

FLORIDA COASTAL MANAGEMENT PROGRAM
Grant Abstracts, FY 2009-2010

FY 09-10 COASTAL PARTNERSHIP INITIATIVE PROJECTS

REMARKABLE COASTAL PLACES

PROJECT: *Zeke's Marina Upland Restoration & Development*

RECIPIENT: Palm Beach County

FCMP FUNDS: \$50,000

ABSTRACT: Palm Beach County acquired Zeke's Marina, a 1.7-acre property located at the terminus of the Loxahatchee River and the Jupiter Inlet. The former marina will be restored for passive resource-based recreation and incorporated into the County's adjacent [DuBois Park](#). The County will use FCMP funds to remove exotic vegetation, replant native plants and construct a 12'-wide paved path through the site that will connect with the Jupiter Riverwalk. Picnic tables, grills, bike racks and trash receptacles will also be installed on the restored site.

PROJECT: *Turkey Creek Environmental Package*

RECIPIENT: City of Palm Bay

FCMP FUNDS: \$15,000

ABSTRACT: The City of Palm Bay will use FCMP funds to implement a public education effort at boat ramps, parks and along the waterways of [Turkey Creek](#) and the [Indian River Lagoon](#). Project elements include: 1) construct informational kiosks in waterfront parks to focus on cause/effect of stormwater runoff; 2) purchase the [EnviroScape Wetlands Model](#) and [EnviroScape Coastal Model](#) to promote importance of sustainable behavior; 3) publish the *Turkey Creek Atlas*, a navigational tool; 4) design and distribute brochures and flyers on waterway pollution and other environmental topics; and 5) implement the Adopt-a-Pond program to involve residents in controlling invasive species and planting beneficial native species.

PROJECT: *Yankeetown Cultural Resources Survey*

RECIPIENT: Gulf Archaeology Research Institute & Town of Yankeetown

FCMP FUNDS: \$15,000

ABSTRACT: The Gulf Archaeology Research Institute and the [Town of Yankeetown](#) will survey lands around the town to develop cultural and historical information for the coastal education and learning center to be built in the future. Project tasks include conducting: 1) a pre-field cultural-environmental resources assessment and literature search; 2) a field survey; 3) laboratory analyses; and 4) educational outreach.

PROJECT: *Timucuan Trail Waterway Guide*

RECIPIENT: Public Trust Environmental Legal Institute & City of Jacksonville

FCMP FUNDS: \$20,250

ABSTRACT: The [Public Trust Environmental Legal Institute](#) and the City of Jacksonville will use FCMP funds to develop a paddling guide for the Timucuan Trail, a unique portion of Jacksonville's waterways that is increasingly sought after for half-day paddling trips. Bordered by expanses of pristine, undeveloped property, this distinctive waterway trail offers a corridor of protected natural waterfront for a high-quality paddling experience. Project deliverables include a detailed waterproof blueways map designed to guide paddlers safety through the network of waters between the Nassau River and the [St. Johns River](#). The map will include canoe/kayak landings, channel markers, depth markings, paddle distances/times between stops, parking locations, and ecological, cultural and historic information. Paddling guide signs, flyers and a [Timucuan Waterway Trail Guide](#) will also be produced.

COMMUNITY STEWARDSHIP

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

RECIPIENT: Sea Turtle Conservancy & Brevard County

FCMP FUNDS: \$30,000

ABSTRACT: The non-profit organization, [Sea Turtle Conservancy](#) and Brevard County will promote coastal stewardship at the [Barrier Island Sanctuary & Education Center](#) (BIS) located within the [Archie Carr National Wildlife Refuge](#). Project tasks include: 1) expand the Summer Eco-Camp at the BIS to further community awareness on coastal habitat conservation and ecology of sea turtles; 2) create Sea Turtle and Coastal Stewardship Kits to lend to educations and institutions; 3) conduct workshops on sea turtle research, conservation, beach habitat management and coastal ecology; and 4) support the second annual [Tour de Turtles](#), an interactive website that tracks the annual turtle migration across the Atlantic. FCMP funds will be used to support BIS personnel, stewardship kits, eco-camp materials, satellite transmitters for the turtle migration and travel.

