

PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date:	August 20, 2024	[X] []	Consent Ordinance	[]	Regular Public Hearing
Department Submitted By: Submitted For					

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to delegate authority to:

- A. the County Administrator or designee to pursue funding from the Florida Department of Environmental Protection Agency (FDEP) Resilient Florida Grant Program (RF) for a grant not to exceed \$1,000,000, estimated to begin on July 1, 2024 and ending after three (3) years in June 2027;
- **B.** the County Administrator or designee to sign all grant application forms and supporting documents and complete all registration requirements in pursuit of the aforementioned funding; and
- C. the County Administrator or designee to execute the forthcoming grant agreement and all future time extensions, task assignments, certifications, and other forms associated with the forthcoming grant agreement and any necessary minor amendments that do not change the scope of work, or conditions of the forthcoming grant agreement by more than 20% of the agreement, if funding is awarded.

Summary:

The Office of Resilience (OOR) and Department of Environmental Resources Management (ERM) are seeking funding to collaborate with coastal Palm Beach County (PBC) municipalities on a planning project to: (1) determine the shoreline protection needs of the coastal communities (PBC); and (2) to create a model shoreline protection ordinance to unite sea level rise and flood adaptation goals and implementation efforts across the County's coastal communities. The grant funding will be used to hire a consultant to take inventory of existing and potential shoreline protection improvements, create shoreline protection green infrastructure design guidelines, develop a shoreline protection policy and implementation plan, lead outreach with efforts to incorporate stakeholder feedback throughout the project, and identify implementation funding opportunities. The proposed project will streamline the planning process and create a unified approach to shoreline protection implementation in PBC. **No match is required for this grant**. Districts 1,4,5,6,&7 (RM)

Background and Justification:

The RF grant program offers funding assistance to eligible entities to analyze and plan for vulnerabilities, as well as implement projects for adaptation and mitigation to effectively address the impacts of flooding and sea level rise that the state faces.

Attachments:

1. Resilient Florida Planning and Implementation Project Application Q&A

2. Shoreline Protection Planning Project Summary

Recommended	Meg 5/ touster	7-30 - 24
•	Department Director	Date
Approved by:	Po	8/6/24
	Deputy County Administrator	Date

II. FISCAL IMPACT ANALYSIS

A. Five-Year Summary of Fiscal Impact:

Fiscal Years	2024	2025	2026	2027	2028					
Capital Expenditures	0									
Operating Costs	0				*****					
External Revenues										
Program Income (County) 0										
In-Kind Match (County)	0		***************************************							
NET FISCAL IMPACT	0	0	0	0	0					
# ADDITIONAL FTE POSITIONS (Cumulative	0	0	0	0	0					
Is Item Included in Curre	nt Budget?		Yes	No X	,					
Does this item include th	e use of fed	eral funds?	Yes	No X						
Does this item include the use of state funds? Yes NoX										
Budget Account No.:										
Fund <u>0001</u> Department	261_Unit	2101 Obje	ct Prog	ram						
B. Recommended Sources of Funds/Summary of Fiscal Impact:										
There is no fiscal impact associated with this item.										
C. Department Fiscal Review:										
III. REVIEW COMMENTS										
A. OFMB Fiscal and /or Contract Dev. and Control Comments:										
OFMB MD 1/30 B. Legal Sufficiency: MD 1/30 B. Legal Sufficiency: MD 1/30 Description of the superior of										
Assistant Co	2 ounty Attorn	ey								
C. Other Depar	n Du	(M)	Water Reso	urces Manage	<u>2</u>					
Environmental Resources Director Water Resources Manager										

Resilient Florida Program Planning and Implementation Project Application Q&A

Helpful documents:

- Standardized Vulnerability Assessment: Scope of Work Guidance.
- Florida Adaptation Planning Guidebook.

The following is a representation of questions and answers provided in discussions, webinars or via email that may assist future applicants to the Resilient Florida Program. Questions or answers may have been modified for accuracy and/or clarity.

Implementation Project Q&As

Are there defined amounts of funds that will be allocated for each project type? Are stormwater and drainage projects more likely to be funded?

There are no criteria in statute that direct the department to distribute funds based on resilience project type. Projects are reviewed for eligibility and then ranked in accordance with the criteria contained in statute. The department will submit a ranked list of all eligible projects in the Statewide Flooding and Sea Level Rise Resilience Plan to the Governor, the President of the Senate and the Speaker of the House of Representatives by December 1 of each year.

