

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
GRANT WORK PLAN  
DEP AGREEMENT NO.: R2107**

**ATTACHMENT 3**

**I. TITLE PAGE**

**1. PROJECT TITLE:** City of Madeira Beach Community Resilience Planning

**2. GRANTEE Contact Information:**

Organization Name: City of Madeira Beach  
Name of Authorized Signer: Robert Daniels  
Title: City Manager  
Address: 300 Municipal Drive  
City: Madeira Beach, FL  
Zip Code: 33708  
Area Code and Telephone Number: (727) 391-9951  
E-mail Address: [rdaniels@madeirabeachfl.gov](mailto:rdaniels@madeirabeachfl.gov)

**3. GRANT MANAGER Contact Information:**

Organization Name: City of Madeira Beach  
Name of Authorized Signer: Robert Daniels  
Title: City Manager  
Address: 300 Municipal Drive  
City: Madeira Beach, FL  
Zip Code: 33708  
Area Code and Telephone Number: (727) 391-9951  
E-mail Address: [rdaniels@madeirabeachfl.gov](mailto:rdaniels@madeirabeachfl.gov)

**4. FISCAL AGENT Contact Information:**

Organization Name: City of Madeira Beach  
Name: Walter Pierce  
Title: Financial Director/City Treasurer  
Address: 300 Municipal Drive  
City: Madeira Beach, FL  
Zip Code: 33708  
Area Code and Telephone Number: (727) 391-9951  
E-mail Address: [wpierce@madeirabeachfl.gov](mailto:wpierce@madeirabeachfl.gov)

5. FEID No. (a.k.a. Tax ID#): 59-6000366 Seq No. 006

6. WORK PERFORMED BY: (Select only one)

       Grantee ONLY  
  X   Subcontractor ONLY  
       BOTH the Grantee & Sub-Contractor  
       To Be Determined

7. SUBCONTRACTORS CONTACT INFORMATION: *(If applicable & known)*

Organization Name: UF|IFAS Program for Resource Efficient Communities (PREC)

Name: Pierce Jones, PhD.

Title: Professor & Director, Program for Resource Efficient Communities

Address: University of Florida, PO Box 110940

City: Gainesville

Zip Code: 32611

Area Code and Telephone Number: 352.392.5684

E-mail Address: piercejones@ufl.edu

8. PROJECT LOCATION:

A. List of County(ies): Pinellas

B. List of City(ies)/Town(s)/Village(s): City of Madeira Beach (with alignment participation by the City of Treasure Island)

C. State Lands Lease Agreement Number(s): N/A

*Provide lease agreement number(s) for any work that will be performed on State Lands. If work will not be on any state lands, please indicate N/A.*

*Remainder of this page intentionally left blank.*

## II. WORK PLAN

9. **PROJECT SUMMARY:** This Project will conduct a neighborhood scale vulnerability analysis for the City of Madeira Beach (“City”) utilizing locally-relevant sea-level rise (“SLR”) data, frequent or “nuisance” flooding, storm surge areas, and the 100- and 500-year coastal flood zones. Supplemental data layers will include vulnerable population locations and demographics, as well as available land use, building characteristics, and infrastructure.

This analysis will enable the City to identify, describe, visualize, and assign focus areas for adaptation (Adaption Action Areas or “AAAs”) and community-wide resilience planning. Project results will facilitate public education and engagement in the resilience planning process. The Final Project Report will include recommended Comprehensive Plan policies and strategies—based on local vulnerabilities—to implement the State’s “Peril of Flood” legislation and improve community resilience.

### 10. **PROJECT DESCRIPTION:**

The Project Team will identify areas and populations vulnerable to coastal flooding based on current and projected inundation hazards and risks using a location-specific, web-based, mapping and decision support tool created by the University of Florida (UF). This tool combines parcel-level property and building data with high resolution SLR, storm surge, flood zone projections and social vulnerability data. In addition, publicly available land use, zoning infrastructure and other locally relevant spatial data will be incorporated to facilitate a best practice analysis.

The assessment will identify and delineate focus areas for potential AAAs based on at-risk populations, housing, and infrastructure. The Project Team will present the results to the City’s Local Planning Agency and stakeholders’ groups for discussion and to foster engagement in the resilience planning process.

