FLORIDA COASTAL MANAGEMENT PROGRAM

COASTAL PARTNERSHIP INITIATIVE GRANT ABSTRACTS

FY 2011 - 2012

PROJECT: Keaton Beach Coastal Park Picnic & Public Education

RECIPIENT: Taylor County

FCMP FUNDS: \$10,000

ABSTRACT: Taylor County will develop a portion of the Keaton Beach Coastal Park. The park property was acquired through a grant from the Florida Communities Trust Florida Forever Program; construction activities funded by the FCMP are part of the long-term, approved park management plan. Specifically, the county will construct one picnic pavilion; an educational kiosk; install habitat and coastal stewardship signage; remove invasive, non-native camphor trees; and plant "Florida Friendly" native vegetation.

PROJECT: Oaks By the Bay Park Access Enhancement & Interpretive Signage

RECIPIENT: Panama City **FCMP FUNDS:** \$25,000

ABSTRACT: The St. Andrews Community Redevelopment Agency will improve public access to the Oaks By the Bay Park, located in the historic <u>St. Andrews waterfront district</u>. The funded park improvements were guided by a citizen-driven plan and involve construction of a new east-side public entryway (to be called the "Lion Plaza"). The City will also install interpretive signage to provide information on the historic district and St. Andrews Bay coastal resources. Other park improvements include landscaping, lighting and paver installation.

PROJECT: Collier County Dune Restoration

RECIPIENT: Collier County **FCMP FUNDS:** \$53,000

ABSTRACT: Collier County has over 40 miles of beach and dune habitat that are threatened by encroachment of non-native invasive plants such as Scaevola, Australian pine and <u>Brazilian pepper</u>. The County will use FCMP/NOAA funds to implement a dune restoration project to restore the beach dune system within the area of <u>Clam Pass Park</u>, one of Collier County's most heavily visited parks. The county will remove all non-native plants then plant native species such as sea oats, beach elder, and morning glory. County staff will monitor the restored sites for any exotic plant regrowth and remove any found to be reseeding, and monitor the planted native vegetation to ensure their healthy growth.

PROJECT: Caloosahatchee Creeks Preserve Wetland Enhancement

RECIPIENT: Lee County **FCMP FUNDS:** \$50,000

ABSTRACT: The <u>Caloosahatchee Creeks Preserve</u> is a 1290-acre property purchased through Lee County's environmental land acquisition program; the Preserve is located on the northern shores of the Caloosahatchee River. Much of the preserve contains intact native vegetation communities; however, several areas contain nearly 100% coverage of Brazilian pepper. Lee County will use FCMP funds for initial invasive control in an area adjacent to the existing boardwalk and canoe launch. The County will also enlist volunteers to assist in planting red mangrove seedlings and coastal cleanups. The 55-acre proposed restoration project will enhance important wetlands that serve as nursery and feeding grounds for fish and wildlife.

PROJECT: Pineapple Park Improvements: Lighting & Gazebo

RECIPIENT: City of Melbourne

FCMP FUNDS: \$60,000

ABSTRACT: Pineapple Park is a <u>City of Melbourne</u> waterfront property located on Florida's east coast just north of SR 518 and adjacent to the <u>Indian River Lagoon</u>. The Pineapple Park Improvement Lighting & Gazebo project is a component of the Park Master Plan, which includes construction of public restrooms, lights, picnic pavilions, gazebo, walking paths and a park sign. The City will 1) install twelve district light poles with LED lighting and banners, including all related electrical; and 2), construct a 24'-wide gazebo including steps and a concrete path. The new lights will provide for extended use of the park and enhance security and the gazebo will provide space for many public events, festivals and farmers' markets.

PROJECT: Building Coastal Stewardship at the Barrier Island Sanctuary & Education Center

RECIPIENT: Sea Turtle Conservancy & Brevard County

FCMP FUNDS: \$30,000

ABSTRACT: The Sea Turtle Conservancy and Brevard County will continue to promote coastal stewardship at the <u>Barrier Island Sanctuary & Education Center</u> located within the <u>Archie Carr National</u> <u>Wildlife Refuge</u>. Project tasks: 1) implement the Summer Eco-Explorer Camp to further awareness on coastal habitat conservation and ecology of sea turtles; 2) produce Sea Turtle and Coastal Stewardship Kits for loan to area educational institutions; 3) expand and conduct workshops on sea turtle conservation and beach habitat management; and 4) support the 2011 *Tour de Turtles Migration Marathon* educational program.