For eligible special districts/entities given eligibility through the signing of HB 7053, has the application process through the portal/application materials been updated to accommodate these districts? Do these entities need to provide additional materials during the application process to verify their eligibility?

The application portal will accept applications from those entities. Documentation that supports the qualification and determination of the special district or entity can be uploaded in the application portal. The department is developing a guidance document to assist entities in determining eligibility and will make that available when complete.

Is utility undergrounding an eligible use for Resilient Florida Program funds?

Utility lines are typically more at risk of wind damage rather than from the impacts of flooding or sea level rise. A project must demonstrate that a critical asset is at risk of flooding or sea level rise and that the project mitigates that risk to be eligible for Resilient Florida grant funding.

Will the scoring system in the draft rule be used to score implementation projects this year (2022)?

Until the rule is fully adopted, the statutory language will be used to evaluate and rank projects.

What are the match requirements for the Supplemental Resilient Florida grants (federally funded projects)? Should applicants indicate on the application that they would like to be considered for the supplemental/federal grant funds?

The 2022 General Appropriations Act (GAA) for fiscal year (FY) 2022-23 funding requires that implementation projects funded with both state and federal funds be consistent with the Statewide Flooding and Sea Level Rise Resilience Plan (Resilience Plan) requirements in Subsection 380.093(5), F.S. Therefore, for the FY23-24 Statewide Plan, each project must have:

- A completed vulnerability assessment (VA).
- 50% matching funds, unless the applicant is considered a disadvantaged small community in accordance with the statute.

Additionally, the department received the remaining fiscal year (FY) 2021-22 federal funds for implementation projects. The previous GAA oversight guidance for these funds did not specify the need for a vulnerability assessment or local matching funds. However, these funds are limited and the department has not finalized guidance for distribution.

The grant application does not allow the applicant to request the fund type for the project. Where possible, the department encourages applicants to submit all eligible implementation projects and to identify local matching funds for the project. This will benefit the project's scoring and ranking and will increase its chances of being funded.

Is there a limit to how early a match can be started/are there any rules to what is eligible for a pre-award of match funds?

There is no defined limit of how early matching funds can be started, but generally should be within one year prior to the fiscal year award date of the grant funds. Matching fund expenditure types and eligibility are subject to review and approval by the department.

Are wastewater plants impacted by flooding or inflow/infiltration eligible for a grant under this program?

Wastewater treatment facilities and lift stations are defined as critical assets in Subsection 380.093(2), F.S., and would be considered eligible based upon the demonstrated impacts due to sea level rise or flooding.

If applying for funds by Sept. 1, 2022, is there a deadline when the VA must be complete? Does the VA need to be formally approved by the local government?

Prior to Dec. 1, 2023, communities and eligible entities may submit projects for funding without a comprehensive VA completed, provided they demonstrate that the project mitigates the risk of flooding or sea level rise for a critical asset as identified in a locally approved assessment, mitigation strategy, adaptation plan or report that includes an analysis of existing and future sea level rise or flooding impacts. After Dec. 1, 2023, the project must address a risk posed by flooding or sea level rise as identified in a comprehensive vulnerable assessment consistent with statutory requirements listed in Section 380.093(3)(d), F.S. Typically these assessments would be completed by the local government or through contracting with a third party, so additional approvals are not necessary.

Are there rules or guidance regarding eligible match sources for implementation projects? Eligible sources for match funding may be local, state or federal, but all matching funds are subject to review to ensure that the department's funding source and the match funding source do not have prohibitive language for their use.

Eligible expenditure categories for matching funds, pursuant to the department's grant agreements standard terms and conditions, include contractual services, salary/wages and fringe benefits, and land acquisition. Additional expenditure types may be eligible depending on the project. The documentation required for expenditures to be used as match and cost reimbursement are the same and are outlined in the standard terms and conditions document.

For additional information or to review any of the department's grant agreement documents, email <u>Hanna.Tillotson@FloridaDEP.gov</u>.

Is there a list showing the agencies that received awards?

