

FY 2010 Energy and Water Development

Altamonte Springs Going Green By 2015, \$150,000

City Of Altamonte Springs, Seminole County, Florida

Funds will be used to decrease the amount of electricity used by the Cranes Roost Park facility by 86%. This project will promote new jobs and allow a huge cost savings to the residents.

Beach Erosion Restoration, \$8,250,000

Miami-Dade County, Miami-Dade County, Florida

Funds will be used for the placement of sand along eroded portions of Miami-Dade County and Miami Beach. This project protects billions of dollars of beachfront development and infrastructure, as well as, domestic and international tourism.

Brevard County Shore Protection Project Mid and South Reaches, \$17,400,000

Brevard County Board Of County Commissioners, Brevard County, Florida

Funds will be used to allow initial construction of the Brevard County Shore Protection Project Mid Reach and provide for South Reach nourishment. This project will protect local infrastructure, residents, and the tourism economy and produce over 900 jobs, in both the public and private sectors.

Energy Efficient HVAC Chillers and Cooling towers, \$1,000,000

Hillsborough Community College, Hillsborough County, Florida

Funds will be used to replace heating and cooling units that are inefficient and nearly obsolete, thereby increasing power efficiency and lowering energy usage and costs.

Canaveral Entrance Channel Sediment Trap \$2,000,000

Canaveral Port Authority, Brevard County, Florida

Funds will be used for maintenance dredging of the sediment trap at the entrance channel to Canaveral Harbor. The trap intercepts sand being transported by storm events into the Federal Navigation Entrance Channel and thus prevents closures of the channel. Without the sediment trap, the entrance channel would be closed for an extended period of time during hurricane season, which would interfere with commerce.

Canaveral Harbor, \$1,500,000

Canaveral Port Authority, Brevard County, Florida

Funds will be used for the preconstruction, engineering, and design (PED) of improvements to Canaveral Harbor. This project will improve the port's general navigation features, and is in the interest of more safe, efficient, and expanded international trade.

Canaveral Harbor Maintenance Dredging, \$5,000,000

Canaveral Port Authority, Brevard County, Florida

Funds will be used to maintain dredging of the Federal Navigation Channels, Basins, and the West Turning Basin to a depth of 35 feet. The project will protect a vital resource.

Cedar Hammock (Wares Creek) Florida Flood Control Project, \$5,000,000

Manatee County Board Of County Commissioners, Manatee County, Florida

Funds will be used to allow construction to proceed through the second phase of the project during FY2010. This project will reduce flood problems and average annual damages by at least 57 percent.

City of Miami Green Initiative, \$1,702,000

City Of Miami, Miami-Dade County, Florida

Funds will be used to replace streetlights with light emitting diode (LED) and solar technology and Miami's vehicle fleet with hybrid cars. This project will represent a 64% increase in fuel economy and reduce greenhouse gas emissions.

City of North Port Water Control Structure Replacement, \$3,000,000

City Of North Port, Sarasota County, Florida

Funds will be used to replace the deteriorated City's Water Control Structure (WCS) #101 with a modern, remotely-controlled structure having six electronic gates, a flow/level sensor and a backup power supply. This project will to modernize and protect the City's existing water infrastructure.

City of Saint Petersburg Sustainable Biosolids Management, \$2,300,000

City Of St. Petersburg, Pinellas County, Florida

Funds will be used to own and operate a facility that will use City generated biostocks to fuel a biomass gasification and energy facility located at the City's Southwest Waster Reclamation Facility. This project will convert a noxious waste to renewable energy, reduce city cost and pollution of waste disposal, and the potential of ground water pollution from landfills or land spreading.

Coquina Coast Seawater Desalination Project, Palm Coast FL, \$5,000,000

City Of Palm Coast, Flagler County, Florida

Funds will be used to implement the seawater desalination project that consists of four main components including: intake, treatment, concentrate management, and distribution. This project will provide 20 million gallons per day (MGD) of potable water with an ultimate capacity of 70 MGD.

Design-Build Water and Wastewater System Expansion for the Town of Davie, Florida, \$5,000,000

Town Of Davie, Broward County, Florida

Funds will be used to expand both its water and wastewater systems in order to provide service to their residents. This project will provide residents with opportunities for employment, housing and essential needs and services within the Town.

DMMP and Permitting for Port St. Joe Ship Channel Maintenance Dredging, \$1,000,000

Port St. Joe Port Authority, Gulf County, Florida

Funds will be used to finance the U.S. Army Corps of Engineers Mobile District to prepare a Dredge Material Management Plan (DMMP) and to acquire permits for the resumption of maintenance dredging of the Federally authorized Port St. Joe Ship Channel. This project will create well paying jobs and revitalize an authorized waterway, which will reduce highway traffic.

