



Hallandale Beach
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City of Hallandale Beach City Commission Agenda Cover Memo

Meeting Date:	Item Type:		1 st Reading	2 nd Reading
8/5/2020	<input checked="" type="checkbox"/> Resolution <input type="checkbox"/> Ordinance <input type="checkbox"/> Other	Ordinance Reading	Click or tap to enter a date.	Click or tap to enter a date.
		Public Hearing	<input type="checkbox"/>	<input type="checkbox"/>
		Advertising Required	<input type="checkbox"/>	<input type="checkbox"/>
		Quasi Judicial:	<input type="checkbox"/>	<input type="checkbox"/>
File No.:				
20-223				
Fiscal Impact (\$):	Account Balance (\$):	Funding Source:	Project Number :	
\$66,000	\$0.00	Florida Department of Environmental Protection Resilient Coastlines Grant	G2008	
Contract/P.O. Required	RFP/RFQ/Bid Number:	Sponsor Name:	Department:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	James Sylvain, P.E.	Department of Public Works	
Strategic Plan Focus Areas:				
<input checked="" type="checkbox"/> Financial	<input type="checkbox"/> Organizational Capacity	<input checked="" type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Development, Redevelopment and Economic Development	
Implementation Timeline				
Estimated Start Date: 8/6/2020 Estimated End Date: 8/6/2070				

SHORT TITLE:

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF HALLANDALE BEACH, FLORIDA, AUTHORIZING ADOPTION OF THE VULNERABILITY ASSESSMENT PLAN (“VAAP”); AND PROVIDING AN EFFECTIVE DATE.

STAFF SUMMARY:

Summary:

This agenda item seeks City Commission Adoption of the Vulnerability Assessment and Adaptation Plan (Exhibit 7).

Background:

The City of Hallandale Beach has been working to improve awareness and reduce risk related to climate change since at least 2016. On November 1, 2016 the City accepted the Southeast Florida Regional Climate Change Compact's Unified Sea-Level Rise Projections (Exhibit 2). On August 16, 2017 the City passed a Resolution committing the City to the Paris Climate Accord and striving to meet its goals and objectives (Exhibit 3). On May 16, 2018 the City adopted the Sustainability Action Plan which includes 27 projects, short-term, and long-term goals to increase sustainability in the City which includes a project to develop, adopt, and implement a Vulnerability Assessment and Adaptation Plan (Exhibit 4). On March 6, 2019 the City Commission adopted a Resolution committing to the greenhouse gas emission (GHG) reduction goals in the UN Intergovernmental Panel on Climate Change Climate Change Special Report on Global Warming of 1.5°C (Exhibit 5). On May 8, 2019 and again on March 10, 2020 staff held internal climate change trainings for staff to further interdepartmental knowledge and buy-in for the work we have ahead of us as a City to mitigate and adapt to climate change.

On July 23, 2019, the City was awarded a \$66,000 grant award from the Florida Department of Environmental Protection's Florida Resilient Coastlines program. By October 2019 the City had entered into the grant agreement (Exhibit 6) with the grantor to carry out the following tasks as the scope of work:

- Flood Hazard Mapping (sea level rise, tidal flooding, heavy precipitation, & storm surge)
- Flood Vulnerability and Loss Assessment
- Future Precipitation Analysis
- Qualitative Assessment of Groundwater Changes
- Projected Changes in Shoreline
- Resilience Strategy Development and Evaluation

On November 13, 2019 the City had entered into an agreement with RS&H (Consultant) to complete the work described in the grant agreement after Commission passed a resolution on September 18, 2019 approving said procurement and expenditure. The work to complete these tasks was carried out between November 13, 2019 and June 30, 2020.