Previous grant awards can be found on the <u>Resilient Florida grants webpage</u>. There are four different award lists: the 2021-2022 Resilient Florida Program Implementation Grant Awards, 2021-2022 Regional Resilience Entity Projects, 2021-2022 Planning Projects and 2022-2023 Statewide Flooding and Sea Level Rise Resilience Plan.

Can you clarify the new language in the statute about special districts, especially the ones that are specifically mentioned? Are they the only types of special districts eligible? House Bill 7053 (2022) was codified in Chapter 2022-89, Laws of Florida, and allows certain special districts that are responsible for the management and maintenance of inlets and intracoastal waterways or for the operation and maintenance of a potable water facility, a wastewater facility, an airport, or a seaport facility, eligible to apply for and receive Resilient Florida funding for projects that address risks of flooding or sea level rise. To be eligible, a special district must meet the definition of "special district" in Section 189.012, F.S.

Water management districts, drainage districts, erosion control districts, flood control districts and regional water supply authorities are also eligible to submit proposals for projects that mitigate risks of flooding or sea level rise on water supplies or water resources of the state.

Do projects need to be listed in the Statewide Flooding and Sea Level Rise Plan to be considered for funding?

In accordance with statutes, eligible projects for the Statewide Flooding and Sea Level Rise Plan must be identified as a vulnerable critical asset or area in a VA or adaptation plan. However, for fiscal year 2022-23, it is anticipated that the program will receive additional federal American Rescue Plan Act (ARPA) funds that do not require that an asset be identified in a VA to be eligible. However, these funds are non-recurring and are not anticipated beyond FY 22/23. Although a VA should list the vulnerable critical assets, the program recognizes that assessments do not have fully developed strategies or projects for funding. It is encouraged through the adaptation planning process to create an adaptation plan to prioritize focus areas, develop adaptation strategies and recommend projects for funding.

How can projects be prioritized at a local level? How can a project rank higher for funding consideration?

The state recognizes that some local decisions must be made as to priority and cannot provide a prescriptive means for prioritization of projects by the local government. In our proposed rule language, if two or more projects score the same amount of points in the scoring criteria, the projects that are most ready to proceed will be prioritized by the state. The Florida Adaptation Planning Guidebook provides a framework for determining adaptation strategies and in Section 4.1.1 some recommendations on prioritization.

Planning Grants

Do planning grants require an applicant match?

The planning grants do not require a match; they are fully funded through the Resilient Florida Program. If entities have local costs to support the project, then that will leverage Program funds and allow additional projects to be awarded.

How will planning project proposals be ranked and scored?

There are no scoring criteria in statute to prioritize Planning or Regional Resiliency Entity grants. Until July 2025, the program aims to support as many Florida communities as possible in completing statutorily compliant vulnerability assessments and updates to existing assessments. Applications will be reviewed for eligibility and cost effectiveness to ensure that state planning funds are available for as many eligible projects as possible.

Does the program prioritize project types?

The program is prioritizing the development of comprehensive vulnerability assessments for all of Florida's 67 counties and 410 municipalities

Is there a spending limit for hiring a consultant to perform the vulnerability assessment? Proposals should demonstrate what costs are necessary to meet the VA requirements in statute. Costs may need to be justified on a case-by-case basis. The standard scope of work contains general costs estimates for common tasks

Where is the VA Scope of Work guidance document located on the website? The comprehensive VA scope of work guidance document can be found on the department's <u>Resources</u> page.

Is the standard scope of work more attuned to the coastal communities, or does it cover both coastal and inland standards?

The scope of work will be largely the same for coastal and inland communities except for what the prominent future threats may be (I.e., rainfall, riverine, compound flooding and, if appropriate, sea level rise). The program is developing technical guidance that will assist all communities in assessing future conditions, especially inputs into the models that would be necessary as part of the standard scope of work. It will also contain sea level rise estimation methodology for coastal communities. This guidance will be available prior to award announcements.

If awarded planning funds, should entities use the VA guidance to direct the grant work plan? Or will that information preset as the Resilient Florida grant managers provide documentation for the work plan and scope?

Work plans are recommended to align with the department's comprehensive VA <u>scope of work</u> <u>quidance</u> to ensure consistency with statutes. Additional tasks relative to completing the comprehensive VA may be considered. If awarded, the department grant managers will work with the grantee to modify the standard scope of work tasks and deliverables as they best fit the project.

