Final Report for Texas Commission on Environmental Quality for Seawall Recycling Contract (#582-19-90210)

Compiled by: Park Board of Trustees of the City of Galveston (ID# 17408510018)



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As contracted (granted) under Water Code §5.124, the Texas Commission on Environmental Quality (TCEQ), and the named Performing Party (Park Board), entered into an agreement (Contract) to cooperatively conduct authorized governmental functions and activities under the laws of the State of Texas. The Park Board assures compliance with the provisions found in UGMS III Subpart B.14 State assurances. This agreement was funded with federal grant money.

Date effective: 9/1/2018 - 8/31/2020

Maximum Authorized Reimbursement: \$18,419.50

TCEQ's Project Manager: Cynthia Clevenger

CFDA Number: 66.456

Federal Grant Number: CE-00655006

PREPARED IN COOPERATION WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND U.S. ENVIRONMENTAL PROTECTION AGENCY

Project description

For this project, the Park Board of Trustees subcontracted with Artist Boat. The project aimed to provide recycling opportunities along approximately six miles of Galveston's seawall to reduce litter that could become marine debris effecting the stormwater system and Galveston Bay. Funding went toward the purchase of 20 recycling cans to be placed at the seawall bus stops and one, six-compartment recycle station that can be moved to areas of highest need.

Introduction

Marine debris, also known as marine litter, is human created waste that has deliberately or accidentally been released in a lake, sea, ocean, or waterway. Marine debris can be simple items such as a discarded water bottle or soda can, cigarette butt, or plastic bag that ends up in the ocean. Marine debris injures and kills marine life, interferes with navigation safety, and poses a threat to human health. Marine debris may cause injury or death through drowning, injury through entanglement and internal injuries, or starvation following ingestion.

Oceans are particularly vulnerable to pollution and impact from marine debris. Most of the trash and debris that covers our beaches comes from storm drains and sewers, as well as from shoreline and recreational activities such as beachgoing. Trash and debris that is not removed and properly disposed of enters the ocean. Galveston Island is a barrier island on the Texas Gulf Coast in the United States, about 50 miles southeast of Houston.

*How plastic is nonbiodegradable and recycling breaks down

Artist Boat is a 501(c)(3) whose mission is to promote awareness and preservation of coastal margins and the marine environment through the disciplines of the sciences and the arts. Among many goals, they aim to expand engagement in existing programming to inform and inspire more people of all ages to appreciate and protect the Texas Gulf Coast, as well as to educate and inspire people to action to preserve and protect coastal and marine habitats.

The Galveston Park Board of Trustees of the City of Galveston's mission is to promote Galveston Island, its natural resources, attractions, and heritage; to attract visitors to Galveston Island; and to assure that Galveston's assets provide visitors and residents with exemplary experiences in an environment that is safe, clean, accessible, fun, and environmentally sensitive.

Recycling helps to minimize marine debris pollution. Examples of the waste that can be recycled includes metals (such as aluminum and steel), glass, paper, and plastic. With proper implementation, recycling has the capacity to reduce the use of natural resources and therefore reduce the already devastating human degradation of the environment. Many individuals exist, but levels of public awareness and government involvement can play a role in significantly improving recycling within a community. The goal of this project was to improve the recycling system along our public beaches and shorelines, for the goal of preserving our shorelines natural beauty by preventing marine debris pollution on Galveston Island.

Project Significance and Background

The Park Board and Artist Boat have an ongoing relationship and a history of partnering through environmentally related projects, including but not necessarily limited to dune restoration, recycling, and beach education and promotion. The Texas Commission on Environmental Quality (TCEQ) has a mission to strive to protect the state's public health and natural resources consistent with sustainable economic development. Their goal is clean air, clean water, and the safe management of waste. This project was an organized effort between all three organizations to utilize the federal funding to install and manage recycling cans, for the shared goal of preserving water quality of our shared ocean.

Methods

These were tasks set forth by the Contract between TCEQ and Park Board.

Task 1: Project Administration

Objective: The City of Galveston Park Board of Trustees will effectively administer, coordinate, and monitor all work performed under this project, including technical and financial supervision and preparation of status reports through subtasks outlined in contract, including:

- 1. Project Oversight
- 2. Quarterly QPRs
- 3. Reimbursement Forms
- 4. Contract Communication
- 5. Coordination Meeting with the TCEQ's Galveston Bay Estuary Program

Problems or Obstacles Encountered: Project Management and Oversight changed when Jesse Ojeda's employment was terminated. Project Manager is now Larry Jackson with the assistance of Bianca Broman.

Task 2: Procure Recycling Receptacles

- 1. Purchasing Receptacles
- 2. Signage and Communication on Receptacles

Objective: To purchase twenty, 58-gallon cans and one, six-compartment station. To encourage proper use of the recycle cans and station they will be retrofitted with restrictor holes installed from the manufacturer.

Task 3: Deploy receptacles

Individual bins were successfully distributed along the Island's Seawall as shown in the following maps and images.







Task 4

Pick up recyclable materials and record data

Collect and analyze material – When the Park Board assesses it is safe to resume normal operations after heightened safety protocols due to COVID-19, staff will collect materials, analyze data and report to TCEQ as a continued dedication to the partnership with GBEP.

Recycling will take place every two weeks (second and fourth Wednesday of every month). Monthly totals will be reported for record keeping. Each location is color coordinated as follows:

29 th
37 th
53 rd
61 st
64 th
69 th
Seawall

The Park Board will document how much plastic and aluminum were collected at each recycling station location along each month, along with how many hours and personnel were required to complete the task. Once the monthly totals are reported, the Coastal Zone Stewardship Coordinator will compile the numbers into maps, figures, and reports (quarterly and annually). The "Seawall" section pertains to all cans along seawall (as mapped in previous figures). The other recycling stations are on the beach and are color coded.



The following data to be determined.

Date:								
Location	Pounds of Trash	Pounds of Plastic	Pounds of Aluminum	Hours	Staff			
29 th								
37 th								
53 rd								
61 st								
64 th								
69 th								
Seawall								

Date:								
Location	Pounds of Trash	Pounds of Plastic	Pounds of Aluminum	Hours	Staff			
29 th								
37 th								
53 rd								
61 st								
64 th								
69 th								
Seawall								

Task 5

Final Project Report - Complete

Draft Final Project Report - Complete

Final Project Report - Complete

Results and Observations

Unfortunately, the COVID-19 pandemic did not allow the Park Board to collect data by tracking and sorting in a effort to prevent the spread of disease to the staff's front line employees. It is however something the Park Board will begin to track as soon as it is safely possible to do so.

References

TCEQ Permitting Requirements Webpage

Texas Administrative Code

Clean Water Act

Natural Resources Code