Current Situation:

The VAAP includes a vulnerability assessment of city facilities and commercial properties to various flood risks, including projected sea level rise, throughout the City. This data is also visualized through an online ArcGIS tool which can be accessed by City staff. Following the vulnerability assessment in the VAAP is the economic loss assessment. This loss assessment reports the number of parcels at medium-high vulnerability/risk to each flood type, the percentage of commercial and city properties at risk, and the potential impact to sales volume and employees due to the flood risk. Next, the VAAP provides insight into potential changes in precipitation, groundwater, and shoreline recession. Lastly, the VAAP includes an adaptive management strategy and a cost-benefit analysis of ten adaptation actions to approach both in the short- and long-term.

City Commission adoption of the Plan will allow for implementation to begin. Adoption of the VAAP does not grant blanket approval of the projects included within. All options will be weighed, tied to a cost/benefit estimates, and brought forward to the City Commission for discussion and approval once the all necessary work has been completed for each individual project.

In resilience work, there is a long-standing “information-action gap” where practitioners and municipalities delay physical work on adaptation to carry out study after study. With this VAAP, the City has direction on short-term projects to carry out to improve the resiliency of Hallandale Beach, in addition to those long-term projects which may change with new information over time. Adopting this Plan and starting on resilience work will bring Hallandale Beach to the forefront of climate adaptation where many cities continue to be frozen in the information-action gap. Taking action now shows that Hallandale Beach is cognizant of global climate change and is responding proactively.

Why Action is Necessary:

City Charter, Article V – Administration, Division 1, Section 5.01: Ordinances and Resolutions states that a Resolution is an expression of the City Commission on matters of official concern, opinion, or administration, of a temporary character, or a provision for the disposition of a particular item of the administrative business of the governing body. The important of the City Commission involvement in the long-term resiliency of the City of Hallandale Beach is clear.

Cost Benefit:

The adoption of this Plan allows implementation to begin. Projects included within the Plan will be brought to Commission individually with cost-benefit analyses included. To report best on the cost-benefit of this item, a triple bottom line (people, planet, prosperity/profit) approach is utilized.

People: As of June 25, 2020, 71% of respondents to the City’s Climate Action Plan Survey stated that they were “very concerned” about climate change. Passing this Plan shows constituents that the Commission is aware of water-related climate risks and is acting accordingly. Adopting the VAAP will likely build trust within Hallandale Beach residents and businesses that the City is taking climate change seriously and has developed a plan of action. Additionally, many of the projects will improve quality of life for the Hallandale Beach community including the resilience hub project, floodproofing assistance for low-income residents, and tidal check valves which will reduce king tide flooding issues.

Planet: While the adaptation actions listed in the VAAP are situated to benefit humans first, many of the adaptation actions – such as the dune access, marina seawall, and NE 12th Avenue Low Impact Development projects – have co-benefits which provide habitat for wildlife and assist in carbon sequestration over time.

Prosperity/profit: The cost of all projects within the VAAP are estimated to total between \$129 to \$182 million. Projects range in price from as low as \$12,000 to as high as \$126 million. Seventy percent (70%) of the total VAAP project cost estimates is concentrated in the “raise critical roads and bridges” project. Each VAAP project is considered hazard mitigation and based on meta-

research published by the National Institute of Building Sciences, the projects in the VAAP could result in a net benefit of \$388 to \$538 million to the City and community. As stated above, each project in the VAAP above procurement thresholds will be brought to Commission (with a cost-benefit analysis) for their approval prior to implementation.

PROPOSED ACTION:

The City Commission consider the adoption of the Vulnerability Assessment and Adaptation Plan.

ATTACHMENT(S):

- Exhibit 1 – Proposed Resolution
- Exhibit 2 – Resolution 2016-10 (Unified Projections)
- Exhibit 3 – Resolution 2017-091 (Paris Agreement)
- Exhibit 4 – Resolution 2018-042 (SAP Adoption)
- Exhibit 5 – Resolution 2019-021 (GHG Reduction Goals)
- Exhibit 6 – FDEP Resilient Coastlines Grant Agreement
- Exhibit 7 – Vulnerability Assessment and Adaptation Plan
- Exhibit 8 – Presentation