Is the \$20 million in preconstruction ONLY for small communities?

For the FY 23-24 Statewide Plan, an additional \$20 million will be available for the Resilient Florida planning grants and preconstruction activities for small, and small financially disadvantaged communities. Preconstruction activities are defined in CS/HB 7053 (2022) as "activities associated with a project that occur before construction begins, including, but not limited to, design of the project, permitting of the project, surveys and data collection, site development, solicitation, public hearings, local code or comprehensive plan amendments, establishing local funding sources and easement acquisition. Preconstruction activities from non-financially disadvantaged communities will be considered if included as part of the overall project scope and cost."

Our municipality received an email from DEP titled "Apply for a Resilient Florida Grant." The email states, "a statewide inventory of VAs indicated that your community has not prepared a VA or currently has one that is not in compliance with current statutory requirements." To clarify, DEP is requesting that entities submit an application to complete a VA?

The department's priority is to ensure that all Florida cities and counties conduct a VA compliant with Subsection 380.093(3), F.S. If your community has not indicated that you have a VA or has completed an assessment prior to the statutory enactment, the department assumes that your community does not have a statutorily compliant VA. Those communities who have been awarded Resilient Florida planning grants to either update an assessment or perform a full assessment are considered to be working toward statutory compliance.

If you have a VA that you believe meets the requirements in Subsection 380.093(3), F.S., you can submit it to the department with the compliance checklist in <u>Appendix E of the Scope of Work Guidance</u> document.

For VAs, is the Peril of Flood compliance only a requirement for coastal communities? Yes, only local governments that are subject to the requirements of Paragraph 163.3178(2)(f), F.S., are required to prepare and adopt a peril of flood comprehensive plan amendment. The department, in coordination with the Department of Economic Opportunity, can help determine if a peril of flood amendment is required by your community.

Would a physical vulnerability assessment (VA) of seawalls and stormwater inlets/outlets (involving field data collection) be included within the eligible project types?

This would technically be considered an eligible project type as an "assessment that encompasses a smaller geographic area or a portion of critical assets," which is subject to approval by the department;

programmatically, we would like every community to have a baseline VA that meets our statutory requirements. That means including inventory of the critical assets and assessing their vulnerability for the entire jurisdiction.

Is a standard scope of work for adaptation plans being developed?

The department is currently working on a scope guidance document for adaptation plans based on the <u>Florida Adaptation Planning Guidebook</u>, available on our website. Please refer to Chapter 3 in the Guidebook until the scope guidance document is complete.

Is developing an adaptation plan based on an existing VA eligible for this funding? How would it fit into the scoring criteria?

The current VA must meet standards according to F.S. 380.093(3)(d). If your current VA does not meet the standards, you may submit a project proposal that includes updating the VA in addition to developing the adaption plan

In developing the grant work plan for planning grants, several of the deliverables are more expansive than those estimated in the original task budget. Can we omit the deliverables that go beyond what was originally budgeted? How strictly do we need to remain to the deliverables in the bank of tasks?

The bank of tasks and deliverables provided for work plans are suggested standard language to ensure that projects with similar tasks are consistently completed and documented. The bank of tasks is meant to provide options of tasks for applicants to pick and choose from based on their scope of work, and the language can be modified to best fit the project. Unnecessary tasks may be omitted if the applicant chooses. However, in performing VAs, applicants should make sure to include tasks that address all the statutory requirements.

Should counties and their municipalities jointly submit a planning application for a vulnerability assessment/adaptation plan or should they be separate applications? The program encourages collaborating within your regional groups and or city/county work groups to not only maximize project funding but to ensure some scale of consistency in your area.

Can social and economic impact analyses be included in a vulnerability assessment? Subject to available funding, the department may consider funding social and economic impact analyses. To be considered, they should be presented as line-item expenses in the project proposal. Social and economic impact analyses are not in the requirements of F.S. 380.093(3)(d).

What is the total amount of funding for planning grants this Fiscal year (22-23)? Is there a max an individual community can receive?

The program anticipates having \$20 million available for planning grants in the 2022-23 Fiscal year. There is not a maximum award amount at this time. Priority is given to communities that do not have a VA. Expenses beyond of the minimum requirements of 380.093(3)(d) are not guaranteed funding.

If we apply this round, when would award likely occur?

