

1 Introduction

1.1 Permits Requested

The Cumberland Harbour Property Owners Association (CHPOA) is applying for a Georgia Coastal Marshlands Protection (CMP) permit for the installation of a living shoreline along Point Peter Creek adjacent to South Point in St Marys, Camden County, Georgia (30.727151°, -81.506868°) (Figure 1-1). The proposed project includes work to be performed below the ordinary high-water mark. This document provides information in support of CHPOA's request for the CMP permit and will be submitted to the Georgia Department of Natural Resources (Georgia DNR), Coastal Resources Division (CRD), and Georgia's Environmental Protection Division (EPD), Water Protection Branch.

1.2 Owner/Applicant

The CHPOA is the sole owner of the subject property. Water Environment Consultants (WEC) is serving as its agent for this project application. The applicant's contact information is given below.

General Applicant	Applicant's Agent
Mr. Keith Danos President, Board of Directors Cumberland Harbour Property Owners Association 354 Spinnaker Drive St Marys, GA 31558 Phone: 240-277-1138	Mr. Matt Goodrich Water Environment Consultants P.O. Box 2221 Mount Pleasant, SC 29465 (843) 375-9022

1.3 Plan of Application

This narrative project description and supporting documentation is an attachment to the permit application. A completed Joint Application and a Revocable License Request are included with this document as Exhibit A. Also included is a Federal Consistency Certification Statement. The Joint Application was not submitted to the US Army Corps of Engineers (USACE) Savannah District; instead CHPOA submitted a Pre-Construction Notification for use of the USACE's Nationwide Permit 13 which covers living shorelines.

