



City of Delray Beach

M E M O R A N D U M

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TO: Caryn Gardner, Assistant City Manager

FROM: Ana Puszkin-Chevlin, Sustainability Officer

DATE: June 13, 2019

SUBJECT: Southeast Palm Beach County Resilience Partnership Interlocal Agreement and Work Plan Agreement for Community Vulnerability Assessment

Summary

The City of Delray Beach (City) is being asked to formally join the Southeast Palm Beach County Coastal Resilience Partnership (CRP), a collaborative of ten (10) local cities and towns, and to opt-in to a Work Plan Agreement for a multi-city, comprehensive Community Climate Vulnerability Assessment (CCVA). This memo explains the genesis and justification for participating in the CRP, as well as the justification, content and cost associated to opting into the CCVA. Legal review of the Interlocal Agreement and Work Plan Agreement documents is requested prior to presenting this initiative to City Commission.

Background

The City has been a member of the South Florida Regional Climate Compact (SRFPC) for nearly a decade, committing itself to assessing and addressing climate vulnerability. While the SRFPC has been instrumental in interpreting the evolving climate science in terms of the South Florida region and framing climate risk assessments, the data and policy recommendations developed for the diverse four-county region do not translate easily into actionable planning at the local level. It is incumbent on cities and towns to apply vulnerability assessment tools to their jurisdictions and develop locally specific community vulnerability assessment and adaptation approaches.

Among the SRFPC's thirty nine (39) cities and four (4) counties, only a handful have completed a Community Climate Vulnerability Assessment (CCVA), a study which assesses the vulnerability of a range of community assets, including people, public and private property, infrastructure and economy, to a range of climate risks such as sea level rise, variable and intense precipitation, coastal storms and surge, heat, saltwater intrusion etc. In 2014, City Commission tasked the Rising Water's Task Force (RWTF) to examine climate vulnerability issues and recommend a path forward. The foremost recommendation of the RWTF was that the City contract a comprehensive Community Vulnerability Assessment, a study that typically costs between \$100K and \$150K for a municipality of our size. The 2018 rewrite of the City's Comprehensive Plan also call for the development of a CCVA, one that goes beyond the sector-based analysis developed for specific public infrastructure issues, such as stormwater management and sea walls -- studies conducted by the City's Public Works Department in 2018.

In addition, climate vulnerability assessments can be used to comply with federal and state mandates including:

- America's Water Infrastructure Act (S. 3021, October 2018) requires water systems to perform Risk and Resilience Assessments (by 2020) and prepare Emergency Response Plans (following the RRA) addressing both malevolent acts and natural hazards with respect to physical and cyber security.
- Florida's Peril of Flood Act (SB 1094, 2015) defines sea level rise as one of the causes of flood risk that must be addressed in the "redevelopment principles, strategies, and engineering solutions" of a comprehensive plan.
- Florida's "Adaptation Action Areas" (Chapter 163.3177, F.S., 2011) are an optional designation within a local government's comprehensive plan for areas that experience coastal flooding and are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning.

The Sustainability Office supports development of a City CCVA, but recognizes that vulnerabilities are locally specific, and resilience is codependent and best achieved in collaboration with surrounding jurisdictions. For example, data, analysis, and adaptations approaches developed by Monroe County for the low-lying Florida Keys may not be applicable in southern Palm Beach County, where land elevations are significant higher, but collaboration and cooperation among Boynton Beach and Boca Raton is critically important in formulating cohesive and synergistic adaptation policies locally. Similar geographies, shared infrastructure, such as the Waste Water Treatment Plan and water supplies lines, and engage with common agencies, like the South Florida Water Management District, suggesting that the CCVA quality would be optimized by working together. Moreover, collaborating on a CCVA in a "micro-region" would likely yield a substantial cost savings by each municipality, as the same data, methodology and analytic tools could be used. These realizations were the genesis of the SE Palm Beach County Coastal Resilience Partnership (CRP).