Eckerd College Science Center, \$1,000,000

Eckerd College, Pinellas County, Florida

Funds will be used for the construction of a \$25 million, 51,000-square-foot science teaching and laboratory facility. This project will educate all students using the most current teaching strategies that support the development of critical thinking skills.

Everglades and South Florida Ecosystem Restoration, \$5,000,000

Seminole Tribe Of Florida, Broward County, Florida

Funds will be used for the Tribe's critical project includes a complex water conservation plan and a canal that transverses the Reservation. This project will improve the hydrology in the Big Cypress Basin, which will improve the water quality, quantity, timing, and distribution, benefiting the ecology on the Reservation (federal lands) and the Big Cypress National Preserve.

Florida Keys Water Quality Improvements, \$20,000,000

City Of Key West & City Of Marathon, Monroe County, Florida

Funds will be used for this multi-city project, for the continued construction of the Florida Keys Water Quality Improvements which will protect the water quality and coral reef in the Keys. This project will protect the entire Keys economy which relies on tourism and it protects the Florida Keys National Marine Sanctuary, which includes a rare fragile coral reef ecosystem.

Gulf Intracoastal Waterway, Caloosahatchee River to Anclote River, \$5,000,000

West Coast Inland Navigation District, Sarasota County, Florida

Funds will be used for maintenance dredging in seven areas of the Gulf Intracoastal Waterway and the Okeechobee Waterway. This project will help create jobs and modernize the waterway.

Herbert Hoover Dike Flood and Storm Damage Restoration, \$130,000,000

South Florida Water Management District, Palm Beach County, FL

Funds will be used To restore and repair problems identified as unacceptable risks of failure. The dike currently exhibits physical evidence of substantial distress during high water events. This project is needed to avoid the impacts of a catastrophic event associated with dike failure.

Intracoastal Crossing Pipe Replacement, \$2,600,000

City Of Hollywood Department Of Public Utilities, Broward County, Florida

Funds will be used to install a total of six new pipelines to replace the subaqueous pipelines that have reached the end of their useful life. This project will alleviate any potential health and/or environmental concerns regarding coastal and recreational water quality within the City of Hollywood.

IWW Dredging, \$5,000,000

Florida Inland Navigation District, Palm Beach County, Florida

Funds will be used to dredge the Intracoastal Waterway (IWW) at the Matanzas Inlet (St. Johns County) and in the vicinity of St. Augustine. This project will also restore the Dredged Material Management Area in St. Johns County and construct a Dredged Material Management Area in Indian River County. Maintenance dredging of the IWW keeps the IWW safe for navigability, which allow for commercial users to transport products to and from FL. When the IWW is properly maintained, it contributes \$38 billion to Florida's economy.

Jacksonville Harbor Mile Point, \$750,000

Jacksonville Port Authority, Duval County, FL

Funds will be used for proposed improvements to the federal shipping channel in the vicinity of Mile Point. Strong currents restrict vessels to a 32 foot depth and vessels must wait on a flood tide. The current navigation impediments present severe safety and efficiency issues for vessel traffic in the harbor. Improvements are critically needed to assure the continued ability to serve modern cargo vessels in a safe and efficient manner.

Jacksonville Harbor GRR, \$950,000

Jacksonville Port Authority, Duval County, Florida

Funds will be used for the ongoing GRR, which is investigating the need for further improvements to the federal shipping channel.

Lake Worth Bulkhead Reconstruction, Phase II, \$850,000

City Of Lake Worth, Palm Beach County, Florida

Funds will be used to restore the bulkhead in Bryant Park , which is in need of critical repairs. This project will ensure public safety, modernize roads, bridges, transit, and waterways and help workers hurt by the economy.

Lake Worth Inlet Sand Transfer Plant Modernization Project, Town of Palm Beach, FL, \$3,000,000

Town Of Palm Beach, Palm Beach County, Florida

Funds will be used to rehabilitate and modernize the existing facility. This project will maintain navigation at the Port of Palm Beach, which supports 2,500 jobs and \$261 million in economic impact in Palm Beach County.

Lee County, FL (Gasparilla Island segment), \$2,354,812

Lee County, Lee County, Florida

Funds will be used to reimburse Lee County for the Federal share of construction of the Lee County, FL (Gasparilla Island segment) storm damage reduction project. This project will help to modernize the nation's coastal infrastructure and protects vital services.