PROJECT: Dania Beach Waterfront Revitalization Master Plan

RECIPIENT: City of Dania Beach

FCMP FUNDS: \$30,000

ABSTRACT: The <u>City of Dania Beach</u> has identified the need to improve the waterfront facilities at Dania Beach Park. To address deteriorating parking, lighting, restrooms, and restore dune vegetation, the City will develop a master plan to increase the functionality, aesthetics and safety of the site. The selected design contractor will coordinate with city residents and local groups to articulate priority design components and will meet with regulatory agencies to identify permitting requirements and concerns pertaining to sea turtles, restoration of the dune system and applicable development regulations.

PROJECT: Pensacola Baywalk Design

RECIPIENT: City of Pensacola

FCMP FUNDS: \$30,000

ABSTRACT: The <u>City of Pensacola</u> will use FCMP funds for design, engineering services and construction documents for a portion of the 'Pensacola Baywalk' to be located on Pensacola Bay in the historic downtown area. The Baywalk will extend approximately three miles and will provide visitors and residents a waterfront access experience and gateway to the Bay's natural environment. The design of the ½ mile of the Baywalk will connect two public parks – the <u>William Bartram Memorial Park</u> on the west with the Hawkshaw Missing Children's Memorial on the east.

PROJECT: Brooks Landing Waterfront Revitalization

RECIPIENT: City of Fort Walton Beach

FCMP FUNDS: \$60,000

ABSTRACT: The <u>City of Fort Walton Beach</u> will enhance public shoreline access by improving an underutilized waterfront located beneath the historic Brooks Bridge and within walking distance to many restaurants, retail stores and residential areas. To enhance this area, the City will use FCMP funds to construct a 10-foot wide concrete walkway through the ½-acre site, and install lighting, picnic tables, bike racks, a canoe launch and interpretive signage. The existing pier/fishing area will be improved by replacing dilapidated boards and adding nautical rope guiders, benches, a fish cleaning station and educational signage. The City will also

plant 135 linear feet of shoreline vegetation (<u>Spartina sp.</u> and <u>Juncus sp.</u>) where none currently exists. A photo of the completed waterfront park is available at http://fwb.org/wp-content/uploads/2013/03/brooks-park-2.jpg.

PROJECT: Lionfish Outreach & Control Programs in Southeast Florida **RECIPIENT:** Reef Environmental Education Foundation & Miami-Dade County

FCMP FUNDS: \$29,200

ABSTRACT: Invasive Indo-Pacific lionfish are a significant threat to Florida's marine and coastal resources – in just the past year, lionfish densities in the Florida Keys and southeast Florida have exploded. The Reef Environmental Education Foundation (REEF) is leading outreach, training, research and control efforts in Florida and has requested FCMP funds to expand its lionfish education and control programs. Specifically, REEF will conduct lionfish removal training workshops in Miami-Dade, Broward and Palm Beach Counties, and will sponsor lionfish collection events and derbies. FCMP funds will also be used for collection gear kits (gloves, nets, bags) for divers. For more information on REEF's lionfish removal effort, please visit http://www.reef.org/programs/exotic/lionfish/resources.

PROJECT: D.J. Wilcox Coastal Access & Restoration Plan

RECIPIENT: St. Lucie County

FCMP FUNDS: \$30,000

ABSTRACT: Saint Lucie County will use FCMP funds to enhance public access at the <u>D.J. Wilcox Preserve</u>. Specifically, the county will design an 800-ft. boardwalk to give visitors a scenic connection to an interpretive trail on this property adjacent to the <u>Indian River Lagoon</u>. To access the trailhead hikers currently walk 400 feet down a utility right-of-way and past a deep pond that is home to several alligators. To create a more scenic route, the boardwalk will include an observation platform and wildlife blind. The county will also develop a plan for removal of damaging invasive plants and for planting native species to enhance the Preserve's ecosystem functionality.

PROJECT: Mangrove Waterway Restoration at Vizcaya Museum & Gardens

RECIPIENT: Miami-Dade County

FCMP FUNDS: \$20,000

ABSTRACT: Miami-Dade County requests funds to develop a restoration plan for five acres of mangroves and ½ mile of a canal estuary at the <u>Vizcaya Museum & Gardens</u>. Vizcaya is a National Historic Landmark that includes mangrove forests that line canals that flow into Biscayne Bay. Mangrove functions have become impaired from infestation of exotic invasive species and from hurricane debris that disrupt water flow. The restoration plan will adhere to management/restoration practices outlined in the county's *Biscayne Bay Management Plan* and will include trimming of damaged mangroves; lifting of the tree canopy; removing marine debris and exotic trees; and replanting native mangroves and other trees/shrubs.

