



City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

Item 7.
COMMITTEE MEMORANDUM

TO: Land Use and Sustainability Committee

FROM: Jimmy L. Morales, City Manager

DATE: May 26, 2020

TITLE: **DISCUSS HOW THE CITIES OF MIAMI AND MIAMI BEACH MEASURE FLOODING**

HISTORY:

The City of Miami Beach Public Works Department owns and operates a stormwater utility that mitigates the impacts of rainfall flooding throughout the City. As part of the regular course of business, the City's Stormwater Operations Division cleans and maintains the stormwater management system to ensure its sustained viability during rain events. Moreover, in an effort to continuously improve the level of service, the City's Public Works Department uses a data driven approach to measure the efficacy of the stormwater system, analyze flood events and make improvements.

In 2019, the Chief Resilience Officer and Senior Resilience Analyst worked with the Public Works and Environment and Sustainability departments to define and analyze types of flooding. Some of the key data that is collected during flooding events includes: water depth, location, and affected stakeholders. Customer complaints, tide levels and additional data are entered into an internal PowerBI stormwater dashboard with the help of the Information Technology Department to provide a holistic view of the event: one that illustrates areas when rainfall flooding presented a significant challenge within the City and also identifying where flooding is avoided.

The City is able to examine types of flooding within different categories to analyze flood events. This process involved various meetings, research, process mapping and training. In addition to this data, the Public Works Team also attempts to document before and after conditions, that not only show the geographic impacts of flooding from storms and high tides, but also illustrate the stormwater system's capacity to overcome an event's peak intensity. The collected data is continuously reviewed by the Public Works Team and strategic initiatives are revised to provide an optimal level of service. The dashboard's data is also used for multi-departmental after action reviews for storms and king tides, to provide data for bond rating agencies, and to answer general questions about flooding.

ANALYSIS:

Results from the 2019 Resident Survey show that 50% of residents rated efforts to manage stormwater drainage and flooding as excellent or good. In order to continue maintaining excellent standards in this area, the City intends to continue to use a data driven approach to measure the efficacy of the stormwater system.

CONCLUSION:

This information is presented to the members of the Land Use and Sustainability Committee for discussion and further direction.

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?

Yes

Does this item utilize G.O. Bond Funds?

No

Departments

Public Works