

# FLORIDA COASTAL MANAGEMENT PROGRAM

## COASTAL PARTNERSHIP INITIATIVE<sup>1</sup>

Grant Abstracts, FY 2016-2017

**PROJECT:** *Brevard County Shoreline Survey and Mapping*  
**RECIPIENT:** Brevard County and the University of Central Florida  
**FCMP FUNDS:** **\$15,000**  
**ABSTRACT:** [Brevard County](#) will partner with the [University of Central Florida \(UCF\)](#) to conduct a shoreline survey in the Brevard County portion of the IRL. Approximately 175 miles of urban shoreline will be surveyed via watercraft to obtain detailed information characterizing the existing shoreline along the Indian River Lagoon (IRL). This project is the first phase of development of a Shoreline Management Plan.

---

**PROJECT:** *Improving Coastal Resource Stewardship & Protecting Shorelines Using Oyster Reef Enhancement (ORE) Modules in Marineland, Florida*  
**RECIPIENT:** University of Florida's Whitney Laboratory for Marine Bioscience  
**FCMP FUNDS:** **\$24,760**  
**ABSTRACT:** University of Florida's [Whitney Laboratory for Marine Bioscience](#) will institute a Coastal Resource Stewardship Program which engages local citizens in activities that result in increased public awareness of coastal resources and catalyzes active coastal resource conservation. This project will entail trainings, and informational and data collection workshops, marine debris removal events., and construction and deployment of oyster garden cages and oyster reef restoration modules.

---

**PROJECT:** *Sustaining the Jacksonville Intracoastal Salt Marsh Paddling Guide*  
**RECIPIENT:** Public Trust Environmental Legal Institute of Florida / City of Jacksonville  
**FCMP FUNDS:** **\$9,604.00**  
**ABSTRACT:** This project involves the collaborative development and production of the updated waterproof paddling guide, updated Guide signs for placement at access ramps, and the inclusion of the update guide and materials on the website <http://jaxintracoastalpaddling.org/>. The project involves the production of an updated, user-friendly, detailed waterproof blue ways map of the intercoastal waterway from the intersection of the St. Johns River down to the Duval/ St. Johns County line. Designed and updated in collaboration with a graphic artist, our 2-sided, color map (approximately 8½" x 23½" in size) will be laminated and foldable to a size (4" x 8½") that can be kept with personal belongings while on the water. The map will include canoe and kayak landings (including access points at area preserves), channel markers, depth markings, a scale, paddle distances and times between stops, bathroom and parking locations, places to eat and cook out, and sites of interest (camping areas, hiking trails, and favorite area attractions). The updated guide will reflect the following recent enhancements along the ICW.

---

**PROJECT:** *Brevard County Shoreline Survey and Mapping*  
**RECIPIENT:** Brevard County Natural Resource Management  
**FCMP FUNDS:** **\$14,400.00**  
**ABSTRACT:** Brevard County is initiating the development of a Shoreline Management Plan with living shorelines as its central theme. This plan will be used to identify and implement environmental enhancement and erosion protection opportunities along the shoreline of the Indian River Lagoon (IRL) within Brevard County. The goals of the shoreline management plan will be to stabilize shorelines; prevent erosion; maintain, enhance and restore estuary habitat along the IRL shoreline; and protect water quality.

---

<sup>1</sup> The [Coastal Partnership Initiative](#) makes federal funds from the National Oceanic & Atmospheric Administration available to local governments of Florida's 35 coastal counties and municipalities that are required to include a coastal element in their comprehensive plan. Florida public colleges and universities, regional planning councils, national estuary programs and nonprofit organizations may also apply if an eligible local government agrees to participate as a partner.

**PROJECT:** *Four Mile Cove Ecological Preserve Invasive Eradication*

**RECIPIENT:** City of Cape Coral

**FCMP FUNDS:** **\$10,000.00**

**ABSTRACT:** The objective of the project is the removal of category 1 and 2 invasive exotic species as described by the Florida Exotic Pest Plant Council. These species include, but is not limited to *T. populnea*, *L. leucocephala*, *A. auriculiformis*, *S. terebinthifolius*. Many of the species have become established in many of the upland preserve areas. This project will also remove large, old growth Brazilian pepper from the banks along the kayak trail. The occurrence of that species has become a navigational hazard and renders the kayak trail impassible in some locations. Large trees will be completely removed from this site and remaining trunks will be treated with herbicide.

