) and quality assurance/control (QA/QC) activities that ensure data of known and acceptable quality are used in and generated by this project. Data acquired for this project will be used for planning, modeling and mapping activities undertaken to improve community decision makers' abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the CZB. Data intended for regulatory purposes will be acquired in accordance with the agency's standards and preferably under an existing QAPP. Research and data findings will be disseminated to the scientific research community and coastal managers, ensuring the content is visible, accessible, and independently understandable to general users. A Data Sharing Plan will be established for this project by TXSTATE. TXSTATE will ensure adherence to the Data Sharing Plan by all subgrantee(s)/subcontractor(s). An acquired data summary report for the project will be submitted with Final Report.

Task 2: Candidate Selection

The TCC will select four coastal communities to work with. TXSTATE will begin the selection process through coordination with TXSTATE and GLO and focus activities on stakeholder

groups in target communities and by disseminating a TCC information packet including a press release, survey and the Coastal SSM developed by the Coastal Zone Program. Based on survey results, AgriLife will conduct a regulatory review of six of communities. AgriLife, along with TCC partner representatives, will meet with decision makers in those communities to complete a post-survey follow up. Based on these meetings, AgriLife, with support from TCC partners, will create a matrix to select the top four communities that show the most interest and greatest likelihood of success to begin working with.

Task 3: Community Workshops

AgriLife will conduct a series of education and outreach workshops with the four selected communities in an approach that will be easily transferrable to other communities. Prior to workshop initiation, TXSTATE will develop a contact database to track strategic outreach and create a TCC website to include co-branding with the Coastal Nonpoint Source program. Then, the entire TCC group will conduct 4-6 GIFT workshops on SSM, 4 TST trainings, 4-6 TST partner events with focus on multicultural education for adults and/or youth (ex. H2O-Headwaters to Oceans) and engage and support watershed-based groups/meetings/events with ISDs, counties, etc. on SSM. TCC will also complete four CHARM workshops, one FAST workshop and host two to three (as needed) highly directed meetings with key stakeholders in the selected communities to achieve comprehensive plans and resolution/ordinance/SSM adoption goals.

Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities

After the workshops, TCC partners will begin directed efforts to create a no-cost resolution in which the four selected communities pledge support of the TCC. Focus will be on cities, counties, ISDs, NGOs and local media. TCC will also start working with the communities to develop SSMs for adoption consideration. This effort will be highly directed by stakeholder meetings and the GIFT, CHARM and FAST workshop input. TCC partners will engage with three communities to consider/adopt ordinances supporting the Coastal NPS Program Management Measures. TCC will work directly with community leaders to draft the ordinances. Additionally, aided by the GIFT, CHARM and FAST workshop input, TCC partners will engage with 2-4 communities to develop comprehensive plans and prepare 10 community scale retrofits plans (schematic, cost, funding plans). If ordinance development partnerships are not established, supplemental actions may be required to ensure anticipated effort is equivalent to outcomes established in this scope.

Task 5: Coordination with the GLO's Coastal NPS Program

TXSTATE will provide technical and fiscal oversight of the staff and/or subgrantee(s)/ subcontractor(s) to ensure Tasks and Deliverables are acceptable and completed as scheduled and within budget. Project oversight status will be provided to GLO with quarterly progress reports (QPRs) and regular/timely communications. TXSTATE will hire a Coastal Coordinator to serve as the primary point of contact for the GLO Project Manager, Coastal NPS program contacts, and TCC partner organizations and communities. The Coastal Coordinator will ensure completion of all project deliverables and report to the Director of Watershed Services. TXSTATE will participate in monthly conference calls with the GLO Contract Manager and TCC partners to discuss project status and address any project concerns. TXSTATE will also

coordinate Semi-Annual Team meetings with TCC subgrantee(s)/subcontractor(s). Notes for the calls/meetings will be provide to the GLO Contract Manager within 7 days.

Task 6: Project Monitoring & Reporting

TXSTATE will produce a Final Report summarizing all activities completed and conclusions reached during the project. The Final Report will describe project activities and identify and discuss the extent to which project goals and purposes are achieved, and the amount of funds actually spent on the project. The Final Report will emphasize successes, failures, lessons learned, and include acquired water quality data, retrofit plans and estimated NPS pollutant load reductions. The Final Report will summarize all the Task Reports in either the text or as appendices.

TXSTATE will prepare and submit all reports, deliverables, and requests for reimbursement as required in the contract, to CMPReceipts@GLO.TEXAS.GOV. Quarterly progress reports are due to CMPReceipts@GLO.TEXAS.GOV on the 10th day of every quarter of the year starting with December 10, 2021. Requests for reimbursement are to be submitted in a timely manner to CMPReceipts@GLO.TEXAS.GOV, as specified in the contract.

TXSTATE will provide a final report describing work completed under each task, all data analysis and discussion, conclusions, and include photos of outreach efforts.

A7. Quality Objectives and Criteria

This Quality Assurance Project Plan (QAPP) documents the planning, implementation, and assessment procedures of, and how quality assurance/control (QA/QC) activities will be implemented during the coastal planning and community engagement project based on the principle of a graded approach. The graded approach, according to EPA (2001), recognizes that a “one size fits all” approach does not work for all programs, therefore the degree of detail presented in this QAPP will vary due to the type of work performed and the intended use of the data.

TXSTATE will document and implement data quality objectives (DQOs) and QA/QC activities for acquired data sources that ensure data of known and acceptable quality are used in and generated by this project. No new environmental field data collection activities are associated with this project. Existing data acquired for this project will be used for planning, conceptual modeling and mapping activities undertaken to improve community decision makers’ abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the coastal zone boundary (CZB). Existing data intended for regulatory purposes will be acquired in accordance with the agency’s standards and included in the list of acquired data sources in section B9 Non-direct Measurements of this document. Additional data sources identified during this project will be added to the list provided in B9 and will serve as an update to this QAPP.

A8. Special Training/Certification

Personnel conducting work associated with this project are deemed qualified to perform their work through educational credentials, specific job/task training, required demonstrations of

competency, and internal and external assessments. Personnel training records are available for review upon request.

A9. Documents and Records

Project documents and records that describe, specify, report, or certify activities, requirements, procedures or results for this project and the items and materials that furnish objective evidence of the quality of items or activities are listed in Table 1.

Table 1. Project Documents and Records

Document/Record	Location	*Retention Period	Format
QAPP, amendments, distribution documentation	TXSTATE	7 years	Digital
Meeting notes	TXSTATE	7 years	Digital
Education and outreach materials	TXSTATE	7 years	Digital
Staff training records	TXSTATE	7 years	Digital
Quarterly progress reports	TXSTATE	7 years	Digital
Daft/final project reports	TXSTATE	7 years	Digital

*RSP102- Grant Research Records – Working Files, Texas State University Records Management

B Data Generation and Acquisition

B1. Sampling Process Design (Experimental Design)

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B2. Sampling Methods

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B3. Sample Handling and Custody

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B4. Analytical Methods

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B5. Quality Control

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B6. Instrument/Equipment Testing, Inspection, and Maintenance

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B7. Instrument/Equipment Calibration and Frequency

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B8. Inspection/Acceptance of Supplies and Consumables

No new environmental data operations will be implemented for this project therefore this section is not applicable to this project.

B9. Non-Direct Measurements

Non-direct measurement data will be acquired for this project for planning, conceptual modeling and mapping activities undertaken to improve community decision makers' abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the coastal zone boundary (CZB) (Appendix I.). Data intended for regulatory purposes will be acquired in accordance with the agency's standards and documented in this QAPP.

Environmental and geospatial data and/or information acquired for use in this project will result from publicly available GIS data (land use, topo, soils, wetlands, geologic, etc.) (Appendix I). These data will be used for workshop and retrofit planning activities. Field surveys may take place at retrofit sites to identify the horizontal/vertical control to assess size, cost, and benefits. Field surveys will be documented in field logs Water data acquired from state/federal agencies will come directly from documented sources along with documented quality assurances.

GIS and water quality data will be retrieved from online database or requested from federal, state, regional, and academic agencies. No new directly measured or acquired water quality or GIS data will be collected for use in this project.

B10. Data Management

Data standards will be maintained for all acquired data types for this project. Data officially released from federal, state, and regional sources will be assumed to have a high level of quality and will be accepted for use in this project. Metadata for these data sets will be reviewed for documented data limitations. Texas state survey standards will be followed.

Project databases and data documentation will be stored electronically on servers maintained by the Texas A&M University System and Texas State University System. Copies of all files are

stored automatically in a backup partition on the server. Project folders will be stored on backup media by all TCC partners.

GIS data/maps will be made available and may be accessed through the website developed for this project. Additional data summaries will be presented in reports. Comprehensive datasets may be requested from the MCWE Project Manager through email or in person.

A Data Sharing Plan has been established and communicated to the project partners for this project by TXSTATE. TXSTATE will ensure adherence to the Data Sharing Plan by all subgrantee(s)/ subcontractor(s). File and data sharing will occur among the TCC project partners on Microsoft Teams and OneDrive. Research and data findings will be disseminated to the scientific research community and coastal managers, ensuring the content is visible, accessible, and independently understandable to general users. An acquired data summary report of all data sources used for this project will be submitted with the final project report.

C Assessment and Oversight

C1. Assessments and Response Actions

Assessment and response activities associated with all data acquisition activities for this project will be conducted. The MCWE project manager and QAO will facilitate, conduct, and document status monitoring oversight, site visits and/or technical systems audits as described in Table 3.

Table 2. Assessment and Response Requirements

Assessment Activity	Approximate Schedule	Responsible Party	Scope	Response Requirements
Status Monitoring Oversight	Continuous	TXSTATE PM	Monitoring of the project status and records to ensure QAPP requirements are being fulfilled. Monitor and review performance and data quality.	Report to GLO PM in QPRs. Ensure project deliverables are on track for completion.
Site Visits	Dates to be determined by MCWE	TXSTATE PM	Status of activities. Overall compliance with scope of work and QAPP.	As needed.
Technical Systems Audits	Dates to be determined by MCWE	TXSTATE QAO	Qualitative audit of facilities, personnel, training, procedures, record keeping, data validation, data management, and reporting aspects of project participants.	Report any findings to GLO in QPRs. Ensure project deliverables meet DQOs and QA protocol described in QAPP. Implement corrective action(s)

				to remedy findings if appropriate.
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C2. Reports to Management

Reports to TXSTATE Project Management

Reporting mechanisms among the TCC project partners have been established and are being implemented. Monthly conference calls with the GLO Contract Manager and TCC partners to discuss project status and address any project concerns are scheduled for the duration of the project to ensure effective reporting and communication among partners and to ensure the project remains on schedule for completion.

TXSTATE also coordinates Semi-Annual Team meetings with TCC partners and prepares notes for the calls/meetings submitted to the GLO Contract Manager within 7 days.

Additionally, internal progress reporting occurs at weekly staff meetings among TXSTATE project staff; reports include status of project deliverables, problems, delays, and corrective actions if applicable.

Reports to GLO Project Management

All reports detailed in this section are contract deliverables and are submitted to the GLO in accordance with contract requirements and the scope of work schedule of deliverables.

Quarterly Progress Reports – will be submitted as specified in the contract scope of work. Reports will summarize the TXSTATE’s and TCC partner’s activities for each task deliverable.

Technical Systems Audit Reports – will be submitted as specified in C1 Assessment and Response. Corrective actions will be pursued as deemed necessary based on the severity of the findings. Audit and corrective action descriptions will be included in the QPRs.

Draft and Final Task Report – will be produced by TXSTATE as specified in the contract scope of work. Reports will summarize all task project activities implemented in the reporting period as described in the contract scope of work.

Draft and Final Project Report – will be produced by TXSTATE as specified in the contract scope of work. Reports will summarize all activities completed and conclusions reached during the project period.

Reports by GLO Project Management

Contractor Evaluation – The contractor participates in a Contractor Evaluation by the GLO for compliance with administrative and programmatic standards. Results of the evaluation are submitted to the GLO Coastal Resources Grants Program.

D Data Validation and Usability

D1. Data Review, Verification, and Validation

Data review, verification and validation is an important part of acquiring data for uses other than their original intended purpose. Data verification is a systematic process for evaluating performance and compliance of a set of data to ascertain its completeness, correctness, and consistency using the methods and criteria defined in the QAPP. Validation includes those processes taken independently of data-generation to evaluate the technical usability of the verified data with respect to the planned objectives or intention of the project. Additionally, validation can provide a level of overall confidence in the reporting of the data based on the methods used.

All existing data acquired for use in this project will be reviewed and verified by the TCC partner using the data for conformance to project requirements. Only those data supported by appropriate quality assurance measurement performance specifications defined by the source of the data will be considered acceptable and used to fulfill contract deliverables.

The TXSTATE Project Manager, in concurrence with the TXSTATE QAO, is responsible for ensuring that all acquired data are reviewed, verified, and validated by the TCC partners. Additionally, the data must meet the project objectives and be suitable for reporting to the GLO.

D2. Verification and Validation Methods

All acquired data will be verified to ensure they are representative of the samples analyzed and locations where measurements were made, and that the data and associated quality control data conform to project specifications.

Verification, validation, and integrity review of data will be performed using self-assessments and peer review, as appropriate to the project task, followed by technical review by the TCC partner responsible for the task. Data compilations created for this project will be visually screened for errors. All data obtained from the various sources will be reviewed and verified for conformance to project requirements.

The data to be verified are evaluated against project performance specifications as defined by the data source and are checked for errors, especially errors in transcription, calculations, and data input. If a question arises or an error is identified, the TCC partner will contact the source generating the data to resolve the issue. Issues that can be corrected are corrected and documented for reporting purposes. If an issue cannot be corrected, the task manager consults with the higher-level project management to establish the appropriate course of action, or the data associated with the issue are rejected and not used for the project or reported to the GLO.

D3. Reconciliation with User Requirements

Non-direct measurement data acquired from third parties as described in this QAPP will be used for planning, conceptual modeling and mapping activities undertaken to improve community decision maker's abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the CZB. Third party data will be analyzed and

reconciled with project data quality objectives and QA/QC activities that ensure data of known and acceptable quality are used in and generated by this project.

The Final Report will describe project activities and identify and discuss the extent to which project goals and purposes are achieved. The Final Report will emphasize successes, failures, lessons learned, and include acquired water quality data, retrofit plans, and estimated NPS pollutant load reductions. Acquired data for this project that do not meet requirements contained in this QAPP will not be included in the draft/final reports due to compromised data quality. All other acquired data that do meet requirements contained in the QAPP will be shared with the scientific research community and coastal managers, ensuring the content is visible, accessible, and independently understandable to general users.

Reference

United States Environmental Protection Agency. 2001. EPA Requirements for Quality Assurance Project Plans. EPA QA/R-5. Office of Environmental Information, Washington, DC. 40 pgs.

APPENDIX I. Task 1: Data Acquisition and Quality Assurance: Texas Coastal Collaborative Environmental Data Acquisition Sources

(DRAFT updated March 19, 2021)

Data Type	Monitoring Project/Program (provide hyperlink to data source if available)	Collecting Entity	Dates of Collection	QA Information	Data Use(s)
CHARM and Highland Bayou					
Places	https://www.census.gov/geo/maps-data/data/tiger-line.html	U.S. Department of Commerce, U.S. Census Bureau, Geography Division	2017	U.S. Census Bureau	municipalities and census designated places
Counties	https://www.census.gov/geo/maps-data/data/tiger-line.html	U.S. Department of Commerce, U.S. Census Bureau, Geography Division	2017	U.S. Census Bureau	County boundaries
Critical Facilities	https://www.fema.gov/flood-maps/products-tools/hazus	FEMA Hazus	2017	FEMA Hazus	Essential facilities in Hazus-Multi Hazard risk assessment tool
Hurricane Track	https://www.ncdc.noaa.gov/	NOAA	2017	NOAA	International best track archive for climate stewardship
Roads and Rails	https://www.fema.gov/flood-maps/products-tools/hazus	U.S. Department of Commerce	2017	U.S. Census Bureau	Interstate, state & local

		ce, U.S. Census Bureau, Geography Division			roads, & rail lines
CHARM Grid	https://www.communitycharm.org/	TCWP, Texas A&M AgriLife Extension Service	Version 2.0-2015 Version 3.0-2018	TCWP	2.5X2.5 acre grids nested across the United States with unique IDs
Current population per grid	https://www.census.gov/geo/maps-data/data/tiger-line.html	U.S. Department of Commerce, U.S. Census Bureau, Geography Division	2018	TCWP	Population density per CHARM square (derived from 2010 census bureau)
Elevation	http://nationalmap.gov/viewer.html	U.S. Geological Survey (USGS)	2013	USGS	Raster elevation data derived from USGS elevation model
Base Flood Elevation (BFE)	https://msc.fema.gov/portal/home	FEMA	varied	FEMA	BFEs are shown on FEMA's Flood Insurance Rate Maps (FIRMs) and in the Flood Insurance Study (FIS)
Floodway	https://msc.fema.gov/portal/home	FEMA	Varied	FEMA	NFHL data showing the primary conveyance area of a

					channel's cross-section
Flood Zone Effective Products /FIRM	https://msc.fema.gov/portal/home	FEMA	Varied	FEMA	Regulatory Risk MAP Flood Products-vector data of 1% & 0.2% flood zones
Change Since Last FIRM	https://msc.fema.gov/portal/home	FEMA	Varied	FEMA	Risk MAP flood risk products. Including change of special flood hazard area, flood zone Old & New
Flood depth grid & analysis	https://msc.fema.gov/portal/home	FEMA	Varied	FEMA	Risk MAP flood risk products. Including water depth of 1% and 0.2% annual chance flood. % annual chance of flooding % 30yrs chance of flooding
Base Level Engineering	https://webapps.usgs.gov/infrm/estbfe/	InFRM – USGS, FEMA, NOAA, & USACE	2019, 2020, 2021	InFRM	Non-Regulatory Flood Products - it includes estimated flood extents (1%, 0.2% & 10%), flood depths

					(1% & 0.2%).
Habitat	https://www.communitycharm.org/	TCWP, Texas A&M AgriLife Extension Service	2014	TCWP	Shape file of ecologically significant areas in the Houston-Galveston region. Shaped depict area of coastal prairies and woodlands
Parcel and Land Use types	https://tnris.org/stratmap/land-parcels/ & Varied, mostly from local appraisal districts (N/A)	TNRIS & mostly from local appraisal districts (N/A)	Varied, depending on workshops	TNRIS & County Appraisal District	Parcel data sets, both shape file and attribute tables
Land Coverage	https://coast.noaa.gov/digitalcoast/data/ccapregional.html https://www.usgs.gov/centers/eros/science/national-land-cover-database?qt-science_center_objects=0#qt-science_center_objects	NOAA, USGS	2017, 2020	NOAA, USGS	Derived from CCAP or NLCD landcover classification. Including Open Water, Land Development Intensity, Undeveloped, Woods, Wetlands
Census Block, Block Group, and Tract	https://www.census.gov/geo/maps-data/data/tiger-line.html	U.S. Department of Commerce, U.S. Census Bureau, Geograp	2018	U.S. Census Bureau	Census units

		hy Division			
Soil	https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm	USDA	2017	Soil Survey Geographi c Database (SSURGO)	Includes- septic tank absorptio n field, plasticity index, prime farmland soils, drainage class, and hydrologi cal group
Catchme nt	https://nhdplus.com/NHDPlus/NHDPlusV2_tools.php	EPA	2017	EPA	Catchmen ts from national hydrologi cal data plus version 2
Sub watersh eds	https://nhd.usgs.gov/data.html	U.S. Geologic Survey (USGS)	2017	USGS	HUC12 of National Hydrologi cal Data
Surge impact to critical facilities	https://www.communitycharm.org/	TCWP, Texas A&M AgriLife Extensio n Service	N/A	TCWP	Derived from SLOSH and Critical Facilities
Surge and SLR	See SLOSH and CHARM	TCWP, Texas A&M AgriLife Extensio n Service	N/A	TCWP	Derived from SLOSH and CHARM
SLOSH	http://slosh.nws.noaa.gov/sloshPub/disclaim.php	NOAA	2013	NOAA	Sea, Lake, and Overland Surges from Hurricane s model data

Wetland	https://www.fws.gov/wetlands/Data/Data-Download.html	U.S. Fish & Wildlife Services	2017	U.S. Fish & Wildlife Services	Nationwide wetland inventory with information on distribution and type of wetlands
Park	https://www.communitycharm.org (State park Websites, https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-overview , The National Map)	TCWP, Texas A&M AgriLife Extension Service	2017	TCWP	Created based on merging multiple parks datasets
Social Vulnerability Index	https://www.census.gov/programs-surveys/acs , https://www.communitycharm.org	TCWP, Texas A&M AgriLife Extension Service	2017	TCWP	Derived from American Census Survey Block group data & it includes 9 demographic variables such as – aged 65 and above, aged 17 and under, per capita income, below poverty, ppl with no high school diploma, speak English less than well, mobile homes and no vehicle access and used statewide

					percentile ranking
Zip Code	https://www.census.gov/geo/maps-data/data/tiger-line.html	U.S. Department of Commerce, U.S. Census Bureau, Geography Division	2017	U.S. Census Bureau	Zip code boundaries
Aerial	http://www.tnris.org/get-data	USDA-FSA Aerial Photography Field Office via TNRIS	Varied	TNRIS	High resolution aerial imagery-raster data
Water Quality Monitoring					
Surface Water Quality Monitoring Data (Field measurements: Temperature, dissolved oxygen, pH, etc.)	TCEQ (SWQM, CRP TMDL, NPS) https://www80.tceq.texas.gov/SwqmisPublic/index.htm	TCEQ	Most recent available for entire project area	TCEQ SWQM QAPP; CRP Partner QAPPs, TMDL QAPPs, NPS QAPPs	Summary statistics, trend analysis, and assessment
Groundwater Quality	TWDB Statewide Program: Groundwater Data Texas Water Development Board	TWDB	Most recent available for entire project area	TWDB QAPP	Summary statistics, trend analysis, and assessment
Streamflow	United States Geological Survey (USGS) http://waterdata.usgs.gov/tx/nwis/sw	USGS	For the period of record collected by the USGS; Station nos. 08075400 – Sims Bayou at	USGS QAPP; USGA database	Flow duration curves, Loading calculations

			Hiram Clarke St., Houston, TX 08072300 – Buffalo Bayou near Katy, TX 08114000 – Brazos River at Richmond, TX, others		
Precipitation Data	National Weather Service (NWS): AHPs Precipitation Analysis (weather.gov)	NWS	Most recent available for entire project area	NWS Website	Summary statistics, trend analysis, and assessment
Texas Stream Team Citizen Scientist Water Quality Monitoring Data	Texas Stream Team https://www.meadowcenter.txstate.edu/Leadership/TexasStreamTeam/Dataviewer-and-Datamap.html	TST	1991 - 2021	Texas Stream Team QAPP	Education and Outreach, Supplemental TCEQ water quality data
Geospatial Data Sources					
TCEQ Segment Shapefile	TCEQ GIS Data Download Page https://www.tceq.texas.gov/gis/download-tceq-gis-data	TCEQ	Latest available shapefile(s) - Polygons	Metadata available with download	Watershed maps
TCEQ Surface Water Quality Monitoring Station Locations	TCEQ GIS Data Download Page https://www.tceq.texas.gov/gis/download-tceq-gis-data	TCEQ	Latest available shapefile(s) - Points	Metadata available with download	Watershed maps

Census Data	TNRIS: TNRIS DataHub	TNRIS	Most recent available for entire project area	Individual organization QA procedures	GIS mapping/analysis
Climatic Data	NCEI: Access National Centers for Environmental Information (NCEI) (noaa.gov)	NOAA	Most recent available for entire project area	Individual organization QA procedures	Characterization of historical and recent climatic conditions associated with routine and storm monitoring events
Groundwater Levels	TWDB Statewide Program: Groundwater Data Texas Water Development Board	TWDB	Most recent available for entire project area	TWBD QAPP	Analysis of recharge, Desired Future Conditions, Trend analysis of groundwater level fluctuations
Hydrography	USGS NHD: National Hydrography Dataset (usgs.gov)	USGS	Most recent available for entire project area	USGS Data Standards	GIS mapping/analysis
Hydrologic Unit Code (HUC)	USGS NHD: USGS Water Mission Area NSDI Node	USGS	Most recent available for entire project area	USGS Data Standards	GIS mapping/analysis
Land Cover	USGS National Land Cover Databas (NLCD): National Land Cover Database (usgs.gov)	USGS	Most recent available for entire	USGS Data Stabdards	GIS mapping/analysis

			project area		
Soils	USDA NRCS: Soil Surveys by State NRCS Soils (usda.gov)	USDA	Most recent available for all project stations	USDA NRCS	GIS mapping/analysis
Stormwater Manuals and Criteria					
Statewide	Texas Coastal Resiliency Master Plan	TGLO	2016-2019	TGLO	Project selection, development, and implementation
Aransas County	County LID Stormwater Guidance Manual- https://cpb-us-e1.wpmucdn.com/wp.txstate.edu/dist/4/2239/files/2020/03/Aransas-County-LID-Stormwater-Guidance-Manual-.pdf 2011 Stormwater Management Plan- https://www.aransascountry.org/stormwatermgmt/e-docs/FINAL20110308%20Open%20House%20-%20AC%20SWMP.pdf	Aransas County	2011-2020	Aransas County	Project selection, development, and implementation
Corpus Christi	Low Impact Development Guide: https://www.tceq.texas.gov/assets/public/waterquality/nps/projects/90473CorpusChristiLIDGuidance.pdf Port of Corpus Christi- Stormwater Management Plan in development with Plummer Associates, INC Announcement- https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/510309/Comm_Memo_Plummer-Final.pdf	TCEQ	2011 2021	TCEQ/City of Corpus Christi	Project selection, development, and implementation
Rio Grande Valley (RGV)	RGV Stormwater Management https://rgvstormwater.org/about-us/stormwater-taskforce/	RGV Stormwater Management Taskforce	2019	RGV Stormwater Management Taskforce	Project selection, development, and implementation
Cameron County	Erosion Response Plan and Dune Protection/Beach Access Plan https://www.glo.texas.gov/coast/coastal-management/forms/files/cameron.pdf	Cameron County Commissioners Court	2018	Cameron County Commissioners Court	Project selection, development, and implementation

South Padre Island	Shoreline Master Plan and Erosion Response Plan https://www.myspi.org/department/index.php?structureid=21	City of South Padre Island	2018	City of South Padre Island	Project selection, development, and implementation
Watershed Protection Plans and Total Maximum Daily Load Reports texas-wpps.pdf (Updated: February 2021) Nonpoint Source Project Viewer (arcgis.com) (Updated: Dec 2020)					
WPP	Arroyo Colorado Watershed Protection Plan https://www.tceq.texas.gov/assets/public/waterquality/nps/watersheds/ArroyoColoradoWPPFINAL.optimized.pdf	TCEQ	2017	TCEQ	Full WPP Updated
TMDL	Oso Bay Total Maximum Daily Load https://www.tceq.texas.gov/waterquality/tmdl/67-osobaybacteria.html#documents	TCEQ	2005-2014	TCEQ	Implementation
WPP	LLM/Brownsville Ship Channel https://www.tceq.texas.gov/assets/public/waterquality/nps/projects/80206-10161-laguna-madre-brownsville-wpp.pdf https://arroyocolorado.org/media/zqjpi1e0/llm_wc_102618_forstakeholderreview.pdf http://www.cameroncounty.us/llmbc/	TCEQ	2020	TCEQ, TSSWCB	Model building; continuing development of WPP
WPP (characterization)	Characterization of Northern and Central RGV Watersheds https://rgvstormwater.org/tceq-319-characterization-of-northern-and-central-rio-grande-valley-watersheds/	TCEQ	2020	TCEQ	Characterization
WPP	San Fernando and Petronila Creek WPP https://twri.tamu.edu/our-work/restoring-protecting/petronila-san-fernando-creeks-watershed-planning/meetings/	TWRI	2021	TSSWCB; EPA	Preliminary stages
TMDL, WPP	Mission Aransas TMDL and now WPP https://www.tceq.texas.gov/waterquality/tmdl/42-copano.html	TSSWCB	2016	TSSWCB	Implementation
TMDL	Carancahua Bay TMDL-bacteria https://www.tceq.texas.gov/assets/public/waterquality/tmdl/108carancahua/108-Carancahua-bacteria-tmdl-proposed.pdf	TCEQ	2020	TCEQ	Implementation
WPP	Carancahua Bay WPP-DO http://matagordabasin.tamu.edu/carancahua-bay/	TCEQ/TWRI	2019	TCEQ/TWRI	Collaborating with stakeholders

WPP (Characterization)	Hidalgo Main WPP https://rgvstormwater.org/tceq-319-characterization-of-northern-and-central-rio-grande-valley-watersheds/	TCEQ	2014	TCEQ	Characterization
WPP	Lavaca River Watershed (WPP) http://matagordabasin.tamu.edu/lavaca/	TCEQ/TWRI	2018	TCEQ/TWRI	Development
TMDL	Tres Palacios https://www.tceq.texas.gov/assets/public/waterquality/tmdl/108trespalacios/108b-trespalacios-bacteria-tmdl-adopted.pdf	CMP and TCEQ	2018	TMDL QAPP	TMDL adopted; Implementation ongoing

APPENDIX B - TASK 2

1. CCTC Contact Database
2. Matrix – Regulatory Review and Survey

CCT Contact Database

County	Organization/Affiliation	Name	Title/Position	Phone	Email
	AECOM	Brandon Hill	(used to work at SPI; contractor for GLO)		brandon.hill@aecom.com
Aransas	City of Rockport	Amanda Torres*	Community Planner	361-790-1125 ext 226	atorres@cityofrockport.com
Multiple	Coastal Bend Bays and Estuaries Program - CBBEP	Kiersten Stanzel	Director of Partnerships	(361) 336-0315	kstanzel@cbbep.org
Brazoria	Brazoria County	Joe Ripple	Floodplain Manager	9798641272	joer@brazoria-county.com
Brazoria	Brazoria County	Brian Frazier	Parks Director	979-864-1114	bryanf@brazoria-county.com
Brazoria	Village of Surfside	Kay Huffman	Building Official....planner/permit reviewer/issues permits	(979) 233-1531	CityHall@surfsidetx.org
Cameron	Cameron County	Joe Vega	County Parks Director	(956) 761-3700	JEVega@co.cameron.tx.us
Cameron	Cameron County	Augusto Sánchez González, M.S., C.F.M	Natural Resources Coordinator - Department of Transportation	(956) 247-3530	augusto.sanchez@co.cameron.tx.us
Cameron	City of South Padre Island	Kristina Boburka	Shoreline Department - Shoreline Director	Office: 956-761-3837	kboburka@myspi.org
Galveston	City of Galveston	Dustin Henry	Development Services	409-797-3621	DHenry@GalvestonTX.gov
Galveston	City of Galveston	David Ewald	Building Official	409-797-3625	DEwald@GalvestonTX.Gov
Galveston	Galveston County	Amanda Davenport	(permit reviewers/planners)	979-233-1531, x103	amanda@surfsidetx.org
Galveston	Galveston County	Sean Welsh	Building Official/permit manager	409.770.5552	BuildingPermits@co.galveston.tx.us
Galveston	Galveston County	William Comeaux	Beach Operations		
Galveston	CoG Park Board	Reuben Trevino	Former employee of city of Galveston, former experience with South Padre; works with Feds now	409-926-1329	reuben.trevino2@usace.army.mil
Galveston, Harris	Texas Community Watershed Partners - TCWP	Charriss York	Stormwater Program Specialist	(281) 694-5508	
Harris	Houston-Galveston Area Council (HGAC)	Todd Running	Manager of Clean Rivers Program Website	713-993-4549	Todd.Running@h-gac.com
Harris	Houston-Galveston Area Council (HGAC)	Cheryl Mergo	Contact info listed on LID site for HGAC	tel:713-993-4520	cheryl.mergo@h-gac.com

Harris	Houston-Galveston Area Council (HGAC)	Kathy Janhsen	Principal Program Coordinator - Clean Waters Initiative	713-993-2423	kathy.Janhsen@h-gac.com
Harris	Houston-Galveston Area Council (HGAC)	Steven Johnston	Senior Planner - TMDL Program	832-681-2579	Steven.Johnston@h-gac.com
Harris	Houston-Galveston Area Council (HGAC)	Kendall Guidroz	Planner - Texas Stream Team	713-627-3200	kendall.guidroz@h-gac.com
Harris	Houston-Galveston Area Council (HGAC)	Justin Bower*	Senior Planner - Watershed Protection Plans	713-499-6653	Justin.Bower@h-gac.com
Nueces	City of Corpus Christi – (floodplain management position currently vacant)	Yvette Dodd-Wallace	Development Services		
Nueces	City of Corpus Christi Stormwater	Sandra Ellis			
Nueces	Nueces County	Jay Parsons – contractor			
Nueces	Nueces County	Barbara Canales	Judge	361-888-0264	maggie.turner@nuecesco.com
Nueces	Nueces County	Juan Pimentel	Director of Public Works, County Engineer	(361) 888-0490	
Nueces	Nueces County	Scott Cross	Director of Coastal Parks, Nueces County	(361) 949-8122	nueces.ballipark@co.nueces.tx.us
Nueces	Port Aransas	Rick Adams	Planning and Zoning	361-749-4111 Ext 233	radams@cityofportaransas.org
Nueces	Port Aransas	Dave Parson*	City Manager	361-749-4111 Ext 224	davidparsons@cityofportaransas.org
Nueces	Port Aransas	Jim Urban	Urban Engineering	361-854-3101	jimu@urbaneng.com
Nueces	Mission Aransas National Estuarine Research Reserve (MANERR)	Sarah Cunningham	Coastal training Program Coordinator		sarah.cunningham@austin.utexas.edu
Nueces	Port Aransas Parks & Recreation department	Colleen Simpson	City Parks & Recreation department	361-749-4158	
Nueces	Sea Grant				
Willacy	Willacy County	Jessica Gracida	Willacy County Judge Aurelio Guerra Jr.'s Office	(956) 689-3393	jessica.gracida@co.willacy.tx.us
Hidalgo	University of Texas - Rio Grande Valley	Jude Benavidez	Associate Professor	(956) 882-5938	jude.benavides@utrgv.edu
Brazos	Texas Water Resources Institute	Jaime Flores	Program Coordinator	956-969-5607	jjflores@ag.tamu.edu
Nueces	Texas State Aquarium	Suraida Nanez-James	STEM Integration Manager	800-477-4853	snanez-james@txstateaq.org
Hidalgo	Pharr ISD				
Cameron, Hidalgo	Rio Grande Valley Master Naturalists	Ed Langley	Texas Master Naturalist	361-749-4749	langley.ed@gmail.com
Travis	Texan by Nature	Jenny Burden	Program Manager	512-284-7482	jenny@texanbynature.org

Nueces	Texas A&M University - Corpus Christi	Erin Hill		361-825-5791	erin.hill@tamucc.edu
Travis	Texas Parks and Wildlife Department	Marty Kelly	Natural Resources Specialist	512-389-8214	marty.kelly@tpwd.texas.gov
Aransas	International Crane Foundation	Elizabeth H. Smith, Ph.D.	North American Program Director	631-543-0303	esmith@savingcranes.org
Harris	Matagorda Bay Foundation	Bill Balboa	Executive Director	361-781-2171	bill.balboa@ag.tamu.edu
Aransas	Mission Aransas National Estuarine Research Reserve (MANERR)	Jace Tunnel	Director	361-749-3046	jace@utexas.edu
Harris	Bayou Preservation Association, Inc	Sarah P. Bernhardt, Ph.D.	President	713-529-6443	sbernhardt@bayoupreservation.org
Cameron	Coastal Cleanups	Thomas Bainter	President/Treasurer		Tbain94113@aol.com
Cameron	Fishing's Future				
Galveston	Galveston Bay Foundation	Nicholas Ellis	Water Quality Programs Coordinator	281-332-3381	nellis@galvbay.org
Nueces	City of Port Aransas	Rae Mooney	Nature Preserve Manager	+1 361-749-0081	rmooney@cityofportaransas.org
Nueces	Coastal Bend Bays and Estuaries Program - CBBEP	Lari Jo Edwards	Director of Environmental Education	(361) 336-0314.	info@cbbep.org
Nueces	Coastal Bend Bays and Estuaries Program - CBBEP	Ray Allen	Executive Director	(361) 336-0305.	
Nueces	Gulf Reach Institute	Suraida Nanez-James	President and Founder	(361) 739-6365	snanezjames@gmail.com

Matrix - Full Responses available [here](#).

Regulatory Review – Key Questions

- Estimated population
- Projected 2040 Population
- County/Counties
- Are there relevant special-purpose districts? (Flood control districts, drainage districts, etc)
- Are there relevant non-profits, advocacy, and community groups? (e.g. Galveston Bay Foundation)
- Has there been a CHARM workshop in this area in the past or planned for the next 6 months?
- Has there been a GIFT workshop in this area in the past or planned for the next 6 months?
- Does the locality have a comprehensive plan (or similar document)?
- Does the locality have a zoning ordinance?
- What is the status of the locality's Hazard Mitigation Plan?
- Active CDBG-DR?
- Is the community subject to NPDES/MS4?
- What is the effective date of the locality's Flood Insurance Rate Maps (FIRM) products?
- NFIP/CRS participants?
- Is BLE data available? If so, for which watersheds?

Survey Questions

How would you best characterize your affiliation?

- Federal Agency
- State Agency
- Regional Agency or Association
- Business/Business Association
- University/College
- Community Group
- Concerned Citizen
- Non-profit Group
- City/Town Government - Elected or Appointed
- City/Town Government – Staff
- County Government - Elected or Appointed
- County Government – Staff
- Elected State Government
- Media
- Tribal
- Other:

Do you have any prior involvement with the Texas General Land Office?

- A great deal of involvement
- Some prior involvement
- Very little prior involvement
- No prior involvement

Does your community have any existing Watershed Protection Plans (WPPs) or Total Maximum Daily Load (TMDL) programs for water quality protection?

- Yes
- Unsure
- No

Please share any relevant additional information on ongoing water quality protection efforts in your community:

Are you interested in receiving support from Clean Coast Texas on any existing coastal water quality projects or initiatives in your community?

- Yes - very interested
- Yes - somewhat interested
- Unsure
- No - not at all interested

What water quality improvement topics would you like to explore with Clean Coast Texas? Select all that apply:

- Planning assistance
- Project planning and/or design
- Wastewater improvements
- Retrofitting
- Funding strategies and applications
- Local government codes and ordinances
- Mass outreach and education
- Share existing opportunities and resources
- Increase collaboration
- Other:

How can Clean Cost Texas best support your community?

- Written materials – guidelines, best practices, lessons learned
- Webinars – presentations from subject matter experts, practitioners
- In-person workshops – detailed assistance specific to your community
- Other:

What type of workshops would you like to see in the future? Select all that apply:

- Funding opportunities and application
- Project planning

Local government code

Project design

Other:

What is the greatest barrier to improving water quality in your community?

Funding or a lack of funding

Lack of technical expertise

Public support

Staff time

Other:

Is your community willing to invest staff time for participation in the project?

Very willing to invest time - this is a high priority

Somewhat willing to invest time - this is a moderate priority

Willing to invest a small amount of time - this is a low priority

Unwilling to invest time - this is not a priority

If selected as a Clean Coast Texas partner community, who

https://txstate.co1.qualtrics.com/jfe/form/SV_6Pd6ih2CZqyBL1k

would be the primary point of contact?

Name

Email

Phone

Please share any additional relevant information on your community or how Clean Coast Texas can assist your community's water quality needs below:

Are you interested in attending future educational opportunities from Clean Coast Texas?

- Yes
- Maybe
- No

Are you or your organization interested in presenting at a future Clean Coast Texas Lunch & Learn opportunity?

- Yes
- Maybe - please send me more information
- No

Would you like to subscribe to emails from Clean Coast Texas?