PROJECT: *Blackwater Watershed Stewardship Program*

RECIPIENT: Blackwater River Foundation, Inc. & Santa Rosa County

FCMP FUNDS: \$50,000

ABSTRACT: The [Blackwater River Foundation](#) (BRF) and Santa Rosa County have identified measures to increase environmental and cultural education throughout the Blackwater Watershed: the BRF will use FCMP funds to 1) develop the Blackwater Watershed Stewardship Program to create stewardship opportunities specific to the Blackwater Watershed area; 2) create the Blackwater Watershed Stewardship Master Plan, which will include watershed status and conditions; inventories on land uses, management plans and stewardship goals; and 3) create the Blackwater Blueways Stewardship Guide to identify paddling opportunities and points of interest along the [Blackwater River](#).

PROJECT: *Bay Grasses in Classes – Wetland Nursery Program*

RECIPIENT: Tampa Bay Watch & Tampa Bay Estuary Program

FCMP FUNDS: \$34,895

ABSTRACT: [Tampa Bay Watch](#) (TBW) is a non-profit environmental program, devoted exclusively to monitoring, restoring and protecting the [Tampa Bay Estuary](#) marine and wetland environments. Urbanization has led to significant decline of salt marsh habitat and the fish and shellfish that depend on the Tampa Bay Estuary ecosystem. In order to impart understanding and stewardship of the salt marsh vegetation in the estuary, TBW will use FCMP funds for the Bay Grasses in Classes Program, which provides middle and high school students with a hands-on opportunity to maintain and grow sea grasses in on-site nurseries. The nursery-raised seagrasses are ultimately transplanted at restoration sites around Tampa Bay (funded by [Restore America's Estuaries](#)). FCMP funds are allotted for personnel, travel and salt marsh nursery supplies.

PROJECT: *Restoration of Intertidal Oyster Reefs in Mosquito Lagoon*

RECIPIENT: Indian River Lagoon National Estuary Program & The Nature Conservancy

FCMP FUNDS: \$50,000

ABSTRACT: The [Indian River Lagoon NEP](#) and [The Nature Conservancy](#) (TNC) will restore eastern oyster intertidal reefs that have incurred damage from wakes from recreational vessels in [Mosquito Lagoon](#). Specifically, the team will build “restoration mats”, created by attaching oyster shells to Vexar mesh with cable ties, a design successfully conducted in the Canaveral National Seashore. The TNC and volunteers will produce 3,000 oyster mats, the amount needed to restore approximately one acre of oyster reef. Oyster mats will be deployed in the Spring and Summer of 2010. FCMP funds will support a full-time person to organize the community mat-making events.

ACCESS TO COASTAL RESOURCES

PROJECT: *Weaver Park*

RECIPIENT: City of Dunedin

FCMP FUNDS: \$50,000

ABSTRACT: In 2007, the [City of Dunedin](#) purchased the Weaver Property, located on St. Joseph Sound, to provide public access facilities to the Sound and to the [Pinellas Trail](#). Weaver Park includes a 750-foot pier, observation deck and floating dock. FCMP grant funds will be used to restore the shoreline (materials for seeding oyster beds); materials and construction of a natural surface trail in the park; safety railings for the pier and observation deck; and design and installation of interpretive signs to inform visitors of the site's natural and historic resources.

PROJECT: *Waterfront Park*

RECIPIENT: City of Palm Coast

FCMP FUNDS: \$50,000

ABSTRACT: The [City of Palm Coast](#) will improve public access at [Waterfront Park](#), which is located on Florida's Intracoastal Waterway and adjacent to property owned by the Florida Inland Navigation District. Specifically, FCMP will provide funds for a walkway and trail; for an informational kiosk on the imperiled manatee and Gopher Tortoise; and for manatee protection/mooring-prohibited signage.

WORKING WATERFRONTS

PROJECT: *St. Marks Marketing & Public Education Project*

RECIPIENT: City of St. Marks

FCMP FUNDS: \$50,000

ABSTRACT: The [City of St. Marks](#), located at the confluence of the [Wakulla](#) and St. Marks rivers, is a designated [Waterfronts Florida Partnership Community](#). The City will use FCMP funds to develop a comprehensive marketing plan that will promote St. Marks as a nature- and heritage-based tourism destination; a public education campaign will also be initiated to promote the area's unique natural and historic resources. FCMP funds will support development of the marketing plan and public education campaign; design of brochures & rack cards; and costs to cover travel expenses for tourism writers to attend a familiarization tour. The City will also host a Waterfronts Florida Program Manager's meeting.