---

**PROJECT:** *Little Bayou Park Coastal Improvements*

**RECIPIENT:** City of St. Petersburg

**FCMP FUNDS:** **\$20,000.00**

**ABSTRACT:** The main objective of this project is the removal of exotic and invasive vegetation. Species targeted include Brazilian pepper, lead tree, grass and vine species, including invasive aquatic plants such as water lettuce. Hardwoods will be cut down, removed and stump treated with herbicides according to the best management practices. Grasses, shrubs, vines and aquatic vegetation will be hand removed in sensitive areas, and treated with herbicides where spraying will not damage existing native vegetation. After the initial removal of exotic and invasive vegetation, a work day will be held with the community to pick up litter and debris.

---

**PROJECT:** *Jacksonville Zoo & Gardens Living Shoreline Project*

**RECIPIENT:** City of Jacksonville

**FCMP FUNDS:** **\$25,000.00**

**ABSTRACT:** The City of Jacksonville is proposing a Living Shoreline Project at the Jacksonville Zoo that will be a perpetual exhibit to demonstrate alternative shoreline protection practices in lieu of vertical seawalls, which will promote natural habitats, feature sustainable products and native vegetation, and educate the public on the importance of living shorelines as an alternative to protect against climate change conditions. The Project is in line with the Zoo's mission, to "inspiring discovery, appreciation and conservation of wildlife, plants and the natural world." The LSL Project will be an active research site monitored for three (3) years by the students of Jacksonville University and a local high school magnet program, as well as community volunteers.

---

**PROJECT:** *Watson Bayou Waterfront Park*

**RECIPIENT:** City of Panama City

**FCMP FUNDS:** **\$30,000.00**

**ABSTRACT:** The Millville Community Redevelopment Agency (CRA) along with the City of Panama City purchased this 4.2-acre parcel of land in 2008. The purpose of the acquisition of this former industrial land was to create access for the residents of Millville to waterfront activities. The plan was to redevelop the area into a public park which provided access to fishing, picnicking, kayaking, and canoeing. The redevelopment started in 2013 with the construction of the fishing pier, lighting, and park benches. After construction of the fishing pier; there was a need to fix the storm water problem that ran underneath the park. The park has sat dormant since the pier was constructed.

---

## STATE AGENCY SECTION 306 GRANTS

**PROJECT:** *Investigating Strategies, Benefits and Stakeholder Preference of “Living Shorelines” to Stabilize and Ecologically Enhance the Coastline Around Daughtry Bayou - Cedar Key, Florida*

**RECIPIENT:** Suwannee River Water Management District

**FCMP FUNDS:** **\$41,187**

**ABSTRACT:** The [Suwannee River Water Management District](#) will use FCMP funds to conduct a 2- part project on Living Shorelines in Cedar Key: (1) the facilitation of a visioning session and design charrettes that will investigate stakeholder interest and perceptions related to the use of Living Shorelines to stabilize 2 areas around Daughtry Bayou; and (2) an investigation of techniques and benefits associated with substrates used to recruit oyster spat and establish oyster reefs, selection and holding of vegetation transplant material, planting techniques used in establishing vegetation and estimating sediment carbon sequestration potential as a result of Living Shoreline implementation.

---

**PROJECT:** *Characterizing Spatio-Temporal Trends in Seagrass Abundance in The Indian River Lagoon Using Satellite Imagery*

**RECIPIENT:** Florida Fish and Wildlife Conservation Commission (FWC)

**FCMP FUNDS:** **\$40,000**

**ABSTRACT:** The [Florida Fish and Wildlife Conservation Commission](#) will build upon previously funded work (FY2013-2014) and quantify long term changes in seagrass cover over the entire Indian River Lagoon (IRL) system for the years following the 2011 and 2016 super bloom events utilizing aerial photographs of existing ground-truth data. In this way, calibration of aerial seagrass density will be made, thus allowing quicker trend interpretation and analysis.