The program's goal is to select projects and execute grant agreements in advance of July 1, 2022, when the grant funding comes available. Grant execution dates will vary from project to project. Regional

resilience entity grants need to be completed and funds expended within a single fiscal year (July 2022 – June 2023). Planning grants have a three-year timeframe for project completion.

General Questions

Are consultants excluded from submitting on behalf of or working on projects they assisted in grant applications with?

We are unaware of any state limitations that would exclude a consultant preparing the application from bidding, competitively or otherwise, on the proposal. However, we defer to local procurement procedure, rules and requirements to ensure that a conflict-of-interest situation does not arise. Additionally, some funds are federally appropriated, and any federal procedures, rules or requirements will apply unless otherwise exempted.

Can a federal funding source to be used as match funds for Resilient Florida Program grants?

Potential matching funds should be identified in the grant proposal. The program will determine eligibility on a case-by-case basis. While not required for planning grants, matching funds are beneficial to leverage program funds, provide additional support and achieve additional initiatives.

Does the program account for regional challenges facing communities when allocating funding?

Yes, the program understands there are differences across the state that create different challenges for assessing vulnerability such as the number of assets, the presence or absence of large water bodies and/or tidally influenced waters.

Will the regional resilience entity grants receive a grant award by July 1?

The program will execute grant agreements as quickly as possible. Comprehensive VAs will be prioritized for funding.

What types of projects will be prioritized for funding of the regional resilience entity grants?

Projects that assist counties and municipalities to complete a comprehensive VA or to update an existing VA to compliance with Section 380.093, F.S. will be prioritized for grant award.

DRAFT PBC Shoreline Protection Planning & Model Ordinance

1. Applicant and Project Information

Applicant Account:

Palm Beach County

Applicant Grant Manager:

Natalie Frendberg

Applicant Authorized Signee: Megan Houston

Applicant Fiscal Agent:

Laura Thompson

2. Project Information

Choose the project type you are submitting:

Adaptation Planning

Project title:

Shoreline Protection Alignment and Model Ordinance for the Palm Beach County Municipal Resilience Partnership

List any municipalities directly served by the project and included in the scope of work:

Boca Raton, Highland Beach, Delray Beach, Gulf Stream, Briny Breezes, Boynton Beach, Ocean Ridge, Hypoluxo, Manalapan, Lantana, South Palm Beach, Lake Worth Beach, West Palm Beach, Palm Beach, Palm Beach Shores, Riviera Beach, Lake Park, North Palm Beach, Juno Beach, Jupiter, Jupiter Inlet Colony, Tequesta, South Bay, Belle Glade, Pahokee,

Select Your County:

Palm Beach

Will the vulnerability assessment include any state managed lands such as National Estuarine Research Reserves (NERRs), State Parks or Aquatic Preserves (APs)?

Yes

Total Population (In Applicant Jurisdiction)

1,492,191 (2020 Census)

Percent of Population (Served by Project)

Need to calculate: Population of all coastal jurisdictions + 5% PBC unincorporated

3. Project Work Plan

Project Summary

The goal of this project is to determine the shoreline protection needs of the coastal communities in Palm Beach County (PBC, the County) and to create a model shoreline protection ordinance to unite sea level rise and flood adaptation goals and implementation efforts across the County's coastal

jurisdictions.

Project Description

The goal of this project is to determine the shoreline protection needs of the coastal communities in Palm Beach County (PBC, the County) and to create a model shoreline protection ordinance to unite sea level rise and flood adaptation goals and implementation efforts across the County's coastal jurisdictions. The project team aims to partner will PBC municipalities with intracoastal, ocean, and Lake Okeechobee coastline. This project will streamline the planning process and create a unified approach to shoreline protection implementation. In PBC, municipalities are not required to adopt all County ordinances. By working with the coastal municipalities to form a model ordinance, the project can result in a plan that works for all stakeholders and is cohesive along the coastline of the County. Once the ordinance is developed, the County and Coastal municipalities can adopt the ordinance to unify shoreline protection.

4. Project Need and Benefit

Explain the demonstrated need, which the project addresses.

