Florida Resilient Coastlines Program

FY 2018-19

Inaugural Grant Abstracts

In 2018, DEP awarded the Florida Resilient Coastlines Program funding for 13 projects. The projects listed below were funded by the Florida Coastal Management Program and NOAA.

PROJECT: Community Based Resiliency in The City of Cocoa

RECIPIENT: City of Cocoa

FCMP FUNDS: $77,200

ABSTRACT: The primary goals of this project are to educate and engage Cocoa’s residents and businesses in the conversation of resiliency and assess impacts from sea level rise, flooding and storm surge. The East Coast Florida Regional Planning Council will work with the City to develop educational visualizations and facilitate engagement opportunities relevant to resiliency and the future of the City. This innovative engagement and education process, combined with an assessment of the City’s vulnerabilities, will guide the decision-making process for future development, infrastructure projects and programs to assist local economic growth and business resilience. This proposal is the first phase of a four-step vision which includes the development of a “Resiliency/Disaster Preparedness Plan for Small Businesses”, development of Adaptation Action Areas and related comprehensive plan goals, policies and strategies and the creation of a Sustainability Resiliency Plan.

PROJECT: Martin County Resilient Coastlines Program

RECIPIENT: Martin County Board of Commissioners

FCMP FUNDS: $18,500

ABSTRACT: This project will build upon efforts already initiated by martin County but will help catalyze a climate and resiliency program for the County by harmonizing efforts under a single program initiative. This includes coordinating technical data and policy response planning, floodplain management and coastal projects. Primarily, this work will develop and utilize best practices to understand and develop mitigation practices for erosion and reduce flood risk in coastal areas resulting from high-tide events, storm surge, flash foods, stormwater runoff, and the related impacts of sea level rise.
PROJECT: Implementing Florida’s 2015 Peril of Flood Act

RECIPIENT: Tampa Bay Regional Planning Council

FCMP FUNDS: $64,386

ABSTRACT: This project proposes to increase Tampa Bay local governments’ ability to integrate nature-based adaptation, low-impact design, and considerations for affordable housing resiliency and Community Redevelopment Areas, into local government comprehensive plans to address requirements of the 2015 Peril of Flood legislation. Project activities will support Tampa Bay Climate and resiliency Compact efforts and increase awareness among stakeholders and residents.

PROJECT: Building Resilience into the Comprehensive Plan

RECIPIENT: City of Sebastian

FCMP FUNDS: $50,000

ABSTRACT: The City of Sebastian has diligently worked towards mitigating damages from coastal flooding and storm damage to public facilities. The City desires to prepare a master plan that will guide the next steps toward funding of capital infrastructure projects. To move forward with a comprehensive plan, the City requires technical assistance to complete a matrix of development strategies that increase their resiliency along Florida’s coastline. Though a portion of the City’s Comprehensive Plan was updated in 2012, the Public Facilities, Conservation Element and Coastal Management Element have not been updated since 1999, presenting an almost twenty-year gap in data and analysis. The City proposes to translate science and data into risk preparedness policy. Utilizing existing data sources, an assessment of the vulnerability of various aspects of the City’s land use, public assets, and ecosystems to certain hazards will lead to the end goal of enhancing resiliency.

PROJECT: Melbourne Beach Coastal Flooding Comprehensive Plan Amendments

RECIPIENT: Town of Melbourne Beach

FCMP FUNDS: $33,000

ABSTRACT: The work product will provide the data and analysis necessary to prepare and process comprehensive plan amendments to the Coastal Management Element of the Town’s Comprehensive Plan. The Comprehensive Plan amendments, part of the Town’s current Evaluation and Appraisal Report update process, are required by 163.3178 (2)(f), F.S. Phase I of the project will benefit other coastal communities within the East Central Florida Regional
Planning Council. Work products generate will serve as a best practice guide in their comprehensive plan update efforts.

**PROJECT:** *Community Based Resiliency in The City of Cape Canaveral*

**RECIPIENT:** City of Cape Canaveral

**FCMP FUNDS:** $67,000

**ABSTRACT:** The City of Cape Canaveral’s priorities to educate and engage its residents and businesses in the conversation of resiliency and assess impacts from sea level rise, flooding and surge are the primary goals of this proposal. The East Central Florida Regional Planning Council will work with the City to develop educational visualizations and facilitate engagement opportunities for the community relevant to resiliency and the future of the City. This public engagement and education, combined with an assessment of the City’s vulnerabilities, as they relate to ensuring resiliency to hazards and changing climate conditions, will guide the decision-making process for future development, infrastructure projects and various programs within the City.

**PROJECT:** *Evacuation Zone Creation Tool for GIS*

**RECIPIENT:** Tampa Bay Regional Planning Council

**FCMP FUNDS:** $27,958

**ABSTRACT:** Create a GIS tool that makes it rather straightforward and even easy to create preliminary evacuation zones for counties and their emergency management departments. The tool will have a user interface similar to what the counties have used already for creating surge zones. The tool will create baseline evacuation zones that adhere to certain parameters that the user will choose to run the model. Essentially it will be creating an evacuation model from a storm surge model.