PROJECT: Florida Keys Coastal Stewardship Program **RECIPIENT:** Reef Relief, Inc. & City of Key West

FCMP FUNDS: \$30,000

ABSTRACT: Reef Relief, Inc., in partnership with Key West will increase community actions to protect the Keys' coastal resources through education, field trips and clean-up events. Reef Relief will expand its "Discover Coral Reefs School Program" to additional counties, which includes distributing *Coral Reef Guides* and anti-litter posters to 4th grade students. Educational outreach will be continued through distribution of environmental posters and brochures to resorts, hotels and visitor centers, and to boaters, snorkelers and fishermen. Reef Relief will also regularly advise the online community on coastal resource issues, trainings and volunteer opportunities, including its monthly reef and coastal cleanups. Reef Relief's website also provides access to its monthly newsletter, scientific studies, educational resources and other coastal resource news.

PROJECT: Vogel Park Development **RECIPIENT:** City of North Bay Village

FCMP FUNDS: \$60,000

ABSTRACT: The <u>City of North Bay Village</u> will develop the City's first public open space, Vogel Park, a half-acre property that fronts the <u>Biscayne Bay Aquatic Preserve</u>. The City will develop the park to preserve the natural and ecologically-sensitive resources and provide coastal public access amid growth and development. Park components using FCMP funds include a walkway that leads to the water with connections to a playground; a pre-fab restroom facility; a picnic table shelter and a gazebo. Park landscaping will be enhanced to include native and salt-tolerant plants. Installation of an additional picnic shelter, a bike rack, benches and educational signage related to Biscayne Bay's ecosystem are also included in the park design.

PROJECT: Miami Beach Dune Education Workshop & Restoration

RECIPIENT: City of Miami Beach

FCMP FUNDS: \$30,000

ABSTRACT: The <u>City of Miami Beach</u> will conduct a Beach & Dune Education Workshop and a volunteer dune restoration effort that will enhance the City's beach dune habitat and improve public beach access. The workshop will provide information on endangered sea turtles and the importance of the dune system and beach restoration. Educational signs displaying key information will be installed at 31 public access points and a brochure will be developed to provide information to condominiums and hotels. Restoration activities involve removal of invasive, exotic vegetation on dunes – the project site will then be revegetated with native plants. FCMP funds will be used to purchase restoration supplies and for contractual services.

PROJECT: Oceanfront Park Observation Boardwalk, Phase 2

RECIPIENT: City of Marathon

FCMP FUNDS: \$30,000

ABSTRACT: The <u>City of Marathon</u> will enhance coastal access to Oceanfront Park, a 7.94-acre passive park that provides outdoor recreation for residents and tourists. Specifically, the City will construct a 5-foot wide, 156' linear boardwalk that will include up to four ocean-viewing observation decks and accommodate the physically disabled. FCMP funds will also be used for native landscaping. Matching funds will share in construction costs and pay for architect/engineering fees.

PROJECT: Charlotte Harbor Volunteer Shoreline Survey

RECIPIENT: Charlotte Harbor National Estuary Program & Lee County

FCMP FUNDS: \$15,000

ABSTRACT: The <u>Charlotte Harbor National Estuary Program</u> (CHNEP) and <u>Lee County</u> will use FCMP funds to conduct the 2013 Shoreline Survey Update, develop online data entry pages, online analyses and GIS linkages. The goal of the survey is to develop a shoreline condition map that can be used as a tool for decision makers, scientists and resource users. Matching funds are from approximately 375 volunteer hours contributed towards the project and for contractual services: the University of South Florida will develop and test data entry screens, analysis tools and upload survey data into the CHNEP Water Atlas.

PROJECT: Park Outdoor Recreation Project, Design & Master Plan

RECIPIENT: Port St. Joe Redevelopment Agency

FCMP FUNDS: \$15,000

ABSTRACT: The Port St. Joe Redevelopment Agency, a unit of the City of Port St. Joe, Florida, will develop a revitalization Master Plan for the City's Bay Park area. The Plan will include recommendations for outdoor recreation and coastal environmental education components to induce visitor use and access to St. Joe Bay. The Plan will also provide a phased implementation plan for discrete components and a conceptual architectural design for the recreational facility. Matching funds will be used for salaries (project management) and contractual services.