- Yes - sign me up
- No - opt out
- I already receive emails from Clean Coast Texas

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APPENDIX C – TASK 3

1. Engagements and meetings with key stakeholders
2. Events and Attendance
3. Texas Stream Team event tracking

Engagements and meetings with key stakeholders

Community name	Date of the interaction	Type of interaction	Names and Titles	Summary of interaction
Aransas County Navigation District	3/24/2021	In person	Tom Hegemier Doucet & Associates C.H. "Burt" Mills County Judge	Conversation with Aransas Co Judge Mills, Rockport Mayor Rios
Aransas County	3/25/2021	In person	Tom Hegemier Doucet & Associates David Reid Management Engineer	Meet with David Reid, Aransas County Stormwater Mgmt
City of Rockport	3/25/2021	In person	Tom Hegemier Doucet & Associates Amanda Torres Community Planning/Floodplain Mgmt	Meet with Amanda Torres, Community Planning/Floodplain Mgmt,
City of Rockport	5/18/2021	In person	Tom Hegemier Doucet & Associates Pat Rios Mayor	CHARM workshop, provide a better understanding of green infrastructure and retrofits to improve water quality and help mitigate flooding in existing developed areas. Field review to identify potential retrofit sites.
City of Port Aransas	5/19/2021	In person	Tom Hegemier Doucet & Associates Colleen Simpson Director Parks & Recreation	
City of Galveston	5/28/2021	Phone call	Tom Hegemier Doucet & Associates Public Works and Utilities Director Angelo Grasso	The City is doing a Seawall Blvd beautification project at 27 th Street. Landscaping in the median. Could be similar to the rain garden concept. He shared a contact that I can reach out to when the time is right to do that. Anything to do with the Seawall starts with the County Engineer, Michael Shannon. Jason and I spoke with him last fall. Michael coordinates with the Corps of Engineers on Seawall related activities. West end drainage is a City concern, beach loss, erosion of channels that drain to the beach, etc. Angelo said that they attempt to drain all new development projects to the Bay as any channels going to beach tend to erode and require considerable maintenance. FM 3005 is a key drainageway to the Bay. TxDOT project is underway to dredge the roadside drainage channels, provide capacity, convey runoff to the Bay. The roadway right-of-way also conveys runoff from the Beach side of the road to the Bay when possible. TxDOT could be a valuable partner in Galveston as they "own"/maintain Seawall Blvd from 61st Street to the State Park west of the city center.
Lake Jackson	6/10/2021	In person	Celina Gauthier Lowry Texas A&M AgriLife Extension Debra Webb Superintendent of Utilities	Meeting with Deb for another unrelated project. I brought the Sustainable Stormwater manual hardcopy and did a brief overview. Followed up with an email with the survey link and more of an introduction. Deb wrote back that she passed the manual on to their drainage engineer and thanked us for the online version.
Dickinson	6/24/2021	in person	Charriss York Texas A&M AgriLife Extension Sean Skipworth Mayor	Discussed Sustainable Stormwater Manual and handed him a copy
City of Corpus Christi	7/8/2021	In person	Ashley Bennis Texas Sea Grant Jeff Edmonds City Engineer	Dropped off Stormwater Manual.
RGV	7/13/2021	Teams meeting	Aspen Navarro Meadows Center Jaime Flores program coordinator and watershed	Virtual meeting to discuss Texas Stream Team in the RGV. Discussed previous partners, future partners, needs, and next steps. Goal is to have TST present at the next watershed meeting to tell locals about TST and to recruit group members.

			coordinator for the Arroyo Colorado Watershed Partnership	
Jefferson	7/14/2021	Email and In Person	Aspen Navarro Meadows Center Terry D. Stelly Southeast Texas Clean Air & Water, Inc President	Terry invited the Texas Stream Team to present at the Clean Air & Water (CAW) directors meeting to promote TST. TST worked with the Lower Neches Valley Authority group to attend the meeting in person and represent TST as the local connecting group.
Kleberg County	7/19/2021	In person	Ashley Bennis Texas Sea Grant	Representatives from CCT, Coastal Bend Bays and Estuary Program, Texas Community Watershed Partners and TAMU-CC presented to County Commissioners on water quality and LID.
Kleberg County	7/23/2021	email	Adriana Mendez Meadows Center Rudy Madrid County Judge	Follow up email including meeting notes from 7/19/2021 and CCT website link and 1-pager
Kleberg County	7/23/2021	email	Adriana Mendez Meadows Center David Rosse County Commissioner	
Kleberg County	7/23/2021	email	Adriana Mendez Meadows Center Chuck Schultz County Commissioner	
Kleberg County	7/23/2021	email	Adriana Mendez Meadows Center Jerry Martinez County Commissioner	
Kleberg County	7/23/2021	email	Adriana Mendez Meadows Center Marcus Salinas County Commissioner	
Kleberg County	7/23/2021		Marty Ontiveros 911 Addressing Coordinator (Emergency Management)	Reached out to Marty Ontiveros July 29 explaining the situation with development in Riviera Beach and asking for help with a percolation test. TAMU-CC Coastal and Marine System Science was able to provide some information about core samples and soil type. On-going conversation to set up and date/time to perform percolation test and present to county Judge and commissioners.
City of Corpus Christi	7/23/2021	In person	Ashley Bennis Texas Sea Grant Jeff Edmonds City Engineer	Met with two city planners, city engineer and city resilience office to talk about stormwater master plan. The meeting covered: CCT workshops, stormwater fee, cost comparisons between LID and hard infrastructure, meeting with city council.
City of Corpus Christi	7/28/2021	In person	Ashley Bennis Texas Sea Grant Ben Molina City Council Member	Met City Council member Ben Molina to discuss Clean Coast Texas.
City of Port Lavaca	7/28/2021	In person	Andrew Knuppel TCWP Jessica Carpenter Director of Development	Met with Port Lavaca's Director of Development, Jessica Carpenter, and dropped off a copy of the SSM. TCWP worked with Port Lavaca on a technical assistance project 2018-early 2020. Current priorities include finalizing a new zoning ordinance and land use map that is being done in-house. They have a number of ongoing grant-funded projects, including some related to drainage and coastal management, but interest in green infrastructure may be restrained by concerns about efficacy, mosquito control, etc. The new City Manager (Jody Weaver) is actually the former City Engineer. Could be some future interest and opportunities for education – they seem to be adding new capacity.
Corpus Christi	7/28/2021	email	Adriana Mendez Meadows Center Ben Molina	Template thank you email for completing the Clean Coast Texas Community Interest Survey
Sinton	7/28/2021	email	Adriana Mendez Meadows Center John Hobson	Template thank you email for completing the Clean Coast Texas Community Interest Survey
Brazoria County	7/28/2021	email	Adriana Mendez Meadows Center Jodie Vice	Template thank you email for completing the Clean Coast Texas Community Interest Survey
Lower Rio Grande Valley	7/28/2021	email	Adriana Mendez Meadows Center Derek Katznelson	Template thank you email for completing the Clean Coast Texas Community Interest Survey

City of Aransas Pass	7/29/2021	In person	Andrew Knuppel TCWP Osei Amo-Mensah City Planner	Met with Aransas Pass' City Planner (Osei Amo-Mensah) and Planning Technician (Laura Harris). TCWP is working with a team of Aransas Pass staffers also including City Manager Gary Edwards and San Patricio Economic Development Corporation GIS Specialist Mark Zans on a technical assistance project. AP is hoping to begin an update their comprehensive plan in the next calendar year and have issues with drainage and aging infrastructure, so they may benefit from some of the planning and BMP retrofit assistance work. A portion of the City is in Aransas County and definitely close to some of the other partners. I left a copy of the SSM with the team and they seem interested in learning more.
Portland	7/29/2021	email	Adriana Mendez Meadows Center Cathy Skurow	Template thank you email for completing the Clean Coast Texas Community Interest Survey
City of Corpus Christi	8/6/2021		Ashley Bennis Texas Sea Grant	Request for Information about Costs Comparisons from City Engineer.
City of South Padre Island	8/31/2021	email	Kate de Gennaro Texas Sea Grant Kristina Boburka Shoreline Director	I emailed this group about Clean Coast Texas and other opportunities/resources that I think they could take advantage of. I reach out to them periodically about different things. I have not been able to coordinate with them on a concrete project yet. As of 11/16, I have had several back&forth emails with Kristina, but no concensus from the whole group.
La Marque	8/31/2021	phone call	Charriss York Texas A&M AgriLife Extension Chaise Cary Interm City Manager	Discussed a possible green infrastructure project in Omega Bay
Bishop Texas	9/1/2021	PLANNED - In person	Ashley Bennis Texas Sea Grant	
Harris County	9/8/2021	email	Adriana Mendez Meadows Center Dennis Johnston	Template thank you email for completing the Clean Coast Texas Community Interest Survey
City of Corpus Christi	9/21/2021	Phone Call	Ashley Bennis/Tom Hegemier Texas Sea Grant/Doucet Alejandro Alvarado Engineer II	Discussed CC drainage criterial manual revision process, offerred CCT Sustainable Stormwater Manual support, sent him files and information
Corpus Christi	10/6/2021	email	Adriana Mendez Meadows Center Amanda Torres Senior City Planner	Template thank you email for completing the Clean Coast Texas Community Interest Survey
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Rudy Madrid County Judge	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center David Rosse County Commissioner	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Chuck Schultz County Commissioner	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Jerry Martinez County Commissioner	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Marcus Salinas County Commissioner	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Kiersten Stanzel Director of Partnerships Coastal Bend Bays & Estuaries Program	emailed Community Forum Action Plan
Kleberg County	10/6/2021	email	Adriana Mendez Meadows Center Michael Wetz, Ph.D. Chair for Coastal Ecosystem Processes Harte Research Institute for Gulf of Mexico Studies	emailed Community Forum Action Plan
Aransas County	10/6/2021	email	Adriana Mendez Meadows Center David Reid Aransas County Engineer	emailed Community Forum Action Plan and Funding Strategy

Aransas County	10/6/2021	email	Adriana Mendez Meadows Center C.H. "Burt" Mills County Judge	emailed Community Forum Action Plan and Funding Strategy
Aransas County Navigation District	10/6/2021	email	Adriana Mendez Meadows Center Malcolm Dieckow Chairman	emailed Community Forum Action Plan and Funding Strategy
Aransas County Navigation District	10/6/2021	email	Adriana Mendez Meadows Center Keith Barrett Harbor Master	emailed Community Forum Action Plan and Funding Strategy
Aransas County	10/6/2021	email	Adriana Mendez Meadows Center Charlie Beldaire Beldaire Environmental, Inc.	emailed Community Forum Action Plan and Funding Strategy
Rockport	10/6/2021	email	Adriana Mendez Meadows Center Pat Rios City Mayor	emailed Community Forum Action Plan and Funding Strategy
Fulton	10/6/2021	email	Adriana Mendez Meadows Center Kelli Cole Town Mayor	emailed Community Forum Action Plan and Funding Strategy
Fulton	10/6/2021	email	Adriana Mendez Meadows Center Mark Wagnon Alderman Place 4	emailed Community Forum Action Plan and Funding Strategy
Hitchcock	10/13/2021	email and In Person	Celina Gauthier Lowry Texas A&M AgriLife Extension Chris Armacost Mayor	Discussed Sustainable Stormwater Manual and delivered a copy to City Hall
Kleberg County	10/19/2021	In person meeting	Ashley Bennis, Adriana Mendez Texas Sea Grant, Meadows Center Chuck Schultz Commissioner Precinct 2	Ashley arranged meeting with Judge Madrid, he could not see us, so we talked to Commissioner Schultz instead. We discussed current drainage management plans. Kleberg county is waiting for some equipment to arrive to clean up and deepen grass lined drainage ditches in Precinct 1 & Precinct 3. They are hoping the equipment will arrive by January. Their major concerns are clearing out culverts and widening some of the ditches. They are trying to coordinate with Kingsville to see what projects the city is pursuing. They are in contact with an engineering firm, S&D Engineering, but are not moving forward with anything until they coordinate with the city. Commissioner Schultz suggested that we reach out to the city manager Mark McLaughlin, and the city engineer Rudy Mora to learn about what the city's plans. I called and spoke with the city manager but he was on his way out and advised me to call Rudy Mora. We also visited the city engineer office and Tranquitas creek (intersection of 14th St and E Santa Gertrudis St).
RGV	10/26/2021	Phone call	Aspen Navarro Meadows Center Jaime Flores program coordinator and watershed coordinator for the Arroyo Colorado Watershed Partnership	Quick phone call meeting to discuss the latest on the next Arroyo Colorado watershed public stakeholder meeting. Texas Stream Team is officially on the agenda - waiting to lock down a date. Jaime will follow up once a date is decided.

Little Bay (Rockport)	11/9/2021	Hybrid	Aspen Navarro, Adriana Mendez Meadows Center Pam Meyer Little Bay Stream Team	The purpose of the meeting was to set up a Texas Stream Team group in the Rockport area, as part of the Clean Coast Texas effort to improve the water quality in Little Bay. Adriana Méndez met in-person with the Little Bay Stream Team at the Key Allegro House (29 Mazatlan Dr, Rockport, TX 78382) and Aspen Navarro joined the meeting via zoom. Three TST certified members attended the meeting, as well as Hannah Rudellat from Belair Environmental, Inc, and two new members interested in taking the TST Standard Core Training. Members of the newly formed Little Bay Stream Team filled leadership positions. Pam Meyer will be the primary contact between Little Bay Stream Team and Texas Stream Team (Meadows Center) and will act as the Quality Assurance Officer (QAO). Hannah Rudellat will act as the data coordinator. Adriana Mendez will fill monitoring plan form online on behalf of the Little Bay Stream Team. Little Bay Stream Team also agreed on the monitoring locations and on which members will monitor which sites. For now, the group will focus on the training of new team members. Likely the Probe Core training will happen early next year. Bill Balboa will travel to Rockport to lead a Standard Core Training session on December 18, 2021.
Kleberg County	11/10/2021	In person meeting	Adriana Mendez Meadows Center David Rosse Commissioner Precinct 1	Commissioner Rosse guided a visit to the areas of Precinct 1 with the greatest drainage issues.
Kleberg County	11/10/2021	In person meeting	Adriana Mendez Meadows Center Jerry Matinez Commissioner Precinct 3	Commissioner Martinez guided a visit to the areas of Precinct 3 with the greatest drainage issues.
Aransas County	11/12/2021	Phone call	Tom Hegemier Doucet & Associates David Reid, PE County engineer	Retrofit opps, Sustainable Manual and the FEMA CRS program, upcoming GIFT workshop, City of Rockport inter-local agreement. David will send CRS info to Doucet, also let GIS staff that we will be in contact regarding CRS
Corpus Christi	11/12/2021	Phone call	Tom Hegemier Doucet & Associates Alejandro Alvarado Engineer II	Retrofit opps in CC, GIFT workshop on Dec 7, City Drainage Criteria Manual input, City parking lot using LID
Mathis	11/15/2021	email	Kate de Gennaro Texas Sea Grant ??	I emailed city manager, city secretary, EMS director, and public works director about Clean Coast Texas and other TAMU opportunities/resources that I think they could take advantage of. I have not heard back as of 11/16.
Kingsville	11/16/2021	Phone call	Tom Hegemier, Ashley Bennis Doucet, Texas Sea Grant Rudy Mora City Engineer	Ashley arranged meeting, discussed CDBG-MIT and TWDB FIF projects, design phase for both, City about to start work with engineering consultant ICE on the CDBG-MIT project. Discussed Sustainable Manual, upcoming Comp Plan, retrofit design opportunity, GIFT workshop.
Kingsville	16-Nov-21	In-person Meeting	Ashley Bennis Texas Sea Grant Uche Echeozo Planning Director	Set up an in-person meeting with Uche to discuss his comprehensive planning process and introduce Clean Coast Texas. CCT has previously interacted with City Engineer Rudy Mora to discuss drainage projects in kingsville and he suggested we reach out to coordinate with Uche. Uche shared that the city of kingsville is updating their Comprehensive Plan that was last updated in 2008. He is reviewing the old plan to pull out elements that could provide foundation for new plan. He plans to present to County Commissioners in January and then begin public outreach meetings in February. HE is very interested in incorporating LID into the plan and was particularly interested in the idea of a conceptual project in Kingsville. Will continue to reach out to him. Provided him with a stormwater manual
Kingsville	17-Nov-21	Email	Ashley Bennis Texas Sea Grant Uche Echeozo and Stephannie Resendez Planning Director and Assistant	Emailed follow-up to send remarks and share the Dec 7 workshop.
Los Fresnos	11/22/2021	Phone call meeting	Aspen Navarro The Meadows Center Mariam Rivera Secondary Science Strategist	Phone call meeting to discuss the history of TST activities for the ISD, discuss existing equipment, and discuss future efforts for TST within the ISD and the city as a whole. Future meetings will be planned after Mariam meets with teachers in the school district.
Corpus Christi	1-Dec-21	Call	Tom Hegemier Doucet Alejandro Alvarado Staff engineer	Discussed the potential of preparing conceptual retrofit plans for the City. Seemed interested and would check on a time to meet on December 6 before GIFT workshop. No contact back from him

Rockport	12/7/2021	In person	Tom Hegemier Doucet Mike Donoho, George Bennet, Ryan P Dept managers	Met at Memorial Park to review potential retrofit sites. Defined 3 to 4 possible sites and measures. Tom will prepare conceptual designs and share with staff in January 2021.
Aransas County	7-Dec-21	In person	Tom Hegemier Doucet & Associates David Reid, PE County engineer	Met at County office, David took me to two sites for potential retrofit designs. One along County road and another at an existing stormwater basin. Tom will prepare conceptual designs and share with him in January 2021.
Keep Aransas county Beautiful	1/4/2022	Email	Aspen Navarro Meadows Judy Sutterfield KACB member	Working with Judy to identify any community cleanup initiatives happening in Aransas county with KACB. They are excited to partner with us.
Rockport	11/4/2021, 11/10/21, 11/12/21	emails	Tom Hegemier Doucet & Associates Mike Donoho, Kimberley Horn City Public Works Dir, and City administrative assistant	Attempting to set up calls/meetings
Kleberg County	6/2021 - 7/2021		Ashley Bennis Texas Sea Grant Rudy Madrid County Judge	Discuss drainage projects and presentation at County Commissioner Court.
Jefferson	6/8/2021 - 9/27/2021	Email	Aspen Navarro Meadows Center Brielle Patronella Senior Environmental Analyst - Lower Neches Valley Authority	Texas Stream Team has been working with LNVA over the past few months to get TST monitoring and activities up in running in Jefferson county. TST worked with LNVA on a training held over the summer, to establish their new Neches River Stream Team group, to formally establish LNVA as a TST partner, and to get LNVA on track to become trainer trained. Contact remains consistent and necessary to continue their trainer status.
			Laura Harris Planning Technician	
			Kate de Gennaro Erika Hughston Coastal Coordinator	
			Kate de Gennaro Marta Martinez Planning Assistant/City Secretary	
			Kate de Gennaro Victor Baldovinos Environmental Health Director	
			Kate de Gennaro Jim Pigg Fire Chief (acting Emergency Management)	
			Kate de Gennaro	
			Kate de Gennaro	
			Kate de Gennaro	
Willacy County		in person	Kate de Gennaro Texas Sea Grant Robert Salinas Building Inspector	Handed each of them the Stormwater Manual. I'm in pretty regular contact with Robert Salinas.
Willacy County		in person	Kate de Gennaro Ron Mills Navigation District Director	
Corpus Christi New Contact	1/20/2022	email	Tom and Ashley Ajia Fielden, new contact Drainage Engineer	Alejandro Alvarado left for Harris County, Ajia is CC engineer with LID interest
City of Hitchcock	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Chris Armacost Mayor	Coastal Resiliency Master Plan Tier 1 project form outreach
City of Lake Jackson	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Debra Webb Superintendent of Utilities	Coastal Resiliency Master Plan Tier 1 project form outreach
Brazoria County	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Matt Hanks County Engineer	Coastal Resiliency Master Plan Tier 1 project form outreach
Brazoria County	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Mike Mullenweg Parks, Lead Interpretive Ranger and Programs Coordinator	Coastal Resiliency Master Plan Tier 1 project form outreach

Galveston County	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Michael Shannon County Engineer	Coastal Resiliency Master Plan Tier 1 project form outreach
City of Dickinson	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Sean Skipworth Mayor	Coastal Resiliency Master Plan Tier 1 project form outreach
City of Clear Lake Shores	2/11/2021	email	Celina Gauthier Lowry Texas A&M AgriLife Extension Brent Spier City Administrator	Coastal Resiliency Master Plan Tier 1 project form outreach
City of Kingsville	2/28/2022	In Person	Ashley, Nick, Charriss CCTx Stephannie Resendez (sresendez@cityofkingsville.com) , Kobby Agyekum Planning	From Nick's notes, CCT could help with education and engagement in the development/review of the stormwater master plan. CHARM could support stormwater planning in Kleburg Co. CCT could help with ordinance/stormwater master plan adoption. \$6M from TWDB to fund four major drainage projects, other funding from CDBG - MIT and City. Add link to the TCRMP Baffin Bay Tier I Project in the email. Ashley to follow up with email.
Kleburg County	2/28/2022	In Person	Tom, Ashley, Nick, Charriss CCTx Kleberg Co. Commissioners Court	All Commissioners were present. The judge was not present during the presentation. Host future CHARM, GIFT, and FAST Workshops and involve Kingsville too. Naval Air Station (NAS) could be the key to generating improved coordination/planning with Kingsville and Kleberg County, met with Abigail Rosenberg (sp?). Heard that NAS is experiencing extensive creek erosion and had to do a fence repair/replacement project. Who is the point of contact? Will this person coordinate the workshops? Baffin Bay WPP and the TCRMP Tier 1 Baffin Bay Project could link all parties; help generate more funding for GI needs. Include link to TCRMP Baffin Bay Project. April 22 is Earth Day - Cleanup? Ashley to follow up with email.
Nueces County	3/1/2022	In Person	Tom, Ashley, Nick CCTx Scott Cross Director of Parks	Aware of the Tri-County Drainage Study, has Susan Roth, PE under contract for water quality and she is also guiding Tri-County Study - Could be an important contact. Share the CCT Roads/Highways/Bridges manual with Scott, include in email. Discussed potential GLO predictive water quality model, Scott indicated that the convention bureau would not be interested. could severely curtail tourism based on forecast, not an actual event. Recommended that we coordinate with rural libraries, share info, etc. Suggested that we investigate North Carolina Riparian zone program, ag exemption benefit. Suggested presentation at commissioner's court, thinks the County Judge will appreciate the program, suggested that the County consider and adopt a resolution - ceremonial but can spur action he said. Potential parking lot retrofit at Padre Bali Park, need to coordinate with LAN Engineers. Consider pavers or other LID Measures, area drains into existing wet pond. Develop MOA for retrofit partnership? Scott followed up with us via email, and has several ideas "brewing". Tom to send a follow-up email.
City of Kingsville	3/1/2022	In Person	Tom, Ashley, Nick, Charriss CCTx Rudy Mora City Engineer	Kingsville has a drainage utility (\$2.25/month/residence, more for commercial tracts). No drainage fee credit for commercial tracts with detention. This has been challenged in Austin. The city has detention requirements for new development and defers to TxDOT when drains to their ROW. Four drainage projects as noted above are funded by several grant sources. Could be potential CCT involvement in the master planning process and landscape requirements. Link LID/GI to landscaping, with landscaping as a requirement but including stormwater storage such as rain gardens, grassy swales, buffers, etc. Potential opportunities to add stormwater wetlands to Tranquitas Creek over banks to increase floodplain storage and yield water quality benefits. NAS involvement would be a plus? Ties directly to CHARM, GIFT workshops with the County. Prepare a rough concept on Google Earth? This concept could help mitigate the increase in runoff caused by other planned drainage conveyance projects. Potential CDBG-MIT project when applications are requested later this year by the GLO? Start the planning now with the city. Backed up by the Petronila/San Fernando WPP and the TCRMP Baffin Bay Tier I Project. Send example MOA to Rudy Mora, outline potential roles based on above and the Rockport MOA. Tom to send Email
City of Kingsville	3/1/2022	In Person	Tom, Ashley, Nick, Charriss CCTx Mike Mora Public Works Director	

City of Rockport	3/2/2022	In Person	Tom, Ashley, Nick CCTx Richard Morton Acting City Manager (through July)	They have no issues with the MOA as drafted, and would like to see all four local governments in Little Bay area on one MOA. Richard has wastewater reuse experience and supports that approach. Time for One Water Grant App? The goal is to reduce effluent in Tule Creek. A better method than attempting to re-route Tule Creek low flows to Aransas Bay. Tule Creek Regional Retrofit, merge with the GLO West Region flood planning/mitigation plan that will be prepared over the next two years. City Engineer is still Urban Engineering. The city would like to create an ETJ development procedure with the County. Timing is right for consideration and adoption of the Sustainable Stormwater Manual. Recommended that the Aransas County Stormwater Advisory Committee function as a coordinator of activities and sounding board, transparency, add to the MOA. May need to define Advisory Committee membership more formally. City Council would consider/need to adopt the MOA. Water quality maintenance of measures a must, CCT to work in partnership with the City during design. Send updated combined MOA to City for review. Tom to send email.
City of Rockport	3/2/2022	In Person	Tom, Ashley, Nick CCTx Kimberly Henry	
City of Rockport	3/2/2022	In Person	Tom, Ashley, Nick CCTx Mike Donoho	
Aransas County	3/2/2022	In Person	Tom, Ashley, Nick CCTx Malcolm Dieckow Aransas County Nav District	
Aransas County	3/2/2022	In Person	Tom, Ashley, Nick CCTx Keith Barrett Aransas County Nav District	
Aransas County	3/2/2022	In Person	Tom, Ashley, Nick CCTx Charlie Belaire Aransas County Nav District	
Aransas County	3/2/2022	In Person	Tom, Ashley, Nick CCTx David Reid County Engineer	
City of Port Aransas	3/2/2022	In Person	Tom, Ashley, Nick CCTx David Parsons City Manager	
Coastal Bend Council of Governments	3/3/2022	In Person	Tom, Ashley, Nick, Charriss CCTx Emily Martinez	
Dickinson	3/29/2022	In Person	Charriss TCWP Jaree Hefner Director of Communications	Met to discuss City interest in workshops and comp plan needs. She ased about resources to help the City meet thier MS4 permit (I pointed them to local non-CCTx contracts for this)
City of La Marque	3/8/2022	Virtual meeting	Celina Gauthier Lowry Texas A&M AgriLife Extension Dinh Ho Consultant-Engineer, Adico Consulting Engineers	Coastal Resiliency Master Plan Tier 1 project form outreach for City of La Marque-Omega Bay
City of La Marque	4/1/2022	Virtual meeting	Celina Gauthier Lowry Texas A&M AgriLife Extension Cesar Garcia City Manager	Coastal Resiliency Master Plan Tier 1 project form outreach for City of La Marque-Omega Bay
Harris Co, Precinct 2	21-Apr-22	virtual meeting	Tom Hegemier CCTx Alejandro Alvarado, Jorge Bustamante Engineers at Harris Co	Shared CCT program menu of services, interested in how they can work with CCT. Would like to do some retrofits. I shared manual and menu links. Will follow up with them the week of May 3.
Harris Co, Precinct 2	19-May-22	virtual meeting	Tom, Ashley Doucet Alejandro Alvarado, Jorge Bustamante Engineers at Harris Co	Discussed potential retrofits at parks, Harris Co staff to get back to CCTx
Coastal Bend Stormwater Committee	12-Jan-22	virtual meeting	Tom, Ashley Doucet TNC, consultants, A&M CC, others NA	Discussed committee plan/goals
Coastal Bend Stormwater Committee	15-Feb-22	virtual meeting	Tom, Ashley Doucet TNC, consultants, A&M CC, others NA	TriCounty drainage study, WPPs, Coastal Bend COG MOD, CCT activities
Coastal Bend Stormwater Committee	15-Mar-22	virtual meeting	Tom, Ashley Doucet TNC, consultants, A&M CC, others NA	CCTx tour update, TWDB regional flood planning,
Coastal Bend Stormwater Committee	27-Apr-22	virtual meeting	Tom, Ashley Doucet TNC, consultants, A&M CC, others NA	NBS discussions, Bringing Baffin Bay Back, TNC on NBS, SARA training,

Coastal Bend Stormwater Committee	7/20/2022	virtual	Nick, Christina Meadows TNC, consultants, A&M CC, others	
Coastal Bend Stormwater Committee	8/17/2022	virtual		

Events and Attendance Tracking

Date	Event	# Attendees
10/15/2020	Riparian Evaluation Citizen Scientist Training (Virtual)	22
1/28/2021	Intro to Clean Coast Texas Workshop 1	314
2/4/2021	Intro to Clean Coast Texas Workshop 2	145
3/22/2021	March Lunch & Learn	73
3/24/2021	Aransas Group Community Forum	17
3/27/2021	E. coli Bacteria Water Quality Citizen Scientist Training (Virtual)	9
4/4/2021	April Lunch & Learn	40
5/12/2021	Aransas Group Retrofit Planning & GIFT	10
5/18/2021	Port Aransas Community Forum	5
5/20/2021	May Lunch & Learn	52
6/17/2021	June Lunch & Learn	50
7/13/2021	Arroyo Watershed Coordinator Partner Meeting	1

Events and Attendance Tracking

Date	Event	# Attendees
10/15/2020	Riparian Evaluation Citizen Scientist Training (Virtual)	22
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3/27/2021	E. coli Bacteria Water Quality Citizen Scientist Training (Virtual)	9
4/4/2021	April Lunch & Learn	40
5/12/2021	Aransas Group Retrofit Planning & GIFT	10
5/18/2021	Port Aransas Community Forum	5
5/20/2021	May Lunch & Learn	52
6/17/2021	June Lunch & Learn	50
7/13/2021	Arroyo Watershed Coordinator Partner Meeting	1
7/15/2021	July Lunch & Learn	50
7/19/2021	Kleberg Co. Commissioner's Court Presentation	12
7/19/2021	Kleberg County Community Forum	10
8/14/2021	Standard Core Water Quality Citizen Scientist Training (Palacios)	8
8/18/2021	Rockport Sustainable Stormwater Manual Meeting	8
8/18/2021	Friends of Little Bay Meeting	12
8/19/2021	Aransas County Sustainable Stormwater Manual Meeting	7
9/16/2021	September Lunch & Learn	55
10/9/2021	Little Bay Stream Team meeting	6
10/12/2021	Texas Stream Team Stream Team Fest (Virtual)	62
10/21/2021	October Lunch & Learn	70
11/22/2021	Los Fresnos CISD Texas Stream Team Strategy Meeting	1
12/7/2021	Green Infrastructure Workshop @ Aransas (hybrid event - in-person and virtual)	109
12/18/2021	Standard Core Water Quality Citizen Scientist Training (Rockport)	7
12/27/2021	Little Bay Stream Team Monitoring Kick-Off	3
1/27/2022	January Lunch & Learn	142
2/17/2022	February Lunch & Learn	63

2/28/2022	City of Kingsville - Planning	5
2/28/2022	City of Kingsville - Engineer/Planning	8
3/1/2022	Kleberg Co. Commissioner's Court Presentation	16
3/1/2022	Neuces County Parks Director - Planning	4
3/2/2022	City of Rockport - Planning	7
3/2/2022	Aransas County Navigation District - Planning	7
3/2/2022	Aransas County - Planning	5
3/2/2022	Port Aransas - Planning	5
3/17/2022	March Lunch & Learn'	70
4/21/2022	April Lunch & Learn	74
5/2/2022	Aransas County Navigation District Board Meeting - MOA	20
5/2/2022	Aransas County SWFMAC Meeting	18
5/12/2022	Kleberg County GIFT	30
5/12/2022	Preparedness - Weslaco	1
5/16/2022	Town of Fulton Council Meeting	29
5/19/2022	May Lunch & Learn	74
5/23/2022	Aransas County Commissioners Court	30
5/24/2022	TX Watershed Coordinator Roundtable - College Station	30
5/24/2022	Coastal State Organization Working Group - National (Zoom)	25
5/26/2022	Chambers County Judge Hurricane Conference	30
7/21/2022	July Lunch & Learn	75
8/9/2022	CHARM - IOB	17
8/10/2022	FAST - Kingsville	24

Total:

1967

Texas Stream Team event tracking

Coastal Collaborative (9/1/2020-8/31/2022)					last updated 8/18/2022		
<p style="text-align: center;">Pink = Due this QTR, Blue = Due this month, Red = Overdue</p>							
Deliverable	Current Due Date	Status	Date Sent	Deliverable Details	Attendees	Shared Drive Documentation	Comments
TASK 1 - FOUR TEXAS STREAM TEAM TRAININGS							
TST Training (1 of 4)	6/30/2022	Complete	8/12/2021	10/15/2020 - Riparian Evaluation Citizen Scientist Training (Virtual)	22	Here	Training held at the Texas Master Naturalist annual conference where hundreds of MN attended. We had a handful of coastal attendees.
TST Training (2 of 4)	6/30/2022	Complete	8/12/2021	3/27/2021 - E. coli Bacteria Water Quality Citizen Scientist Training (Virtual)	9	Here	Opened to the public and advertised statewide. Purpose was to have Bill Balboa attend to receive his E. coli Bacteria certification. Goal is to eventually have Bill become an E. coli Bacteria trainer.
TST Training (3 of 4)	6/30/2022	Complete	8/25/2021	8/14/2021 - Standard Core Water	8	Here	Public in person training to sign Bill Balboa off as a trainer. Sarah Cunningham with MANERR was also present to assist and continue her trainer training process.
				Quality Citizen Scientist Training (Palacios)			
TST Training (4 of 4)	6/30/2022	Complete	12/20/2021	12/18/2021 - Standard Core Water Quality Citizen Scientist Training (Rockport)	7	Here	Training led by Bill Balboa for Little Bay Stream Team group to get the rest of little bay stream team members certified to begin monitoring.
Other trainings that were conducted during the contract period, advertised to the coast that can be counted: Riparian Trainings (9/12/2020, 10/15/2020, 10/17/2020, and 12/5/2020) and Probe Core training (2/28/2022)							
TASK 2 - 4-6 TEXAS STREAM TEAM PARTNER EVENTS							
TST Partner Event (1 of 4)	6/30/2022	Complete	8/12/2021	7/13/21 - Arroyo Watershed Coordinator Partner Meeting 10/12/21	1	Here	Partner meeting to discuss TST in the RGV, contacts, moonitoring supplies, and plans moving forward.
TST Partner Event (2 of 4)	6/30/2022	Complete	11/8/2021	10/14/21 - Texas Stream Team	62	Here	Virtual conference opened to the public and advertised to all partners, including coastal partners.

				Stream Team Fest			
TST Partner Event (3 of 4)	6/30/2022	Complete	11/29/2021	10/9/2021 - Little Bay Stream Team meeting	6	Here	Meeting with Little Bay Stream Team/Rockport folks to brainstorm how Texas Stream Team can be integrated into their concerns and practices moving forward. Goal was to set up the Little Bay Stream Team group.
TST Partner Event (4 of 4)	6/30/2022	Complete	3/15/2022	12/27/21 - Little Bay Stream Team Monitoring Kick-Off	3	Here	Navigation district equipment setup and Little Bay Stream Team monitoring kick-off meeting.
TST Partner Event (5 of 6) - NOT REQUIRED	6/30/2022	Complete	11/29/2021	11/22/2021 - Los Fresnos CISD Texas Stream Team Strategy Meeting	1	Here	Strategy meeting to discuss past, current, and future TST initiatives in the school district. Discussed TST interest and plans to implement trainings in fall 2022
TST Partner Event (6 of 6) - NOT REQUIRED	6/30/2022						
Other events that can be counted: 2/3/2022 Texas Stream Team Trainer meeting, and the Arroyo Colorado Watershed SH meeting (whenever Jaime finally schedules this)							
TASK 3 - PURCHASE & DISTRIBUTE 6 TEXAS STREAM TEAM KITS							
Supplies Purchased - 6 TST kits	6/30/2022	Complete	8/31/2021	3 Standard	-	Here	All supplies purchased and distributed to partners.
				Core kits to Matagorda & 3 Standard Core kits to MANERR			

APPENDIX D - TASK 4

1. Memorandum of Understandings (4)
 - Town of Fulton
 - City of Rockport
 - Aransas County
 - Aransas County Navigation District

2. Memorandum of Agreements (4)
 - Town of Fulton
 - City of Rockport
 - Aransas County
 - Aransas County Navigation District

3. Community Scale Retrofit Plans & Design Report

Memorandum of Understanding
Between
Texas State University
And
Town of Fulton, TX

This Memorandum of Understanding (MOU) is hereby entered into by **Texas State University** (hereafter referred to as "Texas State"), a governmental body of the state whose primary place of business is located at 601 University Dr., San Marcos, TX 78666, by and through its duly authorized representative, and the **Town of Fulton**, Texas, a type A general law municipality (hereafter referred to as "Town") whose primary place of business is located at 201 North 7th Street Fulton, Texas 78358, by and through its duly authorized Mayor. Texas State and Town may be referred to herein individually as a "Party" or collectively as the "Parties."

PREAMBLE

WHEREAS, the governing bodies of each party find that the subject of this MOU is necessary for the benefit of the public and that the performance of this MOU is in the common interest of both parties; and

WHEREAS, Texas State and the Town find that collaboration to identify best practices for floodplain and water pollution management in the Town may have far reaching impacts on water quality throughout the Texas Coast; and

WHEREAS, Texas State and the Town find that the development of an effective organizing framework to enhance cooperation and coordination among regional stakeholders is in the common interest of both parties; and

WHEREAS, Texas State's University Center called "The Meadows Center for Water and Environment" (Meadows Center) shall be the lead in the activities of Texas State; and

WHEREAS, Texas State and the Town find that the efforts undertaken through this MOU will serve to fulfill the four pillars of The Meadows Center's mission of "Inspiring research and leadership that ensures clean, abundant water for the environment and all humanity"; and

WHEREAS, Texas State has a contract with Texas General Land Office titled "The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control". This MOU supports Task 4 titled "Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities"; and

WHEREAS, Texas State and the Town find that the Texas General Land Office, Clean Coast Texas Collaborative program shall serve as the platform for this MOU; and

WHEREAS, Texas State and the Town find that efforts under this MOU shall serve to benefit the water quality in Little Bay, Copano Bay and Aransas Bay; and

WHEREAS, no direct funds are to be committed by the Town or required on behalf of the Town in the fulfillment of this MOU.

NOW THEREFORE, Texas State and the Town, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide services, staff, and resources to Town elected officials, staff, homeowners, businesses, residents and other stakeholders to support best practices for a comprehensive suite of hydrologic and water quality improvements which may include benefits to floodplain management, stormwater management, point source and nonpoint source water pollution management.
2. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will deliver workshops, planning services, and/or presentations to the Town which may include: sustainable stormwater management, water pollution management, floodplain management, regulatory and non-regulatory approaches to protect water resources, comprehensive planning/smart growth, and/or community resilience at times and locations mutually agreed to by Texas State and the Town.
3. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide technical assistance to the Town which may include: engineering strategies and/or engineering design services that address water pollution and seek sustainable stormwater management solutions.
4. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide assistance to the Town in pursuit of strategic funding and financing services that support Clean Coast Texas goals for water pollution and sustainable stormwater management.
5. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will facilitate information sharing and new partnerships for the Town that promote water pollution management education, training and management.

II. TOWN RESPONSIBILITIES

1. Town will share publicly available information and data with Texas State through its Meadows Center, which will aid in the evaluation or development of future water pollution management and Clean Coast Texas Collaborative projects and programs, upon request.
2. Town will respond in a timely manner to communication between Texas State through its Meadows Center and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the Town.
3. Town will facilitate opportunities for Texas State through its Meadows Center to provide Clean Coast Texas Collaborative updates/reports/actions/approvals to Town Council and/or other Town-sponsored committees, boards, commissions, etc. as mutually agreed to by Texas State and the Town.
4. Town may consider the formal adoption of all or selected sections of: GUIDANCE FOR SUSTAINABLE STORMWATER DRAINAGE ON THE TEXAS COAST (For Nonpoint Source Pollution and Flood Management).
5. Town may consider new ordinance(s) or selected revisions to existing ordinance(s) that address water pollution and/or flood management while promoting the goals of both the Town and Texas State through its Meadows Center and the Clean Coast Texas Collaborative.
6. Town may assist Texas State through its Meadows Center in the development of grant applications and other financial strategies in support of future Clean Coast Texas Collaborative projects, programs and/or initiatives that demonstrate clear benefits to the Town. Assistance from the Town may include: letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. Amendments. This MOU may be amended by mutual written agreement signed by the parties hereto.
2. The Parties agree that they may engage in exchanges of activities of mutual interest and benefit including but not limited to the following:
 - a) sharing research project ideas and data for research purposes;
 - b) sharing of tools, techniques, and methodologies developed for research purposes;
 - c) undertaking specific, parallel funded research projects; and
 - d) undertaking staff or student research exchange programs.

3. The Parties agree to cooperate to the extent mutually convenient in identifying potential collaborative projects of mutual benefit and in finding appropriate resources and funding for such projects.
4. Each party shall make reasonable efforts to respect the objectives of the other Party and to accommodate such objectives in the design of any collaborative project.
5. Neither Party shall be required to collaborate with the other on any specific project.
6. Relationship of Parties. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU.
7. Liability. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.
8. Legal Effect of MOU. Texas State and Town understand and agree that this MOU constitutes only an expression of intent and shall have no legal or binding effect on the parties.
9. Information and Confidentiality
 - 9.1. Before commencing any research project or exchanging any data, the Parties will seek all necessary approvals for the sharing of information, complete a research agreement and, where applicable, execute a mutual non-disclosure agreement for the sharing of confidential information.
 - 9.2. Research agreements between the Parties will also stipulate, on a project by project basis, the terms and conditions pertaining to timelines, funding agreements, resource arrangements, intellectual property rights, copyright and the publication of research findings associated with each collaborative research project.
10. Term and Termination
 - 10.1. This MOU is effective upon signatures by both parties and shall terminate on August 31, 2022.
 - 10.2. Either party may terminate this agreement upon 30 days written notice to the other party.
 - 10.3. In the event of termination the Parties shall take the following steps:

- a) Any ongoing projects shall be completed or terminated in accordance with the terms and conditions stipulated in the research agreement; and,
- b) Any equipment, software, data, or materials acquired in connection with collaborative projects or activities shall be distributed between the Parties in accordance with the terms and conditions of the research agreement.

11. Contact information

Notices and correspondence concerning this MOU shall be sent to

For Texas State University:

Nick Dornak
Director of Watershed Services, The Meadows Center 601
University Dr.
San Marcos, TX 78666
Phone: 512-245-7389 Fax:
512-245-7371
nickdornak@txstate.edu

With copy to:

Dr. Reddy Venumbaka
Director, Technology Transfer & Contracts
601 University Dr., JCK 489
San Marcos, TX 78666
Phone: 512-245-4524
Fax: 512-245-3847
reddy@txstate.edu

For Town of Fulton, TX:

Kelli Cole
Mayor
Town of Fulton
PO Box 1130
201 N. 7th Street
Fulton, TX 78358
Phone: 361-729-5533
Fax: 361-729-7029
citysec@fultontexas.org

Hal George
Town Attorney
Suite 431 Kleberg Bank Building
5350 South Staples Street
Corpus Christi, Texas 78411
Phone: 361-992-9002
Fax:
halgeorge@sbcglobal.net

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding to be effective as of the Effective Date.

Texas State University

By: Walter Horton
Walter Horton (May 20, 2021 10:47 CDT)
Dr. Walter E. Horton
Chief Research Officer
Date: May 20, 2021

Town of Fulton

By: Kelli Cole
Kelli Cole,
Mayor
Date: 5/17/21

Memorandum of Understanding
Between
Texas State University
And
City of Rockport, TX

This Memorandum of Understanding (MOU) is hereby entered into by **Texas State University** (hereafter referred to as "Texas State"), a governmental body of the state whose primary place of business is located at 601 University Dr., San Marcos, TX 78666, by and through its duly authorized representative, and the **City of Rockport**, Texas, a council-manager/home rule city (hereafter referred to as "City") whose primary place of business is located at 2751 SH 35 N Bypass, Rockport, TX 78382, by and through its duly authorized Mayor. Texas State and City may be referred to herein individually as a "Party" or collectively as the "Parties."

PREAMBLE

WHEREAS, the governing bodies of each party find that the subject of this MOU is necessary for the benefit of the public and that the performance of this MOU is in the common interest of both parties; and

WHEREAS, Texas State and the City find that collaboration to identify best practices for floodplain and water pollution management in the City may have far reaching impacts on water quality throughout the Texas Coast; and

WHEREAS, Texas State and the City find that the development of an effective organizing framework to enhance cooperation and coordination among regional stakeholders is in the common interest of both parties; and

WHEREAS, Texas State's University Center called "The Meadows Center for Water and Environment" (Meadows Center) shall be the lead in the activities of Texas State; and

WHEREAS, Texas State and the City find that the efforts undertaken through this MOU will serve to fulfill the four pillars of The Meadows Center's mission of "Inspiring research and leadership that ensures clean, abundant water for the environment and all humanity"; and

WHEREAS, Texas State has a contract with Texas General Land Office titled "The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control". This MOU supports Task 4 titled "Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities"; and

WHEREAS, Texas State and the City find that the Texas General Land Office, Clean Coast Texas Collaborative program shall serve as the platform for this MOU; and

WHEREAS, Texas State and the City find that efforts under this MOU shall serve to benefit the water quality in Little Bay, Copano Bay and Aransas Bay; and

WHEREAS, no direct funds are to be committed by the City or required on behalf of the City in the fulfillment of this MOU.

NOW THEREFORE, Texas State and the City, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide services, staff, and resources to City elected officials, staff, homeowners, businesses, residents and other stakeholders to support best practices for a comprehensive suite of hydrologic and water quality improvements which may include benefits to floodplain management, stormwater management, point source and nonpoint source water pollution management.
2. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will deliver workshops, planning services, and/or presentations to the City which may include: sustainable stormwater management, water pollution management, floodplain management, regulatory and non-regulatory approaches to protect water resources, comprehensive planning/smart growth, and/or community resilience at times and locations mutually agreed to by Texas State and the City.
3. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide technical assistance to the City which may include: engineering strategies and/or engineering design services that address water pollution and seek sustainable stormwater management solutions.
4. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide assistance to the City in pursuit of strategic funding and financing services that support Clean Coast Texas goals for water pollution and sustainable stormwater management.
5. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will facilitate information sharing and new partnerships for the City that promote water pollution management education, training and management.

II. CITY RESPONSIBILITIES

1. City will share publicly available information and data with Texas State through its Meadows Center, which will aid in the evaluation or development of future water

pollution management and Clean Coast Texas Collaborative projects and programs, upon request.

2. City will respond in a timely manner to communication between Texas State through its Meadows Center and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the City.
3. City will facilitate opportunities for Texas State through its Meadows Center to provide Clean Coast Texas Collaborative updates/reports/actions/approvals to City Council and/or other City-sponsored committees, boards, commissions, etc. as mutually agreed to by Texas State and the City.
4. City may consider the formal adoption of all or selected sections of: GUIDANCE FOR SUSTAINABLE STORMWATER DRAINAGE ON THE TEXAS COAST (For Nonpoint Source Pollution and Flood Management).
5. City may consider new ordinance(s) or selected revision to existing ordinance(s) that address water pollution and/or flood management while promoting the goals of both the City and Texas State through its Meadows Center and the Clean Coast Texas Collaborative.
6. City may assist Texas State through its Meadows Center in the development of grant applications and other financial strategies in support of future Clean Coast Texas Collaborative projects, programs and/or initiatives that demonstrate clear benefits to the City. Assistance from the City may include: letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. Amendments. This MOU may be amended by mutual written agreement signed by the parties hereto.
2. The Parties agree that they may engage in exchanges of activities of mutual interest and benefit including but not limited to the following:
 - a) sharing research project ideas and data for research purposes;
 - b) sharing of tools, techniques, and methodologies developed for research purposes;
 - c) undertaking specific, parallel funded research projects; and
 - d) undertaking staff or student research exchange programs.
3. The Parties agree to cooperate to the extent mutually convenient in identifying potential collaborative projects of mutual benefit and in finding appropriate resources and funding for such projects.

4. Each party shall make reasonable efforts to respect the objectives of the other Party and to accommodate such objectives in the design of any collaborative project.
5. Neither Party shall be required to collaborate with the other on any specific project.
6. Relationship of Parties. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU.
7. Liability. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.
8. Legal Effect of MOU. Texas State and City understand and agree that this MOU constitutes only an expression of intent and shall have no legal or binding effect on the parties.
9. Information and Confidentiality
 - 9.1. Before commencing any research project or exchanging any data, the Parties will seek all necessary approvals for the sharing of information, complete a research agreement and, where applicable, execute a mutual non-disclosure agreement for the sharing of confidential information.
 - 9.2. Research agreements between the Parties will also stipulate, on a project by project basis, the terms and conditions pertaining to timelines, funding agreements, resource arrangements, intellectual property rights, copyright and the publication of research findings associated with each collaborative research project.
10. Term and Termination
 - 10.1 This MOU is effective upon signatures by both parties and shall terminate on August 31, 2022.
 - 10.2 Either party may terminate this agreement upon 30 days written notice to the other party.
 - 10.3 In the event of termination the Parties shall take the following steps:
 - a) Any ongoing projects shall be completed or terminated in accordance with the terms and conditions stipulated in the research agreement; and,
 - b) Any equipment, software, data, or materials acquired in connection with collaborative projects or activities shall be distributed between the Parties in accordance with the terms and conditions of the research agreement.