PROJECT: *Bagdad Village Transportation & Open Space Master Plan*

RECIPIENT: Bagdad Waterfronts Florida Partnership & Santa Rosa County

FCMP FUNDS: \$25,000

ABSTRACT: The [Bagdad Waterfronts Florida Partnership](#), a non-profit organization, will develop a master plan for Bagdad Village's waterfront district, which was once active with industry. The village is located on the Blackwater River. In 2005, Bagdad was designated a [Waterfronts Florida Partnership Community](#), and its visioning process recognized the need for a waterfront master plan to guide future development of roadways, parks and businesses in the waterfront district. Community participants and stakeholders will provide input on the Master Plan. FCMP funds will be used to hire a contractor to coordinate master plan activities, develop the Master Plan and provide an internet-accessible link to the Plan.

FY 09-10 FCMP GRANTS TO STATE AGENCIES

PROJECT: *Prioritized Panhandle Seagrass Mapping*
AGENCY: Florida Fish & Wildlife Conservation Commission (FWC)
CONTACT: David Palandro
FCMP FUNDS: \$60,132
ABSTRACT: The FWC will map seagrass beds in eastern [Choctawhatchee Bay](#), a large area unmapped since 1992. Significant changes to seagrasses have taken place over past 16 years due to extensive population growth, increased recreational boating and effects from landfall of three hurricanes and one tropical storm. Mapping of the eastern bay will require purchase of new image data – [IKONOS](#) satellite data – a high spatial resolution satellite. Deliverables will include a current seagrass habitat map for Choctawhatchee Bay; a publication documenting the differences between the two IKONOS datasets; and a monitoring report detailing the abundance and presence of seagrass and macroalgal species.

PROJECT: *Florida Preemptive Derelict Vessel Management Program*
AGENCY: Florida Fish & Wildlife Conservation Commission (FWC)
CONTACT: Captain Carol Keyser
FCMP FUNDS: \$86,350
ABSTRACT: The FWC will develop a secure web-enabled database application for marine law enforcement officers and local governments to monitor and track information on vessels at anchor located on waters in the state. The system will also house data on [abandoned or derelict vessels](#) (DVs). Many of the documented DVs threaten the safety of navigation and recreation, pollute state waters from decomposition of fuel, oil tanks, batteries, hazardous chemicals, and harm benthic habitats after sinking. A preemptive derelict vessel tracking application will provide a management tool to protect seagrasses, oyster beds and hard bottom; serves as hazard mitigation; and provides for safer navigable waterways.

PROJECT: *Benthic Baseline Survey & Recovery of a Borrow Pit used for Beach Renourishment*
AGENCY: DEP/Coastal & Aquatic Managed Areas (CAMA)
CONTACT: Shelly Alexander
FCMP FUNDS: \$146,166
ABSTRACT: [CAMA](#) will acquire baseline information on macro-invertebrate communities within habitats that will be impacted by sand mining for beach re-nourishment operations. Affected habitats are federally designated as critical habitat for the threatened [Gulf Sturgeon](#). The study involves sampling benthic infaunal communities at 43 stations before removal of beach quality sand. The study will coincide with a permitted use of Borrow Area 11 within the [St. Andrews Aquatic Preserve](#) and which is adjacent to the ship channel of St. Andrews Pass. FCMP funds are for travel, gas for boats & vehicles, equipment, sampling activities and analysis.

PROJECT: *Waterfronts Florida Partnership Program Implementation*
AGENCY: Department of Community Affairs (DCA)
CONTACT: Shawna Beji
FCMP FUNDS: \$75,000
ABSTRACT: The DCA will pass through \$37,500 to two [Waterfronts Florida Partnership Communities](#) (WFP) designated in June 2009 – the [City of Fort Myers](#) and the community of [Millville](#). The communities will conduct or complete vision plans, develop a waterfront revitalization plan and begin implementation of the plan. WFP staff works with local governments to address natural resource protection & management, hazard mitigation, land use planning & development, public access, protection of cultural and historic features and effective public participation.