PBC is the largest county east of the Mississippi River with a total area of 2,383 square miles, 39 municipalities, and over 1.5 million residents. PBC has 46 miles of shoreline along the Atlantic Ocean and hundreds of natural and manmade waterbodies. In addition, the Intracoastal Waterway runs along the east coast and the shoreline of Lake Okeechobee is in the northwest part of the County. In 2022, over 9 million visitors to PBC brought an economic impact estimated at \$9.7 billion, with most of these tourists coming to visit the County's beaches and coastal attractions. The entire coastline of the County is vulnerable to many significant coastal risks, including sea level rise, storm surge, and coastal erosion, which can have detrimental impacts on PBC's economy.

The County's coastline is already experiencing significant beach erosion from wind waves and longshore currents. Although shoreline retreat is a natural process, most of the shoreline in the County is in close proximity to buildings, highways, and other manmade structures that are threatened by this coastal erosion. As of 2017, 33.6 of the County's 46 miles were listed as critically eroded by Florida's Department of Environmental Protection.

These coastal areas are also currently experiencing nuisance flooding from exceptionally high tides known as "King Tides," while both inland and coastal areas experience rainfall-induced flooding. According to the National Weather Service, precipitation totals in 2022 were above average, with several areas in the County receiving over 60 inches of rain. These events already challenge the County's stormwater management system. Future sea level rise is projected to increase approximately 16 to 32 inches from the current Mean Sea Level by 2070, which will severely exacerbate the issue if it is not addressed.

In the northwest portion of the County lies the Glades region, which consists of three municipalities along the shore of Lake Okeechobee. Lake Okeechobee is the 10^{th} largest natural lake in the U.S., covering approximately 730 square miles. Historically, the three municipalities would flood during heavy rains and hurricanes. Today, Lake Okeechobee is surrounded by a 30-foot-tall earthen dam, called the Herbert Hoover Dike (HHD), to help prevent flooding into the surrounding land that is now known as the Everglades Agricultural Area. The HHD is currently undergoing rehabilitation work by the US Army Corps

of Engineers to improve its stability and prevent dike failure. A catastrophic failure of the HHD poses a significant danger to the residents, local economies, and environment of PBC and South Florida.

Explain how the proposed project fits into one or more of the Project Types.

This project fits into the adaptation planning category for jurisdictions that have completed a statutorily compliant Vulnerability Assessment by conducting planning efforts to implement policy needed to address the coastal vulnerabilities identified in the Palm Beach County vulnerability assessment.

If the project is a Vulnerability Assessment for Peril of Flood compliance or other, please describe how the project will meet the outlined requirements for a Vulnerability Assessment under s. 380.093, F.S.

N/A

If applicable, explain how the proposed project adapts critical assets to the effects of flooding and sea level rise as defined in s. 380.093, F.S.

This project will help create policy to address the flooding and sea level rise risks identified the Palm Beach County vulnerability assessment. This project will help facilitate discussions and decisions between local stakeholders so that the County and local municipalities can take a unified approach to address the flood and sea level rise risks.

Discuss how the project is feasible and can be completed by the grant period deadline.

The funding from this grant will be used to hire a consultant who specializes in coastal environmental policy. The County will help the consultant identify the key contacts from each coastal municipality and other important local stakeholders. Together with the County, the consultant will plan and conduct a series of stakeholder workshops with both a steering committee and the public to present various options to address coastal erosion. Feedback from these workshops will help inform that measures are supported by the local community and will inform the model ordinance. The draft ordinance will be presented to the Palm Beach County Board of County Commissioners and shared with the coastal municipal representatives and the Treasure Coast Planning Council for feedback before being finalized as the model ordinance.

Has the applicant entity(ies) performed a prior vulnerability assessment, separate from what is being proposed in this application?

Yes

Please list which entity(ies) have a prior vulnerability assessment. Palm Beach County

Would you be willing to share this previous work/data with DEP? Yes

Uploads

- Map of project area
- Letters of Support
- PBC Vulnerability Assessment Report
- Optional: Applicant W-9
- Optional: Applicant Certificate of Insurance