PROJECT: Oceanfront Park Observation Boardwalk, Phase 3

RECIPIENT: City of Marathon

FCMP FUNDS: \$30,000

ABSTRACT: The City of Marathon will use FCMP funds for Phase 3 of its Oceanfront Park development, which will add a 600²ft. TiKi hut pavilion to be located in the natural opening in the oceanfront buffer at the western entrance to the park canal. The pavilion will provide a shady respite for visitors at the park and serve as a waterfront classroom for various educational programs. Phase 3 also includes construction of a monument of the <u>Sombrero Key Lighthouse</u> to commemorate the city's commercial fishing heritage. The monument will be erected in the pavilion, with sides decorated with educational plaques.

PROJECT: Jupiter Waterway Trail

RECIPIENT: Town of Jupiter

FCMP FUNDS: \$10,000

ABSTRACT: The <u>Town of Jupiter</u> will develop an interactive Waterway Trail Guide for the Internet and as a mobile application to better promote and market the town's 39 miles of <u>waterway trails</u>. The trail runs through the Loxahatchee River, Intracoastal Waterway and Jupiter Inlet, and is accessible through nine access points including state, county and town parks. The trail offers numerous eco-tourism activities – kayaking, snorkeling, and fishing – and provides access to many historical and environmentally significant destinations.

PROJECT: Charlotte Harbor Buffer Preserve Restoration Planning

RECIPIENT: Lee County **FCMP FUNDS:** \$15,000

ABSTRACT: Lee County will use FCMP funds for preparation of environmental permits for restoration activities designed to rehydrate the <u>Charlotte Harbor Buffer Preserve</u>, which is in a degraded conduction due to previous ditching and farming. The site is currently dominated by invasive exotic vegetation including Brazilian pepper, Australian pine, melaleuca and earleaf acacia. The county will hire an ecologist/engineer to conduct field work to assess the problem, develop a restoration plan and meet with U.S. Army Corps of Engineers and Southwest Florida Water Management District staff to discuss permit documentation.

PROJECT: Beaches to Greenway Public Access, Way Finding and Signage

RECIPIENT: City of Fernandina Beach

FCMP FUNDS: \$15,000

ABSTRACT: The <u>City of Fernandina Beach</u> will use FCMP funds to develop a cohesive way-finding strategy that incorporates environmental resource and safety education information at the city's public beach access points and within the <u>Egans Creek Greenway</u>. The way-finding strategy should help mitigate 'sign litter', which has been identified at 48 open beach access points along the A1A highway, and address an identified safety concern in the lack of identifiable beach access signs for emergency purposes. Movable gopher tortoise protection signs will also be installed to help protect areas where a gopher tortoise has been identified. The City will also design, print and publish a Blueways kayak/canoe guide on the Internet.

PROJECT: D.J. Wilcox Coastal Access & Restoration

RECIPIENT: St. Lucie County

FCMP FUNDS: \$30,000

ABSTRACT: St. Lucie County will construct a 469-foot long boardwalk with two wildlife observation overlooks along a deepwater 'gator pond' in the D.J. Wilcox Preserve. The Preserve is a 106-acre, county-owned property located along the western shore of the Indian River Lagoon, and contains a nearly one mile-long self guided interpretive hiking trail and observation tower. The boardwalk will connect the trail to the Preserve's parking lot just north of the intersection of Old Dixie Highway and Michigan Street, creating a safe and enjoyable route for visitors. An educational kiosk will also be constructed at the entrance to the boardwalk to display a map of the Preserve, the site's flora and fauna, and project sponsors.

PROJECT: Jupiter Beach Park Restoration and Enhancement Project

RECIPIENT: Palm Beach County

FCMP FUNDS: \$30,000

ABSTRACT: <u>Jupiter Beach</u> is a 46-acre, county-owned oceanfront park in northern Palm Beach County, located on the south side of the Jupiter Inlet and the eastern terminus of the Loxahatchee River. Palm Beach County will use FCMP funds to enhance public access to the waterfront, expand the park's recreational facilities and protect the dunes and surrounding habitat. Specifically, the county will stabilize dunes by planting native species; remove exotic vegetation (Australian pines) and replant the area with native species; construct over 1,400 feet of ADA-compliant sidewalks and paths; and install ADA-compliant picnic tables and bicycle racks. All dune work will take place after close of turtle nesting season.