PROJECT: *Florida Geo-Referenced Historical Collection of Aerials & Shoreline Trends System*
AGENCY: DEP/Bureau of Beaches & Coastal Systems
CONTACT: Thomas Watters
FCMP FUNDS: \$130,435
ABSTRACT: The DEP [Bureau of Beaches & Coastal Systems](#) (BCS) has an extensive history of coastal data acquisition along Florida's coasts dating from the early 1970s. Data collection is an integral part of the State's beach management and erosion control program and includes high-resolution, true color aerial photography, profile survey data, aerial videography and weather data. As part of post-storm emergency response, data collection is also important aspect of damage assessment and recovery/restoration efforts. The BCS will integrate/organize the repository of several thousands of geo-referenced digital videos, photos and other data in a coherent indexed file system that will populate a publically-accessible GIS-Web application. The system will complete a public query-able web mapping site to make all the BCS's programs, including post-storms data collections, available for viewing by the public.

PROJECT: *Seagrass Restoration in the Florida Panhandle*
AGENCY: DEP/Northwest Regulatory District, Pensacola
CONTACT: Amy Baldwin
FCMP FUNDS: \$49,050
ABSTRACT: DEP's [Northwest District](#) (NWD) will restore [submerged aquatic vegetation](#) (SAV) populations in the Panhandle region 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. Since its inception in 2006, the SAV salvage program has obtained over 600-12" seagrass cores from dock construction for its restoration efforts and has used the savaged SAV at 12 suitable receiver sites. [Ruppia maritima](#) is propagated at the NWD laboratory, and will be planted at restoration sites. Project deliverables/products include salvaged seagrass cores planted in receiver sites; data on SAV transplant survival and colonization; and photos of salvaged and transplanted SAV.

PROJECT: *Archaeological Mapping in the Big Bend Wildlife Management Area*
AGENCY: Department of State
CONTACT: Rachel Porter
FCMP FUNDS: \$100,000
ABSTRACT: The Florida Department of State's [Bureau of Archaeological Research](#) (BAR), in collaboration with the Florida Fish & Wildlife Conservation Commission, proposes to preserve cultural resources within the coastal buffer preserve of the [Big Bend Wildlife Management Area](#). Specifically, BAR will map at-risk archaeological sites as a means of protecting information that could be lost through degradation of site features. Two mound complexes proposed for this mapping project date from the Weeden Island cultures – the Garden Batch Site in Dixie County and the Spring Warrior Complex in Taylor County. Both sites have been subject to severe vandalism and illegal artifact collection. FCMP funds will be used for survey contracting at the two sites and production of notations and images in the atlas of archaeological sites, Northwest Peninsular edition.

PROJECT: *Florida Panhandle Shipwreck Trail*
AGENCY: Department of State
CONTACT: Roger Smith
FCMP FUNDS: \$60,000
ABSTRACT: The Department of State's [Bureau of Archaeological Research](#) will document and interpret the 'Panhandle Shipwreck Trail' in waters off Pensacola and Panama City to increase heritage, recreational and ecological tourism. Twelve shipwreck sites will be visited to produce updated video and photo documentation to develop web pages that interpret the Trail. This project will meet a key objective of the Florida Oceans Initiative, "Enhancing Steward-ship Through Education", and fulfills cultural

resource management needs as expressed in the 1998 Programmatic Agreement between NOAA and the State for Historical Resource Management, to "work toward establishing a system of underwater parks and shipwreck trails where public access shall be encouraged." FCMP funds will be used for field work to acquire digital video, for travel, supplies, and for lab work to catalog and edit video, design web pages and produce the final *Panhandle Shipwreck Trail* website.

PROJECT: *Building Geodatabase Management Tools for Aquatic Preserves in South Florida*

AGENCY: DEP/CAMA

CONTACT: Gary Lytton

FCMP FUNDS: \$75,000

ABSTRACT: The [Rookery Bay National Estuarine Research Reserve](#) serves as CAMA's South Florida headquarters for 13 Aquatic Preserves (AP); the Reserve has requested FCMP funds to develop two geodatabases to serve as pilot regional coastal and marine spatial management tools. Specifically, the two geodatabase projects will be developed for [Terra Ceia](#) and [Matlacha Pass](#) APs, which include expansive seagrass beds and mangrove forested wetlands that provide essential habitat for a diverse assemblage of estuarine wildlife. The development of a geodatabase that integrates existing science-based information, linked to a spatial management framework through GIS software, will serve as a powerful information tool for AP managers, regulatory personnel and other coastal managers.