11. Contact information

Notices and correspondence concerning this MOU shall be sent to

For Texas State:

Nick Dornak
Director of Watershed Services, The Meadows Center
601 University Dr.
San Marcos, TX 78666
Phone: 512-245-7389
Fax: 512-245-7371
nickdornak@txstate.edu

With copy to:

Dr. Reddy Venumbaka
Director, Office of Technology Commercialization
601 University Dr., JCK 489
San Marcos, TX 78666
Phone: 512-245-2314
Fax: 512-245-3847
reddy@txstate.edu

For City of Rockport, TX:

Patrick R. Rios
Mayor
2751 SH 35 N Bypass
Rockport, TX 78382
Phone: 361-729-2213 ext 221
Fax: 361-790-5966
mayor@cityofrockport.com

With copy to:

Kevin Carruth
City Manager
2751 SH 35 N Bypass
Rockport, TX 78382
Phone: 361-729-2213 ext 253
Fax: 361-790-5966
kcarruth@cityofrockport.com

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding to be effective as of the Effective Date.

Texas State University

City of Rockport, TX

By: Walter Horton
Walter Horton | May 28, 2021 12:11 CDT
Dr. Walter E. Horton
Chief Research Officer

By: Patrick R. Rios
Patrick R. Rios
Mayor

Date: May 28, 2021

Date: May 25, 2021

Memorandum of Understanding
Between
Texas State University
And
Aransas County, TX

This Memorandum of Understanding (MOU) is hereby entered into by **Texas State University** (hereafter referred to as "Texas State"), a governmental body of the state whose primary place of business is located at 601 University Dr., San Marcos, TX 78666, by and through its duly authorized representative, and **Aransas County, Texas**, (hereafter referred to as "County") whose primary place of business is located at 2840 Highway 35 N Rockport, TX 78382, by and through its duly elected County Judge. Texas State and the County may be referred to herein individually as a "Party" or collectively as the "Parties."

PREAMBLE

WHEREAS, the governing bodies of each party find that the subject of this MOU is necessary for the benefit of the public and that the performance of this MOU is in the common interest of both parties; and

WHEREAS, Texas State and the County find that collaboration to identify best practices for floodplain and water pollution management in the County may have far reaching impacts on water quality throughout the Texas Coast; and

WHEREAS, Texas State and the County find that the development of an effective organizing framework to enhance cooperation and coordination among regional stakeholders is in the common interest of both parties; and

WHEREAS, Texas State's University Center called "The Meadows Center for Water and Environment" (Meadows Center) shall be the lead in the activities of Texas State; and

WHEREAS, Texas State and the County find that the efforts undertaken through this MOU will serve to fulfill the four pillars of The Meadows Center's mission of "Inspiring research and leadership that ensures clean, abundant water for the environment and all humanity"; and

WHEREAS, Texas State has a contract with Texas General Land Office titled "The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control". This MOU supports Task 4 titled "Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities"; and

WHEREAS, Texas State and the County find that the Texas General Land Office, Clean Coast Texas Collaborative program shall serve as the platform for this MOU; and

WHEREAS, Texas State and the County find that efforts under this MOU shall serve to benefit the water quality in Little Bay, Copano Bay and Aransas Bay; and

WHEREAS, no direct funds are to be committed by the County or required on behalf of the County in the fulfillment of this MOU.

NOW THEREFORE, Texas State and the County, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide services, staff, and resources to County elected officials, staff, homeowners, businesses, residents and other stakeholders to support best practices for a comprehensive suite of hydrologic and water quality improvements which may include benefits to floodplain management, stormwater management, point source and nonpoint source water pollution management.
2. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will deliver workshops, planning services, and/or presentations to the County which may include: sustainable stormwater management, water pollution management, floodplain management, regulatory and non-regulatory approaches to protect water resources, comprehensive planning/smart growth, and/or community resilience at times and locations mutually agreed to by Texas State and the County.
3. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide technical assistance to the County which may include: engineering strategies and/or engineering design services that address water pollution and seek sustainable stormwater management solutions.
4. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will provide assistance to the County in pursuit of strategic funding and financing services that support Clean Coast Texas goals for water pollution and sustainable stormwater management.
5. Texas State, through its Meadows Center and Clean Coast Texas Collaborative, will facilitate information sharing and new partnerships for the County that promote water pollution management education, training and management.

II. COUNTY RESPONSIBILITIES

1. County will share publicly available information and data with Texas State through its

Meadows Center, which will aid in the evaluation or development of future water pollution management and Clean Coast Texas Collaborative projects and programs, upon request.

2. County will respond in a timely manner to communication between Texas State through its Meadows Center and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the County.
3. County will facilitate opportunities for Texas State through its Meadows Center to provide Clean Coast Texas Collaborative updates/reports/actions/approvals to County Council and/or other County-sponsored committees, boards, commissions, etc. as mutually agreed to by Texas State and the County.
4. County may consider the formal adoption of all or selected sections of: GUIDANCE FOR SUSTAINABLE STORMWATER DRAINAGE ON THE TEXAS COAST (For Nonpoint Source Pollution and Flood Management).
5. County may consider new rule(s)/guidance or selected revisions to existing rule(s)/guidance that address water pollution and/or flood management while promoting the goals of both the County and Texas State through its Meadows Center and the Clean Coast Texas Collaborative.
6. County may assist Texas State through its Meadows Center in the development of grant applications and other financial strategies in support of future Clean Coast Texas Collaborative projects, programs and/or initiatives that demonstrate clear benefits to the County. Assistance from the County may include: letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. Amendments. This MOU may be amended by mutual written agreement signed by the parties hereto.
2. The Parties agree that they may engage in exchanges of activities of mutual interest and benefit including but not limited to the following:
 - a) sharing research project ideas and data for research purposes;
 - b) sharing of tools, techniques, and methodologies developed for research purposes;
 - c) undertaking specific, parallel funded research projects; and
 - d) undertaking staff or student research exchange programs.
3. The Parties agree to cooperate to the extent mutually convenient in identifying potential collaborative projects of mutual benefit and in finding appropriate resources and funding for such projects.

4. Each party shall make reasonable efforts to respect the objectives of the other Party and to accommodate such objectives in the design of any collaborative project.
5. Neither Party shall be required to collaborate with the other on any specific project.
6. Relationship of Parties. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU.
7. Liability. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.
8. Legal Effect of MOU. Texas State and County understand and agree that this MOU constitutes only an expression of intent and shall have no legal or binding effect on the parties.
9. Information and Confidentiality
 - 9.1. Before commencing any research project or exchanging any data, the Parties will seek all necessary approvals for the sharing of information, complete a research agreement and, where applicable, execute a mutual non-disclosure agreement for the sharing of confidential information.
 - 9.2. Research agreements between the Parties will also stipulate, on a project by project basis, the terms and conditions pertaining to timelines, funding agreements, resource arrangements, intellectual property rights, copyright and the publication of research findings associated with each collaborative research project.
10. Term and Termination
 - 10.1 This MOU is effective upon signatures by both parties and shall terminate on August 31, 2022.
 - 10.2 Either party may terminate this agreement upon 30 days written notice to the other party.
 - 10.3 In the event of termination the Parties shall take the following steps:
 - a) Any ongoing projects shall be completed or terminated in accordance with the terms and conditions stipulated in the research agreement; and,
 - b) Any equipment, software, data, or materials acquired in connection with collaborative projects or activities shall be distributed between the Parties in accordance with the terms and conditions of the research agreement.

11. Contact information

Notices and correspondence concerning this MOU shall be sent to

For Texas State:

Nick Dornak
Director of Watershed Services, The Meadows Center
601 University Dr.
San Marcos, TX 78666
Phone: 512-245-7389
Fax: 512-245-7371
nickdornak@txstate.edu

With copy to:

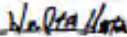
Dr. Roddy Venumbaka
Director, Technology Transfer & Contracts
601 University Dr., JCK 489
San Marcos, TX 78666
Phone: 512-245-4524
Fax: 512-245-3847
reddy@txstate.edu

For County of Rockport, TX:


C.H. Burt Mills, Jr.
County Judge
2840 Hwy 35 N
Rockport, TX 78382-5711
Phone: 361-790-0101
judge@aransascounty.org

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding to be effective as of the Effective Date.

Texas State University


By: Walter Horton (May 24, 2021 11:42 CDT)
Dr. Walter E. Horton
Chief Research Officer
Date: May 24, 2021

Aransas County, TX

By: 
C.H. Burt Mills, Jr.
County Judge
Date: 5-10-2021

Memorandum of Understanding
Between
Texas State University
And
Aransas County Navigation District

This Memorandum of Understanding (MOU) is hereby entered into by **Texas State University** (hereafter referred to as “Texas State”), a governmental body of the state whose primary place of business is located at 601 University Dr., San Marcos, TX 78666, by and through its duly authorized representative, and the **Aransas County Navigation District** (hereafter referred to as “Navigation District”) whose primary place of business is located at 911 Navigation Circle, Rockport, TX 78382 by and through its Chairman. Texas State and the Navigation District may be referred to herein individually as a “Party” or collectively as the “Parties.”

PREAMBLE

WHEREAS, the governing bodies of each party find that the subject of this MOU is necessary for the benefit of the public and that the performance of this MOU is in the common interest of both parties; and

WHEREAS, Texas State and the Navigation District find that collaboration to identify best practices for floodplain and water pollution management in the Navigation District may have far reaching impacts on water quality throughout the Texas Coast; and

WHEREAS, Texas State and the Navigation District find that the development of an effective organizing framework to enhance cooperation and coordination among regional stakeholders is in the common interest of both parties; and

WHEREAS, Texas State’s University Center called “The Meadows Center for Water and Environment” (Meadows Center) shall be the lead in the activities of Texas State; and

WHEREAS, Texas State and the Navigation District find that the efforts undertaken through this MOU will serve to fulfill the four pillars of The Meadows Center’s mission of “Inspiring research and leadership that ensures clean, abundant water for the environment and all humanity”; and

WHEREAS, Texas State has a contract with Texas General Land Office titled “The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control”. This MOU supports Task 4 titled “Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities”; and

1. Navigation District will share publicly available information and data with Texas State through its Meadows Center, which will aid in the evaluation or development of future water pollution management and Clean Coast Texas Collaborative projects and programs, upon request.
2. Navigation District will respond in a timely manner to communication between Texas State through its Meadows Center and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the Navigation District.
3. Navigation District will facilitate opportunities for Texas State through its Meadows Center to provide Clean Coast Texas Collaborative updates/reports/actions/approvals to Navigation District Council and/or other Navigation District-sponsored committees, boards, commissions, etc. as mutually agreed to by Texas State and the Navigation District.
4. Navigation District may consider the formal adoption of all or selected sections of: GUIDANCE FOR SUSTAINABLE STORMWATER DRAINAGE ON THE TEXAS COAST (For Nonpoint Source Pollution and Flood Management).
5. Navigation District may consider new rule(s)/guidance or selected revisions to existing rule(s)/guidance that address water pollution and/or flood management while promoting the goals of both the Navigation District and Texas State through its Meadows Center and the Clean Coast Texas Collaborative.
6. Navigation District may assist Texas State through its Meadows Center in the development of grant applications and other financial strategies in support of future Clean Coast Texas Collaborative projects, programs and/or initiatives that demonstrate clear benefits to the Navigation District. Assistance from the Navigation District may include: letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. Amendments. This MOU may be amended by mutual written agreement signed by the parties hereto.
2. The Parties agree that they may engage in exchanges of activities of mutual interest and benefit including but not limited to the following:
 - a) sharing research project ideas and data for research purposes;
 - b) sharing of tools, techniques, and methodologies developed for research purposes;
 - c) undertaking specific, parallel funded research projects; and
 - d) undertaking staff or student research exchange programs.

3. The Parties agree to cooperate to the extent mutually convenient in identifying potential collaborative projects of mutual benefit and in finding appropriate resources and funding for such projects.
4. Each party shall make reasonable efforts to respect the objectives of the other Party and to accommodate such objectives in the design of any collaborative project.
5. Neither Party shall be required to collaborate with the other on any specific project.
6. Relationship of Parties. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU.
7. Liability. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.
8. Legal Effect of MOU. Texas State and Navigation District understand and agree that this MOU constitutes only an expression of intent and shall have no legal or binding effect on the parties.
9. Information and Confidentiality
 - 9.1. Before commencing any research project or exchanging any data, the Parties will seek all necessary approvals for the sharing of information, complete a research agreement and, where applicable, execute a mutual non-disclosure agreement for the sharing of confidential information.
 - 9.2. Research agreements between the Parties will also stipulate, on a project by project basis, the terms and conditions pertaining to timelines, funding agreements, resource arrangements, intellectual property rights, copyright and the publication of research findings associated with each collaborative research project.
10. Term and Termination
 - 10.1 This MOU is effective upon signatures by both parties and shall terminate on August 31, 2022.
 - 10.2 Either party may terminate this agreement upon 30 days written notice to the other party.
 - 10.3 In the event of termination the Parties shall take the following steps:
 - a) Any ongoing projects shall be completed or terminated in accordance with the terms and conditions stipulated in the research agreement; and,

- b) Any equipment, software, data, or materials acquired in connection with collaborative projects or activities shall be distributed between the Parties in accordance with the terms and conditions of the research agreement.

11. Contact information

Notices and correspondence concerning this MOU shall be sent to

For Texas State:

Nick Dornak
Director of Watershed Services, The Meadows Center
601 University Dr.
San Marcos, TX 78666
Phone: 512-245-7389
Fax: 512-245-7371
nickdornak@txstate.edu

With copy to:

Dr. Reddy Venumbaka
Director, Technology Transfer & Contracts
601 University Dr., JCK 489
San Marcos, TX 78666
Phone: 512-245-4524
Fax: 512-245-3847
reddy@txstate.edu

For Aransas County Navigation District:

Malcolm Dieckow
Chairman
911 Navigation Circle
Rockport, Texas 78382
Phone: 361-729-6661
Fax: 361-729-8037
texjarman@sbcglobal.net

With copy to:

Keith Barrett
Harbor Master
911 Navigation Circle
Rockport, Texas 78382
Phone: 361-729-6661
Fax: 361-729-8037
aransasnav1@yahoo.com

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding to be effective as of the Effective Date.

Texas State University

By: Walter Horton
Walter Horton (Jun 8, 2021 10:38 CDT)

Dr. Walter E. Horton
Chief Research Officer

Date: Jun 8, 2021

**Aransas County Navigation
District**

By: Malcolm Dieckow

Malcolm Dieckow
Chairman

Date: 1 June 2021

Memorandum of Agreements

AGREEMENT BETWEEN ARANSAS COUNTY, TEXAS, AND
TEXAS STATE UNIVERSITY FOR IMPLEMENTATION
OF THE CLEAN COAST TEXAS PROJECT

This Agreement (hereafter termed "Agreement") is entered into by and between ARANSAS COUNTY, TEXAS (hereafter referred to as "Partner" or "County") and TEXAS STATE UNIVERSITY (hereafter referred to as "Texas State"), a member of The Texas State University System, an entity of the State of Texas. Texas State and the County may be referred to herein individually as a "Party" or collectively as the "Parties." Other Partners include the City of Rockport, Town of Fulton, and the Aransas County Navigation District, and each has their own Agreement with Texas State.

WITNESSETH:

WHEREAS, pollution can alter the integrity of water sources in several ways, such as chemically, physically, biologically, or radiologically; and,

WHEREAS, nonpoint source pollution occurs when rainwater draining from the land and built surfaces erodes soil and/or picks up pollutants and carries them into waterways; and,

WHEREAS, the Clean Coast Texas Program is derived from priority actions identified in the *Texas Coastal Nonpoint Source Pollution Control Program*. This comprehensive plan is updated every five (5) years through the joint efforts of Texas Commission on Environmental Quality ("TCEQ") and the Texas State Soil and Water Conservation Board. It was developed following the guidelines established by the United States Environmental Protection Agency ("EPA") and National Oceanic and Atmosphere Administration ("NOAA") as defined in the "Guidance for Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters "USA EPA," 1993; and,

WHEREAS, the Texas General Land Office (the "GLO") has granted funding to Texas State in Contract No. 21-060-020-6682 to facilitate the Clean Coast Texas Program (the "Program"), an offshoot of the *Texas Coastal Nonpoint Source Pollution Control Program*, which combines geographical and categorical approaches to addressing Nonpoint Source pollution; and,

WHEREAS, Texas State and the Partners informally developed an effective organizing framework to enhance cooperation and coordination among various programs and activities within Aransas County and agree that the Aransas County Stormwater Advisory Committee shall function as the coordinating body to guide and perform the tasks identified in this document; and

WHEREAS, within Texas State is "The Meadows Center for Water and the Environment" (hereinafter referred to as "Meadows Center") which shall be the lead in the activities of Texas State undertaken pursuant to this Agreement; and

WHEREAS, each Party shall bear its own costs and expenses accrued in the performance of the Agreement.

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

NOW THEREFORE, in consideration of terms and conditions herein stated, Texas State and County, hereby mutually agree as follows:

1. Purpose and Public Benefit. The purpose of this Agreement is for the Parties to work together to ensure the success of the Clean Coast Texas Program in Aransas County, Texas. The rights and responsibilities of each Party are described below. The governing bodies of each Party find that the Clean Coast Texas Program (hereinafter referred to as “**Program**”), the subject of this Agreement, is necessary for the benefit of the public, that each Party has the legal authority to perform the duties described herein, and that the performance of this Agreement is in the common interest of both parties.
2. Term. The Program is scheduled to end on September 1, 2024. This Agreement shall terminate on or before September 1, 2024, if no amendment or extension is agreed to between the Parties and it is not otherwise terminated as described herein. If the Parties desire to extend the term to accommodate an extension of the Program duration granted by the GLO, this Agreement shall be amended in a writing accepted and signed by both Parties and attached hereto.
3. Consideration. The Parties recognize the value of the mutual promises, covenants, and conditions herein and in consideration of the mutual benefits that will accrue to the Parties, the receipt and sufficiency of which is hereby acknowledged, each Party agrees to perform as outlined herein.
4. Texas State’s Rights and Responsibilities:
 - a. *Program Administration.* Texas State, through its Meadows Center, will administer the Program and coordinate directly with the participating partners to implement demonstration-scale water quality treatment measures, review water quality criteria and regulations, initiate education activities, monitor water quality, distribute the Stormwater Manual, host workshops, and conduct other activities to implement the Program.
 - b. *Technical Assistance.* Texas State will provide technical assistance as specified in the Program to facilitate the design and construction of water quality treatment facilities on County property.
 - c. *Feasibility Study.* Texas State, through its Meadows Center, will study, obtain field data, perform engineering assessments, and determine feasibility of a Tule Creek Regional Water Quality Retrofit. This effort will be in concert with the GLO regional flood mitigation planning efforts. If the potential project provides the desired regional water quality benefits as defined in a Preliminary Engineering Report and is approved, the Meadows Center will prepare construction plans.
 - d. *Construction Plans, Bid Process, Selection, and Management.* Texas State will prepare the construction plans for the demonstration-scale water quality measures,

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

administer the bid process and contractor selection, and oversee the construction process. Texas State will perform a final inspection with County staff.

e. *Educational Features.* Texas State will develop educational features for installation at the demonstration-scale water quality measures when the projects are complete.

f. *Community Event Coordination.* The Meadows Center will coordinate with the County, non-governmental organizations, and other groups to lead and/or support up to three (3) community events that can improve water quality and protect habitat.

g. *Workshops.* Texas State, through its Meadows Center, will host workshops with elected officials, local government staff, and citizens to outline the Program goals and objectives.

h. *Evaluation and Technical Assistance.* Texas State will lead the water quality/criteria manual evaluation process and coordinate with the County on potential enhancements to facilitate water quality management and minimize regulatory redundancy. This process will be based on the Stormwater Manual, 3rd Edition, 2021. Texas State will provide recommended code revisions and support the potential code revision process.

i. *Stakeholder Process.* Texas State will co-lead the water quality/criteria manual stakeholder process with the County. Texas State will provide meeting agendas, notes, regulatory research, and conduct discussions with stakeholders as necessary outside of formal meetings.

j. *Grants.* The Meadows Center will assist the County in preparing grant applications and developing financial strategies to seek funding for water quality and stormwater management improvement projects.

5. County's Rights and Responsibilities:

a. *Site Selection and Quality Measurement Options.* The County will coordinate with Texas State to select sites that can be retrofitted with the agreed upon demonstration-scale water quality management measures to improve water quality and help manage runoff. The County will make the final decision on water quality measure type and location.

b. *Access to Property.* The County will permit Texas State to access selected sites to perform survey, testing, and design activities and allow Texas State to oversee demonstration-scale water quality measure construction.

c. *Access for Potential Bidders.* The County will allow potential contractors to observe the sites during the bid process, this includes, hosting a pre-bid meeting and the site tour.

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

- d. *Inspection and Acceptance.* Upon completion of construction, the County will perform a final inspection with Texas State to ensure that the projects were completed per the construction plans. Upon successful final inspection, County will consider final acceptance of the project(s).
- e. *Feasibility Study Cooperation.* The County will participate with the Meadows Center in the assessment of the feasibility of a Tule Creek Regional Water Quality Retrofit. This includes reviewing the Preliminary Engineering Report and providing an opinion on project feasibility.
- f. *Communication.* The County will respond in a timely manner to communication between Texas State through its Meadows Center and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives in the County.
- g. *Maintenance and Operation of Project Improvements.* The County will endeavor to maintain and operate the water quality measures for a minimum of ten (10) years after implementation as defined in the Sustainable Stormwater Manual provided by Texas State.
- h. *Maintenance and Operation of Education Features.* The County will ensure that educational features installed at the demonstration-scale water quality measures will remain functional for a period of three (3) years after construction is complete.
- i. *Collaboration for Community Events.* The County will support the Meadows Center in the planning and implementation of community events that improve water quality. Up to three (3) community events will be held.
- j. *Collaboration during Review.* The County will participate in a review of the County's existing drainage criteria, water quality criteria, and manuals and will consider potential modifications and amendments to improve water quality protection, enhance flood management, and promote regulatory consistency in the City of Rockport and Aransas County drainage codes and criteria.
- k. *Co-Lead.* The County will actively participate and co-lead the water quality protection and stormwater management criteria stakeholder process.
- l. *County Project Liaison.* The County will identify a point of contact (project manager) who will assist Texas State and its contractors in performing the above tasks and coordinating with residents, County staff, and elected officials as needed.
- m. *Grant Applications and Other Administrative Tasks.* The County may support the Meadows Center in the development of grant applications and other financial strategies in support of the Program and/or initiatives that demonstrate clear benefits

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

to the County. Assistance from the County may include letters of support, resolutions, project reports, financial reports, other documents, etc.

6. Termination. Either Party may terminate this Agreement upon thirty (30) days advance written notice to the other Party.

7. Amendments. This Agreement may be amended by mutual written agreement signed by the parties hereto.

8. No Partnership or Joint Venture. Nothing contained in this Agreement shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized in this Agreement.

9. Status of Employees, Contractors, and Agents. No joint employment is created by this Agreement. The employees, contractors, and agents of the respective Parties shall remain solely the employees, contractors, and agents of that respective Party.

10. Indemnification and Tort Claim Act. To the extent allowed by law, the County agrees to promptly defend, indemnify, and hold Texas State harmless from and against any and all claims, demands, suits, causes of action, and judgments for (a) damages to the loss of property of any person; and or (b) the death, bodily injury, illness, disease, loss of services, or loss of income or wages to any person, arising out of or incident to, concerning or resulting from, the negligent or willful act or omission of the County, its agents, officers, and/or employees in the performance of duties pursuant to this Agreement.

To the extent allowed by law, the Texas State agrees to promptly defend, indemnify, and hold the County harmless from and against any and all claims, demands, suits, causes of action, and judgments for (a) damages to the loss of property of any person; and or (b) the death, bodily injury, illness, disease, loss of services, or loss of income or wages to any person, arising out of or incident to, concerning or resulting from, the negligent or willful act or omission of the Texas State, its agents, officers, and/or employees in the performance of duties pursuant to this Agreement.

Nothing in this Agreement shall be construed to waive, partially or in full, any immunities the Parties may have under the Texas Tort Claim Act or other laws.

11. Notices. Whenever a notice is required to be given in writing and under the terms of this Agreement, such notices shall either be delivered or mailed by certified mail, return receipt requested, to the parties at the following addresses:

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

Texas State University: Nick Dornak
Meadows Center for Water and the Environment
Texas State University
601 University Drive
San Marcos, Texas 78666
Phone: 512-245-6697
Email: nickdornak@txstate.edu

With a Copy To: Dr. Reddy Venumbaka
Technology Transfer & Contracts
Texas State University
601 University Drive
San Marcos, TX 78666-4684
Phone: 512-245-4524
Email: Reddy@txstate.edu

Aransas County: C.H. "Burt" Mills, Jr.
County Judge
2840 Highway 35 North
Rockport, TX 78382
Phone: 361-790-0101
Email: judge@aransascounty.org

With a Copy To: David Reid, PE, CFM
County Road and Bridge Engineer
1931 FM 2165
Rockport, TX 78382
Phone: 361-790-0152
Email: dreid@aransascounty.org

Each party may change the address for notice to it be giving notice of such change in accordance with the provisions in this paragraph.

12. Interpretation of Law, Assignment, and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas. No assignment of this agreement or any right accrued hereunder shall be made, in whole or in part, by either party without the prior written consent of the other party. Venue shall be in Aransas County, Texas.

13. Nondiscrimination. The Parties covenant that (1) no person shall be excluded from participation in, denied the benefit of, or otherwise subjected to discrimination under the terms of this Agreement on the ground of race, color, age, sex, handicap, or national origin; and (2) in carrying out the terms and conditions of this Agreement, no person shall be subjected to discrimination on the grounds of race, color, age, sex, handicap, or national origin. This covenant extends to contractors, subcontractors, and others acting by or through the Parties, and includes compliance with all federal and state laws and policies prohibiting discrimination, harassment, and sexual misconduct.

*Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022*

14. Integration and Amendments. This Agreement constitutes the entire agreement between the Parties and may not be amended, altered, modified, or changed in any way, except in writing that is signed by the Parties, which specifically references this Agreement. There are no other agreements, representations, warranties, whether oral or written, regarding the subject matter of this Agreement. Any amendment to this Agreement shall be attached to this Agreement and all of the terms herein that are not specifically address in the amendment shall remain in full force and effect.

15. No Third Party Beneficiaries. Nothing in this Agreement, expressed or implied, is intended to confer upon any person or entity, other than the Parties hereto, any rights or remedies under the terms of this Agreement, except as expressly stated herein.

16. Severability. If any one or more of the sections, sentences, clauses, or parts of this Agreement be held invalid for any reason, the invalidity of such section, sentence, clause, or part shall not affect nor prejudice the applicability and validity of any other provision of this Agreement.

17. Bargaining. The Parties have each had the opportunity to seek independent legal counsel before entering into this Agreement. The language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against either party.

18. Counterparts. This Agreement may be executed in any number of counterparts and when each party has signed and delivered to the other at least one (1) such counterpart, each counterpart shall be deemed an original, and when taken together with other signed counterparts, shall constitute one (1) agreement; provided, however, this Agreement shall not be binding upon the Parties until signed by both Parties.


19. Authorization. The undersigned officers and/or agents of the respective party hereto are the properly authorized officials of the party and have the necessary authority to execute this Agreement on behalf of the Parties hereto. Each party certifies by signing below that any necessary actions and resolutions extending such authority have been duly passed and approved and are currently in full force and effect.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year last written below.

SIGNATURE PAGES FOLLOW

Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022

“COUNTY”
Aransas County, Texas

By:  6/2/22
C.H. "Burr" Mills, Jr. Date
County Judge

ATTEST:

[SEAL]

 06/02/22
Carrie Arrington Date
County Clerk



ADDITIONAL SIGNATURE PAGE FOLLOWS

Clean Coast Texas Project Implementation Agreement
Aransas County, Texas and Texas State
May 2022

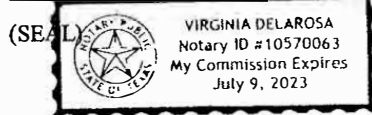
“TEXAS STATE”
Texas State University

By: Michael Blanda Jun 15, 2022
Michael Blanda, Ph.D. Date
Interim Chief Research Officer

DR. BLANDA’S ACKNOWLEDGMENT

STATE OF Texas)
) ss.
COUNTY OF Hays)

On this 15th day of June, 2022, before me, a Notary Public, in and for the above state and county, personally appeared Michael Blanda, known to me to be or who proved on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged that he or she executed the same for the purposes contained therein.



Virginia Delarosa
Notary Public

Read and Agreed:

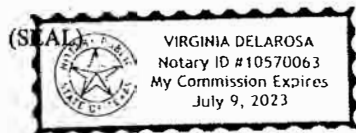
“TEXAS STATE”
Texas State University
The Meadows Center for Water and the Environment

By: Nick Dornak Jun 15, 2022
Nick Dornak Date
Director of Watershed Services

MR. DORNAK’S ACKNOWLEDGMENT

STATE OF Texas)
) ss:
COUNTY OF Hays)

On this 15th day of June, 2022, before me, a Notary Public, in and for the above state and county, personally appeared Nick Dornak, known to me to be or who proved on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged that he or she executed the same for the purposes contained therein.



Virginia Delarosa
Notary Public

MEMORANDUM OF AGREEMENT
BETWEEN
CITY OF ROCKPORT
AND
TEXAS STATE UNIVERSITY
CLEAN COAST TEXAS PROJECT IMPLEMENTATION

PREAMBLE

The Clean Coast Texas Program is derived from priority actions identified in the *Texas Coastal Nonpoint Source Pollution Control program*, (hereinafter the “Plan”) The Plan was developed following the guidelines established by the United States Environmental Protection Agency (EPA) and National Oceanic and Atmosphere Administration (NOAA) as defined in the “Guidance for Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters”, USA EPA, 1993.

This Memorandum of Agreement (hereafter termed “Agreement”) is entered into by and between the CITY OF ROCKPORT (hereafter referred to as “Partner”) and TEXAS STATE UNIVERSITY (hereafter referred to as “Texas State”), a member of The Texas State University System, an entity of the State of Texas. Texas State and the Partner may be referred to herein individually as a “Party” or collectively as the “Parties”. Other Partners include Aransas County, Town of Fulton, and the Aransas County Navigation District and each has their own Agreement with Texas State.

The governing bodies of each party find that the Clean Coast Texas Program (hereinafter referred to as “Program”) subject of this agreement is necessary for the benefit of the public and that the performance of this agreement is in the common interest of both parties

THIS AGREEMENT, entered into on the date of last signature shall terminate on September 1, 2024, when the Program is complete or with an amendment to this document shall be extended to the final date of the Program if the project completion date is extended by the Texas General Land Office (GLO). Either Party may terminate this agreement upon thirty (30) days written notice to the other Party.

WHEREAS, GLO has granted Texas State funding to facilitate the Program (Contract No. 21-060-020-6682); and

WHEREAS, the governing bodies of each party find the subject of this Agreement is necessary for the benefit of the public and that the performance of this Agreement is in the common interest of both parties; and

WHEREAS, Texas State and the Partners informally developed an effective organizing framework to enhance cooperation and coordination among various programs and activities within Aransas County and agree that the Aransas County Stormwater Advisory Committee shall function as the coordinating body to guide and perform the tasks identified in this document; and

WHEREAS, Within Texas State is “The Meadows Center for Water and the Environment” (hereinafter referred to as “Meadows Center”) shall be the lead in the activities of Texas State; and

WHEREAS, Each Party shall bear its own costs and expenses accrued in the performance of the Agreement.

NOW THEREFORE, Texas State and the City of Rockport, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center, will administer the Program and coordinate directly with the participating partners to implement demonstration-scale water quality treatment measures, review water quality ordinances, initiate education activities, monitor water quality, distribute the Stormwater Manual, host workshops, and conduct other activities to implement the Program.
2. Texas State, through its Meadows Center, will provide technical assistance as specified in the Program to facilitate the design and construction of demonstration-scale water quality treatment facilities on City of Rockport (City) property.
3. Texas State, through its Meadows Center, will prepare the construction plans for demonstration-scale water quality measures, administer the bid process and contractor selection, and oversee the construction process. Texas State will perform a final inspection with City staff.
4. Texas State, through its Meadows Center, will study, obtain field data, perform engineering assessments, and determine feasibility of a Tule Creek Regional Water Quality Retrofit. This effort will be in concert with the General Land Office (GLO) regional flood mitigation planning efforts. If the potential project provides the desired regional water quality benefits as defined in a Preliminary Engineering Report and is approved by the City, the Meadows Center will prepare construction plans.
5. Texas State, through its Meadows Center, will develop educational features for installation at the water quality treatment measure sites when the projects are complete.
6. Texas State, through its Meadows Center, will coordinate with the City, non-governmental organizations, and other groups to lead and/or support up to three community events that can improve water quality and protect habitat.
7. Texas State, through its Meadows Center, will host workshops with elected officials, local government staff, and citizens to outline the Program goals and objectives.
8. Texas State, through its Meadows Center, will lead the water quality ordinance/criteria manual evaluation process and coordinate with the City on potential enhancements to facilitate water quality management and minimize regulatory redundancy. This process will be based on the Stormwater Manual, 3rd Edition, 2021. Texas State will provide recommended ordinance revisions and support the potential ordinance revision process.
9. Texas State, through its Meadows Center, will co-lead the water quality ordinance/criteria manual stakeholder process with the City. Texas State will provide meeting agenda, notes, ordinance research and conduct discussions with stakeholders as necessary outside of formal meetings.
10. Texas State, through its Meadows Center, will assist the City in preparing grant applications and developing financial strategies to seek funding for water quality and stormwater management improvement projects.

II. CITY OF ROCKPORT (CITY) RESPONSIBILITIES

1. The City will coordinate with Texas State, through its Meadows Center, to select sites that can be retrofitted with the agreed upon demonstration-scale water quality treatment measures to improve water quality and help manage runoff. The City will provide the final decision on water quality measure type and location.
2. The City will permit Texas State, through its Meadows Center, to access selected sites to perform survey, testing, and design activities and allow Texas State, through its Meadows Center, to oversee demonstration-scale water quality measure construction. The City will allow potential contractors to observe the sites during the bid process, this includes, hosting a pre-bid meeting and the site tour. The City will perform a final inspection with Texas State, through its Meadows Center, to ensure that the projects were completed per the construction plans.
3. The City will support the Meadows Center in the assessment of the feasibility of a Tule Creek Regional Water Quality Retrofit. This includes providing site access, coordination with park activities, real estate records, utility information, and reviewing the Preliminary Engineering Report. The City will provide an opinion on project feasibility including direction to proceed to construction plan preparation or not.
4. City will respond in a timely manner (two days) to communication between Texas State, through its Meadows Center, and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the City.
5. The City will maintain and operate the demonstration-scale water quality measures for a minimum of ten (10) years after implementation as defined in the Sustainable Stormwater Manual provided by Texas State, through its Meadows Center.
6. The City will ensure that educational features installed at the demonstration-scale water quality measures will remain functional for a period of three years after construction is complete.
7. The City will support Texas State, through its Meadows Center, in the planning and implementation of community events that improve water quality. Up to three community events will be held.
8. The City will participate in a review of the City's existing drainage criteria, ordinances, and manuals and will consider potential modifications and amendments to improve water quality protection, enhance flood management, and promote regulatory consistency in the City and Aransas County drainage codes and criteria. The City will coordinate with Aransas County and include them in the above process.
9. The City will actively participate and co-lead the water quality protection and stormwater management criteria stakeholder process.
10. The City will identify a point of contact (project manager) who will assist Texas State, through its Meadows Center, and its contractors in performing the above tasks and

coordinating with residents, city staff, and elected officials as needed.

11. The City may assist Texas State, through its Meadows Center, in the development of grant applications and other financial strategies in support of the Program and/or initiatives that demonstrate clear benefits to the City. Assistance from the City may include letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. This Agreement may be amended by mutual written agreement signed by the parties hereto.
2. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.
3. This Agreement represents the entire and integrated agreement between the Partner and Texas State and supersedes all prior negotiations, representations, or agreements, either written or oral.
4. Notice under this Agreement shall be in writing and may be delivered by hand, by certified mail, by common carrier, or electronically. Notice by hand-delivery is deemed effective immediately, by certified mail is deemed effective three days after deposit in U.S. Post Office or in a U.S. Mail Box, and by common carrier, is deemed effective upon receipt. Electronic notice is deemed effective upon confirmed receipt of the receiving party, documents shall be converted to pdf. Notice to a party shall be addressed as follows:

Texas State University: Nick Dornak
Meadows Center for Water and the Environment
Texas State University
601 University Drive
San Marcos, Texas 78666
Phone: 512-245-6697
Email: nickdornak@txstate.edu

With a Copy To: Dr. Reddy Venumbaka
Technology Transfer & Contracts
Texas State University
601 University Drive
San Marcos, TX 78666-4684
Phone: 512-245-4524
Email: Reddy@txstate.edu

City of Rockport:

City of Rockport
ATTN: Mayor
2751 SH 35 Bypass
Rockport, TX 78382
Phone: 361-729-2213 ext 221
Fax: 361-790-5966
Email: mayor@cityofrockport.com

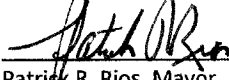
With a Copy To:

City of Rockport
ATTN: City Secretary
2751 SH 35 Bypass
Rockport, TX 78382
Phone: 361-729-2213 ext. 225
Email: tvaldez@cityofrockport.com

5. This Agreement constitutes the entire Agreement between the parties. This agreement may not be modified except as agreed by the parties in writing, nor may this agreement be assigned.
6. Each party may change the address for notice to it be giving notice of such change in accordance with the provisions in this paragraph.
7. Venue for a dispute arising from this agreement shall be in Travis County, Texas.
8. Nondiscrimination: In their execution of this agreement, all contractors, subcontractors, their respective employees, and others acting by or through them shall comply with all federal and state policies and laws prohibiting discrimination, harassment, and sexual misconduct. Any breach of this covenant may result in termination of this agreement.
9. The signatories hereby acknowledge that this agreement is duly authorized by the governing bodies of Texas State and the Partner.

IN WITNESS WHEREOF, the parties have executed this agreement this 28TH day of April 2022.

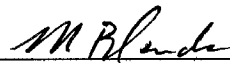
CITY OF ROCKPORT



Patrick R. Rios, Mayor


Date: April 12, 2022

TEXAS STATE UNIVERSITY

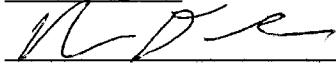


Michael Blanda, Ph.D., Interim Chief Research Officer, Texas State University

Date: 4-28-22

Reviewed and Approved to Sign
Joanne Palmer, OTC


Read and Agreed:



Nick Dornak, Director of Watershed Services, Meadows Center for Water and the Environment, Texas State University

Date: 4/25/22

MEMORANDUM OF AGREEMENT
BETWEEN
ARANSAS COUNTY NAVIGATION DISTRICT
AND
TEXAS STATE UNIVERSITY
CLEAN COAST TEXAS PROJECT IMPLEMENTATION

PREAMBLE

The Clean Coast Texas Program is derived from priority actions identified in the *Texas Coastal Nonpoint Source Pollution Control program*, (hereinafter the "Plan") The Plan was developed following the guidelines established by the United States Environmental Protection Agency (EPA) and National Oceanic and Atmosphere Administration (NOAA) as defined in the "Guidance for Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters", USA EPA, 1993.

This Memorandum of Agreement (hereafter termed "Agreement") is entered into by and between the ARANSAS COUNTY NAVIGATION DISTRICT (hereafter referred to as "Partner") and TEXAS STATE UNIVERSITY (hereafter referred to as "Texas State"), a member of The Texas State University System, an entity of the State of Texas. Texas State and the Partner may be referred to herein individually as a "Party" or collectively as the "Parties". Other Partners include the City of Rockport, Aransas County, and the Town of Fulton and each has their own Agreement with Texas State.

The governing bodies of each party find that the Clean Coast Texas Program (hereinafter referred to as "Program") subject of this agreement is necessary for the benefit of the public and that the performance of this agreement is in the common interest of both parties

THIS AGREEMENT, entered into on the date of last signature shall terminate on September 1, 2024 when the Program is complete or with an amendment to this document shall be extended to the final date of the Program if the project completion date is extended by the Texas General Land Office (GLO). Either Party may terminate this agreement upon thirty (30) days written notice to the other Party.

WHEREAS, GLO has granted Texas State funding to facilitate the Program (Contract No. 21-060-020-6682); and

WHEREAS, the governing bodies of each party find the subject of this Agreement is necessary for the benefit of the public and that the performance of this Agreement is in the common interest of both parties; and

WHEREAS, Texas State and the Partners informally developed an effective organizing framework to enhance cooperation and coordination among various programs and activities within Aransas County and agree that the Aransas County Stormwater Advisory Committee shall function as the coordinating body to guide and perform the tasks identified in this document; and

WHEREAS, Within Texas State is "The Meadows Center for Water and the Environment" (hereinafter referred to as "Meadows Center") shall be the lead in the activities of Texas State; and

WHEREAS, Each Party shall bear its own costs and expenses accrued in the performance of the Agreement.

NOW THEREFORE, Texas State and the Aransas County Navigation District, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center, will administer the Program and coordinate directly with the participating partners to implement demonstration-scale water quality treatment measures, initiate education activities, monitor water quality, distribute the Stormwater Manual, host workshops, and conduct other activities to implement the Program.
2. Texas State, through its Meadows Center, will provide technical assistance as specified in the Program to facilitate the design and construction of demonstration-scale water quality treatment facilities on Aransas County Navigation District (District) property.
3. Texas State, through its Meadows Center, will prepare the construction plans for the demonstration-scale water quality measures, administer the bid process and contractor selection, and oversee the construction process. Texas State will perform a final inspection with District staff.
4. Texas State, through its Meadows Center, will study, obtain field data, perform engineering assessments, and determine feasibility of a Tule Creek Regional Water Quality Retrofit. This effort will be in concert with the General Land Office (GLO) regional flood mitigation planning efforts. If the potential project provides the desired regional water quality benefits as defined in a Preliminary Engineering Report and is approved by the city, the Meadows Center will prepare construction plans.
5. Texas State, through its Meadows Center, will develop educational features for installation at the demonstration-scale water quality measure sites when the projects are complete.
6. Texas State, through its Meadows Center, will coordinate with the district, non-governmental organizations, and other groups to lead and/or support up to three community events that can improve water quality and protect habitat.
7. Texas State, through its Meadows Center, will host workshops with elected officials, local government staff, and citizens to outline the Program goals and objectives.
8. Texas State, through its Meadows Center, will assist the Town in preparing grant applications and developing financial strategies to seek funding for water quality and stormwater management improvement projects.

II. ARANSAS COUNTY NAVIGATION DISTRICT (DISTRICT) RESPONSIBILITIES

1. The District will coordinate with Texas State, through its Meadows Center, to select sites that can be retrofitted with the agreed upon demonstration-scale water quality treatment measures to improve water quality and help manage runoff. The Navigation District will provide the final decision on water quality measure type and location.
2. The District will permit Texas State, through its Meadows Center, to access selected sites to perform survey, testing, and design activities and allow Texas State, through its Meadows

Center, to oversee demonstration-scale water quality measure construction. The District will allow potential contractors to observe the sites during the bid process, this includes, hosting a pre-bid meeting and the site tour. The District will perform a final inspection with Texas State, through its Meadows Center, to ensure that the projects were completed per the construction plans.

3. The District will participate with the Meadows Center in the assessment of the feasibility of a Tule Creek Regional Water Quality Retrofit. This includes reviewing the Preliminary Engineering Report and providing an opinion on project feasibility.
4. The District will respond in a timely manner (two days) to communication between Texas State, through its Meadows Center, and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the District.
5. The District will maintain and operate the demonstration-scale water quality measures for a minimum of ten (10) years after implementation as defined in the Sustainable Stormwater Manual provided by Texas State, through its Meadows Center.
6. The District will ensure that educational features installed at the demonstration-scale water quality measures will remain functional for a period of three years after construction is complete.
7. The District will support Texas State, through its Meadows Center, in the planning and implementation of community events that improve water quality. Up to three community events will be held.
8. The District will identify a point of contact (project manager) who will assist Texas State, through its Meadows Center, and its contractors in performing the above tasks and coordinating with residents, District staff, and elected officials as needed.
9. The District may assist Texas State, through its Meadows Center, in the development of grant applications and other financial strategies in support of the Program and/or initiatives that demonstrate clear benefits to the District. Assistance from the District may include letters of support, resolutions, project reports, financial reports, other documents, etc.

III. MISCELLANEOUS

1. This Agreement may be amended by mutual written agreement signed by the parties hereto.
2. Nothing contained in this MOU shall be deemed to create a partnership, joint venture, or relationship of employment between the Parties. Neither Party shall have the authority to act on behalf of the other Party, or to commit any other Party in any manner or cause whatsoever, or to use any other Party's name in any way not specifically authorized by this MOU. Neither Party shall be liable for any act, omission, representation, obligation or debt of the other Party.