PROJECT: Invasive Removal at Miami Marine Stadium Marina

RECIPIENT: City of Miami **FCMP FUNDS:** \$28,975

ABSTRACT: The City of Miami will use FCMP funds to remove exotic, invasive vegetation from a spoil island adjacent to the Miami Marine Stadium Marina; the spoil island is a small, .25-acre island within the state-designated <u>Biscayne Bay Aquatic Preserve</u> on Virginia Key. The spoil island is inundated with invasive exotic plants, which are stifling the native species and threatening the <u>Virginia Key</u> ecosystem, one of the rarest and most endangered plant communities in Miami-Dade County. Invasive species will be removed by hand by trained staff; debris will be loaded onto a work float, brought to shore and transported to a city mulching site. City staff will install information signage on the island to educate the public of the danger of non-native invasive species.

PROJECT: Hatchett Creek Invasive Species Removal

RECIPIENT: City of Venice **FCMP FUNDS:** \$30.000

ABSTRACT: The <u>City of Venice</u> will use FCMP funds to remove invasive plants (<u>Brazilian pepper</u>) and trees (<u>Australian pines</u>) from Hatchett Creek, located in Legacy Park. In 2008, the City acquired the 10-acre former cement plant site at 395 East Venice Avenue. Prior use of the property has taken a toll on the creek's natural features – invasive plants and trees are intermingled with mangroves along the creek bed. Removal of the invasive vegetation will help restore the natural landscape and provide access for future property plans. Removal of Australian pines will also protect adjacent residential properties from damage due to downed trees, and help keep Hatchett Creek from being blocked during storms, causing upstream flooding.

PROJECT: Working Toward Broward County Resilient Coastal Communities

RECIPIENT: Broward County

FCMP FUNDS: \$14,989

ABSTRACT: As a community, southeast Florida needs to be aware of the local impacts of global <u>climate change</u>, to understand vulnerabilities, to incorporate consideration of climate change into planning documents and work collaboratively to implement strategies to adapt to consequences of climate change while mitigating its causes. Towards this goal, <u>Broward County</u> will use FCMP funds to develop relevant climate impact information and policy materials to 12 municipalities located on the ocean or county waterways. To assist vulnerable communities, the county will develop technical support tools including an assessment of sea level rise vulnerability, and will meet with municipal staff to transmit documents and discuss resilience planning.

PROJECT: ADA Pedestrian/Bicycle Trail at Tideviews Preserve

RECIPIENT: City of Atlantic Beach

FCMP FUNDS: \$20,000

ABSTRACT: The <u>City of Atlantic Beach</u> will construct an ADA-accessible boardwalk and entranceway at the city-owned <u>Tideviews Preserve</u> to provide access to the Preserve's marsh overlooks. This is the first phase of the city's "Preserves Trail", which will provide an approximately 470-ft. by 12-ft wide paved trail. The trail will be located along an existing transmission line easement that will connect the Preserve's entrance with an existing boardwalk, providing a direct route for visitors to reach the park's Sunset Pier. The City's non-profit partner, the <u>Ixia Chapter of the Florida Native Plant Society</u>, will identify native species for planting near the trail. Bicycle racks will also be installed at the new entranceway.

PROJECT: Bakersfield Drive Wetland Restoration & Kayak Launch Planning

RECIPIENT: City of Jacksonville

FCMP FUNDS: \$9,000

ABSTRACT: The <u>City of Jacksonville</u> will use FCMP funds to develop a restoration plan to restore vacant, grassy, flood-prone lots along Wills Branch in south-central Duval County to a functional riparian wetland. Due to frequency and severity of flooding, <u>FEMA purchased recurrently flooded homes</u> from willing homeowners and turned the floodplain land over to the City. The parcels are now vacant, stream-side lots in a residential neighborhood, located on an historic floodplain. The conceptual restoration plan aims to improve localized flood management, water quality and wildlife habitat by planting native, flood tolerant shrubs and trees in the created wetland areas. To improve public waterway access, a kayak launch will be included in the restoration planning effort.

PROJECT: Historic Lighthouse Rescue/Cape San Blas Lighthouse

RECIPIENT: City of Port St. Joe

FCMP FUNDS: \$30,000

The <u>City of Port St. Joe</u> will use FCMP to install a new foundation for the <u>Cape San Blas Lighthouse</u>. In 2012, the National Park Service conveyed the lighthouse to the City so it could be relocated from the eroding cape to a more accessible City-owned park and conservation property with panoramic views of St. Joseph Bay. FCMP funds will partially pay for construction permitting, site preparation, site security, mobilization, testing and threshold inspections. This project does not include the relocation or re-installation of the lighthouse.