PROJECT: *Southern Indian River Lagoon Seagrass Maps*

AGENCY: St. Johns River Water Management District

CONTACT: Troy Rice

FCMP FUNDS: \$42,250

ABSTRACT: A primary objective of the [Indian River Lagoon](#) (IRL) SWIM plan is to protect and restore seagrasses – the Plan also directs the [St. Johns River Water Management District](#) (SJRWMD) to map IRL seagrasses at 2-3 year intervals and to acquire aerial photos during non-mapping years. The lagoon-wide maps provide an overall picture of seagrass resources and serve as important management tools for obtaining a current inventory of this resource, to 1) identify "healthy" areas that may deserve special protection efforts; 2) potential "problem" areas that require further investigation; and 3) help assess the success of management strategies. Primary objectives are to produce orthophotography for the southern IRL and produce a 2011 seagrass map by photo-interpreting the aerial imagery in soft-copy stereo along with ancillary ground truth data. SJRWMD will use FCMP funds for a Study Plan, ground-truthing, orthophotography, photo-interpretation, and other project deliverables.

PROJECT: *Replacement of 390 Buoys in the Florida Keys National Marine Sanctuary*

AGENCY: DEP/CAMA

CONTACT: Kent Edwards

FCMP FUNDS: \$85,300

ABSTRACT: The [Florida Keys National Marine Sanctuary](#) Mooring Buoy Program is managed by DEP's Office of Coastal & Aquatic Managed Areas. The [mooring buoy program](#) is a primary means of protecting coral and fragile submerged resources from damage by managing public access and recreational activities in the Key Largo and [Looe Key National Marine Sanctuaries](#). The buoys to be replaced are found in shallow waters and near coral reef formations and sensitive marine habitats, and offer a free-easy-to-use alternative to anchoring for all classes of vessels. Information buoys are often the first indication for many boaters that the area contains protected underwater natural, cultural and historical resources. All buoy systems are scheduled for replacement every 18 months before becoming hazardous to boaters.

PROJECT: *DCA Coastal Program Support*
AGENCY: Department of Community Affairs
CONTACT: Beth Frost
FCMP FUNDS: \$15,000
ABSTRACT: FCMP funds will be used to continue a program of coordination, technical support, and review through the Department of Community Affairs' [Division of Community Planning](#) to evaluate federal actions for consistency with the FCMP, and to assist local governments in evaluating the impacts of coastal development. The Division is responsible for various growth management initiatives, including the [Development of Regional Impact](#) process, the [Areas of Critical State Concern](#) program, and the [local government comprehensive planning](#) process.

PROJECT: *Waterfronts Florida Partnership Enhancements*
AGENCY: Department of Community Affairs
CONTACT: Elisabeth Salinas
FCMP FUNDS: \$90,000
ABSTRACT: The [Waterfronts Florida Program](#) (WFP) at the Department of Community Affairs (DCA) was created to address the physical and economic decline of traditional working waterfront communities. Since its inception, 21 communities have been designated as WFP communities, which afford access to technical assistance with community-designed vision plans. The plans are used to guide the revitalization of water-dependent economies by addressing public access, hazard mitigation, environmental and cultural resource protection and economic enhancement. In 2009-2010, DCA will continue analyzing state, regional and local comprehensive plan policies related to protection of maritime infrastructure; assist waterfront communities in developing and hosting business continuity education and training needed to minimize losses and increase the resilience of businesses affected by natural disasters; and provide technical assistance to communities as needed and carry out WFP administrative functions.