Lido Key Beach and Sarasota County, Shore Protection Project, Sarasota FL, \$350,000

City Of Sarasota, Sarasota County, Florida

Funds will be used for the continuation of a Pre-Construction, Engineering & Design for the Shore Protection Project. This project will address the coastal erosion that has been a long-term, persistent problem on Lido Key, which threatens commercial and residential structures as well as public infrastructure.

Miami Dade College Green Initiative, \$1,200,000

Miami Dade College, Miami-Dade County, Florida

Funds will be used for solar panels and other renewable energy and technology capabilities and curriculum development around renewable energy and technology at Miami Dade College campuses. This project will lower greenhouse (CO2) gas emissions, foster partnerships with the community and utility service providers and create educational/training opportunities.

Miami Harbor Channel Dredging, \$2,700,000

Port of Miami, Miami-Dade County, Florida

Funds will be used for the Planning, Engineering, and Design (PED) of the deepening project to 50 - 52 feet. This project will protect the economy of South Florida and the nation from increasing competition from foreign ports with existing significantly deeper channels and faces the real threat of losing business to foreign ports.

Miami River Dredging, \$11,000,000

Miami River Commission, Miami-Dade County, FL

Funds will be used for the final phase of the Miami River Dredging Project to restore authorized depth and width to the navigation channel. Dredging and disposal of the contaminated sediments is expected to improve navigation and enhance the environmental quality of the Miami River and downstream portions of Biscayne Bay. Completion of the project will also permit larger commercial vessels to call on the River, thus increasing commerce.

Miami Science Museum Renewable Energy Research Project, \$1,500,000

Miami Science Museum, Miami-Dade County, Florida

Funds will be used for a research and development program aimed at enhancing public understanding of alternative energy and energy efficiency technologies. This project will generate approaches and materials that would be applicable and useful for the Museum's own sustainability efforts and for programs and communities throughout the US.

MOSI-NSB ENERGE Project \$1,000,000

Museum Of Science & Industry, Hillsborough County, Florida

Funds will be used to create a new model of public education for energy research. The project will discover breakthrough scientific insights that emerge from the holistic integration of physics, biomedicine, and nanotechnology; and establish proof-of-concept for commercial feasibility and scalability; and Transition viable technologies into new spinoff companies. Showcasing sustainable and renewable energy innovative ideas will stimulate additional new creative ideas that can initiate economic development in energy for Florida and the nation.

National Open-Ocean Energy Laboratory, \$2,000,000

Florida Atlantic University, SeaTech Campus, Broward County, Florida

Funds will be used for the establishment of the National Open-ocean Energy Laboratory at FAU. Early demonstration/validation testing in a well-mapped operational environment is a necessary component for risk mitigation of commercial designs prior to deployment of open-ocean energy generating systems. This project will help spur technological advancement and drive economic expansion in this growing sector of alternative energy.

Palm Beach County Beach Renourishment (Delray Beach Segment) - Delray Beach, Florida, \$430,000

City Of Delray Beach, Florida, Palm Beach County, Florida

Funds will be used to stabilize an eroding beach, provide nesting habitat for marine turtles, and protect the recreated coastal dune system. Delray Beach had experienced a severe erosion problem for many years. This project will provide work for contractors who perform the required beach renourishment activities.

Palm Beach Harbor Feasibility Study, Palm Beach County, \$702,000

Port Of Palm Beach District, Palm Beach County, Florida

Funds will be used to conduct cost, engineering and environmental analysis of proposed improvements to the Federal channel in order to assure the port's future commercial competitiveness. The existing channel in the Port of Palm Beach was designed and built nearly 50 years ago. This project will make for safer and more efficient navigation. The port is increasingly losing business opportunities because newer, industry standard, vessels cannot access port facilities. If improvements are not made the port will no longer attract international and domestic commerce, regional employment will suffer, and the State's competitiveness will be diminished. Commerce at the Port of Palm Beach supports 2,500 jobs and \$261 million in annual economic activity.

Panama City Beaches Beach Erosion Control and Storm Damage Reduction Project, \$4,000,000

Bay County Tourist Development Council, Bay County, Florida

Funds will be used for beach restoration at Pinnacle Port and Carillon Beach. This area suffered severe beach erosion from Hurricane Ivan in 2004 and several hurricanes in 2005, and it is susceptible to upland structure and infrastructure damage from future storms. Maintaining the beach is of critical importance in terms of preventing storm damage to structures and public infrastructure. A healthy beach will also help maintain beach tourism and the revenue tourism generates for the economy, as well as help keep secure the local jobs that support tourism.