**PROJECT:** *Coastal Management Comprehensive Plan Evaluation*

**RECIPIENT:** Dixie County Board of County Commissioners

**FCMP FUNDS:** $10,000

**ABSTRACT:** The primary goals of this project are to utilize existing tools to assess the vulnerability of coastal communities in Dixie County and to develop language to revise the
County’s Comprehensive Plan to protect our citizens, businesses and visitors while also being compliant with the “peril of flood” provisions of the Florida Administrative Code. This process will guide the decision-making process for future development, infrastructure projects and programs to assist local economic growth and business resilience.

PROJECT: *Community Based Resiliency in New Smyrna Beach*

RECIPIENT: City of New Smyrna Beach

FCMP FUNDS: $33,350

**ABSTRACT:** The primary goal of this grant is for the City of New Smyrna Beach to work with the East Central Florida Regional Planning Council (ECFRPC) to education and engage its residents and businesses in the conversation of resiliency. The ECFRPC and the City will partner with Stetson University’s Institute for Water and Environmental Resilience, the University of Central Florida and Florida Sea Grant to develop background data and analyses to facilitate resilience discussions within the community. The public engagement activities will utilize cutting edge technologies to support the collection of input from diverse citizenry in an effort to drive current and future objectives of the City for policy and project development and identification of priorities, risks, vulnerabilities, and opportunities for resilience building within the City. This input will combine with a quantifiable assessment of the City’s policies and plans as they relate to ensuring resiliency to hazards and changing climate conditions to power a final public presentation and workshop that will help guide the decision-making process for future development, infrastructure projects and various programs within the City.

PROJECT: *Indialantic Resiliency Project*

RECIPIENT: Town of Indialantic

FCMP FUNDS: $24,500

**ABSTRACT:** The Town of Indialantic’s priorities to educate and engage its residents and businesses in the conversation of resiliency and assess impacts from sea level rise, flooding and storm surge are the focus of this proposal. The Town will coordinate with the East Central Florida Regional Planning Council to develop educational visualizations and will facilitate engagement opportunities for the community relevant to resiliency and the future of the Town. This public engagement and education, combined with an assessment of the Town’s vulnerabilities, as they relate to ensuring resiliency to hazards and changing climate conditions, will guide the decision-making process for future development, infrastructure projects and various programs within the Town.
PROJECT: *City of St. Marks Costal Resiliency*

RECIPIENT: City of St. Marks

FCMP FUNDS: $25,000

ABSTRACT: The overall project is designed to evaluate the City’s vulnerability to sea level rise (SLR) and evaluate and recommend policy alternatives to reduce the City’s vulnerability over time. The general approach will utilize the Army Corps of Engineers SLR Model to map potential inundation areas based on two forecasted SLR scenarios (intermediate and high); use GIS software to join inundation layers (in one foot flood depth increments) to parcel level data, future land use and infrastructure data sets to allow for an evaluation of relative vulnerability to land uses, structures and infrastructure within the forecasted identified inundation areas; evaluate policy options, including engineering solutions, to minimize and mitigate the potential damage from SLR inundation; and draft policies setting forth strategies deemed feasible for the City of St. Marks, including potential land use, regulatory, incentive-based, education, funding and potential engineering solutions to strengthen the City’s resiliency to SLR and ability to recover from flooding.

PROJECT: *Indian Harbour Beach Resiliency Project*

RECIPIENT: City of Indian Harbour Beach

FCMP FUNDS: $20,500

ABSTRACT: Priorities of the project will be to educate residents and businesses about resiliency and to assess impacts from sea level rise, flooding and storm surge. The City will coordinate with the East Central Florida Regional Planning Council to develop educational visualizations and will facilitate engagement opportunities for the community relevant to resiliency and the future of the strategies to reduce the potential impacts of sea level rise and storm surge. This public engagement and education, combined with an assessment of the Town’s vulnerabilities, as they relate to ensuring resiliency to hazards and changing climate conditions, will guide the decision-making process for future development, infrastructure projects and various programs within the City.
PROJECT: Resilient Titusville 2020

RECIPIENT: City of Titusville

FCMP FUNDS: $40,000

ABSTRACT: The City of Titusville will utilize the grant to implement comprehensive plan policies related to the Peril of Flood requirements set out in Section 163.3178(2)(f), Florida Statutes. The city recently completed a preliminary vulnerability assessment using the University of Florida’s Sea Level Scenario Sketch Planning Tool. A series of maps were developed that will be submitted with EAR based amendments to the Department of Economic Opportunity in May 2018. The outcomes from the preliminary vulnerability assessment sufficiently identified current and future flood risks for the development of plan policies. The grant funding will provide for a more detailed vulnerability report to inform a future resiliency plan and implement the proposed policies. Based on the comprehensive plan policies that will be adopted the Summer of 2018, the City will develop a coastal resiliency plan that identifies opportunities and deficiencies.

PROJECT: Apalachee Community Resilience

RECIPIENT: Apalachee Regional Planning Council

FCMP FUNDS: $24,809

ABSTRACT: The Apalachee Regional Planning Council will coordinate with the Franklin County, Gulf County, and City of Carrabelle governments in a vulnerability analysis; conduct two meetings with each of the three local governments participating providing materials depicting effects of sea level rise on local resources will be presented, and Protection-Accommodation-Retreat options (development and redevelopment principles, strategies, and engineering solutions) will be discussed with decision makers and key stakeholders.