

Application: RFG--761--

Wood PLC53901RFG--761--Resilient Florida Grant ProgramRFG

Started at: 2/10/2022 01:22 PM - Finalized at: 2/14/2022 04:31 PM

Page: Eligibility Questions
Applicant Name Pinellas County
Entity Type Local Florida Government or Municipality
Applicant County Pinellas
Page: Grantee's General Info
Grant Type Resilient Florida Grant Program

Provide the Applicant's FEID# that matches the registered listing in My Florida Market Place (MFM) (<https://vendor.myfloridamarketplace.com>

(<https://vendor.myfloridamarketplace.com>))

Note: FEID may also be referred to as an FEIN and appears on an entity's W-9

1. Go to MFMP (<https://vendor.myfloridamarketplace.com>), and login to validate and obtain the correct sequence number for your entity's payment information.

2. Enter your User Name & Password. If unknown enter "publicuser" for the User Name & Password

3. Search through the listings under the detail section, that have the following fields that match your application information for where the applicant's funds are to be delivered to:

- Entity legal name
- Full address (physical)

4. Should you not find a listing that matches, please contact MFMP to get a correct entry listed for the Grantee at:

https://www.dms.myflorida.com/business_operations/state_purchasing/myfloridamarketplace

(https://www.dms.myflorida.com/business_operations/state_purchasing/myfloridamarketplace) operations.

5. If your question is not answered by the FAQ's link on MFMP's page, please contact the MFMP Vendor Customer Service Desk at vendorhelp@myfloridamarketplace.com

(<mailto:vendorhelp@myfloridamarketplace.com?subject=MFMP%20Assistance%20Needed>) or by phone at 866-352-3776.

Federal Tax ID Number

59-6000800

DUNS Number

Provide current contact information for each contact. Some information may be duplicative. The grantee's grant manager is responsible for all correspondence with DEP after the grant is awarded and relaying any information necessary to partners and/or subcontractors.

Applicant's Physical Address

315 Court St, Suite 601 Clearwater

Applicant's Physical City

Clearwater

Applicant's Physical Zip Code

33756

Applicant's Grant Manager's Name

Hank Hodde

Applicant's Grant Manager's Title

Coordinator

Applicant's Grant Manager's Physical Address

315 Court St, Suite 601 Clearwater

Applicant's Grant Manager's City

Clearwater

Applicant's Grant Manager's Zip Code

33756

Applicant's Grant Manager's Phone Number

7274643485

Applicant's Grant Manager's Email Address

hhodde@co.pinellas.fl.us

Applicant's Authorized Signer's Name

Hank Hodde

Applicant's Authorized Signer's Title

Coordinator

Applicant's Authorized Signer's Physical Address

315 Court St, Suite 601

Applicant's Authorized Signer's City

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Applicant's Authorized Signer's Zip Code

33756

Applicant's Authorized Signer's Phone Number

7274645414

Applicant's Authorized Signer's Email Address

hhodde@co.pinellas.fl.us

Applicant's Fiscal Agent's Name

Pinellas County

Applicant's Fiscal Agent's Title

Financial Managers

Applicant's Fiscal Agent's Mailing Address

P.O. Box 2438

Applicant's Fiscal Agent's City

Clearwater

Applicant's Fiscal Agent's Zip

33757

Applicant's Fiscal Agent's Phone Number:

7274645414

Applicant's Fiscal Agent's Email Address

hhodde@co.pinellas.fl.us

Page: Project Information**Entity's Name**

Pinellas County

Resilient Florida Grant Program Project Type

Comprehensive Plan amendments and necessary analyses for complying with "Peril of Flood" statute (Sec. 163.3178(2)(f) F.S.) for communities with a Coastal Management Element in their comprehensive plan, Vulnerability assessments, other than that necessary for compliance with Peril of Flood, that identify or address risks of flooding and sea level rise, Development of adaptation/resilience plans, projects, and policies that allow for preparation for threats from flooding and sea level rise

Project Title

Pinellas County Vulnerability Assessment Phase II

List the City(ies)/Town(s)/Village(s)