Pinellas County Beach Erosion Control, \$5,000,000

Pinellas County, FL, Pinellas County, Florida

Funds will be used to support the renourishment and restoration of 9 miles of critically eroded Sand Key Beach. This project is in the public interest for storm protection and recreation.

Port Everglades Future Dredging Program, \$336,100

Broward County, Broward County, Florida

Funds will be used for a feasibility study conducted by the U.S. Army Corps of Engineers to determine the most effective way to deepen and widen Port channels. Port Everglades is the second largest cruise port in the world as well as the fastest growing containerized cargo business entity in the country. It is a primary bulk cargo depot for South Florida, as well as the petroleum distribution point for 12 counties. This project will increase trade and tourism in the region while improving the quality of life for residents.

Regional Reclaimed Water System, \$1,000,000

Charlotte County Board Of County Commissioner, Charlotte County, Florida

Funds will be used to design and construct a 4.5-mile transmission main that will convey reclaimed water from the western end of Central Charlotte County (Riverwood Development), across the Myakka River to the West Port and Rotonda Water Reclamation Facilities, coupled with an Aquifer Storage & Recovery well (ASR). This project offsets the use of potable water for irrigation purposes throughout the county. By offsetting reclaimed water for approximately 954,000 gallons per day of potable water, there will be more potable water available in the region for drinking purposes.

Replacement of wastewater pipes and mechanical equipment, \$3,750,000

S. Seminole N. Orange County Wastewater Transmis, Orange County, Florida

Funds will be used to replace wastewater pipes and mechanical equipment. Recent testing has confirmed extensive corrosion of 75% or more of pipe wall thickness deterioration affecting the operational integrity of the system. A collapse of this pipe and the resulting collapse of the road would be a major health and safety liability.

Robotics and Embedded Systems Research Laboratory, \$1,000,000

Bethune Cookman University, Volusia County, Florida

Funds will be used to advance research in the practical uses for cooperative motion planning and control of multiple heterogeneous mobile robots in performing socially and physically undesirable, hazardous or even "impossible" tasks, such as search and seizure on dangerous, unpredictable terrain, toxic waste clean-up, desert and space exploration, in factory-floor automation unmanned combat vehicles, ships and aircrafts that can negotiate landscapes and fire weapons. Federal funding will allow the University's impressive cadre of talented scientists/faculty interested in strengthening the research capacity of the institution to focus on innovations that are compatible with Florida's economic plans and emerging technologies.

Sarasota Bay Restoration Program, \$3,000,000

Sarasota County, Sarasota County, Florida

Funds will be used to install a sanitary sewer system that will encourage the relocation of individuals to economically disadvantaged sections of Sarasota County, and improve the environment as the deteriorating septic tanks are replaced. This project will benefit low to moderate-income communities in Sarasota County.

Scientific assessment of the ecological flow regime for ACF Basin, \$1,200,000

U.S. Army Corps of Engineers, Florida

Funds will be used to conduct a scientific assessment of the ecological flow regime. This assesment is required to sustain the health and productivity of the waters of the ACF Basin.

Shore Protection Project, Flagler Beach FL, \$495,000

City Of Flagler Beach, Flagler County, Florida

Funds will be used to study the City's shoreline, as it has experienced critical erosion over the last several years which is threatening State Road A1A, which serves as an emergency evacuation route. The

erosion also has caused a severe loss of public recreation opportunities and a degradation of environmental habitat.

Shore Protection Project, St. Johns County FL, \$200,000

St. Johns County Florida, Saint Johns County, Florida

Funds will be used for the study that will assess the needs for Hurricane and Storm Damage Protection and opportunities for environmental restoration and protection along the County coast. Due to tropical storms and major hurricanes, particularly Hurricane Floyd of 1999 and the Hurricanes of 2004, the shorelines of St. Johns County have been subject to significant erosion.

Shore Protection Project, Walton County, FL, \$200,000

Walton County, Florida, Walton County, Florida

Funds will be used to complete preconstruction, engineering, and design of the Walton County, FL shore protection project. Due to major storms, hurricanes, and severe weather patterns the shoreline in this region has been subject to significant erosion. The need to protect the shoreline remains vital to the health of our community. In addition, beaches in Walton County are critical economic and environmental assets as they host 2.5 million overnight visitors, are estimated to generate \$682.9 million in total sales, result in the creation of about 12,158 jobs, generate \$304 million in local incomes and wages, and generate annual County tax revenues of about \$130.9 million.