PROJECT: Lakes By the Bay Park Canoe/Kayak Launch

RECIPIENT: Town of Cutler Bay

FCMP FUNDS: \$30,000

The Town of Cutler Bay is developing the passive portion of the town's Lakes By the Bay Park, which will include a recreation center, picnic pavilions, a canoe/kayak launch, a small parking area and walkway. The Town will use FCMP funds for some park amenities, specifically, purchase and install an ADA- accessible floating kayak/canoe launch with ramping and accessible transfer station. The launch will be located in a natural opening in the mangroves that surround the lake. Grants funds will also be used to construct a small, pervious parking lot and walkway to provide access to the kayak launch. Educational signage will be installed to inform park visitors about the lake and adjacent wetland habitats.

PROJECT: Bayview Avenue Boardwalk & Educational Signage Project

RECIPIENT: City of Panama City

FCMP FUNDS: \$25.000

The <u>City of Panama City</u> requests FCMP funds to provide better waterfront public access along Bayview Avenue, located on St. Andrews Bay in the historic working waterfront district of <u>St. Andrews</u>. The City

constructed the boardwalk in 2000; however, many portions of the boardwalk are now deteriorated and unsafe. The City will use grant funds to demolish existing decking and rails, construct new decking and safety rails, and install interpretive signage on the boardwalk railings. Signage will include a map of the waterfront district, historic markers, information about St. Andrews Bay, and how the public can help the bay's coastal resources.

FCMP GRANTS TO STATE AGENCIES AND WATER MANAGEMENT DISTRICTS

PROJECT: Submerged Aquatic Vegetation Restoration in the Florida Panhandle **AGENCY:** Department of Environmental Protection/Northwest Regulatory District

CONTACT: Amy Baldwin Moss

FCMP FUNDS: \$60,000

DESCRIPTION: DEP's Northwest District Ecosystem Restoration Section (ERS) will restore submerged aquatic vegetation (SAV) populations in Panhandle coastal counties through the utilization of salvaged and laboratory-grown SAV materials. Salvaged SAV will be acquired only from marine construction activities that are exempt from regulation or have met applicable permits for avoidance and minimization. *Ruppia maritima* is propagated at the Northwest District laboratory and will be planted at appropriate restoration sites in Escambia and Santa Rosa Counties. ERS staff will also examine sediment (porewater) biogeochemistry to determine sediment nutrient conditions of natural beds of *H. wrightii* and *T. testudinum* and planted *R. maritima* beds. Project outcomes include salvaged seagrass cores planted in receiver sites; data on SAV transplant survival and colonization; photos of salvaged and transplanted SAV; and sediment (porewater) biogeochemistry data.

PROJECT: Building Geodatabase Tools for Estero Bay & Biscayne Bay Aquatic Preserves

AGENCY: DEP/Coastal & Aquatic Managed Areas (CAMA)

CONTACT: Gary Lytton **FCMP FUNDS:** \$75,000

ABSTRACT: The Rookery Bay National Estuarine Research will use FCMP funds to develop two geodatabases to serve as pilot regional coastal and marine spatial management tools, focused on Estero Bay and Biscayne Bay Aquatic Preserves (AP). Both APs include expansive seagrass beds and mangrove forested wetlands that provide essential habitat for a diverse assemblage of estuarine wildlife. CAMA and partners have worked effectively to develop baseline data on key parameters such as water quality, seagrass location/condition, sea turtle nesting and coastal bird populations. The development of geodatabases that integrate existing science-based information, and are linked to a spatial management framework through GIS software, will serve as powerful information tools for AP managers, regulatory personnel and other coastal managers.