Belleair, Belleair Beach, Belleair Bluffs, Belleair Shore, Clearwater, Dunedin, Gulfport, Indian Rocks Beach, Indian Shores, Kenneth City, Largo, Madeira Beach, North Redington Beach, Oldsmar, Pinellas Park, Redington Beach, Redington Shores, Safety Harbor, St. Pete Beach, St. Petersburg, Seminole, South Pasadena, Tarpon Springs, Treasure Island

Project Scale

County/Municipality-wide

Upload Map

Download File (https://vo-general.s3.amazonaws.com/d017b91f-429c-41d2-94c6-f764db3489dc/55af3ab2-ff8a-494f-8051-788ecaae0e95?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1731187916&response-content-disposition=inline%3B%20filename%3D%22Pinellas_County_Boundary.pdf%22&response-content-type=application%2Fpdf&Signature=iisMYL5GBFQZweRh%2F8tjb%2F5Wq2s%3D)

Total Population

959,107

Percent of Population Served

100%

State Lands included?

Yes

PROJECT WORK PLAN

Please review the Resilient Florida Grant Program parameters (<http://laws.flrules.org/2021/28>) under s. 380.093(3), F.S. If including any letters of support or other materials, they should specifically address the Work Plan components below.

Project Summary

The project will incorporate the necessary steps to meet the full requirements of a vulnerability assessment, including adding all critical assets outlined in 380.093 (F.S.) and modeling Intermediate-High sea level rise, rainfall-induced, and compound flooding scenarios. The project will also expand the exposure analysis completed in Phase I to include more public and private assets, study impacts to infrastructure, identify fiscal risks, and identify policy and regulatory actions to assist in updating the comprehensive plan.

Project Scope of Work

The previously completed vulnerability assessment collected hazard and asset data and identified select assets impacted by tidal flooding and storm surge. The previous vulnerability assessment did not include all the necessary analyses for complying with the "Peril of Flood" statute (Sec. 163.3178(2)(f) F.S.) for communities with a Coastal Management Element in their comprehensive plan but did provide data-driven recommendations of items needed for further study.

Thus, Phase II was identified to expand on the information gathered in Phase I in order to ultimately satisfy the "Peril of Flood" statute as identified in the Countywide Flood Mitigation Action Plan.

The proposed project will update flood risk modeling, project and map additional hazards, expand exposure analysis to more public and private critical assets, study impacts to infrastructure, identify fiscal risks, and identify policy and regulatory actions to enhance resilience. Sensitivity analysis will also be completed. A "Peril of Flood" gap analysis will be completed for use in updating the County's comprehensive plan.

The end goal of the work is to develop and implement a robust comprehensive plan which satisfies the "Peril of Flood" statute and which provides a roadmap to completion that can be used as a model for other counties or metropolitan areas.

PROJECT NEED AND BENEFIT

This section should continue to explain the need for the project in the context of flooding, sea level rise, and their effects. See the Resilient Florida statute (<http://laws.flrules.org/2021/28>) for more information.

A. Explain the demonstrated need(s) and how the project will address those needs.

Pinellas County is considered one of the most vulnerable areas for climate change change-driven sea level rise in the country and a complete knowledge of the types of hazards that affect Pinellas County is needed to minimize loss of life, human suffering, damage to public and private property, and economic loss. Utilizing the projections and data collected from a Vulnerability Assessment, The County will be able to develop solutions to mitigate, adapt, and plan for climate change.

The project fulfills requirements of Section 380.093(3), F.S. which include specifications for vulnerability assessments funded under the Resilient Florida program.

B. Explain how the proposed project fits into the Project Type(s) chosen above.

The project is a vulnerability assessment and adaptation plan that identifies or address risks of flooding and sea level rise.

C. 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.

Previous VA and this update (yes): 1. Risks to critical assets, including regionally significant, owned or managed by the entity.

Previous VA and this update (yes): a. Findings of the assessment.

Previous VA and this update (yes): b. All electronic mapping data.

Previous VA and this update (yes): (I) Geospatial data.