3. This Agreement represents the entire and integrated agreement between the Partner and Texas State and supersedes all prior negotiations, representations, or agreements, either written or oral.
4. Notice under this Agreement shall be in writing and may be delivered by hand, by certified mail, by common carrier, or electronically. Notice by hand-delivery is deemed effective immediately, by certified mail is deemed effective three days after deposit in U.S. Post Office or in a U.S. Mail Box, and by common carrier, is deemed effective upon receipt. Electronic notice is deemed effective upon confirmed receipt of the receiving party, documents shall be converted to pdf. Notice to a party shall be addressed as follows:

Texas State University: Nick Dornak
Meadows Center for Water and the Environment
Texas State University
601 University Drive
San Marcos, Texas 78666
Phone: 512-245-6697
Email: nickdornak@txstate.edu

With a Copy To: Dr. Reddy Venumbaka
Technology Transfer & Contracts
Texas State University
601 University Drive
San Marcos, TX 78666-4684
Phone: 512-245-4524
Email: Reddy@txstate.edu

Aransas County Navigation District: Malcolm Dieckow
Aransas County Navigation District
911 Navigation Circle
Rockport, TX 78382

Phone: 361-729-6661
Email: precinct3@acnd.org

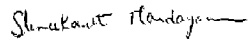
With a Copy To: Keith Barrett
Aransas County Navigation District
911 Navigation Circle
Rockport, TX 78382

Phone: 361-729-6661
Email: harbormaster@acnd.org

5. This Agreement constitutes the entire Agreement between the parties. This agreement may not be modified except as agreed by the parties in writing, nor may this agreement be assigned.
6. Each party may change the address for notice to it be giving notice of such change in accordance with the provisions in this paragraph.
7. Venue for a dispute arising from this agreement shall be in Travis County, Texas.
8. Nondiscrimination: In their execution of this agreement, all contractors, subcontractors, their respective employees, and others acting by or through them shall comply with all federal and state policies and laws prohibiting discrimination, harassment, and sexual misconduct. Any breach of this covenant may result in termination of this agreement.
9. The signatories hereby acknowledge that this agreement is duly authorized by the governing bodies of Texas State and the Partner.

IN WITNESS WHEREOF, the parties have executed this agreement this 1st day of August, 2022

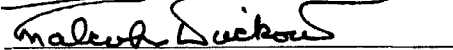
TEXAS STATE UNIVERSITY



Dr. Shreekanth Mandayam, Chief Research Officer

Date: Aug 1, 2022

ARANSAS COUNTY NAVIGATION DISTRICT



Malcolm Dieckow, Chairman

Date: 7/12/22

Read and Agreed:



Nick Dornak, Director of Watershed Services, Meadows Center for Water and the Environment, Texas State University

Date: 7/21/22

**MEMORANDUM OF AGREEMENT
BETWEEN
TOWN OF FULTON
AND
TEXAS STATE UNIVERSITY
CLEAN COAST TEXAS PROJECT IMPLEMENTATION**

PREAMBLE

The Clean Coast Texas Program is derived from priority actions identified in the *Texas Coastal Nonpoint Source Pollution Control program*, (hereinafter the “Plan”) The Plan was developed following the guidelines established by the United States Environmental Protection Agency (EPA) and National Oceanic and Atmosphere Administration (NOAA) as defined in the “Guidance for Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters”, USA EPA, 1993.

This Memorandum of Agreement (hereafter termed “**Agreement**”) is entered into by and between the TOWN OF FULTON (hereafter referred to as “**Partner**”) and TEXAS STATE UNIVERSITY (hereafter referred to as “**Texas State**”), a member of The Texas State University System, an entity of the State of Texas. Texas State and the Partner may be referred to herein individually as a “Party” or collectively as the “Parties”. Other Partners include the City of Rockport, Aransas County, and the Aransas County Navigation District and each has their own Agreement with Texas State.

The governing bodies of each party find that the Clean Coast Texas Program (hereinafter referred to as “**Program**”) subject of this agreement is necessary for the benefit of the public and that the performance of this agreement is in the common interest of both parties

THIS AGREEMENT, entered into on the date of last signature shall terminate on September 1, 2024 when the Program is complete or with an amendment to this document shall be extended to the final date of the Program if the project completion date is extended by the Texas General Land Office (GLO). Either Party may terminate this agreement upon thirty (30) days written notice to the other Party.

WHEREAS, GLO has granted Texas State funding to facilitate the Program (Contract No. 21-060-020-6682); and

WHEREAS, the governing bodies of each party find the subject of this Agreement is necessary for the benefit of the public and that the performance of this Agreement is in the common interest of both parties; and

WHEREAS, Texas State and the Partners informally developed an effective organizing framework to enhance cooperation and coordination among various programs and activities within Aransas County and agree that the Aransas County Stormwater Advisory Committee shall function as the coordinating body to guide and perform the tasks identified in this document; and

WHEREAS, Within Texas State is “The Meadows Center for Water and the Environment” (hereinafter referred to as “Meadows Center”) shall be the lead in the activities of Texas State; and

WHEREAS, Each Party shall bear its own costs and expenses accrued in the performance of the Agreement.

NOW THEREFORE, Texas State and the Town of Fulton, hereby mutually agree to:

I. TEXAS STATE RESPONSIBILITIES

1. Texas State, through its Meadows Center, will administer the Program and coordinate directly with the participating partners to implement demonstration-scale water quality treatment measures, review water quality ordinances, initiate education activities, monitor water quality, distribute the Stormwater Manual, host workshops, and conduct other activities to implement the Program.
2. Texas State, through its Meadows Center, will provide technical assistance as specified in the Program to facilitate the design and construction of demonstration-scale water quality treatment facilities on Town of Fulton (Town) property.
3. Texas State, through its Meadows Center, will prepare the construction plans for the demonstration-scale water quality measures, administer the bid process and contractor selection, and oversee the construction process. Texas State will perform a final inspection with Town staff.
4. Texas State, through its Meadows Center, will develop educational features for installation at the demonstration-scale water quality measure sites when the projects are complete.
5. Texas State, through its Meadows Center, will coordinate with the Town, non-governmental organizations, and other groups to lead and/or support up to three community events that can improve water quality and protect habitat.
6. Texas State, through its Meadows Center, will host workshops with elected officials, local government staff, and citizens to outline the Program goals and objectives.
7. Texas State, through its Meadows Center, will lead the water quality ordinance/criteria manual evaluation process and coordinate with the Town on potential enhancements to facilitate water quality management and minimize regulatory redundancy. This process will be based on the Stormwater Manual, 3rd Edition, 2021. Texas State will provide recommended ordinance revisions and support the potential ordinance revision process.
8. Texas State, through its Meadows Center, will co-lead the water quality ordinance/criteria manual stakeholder process with the Town. Texas State will provide meeting agenda, notes, ordinance research and conduct discussions with stakeholders as necessary outside of formal meetings.
9. Texas State, through its Meadows Center, will assist the Town in preparing grant applications and developing financial strategies to seek funding for water quality and stormwater management improvement projects.

II. TOWN OF FULTON (TOWN) RESPONSIBILITIES

1. The Town will coordinate with Texas State, through its Meadows Center, to select sites that can be retrofitted with the agreed upon demonstration-scale water quality treatment measures to improve water quality and help manage runoff. The Town will provide the final

decision on water quality measure type and location.

2. The Town will permit Texas State, through its Meadows Center, to access selected sites to perform survey, testing, and design activities and allow Texas State, through its Meadows Center, to oversee demonstration-scale water quality measure construction. The Town will allow potential contractors to observe the sites during the bid process, this includes, hosting a pre-bid meeting and the site tour. The Town will perform a final inspection with Texas State, through its Meadows Center, to ensure that the projects were completed per the construction plans.
3. Town will respond in a timely manner (two days) to communication between Texas State, through its Meadows Center, and key staff members to support the development and implementation of Clean Coast Texas Collaborative projects and initiatives within the Town.
4. The Town will maintain and operate the demonstration-scale water quality measures for a minimum of ten (10) years after implementation as defined in the Sustainable Stormwater Manual provided by Texas State, through its Meadows Center.
5. The Town will ensure that educational features installed at the demonstration-scale water quality measures will remain functional for a period of three years after construction is complete.
6. The Town will support Texas State, through its Meadows Center, in the planning and implementation of community events that improve water quality. Up to three community events will be held.
7. The Town will participate in a review of the Town's existing drainage criteria, ordinances, and manuals and will consider potential modifications and amendments to improve water quality protection, enhance flood management, and promote regulatory consistency in the Town and Aransas County drainage codes and criteria. The Town will coordinate with Aransas County and include them in the above process.
8. The Town will actively participate and co-lead the water quality protection and stormwater management criteria stakeholder process.
9. The Town will identify a point of contact (project manager) who will assist Texas State, through its Meadows Center, and its contractors in performing the above tasks and coordinating with residents, Town staff, and elected officials as needed.
10. The Town may assist Texas State, through its Meadows Center, in the development of grant applications and other financial strategies in support of the Program and/or initiatives that demonstrate clear benefits to the Town. Assistance from the Town may include letters of support, resolutions, project reports, financial reports, other documents, etc.

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1. This Agreement may be amended by mutual written agreement signed by the parties hereto.

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601 University Drive
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Phone: 512-245-6697
Email: nickdornak@txstate.edu

With a Copy To: Dr. Reddy Venumbaka
Technology Transfer & Contracts
Texas State University
601 University Drive
San Marcos, TX 78666-4684
Phone: 512-245-4524
Email: Reddy@txstate.edu

Town of Fulton: Kelli Cole
Mayor
P.O. Box 1130
Fulton, TX 78358

Phone: 361-729-5533
Email: mayor@fultontexas.org

With a Copy To: Stephanie Garcia
City Secretary
P.O. Box 1130
Fulton, TX 78358

Phone: 361-729-5533
Email: citysec@fultontexas.org

5. This Agreement constitutes the entire Agreement between the parties. This agreement may not be modified except as agreed by the parties in writing, nor may this agreement be assigned.
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8. Nondiscrimination: In their execution of this agreement, all contractors, subcontractors, their respective employees, and others acting by or through them shall comply with all federal and state policies and laws prohibiting discrimination, harassment, and sexual misconduct. Any breach of this covenant may result in termination of this agreement.
9. The signatories hereby acknowledge that this agreement is duly authorized by the governing bodies of Texas State and the Partner.

IN WITNESS WHEREOF, the parties have executed this agreement this 16 day of MAY 2022

TOWN OF FULTON
Willie Cole
MAYOR

Date: May 16, 2022

TEXAS STATE UNIVERSITY
M. Blanda
Michael Blanda, Ph.D., Interim Chief Research Officer, Texas State University

Date: May 19, 2022

Read and Agreed:

Nick Dornak
Nick Dornak, Director of Watershed Services, Meadows Center for Water and the Environment, Texas State University

Date: 5/17/2022

**Clean Coast Texas
Community Scale Retrofit Plans & Design Report**



**Prepared for:
The Meadows Center for Water and the Environment
Texas State University**

**Prepared by:
Doucet and Associates, Inc.**

July, 2022

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Section 1.0 Introduction

Ten Best Management Practices (BMPs) were conceptually designed as demonstration projects (community scale retrofits) to improve water quality, enhance water supplies, manage runoff, and illustrate the methods and techniques that can be used by residents, developers, local governments, and commercial operators in the Coastal Zone. This report summarizes the evaluated practices at the following sites. See Table 1 later in the report for a summary of cost and total suspended solids (TSS) removal.

Rainwater Harvesting

- Memorial Park Nature Preserve Building - Rockport

Pervious Paver

- Community Aquatic Center Parking Lot - Rockport
- Memorial Park Nature Preserve Parking Lot – Rockport
- Aransas County Navigation District Parking Lot
- Kingsville City Hall Park

Rain Garden

- Memorial Park Nature Preserve Parking Lot – Rockport
- Site at North 7th Street and East Yoakum Ave – Kingsville
- Denver Harbor Park West – Harris County

Vegetated Filter Infiltration Strip

- Rockport Beach Park – Aransas County Navigation District

Regional Detention Basin

- Tranquitas Creek Regional Detention Basin – Kingsville

As noted, the purpose of these BMPs is to illustrate nonpoint source (NPS) pollutant control measures that could be constructed at a future date once final design plans are prepared. Once constructed, these measures can inform stakeholders on the pollution reduction and water conservation benefits of each. This report quantifies pollution managed, includes schematic designs, and estimates construction costs. Details, design criteria, and maintenance guidance for all sites can be found in the [Clean Coast Texas Guidance for Sustainable Stormwater Drainage on the Texas Coast](#), 2021 (Manual).

For additional guidance on water quality retrofit alternatives, design considerations, construction, and maintenance requirements, please see the General Land Office (GLO) [Stormwater Resiliency Retrofit Design Guide](#).

Potential funding sources for these measures include:

- [TCEQ/TSSWCB 319 Watershed Protection Plan Grants](#)
- [Clean Water State Revolving Fund](#)
- Local capital improvement program (CIP) and drainage utility fees
- For an extensive list of other potential sources, please see the GLO [Funding Programs Resiliency Design Guide](#)

Section 2.0 BMP Projects

Pollutant load management was defined by the use of the TCEQ (Texas Commission on Environmental Quality) Edwards Aquifer Protection Program Design Spreadsheet which assesses pounds of total suspended solids (TSS) managed per year. The design spreadsheet rainfall depths were modified to reflect the appropriate annual rainfall depths for each retrofit site. Runoff coefficients in the Edwards region are compatible with coefficients in the coastal zone. Average annual rainfall for Rockport and Kingsville is 30 inches per year while the average rainfall depth in Harris County is 53 inches.

To determine the management of phosphorus, nitrogen, and *E. coli* in the various BMPs, guidance was provided by the City of Austin Environmental Criteria Manual (Tables 1-9, 1-10, 1-11), the Water Environment Research Foundation (WERF) *User's Guide to the BMP SELECT Model*, and the Lower Colorado River Authority (LCRA) Highland Lakes Watershed Ordinance *Water Quality Management Technical Manual*.

The following provides design, cost, pollutant management, and other information at each site. A contingency of 30% was applied to each estimated construction cost. Photographs of each site follow the summary.

Section 2.1 Rainwater Harvesting



Rainwater Harvesting Tank

Per the Manual, rainwater harvesting systems can be used as a Stormwater Credit, Manual Section 4.3.2, to reduce the effective impervious cover at a site. Roof areas connected to a rainfall harvesting system can reduce their impervious cover up to 75% based upon the ratio of the tank volume to the roof area. The target rainfall retention volume is based on the runoff from a 1.5 inch storm and the system should be emptied at least weekly to provide storage for subsequent storms. The design assumption is that managing this runoff volume will achieve 80% TSS reduction requirement. Rainwater harvesting design details are found in Section 5.8 of the Manual.

2.1.1 Rockport Memorial Park Nature Preserve Building

- Storage type – Metal Tank
- Storage size – 3,000 gallons
- Project Cost = \$35,000 (includes gutter improvements and tank)
- Total Site and Building area = 2,950 square feet
- Roof material and area captured – Metal, area = 1,570 square feet
- Allowable Impervious Cover Reduction = 895 square feet
- Use – Rainwater harvested will be used to irrigate the native landscape.
- Delivery method – Gravity fed
- Potential annual harvesting capacity – 29,400 gallons ($\frac{30 \text{ inches}}{\text{year}} \times \frac{1 \text{ foot}}{12 \text{ inches}} \times \frac{7.48 \text{ gallons}}{\text{cubic foot}} \times 1570 \text{ square feet}$)
- Tank is filled by 3.22 inches of rainfall runoff from the roof surface
- TSS pounds managed per year = 36 lbs
- Phosphorus pounds managed per year = 0.03 lbs
- Nitrogen pounds managed per year = 0.15 lbs
- *E. coli* cfu managed per year = 1.33E+10 cfu
 - This rainwater tank has volume in excess of the 1.5-inch storm, thus, it satisfies the 80% TSS removal requirement. If the tank was sized for the 1.50-inch storm, it would need to contain about 1,400 gallons of storage.
- See Appendix A-1 for the schematic design plan and construction cost estimate.



Rockport Memorial Park Building to be Retrofit with a Rainwater Harvesting Tank

Section 2.2 Permeable Pavers/Porous Pavement



Parking Lot Permeable Pavers

Per the Manual, permeable pavers can be used as a Stormwater Credit, Manual Section 4.3.2 to reduce the effective impervious cover at a site. Porous pavement/pavers can reduce the paved area impervious cover up to 90%. To achieve this credit, the subsurface storage system must be able to store the rainfall treatment depth of 1.50 inches. Permeable pavers/porous pavement design details are found in Section 5.4 in the Manual.

The rock water storage area below the pavers is 21 inches thick and composed of 2 inches of ASTM #8/#9 stone, 5 inches of ASTM #57 stone, and 14 inches of ASTM #2 stone. Based on a void ratio of 0.3, the rock water storage area can retain a rainfall depth of 6.3 inches which exceeds the Manual requirements of 1.50 inches. The soil properties were obtained from the USDA Natural Resources Conservation Service Online Soil Map. These soils were either fine sand or loamy sand, which have high infiltration rates.

2.2.1 Rockport Aquatic Complex Parking Lot – Permeable Pavers

- Drainage Area to Pavers = 5,227 square feet (0.12 acres)
- Paver footprint = 2,445 square feet (0.056 acres)
- Soil Type is Galveston-Mustang complex, 0 to 3% slopes, occasionally flooded, frequently ponded, 0 to 80 inches is fine sand.
- Cost = \$83,000 (pavers, bedding materials, installation)
- Allowable Impervious Cover Reduction = 0.051 acres
- TSS pounds managed per year = 98 lbs
- Phosphorus pounds managed per year = 0.19 lbs
- Nitrogen pounds managed per year = 0.60 lbs
- *E. coli* cfu managed per year = 3.97E+10 cfu
- See Appendix A-2 for the schematic design plan and construction cost estimate.



Rockport Aquatic Complex Parking Lot

2.2.2 Rockport Memorial Park Nature Preserve Parking Lot – Permeable Pavers

- This project addresses standing water in the parking lot and eases asphalt maintenance.
- Drainage Area to pavers = 3864 square feet (0.089 acres)
- Paver footprint = 3327 square feet (0.076 acres)
- Soil Type is Galveston-Mustang complex, 0 to 3% slopes, occasionally flooded, frequently ponded, 0 to 80 inches is fine sand.
- Cost = \$97,000 (pavers, installation, bedding material)
- Allowable Impervious Cover Reduction = 0.069 acres
- TSS pounds managed per year = 66 lbs
- Phosphorus pounds managed per year = 0.14 lbs
- Nitrogen pounds managed per year = 0.45 lbs
- *E. coli* cfu managed per year = 2.93E+10 cfu
- See Appendix A-3 for the schematic design plan and construction cost estimate.



Rockport Memorial Park Parking Lot

2.2.3 Aransas County Navigation District Office Parking Lot – Permeable Pavers

- Drainage Area to pavers = 5793 square feet (.13 acres)
- Paver footprint = 2030 square feet (0.047 acres)
- Soil Type is Tatton complex, 0 to 1% slopes, occasionally ponded, 0 to 60 inches is loamy sand.
- Cost = \$63,000 (pavers, bedding, installation)
- Allowable Impervious Cover Reduction = 0.042 acres
- TSS pounds managed per year = 38 lbs
- Phosphorus pounds managed per year = 0.22 lbs
- Nitrogen pounds managed per year = 0.67 lbs
- *E. coli* cfu managed per year = 4.40E+10 cfu
- See Appendix A-4 for the schematic design plan and construction cost estimate.



Aransas County Navigation District Parking Lot

2.2.4 Kingsville City Hall Park – Permeable Pavers Trail

- Drainage Area = Paver footprint = 12,803 square feet (0.29 acres)
- Soil Type is Colmen fine sandy loam, 0 to 1% slopes, 0 to 11 inches is fine sandy loam, 11 to 80 inches is sandy clay loam
- Cost = \$260,000 (pavers, bedding, installation)
- Allowable Impervious Cover Reduction = 0.26 acres
- TSS pounds managed per year = 277 lbs
- Phosphorus pounds managed per year = 0.47 lbs
- Nitrogen pounds managed per year = 1.46 lbs
- *E. coli* cfu managed per year = 9.59E+10 cfu
- See Appendix A-5 for the schematic design plan and construction cost estimate.



Kingsville Site for Future Trail

Section 2.3 Rain Gardens



Rain Garden

Per the Manual, rain gardens generate an 89 percent reduction in TSS by filtering runoff and pollutants through a layer of soil or media, which also function as a growing medium for vegetation. They function as a primary water quality treatment measure and do not provide stormwater credits. Rain gardens can be planted in various manners, from extensive plants and shrubs to a grass covered bottom. To minimize maintenance and cost, grass bottom rain gardens can be an attractive alternative to a shrub and landscape planted basin. Rain garden design details are found in Section 5.6 in the Manual.

The rain gardens consist of Bermuda sod with a base of 18 inches of biofiltration media on top of 18 inches of bridge stone and then ASTM #57 stone to create a fully vegetated rain garden.

2.3.1 Rockport Memorial Park Rain Garden

- Drainage Area = 13,939 square feet (0.32 acres)
- Rain garden volume = 1980 cubic feet with a depth of one foot.
- Soil Type is Mustang fine sand, 0 to 1% slopes, 0 to 80 inches is fine sand. Soil borings and/or test pits are necessary to confirm the depth to groundwater prior to preparing design plans.
- Side slopes are at 4 feet horizontal for one- foot of elevation change to facilitate mowing.
- Cost = \$48,000 (excavation, stone, revegetation, installation)
- TSS pounds managed per year = 252 lbs
- Phosphorus pounds managed per year = 0.28 lbs
- Nitrogen pounds managed per year = 1.28 lbs
- *E. coli* cfu managed per year = 1.12E+11 cfu
- See Appendix A-6 for the schematic design plan and construction cost estimate.

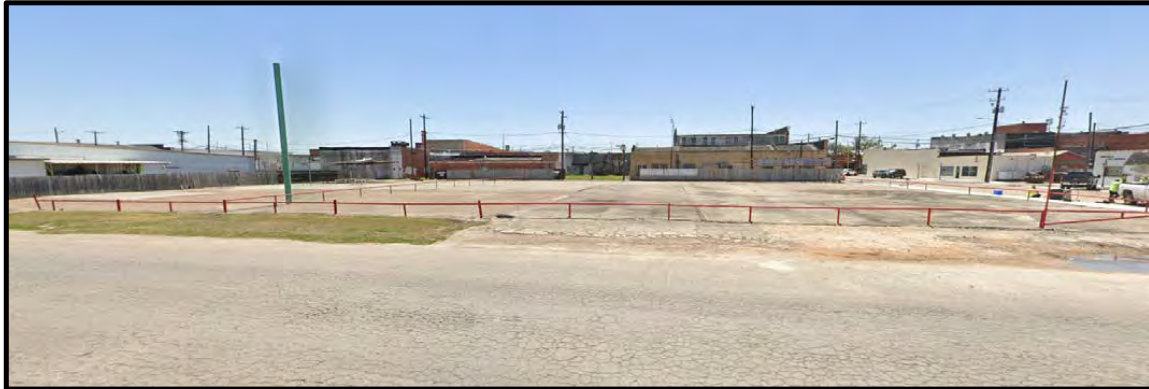


Rockport Memorial Park Rain Garden Site

2.3.2 East 7th Street and East Yoakum Avenue Rain Garden

- Drainage Area = 34,412 square feet (0.79 acres)
- Rain garden volume = 3500 cubic feet with a depth of one foot.
- Soil Type is Czar sandy clay loam, 0 to 1% slopes. 0 to 80 inches is sandy clay loam with minimum infiltration rates of 0.57 in/hr to 198 in/hr, which is sufficient infiltration capacity so that an underdrain is not required.
- Side slopes are at 4 feet horizontal for one- foot of elevation change to facilitate mowing.

- Cost = \$84,000 (excavation, stone, revegetation, installation)
- TSS pounds managed per year = 615 lbs
- Phosphorus pounds managed per year = 0.72 lbs
- Nitrogen pounds managed per year = 3.35 lbs
- *E. coli* cfu managed per year = 2.91E+11 cfu
- See Appendix A-7 for the schematic design plan and construction cost estimate.



Kingsville East 7th Street and Yoakum Site

2.3.3 Harris County, Denver Harbor Park West

- Drainage Area = 17,900 square feet (0.419 acres)
- Impervious cover = 0.26 acres, impervious cover percentage = 64%
- Rain garden volume = 1435 cubic feet with a depth of one foot.
- Soils are not conducive to infiltration, perforated underdrain system is proposed.
- Side slopes are at 4 feet horizontal for one-foot of elevation change to facilitate mowing.
- Cost = \$55,000 (excavation, stone, revegetation, installation)
- TSS pounds managed per year = 354 lbs
- Phosphorus pounds managed per year = 0.26 lbs
- Nitrogen pounds managed per year = 1.23 lbs
- *E. coli* cfu managed per year = 1.07E+11 cfu
- See Appendix A-8 for the schematic design plan and construction cost estimate.

Harris County requires stormwater detention for redevelopment per the Harris County Infrastructure Design Manual, July 2022. Per Chapter 9.2.02.H, the detention volume is 0.75 acre-feet of volume per acre based on the impervious cover of 64%. This results in a detention volume of 8,500 cubic feet that is about six times greater than the water quality volume per the Sustainable Stormwater Manual. The proposed plan does not include a basin sized for detention as it would impact park features and existing trees and is beyond the scope of the water quality retrofit plan. However, as an alternative, the Infrastructure Design Manual allows detention within a parking lot as long as the maximum depth at the inlet is 9 inches. Thus, a non-standard curb and gutter could

be placed around the parking lot perimeter and detention could be provided over the entire area of the proposed rain garden and parking lot at a depth of about 8”.



Harris County, Denver Harbor West Park

Section 2.4 Vegetated Filter Strips



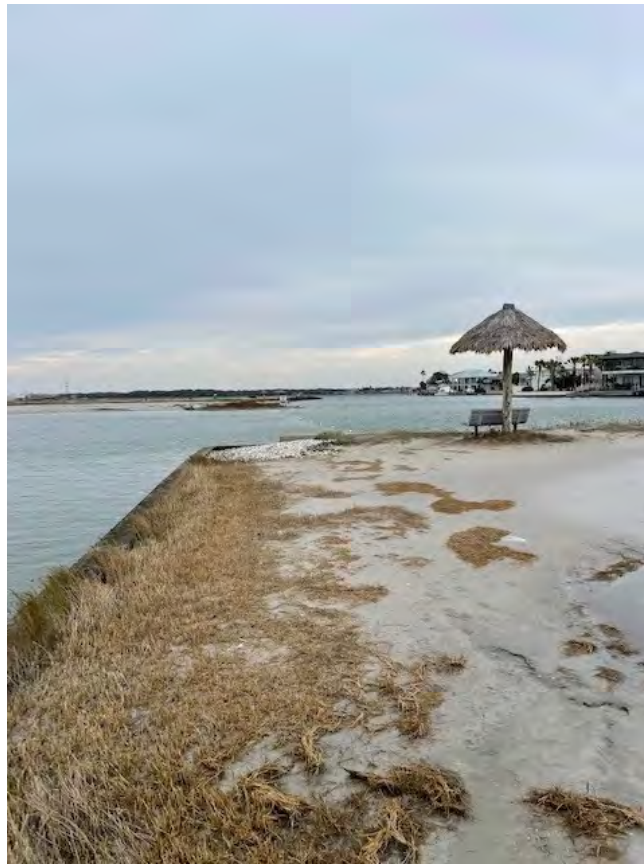
Vegetated Filter Strip and Grassy Swale

Per the Manual, filter strips can be used as a Stormwater Credit, Manual Section 4.3.2 to reduce the effective impervious cover at a site. 80% TSS removal is assumed when following design guidance, including minimum width, slope and cover requirements, and runoff must be in sheet flow conditions. Filter strip design details are found in Section 5.4 in the Manual.

A vegetated filter strip is a gently sloped vegetated section of land that slows down runoff and allows for infiltration and pollutant removal. Filter strip design guidance comes from Aransas County Stormwater Master Plan and Guidance Manual. 80% TSS removal is assumed when following the design guidance, which includes a slope of less than 2% and a required filter strip width dependent on the flow path across paved surface contributing to the filter strip. This measure is very effective in treating runoff as a stand-alone BMP or can function as a secondary treatment device downgradient of structural measures to polish runoff and enhance infiltration.

2.4.1 Rockport Beach Vegetated Filter Infiltration Strip

- Drainage Area = 78,408 square feet (1.8 acres)
- Cost = \$56,000 (sodding, topsoil, grading)
- Phosphorus pounds managed per year = 0.22 lbs
- Nitrogen pounds managed per year = 1.21 lbs
- *E. coli* cfu managed per year = 7.32E+10 cfu
- See Appendix A-9 for the schematic design plan and construction cost estimate.



Rockport Beach Vegetated Filter Strip Site

Section 2.5 Regional Stormwater Detention



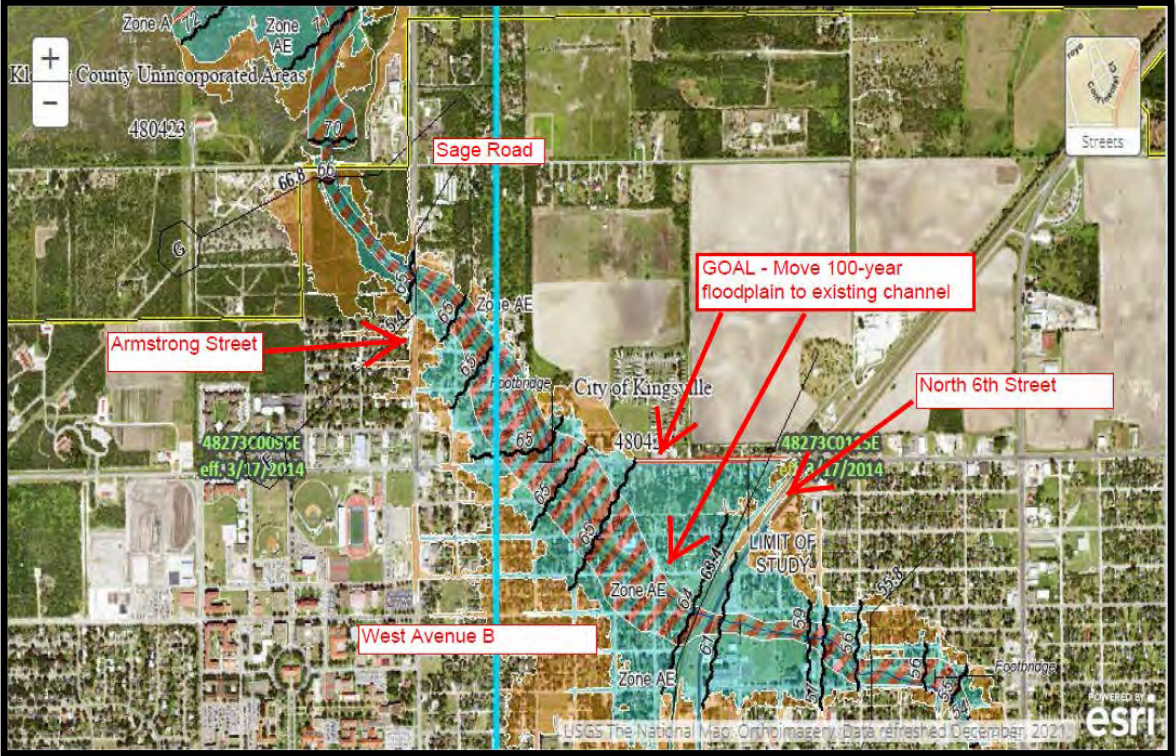
Extended Detention Basin with Soccer Field

Per the Manual, detention basins can manage the increase in runoff rate and volume from new development impervious cover. Many regulatory agencies in the Coastal Zone require stormwater detention so that new development does not adversely impact downstream property owner flooding. Detention basins capture and temporarily detain a portion of the runoff to reduce peak flow rates to help mitigate downstream flooding. In addition, they can serve primarily as settling basins for total suspended solids and metals and nutrients that are attached to solids and are recognized as providing 75% management of TSS. Finally, these measures can provide recreational opportunities such as playing fields (soccer, baseball, football), tennis courts, and running/trail surfaces. By providing community amenities in these facilities, other funding sources such as parks and recreation can be combined with stormwater funds to create a multi-purpose facility that can stretch local resources. Funding sources include those noted in Section 1.0 and TWDB Flood Infrastructure Fund and GLO Mitigation Funds. Detention basin design guidance can be found in Section 5.5 in the Manual.

2.5.1 Kingsville Tranquitas Creek Regional Detention Retrofit

The Tranquitas Creek retrofit concept was presented to Kingsville GIFT Workshop attendees on May 12, 2022. The purpose of the regional retrofit is to reduce storm flow peak flow rates to lower water surface elevations in Tranquitas Creek to help mitigate existing flooding of over 300 homes and structures. The retrofit concept is based on a hydraulic assessment of the existing channel conveyance capacity and found that the 100-year peak flow rate can be reduced by about 20% to lower floodplain levels and enhance public safety downstream of the site. The drainage area to the detention basin site is about 41 square miles. To evaluate water quality benefits, this assessment

only considers the potential park and recreation improvements within the 30-acre detention basin site. It is assumed that there will be impervious cover equal to 15% of the site area for parking, drives, buildings, and recreational amenities. In summary, the retrofit takes the triple bottom line approach to bring environmental, economic, and social benefits to the City of Kingsville.



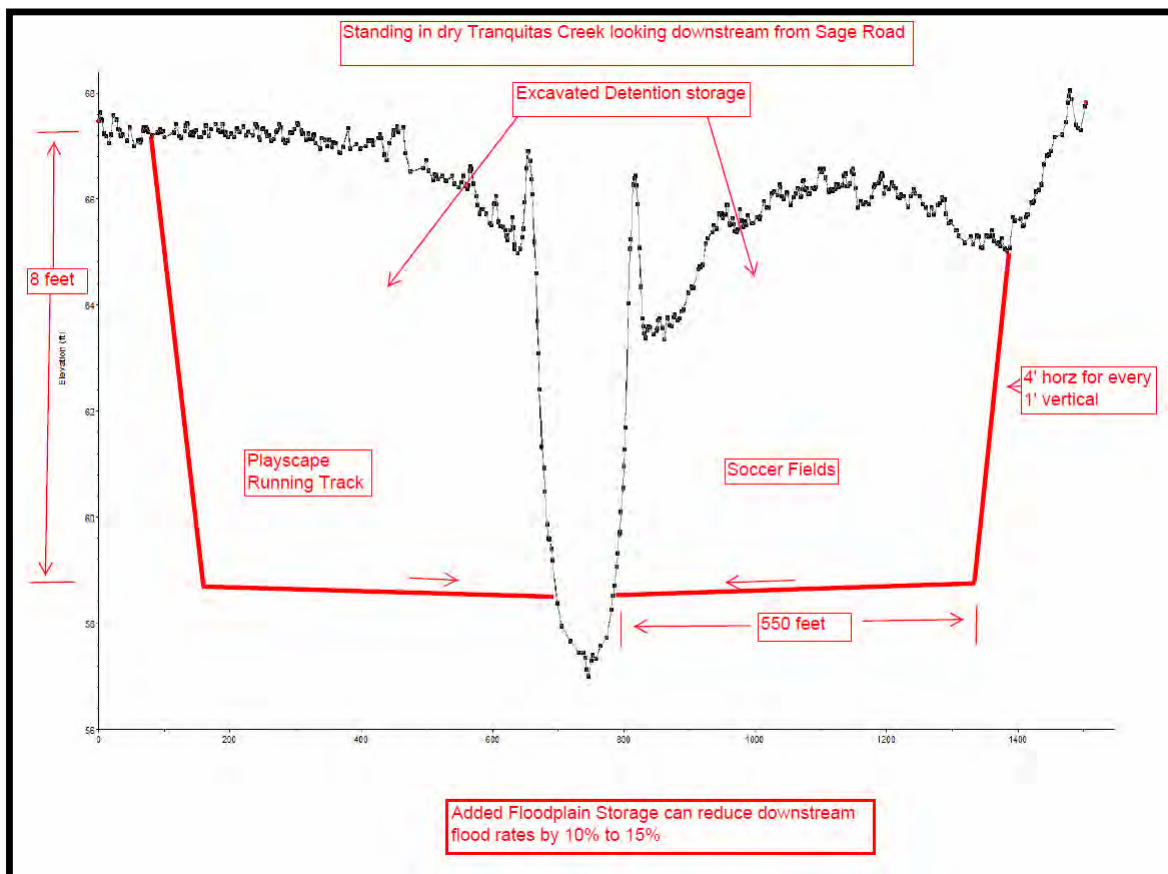
Tranquitas Creek Floodplain, Kingsville Texas



Tranquitas Creek Existing Channel



Tranquitas Creek Regional Detention Site (upper left)



Potential Detention Basin Excavation Section

- Site Drainage Area for water quality benefit determination = 30 acres, potential impervious cover = 4.5 acres
- Extended detention volume for quality treatment = 60,733 cubic feet (1.40 acre feet)
- Detention volume provided = ~ 150 acre feet (50 million gallons)
- Side slopes are at 4 feet horizontal for one-foot of elevation change to facilitate mowing.
- Total Cost ~ \$5.25 million including park amenities
- TSS pounds managed per year = 3670 lbs
- Phosphorus pounds managed per year = 8.28 lbs
- Nitrogen pounds managed per year = 34.04 lbs
- *E. coli* cfu managed per year = 2.98E+12 cfu
- Due to the large-scale of this potential retrofit including the options to add park and recreation features with many variables a schematic design was not prepared beyond the above cross section.
- See Appendix A-10 for the construction cost estimate.

Table 1- BMP Summary

Location and BMP Type	Approx. Treatment Drainage Area	Cost (\$)	Avg. Annual TSS Removal	Cost per Lb. TSS Managed (\$)
<u>Rainwater Harvesting</u>				
Memorial Park Nature Preserve Building	1,570 SF roof	35,000	36	972
<u>Pervious Pavers</u>				
Aquatic Complex Parking Lot	2,445 SF surface	83,000	98	847
Memorial Park Nature Preserve Parking Lot	3,327 SF surface	97,000	66	1,470
Aransas County Navigation District Office Parking Lot	2,030 SF surface	63,000	38	1,658
Kingsville City Hall Park	12,803 SF surface	260,000	277	939
<u>Rain Gardens</u>				
Memorial Park Rain Garden	0.32 acres	48,000	252	190
7 th St and Yoakum Ave	0.79 acres	84,000	615	136
Denver Harbor West	0.41 acres	55,000	354	155
<u>Vegetated Filter Strip</u>				
Rockport Beach*	1.8 acres	56,000	0	-
<u>Regional Detention</u>				
Kingsville Tranquitas Creek	30 acres		3670	NA**

See the individual BMP summaries for nitrogen, phosphorus, and *E. coli* management. TSS removal computed per the TCEQ “Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices”.

*Vegetated Filter Strip at Rockport Beach does not have any impervious cover draining to it and thus does not have any TSS load removal based upon TCEQ equations. However, the filter strip will minimize the transport of sand and spoils material to receiving waters.

