

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
GRANT WORK PLAN
DEP AGREEMENT NO.: R1817**

ATTACHMENT 3

Project Title: Palm Beach County Coastal Resilience Partnership

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PROJECT LOCATION:

The Palm Beach County Coastal Resilience Partnership (CRP) currently includes seven municipalities in coastal southeast Palm Beach County: City of Boca Raton, City of Boynton Beach, City of Delray Beach, City of Lake Worth, Town of Highland Beach, Town of Ocean Ridge, and Town of Lantana (see Figure 1). Additional neighboring coastal municipalities will be invited to join before the partnership is formalized in June 2019.

WORK PLAN

1. Project Abstract: The City of Boynton Beach requests support of \$72,000 to initiate a multi-jurisdictional resilience planning partnership of seven coastal municipalities and the Palm Beach County Office of Resilience. This collaboration will reduce costs for each municipality while fostering synergy

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and consistency in assessing climate vulnerability, prioritizing adaptation needs, and identifying adaptation strategies. The proposed project directly addresses Resilience Planning Grant Priority Areas 1 and 4, and facilitates an ongoing collaboration to address Priority Areas 2 and 3 in later project phases. From January–May 2019, the County and participating municipalities will receive pro-bono assistance from Harvard University Law School’s Emmett Environmental Law and Policy Clinic to develop legal and policy tools for the partnership. Resilience Planning Grant funds, if awarded, will be used concurrently to the Harvard Clinic to support the completion of three project tasks. Task 1 entails an inventory and synthesis of existing municipal and County GIS data on community assets to be used in a later vulnerability assessment. Task 2 consists of stakeholder and public engagement activities, including one Working Group meeting, a web page, press release, and social media announcements. Task 3 entails developing a methodology for a multi-jurisdictional vulnerability assessment. At the end of the grant period in summer 2019, the partnership will be fully prepared to solicit proposals for a multi-jurisdictional vulnerability assessment and proceed with climate adaptation planning on the micro-regional scale.

2. Project Description:

The purpose of this project is to establish the organizational and technical foundations for a multi-jurisdictional resilience planning collaborative in coastal southeast Palm Beach County. The Palm Beach County Coastal Resilience Partnership (hereafter “CRP”) comprises Palm Beach County and seven municipalities along a 20-mile stretch of the Intracoastal Waterway from the Boca Raton Inlet in the south to just north of the Boynton Beach Inlet. This “micro-region” spans barrier island and mainland real estate including low-lying areas severely threatened by coastal flooding. The partnership unites three of the County’s four largest cities (Boca Raton, Boynton Beach, and Delray Beach) with a smaller city (Lake Worth) and neighboring small towns (Lantana, Ocean Ridge, and Highland Beach; see Figure 1), some of which lack capacity to conduct their own municipal resilience assessments. The micro-region is geographically separate from the County’s largest city, West Palm Beach, which is progressing its own resilience planning and can provide a model for its neighbors to the south.

Representatives from the seven towns and cities, Palm Beach County staff, and local technical experts have convened informally over the past year to review the science of sea level rise and discuss common challenges related to coastal flooding and saltwater intrusion. Two of the municipalities have modified their Comprehensive Plans to comply with the 2015 “Peril of Flood” statute, and two are in the process of doing so, but none have yet designated Adaptation Action Areas (AAAs) nor conducted a vulnerability assessment. This presents an opportunity for the partners to leverage resources and initiate a collaborative resilience planning process. The proposed micro-regional partnership offers multiple benefits including a consistent vulnerability assessment methodology, consistent data inputs, integrated data outputs, coordinated adaptation recommendations, and reduced costs for each municipality.

Beginning in January 2019, the Palm Beach County Office of Resilience will receive assistance from Harvard University to develop the legal and administrative structure for the CRP. Under the direction of Harvard Law School’s Emmett Environmental Law and Policy Clinic Director Wendy Jacobs and Clinical Instructor Aladdine Joroff, third-year Harvard law students and/or cross-disciplinary graduate students will provide pro-bono assistance in the spring 2019 semester. The students will assist with a variety of tasks including crafting interlocal agreements, drafting Peril of Flood language to add to participating communities’ Comprehensive Plans, and developing model ordinances for designating

AAAs. During this phase, the CRP will also reach out to neighboring coastal municipalities (e.g., Hypoluxo, Manalapan, Briny Breezes, Gulf Stream) to invite them to join the partnership.

The proposed project will maximize the opportunity provided by the Harvard partnership to conduct technical, community engagement, and planning activities from December 2018 to June 2019. Resilience Planning Grant (RPG) funds, if awarded, will be used to develop an integrated multi-jurisdictional GIS dataset, establish a working group of stakeholders, conduct public outreach to build program support, and facilitate Peril of Flood statutory compliance for four partner communities. Upon completion of this initial phase in June 2019, the CRP will solicit proposals for a vulnerability assessment and proceed with climate adaptation planning on the micro-regional scale.