---

**PROJECT:** *Restoration of Florida Bay's Sponge Community: Evaluating How Current Restoration Techniques Affect Sponge Ecological Function*

**RECIPIENT:** Florida Fish and Wildlife Conservation Commission (FWC)

**FCMP FUNDS:** **\$32,446**

**ABSTRACT:** The [Florida Fish and Wildlife Conservation Commission](#) will investigate the effects of the propagation process on the sponge's filtration capabilities. Presently, it is not known how quickly individual sponge species recover from the propagation process and begin filtering efficiently and whether they can selectively filter planktonic particles from the water column similar to natural sponges. Therefore, this project will involve a two-pronged approach to examine how the present sponge propagation process currently underway in Florida Bay affects the ecological function of the resulting cloned sponges.

---

**PROJECT:** *Investigation of Summer Haven's Morphodynamic Effects on Hydrodynamics, Water Quality, Trophic State, and Oyster Reef Habitat in South Matanzas River Estuary*

**RECIPIENT:** DEP – Florida Coastal Office/Guano Tolomato Matanzas National Estuarine Research Reserve (GTMNERR)

**FCMP FUNDS:** **\$49,988**

**ABSTRACT:** In 2008, over 200,000 cubic yards of sand and shell were washed through a barrier-island breach infilling more than half the length of Summer Haven River, a lagoonal reach of the S. Matanzas River estuary. Opening the river via excavation is planned for early 2017. [The Guano Tolomato Matanzas National Estuarine Research Reserve](#) (GTMNERR) will document the morpho-hydrodynamic change from closure to opening of the Summer Haven, the subsequent impacts on the morpho-hydrodynamics of nearby Matanzas Inlet, and that, in turn, on water quality and trophic state of the greater estuary. Further implications for the estuary's oyster resource, such as the impacts from Hurricane Matthew, will be evaluated,

---

---

**PROJECT:** *Identification and Characterization of Stressed Mangroves in Tampa Bay*

**RECIPIENT:** Florida Fish and Wildlife Conservation Commission (FWC)

**FCMP FUNDS:** **\$30,446**

**ABSTRACT:** The Tampa Bay area is particularly susceptible to altered hydrology due to extensive urban development and widespread mosquito ditching in remaining coastal wetlands. The mangrove forests in this highly urbanized area also face altered hydrology because of urban development, road construction, concentrated storm water runoff, and dredging. Damage due to blocked tidal flow is reversible if proper hydrology is restored. This type of intervention is most successful if mangrove "heart attacks" and potential peat collapse are identified and mitigated early. The [Florida Fish and Wildlife Conservation Commission](#) will identify four (4) locations in Tampa Bay that show early signs of stress due to blocked tidal flow and document evidence of vegetative stress and early signs of peat collapse. Identification of the location and indicators of stress allows for early intervention before extensive mangrove die-offs occur.

---

## STATE AGENCY AND WATER MANAGEMENT DISTRICT PROJECTS<sup>2</sup>

**PROJECT:** *Adaptation Action Initiative, Year 1*  
**AGENCY:** Florida Department of Economic Opportunity  
**CONTACT:** Stella Lewis  
**FCMP FUNDS:** **\$160,000**

**ABSTRACT:** [Florida Department of Economic Opportunity \(DEO\)](#) will provide assistance to local governments to take action related to adaptation to current and future risks of coastal flooding. DEO will collaborate with other state agencies (Focus Groups) to discuss current and upcoming resiliency resources and efforts. This collaborative approach will provide both interagency coordination and direct support to local governments that are involved in the Adaptation Action Initiative. On an annual basis, DEO will select up to two (2) communities to receive enhanced technical assistance for adaptation. Communities that are deemed to be at a high risk to coastal hazards and can demonstrate support and partnerships at the local level will be given priority. Selected communities will be eligible to receive a combination of financial assistance to support plan development, expertise from a skilled team, and staff support from DEO.