Tasks

Task Number: 1

- Task Title: Inventory Existing and Potential Shoreline Protection Improvements
- Work Performed By: Consultant
- Task Description: This project will assess existing conditions using GIS tools, aerial maps, and
 environmental data regarding sediment quality, water quality, bathymetry, stormwater outlets,
 adjacent land use, submerged land ownership, etc., and stormwater inputs. Some data already
 exists on shoreline characterization, such as percentage seawall, riprap, mangrove, beach, etc., but
 the County lacks data such as sediment quality, age of current seawall, height of current sea walls,
 and other detailed characterizations. Where necessary to fill data gaps, and to the extent
 practicable, field data will be collected in key areas.
- This project will also assess links between potential green infrastructure installations and stormwater improvements and identify and prioritize improvements for drainage areas that discharge into waters around potential green infrastructure installations.
- This project will identify sites, conduct site assessments, and map locations that may have conditions conducive to and appropriate for installing green infrastructure to assist with future planning and funding requests.
- Goal: To inventory existing and potential shoreline protection improvements along the waterfronts of Palm Beach County
- Time to Completion: 12 months
- **Deliverables Associated with Task:** Inventory Existing and Potential Shoreline Protection Improvements, GIS Files of Existing and Potential Shoreline Protection Improvements

Task Number: 2

Task Title: Shoreline Protection Green Infrastructure Design Guidelines

Work Performed By: Consultant

Task Description: This document will include design guidelines and recommendations for green infrastructure and living shorelines. These guidelines serve as the standard local method for implementing green infrastructure. They will be used by local jurisdictions and provided to local developers as guidance for building green shoreline protection options. The PBC Environmental Resources Management (ERM) Department has been expanding living shorelines in the Lake Worth Lagoon for decades and has learned many lessons and designs that can help inform best practices for the region. PBC ERM currently uses a four-sided approach to combat beach erosion: dune restoration, inlet sand transfer, sand renourishment, and installation of support structures. ERM oversees the continued management of public beaches and inlets by implementing funding and/or managing projects that replace beach and dune habitats for people and nesting sea turtles. From its experience, ERM has found that living shorelines along seawalls and bulkheads help protect the infrastructure and extend its longevity. Green infrastructure options may include but are not limited to rip rap, mangrove planters, submerged vegetation planting, and dune restoration. This project will identify example implementation projects, referencing specific locations identified through the GIS assessment and the green infrastructure design(s) that may be installed.

Goal: To create shoreline protection green infrastructure design guidelines for the waterfronts of Palm Beach County

Time to Completion: 24 Months

Deliverables Associated with Task: Design Guidelines Report

Task Number: 3

Task Title: Shoreline Protection Policy Development and Implementation

Work Performed By: Consultant

Task Description: Multiple coastal communities have already begun planning to unify their shoreline protection efforts. For example, Delray Beach passed an ordinance in 2022 setting a minimum elevation of 4.2′ NAVD88 for the height of all seawalls that are constructed. In addition, all seawalls that are constructed to a height less than 5.0′ NAVD88 must be designed to accommodate raising the seawall to this level. Moreover, Broward County and the Tampa Bay Regional Planning Council have developed collaborative shoreline protection ordinances. The CRP of SE PBC has previously worked with the Emmet Environmental Law and Policy Clinic at Harvard Law School to research and develop potential options for shoreline protection, with examples that have been implemented elsewhere. The project team will complete a literature review and compile existing shoreline protection ordinances.

Creating a policy that has input from all County and municipal stakeholders and meets all jurisdictional needs is key to project success. The project team will share model ordinance options with local stakeholders, including government officials and staff, coastal property owners, community members that reside near and frequently use the shoreline, and other local stakeholders. The project team will seek feedback from stakeholders through community workshops, local government staff workshops, a community survey, and by seeking direction from local elected officials at the County and municipal level to receive direction. The project team will use best practices from other coastal areas, combined with local stakeholder input, to then develop a model ordinance for seawalls and green infrastructure that will account for future sea level rise, storm surge, and high tide conditions and can be successfully implemented within the County.

Goal: To develop a model shoreline protection ordinance and coordinate with local stakeholders to ensure policy can be successfully implemented in Palm Beach County

Time to Completion: 30 Months

Deliverables Associated with Task: Model Shoreline Protection Policy, Summary of stakeholder feedback

Task Number: 4

Task Title: Social Equity Focus & Assessment

Work Performed By: Consultant

Task Description: Although there are some extremely wealthy communities within Palm Beach County, there is also a large income disparity. Approximately 75% of the PBC coastline is comprised of flood-

prone areas that are located in, or within a ½ mile of, Disadvantaged Census Tracts (DCTs). PBC has 23 Disadvantaged Census Tracts (DCTs) along the Atlantic Ocean and Intracoastal Waterway, many more within a half mile, and 8 DCTs along Lake Okeechobee. Many people within these DCTs are hit first and worst by the impacts of climate change, and many do not have the financial resources to adapt. Many people also rely on the coastal waters for fishing and food sources.