PROJECT: Micro-Marine Debris Clean-Up Training Program AGENCY: Department of Agriculture/Division of Aquaculture

CONTACT: Paul Zajicek FCMP FUNDS: \$67,550

ABSTRACT: The Department of Agriculture's <u>Division of Aquaculture</u> (DoA) has expended considerable effort to develop effective, non-damaging micro-marine debris extraction, collection and accounting methods in the Indian River Lagoon. Micro-marine debris (e.g., synthetic sheeting, netting, rope, twine, bottle caps, toys, and shattered remains of these items) has great potential to affect wild flora and fauna. DoA considers micro-marine debris extraction to be well within the capability of trained volunteers and will use FCMP funds to produce a micro-marine debris handbook and technical bulletin; train volunteers to manage debris cleanup; field test the handbook; and conduct a "train-the-trainer" program. The final Micro-Marine Training Manual is available at http://www.floridaaquaculture.com/publications/Final%20Micro-Marine%20Debris%20Training%20Manual.pdf.

PROJECT: Implementation of the Statewide Coastal Wildlife Conservation Initiative

AGENCY: Florida Fish & Wildlife Conservation Commission (FWC)

CONTACT: Melissa Tucker

FCMP FUNDS: \$29,659

ABSTRACT: The FWC will implement the <u>Coastal Wildlife Conservation Initiative</u> (CWCI), a statewide, cooperative project that aims to achieve consistency in protecting native coastal wildlife populations, conserving and managing coastal ecosystems and attaining balance between these efforts and ecologically-sound/ responsible human use of coastal areas. The FWC will establish working groups around the state to assist in development and implementation of enabling objectives and actions necessary to meet CWCI goals. A Standing Team will be established to provide oversight and guidance to the working groups. FCMP funds will be used to support the CWCI Coordinator position for one year.

PROJECT: Net Ecosystem Metabolism: Derivation & Modeling of a Metric for Estuarine Health

AGENCY: FFWCC/Fish & Wildlife Research Institute (FWRI)

CONTACT: James Ivey **FCMP FUNDS:** \$149,951

ABSTRACT: Estuaries serve as primary sources of production and irreplaceable processors of terrestrial contaminants. Sarasota Bay, an important lagoonal estuary, has limited tidal flushing and no major tributary – freshwater inputs primarily arise from precipitation and runoff. The FWRI was awarded FCMP funds to assess and model the dynamics of non-point source contaminants in Sarasota Bay and the mitigation strategies with which to control them. From historical and evolving monitoring databases, FWRI will derive net ecosystem metabolism values – a metric to gauge system-level functionality. This study will bolster system-level assessment of chronic/acute anthropogenic impacts on estuarine health.

PROJECT: Hyperspectral Mapping of Alligator Harbor Aquatic Preserve Submerged Features

AGENCY: DEP/Coastal & Aquatic Managed Areas (CAMA)

CONTACT: Kim Wren **FCMP FUNDS:** \$150,000

ABSTRACT: The protection of critical resources is a high priority for the Alligator Harbor Aquatic Preserve (AP). In order to adequately manage the AP, natural and historical resources must be monitored, documented and mapped to identify areas where increased management emphasis is necessary. Historical seagrass coverage indicates there are 3,661 acres of seagrass habitat within AP boundaries; there are also 40 clam aquaculture leases in the AP. Plans for development may drastically affect the AP; therefore, long-term monitoring is crucial in protecting valuable natural resources. Towards this long-term monitoring goal, AP staff will acquire high resolution spectral imagery of Alligator Harbor AP to determine the coverage/extent of seagrass habitat, prop scar damage, and bathymetry for comparison to and development of trends based on previous and future mapping efforts.

PROJECT: DEO Coastal Program Support

AGENCY: Department of Economic Opportunity

CONTACT: Beth Frost **FCMP FUNDS:** \$15,000

DESCRIPTION: The Department of Economic Opportunity will use FCMP funds to continue a program of coordination, technical support, and review through its <u>Division of Community Planning and Development</u> to evaluate federal actions for consistency with the Florida Coastal Management Program and to assist local governments in evaluating the impacts of coastal development. The Division is responsible for review and comment on growth management issues, including Development of Regional Impacts, Areas of Critical State Concern, and local government comprehensive plans.

PROJECT: Community Resiliency: Planning for Sea Level Rise, Year 1

AGENCY: Department of Economic Development

CONTACT: Julie Dennis **FCMP FUNDS:** \$140,000

ABSTRACT: Projected sea level rise (SLR) impacts threaten to exacerbate the vulnerability of Florida's at-risk coastal resources. Adapting to and mitigating impacts will require that SLR be incorporated into all levels of hazard mitigation and land use planning in Florida. Towards this goal, the Department of Economic Opportunity (DEO) will identify appropriate models for mapping Florida's coasts for SLR impacts (including storm surge). Part of this effort will include creating a risk assessment and adaptation plan for at least two pilot communities. Based on lessons learned, the final project report will include recommended statutory and rule changes to integrate SLR into hazard mitigation and land use planning. The report will also identify best practices for engaging citizens in this effort. In the first year (of this 5-year initiative) DEO will 1) inventory SLR research and initiatives across the state, including the degree to which SLR is addressed in local comprehensive plans; 2) identify technical assistance resources available for community planning, mitigation, and adaptation; and 3) form a focus group to provide guidance and oversight over the five year project period.