** TSS managed only for 30-acre site, not the contributing drainage area (DA). Cost based on DA.

Section 2.6 BMP Sign Examples



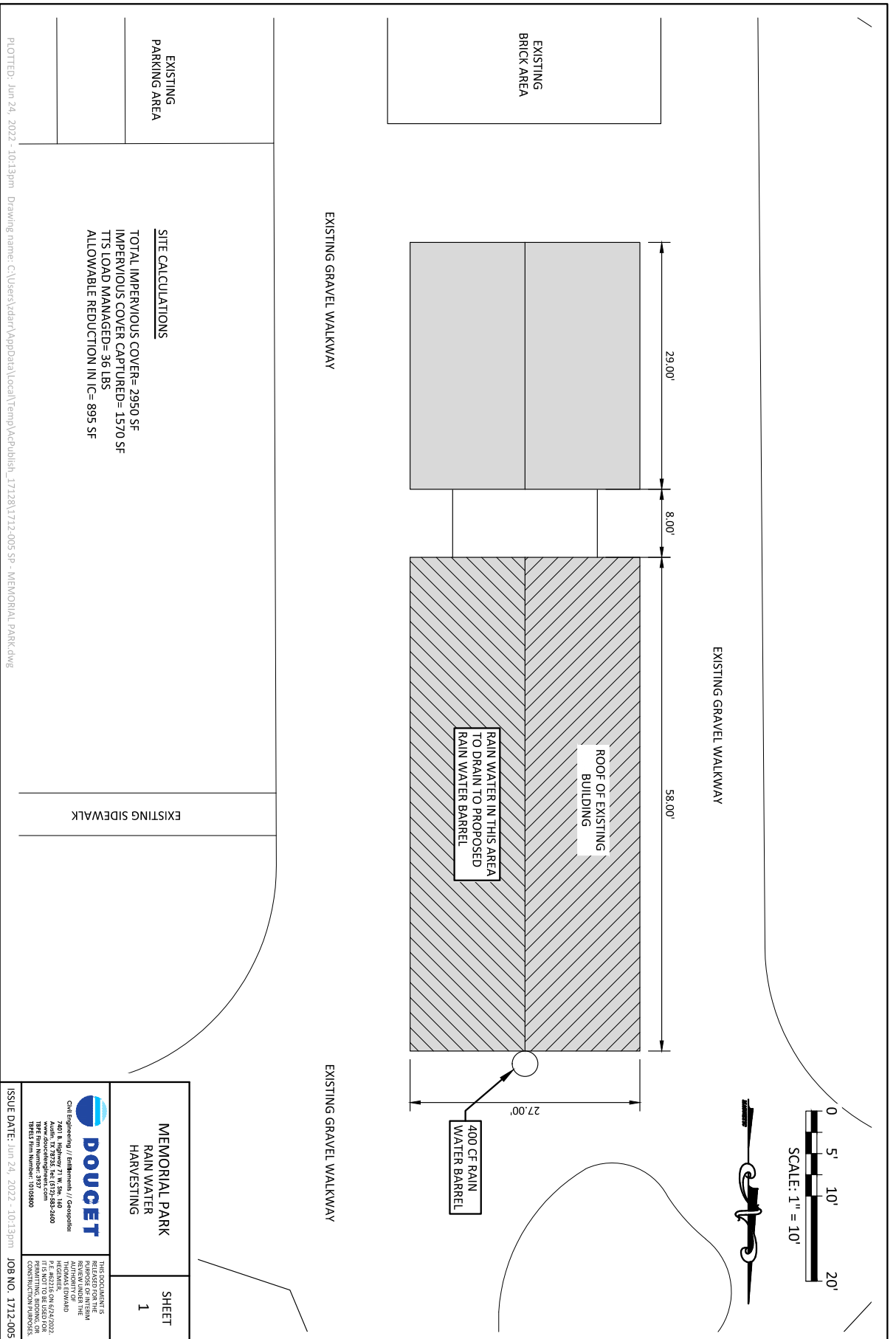
Figure 1-Woodcreek Golf Course Rain Garden



Figure 2-Woodcreek Golf Course Rainwater Harvesting


Appendix

Appendix A-1 Rockport Memorial Park Nature Preserve Building



SITE CALCULATIONS
 TOTAL IMPERVIOUS COVER= 2950 SF
 IMPERVIOUS COVER CAPTURED= 1570 SF
 TTS LOAD MANAGED= 36 LBS
 ALLOWABLE REDUCTION IN IC= 895 SF

PLOTTED: Jun 24, 2022 - 10:13pm Drawing name: C:\Users\vdar\AppData\Local\Temp\AcPublish_17128\1712-005 SP - MEMORIAL PARK.dwg

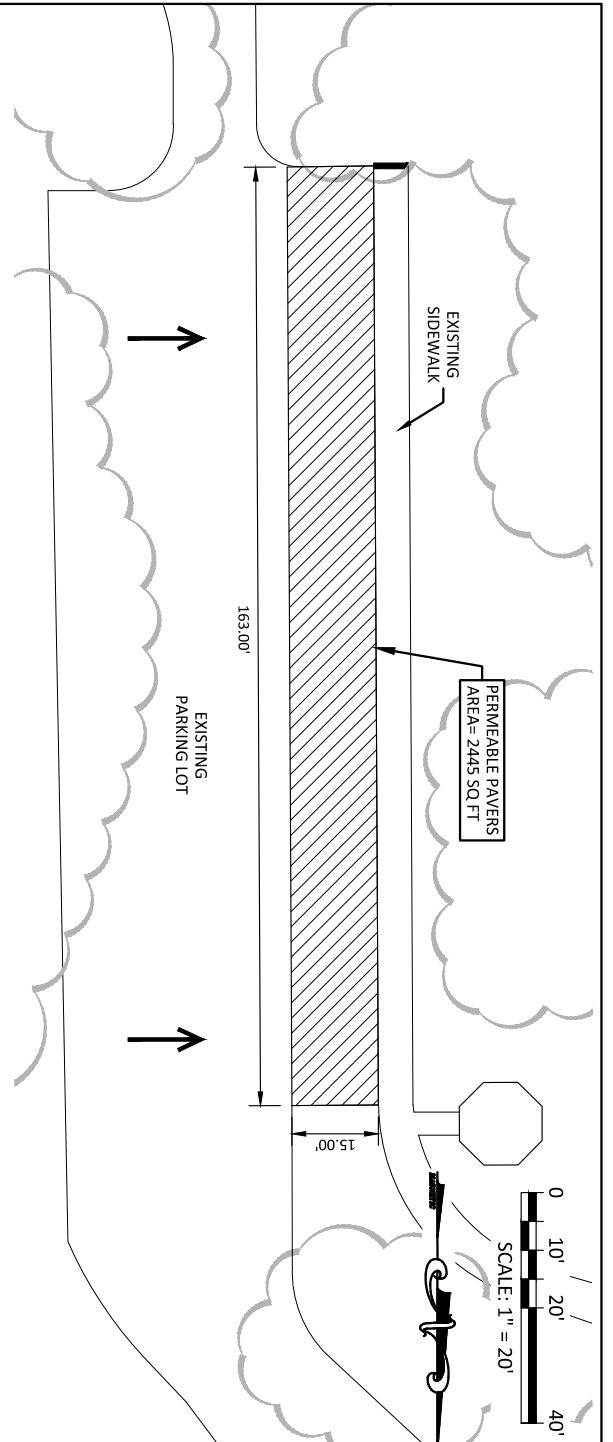
 Chief Engineering // Engineer-in-Charge 7401 S. Highway 71 W. Ste. 102 Minneapolis, MN 55425 Phone: 612-291-2400 Fax: 612-291-2400 Email: doucet@doucet.com	MEMORIAL PARK RAIN WATER HARVESTING	SHEET 1
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ISSUE DATE: Jun 24, 2022 - 10:13pm JOB NO. 1712-005

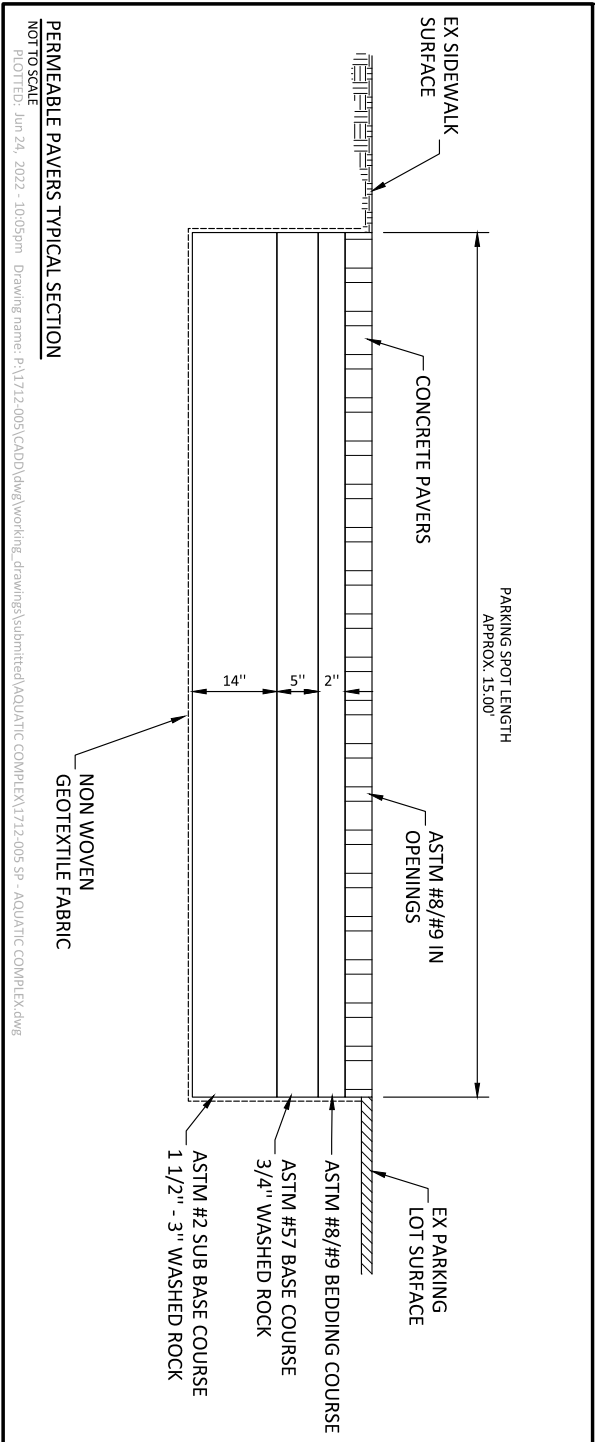
**City of Rockport Memorial Park Building Rainwater Harvesting Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$2,000	\$ 2,000.00
Insurance and Bond	LS	1	\$500	\$ 500.00
Gutter and downspout system	LS	1	\$2,500	\$ 2,500.00
Rainwater tank base	LS	1	\$1,000	\$ 1,000.00
Pipe distribution to irrigation system and pump	LS	1	\$8,000	\$ 8,000.00
Equipment housing/containment	LS	1	\$4,000	\$ 4,000.00
Sodding of disturbed areas	SY	100	\$12	\$ 1,200.00
3000 gallon metal tank	EA	1	\$7,000	\$ 7,000.00
Site restoration	LS	1	\$1,000	\$ 1,000.00
TOTAL				\$ 27,200.00
30% contingency				\$ 8,160.00
Total Est Construction Cost				\$ 35,360.00

Appendix A-2 Rockport Aquatic Complex Parking Lot



- SEQUENCE OF CONSTRUCTION**
1. MEET WITH THE ENGINEER, CONTRACTOR, AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
 2. PERFORM GRADING/EXCAVATION AND PLACE GEOTEXTILE FABRIC.
 3. BACKFILL WITH #2 STONE, #57 STONE, #8 OR #9 STONE, AND PLACE PAVERS WITH #8 OR #9 STONE IN BETWEEN.
 4. FINAL INSPECTION MEETING WITH ENGINEER, CONTRACTOR, AND OWNER
- SITE CALCULATIONS**
- DRAINAGE AREA= .12 ACRES
 IMPERVIOUS COVER TREATED= .12 ACRES
 TSS LOAD MANAGED= 98 LBS
 ALLOWABLE IC REDUCTION= 0.051 ACRES

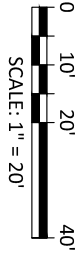
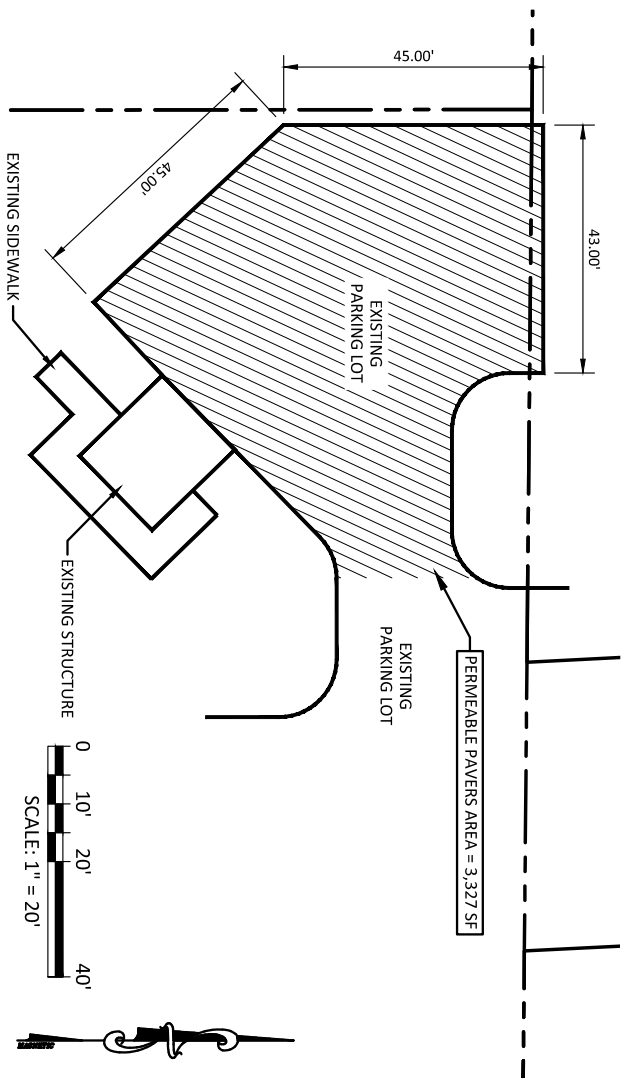


<p>PERMEABLE PAVERS TYPICAL SECTION</p> <p>NOT TO SCALE PLOTTED: Jun 24, 2022 - 10:05pm Drawing name: P:\1712-005\CADD\dwg\working_drawing\submitted\AQUATIC COMPLEX\1712-005.sp - AQUATIC COMPLEX.dwg</p>	
<p>AQUATIC COMPLEX PARKING LOT PERMEABLE PAVERS</p>	<p>SHEET 1</p>
<p>DOUGET Civil Engineering // Estimators // Geospatial 7401 S. Highway 71 W. Ste. 148 Fort Worth, TX 76116 Phone: 817.336.2400 www.douget.com</p>	<p>THIS DOCUMENT IS RELEASED FOR THE AUTHORITY OF THE REVIEW AND SIGN THE ENGINEER'S SEAL DATE: 02/22/2022 PROJECT: AQUATIC COMPLEX PRELIMINARY DESIGN, OR CONSTRUCTION PURPOSES</p>
<p>ISSUE DATE: Jun 24, 2022 - 10:05pm</p>	<p>JOB NO. 1712-005</p>

**Aquatic Complex Parking Lot Permeable Pavers Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Excavation	CY	185	\$35	\$ 6,475.00
Temporary Sediment Control Fence	LF	200	\$6	\$ 1,200.00
Permeable Pavers and bedding materials	SF	2445	\$20	\$ 48,900.00
TOTAL				\$ 63,575.00
30% contingency				\$ 19,072.50
Total Est Construction Cost				\$ 82,647.50

Appendix A-3 Rockport Memorial Park Nature Preserve Parking Lot

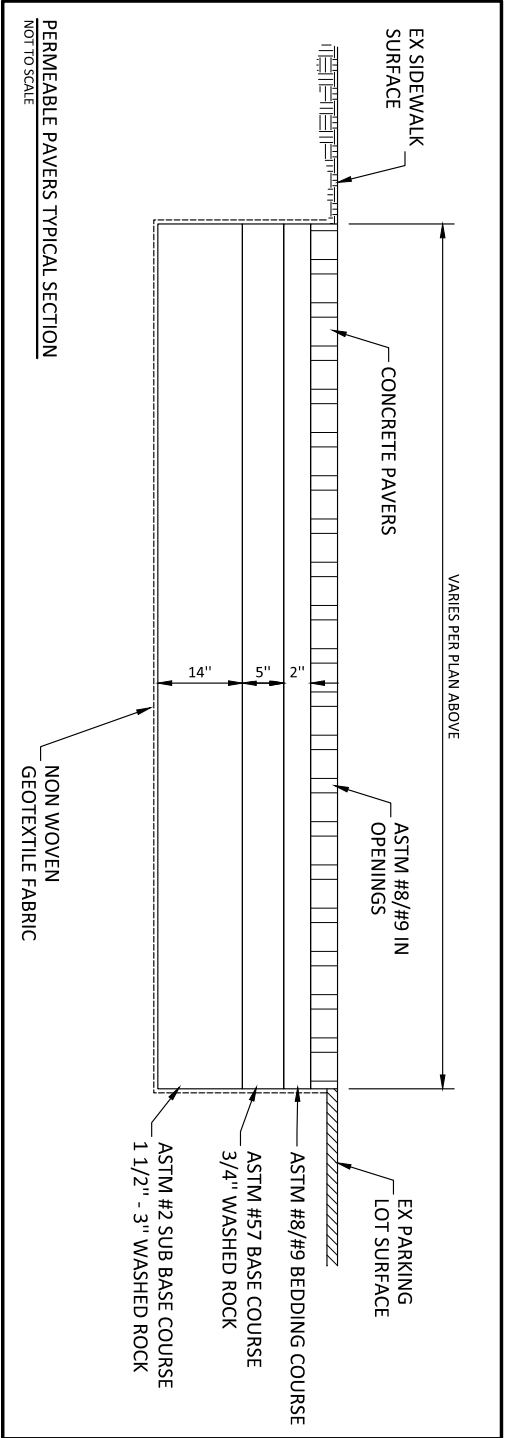


SEQUENCE OF CONSTRUCTION

1. MEET WITH THE ENGINEER, CONTRACTOR, AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
2. PERFORM GRADING/EXCAVATION AND PLACE GEOTEXTILE FABRIC.
3. BACKFILL WITH #2 STONE, #57 STONE, #8 OR #9 STONE, AND PLACE PAVERS WITH #8 OR #9 STONE IN BETWEEN.
4. FINAL INSPECTION MEETING WITH ENGINEER, CONTRACTOR, AND OWNER

SITE CALCULATIONS

DRAINAGE AREA= 0.0887 ACRES
 IMPERVIOUS COVER TREATED= 0.081 ACRES
 TSS LOAD MANAGED= 66 LBS
 ALLOWABLE REDUCTION IN IC = 0.069% ACRE



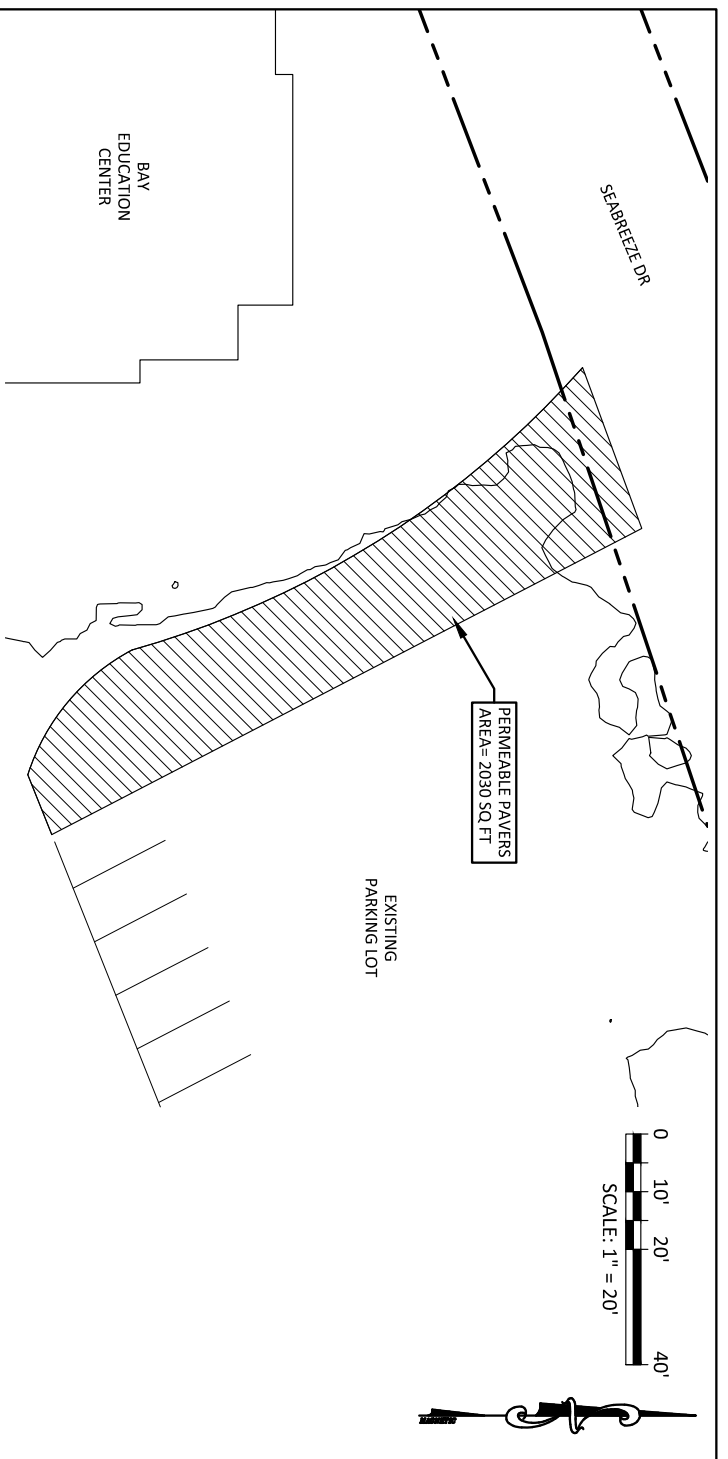
PI-OTTEB - Jun 27, 2022 - 2:19pm Drawing name: P:\1712-005\CADD\dwg\working_drawing\submitted\MEMORIAL PARK\1712-005-SP - MEMORIAL PARK.dwg

 <p>DOUCET Civil Engineering // Environment // Geospatial 7401 S. Highway 71 N, Ste. 102 Boise, Idaho 83725-2400 Phone: 208.333.7229 Fax: 208.333.7230 Email: info@doucet.com</p>		<p>MEMORIAL PARK PARKING LOT</p>	<p>SHEET 1</p>
<p>ISSUE DATE: Jun 27, 2022 - 2:19pm</p>		<p>THIS DOCUMENT IS RELEASED FOR THE REVIEW OF THE CLIENT ONLY. IT IS NOT TO BE USED FOR ANY OTHER PROJECTS WITHOUT THE WRITTEN AUTHORITY OF DOUCET ENGINEERING.</p> <p>DATE: 06/27/2022 PROJECT: MEMORIAL PARK DRAWING: PAVING AND CONSTRUCTION DETAILS</p>	

**City of Rockport Memorial Park Nature Preserve Parking Lot Permeable Pavers Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Temporary Sediment Control Fence	LF	200	\$6	\$ 1,200.00
Permeable Pavers and bedding materials	SF	3327	\$20	\$ 66,540.00
TOTAL				\$ 74,740.00
30% contingency				\$ 22,422.00
Total Est Construction Cost				\$ 97,162.00

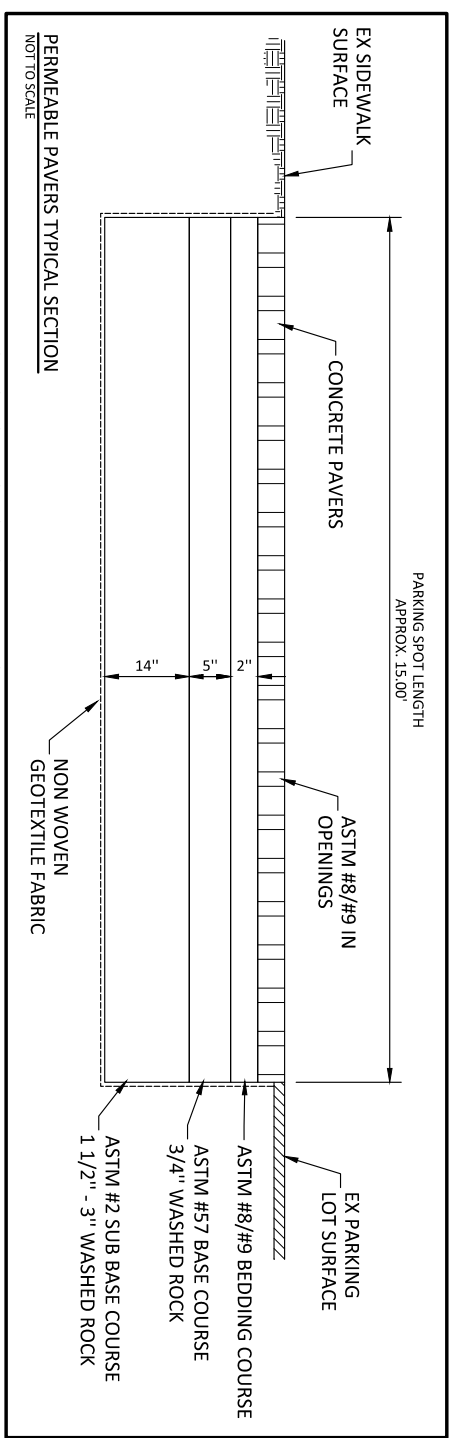
Appendix A-4 Aransas County Navigation District Office Parking Lot



- SEQUENCE OF CONSTRUCTION**
1. MEET WITH THE ENGINEER, CONTRACTOR, AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
 2. PERFORM GRADING/EXCAVATION AND PLACE GEOTEXTILE FABRIC.
 3. BACKFILL WITH #2 STONE, #57 STONE, #8 OR #9 STONE, AND PLACE PAVERS WITH #8 OR #9 STONE IN BETWEEN.
 4. FINAL INSPECTION MEETING WITH ENGINEER, CONTRACTOR, AND OWNER

SITE CALCULATIONS

DRAINAGE AREA = .13 ACRES
 IMPERVIOUS COVER = 0.047 ACRES
 TSS LOAD MANAGED = 38 LBS
 ALLOWABLE IC REDUCTION = 0.042 ACRES

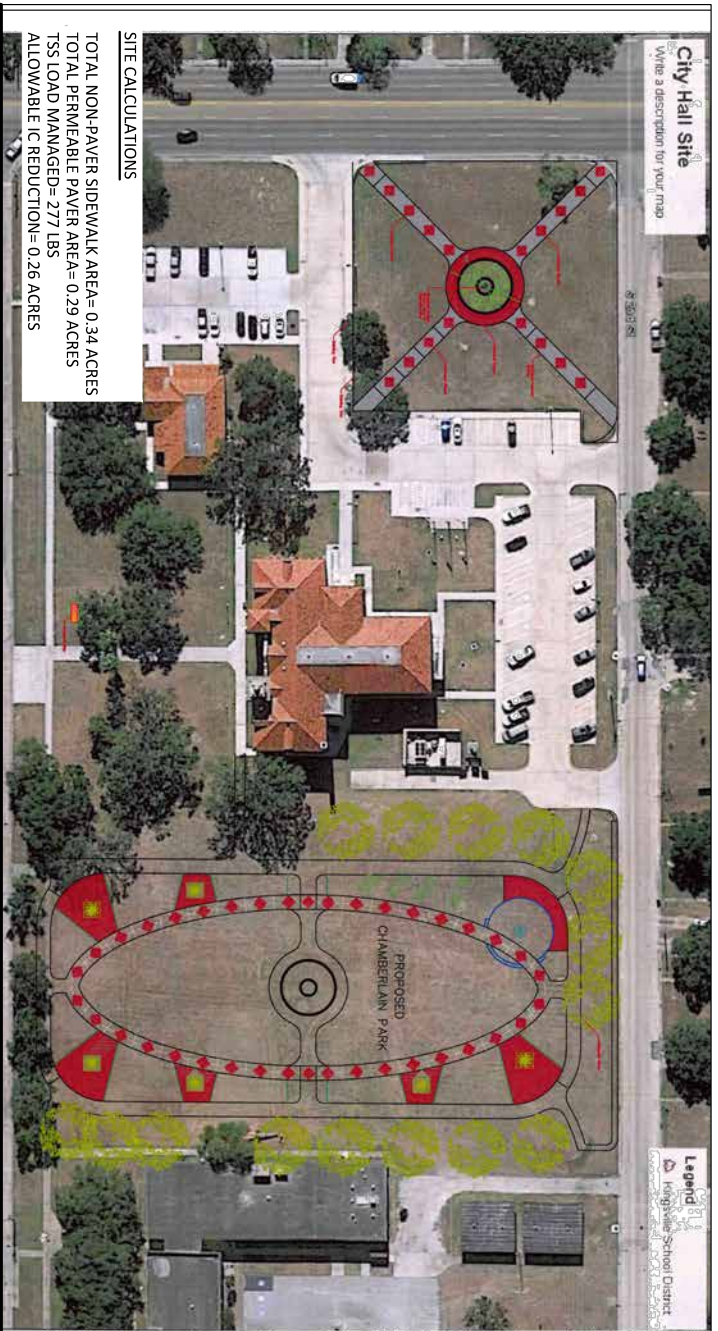


<p>ACND OFFICE PARKING LOT PERMEABLE PAVERS</p>	<p>SHEET 1</p>
<p>DOUCET Civil Engineering // Estimating // Geospatial 7401 S. Highway 71 W. Ste. 104 Houston, TX 77057 Phone: 281.486.2200 Fax: 281.486.2201 www.doucet-engineering.com THEFT FIRM NUMBER: 397 THEFT FIRM NUMBER: 16189890</p>	
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**City of Rockport ACND Parking Lot Permeable Pavers Water Quality Retrofit
Construction Cost Estimate**

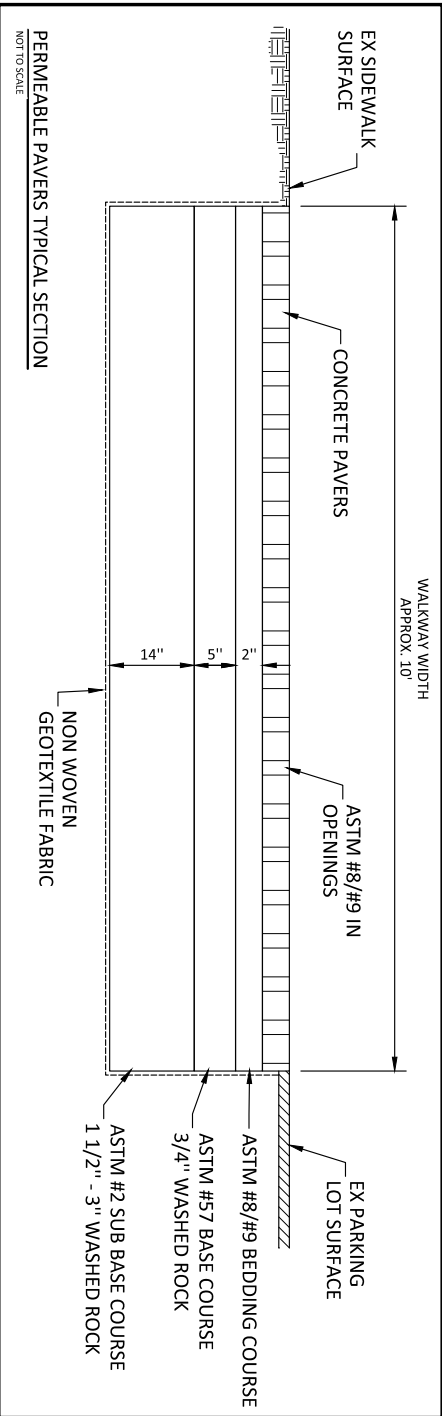
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Temporary Sediment Control Fence	LF	150	\$6	\$ 900.00
Permeable Pavers and bedding materials	SF	2030	\$20	\$ 40,600.00
TOTAL				\$ 48,500.00
				30% contingency \$ 14,550.00
Total Estimated Construcion Cost				\$ 63,050.00

Appendix A-5 Kingsville City Hall Park



SITE CALCULATIONS

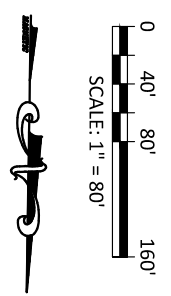
TOTAL NON-PAVER SIDEWALK AREA= 0.34 ACRES
 TOTAL PERMEABLE PAVER AREA= 0.29 ACRES
 TSS LOAD MANAGED= 277 LBS
 ALLOWABLE IC REDUCTION= 0.26 ACRES



PERMEABLE PAVERS TYPICAL SECTION

NOT TO SCALE

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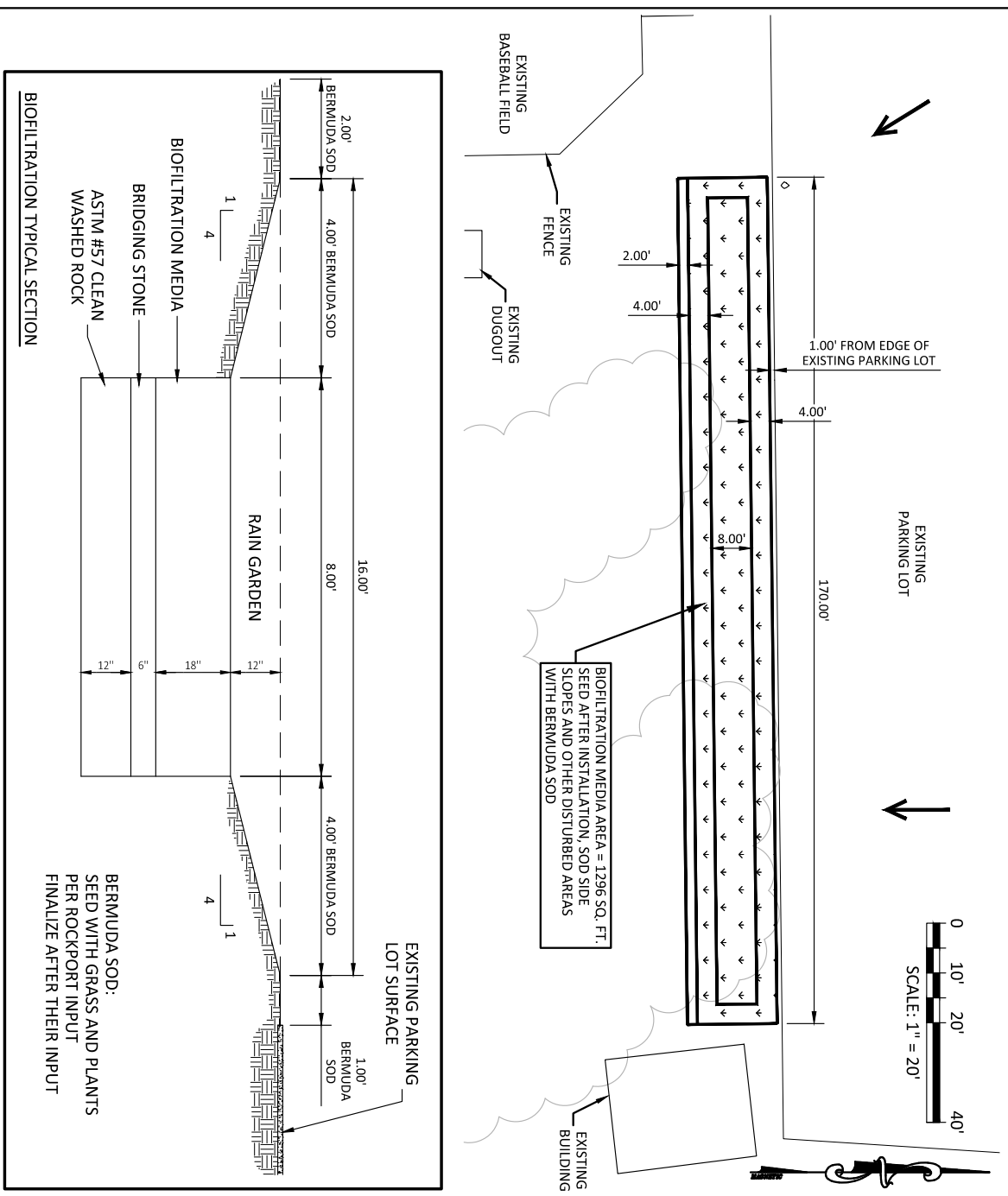


<p>KINGSVILLE CITY HALL PARK, WALKWAY PERMEABLE PAVERS</p>		<p>SHEET 1</p>
<p>City Engineering // Estimation // Construction 7401 S. Highway 71 W. Ste. 102 Kingsville, TX 77603 Phone: 409.625.2400 Fax: 409.625.2400 Email: info@doucet.com</p>		<p>THIS DOCUMENT IS RELEASED FOR THE REVIEW AND APPROVAL OF THE AUTHORITY OF THE CITY OF KINGSVILLE, TEXAS FOR THE PURPOSES OF PERMITTING, BIDDING, OR CONTRACTING WORK.</p>
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**City of Kingsville City Hall Park Permeable Pavers Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Temporary Sediment Control Fence	LF	400	\$6	\$ 2,400.00
Permeable Pavers and bedding materials	SF	12800	\$15	\$ 192,000.00
			TOTAL	\$ 201,400.00
			30% contingency	\$ 60,420.00
			Total Est Construcion Cost	\$ 261,820.00

Appendix A-6 Rockport Memorial Park



BIOFILTRATION TYPICAL SECTION

BIOFILTRATION MEDIA AREA = 1296 SQ. FT.
SEED AFTER INSTALLATION, SOD SIDE SLOPES AND OTHER DISTURBED AREAS WITH BERMUDA SOD

BIOFILTRATION MEDIA
BRIDGING STONE
ASTM #57 CLEAN WASHED ROCK

EXISTING PARKING LOT SURFACE
BERMUDA SOD:
SEED WITH GRASS AND PLANTS PER ROCKPORT INPUT
FINALIZE AFTER THEIR INPUT

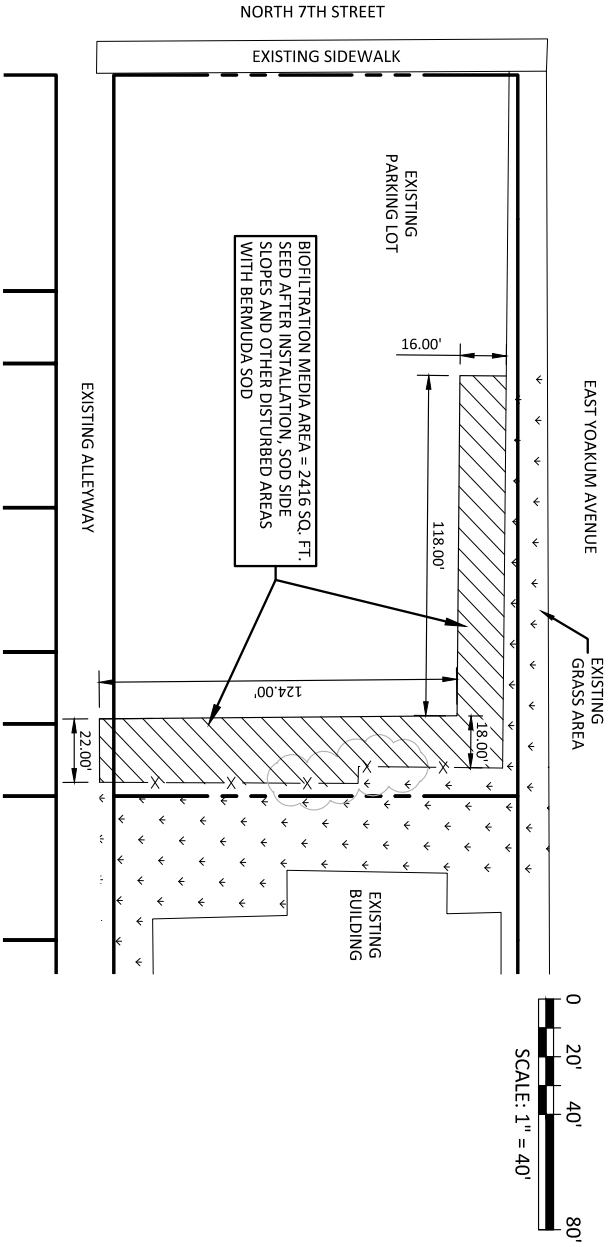
- SEQUENCE OF CONSTRUCTION**
1. MEET WITH THE ENGINEER AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
 2. INSTALL SILT FENCE.
 3. PERFORM GRADING/EXCAVATION AND SCARIFY BASIN BOTTOM.
 4. BIOFILTRATION SURFACE AREA = 1296 SF BIOFILTRATION MEDIA VOLUME = 76 CY BACKFILL WITH #57 STONE, BRIDGING STONE AND FILTRATION MEDIA.
 5. PLACE SOD IN DESIGNATED AREAS.
 6. SEED FILTRATION AREA.
 7. REMOVE SILT FENCE.
- SITE CALCULATIONS**
- DRAINAGE AREA = 0.32 ACRES
IMPERVIOUS COVER TREATED = 0.30 ACRES
TSS LOAD MANAGED = 252 LBS
- BIOFILTRATION MEDIA PROPERTIES**
- THE FILTRATION MEDIA SHOULD HAVE A MINIMUM THICKNESS OF 18 INCHES AND SHOULD HAVE A MAXIMUM CLAY CONTENT OF LESS THAN 5%. THE SOIL MIXTURE SHOULD BE 75-90% SAND; 0-4% ORGANIC MATTER; AND 10-25% SCREENED BULK TOPSOIL. THE SOIL SHOULD BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITHIN THE BIORETENTION THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. PROVIDE CLEAN SAND, FREE OF DELETERIOUS MATERIALS. SAND MAY BE COMPOSED OF EITHER ASTM C-33 (CONCRETE SAND) OR ASTM C-144 (MASONRY SAND). THE ORGANIC MATTER SHOULD NOT INCLUDE COMPOST, BUT MATERIAL SUCH AS PEAT MOSS OR SHREDED BARK MULCH IS ACCEPTABLE.

MEMORIAL PARK PARKING LOT RAIN GARDEN		SHEET 1
<p>Civil Engineering // Estimating // Construction 7401 N. Highway 71 N. Ste. 100 Houston, Texas 77057 Tel: 281.400.0000 www.doucet-engineering.com</p>		<p>THIS DOCUMENT IS RELEASED FOR THE REVIEW OF THE AUTOMATICITY OF THE PROJECT. DATE: 06/24/2022 PROJECT: MEMORIAL PARK DRAWING: RAIN GARDEN CONSTRUCTION PROPOSAL</p>
ISSUE DATE: Jun 24, 2022 - 10:07pm		JOB NO. 1712-005

**City of Rockport Memorial Park Linear Rain Garden Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Excavation	CY	403	\$35	\$ 14,105.00
Revegetation (Bermuda Sodding)	SY	300	\$12	\$ 3,600.00
Temporary Sediment Control Fence	LF	200	\$6	\$ 1,200.00
Biofiltration Medium	CY	76	\$75	\$ 5,700.00
Bridging Stone, clean washed pea gravel	CY	25	\$50	\$ 1,250.00
Gravel (1/2" to 1 1/2" washed rounded river gravel, for pond bottom layer)	CY	50	\$75	\$ 3,750.00
			TOTAL	\$ 36,605.00
			30% contingency	\$ 10,981.50
			Total Est Construcion Cost	\$ 47,586.50

Appendix A-7 East 7th Street and East Yoakum Avenue



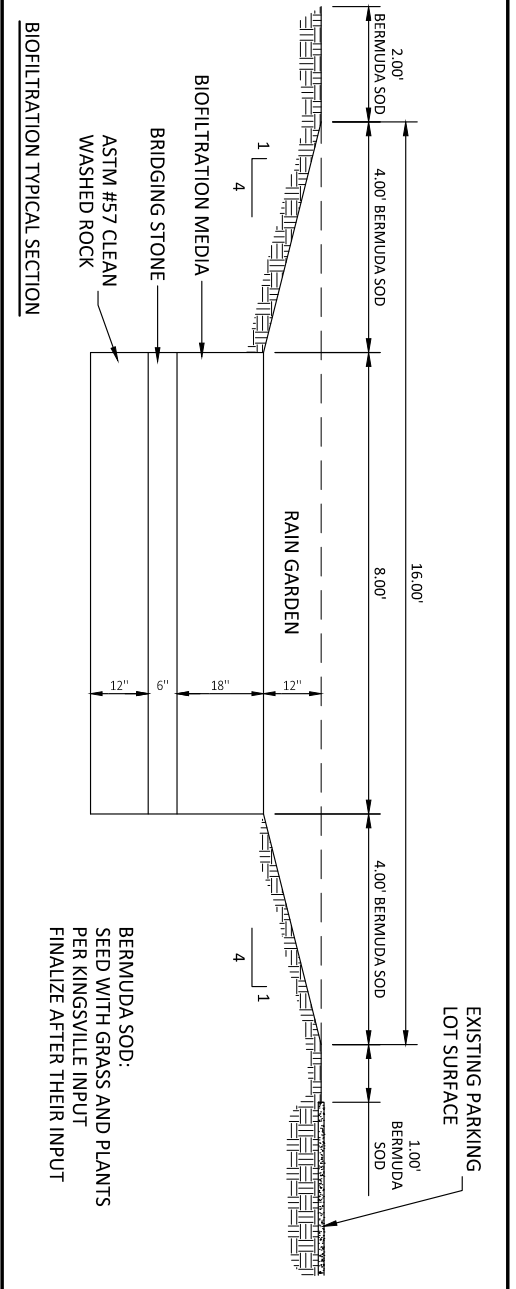
0 20' 40' 80'

SCALE: 1" = 40'

- SEQUENCE OF CONSTRUCTION**
1. MEET WITH THE ENGINEER AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
 2. INSTALL SILT FENCE.
 3. PERFORM GRADING/EXCAVATION AND SCARIFY BASIN BOTTOM.
 4. BIOFILTRATION SURFACE AREA = 2416 SF BIOFILTRATION MEDIA VOLUME = 134 CY BACKFILL WITH #57 STONE, BRIDGING STONE AND FILTRATION MEDIA.
 5. PLACE SOD IN DESIGNATED AREAS.
 6. SEED FILTRATION AREA.
 7. REMOVE SILT FENCE.

SITE CALCULATIONS

DRAINAGE AREA = 0.79 ACRES
 IMPERVIOUS COVER = 0.79 ACRES
 TSS LOAD MANAGED = 615 LBS



BIOFILTRATION TYPICAL SECTION

BERMUDA SOD:
 SEED WITH GRASS AND PLANTS
 PER KINGSVILLE INPUT
 FINALIZE AFTER THEIR INPUT

PLOTTED: Jun 24, 2022 - 10:05pm Drawing Name: C:\Users\vdar\MyData\local\Temp\Ac\Pub\lib_17128\1712-005 SP - KINGSVILLE.dwg

<p>KINGSVILLE 7TH & YOAKUM AVE. PARKING LOT RAIN GARDEN</p>	<p>SHEET 1</p>
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Civil Engineering / Environmental / Geospatial
 24013 Shepherd Dr. W. Ste. 100
 Austin, TX 78735 Tel: (817) 485-2400
 Fax: (817) 485-2401
 Email: info@ducet.com
 TRS File Number: 897

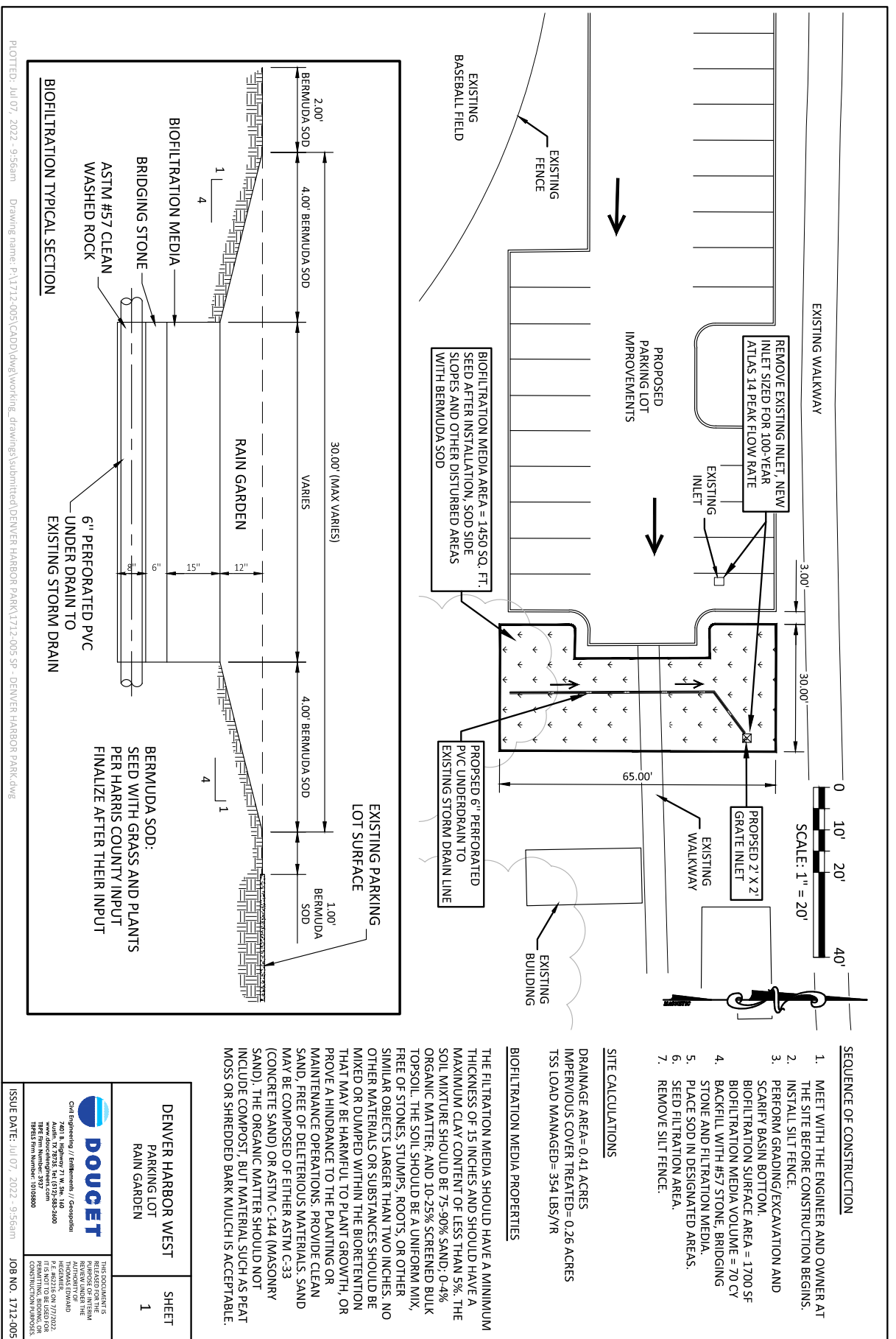
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ISSUE DATE: Jun 24, 2022 - 10:05pm JOB NO. 1712-005

**Kingsville 7th and Yoakum Rain Garden Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Excavation	CY	630	\$35	\$ 22,050.00
Revegetation (Bermuda Sodding)	SY	530	\$12	\$ 6,360.00
Temporary Sediment Control Fence	LF	270	\$6	\$ 1,620.00
Biofiltration Medium	CY	134	\$75	\$ 10,050.00
Bridging Stone, clean washed pea gravel	CY	88	\$50	\$ 4,400.00
Gravel (1/2" to 1 1/2" washed rounded river gravel, for pond bottom layer)	CY	176	\$75	\$ 13,200.00
			TOTAL	\$ 64,680.00
			30% contingency	\$ 19,404.00
			Total Est Construcion Cost	\$ 84,084.00

Appendix A-8 Denver Harbor Park West



SEQUENCE OF CONSTRUCTION

1. MEET WITH THE ENGINEER AND OWNER AT THE SITE BEFORE CONSTRUCTION BEGINS.
2. INSTALL SILT FENCE.
3. PERFORM GRADING/EXCAVATION AND SCARIFY BASIN BOTTOM.
4. BIOFILTRATION SURFACE AREA = 1700 SF BIOFILTRATION MEDIA VOLUME = 70 CY BACKFILL WITH #57 STONE, BRIDGING STONE AND FILTRATION MEDIA.
5. PLACE SOD IN DESIGNATED AREAS.
6. SEED FILTRATION AREA.
7. REMOVE SILT FENCE.