---

**PROJECT:** *Aquatic Preserve Management Plan Updates, Year 1*  
**AGENCY:** DEP/Florida Coastal Office  
**CONTACT:** Earl Pearson  
**FCMP FUNDS:** **\$40,000**

**ABSTRACT:** The [Florida Coastal Office \(FCO\)](#) is responsible for managing the state's 41 Aquatic Preserves (AP). Effective and efficient oversight is critical for the long-term protection of these significant coastal resources. In support of their management responsibilities, FCO will use FCMP funds in FY 2016-17 to continue to update management plans for the state's AP and NERR systems. Management plans define specific key issues (ecosystem health, land use, water resources, human activities, geophysical conditions) and identify goals, objectives and strategies on how to address these issues through active management.

---

**PROJECT:** *Development of a Visitor Use Monitoring Protocol for Florida's Aquatic Managed Areas, Year 1*  
**AGENCY:** DEP/Florida Coastal Office  
**CONTACT:** Jeff Carter/Richard Noyes  
**FCMP FUNDS:** **\$50,000**

**ABSTRACT:** Unfettered access presents challenges to submerged land managers attempting to assess visitor use; sites accessible from all sides do not lend themselves to the traditional techniques of counting visitors, such as entrance gate counts. Consequently, the [Florida Coastal Office](#) will address the current lack of consistent visitor use monitoring methods by developing a statewide, cost-effective protocol, which will provide scientifically defensible, comparable data that can be used to evaluate public use of Florida's coastal resources, future access needs, and potential impacts of visitors in coastal and aquatic managed areas. The protocol and resulting estimates will enhance the ability of state and local managers to focus limited management resources on specific areas or priorities, and will be incorporated into coastal and aquatic area management plans.

---

<sup>2</sup> Program enhancement projects identified in the FCMP's [Section 309 Assessment and Strategies, FY 2016-2020](#).

**PROJECT:** *Statewide Ecosystem Assessment Program of Florida's Coastal Aquatic Managed Areas, Year 1*  
**AGENCY:** DEP/Florida Coastal Office  
**CONTACT:** Cheryl Clark  
**FCMP FUNDS:** **\$156,000**

**ABSTRACT:** FCO and Florida Coastal Management Program partner agencies collect a variety of coastal resource ecological data (e.g., water quality, nutrient levels, bacteria/pathogens, submerged aquatic vegetation (SAV), etc.) within these place-based management locations. However, the types of data collected and methods used are not always consistent between and outside of these locations nor is always readily available in formats usable by managers, planners, policy makers and the public. [This five \(5\)-year strategy](#) will develop and pilot a comprehensive ecosystem assessment program which will synthesize, interpret and disseminate information about the ecological health (statuses and trends) of Florida's coastal resources. In Year 1, the Florida Coastal Office will form a Resource Assessment Data Team to identify: (1) the data resources available from ongoing monitoring programs within the stat; and (2) 1-3 key stressors and indicators, available data, data needs and gaps and evaluate the layout of a report which can be recommended for a statewide approach

---

**PROJECT:** *Florida Keys Vessel Turn-In Program, Year 1*  
**AGENCY:** Florida  
**CONTACT:** Phil Horning  
**FCMP FUNDS:** **\$109,000**

**ABSTRACT:** Abandoned and derelict vessels have been a problem throughout Florida for many years, presenting environmental and navigational issues, as well as significant costs (financial and staff resources) for removals. Existing abandoned and derelict vessel programs throughout the state represent a reactive approach to management; while effective in removing derelict vessels, these programs have not had a significant impact on the reduction or prevention of such vessels. This strategy will implement a proactive management approach through a pilot Vessel Turn-in Program (Program) in the Florida Keys. The [Florida Fish and Wildlife Conservation Commission](#) will address the socioeconomic and behavioral issues associated with the use of unattended and liveaboard vessels and will develop a process by which a vessel owner can surrender their titled vessel to a local participating 'agent' for proper disposal.