PROJECT: Coral Reef and Hardbottom Mapping & Monitoring AGENCY: Florida Fish & Wildlife Conservation Commission

CONTACT: David Palandro

FCMP FUNDS: \$85,321

ABSTRACT: The Florida Fish & Wildlife Conservation Commission (FWC), in partnership with CAMA, has identified the need for a single coordinated perspective on the mapping, monitoring and management of the Florida reef tract due to increased threats from anchoring incidents, increased boater activity and potential climate change. FWC will build upon methods currently used by federal, state and university scientists to provide a highly detailed and synoptic view of the coral reef ecosystem that ranges from the Florida Keys National Marine Sanctuary to Martin County. By combining FWC's Coral Reef Evaluation & Monitoring Program with extensive mapping projects in southeast Florida, the Dry Tortugas and Biscayne National Parks, a more robust and synoptic dataset will be made available for resource managers, stakeholders and the public. First year activities include meeting with federal, state and university partners to determine the mapping classification scheme; developing the database structure; applying a single Florida reef tract classification to existing benthic habitat maps; and initiating education and outreach efforts.

PROJECT: Aquatic Preserve Management Plan Update Support Services

AGENCY: DEP/Coastal & Aquatic Managed Areas (CAMA)

CONTACT: Penny Isom **FCMP FUNDS:** \$81,658

ABSTRACT: CAMA will use FCMP funds to support development of management plan updates for the state's aquatic preserve (AP) system. CAMA is responsible for the state's 41 APs, and with almost two million acres of submerged lands to manage, effective and efficient oversight is critical for the long-term protection of these valuable coastal resources. AP plans define specific key issues (e.g., ecosystem health, land use, water resources, human activities and geophysical conditions) and identify goals, objectives and strategies on how to address these issues through active management. In FY 11-12, CAMA will develop and receive public input on updates to 3-5 AP plans. Project tasks include: assembling background information and initial use development; conducting public scoping meetings; and revising and receiving public input on the draft plans.

PROJECT: Special Area Management Planning for FWC's Critical Wildlife Areas

AGENCY: Florida Fish & Wildlife Conservation Commission (FWC)

CONTACT: Melissa Tucker

FCMP FUNDS: \$92,000

ABSTRACT: Critical Wildlife Areas (CWA) provide areas where important wildlife congregations can be protected during critical life cycles (e.g., nesting, migration) while still providing recreational user access. The FWC has identified limiting human-wildlife conflicts in CWAs as a high priority since human-wildlife conflicts increase as areas available to wildlife decrease (especially in beach habitats). CWAs, however, are designated through establishment orders that must be revised when new areas of congregating wildlife are identified. To begin these efforts, FCMP funds will be used to support a program coordinator who will: identify current CWAs and develop species lists specific to each; identify CWAs that need to be re-established; meet with DEP to develop coastal area rule and/or guidelines; and coordinate stakeholder meetings.

PROJECT: Estuarine Habitat Restoration: State Planning & Guidance

AGENCY: St. Johns River Water Management District

CONTACT: Paul Haydt **FCMP FUNDS:** \$156,000

ABSTRACT: A variety of public and private estuarine habitat restoration activities (submerged aquatic vegetation, oyster reef, salt marsh, mangroves, coral reef) occur in Florida primarily as stand-alone or regional efforts. However, Florida lacks a statewide planning and guidance document focused on coordinated estuarine habitat restoration. As a collaborative effort, the St. Johns River Water Management District will partner with CAMA and FWC staff to 1) develop a statewide estuarine restoration guidance document and; 2) develop a pilot restoration plan for Northeast Florida Region. The FY 11-12 project tasks are: draft guidance framework components that focus on estuarine biotic and abiotic characteristics and the socio-economic factors unique to Florida; and form a technical advisory committee that will conduct public meetings to gain input on plan component revisions. The first year product will be a statewide planning and guidance document for estuary habitat restoration and a report describing project events, lessons learned and recommendations.