SITE CALCULATIONS

DRAINAGE AREA = 0.41 ACRES
 IMPERVIOUS COVER TREATED = 0.26 ACRES
 TSS LOAD MANAGED = 354 LBS/YR

BIOFILTRATION MEDIA PROPERTIES

THE FILTRATION MEDIA SHOULD HAVE A MINIMUM THICKNESS OF 15 INCHES AND SHOULD HAVE A MAXIMUM CLAY CONTENT OF LESS THAN 5%. THE SOIL MIXTURE SHOULD BE 75-90% SAND; 0-4% ORGANIC MATTER; AND 10-25% SCREENED BULK TOPSOIL. THE SOIL SHOULD BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITHIN THE BIORETENTION THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. PROVIDE CLEAN SAND, FREE OF DELETERIOUS MATERIALS. SAND MAY BE COMPOSED OF EITHER ASTM C-33 (CONCRETE SAND) OR ASTM C-144 (MASONRY SAND). THE ORGANIC MATTER SHOULD NOT INCLUDE COMPOST, BUT MATERIAL SUCH AS PEAT MOSS OR SHREDED BARK MULCH IS ACCEPTABLE.

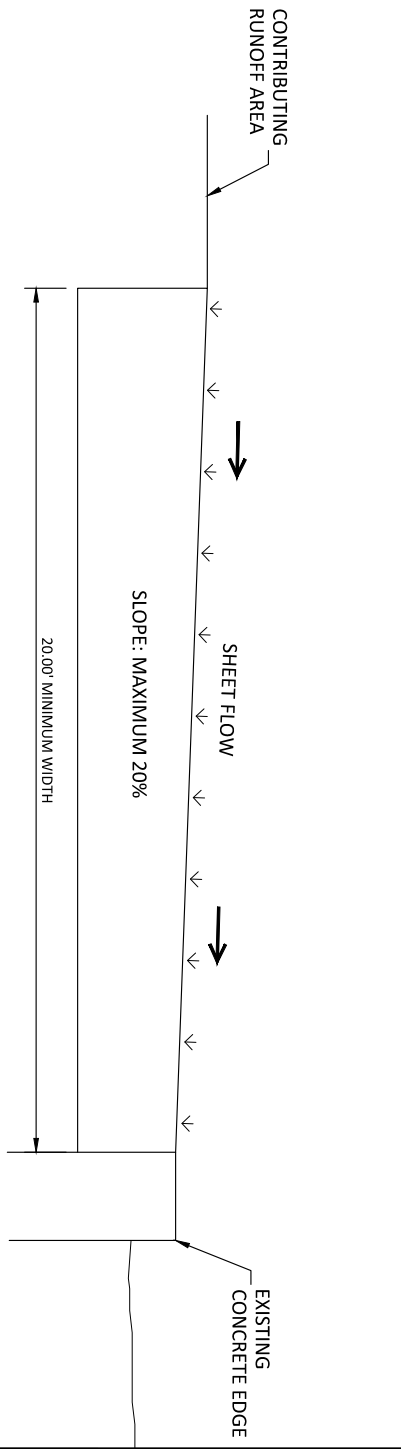
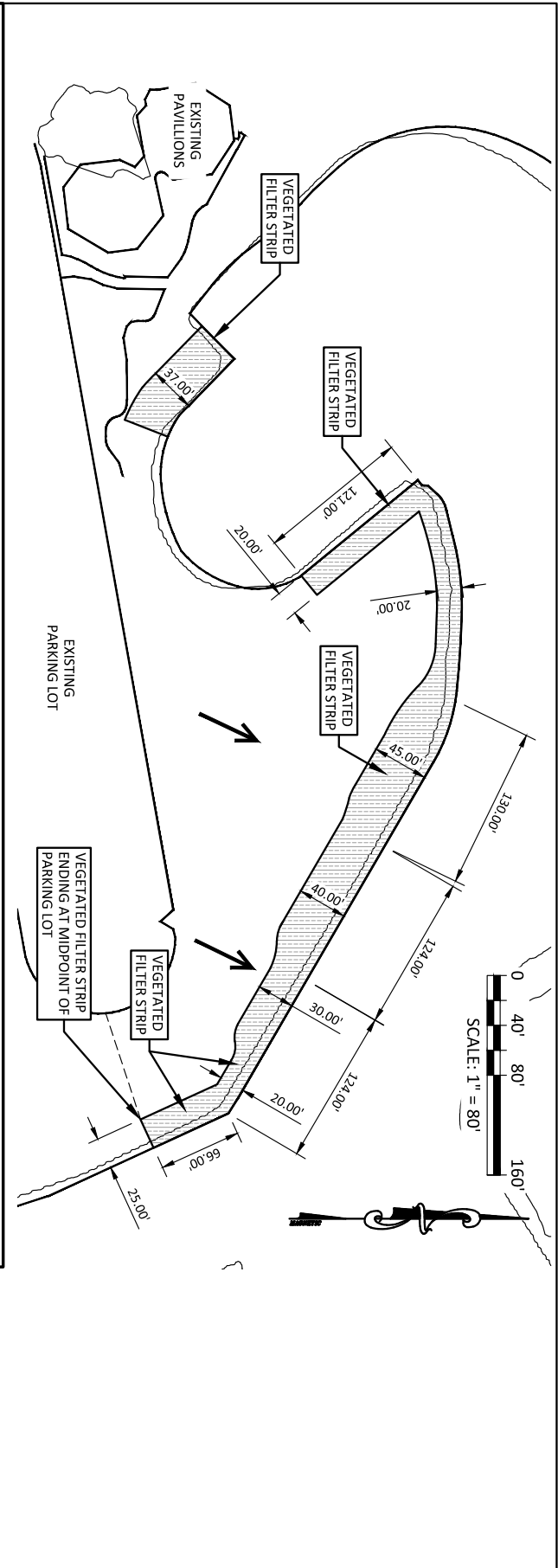
	
DENVER HARBOR WEST PARKING LOT RAIN GARDEN	SHEET 1
<p style="font-size: small;"> THIS DOCUMENT IS RELEASED FOR THE REVIEW OF THE CLIENT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. </p> <p style="font-size: x-small;"> Civil Engineering // Estimating // Geospatial 7401 S. Highway 71 W. Ste. 102 Denver, Colorado 80231-2640 www.doucet-engineering.com THE Firm Number: 397 THE Firm Phone: 303.733.9090 </p>	
<p style="font-size: x-small;"> ISSUED DATE: Jul 07, 2022 - 9:56am JOB NO. 1712-005 </p>	

PLOTTED: Jul 07, 2022 - 9:56am Drawing name: P:\1712-005\CADD\dwg\working_drawings\submit\denver_harbor_park\1712-005-sp - denver harbor park.dwg

Harris Co Denver Harbor West Rain Garden

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Excavation	CY	337	\$35	\$ 11,795.00
Revegetation (Bermuda Sodding)	SY	240	\$12	\$ 2,880.00
Landscaping, trees, plants	LS	1	\$5,000	\$ 5,000.00
Temporary Sediment Control Fence	LF	200	\$6	\$ 1,200.00
Storm Drain Inlet and perforated PVC pipe	LS	1	\$4,000	\$ 4,000.00
Biofiltration Medium	CY	70	\$75	\$ 5,250.00
Bridging Stone, clean washed pea gravel	CY	30	\$50	\$ 1,500.00
Gravel (1/2" to 1 1/2" washed rounded river gravel, for pond bottom layer)	CY	40	\$75	\$ 3,000.00
			Total	\$ 41,625.00
			30% contingency	\$ 12,487.50
			Total Est Construcion Cost	\$ 54,112.50

Appendix A-9 Rockport Beach



*FILTER STRIP WIDTH DETERMINED BY ARKANSAS COUNTY STORMWATER MASTER PLAN AND GUIDANCE MANUAL

VEGETATION FILTER STRIP SECTION

NOT TO SCALE
 PLOTTED: Jul 06, 2022 - 5:37pm
 Drawing name: P:\1712-005\CADD\dwg\working_drawing\submitted\ROCKPORT BEACH\1712-005 SP - ROCKPORT BEACH.dwg

<p>ROCKPORT BEACH VEGETATION FILTERS</p>	<p>SHEET 1</p>
<p>Chief Engineering // Environment // Geospatial DOUGET 7401 S. Highway 71 W. Ste. 102 Little Rock, AR 72209 www.dougetengineering.com Phone Number: 501-985-1900</p>	
<p>THIS DOCUMENT IS RELEASED FOR THE REVIEW AND REVISION OF THE AUTOMATICALLY HIGHWAY SYSTEM FILE. REVISED ON 7/6/2022 FOR THE PURPOSES OF PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.</p>	
<p>ISSUE DATE: Jul 06, 2022 - 5:37pm</p>	<p>JOB NO. 1712-005</p>

**Rockport Beach VFS Water Quality Retrofit
Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$5,000	\$ 5,000.00
Insurance and Bond	LS	1	\$2,000	\$ 2,000.00
Revegetation (Bermuda Sodding)	SY	2500	\$10	\$ 25,000.00
Mulch Sock	LF	600	\$10	\$ 6,000.00
6" Top Soil	SY	2500	\$2	\$ 5,000.00
TOTAL				\$ 43,000.00
30% contingency				\$ 12,900.00
Total Estimated Construcion Cost				\$ 55,900.00

Tranquitas Creek Regional Detention and Park Cost Estimate

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Mobilization	LS	1	\$20,000	\$ 20,000.00
Insurance and Bond	LS	1	\$5,000	\$ 5,000.00
Excavation	CY	220,000	\$15	\$ 3,300,000.00
Revegetation (Seeding)	SY	110,000	\$2	\$ 220,000.00
Temporary Sediment Control Fence	LF	1,000	\$6	\$ 6,000.00
Recreation amenities	LS	1	\$500,000	\$ 500,000.00
			Total	\$ 4,051,000.00
			30% contingency	\$ 1,215,300.00
			Total Est Construcion Cost	\$ 5,266,300.00

Appendix A-11 TP, TN and Fecal Coliform Calculations

CLEAN COAST TEXAS COMMUNITY SCALE RETROFIT
BMP LOAD REDUCTIONS

Water Quality Measure	Drainage area (acres)	Impervious Area (acres)	Percent Impervious Cover (%)	Runoff-Rainfall Ratio, R _v	WQ Measure Effluent Concentration Phosphorus	Annual Phosphorus Load Managed (pounds)	WQ Measure Effluent Concentration Nitrogen	Annual Nitrogen Load Managed (pounds)	WQ Measure Effluent Concentration E. coli	Annual E. coli Load Managed (cfu)
Memorial Park Rain Garden	0.32	0.3	94%	0.74	0.224	0.28	1.42	1.29	11065	1.12E+11
Denver Harbor Park, Rain Garden, Harris Co	0.41	0.26	63%	0.55	0.224	0.26	1.42	1.23	11065	1.07E+11
Site at North 7th St and East Yoakum Ave Rain Garden	0.79	0.79	100%	0.78	0.224	0.72	1.42	3.35	11065	2.91E+11
Memorial Park Nature Preserve Building rainwater harvesting	0.036	0.036	100%	0.78	0.224	0.03	1.42	0.15	11065	1.33E+10
Community Aquatic Center Parking Lot Pervious Pavers	0.12	0.12	100%	0.78	0.09	0.19	1.27	0.60	12500	3.97E+10
Memorial Park Nature Preserve Parking Lot Pervious Pavers	0.0887	0.081	91%	0.78	0.09	0.14	1.27	0.45	12500	2.93E+10
Aransas County Navigation District Parking Lot Pervious Pavers	0.133	0.0466	35%	0.78	0.09	0.22	1.27	0.67	12500	4.40E+10
Kingsville City Hall Park Pervious Pavers	0.29	0.29	100%	0.78	0.09	0.47	1.27	1.46	12500	9.59E+10
Rockport Beach Park Vegetated Filter Strip	1.8	0	0%	0.064	0.12	0.22	0.67	1.21	6250	7.32E+10
Tranquitas Creek Extended Detention Basin	30	4.5	15%	0.172	0.16	8.28	1.25	34.04	7980	2.98E+12
Runoff coefficient from the City of Austin Environmental Criteria Manual (ECM), Table 1-9										
Total phosphorus influent	0.396	mg/L	COA Table 1-10, ECM							
Total nitrogen influent	2.22	mg/L	COA Table 1-10, ECM							
E. coli influent	25000	cfu/100 ml	COA Table 1-10, ECM							
Effluent concentration from the City of Austin Environmental Criteria Manual, Table 1-11 for rainwater harvesting, rain gardens, and extended detention										
Extended detention effluent concentration is considered to be the average of retention basins and biofiltration basins from Table 1-11										
Effluent concentration from the WERF User's Guide to the BMP SELECT Model Table 4 for permeable pavement										
Effluent concentration from the LCRA Highland Lakes Watershed Ordinance Technical Manual, 70% pollutant mgmt for vegetated filter infiltration strip										

7/13/2022

APPENDIX E - TASK 5

Subcontract Awards:

- AgriLife
- Doucet
- Texas Sea Grant

Research Subaward Agreement

Institution/Organization ("Prime Recipient") Name: Texas State University 601 University Drive San Marcos, TX 78666-4684	Institution/Organization ("Subrecipient") Name: Texas A&M University 400 Harvey Mitchell Pky S Ste 300 College Station, TX 77845-4375
Prime Award No. 21-060-021-C810 FAIN: n/a	Subaward No. 2015-83570-3
Awarding Agency : Texas General Land Office (TGLO)	Amount Funded this Action: \$ 39,542.00 Total Estimated Amount Funded: \$ 79, 971.00
Project Title: The Texas Coast Collaborative-A Dynamic Approach to Hazard	Cost Match Amount: N/A
Principal Investigator: David Dornak	Principal Investigator: Pamela Plotkin
Subaward Period of Performance: 09.01.2020 – 08.31.2021	Estimated Project Period (if incrementally funded): 09.01.2020 - 08.31.22
Reporting Requirements [Check here if applicable: <input checked="" type="checkbox"/> See Attachment 4] <input type="checkbox"/> FFATA (Attachment 3B) <input type="checkbox"/> ARRA Funds (Attachment 4A)	
Terms and Conditions	
1) Prime Recipient hereby awards a cost reimbursable subaward, as described above, to Subrecipient. The statement of work and budget for this subaward are (check one): as specified in Subrecipient's proposal dated ; or X as shown in Attachment 5 . In its performance of subaward work, Subrecipient shall be an independent entity and not an employee or agent of Prime Recipient.	
2) Prime Recipient shall reimburse Subrecipient not more often than monthly for allowable costs. <i>Invoices that do not reference current and cumulative costs, subaward number, and certification as to truth and accuracy of invoice shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments should be directed to the appropriate party's Financial Contact, as shown in Attachment 3A and 3B.</i>	
3) A final statement of cumulative costs incurred, including cost sharing, marked "FINAL," must be submitted to Prime Recipient's Financial Contact NOT LATER THAN thirty (30) days after subaward end date. The final statement of costs shall constitute Subrecipient's final financial report.	
4) All payments shall be considered provisional and subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the Subrecipient.	
5) Matters concerning the technical performance of this subaward should be directed to the appropriate party's Principal Investigator, as shown in Attachment 3A and 3B . Technical reports are required as shown above, "Reporting Requirements."	
6) Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this subaward agreement, and any changes requiring prior approval, should be directed to the appropriate party's Administrative Contact, as shown in Attachment 3A and 3B . Any such changes made to this subaward agreement require the written approval of each party's Authorized Official, as shown in Attachment 3A and 3B .	
7) Each party shall be responsible for its negligent acts or omissions and the negligent acts or omissions of its employees, officers, or directors, to the extent allowed by law.	
8) Either party may terminate this agreement with thirty days written notice to the appropriate party's Administrative Contact, as shown in Attachment 3A and 3B .	
9) No-cost extensions require the approval of the Prime Recipient. Any requests for a no-cost extension should be addressed to and received by the Financial Contact, as shown in Attachment 3A , not less than thirty days prior to the desired effective date of the requested change.	
10) The Subaward is subject to the terms and conditions of the Prime Award and other special terms and conditions, as identified in Attachment 6 .	
11) By signing below Subrecipient makes the certifications and assurances shown in Attachment 1 and Attachment 2 .	
By an Authorized Official of PRIME RECIPIENT: <i>Marivel Alvarez</i> _____ 3/18/2021 Name: Walter E. Horton Jr., Ph.D. Date Title: Associate Vice President for Research and Federal Relations	By an Authorized Official of SUBRECIPIENT: Digitally signed by Lester L. Crenwelge Lester L. Crenwelge _____ Date: 2021.03.12 16:40:01 -06'00' 3/12/2021 Name: Lester Crenwelge <i>MS ml</i> Date Title: Associate Director, Contracts and Grants

Attachment 1
Certifications and Assurances

Subaward Number:

2015-83570-3

Certification Regarding Lobbying

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief that neither the Subrecipient nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency.

Audit and Access to Records

Subrecipient certifies that it will provide notice of any adverse findings which impact this Subaward and will provide access to records as required by law and as applicable. If Subrecipient is not subject to the Single Audit Act, then Subrecipient will provide notice of the completion of any required audits and provide access to such audits upon request.

Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Attachment 2
Award Terms and Conditions

Subaward Number
2015-83570-3

Required Data Elements

The data elements required by Uniform Guidance are incorporated as entered.

Awarding Agency Institute (If Applicable)
Federal Award Issue Date FAIN CFDA No.
15.435
CFDA Title
GoMESA
Key Personnel Per NOA

This Subaward Is:

- Research & Development Subject to FFATA

General Terms and Conditions

By signing this Subaward, Subrecipient agrees to the following:

1. To abide by the conditions on activities and restrictions on expenditure of federal funds in appropriations acts that are applicable to this Subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the Federal Awarding Agency's website:
As referenced in Attachment 6
2. 2-CFR-200
3. The Federal Awarding Agency's grants policy guidance, including addenda in effect as of the beginning date of the period of performance or as amended found at:
As referenced in Attachment 6
4. Research Terms and Conditions, including any Federal Awarding Agency's Specific Requirements found at:
As referenced in Attachment 6 except for the following :
 - a. No-cost extensions require the written approval of the PTE. Any requests for a no-cost extension shall be directed to the Administrative Contact shown in Attachment 3A, not less than 30 days prior to the desired effective date of the requested change.
 - b. Any payment mechanisms and financial reporting requirements described in the applicable Federal Awarding Agency Terms and Conditions and Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward; and
 - c. Any prior approvals are to be sought from the PTE and not the Federal Awarding Agency.
 - d. Title to equipment as defined in Attachment 6 that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall vest in the Subrecipient subject to the conditions specified in Attachment 6.
 - e. Prior approval must be sought for a change in Subrecipient PI or change in Key Personnel (defined as listed on the NOA). Treatment of program income: Additive

Special Terms and Conditions:

Data Sharing and Access:

Subrecipient agrees to comply with the Federal Awarding Agency's data sharing and/or access requirements as reflected in the NOA or the Federal Awarding Agency's standard terms and conditions as referenced in General Terms and Conditions 1-4 above.

No additional requirements

Data Rights:

Subrecipient grants to PTE the right to use data created in the performance of this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Copyrights:

Subrecipient Shall Grant to PTE an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Subrecipient grants to PTE the right to use any written progress reports and deliverables created under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its Federal Award.

Promoting Objectivity in Research (COI):

Subrecipient must designate herein which entity's Financial Conflicts of Interest policy (COI) will apply: Subrecipient

If applying its own COI policy, by execution of this Subaward, Subrecipient certifies that its policy complies with the requirements of the relevant Federal Awarding Agency as identified herein: General Land Grant- Texas General Land Office (TGLO)

Subrecipient shall report any financial conflict of interest to PTE's Administrative Representative or COI contact, as designated on Attachment 3A. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to Federal Awarding Agency. Such report shall be made before expenditure of funds authorized in this Subaward and within 45 days of any subsequently identified COI.

Work Involving Human or Vertebrate Animals (Select Applicable Options)

No Human or Vertebrate Animals

This section left intentionally blank.

Human Subjects Data (Select One)

This section left intentionally blank

This section left intentionally blank

Additional Terms

This agreement shall be governed, construed and enforced in accordance with applicable state law. Nothing herein shall constitute a waiver of either party's sovereign immunity or the constitutionally, statutory or common law rights, privileges, immunities or defenses of the parties.

By agreeing to this subaward, Institution is certifying they, and their PI, are in good standing with System for Award Management (SAM.gov).

Attachment 3A
Pass-Through Entity (PTE) Contacts

Subaward Number:
2015-83570-3

PTE Information

Entity Name:

Legal Address:

Website:

PTE Contacts

Central Email:

Principal Investigator Name:

Email: Telephone Number:

Administrative Contact Name:

Email: Telephone Number:

COI Contact email (if different to above):

Financial Contact Name:

Email: Telephone Number:

Email invoices? Yes No Invoice email (if different):

Authorized Official Name:

Email: Telephone Number:

PI Address:

601 University Drive, SLH 213
ATTN: David Dornak
San Marcos, TX 78666-4684

Administrative Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Invoice Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Attachment 3B
Subrecipient Contacts

Subaward Number:

2015-83570-3

Subrecipient Information for FFATA reporting

Entity's UEI/DUNS Name: Texas A&M University

EIN No.: 74-6000531 Institution Type: Public/State Controlled Inst. of Higher Ed.

UEI/DUNS: 02-027-1826 Currently registered in SAM.gov: Yes No

Exempt from reporting executive compensation: Yes No (if no, complete 3Bpg2)

Parent UEI/DUNS: This section for U.S. Entities: Zip Code [Look-up](#)

Place of Performance Address Congressional District: TX-017 Zip Code+4: 778454375

Texas A&M University, Texas Sea Grant
797 Lamar Street, 4115 TAMU
College Station, Texas 77843-4115

Subrecipient Contacts

Central Email: awards@tamu.edu

Website: srs.tamu.edu

Principal Investigator Name: Pamela Plotkin

Email: plotkin@tamu.edu Telephone Number: 9798453854

Administrative Contact Name: Micah Leonard

Email: micah.leonard@tamu.edu Telephone Number: 9798477666

Financial Contact Name: Nancy Ginn

Email: nginn@tamu.edu Telephone Number: 979-847-7615

Invoice/Payment Email: awards@tamu.edu

Authorized Official Name: Lester Crenwelge

Email: awards@tamu.edu Telephone Number: 9798456777

Legal Address:

Texas A&M University
Sponsored Research Services
400 Harvey Mitchell Parkway South, Suite 300
College Station, Texas 77845-4375

Administrative Address:

Texas A&M University
Sponsored Research Services
400 Harvey Mitchell Parkway South, Suite 300
College Station, Texas 77845-4375

Payment Address:

Texas A&M University
Sponsored Research Services
400 Harvey Mitchell Parkway South, Suite 300
College Station, Texas 77845-4375

FDP 3B.1 JAN 2020

Attachment 3B-2
Highest Compensated Officers

Subaward Number:
2015-83570-3

Subrecipient:

Institution Name:
PI Name:

Highest Compensated Officers

The names and total compensation of the five most highly compensated officers of the entity(ies) must be listed if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue Code of 1986.

Officer 1 Name:
Officer 1 Compensation:
Officer 2 Name:
Officer 2 Compensation:
Officer 3 Name:
Officer 3 Compensation:
Officer 4 Name:
Officer 4 Compensation:
Officer 5 Name:
Officer 5 Compensation:

Attachment 5
Statement of Work, Cost Sharing, Indirects & Budget

Subaward Number:

2015-83570-3

Statement of Work

Below Attached, pages

If award is FFATA eligible and SOW exceeds 4000 characters, include a *Subrecipient Federal Award Project Description*

Budget Information

Indirect Information Indirect Cost Rate (IDC) Applied <input type="text" value="15"/> %		Cost Sharing <input type="text" value="No"/>
Rate Type: <input type="text" value="Total Direct Costs"/>		If Yes, include Amount: \$ <input type="text"/>

Budget Details Below Attached, pages

Budget Totals

Direct Costs	\$ <input type="text" value="34,384.00"/>
Indirect Costs	\$ <input type="text" value="5,158.00"/>
Total Costs	\$ <input type="text" value="39,542.00"/>


All amounts are in United States Dollars

FDP Cost Reimbursement Subaward

Federal Awarding Agency: Other [Type in Agency]		General Land Office
Pass-Through Entity (PTE):		Subrecipient:
Texas State University		Texas A&M AgriLife Extension Service
PTE PI: David Dornak	Sub PI: Charriss York	
PTE Federal Award No: 21-060-021-C810	Subaward No: 21013-83570-1	
Project Title: The Texas Coast Collaborative-A Dynamic Approach to Hazard		
Subaward Period of Performance (Budget Period):		Amount Funded This Action (USD): \$ 147,866.00
Start: 09/01/2020	End: 08/31/2021	
Estimated Project Period (if incrementally funded):		Incrementally Estimated Total (USD): \$ 237,889.00
Start: 09/01/2020	End: 08/31/2022	

Terms and Conditions

1. PTE hereby awards a cost reimbursable Subaward, (as determined by 2 CFR 200.330), to Subrecipient. The Statement of Work and budget for this Subaward are as shown in Attachment 5. In its performance of Subaward work, Subrecipient shall be an independent entity and not an employee or agent of PTE.
2. Subrecipient shall submit invoices not more often than monthly and not less frequently than quarterly for allowable costs incurred. Upon the receipt of proper invoices, the PTE agrees to process payments in accordance with this Subaward and 2 CFR 200.305. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include current and cumulative costs (including cost sharing), breakdown by major cost category, Subaward number, and certification, as required in 2 CFR 200.415(a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to the party's Financial Contact, shown in Attachment 3A.
3. A final statement of cumulative costs incurred, including cost sharing, marked "FINAL" must be submitted to PTE's Financial Contact, as shown in Attachment 3A, not later than 60 days after the Project Period end date. The final statement of costs shall constitute Subrecipient's final financial report.
4. All payments shall be considered provisional and are subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the Subrecipient.
5. Matters concerning the technical performance of this Subaward shall be directed to the appropriate party's Principal Investigator as shown in Attachments 3A and 3B. Technical reports are required as shown in Attachment 4.
6. Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this Subaward, and any changes requiring prior approval, shall be directed to the PTE's Authorized Official Contact and the Subrecipient's Authorized Official Contact shown in Attachments 3A and 3B. Any such change made to this Subaward requires the written approval of each party's Authorized Official as shown in Attachments 3A and 3B.
7. The PTE may issue non-substantive changes to the Period of Performance and budget Bilaterally. Unilateral modification shall be considered valid 14 days after receipt unless otherwise indicated by Subrecipient when sent to Subrecipient's Authorized Official Contact, as shown in Attachment 3B.
8. Each party shall be responsible for its negligent acts or omissions and the negligent acts or omissions of its employees, officers, or directors, to the extent allowed by law.
9. Either party may terminate this Subaward with 30 days written notice. PTE notice shall be directed to the Authorized Official Contact, and Subrecipient notice shall be directed to the Authorized Official Contact as shown in Attachments 3A and 3B. PTE shall pay Subrecipient for termination costs as allowable under Uniform Guidance, 2 CFR 200, or 45 CFR Part 75 Appendix IX, as applicable.
10. By signing this Subaward, including the attachments hereto which are hereby incorporated by reference, Subrecipient certifies that it will perform the Statement of Work in accordance with the terms and conditions of this Subaward and the applicable terms of the Federal Award, including the appropriate Research Terms and Conditions ("RTCs") of the Federal Awarding Agency, as referenced in Attachment 2. The parties further agree that they intend this Subaward to comply with all applicable laws, regulations, and requirements.

By an Authorized Official of the PTE:  Walter Horton (Feb 25, 2021 19:56 CST)	By an Authorized Official of the Subrecipient: Lesli Kerth <small>Digitally signed by Lesli Kerth Date: 2021.02.25 09:55:41 -06'00'</small> for Julie Bishop Date: 2/25/2021
Name: Walter E. Horton Jr., Ph.D.	Name: Julie Bishop
Title: Associate Vice President for Research and Federal Relations	Title: Assoc. Exec. Dir., TAMU, Sponsored Research Services



FDP SEPT 2019

Attachment 1
Certifications and Assurances

Subaward Number:

21013-83570-1

Certification Regarding Lobbying (2 CFR 200.450)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement in accordance with 2 CFR 200.450.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters (2 CFR 200.213 and 2 CFR 180)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief that neither the Subrecipient nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, in accordance with 2 CFR 200.213 and 2 CFR 180.

Audit and Access to Records

Per 2 CFR 200.501- 200.521, Subrecipient certifies that it will provide notice of any adverse findings which impact this Subaward and will provide access to records as required by parts 2 CFR 200.336, 200.337, and 200.201 as applicable. If Subrecipient is not subject to the Single Audit Act, then Subrecipient will provide notice of the completion of any required audits and provide access to such audits upon request.

Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Attachment 2
Federal Award Terms and Conditions

Subaward Number
21013-83570-1

Required Data Elements

The data elements required by Uniform
Guidance are incorporated in the attached Federal Award.

Awarding Agency Institute (If Applicable)		
Federal Award Issue Date	FAIN	CFDA No.
		15.435
CFDA Title		
GoMESA		
Key Personnel Per NOA		

This Subaward Is:

Research & Development Subject to FFATA

General Terms and Conditions

By signing this Subaward, Subrecipient agrees to the following:

1. To abide by the conditions on activities and restrictions on expenditure of federal funds in appropriations acts that are applicable to this Subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the Federal Awarding Agency's website:
2. 2 CFR 200
3. The Federal Awarding Agency's grants policy guidance, including addenda in effect as of the beginning date of the period of performance or as amended found at:
4. Research Terms and Conditions, including any Federal Awarding Agency's Specific Requirements found at:
 except for the following :
 - a. No-cost extensions require the written approval of the PTE. Any requests for a no-cost extension shall be directed to the Administrative Contact shown in Attachment 3A, not less than 30 days prior to the desired effective date of the requested change.
 - b. Any payment mechanisms and financial reporting requirements described in the applicable Federal Awarding Agency Terms and Conditions and Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward; and
 - c. Any prior approvals are to be sought from the PTE and not the Federal Awarding Agency.
 - d. Title to equipment as defined in 2 CFR 200.33 that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall vest in the Subrecipient subject to the conditions specified in 2 CFR 200.313.
 - e. Prior approval must be sought for a change in Subrecipient PI or change in Key Personnel (defined as listed on the NOA).
5. Treatment of program income: Additive

Special Terms and Conditions:

Data Sharing and Access:

Subrecipient agrees to comply with the Federal Awarding Agency's data sharing and/or access requirements as reflected in the NOA or the Federal Awarding Agency's standard terms and conditions as referenced in General Terms and Conditions 1-4 above.

No additional requirements

Data Rights:

Subrecipient grants to PTE the right to use data created in the performance of this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Copyrights:

Subrecipient Grants to PTE an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Subrecipient grants to PTE the right to use any written progress reports and deliverables created under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its Federal Award.

Promoting Objectivity in Research (COI):

Subrecipient must designate herein which entity's Financial Conflicts of Interest policy (COI) will apply: Subrecipient

If applying its own COI policy, by execution of this Subaward, Subrecipient certifies that its policy complies with the requirements of the relevant Federal Awarding Agency as identified herein: General Land Office

Subrecipient shall report any financial conflict of interest to PTE's Administrative Representative or COI contact, as designated on Attachment 3A. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to Federal Awarding Agency. Such report shall be made before expenditure of funds authorized in this Subaward and within 45 days of any subsequently identified COI.

Work Involving Human or Vertebrate Animals (Select Applicable Options)

No Human or Vertebrate Animals

This section left intentionally blank.

Human Subjects Data (Select One)

This section left intentionally blank

This section left intentionally blank

Additional Terms

By agreeing to this subaward, Institution is certifying they, and their PI, are in good standing with System for Award Management (SAM.gov).

Due to the single audit findings, all submitted invoices must have backup documentation related to the expenses on the invoice.

This agreement shall be governed, construed and enforced in accordance with applicable state law. Any legal action relating to this agreement shall be brought in a court of competent jurisdiction. Nothing herein shall constitute a waiver of either party's sovereign immunity or the constitutionally, statutory or common law rights, privileges, immunities or defenses of the parties.

Attachment 3A
Pass-Through Entity (PTE) Contacts

Subaward Number:
21013-83570-1

PTE Information

Entity Name:

Legal Address:

Website:

PTE Contacts

Central Email:

Principal Investigator Name:

Email: Telephone Number:

Administrative Contact Name:

Email: Telephone Number:

COI Contact email (if different to above):

Financial Contact Name:

Email: Telephone Number:

Email invoices? Yes No Invoice email (if different):

Authorized Official Name:

Email: Telephone Number:

PI Address:

601 University Drive, SLH 213
ATTN: David Dornak
San Marcos, TX 78666-4684

Administrative Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Invoice Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Attachment 3B
Subrecipient Contacts

Subaward Number:

21013-83570-1

Subrecipient Information for FFATA reporting

Entity's UEI/DUNS Name: Texas A&M AgriLife Extension Service

EIN No.: 746000537 Institution Type: Public/State Controlled Inst. of Higher Ed.

UEI/DUNS: 781568837 Currently registered in SAM.gov: Yes No
Exempt from reporting executive compensation: Yes No (if no, complete 3Bpg2)

Parent UEI/DUNS: This section for U.S. Entities: Zip Code Look-up

Place of Performance Address Congressional District: TX-017 Zip Code+4: 77845-4375

1335 Regents Park Dr, Ste. 260
Houston, TX 77058

Subrecipient Contacts

Central Email: srs.tamu.edu

Website: http://tcwp.tamu.edu

Principal Investigator Name: Charriss York

Email: cyork@tamu.edu Telephone Number: 281-694-5508

Administrative Contact Name: Carla Krystyniak

Email: ckrystyniak@tamu.edu Telephone Number: 979-458-2231

Financial Contact Name: Sucheta Das

Email: sdas@tamu.edu Telephone Number: 979-458-0755

Invoice/Payment Email: awards@tamu.edu

Authorized Official Name: Julie Bishop

Email: srs-awards@tamu.edu Telephone Number: 979-862-6777

Legal Address:

400 Harvey Mitchell Parkway S, Suite 300
College Station, TX 77845-4375

Administrative Address:

400 Harvey Mitchell Parkway S, Suite 300
College Station, TX 77845-4375

Payment Address:

400 Harvey Mitchell Parkway S, Suite 300
College Station, TX 77845-4375

FDP 3B.1 JAN 2020

Attachment 3B-2
Highest Compensated Officers

Subaward Number:

21013-83570-1

Subrecipient:

Institution Name:

PI Name:

Highest Compensated Officers

The names and total compensation of the five most highly compensated officers of the entity(ies) must be listed if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue Code of 1986.

Officer 1 Name:

Officer 1 Compensation:

Officer 2 Name:

Officer 2 Compensation:

Officer 3 Name:

Officer 3 Compensation:

Officer 4 Name:

Officer 4 Compensation:

Officer 5 Name:

Officer 5 Compensation:

Attachment 4
Reporting and Prior Approval Terms

Subaward Number:

21013-83570-1

Subrecipient agrees to submit the following reports (PTE contacts are identified in Attachment 3A):

Technical Reports:

- Monthly technical/progress reports will be submitted to the PTE's within days of of the end of the month.
- Quarterly technical/progress reports will be submitted within 30 days after the end of each project quarter to the PTE's .
- Annual technical / progress reports will be submitted within days prior to the end of each budget period to the PTE's . Such report shall also include a detailed budget for the next Budget Period, updated other support for key personnel, certification of appropriate education in the conduct of human subject research of any new key personnel, and annual IRB or IACUC approval, if applicable.
- A Final technical/progress report will be submitted to the PTE's within days of the end of the Project Period or after termination of this award, whichever comes first.
- Technical/progress reports on the project as may be required by PTE's in order for the PTE to satisfy its reporting obligations to the Federal Awarding Agency.

Prior Approvals:

Carryover:

Carryover is restricted for this subaward by the:

Carryover instructions and requirements are as stated by the Federal Awarding Agency guidance or as shown below.

Submit carryover requests to the .

Other Reports:

- In accordance with 37 CFR 401.14, Subrecipient agrees to notify both the Federal Awarding Agency via iEdison and PTE's within 60 days after Subrecipient's inventor discloses invention(s) in writing to Subrecipient's personnel responsible for patent matters. The Subrecipient will submit a final invention report using Federal Awarding Agency specific forms to the PTE's within 60 days of the end of the Project Period to be included as part of the PTE's final invention report to the Federal Awarding Agency.
A negative report is required:
- Property Inventory Report (only when required by Federal Awarding Agency), specific requirements below.

Additional Technical and Reporting Requirements:

Texas State to provide Subrecipient with Purchase Order (PO) Number. This PO Number is to be included on all submitted invoices. Invoices that do not reference the Texas State University PO number and subaward number may be returned to Subrecipient.

Invoices requesting reimbursement may be required to produce appropriate backup documentation at the request of Texas State University before payment is made to Subrecipient.

Attachment 5
Statement of Work, Cost Sharing, Indirects & Budget

Subaward Number:
21013-83570-1

Statement of Work

Below Attached, pages

If award is FFATA eligible and SOW exceeds 4000 characters, include a *Subrecipient Federal Award Project Description*

Budget Information

Indirect Information Indirect Cost Rate (IDC) Applied <input type="text" value="15"/> % Rate Type: <input type="text" value="Modified Total Direct Costs"/>	Cost Sharing <input type="text" value="No"/> If Yes, include Amount: \$ <input type="text"/>
---	--

Budget Details Below Attached, pages

Budget Totals

Direct Costs \$
Indirect Costs \$
Total Costs \$

All amounts are in United States Dollars

Texas Coastal Collaborative Scope of Work

Task 1: Sustainable Stormwater Manual

TCWP through their Green Infrastructure for Texas (GIFT) program will coordinate with Doucet and Sea Grant to hold up to 6 of workshops in identified communities on green infrastructure and the Sustainable Stormwater Manual (SSWM). These workshops will be based on the current GIFT workshop model that address stormwater infrastructure from multiple scales; site scale, neighborhood or community scale, and large scale (500+ acres). Each of these scales provides benefits and services to the community and should be considered when creating a community wide approach to stormwater management. This workshop model will be expanded to include information specific to the SSWM and encourage communities to adopt this manual as a guidance document.

Deliverables: Workshop outreach document, agendas, sign-in sheets, and photos for ## workshops.

Task 2: Community Health and Resource Management (CHARM)

Discovery workshops will be held in xx number of communities where the team has determined there exists a high likelihood of effective local participation and project opportunities. The workshop will bring together in attendance key stakeholders and officials to conduct a CHARM map supported discovery exercise to identify opportunities across the community for implementing SSWM practices and green infrastructure retrofits. The discovery exercise will generate input that we anticipate will include a discussion of possible pathways or barriers to implementation, comparative advantages among possible project sites, local ordinances or lack thereof, and addressing enforcement or maintenance practices and capabilities. The objective is to lead into future tasks that are site specific for the community.

Deliverables: Agenda, sign-in sheets, meeting notes and stakeholder input, map products of discovery outputs and recommendations for next steps.

Task 3: Flow Assessment and Stormwater Technology (FAST)

The project team will engage a community in a pilot project using the FAST platform to craft a community green infrastructure plan for a specific neighborhood or city precinct. Through targeted outreach, FAST brings stakeholders together for a data driven dialogue about stormwater management, community needs, and green infrastructure. As with CHARM, FAST uses GIS based maps paired with an interactive tabletop mapping platform to engage stakeholders in an exercise to site green infrastructure in their community. FAST, in contrast to CHARM's city wide scale, assess the flow of stormwater at a meter level within a community and produces real time graphs and outputs for water quality and quantity parameters. Stakeholders will leave the workshop with a real understanding of the role specific green infrastructure can play in their community.

Building on the dialogue in the FAST workshops, TCWP and Doucet will continue to work with stakeholders through a series of meetings and activities to ground truth project locations, develop a full community green infrastructure plan, and complete engineering and design work for selected projects.

Deliverables: Workshop outreach document, agendas, sign-in sheets, and photos for ## workshops.
Draft and Final green infrastructure plan with engineering designs for selected projects.