Previous VA and this update (yes), FL State Plan 901 East: (II) GIS data using the Florida State Plane Coordinate System. Metadata.

Previous VA and this update (yes): c. A list of critical assets, including regionally significant, that are impacted.

2. The depth of:

Previous VA and this update (yes): a. Tidal flooding, including future high tides. To the extent practicable, the number of tidal flood days expected.

Previous VA and this update (yes): b. Current and future storm surge flooding using NOAA or FEMA storm surge data. The initial storm surge event must equal or exceed the 100-year flood event.

Previous VA and this update (yes): c. To the extent practicable, rainfall-induced flooding. Future boundary conditions should consider sea level rise and high tide conditions.

(No): d. To the extent practicable, compound flooding or the combination of tidal, storm surge, and rainfall-induced flooding.

3. The following standards:

Previous VA and this update (yes): a. All analyses in NAVD 88.

Previous VA and this update (yes): b. At least two local sea level rise scenarios, including the 2017 NOAA intermediate-low and high projections.

Previous VA and this update (yes): c. At least two planning horizons for 2040 and 2070.

D. 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.

The project elaborates on the original vulnerability assessment and adaptation plan that will help identify additional vulnerable critical and regional assets that may need further analysis for projects to adapt them, by the County or the responsible entity, in the future and make them more resilient. Additional modeling utilizing precipitation and compound flooding data will be completed to further identify vulnerable critical assets.

This will help the County focus on areas where more assets may be vulnerable than others, develop design criteria, prioritize adaptation investments, explore funding strategies and determine policy responses.

E. Project Length

Yes

Vulnerability Assessment Status

Yes

Vulnerability Assessment Data Sharing

Yes

Page: Budget Information**Estimated total project cost**

\$700,000

Grant funding amount requested

\$700,000

Cost-Share percentage available for the project

0

Cost-share source

N/A

COST-SHARE FUNDING SOURCES

Other Funding Source Names

Cost-share document upload

No File Uploaded

Budget Narrative Description

The budget was developed using contractor estimates that identified tools and approaches to fulfill the requirements of Section 380.093, F.S. including the (3) vulnerability assessments and the (5) ranking criteria applicable to projects and vulnerability assessments within the statute.

Once tools, modeling and data approaches were derived, hours of effort and hourly rates were estimated to arrive at task-based cost estimates with deliverables to be produced within the guidelines for the scope of work provided by the department.

These estimates were further refined once individual tasks were aggregated in furtherance of this grant application.

Work Performed by:

Both the Grantee & Sub-Contractor

Salary Breakdown Table per Task

All work performed on the project by the Grantee, must be included in this table. Continue to enter in information until all tasks with all personnel have been included.

Salary Breakdown Table Per Task

Positions

Indirect %

Sub-Contractor's Information

All Sub-Contractors who will be performing work on this project, to be paid out using the requested funds from DEP, must be listed in the table below.

Sub-contractor 1 Company Name

TBD

Sub-contractor 1 Contact Person Name

Sub-contractor 1 Title

Sub-contractor 1 Phone Number

Sub-contractor 1 Email Address

Sub-contractor 1 Address

Sub-contractor 1 Amount Table

Tasks

additionalSub2

No

Budget Breakdown by Phase

In order to get a clear understanding of the cost-breakdown for each component in this scope for funding consideration, we have broken out the basic phases of a long-term planning project to better understand the length and cost of each phase. This includes:

1. Outreach/Stakeholder Input*
2. Peril of Flood Comprehensive Plan Amendments*
3. **Critical Asset Inventory***
4. **VA- Exposure Analysis***
5. **VA- Sensitivity Analysis***
6. VA- Other Analyses (up to 3)
7. Adaptation Plan*
8. Contracting for GIS Services
9. Contracting for Modeling or Data Analysis
10. Surveying for Elevation Certificates
11. Administrative Expenses
12. Other (up to 3)

** indicates a required field. If the required field is NOT included in your scope, please input "0" for your responses.*

Bolded items #3-5 must adhere to the statutory requirements outlined in [s. 380.093 F.S.](http://laws.flrules.org/2021/28) (<http://laws.flrules.org/2021/28>). A summary of requirements can be found [here](https://frcp.secure-platform.com/a/page/VulnerabilityAssessment_criteria) (https://frcp.secure-platform.com/a/page/VulnerabilityAssessment_criteria).