### 11. **PROJECT NEED AND BENEFIT:**

- A. **Explain the demonstrated need, which the project addresses.** All coastal areas in Florida are vulnerable to SLR and storm-driven natural hazards. The City is no exception. Further, the Tampa Bay Regional Planning Council has recently established a regional Resilience Coalition. This regional collaboration is proving to be an effective approach to improved community dialoguing and education. This Project will provide analysis and supporting data for City staff and citizens to evaluate and adopt productive policies and programs into the City’s Comprehensive Plan to enhance community resilience in the face of changing climatic conditions. It is also hoped that the community conversation initiated by this Project will not only further the larger conversation in the region but provide additional supporting documentation if furtherance of the regional resilience effort.
- B. **Explain how the proposed project meets the purpose of one or more of the Goals and Priorities for FRCP.** This Project satisfies identified requirements in Priority 1 and positions the City to address aspects of Priorities 3 and 4, including a vulnerability assessment, online decision support tools for resilience planning, and identified focus areas for potential AAAs.
- C. **Discuss how the project is feasible and can be completed by the grant period deadline.** The combination of City staff local knowledge and UF expertise combines to make this a very practical and achievable Project. UF has experience and familiarity with relevant data, mapping tools, and a history of facilitating stakeholder engagement and advocacy. The Project Team has sufficient support capacity to initiate and complete the proposed Project during the proposed Grant period.
- D. **Explain how this project is addressing social vulnerability or vulnerability of historic resources or stormwater management systems.** The decision support tool includes a social vulnerability index (SVI) data layer containing information and analysis of Census-based socioeconomic characteristics of vulnerable populations. This information is incorporated into the Citywide vulnerability

assessment. This Project provides an opportunity to evaluate social vulnerability and existing data on stormwater management systems at the community or neighborhood scale as a subset of the Census tract level analysis. This will more accurately reflect the degree and location of social vulnerabilities throughout the two barrier island communities of Madeira Beach and Treasure Island. In addition, the methodology serves as a template to apply to other coastal areas within the County and the Tampa Bay Region.

## 12. DESCRIPTION OF PROJECT OUTCOMES:

Anticipated outcomes include:

- A parcel level analysis of housing structure and flood hazard vulnerabilities within the study area.
- Providing workshops to present vulnerability assessment results and implications.
- Fostering public participation by gathering comments and reactions.
- A summary report of vulnerability assessment methods and evaluation activities.

## 13. BUDGET SUMMARY: Allowable budget categories and form of payment with the costs for this project are listed in the table below.

### BUDGET SUMMARY BREAKDOWN

| Budget Categories            | Payment     | Task 1          | Task 2          | Task 3          | Grant Amount Awarded |
|------------------------------|-------------|-----------------|-----------------|-----------------|----------------------|
| Salaries & Fringe            | Fixed Price | \$0             | \$0             | \$0             | \$0                  |
| Contractual Services*        | Fixed Price | \$24,000        | \$24,000        | \$18,000        | \$66,000             |
| <b>GRANT AGREEMENT TOTAL</b> |             | <b>\$24,000</b> | <b>\$24,000</b> | <b>\$18,000</b> | <b>\$66,000</b>      |

A. Describe how the project costs was determined: UF estimates of Project Team time needed to complete tasks.

B. **Contractual Services Selection\*:** Upon a selected Sub-Contractor(s) (if applicable), the Grantee will Provide a signed certification statement giving a description of the procurement process that was utilized for the selection of the sub-contractors. The description must include:

- a. What procurement process was utilized
- b. Justification as to how & why you made your final selection.
- c. For competitively obtained Sub-Contractor also include:
  - i. A list of all entities that you received bids/quotes from,
  - ii. Names and addresses of those entities that provided bids/quotes,
  - iii. Actual amounts of the bids/quotes that were submitted.

## 14. PROJECT TIMELINE: All tasks are to be completed and submitted no later than the task/deliverable due date listed in the table below. Requests for any change must be submitted prior to the current task/deliverable due date listed in the project timeline. Requests are to be sent via separate email to the Department's Grant Manager, with the details of the request being made and the reason for the request.

### PROJECT TIMELINE

| Task No.     | Task Title                                      | Deliverable Due Date | Task Amount     |
|--------------|-------------------------------------------------|----------------------|-----------------|
| 1            | Vulnerability Assessment                        | 11/31/2020           | \$24,000        |
| 2            | Alignment and Assessment Presentation Workshops | 01/31/2021           | \$24,000        |
| 3            | Final Project Assessment and Report             | 04/27/2021           | \$18,000        |
| <b>Total</b> |                                                 |                      | <b>\$66,000</b> |

- 15. PERFORMANCE MEASURES:** The Grantee will submit all deliverables for each task via **one pdf document** to the Department's Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline. The Department's Grant Manager will review the task/deliverables to verify that they meet the specifications in the Grant Work Plan and this task description, to include any work being performed by any sub-contractor(s). Upon review and written acceptance by the Department's Grant Manager of all deliverables under this task, the Grantee may proceed with payment request submittal.
- 16. CONSEQUENCES FOR NON-PERFORMANCE:** The Department will reduce each Task Funding Amount by 5% for every day that the task/deliverable(s) is not received on the specified due date in the most recent Project Timeline, for the Agreement. Should a Change Order or Amendment be requested on the date of or after the most current task/deliverable due date, the 5% reduction of that Task Funding Amount will be imposed until the date of the requested change is received, via email by the Department.
- 17. PAYMENT REQUEST SCHEDULE:** Grantee may submit a request for the Task Funding Amount to be paid using the Exhibit C, after all deliverables for that task have been approved by the Department. Request(s) for payment must include the Exhibit A showing 100% completion of that task and must be submitted within 45 days of the task/deliverable due date. Please refer to the [website Grants page](#) for "How to Request Payment", and "Checklist for Requesting Payment"

**Or**

Grantee may submit one request for the Grant Amount Awarded, by using the Exhibit C, after the project is 100% completed. The request for the Grant Amount Awarded, must include an Exhibit A showing 100% completion for all tasks, and must be submitted within 45 days of the last task/deliverable due date.