Shoreline Protection Project, Okaloosa County FL, \$600,000

Okaloosa County, Okaloosa County, Florida

Funds will be used to commence a feasibility study for the development of a work-plan that will effectively safeguard our shoreline from further erosion. Due to major storms, hurricanes, and severe weather patterns the shoreline in this region has been subject to significant erosion. The need to protect our coast remains vital to the health of our community.

Solar Power Energy for Community Health Center, Miami, Florida, \$175,000

Borinquen Health Care Center, Inc., Miami-Dade County, Florida

Funds will be used to build an integrated roof-mounted hurricane resistant PV and SDHW solar mounted system for Borinquen Health Care Center, Inc. This would be a unique solar powered system designed for South Florida's weather, and would function from sun up to sun down. There would be an approximate cost savings of \$175,000 to \$225,000 in electricity over the life of the solar powered systems. This project will have a beneficial effect on pollution, global warming and the world economy.

South Channel Extension, Port Manatee, Florida, \$5,000,000

Port Manatee, Manatee County, Florida

Funds will be used for the extension of a federal channel by approximately 1,600 feet southward and dredging to the authorized water depth to 40 feet with a 400 foot wide channel. Timely dredging of the South Channel extension is essential to accommodate the needs of port users and is critical to the ability of Port Manatee to respond to market demands and future growth projections. Manatee Port supports 22,500 jobs, with an annual local economic impact of \$2.3 billion. This project upgrades existing public infrastructure to the benefit of the entire region, while employing construction workers and protecting the jobs of workers that rely on the Port's continued viability.

South Florida Everglades Ecosystem Restoration, \$214,357,000

South Florida Water Management District, West Palm Beach, FL

This plan includes various components, extending from the Kissimmee River Basin to Florida Bay. These projects provide restoration, protection, and preservation of the water resources of central and southern Florida, vital to restoration of the Everglades.

St. Lucie Inlet, FL, \$5,000,000

Martin County, Martin County, Florida

Funds will be used to improve the north jetty system at the Inlet. The Inlet serves as the flushing point for water sent from Lake Okeechobee via the St. Lucie Canal. The Inlet averages over 800 boat trips per day and supports a vital commercial fishing industry that contributes over 31 million lbs. of catch on Florida's east coast. Furthermore, the Inlet supports 350 marine related businesses in the County that generate revenue in excess of \$302 million per year.

Stetson University New Science Center Complex, \$1,000,000

Stetson University, Volusia County, Florida

Funds will be used to expand and renovate the Science Center Complex. Essential elements of the complex include flexible learning spaces for observation, research, and collaboration; tiered classrooms to serve as lecture halls for the entire Stetson community; comfortable spaces for group study sessions; and outdoor balconies to unite the science classroom and nature. Educating more students in the areas of science, technology, engineering, and mathematics is imperative to successfully overcome economic challenges. This project will help Stetson educate its students and contribute significantly to the improvement of science education throughout the state.

Tampa Harbor Dredging, \$5,000,000

Tampa Port Authority, Hillsborough County, Florida

Funds will be used to dredge the 70 miles of federal channels in the Tampa Harbor. Maintaining the depth of the main federal channel is essential for Tampa Port to be able to efficiently and safely continue to handle modern cargo and passenger vessels and therefore assure Tampa Port's continued viability and significant contributions to the regional economy. The Tampa Port is the largest economic engine in West Central Florida, generating an annual economic impact of almost \$8 billion which includes the contribution of over \$570 million annually in state and local taxes. The Port of Tampa generates over 16,000 direct jobs annually.

Tampa Harbor Widening, \$500,000

Tampa Port Authority, Hillsborough County, Florida

Funds will be used to widen select portions of the main channel in Tampa Harbor. The ship channel is too narrow to allow for safe two way vessel traffic due to the introduction of new longer and broader cruise ships. The congestion causes safety hazards and economic inefficiencies. This project will reduce vessel operations costs, resulting in transportation cost savings, increased harbor safety and reduced cargo deliver delays. The Tampa Port is the largest economic engine in West Central Florida, generating an annual economic impact of almost \$8 billion which includes the contribution of over \$570 million annually in state and local taxes. The Port of Tampa generates over 16,000 direct jobs annually.

Water Control Manual (WCM) update, \$5,000,000

U.S. Army Corps of Engineers, Florida

Funds will be used to conduct a peer review of the findings and recommendations of the Corps Environmental Impact Statement (EIS) being developed in support of the Water Control Manual (WCM) update. The updates will focus on current system operations including drought contingency plans. This project will protect a vital resource to the region.