Establishing the CRP through a Interlocal Agreement

The Southeast Palm Beach County Coastal Resilience Partnership (CRP) began through a year-long process of informal meetings among resiliency professionals, city staff, and in some cases the elected officials of six municipalities (Boca Raton, Highland Beach, Delray Beach, Boynton Beach, Ocean Ridge, Lantana) that abut the Intracoastal Waterway from the Palm Beach County southern border to the Lake Worth Lagoon. In 2018 the group, with the addition of Lake Worth Beach and Palm Beach County, applied and received a \$75,000 FDEP Coastal Resilience Grant to: 1) formally organize the group into the Southeast Palm Beach County Coastal Resilience Partnership and determine how a multi-city partnership would operate and procure technical services; 2) develop a RFP workscope for a CCVA; and 3) assess the availability of needed data and provide a gap analysis. During the grant period the CRP expanded to include the Town of South Palm Beach, Gulf Stream, Briny Breezes and Hypoluxo, a geographically continuous micro-region.

The Phase I of the FDEP grant was administered by the City of Boynton Beach. The work began in January 2019 and will conclude in June 2019. Due to the tight time frame, much of the technical vulnerability methodology work was awarded to Carollo Engineering, an engineering firm with a continuing-services agreement with the City of Boynton Beach. The CRP also received invaluable pro-

bono assistance on the Interlocal Agreement, procurement issues and cost-sharing approach related to the CCVA from Harvard University's Emmett Law Clinic.

As we approach the end of Phase I, each participating city is being asked to sign the Interlocal Agreement (see attached) creating and governing the CRP. There are **no** financial commitments to becoming a member city. As stated in the Interlocal Agreement the CRP's purpose is to:

- A. The intent and purpose of this Agreement is to establish a framework for continuing collaboration between the Participants to assess climate change vulnerabilities and develop and/or implement climate change adaptation strategies, including via the adoption of Work Plan Agreements.
- B. Pursuant to this Agreement, the Participants may, among other activities, (i) convene public and/or private meetings, (ii) share knowledge, experiences and ideas, (iii) collaborate on grant applications or funding opportunities, and (iv) coordinate the identification, design, procurement and/or joint implementation of specific tasks relevant to assessing and responding to the impacts of climate change.
- C. The projects and activities stemming from this agreement are typically organized in individual work plan agreements into which Participants may choose to enter or not. Work plan agreements may include all or a subset of Participants. Commitments to resources are associated with the work plan agreements, not the CRP.

The Community Climate Vulnerability Assessment Work Plan

As noted in item C above, the CRP members will organize "Work Plan Agreements" (see attached), the initial one being the micro-regional CCVA project. Member cities that opt-in and commit to this Work Plan Agreement will share in the management, product and cost of the CCVA. The CCVA Workscape, methodology and cost sharing framework was developed through multiple meetings with the other participating cities and with the guidance of Corollo and the Harvard University team. It includes the following five tasks:

Phase II¹ (October 2019 – September 2020)

1. *Explore Climate Threats*
2. *Identify and Evaluate Community Assets*
3. *Assess Vulnerabilities and Risks*: Evaluate the propensity of community assets to be adversely affected by climate hazards by assessing their exposure, sensitivity, and adaptive capacity; estimate magnitude of potential losses
4. *Investigate Potential Adaptation Strategies*: Identify site-specific protective measures, design guidelines, and potential nature-based options
5. *Prioritize Adaptation Strategies*: Document benefits of adaptation strategies, develop planning level cost estimates, and identify funding sources to prioritize the adaptation strategies

¹ If awarded, FDEP 2019/20 RPG funds will supplement costs for Phase II, which includes Steps 3 through 5.

The three primary deliverables will include a comprehensive report, an electronic visual mapping tool that illustrates vulnerabilities dynamically, and a concise overview piece that can be used for public distribution. The comprehensive report will have sections that summarize the collective risks, vulnerabilities and suggested adaptation responses and separate chapters/appendices that focus on data and analysis relevant to each city or town. The consultant would also be required to participate in two public presentations and a minimum of three workshops for city staff and elected officials.

