RCP Application

Grant Funding Type: Funding for Resilient Florida – Planning Projects

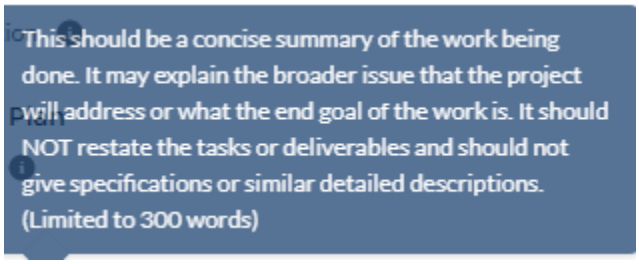
1. Applicant and Project Information
   - **Applicant Account**: City of Lake Worth Beach
   - **Applicant Grant Manager**: Julie Parham
   - **Applicant Authorized Signee**: Carmen Davis
   - **Applicant Fiscal Agent**: Bruce Miller

2. Project Information
   - **Choose the project type you are submitting**:
     - Adaption planning (Statutory VA is a pre-req)
     - Complete Vulnerability Assessment (entire community)
     - Partial Vulnerability Assessment (part of community)
     - Updated to Existing Assessment for Statutory compliance
     - Comprehensive Plan Amendments for Peril of Flood
   - **Project Title (20-word limit)**: City of Lake Worth Beach Intracoastal Infrastructure Vulnerability Assessment
   - **Total Grant Funding Amount Requested**: $100,000
   - **Total Grant Match Amount**: $0
   - **List any municipalities directly served by the project and included in the scope of work:** City of Lake Worth Beach
   - **Area served – County**: Palm Beach County
   - **Will the vulnerability assessment include any state managed lands such as National Estuarine Research Reserves (NERRs) or Aquatic Preserves (APs)**? No
   - **Total Population:** 37,728 (per 2020 census map on City GIS website)
   - **Percent of Population** (what percentage of the total population will be served by this planning project): 37% (Area estimate east of US1 = 2.42 sq mi/ 6.46 sq mi total = 37%)

3. Project Work Plan
   - **Project Summary (75-word limit)**:

The Intracoastal Infrastructure Vulnerability Assessment will complete a vulnerability assessment consistent with s.380.093 F.S. for the portion of the City east of US1 and along the West Palm Beach Canal. The City will also conduct a physical assessment of the critical infrastructure in this area, including seawalls, stormwater, and wastewater systems owned and maintained by the City. The Assessment will meet State data requirements and provide actionable data to inform future resiliency measures.

- **Project Description (300-word limit)**:



In 2021, the Coastal Resilience Partnership of Southeast Palm Beach County (CRP) published a Multi-Jurisdictional Climate Change Vulnerability Assessment (CCVA) report, creating a regional vulnerability overview which included the City of Lake Worth Beach. Per this report, approximately 75% of the City faces access trouble due to current rainfall-induced flood levels, and is also vulnerable to tidal flooding, which is expected to increase.

The CCVA provides valuable information on the effects of climate change along the Intracoastal Waterway, but it needs to be updated to meet the requirements of s.380.093 F.S. The Intracoastal Infrastructure Vulnerability Assessment will provide updated data for the eastern portion of the City of Lake Worth Beach along the Intracoastal Waterway (also known as the Lake Worth Lagoon) and West Palm Beach canal. Approximately half of the project area lies within a current (c. 2017) FEMA Flood Zone, and is subject to the compound effects of rainfall-induced flooding, storm surge wave action, and tidal flooding, including king tides. Many critical assets are located within the project area, including the Lake Worth Beach Sanitation Department, College Park Historic District, Bryant Park and Pier, Snook Islands Natural Area, Lake Avenue Bridge (an evacuation route), the Lake Worth Public Library, and many churches, schools, parks, cemeteries, and community and art centers.

The project also includes a physical assessment of critical infrastructure within this area, including stormwater and wastewater system installations and seawalls. The combination of mapped flooding and physical evaluation data will enable the City to have a clearer understanding of the most vulnerable critical assets within the flood-prone Intracoastal region, and help to define and prioritize future implementation efforts to increase the resiliency of Lake Worth Beach.

4. Project Need and Benefit

- **Explain the demonstrated need, which the project addresses**:

  NOAA Tidal Gauge readings at the Lake Worth Pier, taken since 1970, show a steady increase in sea level elevation. The observed rise to date is equivalent to a rate of 1.25 feet every 100 years. Approximately half of the eastern portion of the City currently lies within a FEMA-designated flood zone, which is expected to widen in future years. The CRP Vulnerability Assessment report forecasts a 46% increase in area parcels with medium to high flood risk by 2040, and a 663% increase in affected parcels by 2070. The CRP's report

provides a regional view of threats to community resilience. The City's Intracoastal Vulnerability Assessment will focus specifically on Lake Worth Beach's jurisdiction, to better pinpoint anticipated effects to the community. This Assessment will allow community leaders to better define an adaptation plan and prioritize future implementation projects.

- **Explain how the proposed project fits into one or more of the Project Types**:

  The CRP's CCVA is the only current vulnerability assessment that includes the City of Lake Worth Beach. However, the CCVA does not meet the new standards of s.380.093(3)(b), F.S. for a vulnerability assessment. The City will prepare an assessment for the Intracoastal area that meets the current statutory requirements, providing flood depths for specified scenarios and identifying critical assets within the project area that are threatened by changing conditions. At the completion of this project, a final vulnerability assessment report will be shared with the State.