SRS Budget Worksheet

SRS Proposal #: 2000747
Project Dates: 10/1/2020-9/30/2022
Sponsor: TSU/GOMESA

Cumulative Budget Request					
Category			Year 1	Year 2	TOTAL
A. Sr Personnel					
Name	Project Role				
Charriss York	Principal Investigator	Person Months	0.36	0.17	
		Salary	\$ 2,247	\$ 1,124	\$ 3,371
		Fringe	\$ 409	\$ 205	\$ 614
		Insurance	\$ 269	\$ 130	\$ 399
		Total Fringe	\$ 678	\$ 335	\$ 1,013
Steven Mikulencak	Co-PI	Person Months	0.36	0.36	
		Salary	\$ 2,480	\$ 2,555	\$ 5,035
		Fringe	\$ 451	\$ 465	\$ 916
		Insurance	\$ 269	\$ 269	\$ 538
		Total Fringe	\$ 720	\$ 734	\$ 1,454
Subtotal Salaries Senior Personnel			\$ 4,727	\$ 3,679	\$ 8,406
Subtotal Benefits Senior Personnel			\$ 1,398	\$ 1,069	\$ 2,467
Subtotal Senior Personnel			\$ 6,125	\$ 4,748	\$ 10,873
B. Other Personnel					
Name	Project Role		Year 1	Year 2	TOTAL
TBN	GIS Tech	Person Months	3.00	3.00	
		# of Persons	1	1	
		Salary	\$ 14,113	\$ 14,536	\$ 28,649
		Fringe	\$ 2,569	\$ 2,646	\$ 5,215
		Insurance	\$ 2,238	\$ 2,238	\$ 4,476
		Total Fringe	\$ 4,807	\$ 4,884	\$ 9,691
TBN	Prog. Coord	Person Months	5.64	3.00	
		# of Persons	1	1	
		Salary	\$ 23,500	\$ 12,875	\$ 36,375
		Fringe	\$ 4,277	\$ 2,343	\$ 6,620
		Insurance	\$ 4,207	\$ 2,238	\$ 6,445
		Total Fringe	\$ 8,484	\$ 4,581	\$ 13,065
TBN	Prog. Coord	Person Months	3.00	5.52	
		# of Persons	1	1	
		Salary	\$ 12,500	\$ 23,690	\$ 36,190
		Fringe	\$ 2,275	\$ 4,312	\$ 6,587
		Insurance	\$ 2,238	\$ 4,118	\$ 6,356
		Total Fringe	\$ 4,513	\$ 8,430	\$ 12,943
Total Other Professional Salary			\$ 50,113	\$ 51,101	\$ 101,214
Total Other Professional Fringe			\$ 17,804	\$ 17,895	\$ 35,699
Subtotal Salaries Other Personnel			\$ 50,113	\$ 51,101	\$ 101,214
Subtotal Benefits Other Personnel			\$ 17,804	\$ 17,895	\$ 35,699
Subtotal Other Personnel			\$ 67,917	\$ 68,996	\$ 136,913
Total Salaries			\$ 54,840	\$ 54,780	\$ 109,620
Total Benefits			\$ 19,202	\$ 18,964	\$ 38,166
Total Personnel Costs			\$ 74,042	\$ 73,744	\$ 147,786
DIRECT COSTS					
<i>Travel: Domestic</i>					
			\$ 4,064	\$ 4,064	\$ 8,128
Total Domestic Travel			\$ 4,064	\$ 4,064	\$ 8,128
<i>Materials & Supplies</i>					
			\$ 250	\$ 250	\$ 500
Total Supplies			\$ 250	\$ 250	\$ 500
<i>Other Costs</i>					
	Consultants/Professional Services		\$ 50,000	\$ -	\$ 50,000
	Other:		\$ 23	\$ 23	\$ 46
	Other		\$ 200	\$ 200	\$ 400
Total Other Costs			\$ 50,223	\$ 223	\$ 50,446
Modified Total Direct Costs (MTDC)			\$ 128,579	\$ 78,281	\$ 206,860
Total Direct Costs (TDC)			\$ 128,579	\$ 78,281	\$ 206,860
INDIRECT COSTS					
		Rate Base	15.0% MTDC	15.0% MTDC	
			\$ 19,287	\$ 11,742	\$ 31,029
TOTAL REQUEST FROM SPONSOR (TRS)			\$ 147,866	\$ 90,023	\$ 237,889

Subaward Number:

21013-83570-1

Attachment 6

Notice of Award (NOA) and any additional documents

- The following pages include the NOA and if applicable any additional documentation referenced throughout this Subaward.
- Not incorporating the NOA or any additional documentation to this Subaward.



**GOMESA GRANT AGREEMENT
CMP PROJECT OF SPECIAL MERIT
GLO CONTRACT NO. 21-060-021-C810**

The **GENERAL LAND OFFICE** (the “GLO”), an agency of the State of Texas, and **TEXAS STATE UNIVERSITY** (“Grantee”), each a “Party” and collectively the “Parties,” enter into this grant agreement (the “Contract”) to provide funding made available to the State of Texas under the Gulf of Mexico Energy Security Act of 2006 (“GOMESA”), and awarded pursuant to Texas Natural Resources Code, Chapter 33, for the implementation of a Coastal Management Program (“CMP”) Project of Special Merit, as approved by the Texas Land Commissioner and administered by the GLO.

ARTICLE I – GENERAL PROVISIONS

1.01 PURPOSE AND AUTHORITY

The purpose of this Contract is to set forth the terms and conditions of this grant of state GOMESA funds from the GLO to Grantee to implement the CMP Project of Special Merit entitled, “The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control” (the “Project”). This Contract is entered into pursuant to Texas Natural Resources Code Section 33.204(g), which authorizes the Texas Land Commissioner to award grants to projects that further the goals and policies of the CMP, and in accordance with the authorized uses and purposes set forth in GOMESA.

1.02 CONTRACT DOCUMENTS

This document and the following Attachments, which are incorporated herein in their entirety for all purposes, shall govern the Contract:

ATTACHMENT A: BUDGET AND WORK PLAN

ATTACHMENT B: GENERAL AFFIRMATIONS

1.03 DEFINITIONS

“Administrative and Audit Regulations” means all applicable statutes, regulations, and other laws governing administration or audit of this Contract, including the Texas Uniform Grant Management Standards and Texas Government Code, Chapter 321.

“Attachment” means documents, terms, conditions, or additional information physically attached to this Contract following the execution page, or incorporated by reference within the body of this Contract.

“Budget” means the budget for the Project funded by the Contract, in **Attachment A**.

“CMP Rules” means Title 31, Texas Administrative Code, Chapters 501-506.

“Comptroller” means the Texas Comptroller of Public Accounts.

“Contract” means this entire document, along with any Attachments, both physical and incorporated by reference.

“Deliverables” means a unit or increment of work, including any item, report, data, document, photograph, drawing, process, computer program or code, or other submission required to be delivered under the terms of this Contract.

“Equipment” means tangible personal property having a useful life of more than one year and an acquisition cost of **\$5,000.00** or more per unit.

“Event of Default” means the occurrence of any of the events set forth in **Section 3.03**.

“Fiscal Year” means the annual accounting period for the State of Texas, beginning September 1 and ending August 31 each year.

“GAAP” means Generally Accepted Accounting Principles.

“GASB” means the Governmental Accounting Standards Board.

“General Affirmations” means the statements in **Attachment B**.

“GOMESA” means the Gulf of Mexico Energy Security Act of 2006, Pub. L. 109-432, 120 Stat. 2922, 43 U.S.C. 1331 note.

“Grant Administrator” means the Director, Grant Programs, GLO Coastal Resources Division, or the Director’s designee.

“Intellectual Property” means patents, rights to apply for patents, trademarks, trade names, service marks, domain names, copyrights, and all applications and worldwide registration of such, schematics, industrial models, inventions, know-how, trade secrets, computer software programs, other intangible proprietary information, and all federal, state, or international registrations or applications for any of the foregoing.

“Progress Reports” means written progress reports that must be received by the GLO, in accordance with the format and schedule specified in the Work Plan.

“Project” means the work and activities involved in the CMP Project of Special Merit funded under this Contract and further detailed in the Work Plan in **Attachment A**.

“Public Information Act” means Chapter 552 of the Texas Government Code.

“Real Property” means land, including land improvements, structures and appurtenances thereto, but excludes movable machinery and equipment.

“Subcontractor” means an individual or business that contracts to perform part of Grantee’s obligations under this Contract.

“Travel Regulations” means all applicable statutes, regulations, laws, and Comptroller guidance related to reimbursement of travel expenses under this Contract, including Title 34, Texas Administrative Code, Section 5.22; Texas Government Code, Chapter 660; the

General Appropriations Act; and *Textravel*, the Comptroller’s travel regulation guidance available on the Comptroller’s website.

“UGMS” means the Texas Uniform Grant Management Standards issued by the Comptroller.

“Work Plan” means the statement of work for the Project, including any special conditions, in **Attachment A**.

1.04 INTERPRETIVE PROVISIONS

- (a) The meaning of a defined term applies to its singular and plural forms.
- (b) The words “herein,” “hereunder,” and similar words refer to this Contract as a whole and not to any particular provision, section, attachment, work order, or schedule of this Contract unless otherwise specified.
- (c) The term “including” means “including without limitation.”
- (d) Unless otherwise expressed provided, a reference to a contract includes subsequent amendments and other modifications thereto executed according to the contract’s terms, and a reference to a statute, regulation, or other law includes subsequent amendments, renumbering, recodification, and other modifications thereto by the enacting authority.
- (e) The captions and headings of this Contract are for convenience of reference only and shall not affect the interpretation of this Contract.
- (f) The limitations, regulations, and policies contained herein are cumulative and each must be performed in accordance with its terms without regard to other limitations, regulations, and policies affecting the same matter.
- (g) Unless otherwise expressly provided, reference to any action of or by the GLO by way of consent, approval, or waiver is deemed modified by the phrase “in its/their sole discretion.” Notwithstanding the preceding, the GLO shall not unreasonably withhold or delay any approval, consent, or waiver.
- (h) All due dates and/or deadlines referenced in this Contract that occur on a weekend or holiday shall be considered as if occurring on the next business day.
- (i) All time periods in this Contract shall commence on the day after the date on which the applicable event occurred, report is submitted, or request is received.
- (j) Time is of the essence in this Contract.
- (k) If the provisions of this Contract and its Attachments conflict, such conflicts shall be resolved in the following order of precedence: Signed Contract; **Attachment A**; **Attachment B**.

ARTICLE II – PROJECT GRANT AND SCOPE

2.01 PROJECT GRANT

Grantee submitted a CMP grant application to the GLO. The application was selected as a CMP Project of Special Merit eligible for a grant of GOMESA funds, as approved by

the Texas Land Commissioner and as administered by the GLO. This Contract is entered into based on Grantee's application.

Subject to the terms and conditions of this Contract, the GLO agrees to provide GOMESA funds to Grantee, in an amount not to exceed **\$1,000,000.00**, payable as reimbursement of allowable expenses incurred by Grantee, to be used in strict accordance with the Budget in **Attachment A**. It is understood that any additional funds necessary for the completion of this Project are the Grantee's responsibility. The Parties acknowledge that this Contract does not require a match to be contributed by Grantee.

The GLO is not liable to Grantee for any expenses incurred by Grantee before the effective date of this Contract or after termination or expiration of this Contract.

2.02 PROJECT SCOPE AND WORK PLAN

Grantee shall perform the Project in strict accordance with the terms and conditions of this Contract and all provisions of the Work Plan, including any special conditions, set forth in **Attachment A**.

Grantee may request an amendment to the Work Plan or scope of the Project by submitting a written request and detailed justification to the Grant Administrator. If there are any costs included in the requested amendment that were not previously included in the Contract, Grantee is solely responsible for such costs it incurs while awaiting GLO approval. The Grant Administrator will inform Grantee in writing if the amendment request is approved.

2.03 AUTHORIZED USES OF GOMESA FUNDS

Grantee represents and warrants that it will use all GOMESA funds provided under this Contract in accordance with all applicable federal and state laws and only for one or more of the following purposes: (a) projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses; (b) mitigation of damage to fish, wildlife, or natural resources; (c) implementation of a federally-approved marine, coastal, or comprehensive conservation management plan; or (d) mitigation of the impact of outer Continental Shelf (as that term is defined in 43 U.S.C. § 1331) activities through the funding of onshore infrastructure projects.

ARTICLE III – TERM

3.01 DURATION

This Contract shall be effective on September 1, 2020 and shall terminate upon the completion of the Project, in the GLO's sole determination, or on August 31, 2022, whichever occurs first. Upon receipt of a written request and acceptable justification from Grantee, the GLO may amend this Contract to extend the Contract Period. Any request for extension must be received at least sixty (60) days before the Contract's original termination date.

3.02 EARLY TERMINATION

The GLO may terminate this Contract by giving Grantee written notice specifying a termination date at least thirty (30) days after the date of the notice. Upon receipt of such notice, Grantee shall cease work, terminate any subcontracts, and incur no further expense related to this Contract. Such early termination shall be subject to the equitable settlement of the respective interests of the Parties, accrued up to the date of termination.

3.03 EVENTS OF DEFAULT

Each of the following events shall constitute an Event of Default under this Contract: (i) Grantee fails to comply with any term, condition, covenant, or provision contained in this Contract; (ii) Grantee makes a general assignment for the benefit of creditors or takes any similar action for the protection or benefit of creditors; or (iii) if at any time, Grantee makes a materially incorrect representation in the Work Plan, any reimbursement request, or any report submitted to the GLO related to the Contract.

3.04 REMEDIES; NO WAIVER

Upon the occurrence of any Event of Default, the GLO may avail itself of any legal or equitable remedy available to it. The Parties' rights or remedies under this Contract are not intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right or remedy given under this Contract, or hereafter legally existing upon the occurrence of an Event of Default. Any failure by the GLO to insist at any time upon the strict observance or performance of any of the provisions of this Contract or to exercise any right or remedy as provided in this Contract shall not impair any such right or remedy or be construed as a waiver or relinquishment with respect to another Event of Default.

ARTICLE IV – GRANT ADMINISTRATION

4.01 SUBMISSIONS AND FORMS

Except for legal notices that must be sent pursuant to **Section 9.09**, all written reports, forms, requests, and deliverables under this Contract must be submitted in electronic format to the Grant Administrator at cmreceipts@glo.texas.gov.

Standard forms that Grantee must use for submissions to the Grant Administrator are available at <http://www.glo.texas.gov/coast/coastal-management/forms/index.html>. As the standard forms are updated from time to time, Grantee should periodically check the website for updated forms. Grantee is responsible for using the proper forms.

If there is not a standard form for a particular request allowed under this Contract, Grantee may submit the request in writing via email to the Grant Administrator for GLO review and approval. The request must include the nature of the request, the section of the Contract that authorizes the request, and a detailed justification for the request. The Grant Administrator will notify Grantee in writing if the request is approved.

4.02 PROGRESS REPORTS

Grantee shall submit periodic Progress Reports on a monthly or quarterly basis, as required in **Attachment A** and commencing on the date specified therein. Monthly reporting must be submitted on or before the 10th day of each calendar month during the term of this Contract. Quarterly reporting must be submitted on or before the 10th day of each calendar quarter during the term of this Contract. Grantee must submit Progress Reports using the **Progress Report Form**.

Progress Reports must include the following:

- (a) a brief statement of the overall progress since the preceding Progress Report of each task identified on the Work Plan;
- (b) a brief description of any problems encountered during the previous reporting period that will affect the Work Plan, delay the completion of any portion of this Contract, or inhibit the completion of or cause a change in any Work Plan objective;
- (c) a description of any action Grantee plans to undertake to correct any problems that have been encountered; and
- (d) a status report on the Budget, as defined in this Contract.

Grantee must submit a **Project Closeout Form** upon completion of the Project.

4.03 DELIVERABLES

Grantee shall electronically submit the Deliverables set forth in the Work Plan in **Attachment A**, in the time and manner specified therein, to the Grant Administrator. The GLO may require Grantee to conform any data presentation or product funded under this Contract to reflect GLO comments.

Grantee may request changes to Deliverable due dates by submitting a written request and detailed justification to the Grant Administrator for GLO review and approval. The Grant Administrator will notify Grantee in writing if the request is approved.

4.04 REIMBURSEMENT REQUESTS

Grantee shall submit reimbursement requests on either a monthly or quarterly basis as required in **Attachment A** and on or before the 10th day of each month or quarter as specified therein.

Reimbursement requests must:

- (a) prominently display “GLO Contract No. 21-060-021-C810”;
- (b) be submitted to cmprreceipts@glo.texas.gov on the GLO standard form;
- (c) be supported by an invoice detailing each expense by Budget category in accordance with the Budget in **Attachment A**;

- (d) include a timesheet or a payroll clearing account spreadsheet; and
- (e) provide such other information as the GLO may request.

Grantee's failure to submit reimbursement requests as instructed in this section may significantly delay reimbursement. Reimbursement requests must be supported by actual receipts, cancelled checks, and/or such other documentation that, in the judgment of the GLO, allows for full substantiation of the costs incurred. If no Contract expenses have been incurred in a given period, Grantee must submit a zero-dollar (\$0.00) invoice.

Grantee's indirect costs may not exceed the amount for such costs set forth in **Attachment A**. Grantee may not charge "other operating costs" (including administrative costs, computer usage fees, etc.) in addition to indirect costs, if such costs are already included in the calculation to determine Grantee's indirect cost rate.

Grantee must submit reimbursement requests no later than sixty (60) days from the date Grantee incurs the expenses listed therein. The GLO may deny reimbursement requests Grantee fails to submit in a timely manner.

The GLO may deny reimbursement requests if Grantee fails to submit Deliverables or Progress Reports by their due dates. If the GLO denies reimbursement, Grantee shall resubmit the invoice after the date the overdue Deliverable or Progress Report is submitted.

4.05 TRAVEL EXPENSES

The GLO will not reimburse Grantee for travel expenses of any kind that are not included in **Attachment A**. The GLO will only reimburse travel expenses directly attributable to Grantee's performance under this Contract at the rates established or adopted by the Comptroller, as outlined in the Travel Regulations.

Grantee understands and acknowledges that any travel expense reimbursement by the GLO is not a per diem. The GLO will only reimburse actual, allowable expenses in accordance with the Travel Regulations. Grantee must submit itemized receipts to support any request for travel expense reimbursement.

4.06 BUDGET VARIANCE

Grantee may request reallocations among direct cost Budget categories by submitting a **Budget Amendment Form** and written justification to the Grant Administrator. Such reallocations may not increase or decrease the total Budget amount and will be effective only upon GLO approval. The Grant Administrator will notify Grantee in writing if the request is approved.

To request any budget changes increasing or decreasing the total Budget amount, Grantee shall submit a Budget Amendment Form and a written justification to the Grant Administrator. If approved, the budget change shall be incorporated through a formal, written amendment to the Contract as mutually agreed to by the Parties.

Grantee shall submit to the Grant Administrator a final, actual Budget no later than sixty (60) days following the expiration or termination date of the Contract.

4.07 WITHHOLDING

To ensure full performance of the Project, the GLO may withhold an amount equal to five percent (5%) of the Budget until Grantee's submittal of all required Deliverables, and the GLO's approval, as necessary for the completion of the Project. The GLO shall make a final disbursement only upon receipt of documentation sufficient to demonstrate Grantee has completed the Project in accordance with the Work Plan in **Attachment A** and fulfilled all requirements of the Contract.

4.08 EQUIPMENT

Equipment or computer software purchases must be directly related to a GOMESA authorized use and must comply with all applicable laws, rules, and regulations. Grantee may not purchase any Equipment or computer software without the GLO's prior written approval. Grantee shall retain title to and possession of any Equipment or computer software unless and until transferred to the GLO, upon written request by the GLO. Grantee shall furnish, with its final reimbursement request, a list of all Equipment and software purchased with funds under the Contract, including the name of the manufacturer, model number, and serial number. The disposition of any Equipment shall be in accordance with UGMS.

4.09 AUDIT COMPLIANCE

If Grantee expends \$750,000.00 or more in state awards during each any of Grantee's fiscal years of funding, Grantee must have a single or program-specific audit conducted for that year in accordance with UGMS. If applicable, Grantee shall complete and return the Audit Reporting Form no later than September 1 of each year until the Contract is terminated. The Audit Reporting Form may be downloaded at: <http://www.glo.texas.gov/coast/coastal-management/forms/index.html>.

4.10 REAL PROPERTY

Acquisition of real property is not authorized under this Contract.

ARTICLE V – STATE FUNDING

5.01 STATE FUNDING

- (a) This Contract shall not be construed as creating any debt on behalf of the State of Texas and/or the GLO in violation of Article III, Section 49, of the Texas Constitution. In compliance with Article VIII, Section 6 of the Texas Constitution, all obligations of the GLO hereunder are subject to the availability of state funds. If such funds are not appropriated or become unavailable, this Contract may be terminated and the Parties discharged from further obligations, subject to the equitable settlement of their respective interests, accrued up to the date of termination.

- (b) Any claim by Grantee for damages under this Contract may not exceed the amount due and owing Grantee or the amount of funds appropriated for payment, but not yet paid to Grantee, under the annual budget in effect at the time of the breach. Nothing in this provision shall be construed as a waiver of sovereign immunity.

5.02 GENERAL AFFIRMATIONS

To the extent they apply, Grantee certifies it has reviewed the General Affirmations in **Attachment B** and that Grantee is in compliance with all the requirements set forth therein.

5.03 RECAPTURE OF FUNDS

The discretionary right of the GLO to terminate for convenience under **Section 3.02** notwithstanding, the GLO may terminate the Contract and recapture, and Grantee must reimburse, any payments made by the GLO that (i) exceed the maximum allowable rates; (ii) are not allowed under applicable laws, rules, and regulations; (iii) are otherwise inconsistent with the terms and conditions of this Contract, including any unapproved expenditures. **This recapture provision applies to any expenditures by Grantee that are not consistent with one of the authorized uses of GOMESA funds set forth in Section 2.03.**

5.04 OVERPAYMENT

Grantee shall be liable to the GLO for any costs disallowed pursuant to any financial or compliance audits of funds received under this Contract. Grantee shall reimburse such disallowed costs from funds which were not provided or otherwise made available to Grantee under this Contract.

ARTICLE VI – INTELLECTUAL PROPERTY

6.01 OWNERSHIP

The GLO and Grantee shall jointly own, without limitation, all right, title, and interest in and to all reports, drafts of reports, data, drawings, computer programs and codes, and/or any other information or materials acquired or developed under this Contract with each Party having an unlimited right to access and use, and authorize or license third parties to access and use, all such information and materials without the necessity of obtaining authorization from the other Party and without expense, charge, or accounting to the other Party.

6.02 INTELLECTUAL PROPERTY

- (a) The GLO and Grantee shall retain, both during and after the term of this Contract, exclusive ownership of all rights, title, and interest in and to, their respective pre-existing Intellectual Property as of the effective date of this Contract. This Contract will not be interpreted or deemed as causing the parties to become joint owners of any such pre-existing Intellectual Property.

- (b) The GLO and the State of Texas each has the right to use, reproduce, publish, publicly display, distribute and create derivative or new works and otherwise use, exploit, or authorize others to use or exploit for government purposes all reports, drafts of reports, data, drawings, computer programs, codes and any other work associated with this Contract, and exercise any intellectual property rights, without obtaining authorization from the other Party and without expense, charge, or accounting to the other Party.
- (c) The Grantee may obtain intellectual property rights for any work that is subject to intellectual property rights and was developed, or for which ownership was purchased, under this Contract, only if the GLO and the State of Texas each are granted a worldwide, royalty free, non-exclusive, fully paid-up, and irrevocable license to reproduce, publish, publicly display, distribute and create derivative or new works and otherwise use, exploit, or authorize others to use or exploit for government purposes all reports, drafts of reports, data, drawings, computer programs, codes and or any other work associated with this Contract.
- (d) Grantee must give the GLO and the State of Texas, as well as any person designated by the GLO or the State of Texas, all assistance required to perfect the rights granted to the GLO and the State of Texas herein without any charge or expense beyond the stated amount payable to Grantee for the work authorized under this Contract.
- (e) The Contract in no way creates an obligation on behalf of the GLO or the State of Texas to obtain or enforce any intellectual property right that may be created under this Contract.

6.03 NON-ENDORSEMENT

Grantee shall not publicize or otherwise circulate promotional material (such as advertisements, sales brochures, press releases, speeches, still and motion pictures, articles, manuscripts, or other publications) that states or implies State of Texas or government employee endorsement of a product, service, or position that Grantee represents. No release of information relating to this Project may state or imply that the GLO or the State of Texas approves of Grantee's work products or considers Grantee's work product to be superior to other products or services.

ARTICLE VII – ACKNOWLEDGMENTS, PUBLICATIONS, AND SIGNAGE

7.01 ACKNOWLEDGEMENT

Grantee is required to inform the public that the Project is funded, in whole or in part, by a state grant of Gulf of Mexico Energy Security Act of 2006 funding awarded under the Texas Coastal Management Program. Acknowledgement of the source of funding may take many forms (e.g., signage or written acknowledgement in a Project publication or website) as set forth herein, or as otherwise approved in writing by the Grant Administrator.

7.02 PUBLICATIONS

If Grantee publishes any reports, papers, products in electronic format, or other materials based on or developed in whole or in part as a result of this Contract, Grantee shall ensure that such documents, products, and other materials bear the following statement, as well as the GLO and CMP logos, on the cover or first page:

“This (publication/report/paper/website) was funded in part through a grant from the Texas General Land Office (GLO) providing Gulf of Mexico Energy Security Act of 2006 funding made available to the State of Texas and awarded under the Texas Coastal Management Program. The views contained herein are those of the authors and should not be interpreted as representing the views of the GLO or the State of Texas.”

7.03 SIGNAGE

If the Project funded under this Contract includes the construction of facilities or other permanent improvements, Grantee shall erect temporary signs during the construction phase of such facilities or improvements. Signs must include the GLO and CMP logos and contain the following language:

“This project was funded in part through a grant from the Texas General Land Office providing Gulf of Mexico Energy Security Act of 2006 funding made available to the State of Texas and awarded under the Texas Coastal Management Program.”

At the completion of construction, Grantee shall replace the temporary signs with permanent signs approved by the GLO. Grantee must erect permanent signs for projects that include land acquisition.

ARTICLE VIII – RECORDS, AUDIT, RETENTION, AND DISCLOSURE

8.01 BOOKS AND RECORDS

Grantee shall keep and maintain, or cause to be kept or maintained, under GAAP or GASB (as applicable) full, true, and complete records necessary for fully disclosing to the GLO, the Texas State Auditor’s Office, and/or their authorized representatives sufficient information to determine Grantee’s compliance with this Contract and all applicable laws, rules, and regulations.

8.02 INSPECTION AND AUDIT

- (a) All records related to this Contract (including records of Grantee and its Subcontractors) shall be subject to the Administrative and Audit Regulations.
- (b) The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under the Contract or indirectly through a subcontract under the Contract. Acceptance of funds directly under the Contract or indirectly through a subcontract under the Contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds.

Under the direction of the legislative audit committee, an entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit. Grantee shall ensure that this clause concerning the authority to audit funds received indirectly by Subcontractors through Grantee and the requirement to cooperate is included in any subcontract it awards.

- (c) State agencies authorized to audit and inspect Grantee, its records, its Subcontractors, and its Subcontractors' records, include the GLO, the GLO's contracted examiners, the State Auditor's Office, the Texas Attorney General's Office, the Comptroller, and their authorized designees.

8.03 PERIOD OF RETENTION

Each Party shall retain in its records this Contract and all documents related to this Contract. Unless a longer retention period is specified by applicable law or regulation, the Parties may destroy the Contract and related documents only after the seventh anniversary of the date: the Contract is completed or expires; or all issues that arise from any litigation, claim, negotiation, audit, open records request, administrative review, or other action involving the Contract or related documents are resolved.

8.04 CONFIDENTIALITY

To the extent permitted by law, Grantee and the GLO shall keep all information confidential, in whatever form produced, prepared, observed, or received by Grantee or the GLO to the extent that such information is: (a) confidential by law; (b) marked or designated "confidential" (or words to that effect) by Grantee or the GLO; or (c) information that Grantee or the GLO are otherwise required to keep confidential by this Contract. Furthermore, Grantee will not advertise that it is doing business with the GLO use this Contract as a marketing or sales tool, or make any press releases concerning this Contract without the GLO's prior written approval.

8.05 PUBLIC RECORDS

In accordance with Section 2261.253 of the Texas Government Code, the GLO may post this Contract and related documents on its website. Information, documentation, and other material related to this Contract may be subject to public disclosure pursuant to the Texas Public Information Act ("PIA"). In accordance with Section 2252.907 of the Texas Government Code, Grantee shall make any information created or exchanged with the State/GLO pursuant to the Contract, and not otherwise excepted from disclosure under the PIA, available in a format that is accessible by the public at no additional charge to the State/GLO. Grantee shall make any information required under the PIA available to the GLO in portable document file (.pdf) format or any other format agreed between the Parties. If Grantee believes that any of its information is confidential and should be withheld from release under the PIA, Grantee should clearly label that information as confidential. However, the Attorney General will ultimately determine whether any Grantee information may be withheld from release under the PIA. In the event that the GLO receives a Public Information Request ("PIR") for any information submitted by Grantee related to this Contract, the GLO will comply with Section 552.305 of the Texas

Government Code by notifying Grantee and providing Grantee with a copy of the PIR and the GLO's referral of the PIR to the Attorney General. Grantee, not the GLO, is responsible for making arguments to the Attorney General regarding the release of Grantee's information under the PIA. Grantee shall notify the GLO's Office of General Counsel within twenty-four hours of Grantee's receipt of any third party written requests for information to which Grantee has access as a result of this Contract, and Grantee will forward a copy of any such written requests to PIALegal@glo.texas.gov. For any third party requests for information that are not written, Grantee shall direct third parties to PIALegal@glo.texas.gov.

ARTICLE IX – MISCELLANEOUS PROVISIONS

9.01 LEGAL OBLIGATIONS

Grantee shall procure and maintain for the duration of this Contract any state, county, city, or federal license, authorization, insurance, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by Grantee for the performance of this Contract. Grantee shall pay all taxes, assessments, fees, premiums, permits, and licenses required by law. Grantee shall pay all such government obligations not paid by its Subcontractors during performance of this Contract. Grantee shall not commence construction of the Project until it has obtained the requisite licenses and/or permits. Grantee shall include copies of such licenses and permits as a part of the Progress Report, as defined in this Contract, for the period during which they are obtained.

9.02 TAXES, WORKERS COMPENSATION, UNEMPLOYMENT INSURANCE

- (a) Grantee shall be solely liable and responsible for payment of Grantee's and Grantee's employees' taxes of whatever kind, arising out of the execution or performance of the Contract. Grantee shall comply with all state and federal laws applicable to any such persons, including laws regarding wages, taxes, insurance, and workers' compensation. The GLO and the State of Texas shall not be liable to Grantee or its officers, agents, employees, representatives, contractors, assignees, designees, or others for the payment of taxes, or the provision of unemployment insurance, workers' compensation, or any benefit available to a state employee or employee of another governmental entity.
- (b) To the extent permitted by law, Grantee shall indemnify, defend, and hold harmless the State of Texas, the GLO, and/or their officers, agents, employees, representatives, contractors, assignees, and/or designees from and against any and all liability, actions, claims, demands, damages, proceedings, or suits, and all related costs, attorney fees, and expenses arising out of, connected with, or resulting from tax liability, unemployment insurance, or workers' compensation in the execution or performance of the Contract. Grantee and the GLO shall furnish timely written notice to each other of any such claim. Grantee shall be liable to pay all costs of defense including attorneys' fees. Grantee shall coordinate its defense with the Office of the Attorney General if the GLO or another Texas state agency is named defendants in any lawsuit and Grantee may

not agree to any settlement without first obtaining the written consent of the Office of the Attorney General.

9.03 INDEMNITY

As required under the Constitution and laws of the State of Texas, each Party understands that it is solely liable for any liability resulting from its acts or omissions. No act or omission of a Party shall be imputed to the other Party. Neither Party shall indemnify or defend the other Party.

9.04 ASSIGNMENT AND SUBCONTRACTS

- (a) Grantee shall not assign, transfer, or delegate any rights, obligations, or duties under this Contract without the prior written consent of the GLO and any attempted or purported assignment, transfer or delegation thereof without such consent shall be null and void. Notwithstanding this provision, it is mutually understood and agreed that Grantee may subcontract with others for some or all of the work to be performed. In no event may Grantee delegate or transfer its responsibility for use of the funds under this Contract.
- (b) Grantee is responsible for upholding the integrity of the procurement process and must comply with the organizational conflicts of interest and/or noncompetitive procurement practices as required by UGMS and applicable state law.
- (c) In any approved subcontracts, Grantee shall legally bind any such Subcontractors to perform, and make such Subcontractors subject to, all the duties, requirements, and obligations of Grantee as specified in this Contract. Nothing in this Contract shall be construed to relieve Grantee of the responsibility for ensuring that the work performed by Grantee and/or any of its Subcontractors comply with all terms and conditions of this Contract. **Grantee must submit a copy of each subcontract to the GLO within ten (10) business days after execution.**

9.05 RELATIONSHIP OF THE PARTIES

Grantee is associated with the GLO only for the purposes and to the extent specified in this Contract. Grantee is and shall be an independent contractor and, subject only to the terms of this Contract, shall have the sole right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Contract. Nothing contained in this Contract creates a partnership or joint venture, employer-employee or principal-agent relationships, or any liability whatsoever with respect to the indebtedness, liabilities, and obligations of Grantee or any other party. Grantee shall be solely responsible for, and the GLO shall have no obligation with respect to: withholding of income taxes, FICA, or any other taxes or fees; industrial or workers' compensation insurance coverage; participation in any group insurance plans available to State of Texas employees; participation or contributions by the State to the State Employees Retirement System; accumulation of vacation leave or sick leave; or unemployment compensation coverage provided by the State.

9.06 COMPLIANCE WITH CMP RULES

If the Project is located within the coastal zone established under Texas Natural Resources Code, Chapter 33, Grantee shall implement the Project in compliance with the CMP Rules and shall ensure that the performance of all Subcontractors is in compliance therewith.

9.07 COMPLIANCE WITH OTHER LAWS

In its performance under this Contract, Grantee shall comply with all applicable federal, state, county, and city laws, statutes, ordinances, and regulations. Grantee is deemed to know of and understand all applicable laws, statutes, ordinances, and regulations.

9.08 HISTORICALLY UNDERUTILIZED BUSINESSES

In accordance with State law, it is the GLO’s policy to assist Historically Underutilized Businesses (“HUBs”) whenever possible, to participate in providing goods and services to the GLO. The GLO encourages Grantee to adhere to this same philosophy in selecting Subcontractors to assist in fulfilling Grantee's performance under the Contract. The GLO encourages Grantees to partner with certified HUBs that participate in the Comptroller's Mentor Protégé Program. More information on this program is available on the Comptroller’s website.

9.09 NOTICES

Any notices required under this Contract shall be deemed delivered when deposited either in the U.S. mail, postage paid, certified, return receipt requested; or with a common carrier, overnight, signature required, to the appropriate address below:

GLO:

Texas General Land Office
1700 N. Congress Avenue, Mail Code 158
Austin, TX 78701
Attention: Contract Management Division

With a copy to:

Texas General Land Office
1700 N. Congress Avenue, Room 330
Austin, TX 78701
Attention: CMP Grant Administrator

Grantee:

Texas State University
601 University Dr.
San Marcos, Texas 78666
Attention: Vice President, Finance and Support Services

Notice given in any other manner shall be deemed effective only if and when received by the Party to be notified. Either Party may change its address for notice by written notice to the other Party as herein provided.

9.10 GOVERNING LAW AND VENUE

This Contract and the rights and obligations of the Parties hereto shall be governed by, and construed according to, the laws of the State of Texas, exclusive of conflicts of law provisions. Venue of any suit brought under this Contract shall be in a court of competent jurisdiction in Travis County, Texas. Subrecipient irrevocably waives any objection, including any objection to personal jurisdiction, the laying of venue, or based on forum non conveniens, which it has or may have to the bringing of any action or proceeding in such jurisdiction in respect of this Contract or any related document. **NOTHING IN THIS CONTRACT SHALL BE CONSTRUED AS A WAIVER OF SOVEREIGN IMMUNITY BY THE GLO OR THE STATE OF TEXAS.**

9.11 SEVERABILITY

If a court of competent jurisdiction determines any provision of this Contract is invalid, void, or unenforceable, the remaining terms, provisions, covenants, and conditions of this Contract shall remain in full force and effect, and shall in no way be affected, impaired, or invalidated.

9.12 DISPUTE RESOLUTION

Except as otherwise provided by statute, rule or regulation, Grantee shall use the dispute resolution process established in Chapter 2260 of the Texas Government Code and related rules to attempt to resolve any dispute under this Contract, including a claim for breach of contract by the GLO, that the Parties cannot resolve in the ordinary course of business. Neither the occurrence of an event giving rise to a breach of contract claim nor the pendency of such a claim constitutes grounds for Grantee to suspend performance of this Contract. Notwithstanding this provision, the GLO reserves all legal and equitable rights and remedies available to it. **NOTHING IN THIS SECTION SHALL BE CONSTRUED AS A WAIVER OF SOVEREIGN IMMUNITY BY THE GLO.**

9.13 INFRINGEMENT

- (a) To the extent allowed by law, Grantee shall indemnify, defend, and hold harmless the State of Texas, the GLO, and/or their officers, agents, employees, representatives, contractors, assignees, and/or designees from and against any and all liability, actions, claims, demands, damages, proceedings, or suits, and all related costs, attorney fees, and expenses arising out of, connected with, or resulting from infringement of any United States patent, copyright, trade or service mark, or any other intellectual or intangible property right that occurs in the performances or actions of Grantee pursuant to this Contract. Grantee and the GLO shall furnish timely written notice to each other of any such claim. Grantee shall be liable to pay all costs of defense including attorneys' fees. Grantee shall coordinate its defense with the Office of the Attorney General (OAG) when Texas

state agencies are named defendants in any lawsuit and Grantee may not agree to any settlement without first obtaining the written consent of the OAG.

- (b) Grantee shall have no liability under this section if the alleged infringement is caused in whole or in part by: (i) use of the product or service for a purpose or in a manner for which the product or service was not designed, (ii) any modification made to the product without Grantee's written approval, (iii) any modifications made to the product by Grantee pursuant to the GLO's specific instructions, or (iv) any use of the product or service by the GLO that is not in conformity with the terms of any applicable license agreement.
- (c) If Grantee becomes aware of an actual or potential claim, or the GLO provides Grantee with notice of an actual or potential claim, Grantee may (or in the case of an injunction against the GLO, shall), at Grantee's sole option and expense: (i) procure for the GLO the right to continue to use the affected portion of the product or service, or (ii) modify or replace the affected portion of the product or service with a functionally equivalent or superior product or service so that the GLO's use is non-infringing.

9.14 FORCE MAJEURE

Except with respect to the obligation of payments under this Contract, if either Party, after a good faith effort, is prevented from complying with any express or implied covenant of this Contract by reason of war; terrorism; rebellion; riots; strikes; acts of God; any valid order, rule, or regulation of governmental authority; or similar events that are beyond the control of the affected Party (collectively referred to as a "Force Majeure"), then, while so prevented, the affected Party's obligation to comply with such covenant shall be suspended, and the affected Party shall not be liable for damages for failure to comply with such covenant. In any such event, the Party claiming Force Majeure shall promptly notify the other Party of the Force Majeure event in writing and, if possible, such notice shall set forth the extent and duration thereof. The Party claiming Force Majeure shall exercise due diligence to prevent, eliminate, or overcome such Force Majeure event where it is possible to do so and shall resume performance at the earliest possible date. However, if non-performance continues for more than thirty (30) days, the GLO may, at its sole discretion, terminate this Contract immediately upon written notification to Grantee.

9.15 ENTIRE CONTRACT AND MODIFICATIONS

This Contract and its Attachments constitute the entire agreement of the Parties and are intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Any additional or conflicting terms in such Attachments shall be harmonized with this Contract to the extent possible. Unless an Attachment specifically displays a mutual intent to amend part of this Contract, conflicts in language shall be construed consistently with the terms of this Contract. Except as otherwise provided herein, this Contract may only be amended by a mutual, written agreement executed by the Parties' authorized representatives.

9.16 PROPER AUTHORITY

Each party hereto represents and warrants that the person executing this Contract on its behalf has full power and authority to legally bind its respective entity.

9.17 COUNTERPARTS

This Contract may be executed in any number of counterparts, each of which shall be an original, and all such counterparts shall together constitute but one and the same Contract.

9.18 OFFER SUBJECT TO CANCELLATION

If Grantee does not return the original signed Contract to the GLO within thirty (30) days of transmittal of the Contract to Grantee, grant funding for the Project may be cancelled.

9.19 SURVIVAL OF TERMS AND CONDITIONS

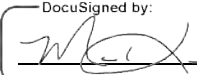
The terms and conditions of this Contract relating to the following subjects shall survive the termination of this Contract: definitions; interpretive provisions; project grant; authorized uses of GOMESA funds; state funding; general affirmations; recapture; overpayment; intellectual property; ownership and use; copyright; non-endorsement; grant acknowledgment; publications; signage; books and records; inspection and audit; records retention; confidentiality; public records; indemnification; infringement; independent contractor relationship; compliance with laws; notices; choice of law and venue; severability; merger and integration. Terms and conditions that, explicitly or by their nature, evidence the Parties' intent that they should survive the termination or expiration of this Contract shall so survive.

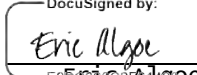
SIGNATURE PAGE FOLLOWS

SIGNATURE PAGE FOR GLO CONTRACT NO. 21-060-021-C810

GENERAL LAND OFFICE






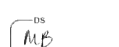
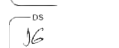
TEXAS STATE UNIVERSITY

DocuSigned by:

7C269F4374E7497
Mark A. Havens, Chief Clerk/
Deputy Land Commissioner

DocuSigned by:

Eric Algoe
By: Eric Algoe
Title: VPFSS

Date of execution: 11/16/2020

Date of execution: 11/16/2020

- OGC 
- PM 
- DIR 
- DD 
- SDD 
- DGC 
- GC 

ATTACHMENTS TO THIS CONTRACT:

- ATTACHMENT A: BUDGET AND WORK PLAN**
- ATTACHMENT B: GENERAL AFFIRMATIONS**

ATTACHMENTS FOLLOW

Project Name: The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control
Subrecipient: Texas State University
Contact: Nick Dornak
Reporting Frequency: Quarterly

Project Description:

Coastal communities face an elevated risk of water quality degradation, habitat loss, storm surge damage, and flooding as a result of natural disasters. Smaller communities are even more at risk as they often lack technical and financial resources to develop policies and plans and critical infrastructure needed to manage the economic and environmental risks associated with coastal hazards. The Texas Coastal Nonpoint Source (NPS) Pollution Program (Coastal NPS) identifies 11 rapidly growing, non-MS4 municipalities within the coastal zone boundary (CZB) that would benefit from receiving technical and financial assistance to implement sustainable stormwater management practices. These communities include Jamaica Beach, Beach City, Port Lavaca, Fulton, Aransas Pass, Port Aransas, Ingleside, Rockport, Port Isabel, Laguna Vista and South Padre Island. Other target communities may also be considered.

Texas State University (TXState) will lead a dynamic team of scientists, educators, engineers and communication professionals, collectively known as the Texas Coastal Collaborative (TCC), in a two-year coastwide effort to engage key stakeholders in these target communities. TCC partners include The Meadows Center for Water and the Environment (TXState), Texas Community and Watershed Partners (AgriLife), Texas Sea Grant (Sea Grant), and Doucet and Assoc. (Doucet). The TCC will select four communities and work closely with them to deliver customized local workshops. The workshops will help the communities create ordinances to consider for adoption, write or modify existing sustainable stormwater design manuals (SSMs) for adoption and regulatory program development, develop comprehensive NPS plans specific to their communities and create conceptual designs to construct green NPS infrastructure or retrofit existing infrastructure.

AgriLife will lead the community workshops that will include utilizing Green Infrastructure for Texas (GIFT) workshop information, Community Health and Resource Management (CHARM) mapping and piloting the Flow Assessment and Stormwater Technology (FAST) program. Doucet will direct engagement with local officials to prepare engineering designs, develop ordinances and regulations and adopt SSM. Sea Grant will enhance utility, sustainability and impact of project deliverables through local comprehensive planning and program facilitation. TXState will utilize an expansive coastal network to facilitate TCC programming, support citizen science programs and implement innovative school and community-based environmental education.

This project will generate highly visible, productive projects with measurable benefits and findings and approaches that can be easily translated to other communities. This universal program will lay the groundwork for methods that promote the continued adoption of: 1) Restoration of coastal natural resources, 2) Improved water quality, 3) Balance between

protection of coastal natural resources and public use of those resources, 4) Improved environmental management, and 5) Mitigation of coastal erosion. All activities will be co-branded with the Coastal NPS program.

Project Budget:

	GOMESA
Salaries	\$268,810.00
Fringe	\$76,069.00
Travel	\$20,438.00
Supplies	\$6,599.00
Equipment	\$0.00
Contractual	\$552,766.00
Other	\$7,200.00
Subtotal:	\$931,882.00
Indirect	\$68,118.00
Total:	\$1,000,000.00

Special Award Conditions:

1. This project must be completed as described in this work plan.
2. The GLO must approve any changes in the scope of work or budget requests that change the total project cost.
3. The CMP logo, including appropriate acknowledgment statement, must be printed on education/outreach materials, signs, final reports and/or publications.
4. Data must be shared in the appropriate manner as specified in the contract.
5. The subrecipient must coordinate with the GLO prior to issuing press releases, conducting media events, or otherwise engaging in media related communications for this project.

Task 1: Data Acquisition and Quality Assurance

TXState will document and implement data quality objectives (DQOs) and quality assurance/control (QA/QC) activities that ensure data of known and acceptable quality are used in and generated by this project. Data acquired for this project will be used for planning, modeling and mapping activities undertaken to improve community decision makers’ abilities to identify sources of, as well as prevent and mitigate nonpoint source pollution from urbanization and development in the CZB. Data will be acquired in accordance with the agency’s standards and preferably under an existing Quality Assurance Project Plan (QAPP). Research and data findings will be disseminated to the scientific research community and coastal managers, ensuring the content is visible, accessible, and independently understandable to general users.

A Data Sharing Plan will be established for this project by TXState. TXState will ensure adherence to the Data Sharing Plan by all subgrantee(s)/ subcontractor(s). An acquired data summary report for the project will be submitted with Final Report.