PROJECT: *Seagrass Integrated Mapping & Monitoring, Year 3*
AGENCY: FFWCC/Fish & Wildlife Research Institute
CONTACT: Paul Carlson
FCMP FUNDS: \$150,000
ABSTRACT: Florida seagrass beds are an extremely valuable resource but are vulnerable to many direct and indirect human impacts, especially eutrophication, which reduces water clarity. To protect and manage this resource, the [Fish & Wildlife Research Institute](#) (FWRI) will continue development of the Seagrass Integrated Mapping and Monitoring program to enable resource managers to track changes in the distribution, abundance, and species composition of seagrass meadows around the state. FWRI's tasks in FY 09-10 are: 1) establish seagrass monitoring programs in [Choctawhatchee Bay](#) and St. Andrews Bay; 2) complete mapping of [Biscayne Bay](#) seagrasses; 3) complete mapping of [St. Joe Bay](#) seagrasses; 4) evaluate the feasibility of obtaining seagrass imagery from Dept. of Revenue triennial property mapping; and 5) develop and test effective monitoring techniques for deepwater seagrass beds in the Big Bend region.

PROJECT: *Harmful Algal Bloom Response Plans, Year 4*
AGENCY: Department of Health
CONTACT: Andy Reich
FCMP FUNDS: \$42,000
ABSTRACT: The Department of Health's (DOH) [Aquatic Toxins Program](#) will continue to develop county-specific HAB public health response plans for all the major harmful algal bloom organisms (HAB); specifically, for blue green algae/cyanobacteria; [Florida Red Tide](#); Ciguatera; and Saxitoxin. In FY 09-10, FDOH will work with county health departments (CHD) to finalize 30 HAB response plans. CHDs with completed plans will assist with developing new county plans by representing the county perspective, sharing completed plans and marketing to colleagues. HAB plans will be posted on the DOH Aquatic Programs web site (see above).

PROJECT: *Post-Disaster Redevelopment Plans, Year 4*
AGENCY: Department of Community Affairs
CONTACT: Walker Banning
FCMP FUNDS: \$100,000
ABSTRACT: The Department of Community Affairs (DCA) will continue its initiative to guide development of [post-disaster redevelopment plans](#) (PDRP) to create sustainable communities. DCA's project tasks for the fourth phase of this initiative are to print the Best Practices Guidebook (completed with FCMP 08-09 funds); assist pilot communities with implementation of their PDRPs; and begin to incorporate sea level rise adaptation into the PDRP planning framework.

PROJECT: *Hyperspectral Mapping of the Big Bend Aquatic Preserve*
AGENCY: DEP/Coastal & Aquatic Managed Areas (CAMA)
CONTACT: Melissa Charbonneau
FCMP FUNDS: \$150,000
ABSTRACT: CAMA staff will obtain baseline maps of bathymetry, seagrass beds and the extent of [propeller scar damage](#) in the [Big Bend Seagrasses Aquatic Preserve](#), the largest of Florida's 41 Aquatic Preserves. CAMA will obtain hyperspectral imagery for imagery off the Taylor County coast, where extensive near-shore seagrass beds are located adjacent to areas of planned high density development, marinas and boat traffic. High spectral imagery will set a baseline for many submerged aquatic resources on which future mapping efforts may be compared – the acquired imagery will also provide information that can be applied during management planning for the Preserve. CAMA will produced maps and coverages of the area's bottom types, seagrass habitat, bathymetry, and determine the extent of propeller scar damage. CAMA will also host a website where flight data, imagery, metadata and post-processed maps will be available to the public.

PROJECT: *Evaluating Flooding Impacts on Aquifer & Near-Shore Water Quality*
AGENCY: DEP/Florida Geological Survey
CONTACT: Rodney DeHan
FCMP FUNDS: \$121,200
ABSTRACT: Staff at the [Florida Geological Survey](#) (FGS) will evaluate water quality changes from flooding and storm surge in coastal [Wakulla County](#) served by centralized sewers vs. septic systems. To provide county and state decision-makers with data-based scientific information on water quality impacts stemming from flooding and/or storm surges and the potential release of raw or inadequately-treated domestic effluents to the environment, the FGS will 1) determine impacts on ground- and surface-water quality from storm surges at Shell Point and Live Oak Island; 2) track the source of fecal coliform bacteria in this area during non-storm and post-storm surge periods; and 3) predict nitrate concentrations and the path effluents are transported from septic tanks and sewer lines through the subsurface to discharge points in near-shore waters during both non-storm and post-storm surges.