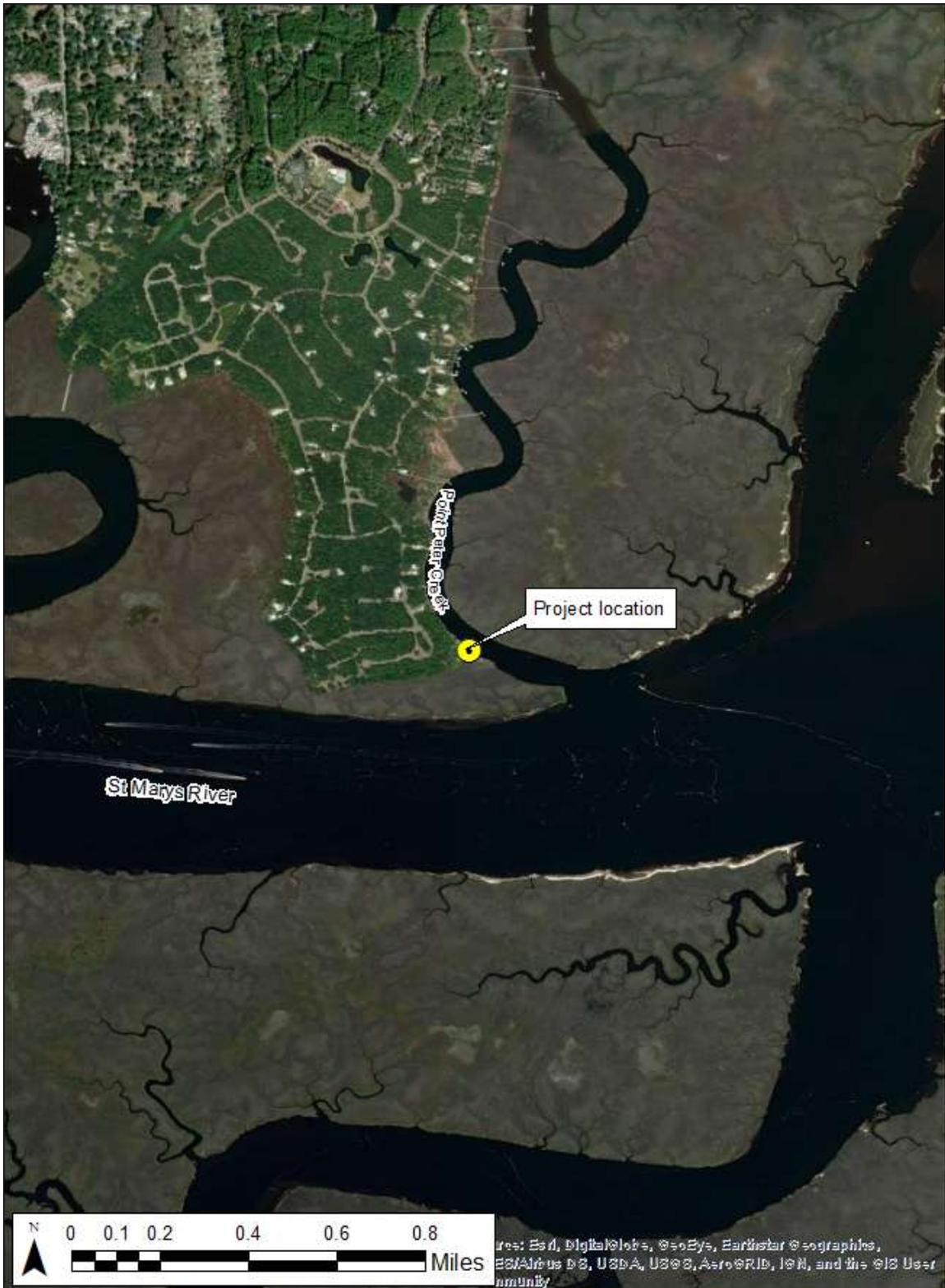


Figure 1-1. Map showing the Cumberland Harbour South Point living shoreline project location

2 Project Summary

The Cumberland Harbour community is located in St Marys, GA. The property is bordered by the St Marys River to the south, Point Peter Creek to the east, and the North River to the west. South Point park is located at the southernmost tip of the Cumberland Harbour community (Figure 1-1).

Cumberland Harbour is a planned coastal community developed within a natural environment including brackish waterways, marshes, upland maritime forests, and documented historic and cultural resources. Within the community is a common area known as South Point park, which acts as an outdoor recreation area of uplands and marsh with access to Point Peter Creek. The bank in this area of Point Peter Creek has experienced excessive erosion in recent history. The area of South Point is increasingly susceptible to erosion from a number of natural and man-made forces. The proximity of South Point to the confluence of Point Peter Creek and the St Marys River exposes the shoreline to boat wakes, tidal currents, upland runoff, wind-driven waves and storm surge. The photo in Figure 2-1 shows the existing conditions of the South Point park bank.

An evaluation of changes to South Point, comparing historic shoreline layers in the Georgia Department of Natural Resources (DNR) Geographic Information System (GIS) mapping website, indicates that a large amount of uplands has eroded away since the 1800s. Mapping data of historical shorelines that has been compiled by the Georgia DNR indicates that 115 feet of shoreline along South Point has been lost since 1933 (an average rate of 1.3 ft per year) and has more recently been eroding at a rate of about 1.7 ft per year.

Installing a living shoreline to prevent further coastal erosion is important in avoiding any further loss of Cumberland Harbour property and preserving the natural resources that significantly contribute to a healthy local and regional ecosystem. Due to the apparent continual erosion of the South Point shoreline, the CHPOA is concerned that more community property and natural habitat will be lost unless a shoreline stabilization project is implemented at South Point. If not abated, the erosion will continue to cause the loss of community property and potentially impact adjacent private properties.

The proposed project will use a living shoreline approach that combines articulated concrete block (ACB) mats with natural elements. The natural materials used in the construction of the living shoreline will promote shoreline resilience while blending in with the natural environment, improve water quality, and create valuable habitat that will mature over time. This shoreline stabilization approach has been successful in other coastal projects, including one on Daniel Island, South Carolina (Figure 2-2).

The applicant proposes the installation of approximately 244 linear feet of ACB mats (Conteches Armorflex 50) with native vegetative plantings along the bank of Point Peter Creek adjacent to the Cumberland Harbour community. The ACB mats will measure 8-ft wide and range from 35 to 60 feet long, with recycled concrete flank protection on the north and south ends. The ACB mats are proposed to extend approximately -6 feet Mean Low Water (MLW) into Point Peter Creek. Installation includes fine grading the bank, placement of geotextile and gravel substrate on a slope above MLW (-3 feet NAVD88). The ACB mats are to be installed by a barge-based crane. The project will include an upland

berm to reduce inundation of the park area during storm events. The berm will be located upland from the DNR marsh jurisdiction line.