Item #6, "VA- Other Analysis", allows you to include modeling that is outside of the statutory required analysis that items #3-5 cover. You may add up to 3 separate entries within this question, covering up to 3 additional types of modeling (examples include social analysis, economic analysis, habitat modeling, etc.).

If a phase is included in your scope that does not fall under items 1-11, please use item #12 "Other" to input this phase.

Note: This section is intended to provide us with a budget breakdown and does not have to dictate how you arrange your project's tasks in the Tasks & Deliverables section.

Please look closely at the phase option within each field offered.

Budget Information per Planning Phase (1 Outreach)

Planning Phase

Outreach Phase: Outreach/Stakeholder Input

Budget Information per Planning Phase (2 POF)

Planning Phase

POF Comp Plan Amendments: Peril of Flood- Comprehensive Plan Amendments

Budget Information per Planning Phase (3 Asset Inventory)

Planning Phase

Critical Asset Invenotry: Critical Asset Inventory

Budget Information per Planning Phase (4 Exposure Analysis)

Planning Phase

Vulnerability Assessment Exposure Analysis: Vulnerability Assessment- Exposure Analysis

Budget Information per Planning Phase (5 Sensitivity Analysis)

Planning Phase

Vulnerability Assessment Sensitivity Analysis: Vulnerability Assessment- Sensitivity Analysis

Budget Information per Planning Phase (6 Other Analyses)

Planning Phase

Other Analaysis: Vulnerability Assessment- Other Modeling

Budget Information per Planning Phase (7 Adaptation Plan)

Planning Phase

Adaptation Plan: Adaptation Plan

Budget Information per Planning Phase (8 Contracting GIS)

Planning Phase

Contracting for GIS Services: Contracting for GIS Services

Budget Information per Planning Phase (9 Contracting for Modeling)

Planning Phase

Budget Information per Planning Phase (10 Survey Costs)

Planning Phase

Budget Information per Planning Phase (11 Admin Staff Hours)

Planning Phase

Budget Information per Planning Phase (12 Other)

Planning Phase

Other Phase(s): Other

Page: Tasks & Deliverables

PROJECT TIMELINE with **TASKS & DELIVERABLES DETAILS**

*This is where each task is listed with the title, due date for submission of all deliverables by task, and total of task funding amount requested. **To avoid late submittals and financial consequences, be sure to allow enough time for submitting deliverables.***

Details for each task to include:

- Title,
- Goal,
- Description,
- Listing of deliverables,
- Total task amount, and
- Budget category (who will be performing the work, grantee and/or contractor)

Project Timeline Chart

Task #s

A. Task#: 1

B. Task Title: Outreach/Stakeholder Input

C. Task Goal: Inform and seek input from the community and BOCC (including internal staff) on the data collection efforts, modeling approach, modeling output, findings, and recommendations.

D. Task Description: Once data has been collected and initial analysis has been conducted, a County Administration and separate Public Workshop will be held to present results and gain feedback for input into the planning process. Also important to this deliverable will be an explanation of the data utilized and the results of the analysis, and options for integrating the

study findings into relevant County decision-making. A BOCC Briefing and second Public Workshop will be held to present the study results and draft an updated Vulnerability Assessment and Adaptation Plan to gain feedback for input into the implementation process. Finally, the County will update its online communications tools, such as the Sea Level Rise Story Map and flood map service applications, to applications, to reflect the updated data, plan, and implementation strategy. The County will continue to make this resource available to further outreach and education efforts beyond the conclusion of the granting period.

E. Task Deliverable(s) 1:

Kick-Off Meetings

General Workshops/Meetings

Meetings with Elected Officials

Other Updated online communications tools, including Storymap development

F. Task Due Date: 7/1/2024

G. Total Task Amount: 25000

H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 2

B. Task Title: Peril of Flood Comprehensive Plan Amendments

C. Task Goal: The goal of this task will be to bring the County more fully into policy compliance with the Peril of Flood mandate.