3. Budget Summary:

AGREEMENT TOTAL	Grant \$ 72,000
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TOTAL GRANT FUNDS

Categories	Amount
Contractual	
Task 1: Inventory and Synthesize County and Municipal GIS Data	
<i>Review background information, convene kick-off meeting</i>	\$ 6,000
<i>Inventory existing data (\$4,000 * 8 jurisdictions)</i>	\$ 32,000
<i>Review and synthesize data, develop final report</i>	\$ 12,000
Subtotal Task 1	\$ 50,000
Task 2: Engage Stakeholders and the Public	
<i>Convene Working Group meeting</i>	\$ 4,000
<i>Prepare final report</i>	\$ 3,000
<i>Develop web page, social media posts, press release</i>	\$ 7,000
Subtotal Task 2	\$ 14,000
Task 3: Develop Vulnerability Assessment Methodology	\$ 8,000
Subtotal Task 3	\$ 8,000
TOTAL CONTRACTUAL	\$ 72,000

4. Project Timeline:

Task/ Deliverable No.	Task or Deliverable Title	Task Start Date	Task End Date	Deliverable Due Date	Task Amount
1	Inventory and Synthesize Municipal and County GIS Data	Upon Execution (Jan. 2019)	4/15/2019	5/1/2019	\$ 50,000
2	Engage Stakeholders and the Public	3/1/2019	5/10/2019	5/24/2019	\$ 14,000
3	Develop Vulnerability Assessment Methodology	4/26/2019	6/7/2019	6/21/2019	\$ 8,000

Task 1

Title: Inventory and Synthesize County and Municipal GIS Data

Description: A vulnerability assessment requires the integration of multiple sources of data on climate, socioeconomics, and the built environment. Data are spatially analyzed in a geographic information system (GIS) to produce maps detailing a community's exposure, sensitivity, adaptive capacity, risk, and vulnerability to various climate hazards. Data inventory is one of the first steps of a vulnerability assessment. Data on climate hazards, socioeconomics, and some infrastructure (e.g., roads) can be acquired from federal and state sources, while most data on the built environment and natural assets are located at the city and county level. A multi-jurisdictional vulnerability assessment therefore involves the added complexity of locating, comparing, and integrating multiple sources of municipal and county data. By inventorying the data early with RPG funding, the CRP will identify data gaps, ensure consistency, and be fully prepared to initiate a vulnerability assessment at the end of the grant period in June 2019.

The contractor will be responsible for the following subtasks:

- Review vulnerability assessment best practices (e.g., Florida Adaptation Planning Guidebook, U.S. Climate Resilience Toolkit) to identify needed municipal and county data sources
- Convene a kick-off meeting with the CRP Steering Committee to identify all participating municipalities, review vulnerability assessment data needs, and identify technical staff contacts
- Review current, relevant municipal and county management plans and reports (e.g., hazard mitigation plans, Comprehensive Plans, stormwater plans) and associated data
- Coordinate with municipal GIS or technical staff to locate existing GIS and tabular data on municipal assets including residential parcels, commercial parcels, buildings, critical facilities, water and stormwater infrastructure, parks, natural areas, etc.
- Inventory County-maintained data layers including LIDAR, land use, soils, and flood insurance rate maps
- Assemble, review, and synthesize existing data layers into a single dataset
- Meet with CRP Steering Committee and technical staff to identify gaps in existing information, and also identify needs for higher resolution and/or additional spatial datasets
- Prepare a final report summarizing existing data sources (including metadata) and missing or incomplete data

Deliverable: Synthesized spatial dataset of existing data on key municipal and county assets, final report of existing and needed data

Due Date: May 1, 2019

Funding Amount: \$50,000

Performance Measure: The Department will review the deliverable(s) to ensure it meets the specifications provided in the Task Description, above.

Task 2

Title: Engage Stakeholders and the Public

Description: Involving stakeholders and the public in the early stages of adaptation planning is important to raise awareness of the need for climate adaptation, gain support for policies, and understand local

concerns and preferences for later strategy development. The contractor will be responsible for the following subtasks:

- Work with the Steering Committee to establish a Working Group of up to four staff from each municipality and the County, plus representatives from the business, nonprofit, and university sectors
- Convene a Working Group kick-off meeting to discuss the purpose of climate adaptation planning, review existing adaptation planning efforts, and contribute to a statement of CRP guiding principles and motivations. This kick-off meeting will set the stage for additional Working Group meetings throughout the subsequent project phases.
- Prepare a final report summarizing outcomes of the Working Group meeting
- Develop a CRP web page (to be hosted by Palm Beach County's Office of Resilience and linked to each municipality's website)
- Create and distribute a press release and social media announcements about the partnership

Deliverables: Working Group meeting, final report summarizing meeting outcomes, CRP web page, press release, social media posts

Due Date: May 24, 2019

Funding Amount: \$14,000

Performance Measure: The Department will review the deliverable(s) to ensure it meets the specifications provided in the Task Description, above.

Task 3

Title: Develop Vulnerability Assessment Methodology

Description: The contractor's final task will be to develop a methodology for conducting a climate vulnerability assessment for the CRP. The contractor will develop the methodology based on the results of their prior tasks and deliverables, including the review of vulnerability assessment best practices, the results of the GIS data inventory and gap analysis, and the CRP working group meeting. The methodology will provide a consistent framework for participating jurisdictions to implement a vulnerability assessment, either collaboratively or separately, in the next phase of the project.

Deliverable: Methodology for climate vulnerability assessment

Due Date: June 21, 2019

Funding Amount: \$8,000

Performance Measure: The Department will review the deliverable(s) to ensure it meets the specifications provided in the Task Description, above.