A plan and section views of the installation, as well as a list of potential vegetative plantings, are shown in Figure 2-3 and 2-4. Full-size construction drawings are provided in Exhibit B.

The impacts from the proposed living shoreline installation occur below the jurisdictional line impacting tidal waters and wetland. The total fill amount is proposed to be 244 cy. The total area of impact is 12,201 ft² (or 0.28 acres). The individual areas include:

- 11,844 ft² of ACB mats with a rock drainage layer
- 357 ft² of recycled concrete for flank protection

While these impacts are permanent, they should not be considered loss of habitat as the project creates a living shoreline environment with improved function.

For project construction, equipment will operate from the upland and from a barge-based crane. The proposed project will be conducted in compliance with applicable erosion and sediment control requirements and best management practices will be implemented to avoid secondary impacts to adjacent waters.



Figure 2-1. Photo showing the existing condition of the South Point park bank.



Figure 2-2. Vegetated ACB mats on banks of Daniel Island, SC

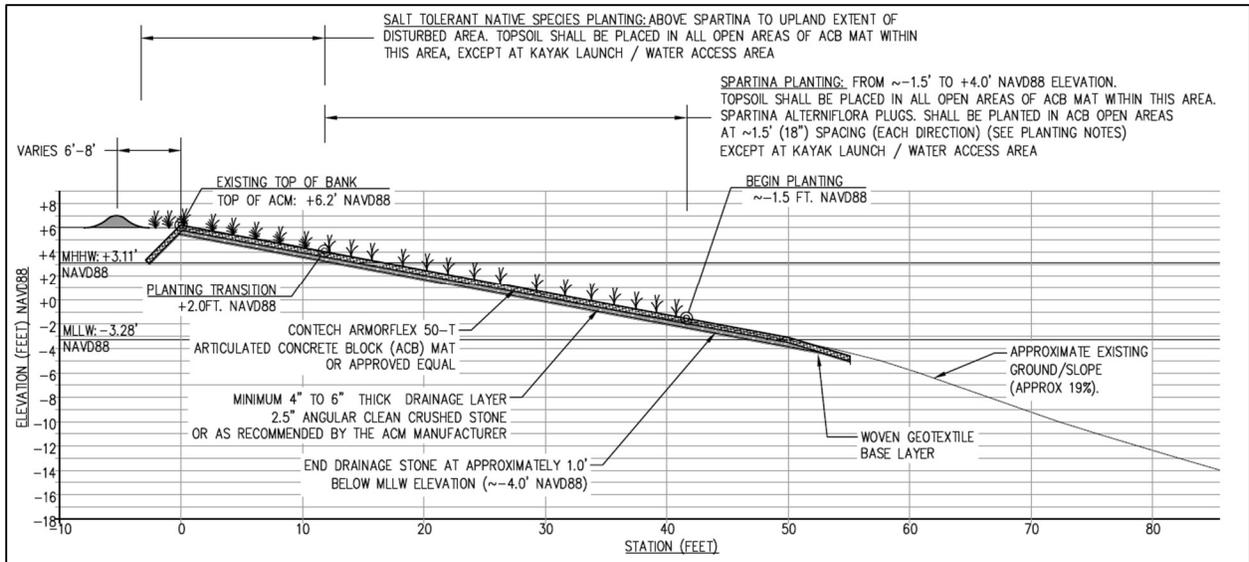


Figure 2-4. Section view of proposed living shoreline features along the South Point park (Section A-A from Figure 2-3).

3 Project Drawings & Site Plans

The subheadings in this section include specific items from CRD's checklist provided in "Instructions for Completing a Georgia Coastal Marshlands Protection Permit Application."

Marshland Component of the Project:

Permit drawings are included as Exhibit B. The drawings show:

- Existing features within jurisdiction
- Proposed features within jurisdiction
- Section/Elevation view showing a cross-section view of the proposed project
- Depth of water at the water-ward face of the proposed project

As described in Section 2, the proposed living shoreline installation occurs below the jurisdictional line impacting tidal waters and wetland. The total area of impact is 12,201 ft² (or 0.28 acres). The individual areas include:

- 11,844 ft² of ACB mats with a rock drainage layer
- 357 ft² of recycled concrete for flank protection

While these impacts are permanent, they should not be considered loss of habitat as the project creates a living shoreline environment with improved function.