D. Task Description: The County will review its Comprehensive Plan and Code of Ordinances in order to identify necessary additions and amendments to ensure compliance with Sec. 163.3178(2)(f) Fla. Statute ("Peril of Flood"). Local government Comprehensive Plans and Coastal Elements that have already come into compliance with the statute will be reviewed as templates for potential modifications to the County's Plan.

Post-disaster redevelopment adaptation strategies, which were identified and developed in the draft version of the Coastal Management Element using the FY 20-21 Resilience Planning Grant, will be used to prepare a redevelopment component within the Conservation and Coastal Element of the County's Comprehensive Plan. This will also include further development of the concept of the adaptation area, in order to bring it more fully into compliance with Section 163.3178(2)(f), Florida Statutes.

Currently adopted surface water management level of service standards for drainage and local regulations regarding water management improvements will be reviewed in light of current and future condition modeled flooding associated within the County boundaries.

The County's current rating under the FEMA Community Rating System (CRS) will be evaluated to determine the extent to which revised policies adopted to ensure Peril of Flood compliance can contribute to an enhanced score. In light of the modeled current and future conditions, the County will also consider opportunities for regulatory changes (if appropriate) which exceed flood-resistant construction requirements in the Florida Building Code, as well as applicable flood plain management regulations set forth in 44 C.F.R. part 60.

E. Task Deliverable(s) 1: A draft resolution to update the County's Comprehensive Plan to create a redevelopment component of the Comprehensive Plan that addresses the requirements of the Peril of Flood mandate

Other A draft resolution to update the County's Comprehensive Plan to create a redevelopment component of the Comprehensive Plan that addresses the requirements of the Peril of Flood mandate

Other Draft ordinance amending land development code as required to ensure consistency with updated comprehensive plan.

Other Draft resolution and presentation to deliver to Pinellas County BOCC.

F. Task Due Date: 12/31/2023

G. Total Task Amount: 30000

H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 3

B. Task Title: Critical Asset Inventory

C. Task Goal: The goal of this Task is to compile an inventory of all critical assets, including regionally significant assets, owned or maintained by the County, as outlined in s. 380.093, F.S..

D. Task Description: Available Federal, State, Regional, County, municipal and private service provider data will be collected to update the asset inventory collected for Phase 1 of this Vulnerability Assessment. Building upon previous vulnerability work will better define existing, needed, or future data sources to help further vulnerability planning efforts of the County. Data sources supplemental to County data may include FEMA, Department of Homeland Security, Southwest Florida Water Management District, University of South Florida, Pinellas County School Board, municipalities, and private entities, such as hospitals and energy providers, among other sources. Compiling a comprehensive critical asset inventory has a two-fold purpose: 1) assess available information for the Updated Vulnerability Assessment and 2) provide information that can be incorporated into the modeling tools for the expanded analysis contemplated by this update. Initial identification of data sources has occurred with the previous vulnerability assessment, but a primary effort will be to update these sources, categorize them and identify areas where the County can develop more finite information or manage its data in such a way to assist with future vulnerability updates to have best available data for decision-making.

E. Task Deliverable(s) 1: GIS files with locations of critical assets owned or maintained by the county/municipality and appropriate metadata identifying the asset class as defined in 380.093(2) 1-4

Other GIS files with locations of critical assets owned or maintained by the county/municipality and appropriate metadata identifying the asset class as defined in 380.093(2) 1-4

F. Task Due Date: 7/1/2024

G. Total Task Amount: 50000

H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 4

B. Task Title: Exposure Analysis

C. Task Goal: The goal of this task is to identify the depth of water caused by various flooding and sea-level rise across Pinellas County and illustrate the spatial extent of flooding using scenarios and standards outlined in s. 380.093, F.S. Updated modeling effort will be performed focusing primarily on the Peril of Flood requirements that have not yet been included within the

County's previous vulnerability work.