This project will identify priority DCT communities for green infrastructure shoreline protection projects. It will also develop a target percentage for green infrastructure shoreline protection features in disadvantaged communities to simultaneously increase community resilience and access to open space, nature, and fishing opportunities.

Goal: To identify priority disadvantaged communities for future green infrastructure shoreline protection projects.

Time to Completion: 24 months

Deliverables Associated with Task: Report on priority areas identified for future green infrastructure projects, Summary of community outreach feedback

Task Number: 5

Task Title: Outreach

Work Performed By: Consultant

Task Description: Community participation and feedback are key components the project. The project team will form a stakeholder committee with representatives from as many of the coastal jurisdictions as possible. This stakeholder committee will meet quarterly to review the status of the project and provide input to the project team. The project team will also conduct outreach throughout the coastal region. This will involve community hybrid workshops in 7 locations along the Atlantic Coast and 3 locations in the western Glades Region at key touch points during this planning process:

- The first workshops will be held in the initial inventory phase to introduce the project
- The second workshops will be held mid-project to present options for coastal protection to seek community feedback on their preference and concerns; and
- The last set of workshops will present the model ordinance and recommendations to seek final community feedback.

To assist stakeholders in visualizing future coastal flooding impacts and possible shoreline protection options, the project team will create interactive engagement materials to demonstrate impacts and options in multiple locations along the County coastline. These interactive engagement materials will be incorporated into outreach at community festivals and events, community workshops, stakeholder meetings, and online on the project website. Once stakeholders have seen the impacts and options, they will be invited to take a survey to share their feedback, concerns, and preferences, which will be used to inform the model shoreline protection ordinance.

Once the model ordinance is finalized, the project team will collaborate with the local municipalities to host a meeting for local government staff and elected officials to present the model ordinance, recommendations, and funding options. The project team will explain the benefits of the ordinance and

why they should consider adopting the ordinance. The Palm Beach County Office of Resilience will host and develop a project website that will include the final model ordinance.

This project will include intentional outreach to low-income and disadvantaged community members, working with a consultant that specializes in equitable outreach as part of the project team. They will assist with ensuring that all outreach materials and content are in plain language, use their established network with other community-based organizations to invite participants to outreach events and workshops, and help disseminate the survey to ensure the survey participants are representative of the local community. Outreach materials and content will be available in the three languages most common in PBC: English, Spanish, and Haitian Creole. The survey will be primarily online, but paper versions of the survey will be available for non-tech-savvy residents.

Goal: To share project overview and shoreline protection options with community stakeholders and receive feedback.

Time to Completion: 30 months

Deliverables Associated with Task: Copy of community survey results. Copy of workshop and outreach materials. Summary of stakeholder feedback from each outreach event.

Task Number: 6

Task Title: Identify Implementation Funding Opportunities

Work Performed By: Consultant

Task Description: A project consultant will compile a list of potential grant funding and financing opportunities that local jurisdictions, businesses, and residents can utilize to implement the policies and recommendations from the model ordinance developed by this project. These grant funding opportunities will be shared with all local government stakeholders, and options for funding private property projects will be posted on the project website.

Goal: To identify potential grant and financing opportunities to fund coastal protection implementation projects.

Time to Completion: 34 months

Deliverables Associated with Task: Report outlining details of potential shoreline protection funding opportunities.

Task Number: 7

Task Title: Grant Administration & Project Management

Work Performed By: Grantee (PBC Office of Resilience)

Task Description: A project consultant will compile a list of potential grant funding and financing opportunities that local jurisdictions, businesses, and residents can utilize to implement the policies and recommendations from the model ordinance developed by this project. These grant funding opportunities will be shared with all local government stakeholders, and options for funding private property projects will be posted on the project website.

Goal: To manage the project, including consultant procurement and oversight, grant execution, budget tracking, grant reporting, and grant closeout.

Time to Completion: 36 months

Deliverables Associated with Task: Log of staff time spent on project, grants reports, Request for Proposals, Executed Consultant Contract.