- **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**.:
  As a coastal community is southeast Florida, the City of Lake Worth Beach is subject to the Peril of Flood statute, which requires a coastal management component within the City's comprehensive plan. By detailing floodwater encroachment in present and future conditions, and the subsequent threat to critical assets, this vulnerability assessment will enable city leaders to outline a management plan specific to its coastal region. Draft comprehensive plan language will be developed based on the findings of this Intracoastal vulnerability assessment.

- **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 is an assessment of current and future threats to the critical assets within the Lake Worth Beach intracoastal region. Going forward, the City will use the flood data and physical assessment information compiled for this vulnerability assessment to determine a plan for adapting these critical assets to flooding and sea level rise threats.

- **Discuss how the project is feasible and can be completed by the grant period deadline**:
  The City proposes to hire a qualified contractor to collect data and build a GIS model consistent with the requirements of s.380.093 F.S. The project area has been selected to target the area of City-owned and maintained infrastructure that is most vulnerable to sea level rise and flooding impacts. The three-year work period will allow for the City to complete the procurement process for contractor selection, collect flooding data and physical assessment reports, and to generate a vulnerability assessment report for the intracoastal area from these findings.

- **Has the applicant entity performed a prior vulnerability assessment, separate from what is being proposed in this application**? Yes (pull-down selection)

Uploads

- Map of project area (map must have a minimum scale of 1" = 200' and include a compass rose and legend) ***REQUIRED***
- Geographic extent of the project area in GIS format
- Draft or signed resolution or letter of support from local governing board ***REQUIRED***
- Vulnerability Assessment Report or other local study or report
- Final design and permitting documents (if applicable)
- Match or additional cost-share documents (if applicable)
- Subcontractor or other local or regional partnership agreements (if applicable)

Tasks (need at least one task to be able to submit)

- **Task Number**: 1
- **Task Title (dropdown menu, if not available leave blank and enter into 'Title Other' field**:
  - Pre-Design or Feasibility Study
  - Data Collection or Study
  - Stakeholder Coordination and Planning
  - Design and Permitting or Preconstruction Activity
  - Project Management
  - Bidding and Contractor Selection
  - Construction
  - Monitoring
  - Public Education
  - Equipment Purchase
  - Land Acquisition
  - Site Clean-Up
  - Peril of Flood Compliance
  - Vulnerability Assessment Geographic Information System
  - Salary-Wages
  - Acquire Background Data and Perform Gap Analysis
  - Set Context
  - Critical and Regionally Significant Asset Inventory
  - Exposure Analysis, Sensitivity Analysis, and Focus Area Mapping
  - Final Vulnerability Assessment Report
  - Set Context – Establish goals, motivations, and assemble stakeholder team
  - Acquire Background Data
  - Draft Vulnerability Assessment
  - Final Vulnerability Assessment
  - Local Mitigation Strategy
  - Peril of Flood Compliance (if applicable)
- **Work Performed By**:

- Grantee only
- Contractor only
- Grantee and Contractor

- **Task Description**:

  The City will contract for professional support services through a competitive qualifications-based solicitation process in accordance with City procurement policies and standards. The selected consultant will build a GIS model of the City's Intracoastal region consistent with s.380.093 F.S., which will include a complete list of critical assets for the project area. Tidal, rainfall-induced, and current and future storm surge flooding depths will be defined, and the NOAA Intermediate Low and Intermediate High sea-level rise curves for the planning horizons of 2040 and 2070 will be provided for this portion of the city along the Intracoastal Waterway. The City will also conduct a physical assessment of City-owned and maintained critical infrastructure in the project area. The data will be summarized in a Final Vulnerability Assessment Report as the project deliverable.

- **Goal**: Conduct Vulnerability Assessment of intracoastal area infrastructure
- **Time to Completion**:
  - 1-6 months
  - 1 year
  - 2 years
  - 3 years
  - Other
- **Select deliverables associated with each task. If not listed, add to 'Other Deliverable' field**:
  - Meeting agenda and sigh-in sheets indicating location, date, and time of meeting
  - Presentation(s) from the meeting
  - Summary report including attendee input and meeting outcomes defining motivations, geographic context, relevant assets, and planning goals for the project
  - Report outlining the data compiled and findings of the gap analysis-
  - Summary of recommendations to address the identified data gaps and actions taken to rectify them, if applicable
  - GIS files with appropriate metadata of the data compiled, to include locations of critical assets owned or maintained by the county/municipality and regionally significant assets
  - A report summarizing the areas identified as focus areas, with justification for choosing each area
  - Table listing each focus area with any critical assets that are contained inside the focus area
  - Maps illustrating the location of each focus area compared to the location of all critical assets within the geographic extent of the study
  - Final Vulnerability Assessment Report detailing the findings, including illustrations via maps and tables, based on the statutory scenarios and standards outlined in the Technical Standards Guidance
  - A final list of critical and regionally significant assets that are impacted by flooding, prioritized by area of immediate need, specifying for each asset which flood scenario it was impacted by

- Letter to FDEP and FDEM Mitigation Bureau Planning Unit, signed by the LMSWG Chair, or Designee
- Draft comprehensive plan coastal management element language in strike-through and underlined format that satisfies the Peril of Flood requirements

Task Budget Category (for each task)

- **Applicant Task Number**: Task 1 – $100,000
- **Expense Budget Category**:
  - Contractual Services
  - Salary/Fringe
  - Equipment
  - Miscellaneous/Other Expenses
  - Land Acquisition
- **Budget Amount**: $100,000
- **Match Amount**: $0

~~Task Personnel Grantee~~

~~**Only necessary if the Grantee is performing work on the project as indicated previously under "task Category". This section is NOT required if a contractor is the only budget category on the project.~~