D. Task Description: This project will produce current and future coastal inundation maps, caused by sea level rise and storm surge, for 2020, 2040, 2070, and 2100 planning horizons for two local sea level rise scenarios: the 2017 NOAA intermediate-low and intermediate-high sea level rise projections and the nuisance tides coastal flood maps (based on modeling of tides rather than the "bathtub" inundation method which extrapolates coastal tides onto the floodplain).

A total of seven sea level rise scenarios will be considered: present conditions (based on 2020 sea levels), 2040 intermediate-low and intermediate-high, 2070 intermediate-low and intermediate-high, and 2100 intermediate-low and intermediate-high sea level rise levels. Storm surge analyses for these scenarios will be considered for the 25 and 100 year storm events.

This task will include updated modeling to address rainfall induced and compound flooding. The county will evaluate readily available modeling tools and determine the best fit for modeling 9 rainfall + SLR scenarios related to the: 10, year (24-hour), 50-year (24-hour) and 100-year (24 hour) rainfall events anticipated for the 2040, 2070, and 2100 time horizons. This task will also include shoreline data because it is defined as a critical asset in Section 380.093(2)4., F.S.

All products and analyses will employ the most recent available Digital Elevation Model and/or elevation data and NAVD88 North American Vertical Datum.

These products will aid in critical asset identification, and vulnerability analyses, which will allow the jurisdictions to improve the planning and implementation of resiliency projects.

E. Task Deliverable(s) 1: A summary report of the process and methodology of the map development.

Other A summary report of the process and methodology of the map development.

Other A digital GIS version of the bathymetry and topography data for the Pinellas County domain.

Other Historical storm data, SLR data, precipitation data, and river flow data will be presented in tabular form.

Other GIS shapefiles, file geodatabase, or ArcGIS Pro package format of the nuisance tide flood maps (spatial information on the number of expected flood days).

Other GIS shapefiles, file geodatabase, or ArcGIS Pro package format of the 100 year coastal flood maps including still water level, wave crest and wave characteristics.

F. Task Due Date: 7/1/2024

G. Total Task Amount: 330000

H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 5

B. Task Title: Vulnerability Assessment

C. Task Goal: Prepare the Updated Vulnerability Assessment to include new modeling, list of critical and regional assets, recommendations and map series.

D. Task Description: This task will take the GIS vulnerability model developed in Task 3 to evaluate the climate threat and add layers showing the location of prioritized assets from each asset category based on existing data sets. By overlaying the locations of the assets, the team will develop a basic representation of which assets have the potential to be affected by climate threats.

The outcome of this task would be an estimation of the likelihood and magnitude of potential losses across each asset class. In addition to having the GIS-based interactive map, results from the sensitivity analysis will be summarized in a matrix format for each of the priority climate threats.

Additionally, this task will assimilate all updated and additional data and modeling output into a new or as an Appendix to the Vulnerability Assessment. Map series from the additional vulnerability assessment may be modified to further distinguish between critical assets and regionally significant assets if warranted by further Resilient Florida program guidance. An update map series will be produced that aligns modeling output with statutory criteria. The final format of the document will be influenced by further Resilient Florida rulemaking and/or program guidance.

E. Task Deliverable(s) 1:Draft Vulnerability Assessment Document

Map Series

Final Vulnerability Assessment Update Document
Other Draft Vulnerability Assessment Document

Map Series

Final Vulnerability Assessment Update Document

F. Task Due Date: 7/1/2024
G. Total Task Amount: 50000
H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 6
B. Task Title: Project Management and Coordination Meetings
C. Task Goal: Coordinate with Project Lead staff and other project participants as necessary on data collection, BOCC briefings and Public Workshops.
D. Task Description: This task will include internal meetings between the project team and staff as necessary at key milestones throughout the project to be determined. The meetings will be planned with agendas and meeting minutes will be generated as a summary of the meeting content.
E. Task Deliverable(s) 1:Agendas and meeting minutes for 4 meetings
Other Agendas and meeting minutes for 4 meetings

F. Task Due Date: 7/1/2024
G. Total Task Amount: 20000
H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 7

B. Task Title: Preparation of Metadata

C. Task Goal: The goal of this task is to prepare the metadata for the project to meet DEP specifications.

D. Task Description: The project team will continue to seek clarity and guidance on how DEP will require the data from the project to be created and maintained for transmittal at the project's conclusion.