Data to be acquired:

- Geospatial data for CHARM and FAST workshops
- TCEQ Clean Rivers Program – Water Quality
- Existing stormwater manuals and criteria from coastal region communities
- Watershed Protection Plans (WPP)
 - Monitoring data
 - Outreach efforts
 - Project Plans
- Total Maximum Daily Load (TMDL) reports
 - Monitoring data
 - Outreach efforts
 - Project Plans
- Historic NPS outreach efforts by State of Texas
- Coastal Resiliency Master Plan
- Texas Stream Team (TST)/Citizen Science Data

Task 1 Deliverables:

1. List of data acquired
Due Date: 11/30/2020
2. Documentation of DQOs and QA/QC protocol for acquired data (Quarter 1)
Due Date: 12/31/2020
3. Draft Data Sharing Plan (Quarter 2)
Due Date: 2/28/2021
4. Final Data Sharing Plan (Quarter 3)
Due Date: 4/30/2021

Task 2: Candidate Selection

AgriLife will select four coastal communities to work with. AgriLife will begin the selection process through coordination with TXSTATE and GLO and focus activities on stakeholder groups in target communities and by disseminating a TCC information packet including a press release, survey and the Coastal SSM developed by the Coastal Zone Program. Based on survey results, AgriLife will conduct a regulatory review of six of communities and meet with decision makers and in those communities to complete a post-survey follow up. Based on these meetings, AgriLife will create a matrix to select the top four communities that show the most interest and greatest likelihood of success to begin working with.

Task 2: Deliverables

1. List of Stakeholders identified and TCC contact database
Due Date: 11/30/2020

2. Draft survey and matrix for target communities
Due Date: 11/30/2020
3. Dissemination of TCC informational packet to Target Communities (Quarter 2)
Due Date: 12/31/2020
4. TCC website and co-branding campaign completed (Quarter 2-8)
Due Date: 7/31/2022
5. Survey results and list of top 4 candidate communities
Due Date: 2/15/2021
6. Final decision matrix
Due Date: 2/28/2021
7. Notification of the four communities selected
Due Date: 3/30/2021

Task 3: Community Workshops

AgriLife will conduct a series of education and outreach workshops with the four selected communities in an approach that will be easily transferrable to other communities. Prior to workshop initiation, AgriLife will develop a contact database to track strategic outreach and create a TCC website to include co-branding with the Coastal Nonpoint Source program. Then, the entire TCC group will conduct 4-6 GIFT workshops on SSM, 4 TXSTATE (TST) trainings, 4-6 TST partner events with focus on education for youth and/or adults and engage and support watershed-based groups/meetings/events with ISDs, counties, etc. on SSM. TCC will also complete four CHARM workshops, one FAST workshop and host two to three (as needed) highly directed meetings with key stakeholders in the selected communities to achieve comprehensive plans and resolution/ordinance/SSM adoption goals.

Task 3 Deliverables:

1. Notes from Workshops - GIFT (4-6), CHARM (4), FAST (1); TST Training (4); TST Partner Events (4-6)
Due Date: Send in as conducted until 6/30/2022
2. Notes from meetings with key stakeholders (Quarters 3-8)
Due Date: Send in as conducted until 6/30/2022

Task 4: Target Community Planning and Adoption of Texas Coastal NPS Program Priorities

After the workshops, TCC partners will begin directed efforts to create a no-cost resolution in which the four selected communities pledge support of the TCC. Focus will be on cities, counties, ISDs, NGOs and local media. TCC will also start working with the communities to develop SSMs for adoption consideration. This effort will be highly directed by stakeholder meetings and the GIFT, CHARM and FAST workshop input. TCC partners will engage with three communities to consider/adopt ordinances supporting the Coastal NPS Program Management Measures TCC will work directly with community leaders to draft the ordinances. Additionally, aided by the GIFT, CHARM and FAST workshop input, TCC partners will engage

with 2-4 communities to develop comprehensive plans and prepare 10 community scale retrofits plans (schematic, cost, funding plans). If ordinance development partnerships are not established, supplemental actions may be required to ensure anticipated effort is equivalent to outcomes established in this scope.

Task 4 Deliverables:

1. Adoption of no-cost resolutions by 4 Target Communities and supporting municipalities/organizations (Quarter 4)
Due Date: 9/30/2021
2. Notification of SSM consideration (all or partial) by 4 Target Communities (Quarters 5-8)
Due Date: 6/30/2022
3. Notification of Ordinance consideration by 3 Target Communities (Quarters 5-8)
Due Date: 6/30/2022
4. Results from comprehensive planning undertaken by 2-4 Target Communities (Quarters 5-8)
Due Date: 6/30/2022
5. 10 Community Scale Retrofit Plans (includes schematic design, construction cost, funding plan) - (Quarter 8)
Due Date: 6/30/2022

Task 3 & 4 Travel:

Specific travel locations will be determined in the early phase of this project and is anticipated to be limited from staff offices/homes to meetings, workshops and conferences delivered to the target communities identified in the SOW, including:

Jamaica Beach, Beach City, Port Lavaca, Fulton, Aransas Pass, Port Aransas, Ingleside, Rockport, Port Isabel, Laguna Vista and South Padre Island

Texas Community and Watershed Partners (AgriLife)

- *GIFT workshops*
 - 4 workshop x 3 staff per workshop = 12 trips
- *CHARM workshops*
 - 4 workshops x 4 staff per workshop = 16 trips
- *Other meetings*
 - 4 meetings x 1 staff per workshops = 4 trips
- *Total*
 - 32 total trips (up to 12 locations, up to 8 staff members)

Texas Sea Grant (Sea Grant)

*Funds will be used to support mileage costs for Mr. Peacock from his Houston office, Ms. de Gennaro from her Brownsville office, Ms. Ashley Bennis and Ms. Ayers to travel to and from their office located Corpus Christi for meetings and workshops with the 11 target communities along the upper, middle and lower Texas Coast.

- 0-6 Months:
 - 22 trips (11 identified communities visited twice)
- 7-12 Months:
 - 16 trips (4 communities are selected, each have at least 4 follow up meetings)
- Year 2:
 - 16 trips (4 communities are selected and that each have at least 4 follow up meetings)
- *Total*
 - 54 total trips (various staff and various locations)

The Meadows Center for Water and the Environment (TXState)

- Meetings
 - 33 trips (average 1.5 staff visit all 11 identified communities twice)
- TST Trainings
 - 10 trips (average 2.5 staff conduct TST trainings for 4 selected communities)
- TST partner events
 - 20 trips (average 3.5 staff conduct 4-6 TST partner events for 4 selected communities)
- *GIFT workshops*
 - 4 trips (4 workshop x 1 staff per workshop)
- *CHARM workshops*
 - 4 trips (4 workshops x 1 staff per workshop)
- *EPA Stormwater Conferences*
 - 6 trips (2 conferences x 3 staff per conference)
- *Total*
 - 77 total trips (various staff and various locations)

Task 5: Coordination with the GLO's Coastal NPS Program

TXState will provide technical and fiscal oversight of the staff and/or subgrantee(s)/subcontractor(s) to ensure Tasks and Deliverables are acceptable and completed as scheduled and within budget. Project oversight status will be provided to GLO with quarterly progress reports (QPRs) and regular/timely communications. TXState will hire a Coastal Coordinator to serve as the primary point of contact for the GLO Project Manager and TCC partner organizations and communities. The Coastal Coordinator will ensure completion of all project deliverables and report to the Director of Watershed Services. TXState will participate in monthly conference calls with the GLO Contract Manager, Coastal NPS program contacts, and TCC partners to discuss project status and address any project concerns. TXState will also coordinate Semi-Annual Team meetings with TCC subgrantee(s)/subcontractor(s). Notes for the calls/meetings will be provide to the GLO Contract Manager within 7 days.

Task 5 Deliverables:

1. Copy of subgrantee(s)/subcontractor(s) contracts (Quarter 1)
Due Date: 11/30/2020
2. Notification of Hire of Full Time Coastal Coordinator (Quarter 1)
Due Date: 11/30/2020
3. = Call notes (Monthly X 24)
Due Date: Ongoing until 7/15/2022
4. Semi-Annual TCC Team Meeting notes (Semi-annual X 4)
Due Date: Ongoing until 7/15/2022

Task 6: Project Monitoring & Reporting

TXState will produce a Final Report summarizing all activities completed and conclusions reached during the project. The Final Report will describe project activities and identify and discuss the extent to which project goals and purposes are achieved, and the amount of funds actually spent on the project. The Final Report will emphasize successes, failures, lessons learned, and include acquired water quality data, retrofit plans and estimated NPS pollutant load reductions. The Final Report will summarize all the Task Reports in either the text or as appendices

TXState will prepare and submit all reports, deliverables, and requests for reimbursement as required in the contract, to CMPReceipts@GLO.TEXAS.GOV. Quarterly progress reports are due to CMPReceipts@GLO.TEXAS.GOV on the 10th day of every quarter of the year starting with January 10, 2021. Requests for reimbursement are to be submitted in a timely manner to CMPReceipts@GLO.TEXAS.GOV, as specified in the contract.

TXState will provide a final report describing work completed under each task, all data analysis and discussion, conclusions, and include photos of outreach efforts.

Task 6 Deliverables:

1. Quarterly progress reports and requests for reimbursement
Due Date: Ongoing until 8/30/2022
2. Draft final report
Due Date: 8/1/2022
3. Final report
Due Date: 8/30/2022

General Affirmations

To the extent they apply, Subrecipient affirms and agrees to the following, without exception:

1. Subrecipient represents and warrants that, in accordance with Section 2155.005 of the Texas Government Code, neither Subrecipient nor the firm, corporation, partnership, or institution represented by Subrecipient, or anyone acting for such a firm, corporation, partnership, or institution has (1) violated any provision of the Texas Free Enterprise and Antitrust Act of 1983, Chapter 15 of the Texas Business and Commerce Code, or the federal antitrust laws, or (2) communicated directly or indirectly the contents of this Contract or any solicitation response upon which this Contract is based to any competitor or any other person engaged in the same line of business as Subrecipient.
2. If the Contract is for services, Subrecipient shall comply with Section 2155.4441 of the Texas Government Code, requiring the purchase of products and materials produced in the State of Texas in performing service contracts.
3. Under Section 231.006 of the Family Code, the Subrecipient certifies that the individual or business entity named in this Contract, bid or application is not ineligible to receive the specified grant, loan, or payment and acknowledges that this Contract may be terminated and payment may be withheld if this certification is inaccurate.
4. A bid or an application for a contract, grant, or loan paid from state funds must include the name and social security number of the individual or sole proprietor and each partner, shareholder, or owner with an ownership interest of at least 25 percent of the business entity submitting the bid or application. Subrecipient certifies it has submitted this information to the GLO.
5. If the Contract is for the purchase or lease of computer equipment, as defined by Texas Health and Safety Code Section 361.952(2), Subrecipient certifies that it is in compliance with Subchapter Y, Chapter 361 of the Texas Health and Safety Code, related to the Computer Equipment Recycling Program and the Texas Commission on Environmental Quality rules in Title 30 Texas Administrative Code Chapter 328.
6. Pursuant to Section 2155.003 of the Texas Government Code, Subrecipient represents and warrants that it has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the Contract.
7. Payments due under the Contract shall be directly applied towards eliminating any debt or delinquency Subrecipient owes to the State of Texas including, but not limited to, delinquent taxes, delinquent student loan payments, and delinquent child support, regardless of when the debt or delinquency arises.
8. Upon request of the GLO, Subrecipient shall provide copies of its most recent business continuity and disaster recovery plans.

9. If the Contract is for consulting services governed by Texas Government Code Chapter 2254, Subchapter B, in accordance with Section 2254.033 of the Texas Government Code, relating to consulting services, Subrecipient certifies that it does not employ an individual who has been employed by The GLO or another agency at any time during the two years preceding the Subrecipient's submission of its offer to provide consulting services to the GLO or, in the alternative, Subrecipient, in its offer to provide consulting services to the GLO, disclosed the following: (i) the nature of the previous employment with the GLO or other state agency; (ii) the date the employment was terminated; and (iii) the annual rate of compensation for the employment at the time of its termination.
10. If the Contract is not for architecture, engineering, or construction services, except as otherwise provided by statute, rule, or regulation, Subrecipient must use the dispute resolution process provided for in Chapter 2260 of the Texas Government Code to attempt to resolve any dispute arising under the Contract. **NOTHING IN THIS SECTION SHALL BE CONSTRUED AS A WAIVER OF SOVEREIGN IMMUNITY BY THE GLO.**
11. If the Contract is for architecture, engineering, or construction services, subject to Texas Government Code, Section 2260.002 and Texas Civil Practice and Remedies Code Chapter 114, and except as otherwise provided by statute, rule, or regulation, Subrecipient shall use the dispute resolution process provided for in Chapter 2260 of the Texas Government Code to attempt to resolve all disputes arising under this Contract. Except as otherwise provided by statute, rule, or regulation, in accordance with the Texas Civil Practice and Remedies Code, Section 114.005, claims encompassed by Texas Government Code, Section 2260.002(3) and Texas Civil Practice and Remedies Code Section 114.002 shall be governed by the dispute resolution process set forth below in subsections (a)-(d). **NOTHING IN THIS SECTION SHALL BE CONSTRUED AS A WAIVER OF SOVEREIGN IMMUNITY BY THE GLO.**
 - a. Notwithstanding Texas Government Code, Chapter 2260.002(3) and Chapter 114.012 and any other statute or applicable law, if the Subrecipient's claim for breach of contract cannot be resolved by the parties in the ordinary course of business, Subrecipient may make a claim against the GLO for breach of contract and the GLO may assert a counterclaim against the Subrecipient as is contemplated by Texas Government Code, Chapter 2260, Subchapter B. In such event, Subrecipient must provide written notice to the GLO of a claim for breach of the Contract not later than the 180th day after the date of the event giving rise to the claim. The notice must state with particularity: (1) the nature of the alleged breach; (2) the amount the Subrecipient seeks as damages; and (3) the legal theory of recovery.
 - b. The chief administrative officer, or if designated in the Contract, another officer of the GLO, shall examine the claim and any counterclaim and negotiate with the Subrecipient in an effort to resolve them. The negotiation must begin no later than the 120th day after the date the claim is received, as is contemplated by Texas Government Code, Chapter 2260, Section 2260.052.
 - c. If the negotiation under paragraph (b) above results in the resolution of some disputed issues by agreement or in a settlement, the parties shall reduce the agreement or

- settlement to writing and each party shall sign the agreement or settlement. A partial settlement or resolution of a claim does not waive a party's rights under this Contract as to the parts of the claim that are not resolved.
- d. If a claim is not entirely resolved under paragraph (b) above, on or before the 270th day after the date the claim is filed with the GLO, unless the parties agree in writing to an extension of time, the parties may agree to mediate a claim made under this dispute resolution procedure. This dispute resolution procedure is the Subrecipient's sole and exclusive process for seeking a remedy for an alleged breach of contract by the GLO if the parties are unable to resolve their disputes as described in this section.
 - e. Nothing in the Contract shall be construed as a waiver of the state's or the GLO's sovereign immunity. This Contract shall not constitute or be construed as a waiver of any of the privileges, rights, defenses, remedies, or immunities available to the State of Texas. The failure to enforce, or any delay in the enforcement, of any privileges, rights, defenses, remedies, or immunities available to the State of Texas under this Contract or under applicable law shall not constitute a waiver of such privileges, rights, defenses, remedies or immunities or be considered as a basis for estoppel. The GLO does not waive any privileges, rights, defenses, or immunities available to it by entering into this Contract or by its conduct, or by the conduct of any representative of the GLO, prior to or subsequent to entering into this Contract.
 - f. Except as otherwise provided by statute, rule, or regulation, compliance with the dispute resolution process provided for in Texas Government Code, Chapter 2260, subchapter B and incorporated by reference in subsection (a)-(d) above is a condition precedent to the Subrecipient: (1) filing suit pursuant to Chapter 114 of the Civil Practices and Remedies Code; or (2) initiating a contested case hearing pursuant to Subchapter C of Chapter 2260 of the Texas Government Code.
12. If Chapter 2271 of the Texas Government Code applies to this Contract, Subrecipient verifies that it does not boycott Israel and will not boycott Israel during the term of the Contract.
 13. This Contract is contingent upon the continued availability of lawful appropriations by the Texas Legislature. Subrecipient understands that all obligations of the GLO under this Contract are subject to the availability of state funds. If such funds are not appropriated or become unavailable, the GLO may terminate the Contract. The Contract shall not be construed as creating a debt on behalf of the GLO in violation of Article III, Section 49a of the Texas Constitution.
 14. Subrecipient certifies that it is not listed on the federal government's terrorism watch list as described in Executive Order 13224.
 15. In accordance with Section 669.003 of the Texas Government Code, relating to contracting with the executive head of a state agency, Subrecipient certifies that it is not (1) the executive head of the GLO, (2) a person who at any time during the four years before the effective date

of the Contract was the executive head of the GLO, or (3) a person who employs a current or former executive head of the GLO.

16. Subrecipient represents and warrants that all statements and information prepared and submitted in connection with this Contract are current, complete, true, and accurate. Submitting a false statement or making a material misrepresentation during the performance of this Contract is a material breach of contract and may void the Contract or be grounds for its termination.
17. Pursuant to Section 2155.004(a) of the Texas Government Code, Subrecipient certifies that neither Subrecipient nor any person or entity represented by Subrecipient has received compensation from the GLO to participate in the preparation of the specifications or solicitation on which this Contract is based. Under Section 2155.004(b) of the Texas Government Code, Subrecipient certifies that the individual or business entity named in this Contract is not ineligible to receive the specified contract and acknowledges that the Contract may be terminated and payment withheld if this certification is inaccurate. This Section does not prohibit Subrecipient from providing free technical assistance.
18. Subrecipient represents and warrants that it is not engaged in business with Iran, Sudan, or a foreign terrorist organization, as prohibited by Section 2252.152 of the Texas Government Code.
19. In accordance with Section 2252.901 of the Texas Government Code, for the categories of contracts listed in that section, Subrecipient represents and warrants that none of its employees including, but not limited to, those authorized to provide services under the contract, were employees of the GLO during the twelve (12) month period immediately prior to the date of execution of the contract. Solely for professional services contracts as described by Chapter 2254 of the Texas Government Code, Subrecipient further represents and warrants that if a former employee of the GLO was employed by Subrecipient within one year of the employee's leaving the GLO, then such employee will not perform services on projects with Subrecipient that the employee worked on while employed by the GLO.
20. The Contract shall be governed by and construed in accordance with the laws of the State of Texas, without regard to the conflicts of law provisions. The venue of any suit arising under the Contract is fixed in any court of competent jurisdiction of Travis County, Texas, unless the specific venue is otherwise identified in a statute which directly names or otherwise identifies its applicability to the GLO.
21. IF THE CONTRACT IS NOT FOR ARCHITECTURE OR ENGINEERING SERVICES GOVERNED BY TEXAS GOVERNMENT CODE CHAPTER 2254, SUBRECIPIENT, TO THE EXTENT ALLOWED BY LAW, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE STATE OF TEXAS AND THE GLO, AND/OR THEIR OFFICERS, AGENTS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEY FEES, AND EXPENSES ARISING OUT OF, OR RESULTING FROM ANY ACTS OR OMISSIONS

OF SUBRECIPIENT OR ITS AGENTS, EMPLOYEES, SUBCONTRACTORS, ORDER FULFILLERS, OR SUPPLIERS OF SUBCONTRACTORS IN THE EXECUTION OR PERFORMANCE OF THE CONTRACT AND ANY PURCHASE ORDERS ISSUED UNDER THE CONTRACT. THE DEFENSE SHALL BE COORDINATED BY SUBRECIPIENT WITH THE OFFICE OF THE TEXAS ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND SUBRECIPIENT MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE TEXAS ATTORNEY GENERAL. SUBRECIPIENT AND THE GLO SHALL FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.

22. IF THE CONTRACT IS FOR ARCHITECTURE OR ENGINEERING SERVICES GOVERNED BY TEXAS GOVERNMENT CODE CHAPTER 2254, SUBRECIPIENT, TO THE EXTENT ALLOWED BY LAW, SHALL INDEMNIFY AND HOLD HARMLESS THE STATE OF TEXAS AND THE GLO, AND/OR THEIR OFFICERS, AGENTS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED DAMAGES, COSTS, ATTORNEY FEES, AND EXPENSES TO THE EXTENT CAUSED BY, ARISING OUT OF, OR RESULTING FROM ANY ACTS OF NEGLIGENCE, INTENTIONAL TORTS, WILLFUL MISCONDUCT, PERSONAL INJURY OR DAMAGE TO PROPERTY, AND/OR OTHERWISE RELATED TO SUBRECIPIENT'S PERFORMANCE, AND/OR FAILURES TO PAY A SUBCONTRACTOR OR SUPPLIER BY THE SUBRECIPIENT OR ITS AGENTS, EMPLOYEES, SUBCONTRACTORS, ORDER FULFILLERS, CONSULTANTS UNDER CONTRACT TO SUBRECIPIENT, OR ANY OTHER ENTITY OVER WHICH THE CONTRACTOR EXERCISES CONTROL, OR SUPPLIERS OF SUBCONTRACTORS IN THE EXECUTION OR PERFORMANCE OF THE CONTRACT. THE DEFENSE SHALL BE COORDINATED BY SUBRECIPIENT WITH THE OFFICE OF THE TEXAS ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND SUBRECIPIENT MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE TEXAS ATTORNEY GENERAL. SUBRECIPIENT AND THE GLO SHALL FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.
23. TO THE EXTENT ALLOWED BY LAW, SUBRECIPIENT SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE GLO AND THE STATE OF TEXAS FROM AND AGAINST ANY AND ALL CLAIMS, VIOLATIONS, MISAPPROPRIATIONS OR INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT, TRADE SECRET OR OTHER INTELLECTUAL PROPERTY RIGHTS AND/OR OTHER INTANGIBLE PROPERTY, PUBLICITY OR PRIVACY RIGHTS, AND/OR IN CONNECTION WITH OR ARISING FROM: (1) THE PERFORMANCE OR ACTIONS OF SUBRECIPIENT PURSUANT TO THIS CONTRACT; (2) ANY DELIVERABLE, WORK PRODUCT, CONFIGURED SERVICE OR OTHER SERVICE PROVIDED HEREUNDER; AND/OR (3) THE GLO'S AND/OR SUBRECIPIENT'S USE OF OR ACQUISITION OF ANY REQUESTED SERVICES OR OTHER ITEMS PROVIDED TO THE GLO BY

SUBRECIPIENT OR OTHERWISE TO WHICH THE GLO HAS ACCESS AS A RESULT OF SUBRECIPIENT'S PERFORMANCE UNDER THE CONTRACT. SUBRECIPIENT AND THE GLO SHALL FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM. SUBRECIPIENT SHALL BE LIABLE TO PAY ALL COSTS OF DEFENSE, INCLUDING ATTORNEYS' FEES. THE DEFENSE SHALL BE COORDINATED BY SUBRECIPIENT WITH THE OFFICE OF THE TEXAS ATTORNEY GENERAL (OAG) WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND SUBRECIPIENT MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM OAG. IN ADDITION, SUBRECIPIENT WILL REIMBURSE THE GLO AND THE STATE OF TEXAS FOR ANY CLAIMS, DAMAGES, COSTS, EXPENSES OR OTHER AMOUNTS, INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND COURT COSTS, ARISING FROM ANY SUCH CLAIM. IF THE GLO DETERMINES THAT A CONFLICT EXISTS BETWEEN ITS INTERESTS AND THOSE OF SUBRECIPIENT OR IF THE GLO IS REQUIRED BY APPLICABLE LAW TO SELECT SEPARATE COUNSEL, THE GLO WILL BE PERMITTED TO SELECT SEPARATE COUNSEL AND SUBRECIPIENT WILL PAY ALL REASONABLE COSTS OF THE GLO'S COUNSEL.

24. Subrecipient has disclosed in writing to the GLO all existing or potential conflicts of interest relative to the performance of the Contract.
25. Sections 2155.006 and 2261.053 of the Texas Government Code prohibit state agencies from accepting a solicitation response or awarding a contract that includes proposed financial participation by a person who, in the past five years, has been convicted of violating a federal law or assessed a penalty in connection with a contract involving relief for Hurricane Rita, Hurricane Katrina, or any other disaster, as defined by Section 418.004 of the Texas Government Code, occurring after September 24, 2005. Under Sections 2155.006 and 2261.053 of the Texas Government Code, Subrecipient certifies that the individual or business entity named in this Contract is not ineligible to receive the specified contract and acknowledges that this Contract may be terminated and payment withheld if this certification is inaccurate.
26. Subrecipient understands that the GLO will comply with the Texas Public Information Act (Chapter 552 of the Texas Government Code) as interpreted by judicial rulings and opinions of the Attorney General of the State of Texas. Information, documentation, and other material related to this Contract may be subject to public disclosure pursuant to the Texas Public Information Act. In accordance with Section 2252.907 of the Texas Government Code, Subrecipient shall make any information created or exchanged with the State/GLO pursuant to the Contract, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State or the GLO.
27. The person executing this Contract certifies that he/she is duly authorized to execute this Contract on his/her own behalf or on behalf of Subrecipient and legally empowered to contractually bind Subrecipient to the terms and conditions of the Contract and related documents.

28. If the Contract is for architectural or engineering services, pursuant to Section 2254.0031 of the Texas Government Code, which incorporates by reference Section 271.904(d) of the Texas Local Government Code, Subrecipient shall perform services (1) with professional skill and care ordinarily provided by competent engineers or architects practicing under the same or similar circumstances and professional license, and (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.
29. The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under the Contract or indirectly through a subcontract under the Contract. The acceptance of funds directly under the Contract or indirectly through a subcontract under the Contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. Under the direction of the legislative audit committee, an entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit. Subrecipient shall ensure that this paragraph concerning the authority to audit funds received indirectly by subcontractors through the Contract and the requirement to cooperate is included in any subcontract it awards. The GLO may unilaterally amend the Contract to comply with any rules and procedures of the state auditor in the implementation and enforcement of Section 2262.154 of the Texas Government Code.
30. Subrecipient certifies that neither it nor its principals are debarred, suspended, proposed for debarment, declared ineligible, or otherwise excluded from participation in the Contract by any state or federal agency.
31. Subrecipient expressly acknowledges that state funds may not be expended in connection with the purchase of an automated information system unless that system meets certain statutory requirements relating to accessibility by persons with visual impairments. Accordingly, Subrecipient represents and warrants to the GLO that any technology provided to the GLO for purchase pursuant to this Contract is capable, either by virtue of features included within the technology or because it is readily adaptable by use with other technology, of: providing equivalent access for effective use by both visual and non-visual means; presenting information, including prompts used for interactive communications, in formats intended for non-visual use; and being integrated into networks for obtaining, retrieving, and disseminating information used by individuals who are not blind or visually impaired. For purposes of this Section, the phrase “equivalent access” means a substantially similar ability to communicate with or make use of the technology, either directly by features incorporated within the technology or by other reasonable means such as assistive devices or services which would constitute reasonable accommodations under the Americans With Disabilities Act or similar state or federal laws. Examples of methods by which equivalent access may be provided include, but are not limited to, keyboard alternatives to mouse commands and other means of navigating graphical displays, and customizable display appearance.
32. If the Contract is for the purchase or lease of covered television equipment, as defined by Section 361.971(3) of the Texas Health and Safety Code, Subrecipient certifies its

compliance with Subchapter Z, Chapter 361 of the Texas Health and Safety Code, related to the Television Equipment Recycling Program.

33. Pursuant to Section 572.069 of the Texas Government Code, Subrecipient certifies it has not employed and will not employ a former state officer or employee who participated in a procurement or contract negotiations for the GLO involving Subrecipient within two (2) years after the date that the contract is signed or the procurement is terminated or withdrawn. This certification only applies to former state officers or employees whose state service or employment ceased on or after September 1, 2015.
34. The GLO does not tolerate any type of fraud. GLO policy promotes consistent, legal, and ethical organizational behavior by assigning responsibilities and providing guidelines to enforce controls. Any violations of law, agency policies, or standards of ethical conduct will be investigated, and appropriate actions will be taken. Subrecipient shall report any possible fraud, waste, or abuse that occurs in connection with the Contract to the GLO's Fraud Reporting hotline at (877) 888-0002.
35. The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract and Subrecipient agrees that the Contract can be terminated if Subrecipient knowingly or intentionally fails to comply with a requirement of that subchapter.
36. If Subrecipient, in its performance of the Contract, has access to a state computer system or database, Subrecipient must complete a cybersecurity training program certified under Texas Government Code Section 2054.519, as selected by the GLO. Subrecipient must complete the cybersecurity training program during the initial term of the Contract and during any renewal period. Subrecipient must verify in writing to the GLO its completion of the cybersecurity training program.
37. Under Section 2155.0061, Texas Government Code, Subrecipient certifies that the entity named in this contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.

Certificate Of Completion

Envelope Id: C7250C0C90A64E0C90BB8B9E8BDC8F06	Status: Completed
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Source Envelope:	
Document Pages: 39	Signatures: 2
Certificate Pages: 4	Initials: 7
AutoNav: Enabled	
Envelope Stamping: Enabled	Envelope Originator:
Time Zone: (UTC-06:00) Central Time (US & Canada)	Sandra Radosavljevic
	1700 Congress Ave
	Austin, TX 78701
	sandra.radosavljevic@glo.texas.gov
	IP Address: 67.204.29.235

Record Tracking

Status: Original	Holder: Sandra Radosavljevic	Location: DocuSign
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Signer Events

Andrew Hawkins
andrew.hawkins@glo.texas.gov
Staff Attorney
Texas General Land Office
Security Level: Email, Account Authentication (None)

Signature



Signature Adoption: Uploaded Signature Image
Using IP Address: 136.49.67.17

Timestamp

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Signed: 11/12/2020 3:28:35 PM

Electronic Record and Signature Disclosure:
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Ben Wilson
ben.wilson@glo.texas.gov
Texas General Land Office
Security Level: Email, Account Authentication (None)



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Electronic Record and Signature Disclosure:
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Julie McEntire
Julie.McEntire@glo.texas.gov
Texas General Land Office
Security Level: Email, Account Authentication (None)



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




Melissa Porter
melissa.porter@glo.texas.gov
Texas General Land Office
Security Level: Email, Account Authentication (None)



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Electronic Record and Signature Disclosure:
Not Offered via DocuSign

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<p>Marc Barenblat marc.barenblat@glo.texas.gov Deputy General Counsel Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	 <p>Signature Adoption: Pre-selected Style Using IP Address: 104.15.130.4</p>	<p>Sent: 11/13/2020 8:54:14 AM Viewed: 11/13/2020 2:02:16 PM Signed: 11/13/2020 2:04:06 PM</p>
<p>Jeff Gordon jeff.gordon@glo.texas.gov General Counsel Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	 <p>Signature Adoption: Pre-selected Style Using IP Address: 107.129.126.169</p>	<p>Sent: 11/13/2020 2:04:10 PM Viewed: 11/13/2020 2:05:37 PM Signed: 11/13/2020 2:05:44 PM</p>
<p>Eric Algoe e_a231@txstate.edu VPFSS Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	 <p>Signature Adoption: Pre-selected Style Using IP Address: 147.26.150.116</p>	<p>Sent: 11/13/2020 2:05:48 PM Viewed: 11/13/2020 2:07:34 PM Signed: 11/16/2020 11:06:05 AM</p>
<p>Mark A. Havens mark.havens@glo.texas.gov Chief Clerk and Deputy Land Commissioner Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	 <p>Signature Adoption: Drawn on Device Using IP Address: 162.193.135.244 Signed using mobile</p>	<p>Sent: 11/16/2020 11:06:10 AM Viewed: 11/16/2020 2:15:23 PM Signed: 11/16/2020 2:15:29 PM</p>
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<p>Kelly McBride kelly.mcbride@glo.texas.gov Director of Contract Management Texas General Land Office Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	Sent: 11/12/2020 2:33:04 PM Viewed: 11/16/2020 2:22:42 PM
<p>Sandra Radosavljevic Sandra.Radosavljevic@GLO.TEXAS.GOV Contract Specialist Texas General Land Office Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	Sent: 11/12/2020 2:33:04 PM Resent: 11/16/2020 2:15:35 PM
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<p>Susan Tipton-Hines Susan.Tipton-Hines@GLO.TEXAS.GOV Executive Assistant II Texas General Land Office Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	Sent: 11/12/2020 2:33:04 PM Viewed: 11/12/2020 2:37:34 PM
<p>Andrea Walmus Andrea.Walmus@glo.texas.gov Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	Sent: 11/12/2020 3:28:38 PM
<p>Janette Gibreal janette.gibreal@glo.texas.gov Texas General Land Office Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	Sent: 11/12/2020 9:15:10 PM

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<p>Stephanie Crenshaw stephanie.crenshaw@glo.texas.gov Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	<p>Sent: 11/13/2020 2:04:10 PM</p>
<p>Joanne Palmer jp57@txstate.edu Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	<p>Sent: 11/13/2020 2:05:48 PM Viewed: 11/17/2020 10:44:31 AM</p>
<p>Angie Williams Angie.Williams@glo.texas.gov Interim Director, Budget and Planning Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	<p>Sent: 11/16/2020 2:15:34 PM</p>
<p>Sharon Moore sharon.moore@glo.texas.gov Texas General Land Office Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	<p>Sent: 11/16/2020 2:15:34 PM</p>
<p>HUB HUB@glo.texas.gov Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	COPIED	<p>Sent: 11/16/2020 2:15:34 PM</p>


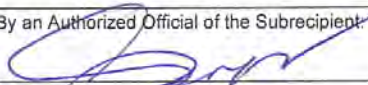
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Notary Events	Signature	Timestamp
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Completed	Security Checked	11/16/2020 2:15:34 PM

Payment Events	Status	Timestamps
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FDP Cost Reimbursement Subaward			
Federal Awarding Agency: Other [Type in Agency]		General Land Office	
Pass-Through Entity (PTE):		Subrecipient:	
Texas State University		Doucet and Associates, Inc.	
PTE PI: David Dornak		Sub PI: Tom Hegemier	
PTE Federal Award No: 21-060-021-C810		Subaward No: 21014-83570-2	
Project Title: The Texas Coast Collaborative-A Dynamic Approach to Hazard			
Subaward Period of Performance (Budget Period):		Amount Funded This Action (USD): \$ 117,452.50	
Start: 09/01/2020	End: 08/31/2021		
Estimated Project Period (if incrementally funded):		Incrementally Estimated Total (USD): \$ 234,905.00	
Start: 09/01/2020	End: 08/31/2022		
Terms and Conditions			
<p>1. PTE hereby awards a cost reimbursable Subaward, (as determined by 2 CFR 200.330), to Subrecipient. The Statement of Work and budget for this Subaward are as shown in Attachment 5. In its performance of Subaward work, Subrecipient shall be an independent entity and not an employee or agent of PTE.</p> <p>2. Subrecipient shall submit invoices not more often than monthly and not less frequently than quarterly for allowable costs incurred. Upon the receipt of proper invoices, the PTE agrees to process payments in accordance with this Subaward and 2 CFR 200.305. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include current and cumulative costs (including cost sharing), breakdown by major cost category, Subaward number, and certification, as required in 2 CFR 200.415(a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to the party's Financial Contact, shown in Attachment 3A.</p> <p>3. A final statement of cumulative costs incurred, including cost sharing, marked "FINAL" must be submitted to PTE's Financial Contact, as shown in Attachment 3A, not later than 60 days after the Project Period end date. The final statement of costs shall constitute Subrecipient's final financial report.</p> <p>4. All payments shall be considered provisional and are subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the Subrecipient.</p> <p>5. Matters concerning the technical performance of this Subaward shall be directed to the appropriate party's Principal Investigator as shown in Attachments 3A and 3B. Technical reports are required as shown in Attachment 4.</p> <p>6. Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this Subaward, and any changes requiring prior approval, shall be directed to the PTE's Authorized Official Contact and the Subrecipient's Principal Investigator Contact shown in Attachments 3A and 3B. Any such change made to this Subaward requires the written approval of each party's Authorized Official as shown in Attachments 3A and 3B.</p> <p>7. The PTE may issue non-substantive changes to the Period of Performance and budget Unilaterally. Unilateral modification shall be considered valid 14 days after receipt unless otherwise indicated by Subrecipient when sent to Subrecipient's Principal Investigator Contact, as shown in Attachment 3B.</p> <p>8. Each party shall be responsible for its negligent acts or omissions and the negligent acts or omissions of its employees, officers, or directors, to the extent allowed by law.</p> <p>9. Either party may terminate this Subaward with 30 days written notice. PTE notice shall be directed to the Authorized Official Contact, and Subrecipient notice shall be directed to the Authorized Official Contact as shown in Attachments 3A and 3B. PTE shall pay Subrecipient for termination costs as allowable under Uniform Guidance, 2 CFR 200, or 45 CFR Part 75 Appendix IX, as applicable.</p> <p>10. By signing this Subaward, including the attachments hereto which are hereby incorporated by reference, Subrecipient certifies that it will perform the Statement of Work in accordance with the terms and conditions of this Subaward and the applicable terms of the Federal Award, including the appropriate Research Terms and Conditions ("RTCs") of the Federal Awarding Agency, as referenced in Attachment 2. The parties further agree that they intend this Subaward to comply with all applicable laws, regulations, and requirements.</p>			
By an Authorized Official of the PTE:		By an Authorized Official of the Subrecipient:	
 Walter Horton (Dec 16, 2020 11:32 CST)			
Name: Walter E. Horton Jr., Ph.D.		Name: Amy Doucet	
Date: []		Date: 12/15/2020	
Title: Associate Vice President for Research and Federal Relations		Title: President	

FDP SEPT 2019

Attachment 1
Certifications and Assurances

Subaward Number:

21014-83570-2

Certification Regarding Lobbying (2 CFR 200.450)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement in accordance with 2 CFR 200.450.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters (2 CFR 200.213 and 2 CFR 180)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief that neither the Subrecipient nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, in accordance with 2 CFR 200.213 and 2 CFR 180.

Audit and Access to Records

Per 2 CFR 200.501- 200.521, Subrecipient certifies that it will provide notice of any adverse findings which impact this Subaward and will provide access to records as required by parts 2 CFR 200.336, 200.337, and 200.201 as applicable. If Subrecipient is not subject to the Single Audit Act, then Subrecipient will provide notice of the completion of any required audits and provide access to such audits upon request.

Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Attachment 2
Federal Award Terms and Conditions

Subaward Number
21014-83570-2

Required Data Elements

The data elements required by Uniform
Guidance are incorporated in the attached Federal Award.

Awarding Agency Institute (If Applicable)

Federal Award Issue Date	FAIN	CFDA No.
		15.435
CFDA Title		
GoMESA		
Key Personnel Per NOA		

This Subaward Is:

- Research & Development Subject to FFATA

General Terms and Conditions

By signing this Subaward, Subrecipient agrees to the following:

1. To abide by the conditions on activities and restrictions on expenditure of federal funds in appropriations acts that are applicable to this Subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the Federal Awarding Agency's website:
2. 2 CFR 200
3. The Federal Awarding Agency's grants policy guidance, including addenda in effect as of the beginning date of the period of performance or as amended found at:
4. Research Terms and Conditions, including any Federal Awarding Agency's Specific Requirements found at:
 except for the following :
 - a. No-cost extensions require the written approval of the PTE. Any requests for a no-cost extension shall be directed to the Administrative Contact shown in Attachment 3A, not less than 30 days prior to the desired effective date of the requested change.
 - b. Any payment mechanisms and financial reporting requirements described in the applicable Federal Awarding Agency Terms and Conditions and Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward; and
 - c. Any prior approvals are to be sought from the PTE and not the Federal Awarding Agency.
 - d. Title to equipment as defined in 2 CFR 200.33 that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall vest in the Subrecipient subject to the conditions specified in 2 CFR 200.313.
 - e. Prior approval must be sought for a change in Subrecipient PI or change in Key Personnel (defined as listed on the NOA).
5. Treatment of program income: Additive

Special Terms and Conditions:

Data Sharing and Access:

Subrecipient agrees to comply with the Federal Awarding Agency's data sharing and/or access requirements as reflected in the NOA or the Federal Awarding Agency's standard terms and conditions as referenced in General Terms and Conditions 1-4 above.

No additional requirements

Data Rights:

Subrecipient grants to PTE the right to use data created in the performance of this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Copyrights:

Subrecipient Grants to PTE an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Subrecipient grants to PTE the right to use any written progress reports and deliverables created under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its Federal Award.

Promoting Objectivity in Research (COI):

Subrecipient must designate herein which entity's Financial Conflicts of Interest policy (COI) will apply: Subrecipient

If applying its own COI policy, by execution of this Subaward, Subrecipient certifies that its policy complies with the requirements of the relevant Federal Awarding Agency as identified herein: General Land Office

Subrecipient shall report any financial conflict of interest to PTE's Administrative Representative or COI contact, as designated on Attachment 3A. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to Federal Awarding Agency. Such report shall be made before expenditure of funds authorized in this Subaward and within 45 days of any subsequently identified COI.

Work Involving Human or Vertebrate Animals (Select Applicable Options)

No Human or Vertebrate Animals

This section left intentionally blank.

Human Subjects Data (Select One)

This section left intentionally blank

This section left intentionally blank

Additional Terms

By agreeing to this subaward, Institution is certifying they, and their PI, are in good standing with System for Award Management (SAM.gov).

Attachment 3A
Pass-Through Entity (PTE) Contacts

Subaward Number:

21014-83570-2

PTE Information

Entity Name:

Legal Address:

Website:

PTE Contacts

Central Email:

Principal Investigator Name:

Email: Telephone Number:

Administrative Contact Name:

Email: Telephone Number:

COI Contact email (if different to above):

Financial Contact Name:

Email: Telephone Number:

Email invoices? Yes No Invoice email (if different):

Authorized Official Name:

Email: Telephone Number:

PI Address:

601 University Drive, SLH 213
ATTN: David Dornak
San Marcos, TX 78666-4684

Administrative Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Invoice Address:

Office of Research and Sponsored Programs
601 University Drive, JCK 420
ATTN: ORSP
San Marcos, TX 78666-4684

Attachment 3B
Subrecipient Contacts

Subaward Number:
21014-83570-2

Subrecipient Information for FFATA reporting

Entity's UEI/DUNS Name: Doucet and Associates, Inc.

EIN No.: 74-2638150 Institution Type: Small Business

UEI/DUNS: 84-554-9211 Currently registered in SAM.gov: Yes No

Exempt from reporting executive compensation: Yes No (if no, complete 3Bpg2)

Parent UEI/DUNS: This section for U.S. Entities: Zip Code Look-up

Place of Performance Address Congressional District: 21 Zip Code+4: 78735

7401 Highway 71 Wet, Suite 160, Austin, Texas 78735

Subrecipient Contacts

Central Email:

Website: www.doucetengineers.com

Principal Investigator Name: Tom Hegemier

Email: thegemier@doucetengineers.com Telephone Number: 512-583-2635

Administrative Contact Name: Helen Lee

Email: hlee@doucetengineers.com Telephone Number: 512-583-2620

Financial Contact Name: Craig Trupo

Email: ctrupo@doucetengineers.com Telephone Number: 512-583-2600

Invoice/Payment Email: accounting@doucetengineers.com

Authorized Official Name: Duke Altman

Email: daltman@doucetengineers.com Telephone Number: 512-583-2635

Legal Address:

7401 Highway 71 Wet, Suite 160, Austin, Texas 78735

Administrative Address:

7401 Highway 71 Wet, Suite 160, Austin, Texas 78735

Payment Address:

7401 Highway 71 Wet, Suite 160, Austin, Texas 78735

Attachment 3B-2
Highest Compensated Officers

Subaward Number:
21014-83570-2

Subrecipient:

Institution Name: Doucet and Associates, Inc.

PI Name: Tom Hegemier

Highest Compensated Officers

The names and total compensation of the five most highly compensated officers of the entity(ies) must be listed if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue Code of 1986.

Officer 1 Name:

Officer 1 Compensation:

Officer 2 Name:

Officer 2 Compensation:

Officer 3 Name:

Officer 3 Compensation:

Officer 4 Name:

Officer 4 Compensation:

Officer 5 Name:

Officer 5 Compensation:

Attachment 5
Statement of Work, Cost Sharing, Indirects & Budget

Subaward Number:
21014-83570-2

Statement of Work

Below Attached, pages

If award is FFATA eligible and SOW exceeds 4000 characters, include a *Subrecipient Federal Award Project Description*

Budget Information

Indirect Information Indirect Cost Rate (IDC) Applied <input type="text" value=""/> %	Cost Sharing <input type="text" value="No"/>
Rate Type: <input type="text" value="Total Direct Costs"/>	If Yes, include Amount: \$ <input type="text" value=""/>

Budget Details Below Attached, pages

Budget Totals

Direct Costs \$

Indirect Costs \$

Total Costs \$

All amounts are in United States Dollars

Subaward Number:
21014-83570-2

Attachment 6
Notice of Award (NOA) and any additional documents

- The following pages include the NOA and if applicable any additional documentation referenced throughout this Subaward.
- Not incorporating the NOA or any additional documentation to this Subaward.



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FOR WATER AND THE ENVIRONMENT

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