- 18. FUNDING SOURCE:** Grantee agrees to include on all publications, printed reports, audiovisuals (including videos, slides, and websites except that unless required under special terms of this Agreement, this requirement does not apply to audiovisuals produced as research instruments or for documenting experimentation or findings and which are not intended for presentation to the general public) or similar materials must include the DEP logo (which can be found on the Department's website at <https://floridadep.gov/resilience> or by contacting the Department's Grant Manager for a copy) and the following statement on, the following language.

"This work was funded in part through a grant agreement from the Florida Department of Environmental Protection, Florida Resilient Coastlines Program, by a grant provided by the Office of Resilience and Coastal Protection. The views, statements, findings, conclusions and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida or any of its subagencies."

The next printed line shall identify the month and year of the publication.

### **III. TASKS & DELIVERABLES**

#### **Task #1**

**A. Title:** Vulnerability Assessment

**B. Goal:** Identify and delineate areas and populations vulnerable to flood hazards within the City.

- C. Description:** The Project Team will hold a kick-off meeting to prepare an initial public outreach workshop to review the primacy of the Comprehensive Plan, Florida Statutory requirements, and drivers of responsibility to implement and advance the “Peril of Flood” provisions of F.S. Ch. 163. The City and UF will collaborate to compile and integrate parcel data, (e.g., geography and relevant structure and value attributes), inundation/hazard data (e.g., SLR, storm surge, flood zones, and flooded lands), SVI, with locally-relevant and publicly-available infrastructure data into the web-based tool. This data will then be analyzed to assess the City’s geospatial vulnerability to flooding hazards and risks.
- D. Deliverable(s):** The Grantee will submit all deliverables for each task via **one pdf document** to the Department’s Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline.
- 1) Initial kick-off meeting agenda and sign-in sheets indicating location, date, and time of meeting
  - 2) Agenda and any presentation(s) from the kick-off meeting
  - 3) Brief summary report from the kick-off meeting including
    - a. City-wide analysis of vulnerable housing, infrastructure, and populations, at the neighborhood and parcel level.
    - b. Visualizations and map products to support public review and foster participation in mitigation and resilience planning.

## **Task #2**

- A. Title: Alignment and Assessment Presentation Workshops**
- B. Goal:** To inform and engage City stakeholders in flood hazard vulnerability issues, potential mitigation actions, community resilience considerations, and gather feedback on draft policy language in compliance with the Peril of Flood legislation requirements. To align this flooding resilience Project with other flooding resilience efforts being done or proposed by the neighboring City of Treasure Island on the same barrier island chain to the south, to assure consistency of approach and response to future climate change scenarios.
- C. Description:** The Project Team, will draft policy language, organize no fewer than two workshops (depending on logistics and scheduling) to present the results of the assessment, gather stakeholder feedback on potential policy and strategy language, and outline next steps to improve community resilience. The Project Team will describe and illustrate the City’s current “Peril of Flood” implementation status and undertake engagement processes to facilitate discussion about SLR, new and proven nature-based adaptation options, and socio-cultural vulnerability and potential strategies.
- D. Deliverable(s):** The Grantee will submit all deliverables for each task via **one pdf document** to the Department’s Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline.
- 1) Draft Goals, Objectives, and Policies (GOPs) for adoption into the comprehensive plan to comply with the Peril of Flood requirement
  - 2) Timeline for Presentation of the GOPs to the local governing body
  - 3) Public workshop agendas and sign-in sheets, indicating location, date and time of each workshop.
  - 4) Presentation(s) from each workshop/meeting
  - 5) Brief summary report from each workshop/meeting including attendee input and outcomes
  - 6) Any materials created at each workshop/meeting (as applicable)

### **Task #3**

- A. Title:** Final Project Assessment and Report
- B. Goal:** Produce a Final Report summarizing the findings of the vulnerability analysis and the community engagement process leading to draft policy language and alignment of resilience approaches between the barrier-island municipalities of Madeira Beach and Treasure Island.
- C. Description:** The Project Team will produce a summary Final Report. The Report will summarize the Project activities, processes, stakeholder feedback, and lessons learned. The Final Report will include the City's Vulnerability Assessment, integrated recommendations for alignment of resilience approaches between the barrier island cities and resulting draft policy language in compliance with the Peril of Flood legislation requirements.
- D. Deliverable(s):** The Grantee will submit all deliverables for each task via **one pdf document** to the Department's Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline.
  - 1) Final report summary of the vulnerability analysis to include:
    - a. City of Madeira Beach Vulnerability Assessment draft language to be provided to local government for approval
    - b. Integrated recommendations report for alignment of the resilience approaches of the Cities of Madeira Beach and Treasure Island
    - c. Summary report of community engagement workshops being provided to local government