The Work Plan Agreement was structured based on the participation of 10 local town and cities, as well as Palm Beach County, each committing funds to the project based on cost-sharing equation which considers the jurisdictions' population, total assessed value of property, household median income, in addition to a base fixed cost. The City, as one of the three largest and most affluent in the group, would be asked to contribute approximately \$56,500 of the total proposed budget of \$400,000. This is approximately half of the estimated cost of procuring a comparable CCVA individually. This figure is contingent on obtaining participation from all the cities. It may be slightly higher if some cities opt-out, or it could be less if the CRP is able to secure a Phase II grant of \$75,000 from FDEP. (The CRP applied for round two funding in March and is awaiting a response.)

Table 1. Proposed Cost Share Structure for a \$400,000 Climate Vulnerability Assessment

Town/City	Total Contribution	Base Project Contribution* (40%)	Population** (30%)	Property Value*** (15%)	Median Household Income**** (15%)
Boca Raton	\$85,540	\$13,103	\$37,626	\$29,144	\$5,667
Boynton Beach	\$53,754	\$13,103	\$29,825	\$7,067	\$3,759
Briny Breezes	\$16,419	\$13,103	\$342	\$60	\$2,913
Delray Beach	\$56,409	\$13,103	\$26,610	\$12,739	\$3,958
Gulf Stream	\$27,491	\$13,103	\$315	\$1,387	\$12,685
Lake Worth Beach	\$32,974	\$13,103	\$14,958	\$2,212	\$2,700
Lantana	\$22,422	\$13,103	\$4,501	\$1,266	\$3,552
Highland Beach	\$25,255	\$13,103	\$1,490	\$3,033	\$7,628
Ocean Ridge	\$22,246	\$13,103	\$611	\$1,216	\$7,315
Hypoluxo	\$19,226	\$13,103	\$1,094	\$423	\$4,606
South Palm Beach	\$18,264	\$13,103	\$561	\$418	\$4,182
Palm Beach County	\$20,000	\$13,103	-	-	

Total	\$400,000	\$160,000	\$120,000	\$60,000	\$60,000

*The Base Project Contribution is a fixed cost assigned to each member's participation in the vulnerability assessment.

**Each community's contribution based on its proportion of the region's full-time population (Data: US Census, American Community Survey 5-Year Estimates, 2013-2017).

***Each community's contribution based on its proportion of the region's total assessed property value (Data: Palm Beach County Property Appraiser)

****Each community's contribution based its median household income in proportion to that of the region as a whole.

*****Palm Beach County, with a small amount of land and population within the study footprint, is proposing a fixed contribution of \$20,000 to support the project.

The CRP members also evaluated approaches to procure the CVA analysis and manage the fiscal aspects of the contract and requested grant funds. After much discussion and input from the Harvard team, the group decided that the Town of South Palm Beach would serve as the fiscal agent for this Workplan Agreement. Their staff time for accounting and reporting would be an in-kind contribution in lieu of their \$18,264 financial commitment. South Palm Beach was selected over the Treasure Coast Regional Plan Agency due to the lower cost basis, staff skill set in procurement, and streamlined process.

The CRP group also evaluated merits of procuring the CCVA analysis services through an RFP or RFQ. While arguments can be made for both approaches, the group has agreed to move forward with the RFP approach, as the Work Plan Agreement has a maximum budget of \$400K, and one may argue that the product required is not strictly architectural, landscape architecture or engineering as specified in the CNNA. Per the Work Plan Agreement, the one representative from each of the participating jurisdictions will be part of the selection committee and the steering committee overseeing the work product.

Recommendation

Our stewardship of the CRP and the multiple anticipated benefits of engaging in a CCVA with our neighboring communities supports signing the Interlocal and opt-in to participation on the Work Plan Agreement.

Delray Beach's Sustainability Office was one of founding members of this innovative collaborative effort. Delray Beach's leadership on this collaboration and on climate resiliency generally was fundamental in engaging surrounding jurisdictions in the project.

Moreover, the micro-regional approach is novel, highly promising, and thus supported by FDEP's Coastal Resilience Program. All participants in the Work Plan Agreement believe that the resulting CCVA will not only cost effectively provide a critical base-line assessment, but also identify the interdependencies among neighboring cities that impact vulnerability and the opportunities to collaborate on resilience projects.