Upland Component of the Project:

The project will include a low-lying earthen berm to reduce inundation of the park area during storm events and high tide flooding that will occur with future sea-level rise. The berm will be located upland from the DNR marsh jurisdiction line but within the marshlands buffer. The perimeter berm will rise only 1 to 2 feet above the existing grade. The center of the berm will be a walkway, and the side slopes will be landscaped with native vegetation.

Marshlands Buffers for Upland Component:

The marshlands buffer is delineated in the project drawings. The existing buffer is a combination of maritime forest and a grassed park area that includes trees (Figure 2-1). As mentioned above, the project will include construction of a low-lying earthen berm within the marshlands buffer. The center of the berm will be a walkway to provide pedestrian access for passive recreation, and the side slopes will be landscaped with native vegetation. The planting and grading are designed to enhance stormwater treatment. Stormwater within the berm area will be directed to a 10-inch diameter pipe with an in-line check valve installed at low spot along berm.

Stormwater Management Plan of the Upland Component:

The proposed project will include Erosion, Sedimentation, and Pollution Control (ES&PC) plans prepared in accordance with the City of St Mary's ES&PC Ordinance and the Georgia E&S Act of 1975.

Impervious Surface calculations of the Upland Component:

The project will not include any impervious surface.

4 Adjoining Land Owners

Information pertaining to adjacent land owners is provided below.

Adjacent Land Owner:
1. ROMSPEN (CH) LLC 162 CUMBERLAND STREET TORONTO, ON M5R 3N5 Parcel ID: 160C 1002
2. M3 AMERICAN INVESTMENTS LLC 250 NORTH ORANGE AVENUE SUITE 610 ORLANDO, FL 32801 Parcel ID: 160C 160Z

5 Alternative Analysis

The purpose of the proposed living shoreline installation is to provide bank restoration and stabilization. While other alternatives, including rip-rap, construction of a wooden bulkhead, installation of steel sheet pile bulkhead, or the no-action alternative were considered, it was determined that the proposed living shoreline project had the smallest environmental impacts and provided the greatest environmental benefits while meeting the objective of stabilizing the shoreline. The proposed project will result in the restoration of the bank of South Point, while stabilizing the shoreline and alleviating future erosion. Furthermore, the proposed creation of vegetated habitat will add beneficial habitat and ecological function to the area.

6 Landfill or Hazardous Waste Statement

The proposed work will not take place over a landfill or hazardous waste site.

7 Water Quality Certification

Concurrently, the applicant is submitting a Pre-Construction Notification (PCN) requesting authorization for use of the U.S. Army Corps of Engineers (USACE) Nationwide Permit Number 13 (NWP 13) to cover the proposed project.

The Georgia Department of Natural Resources, Environmental Protection Division (Georgia EPD) issued a conditional Water Quality Certification for all NWPs in Georgia, pursuant to Section 401 of the Clean Water Act. Therefore, the proposed project will not require individual Section 401 Water Quality

Certification. The project will comply with the Savannah District's Regional Conditions, including the applicable provisions issued by Georgia EPD outlined in Appendix C of the Regional Conditions:

1. The applicant will conduct all activities in a manner that will ensure water quality is adequate or necessary to protect and maintain designated uses.
 - a. To prevent or avoid degradation of water quality downstream, the applicant will install in-water Best Management Practices to the extent practical and feasible, to minimize total suspended solids and sedimentation for any work conducted within a state water or within the delineated boundaries of wetlands.
 - b. In order to prevent or avoid violations of state water quality standards, the applicant will ensure that any fill placed in state waters must be clean fill that is free of solid waste, toxic, or hazardous contaminants.

8 Erosion and Sedimentation Statement

The applicant agrees that the project will be conducted in compliance with applicable erosion and sediment control responsibilities, including the City of St Mary's ES&PC Ordinance and the Georgia E&S Act of 1975.

9 Public Interest Statement

The proposed project is not contrary to the public interest, specific of the following considerations:

- a) The proposed work will not create any harmful obstruction to or the alteration of the natural flow of navigational water within the affected area.
- b) The proposed project will not create unreasonably harmful or increased erosion, shoaling of channels, or stagnant areas of water.
- c) The granting of a permit and the completion of the proposed work will not unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, wildlife, or other resources, including but not limited to water and oxygen supply.