E. Task Deliverable(s) 1:Metadata files

Other Metadata files

F. Task Due Date: 7/1/2024

G. Total Task Amount: 10000

H. Task Budget Category: Sub-Contractor Only (CS)

A. Task#: 8

B. Task Title: Adaptation Action Plan

C. Task Goal: Based on the exposure and sensitivity analysis completed in previous tasks as part of the vulnerability assessment, the main goal of this task is to develop a set of strategic protection, accommodation and retreat tools that will present the County with a dashboard of adaptation alternatives to be analyzed and prioritized for the critical assets.

Under this task, the County will develop a set of conceptual adaptations strategies, in compliance with the Peril of Flood requirements and aligned with FDEP's Sea Level Impact Tool's adaptation strategies , which will serve the County as a strategic guidance document for planning. This plan will integrate natural as well as engineered alternatives and will serve as strategic guidance to stakeholders to understand and prioritize these alternatives for the County to move forward.

D. Task Description: The project team will use the vulnerability assessment and background information and inundation modeling completed in previous tasks to analyze in further detail any statutory requirements relative to high tides, storm surges, and SLR impacts and evaluate and prioritize several adaption strategies with the following considerations

Flooding and drainage problems including stormwater management and drainage, flooding county-owned and private infrastructure (e.g. marina, roads, septic tanks, utilities)

Level of protection relative to sea level rise and king tides, including fortifying residences, raising roads and homes, building higher seawalls and bulkheads among other soft (green alternatives preferred) and hard alternatives.

Environmental review. Impacts to environmental resources including beaches and dunes, wetlands and upland habitats, wildlife (e.g. sea turtles, shorebirds and wading birds, marine species) mangroves, and seagrass. The County will obtain a list of threatened and endangered species and designated critical habitats that might be present in the project area.

Evaluate increased shoreline erosion in the AAA and the use of soft engineering alternatives like a natural resource-based shoreline armoring or protection system and beach nourishment

Coastal, social vulnerability, and vulnerability of historic resources

Existing Zoning Code and land use considerations. Review land use plans with resiliency guidelines as anticipating action to direct new developments away from vulnerable areas; evaluate land conservation and conservation easements, as necessary. Strategic redevelopment to safer areas.

Building Form Aesthetics and Urban design considerations

Permit feasibility

Potential phasing of future adaption

Operational impacts and maintenance assessment

Service life

Overall resiliency

Social vulnerability. An assessment of any impact or environmental effects on minority or low-income residents and evaluate project features that will mitigate such effects.

Public participation and regional collaboration (to be addressed separately in Task 1).

E. Task Deliverable(s) 1:A list of recommended projects, policies, and practices with the order of magnitude costs to be considered for funding and implementation

Suggested updates to Pinellas County’s SLR Tool for Capital Planning

Other A list of recommended projects, policies, and practices with the order of magnitude costs to be considered for funding and implementation

Suggested updates to Pinellas County’s SLR Tool for Capital Planning

F. Task Due Date: 7/1/2024

G. Total Task Amount: 185000

H. Task Budget Category: Sub-Contractor Only (CS)

Grant Applicant's Certification Statement

"By signing this Statement page, the undersigned certifies that:

- a. This application is in all respects fair and submitted in good faith without collusion or fraud;
- b. If selected through this application process, the recipient will work in good faith and in partnership with the Resilient Florida Program (RF) to manage its subcontractors in a timely and accurate manner;
- c. Any funds awarded as a result of this application process will not be used as matching funds to apply for or receive other state funds;
- d. The undersigned has full authority to bind the applicant."

Please be advised that the selection of the checkboxes below are acting as a signature box on your behalf, as indicated in the field titles.

Grantee's Authorized Signer's Name

Hank Hodde

Do you Agree to the Certification Statement?

I agree

