



CITY OF FORT LAUDERDALE
City Commission Agenda Memo
CONFERENCE MEETING

#16-1371

TO: Honorable Mayor & Members of the
Fort Lauderdale City Commission

FROM: Lee R. Feldman, ICMA-CM, City Manager

DATE: November 15, 2016

TITLE: Response to the 2016 King Tides

Background

Last year, extreme high tides generated discussion and action by the City to consider both infrastructure and regulatory changes to reduce flooding impacts. Improvements to date have included installation of a cumulative total of 116 tidal valves, retrofitted storm basins, and a new seawall ordinance. We also saw our neighbor's making investments to reduce impacts on private property. Due to infrastructure and operational improvements as well as increased awareness of the challenges from our neighbors, the City received very few calls or complaints related to impacts from the September King Tide event.

The October 2016 King Tide was truly extreme with flooding similar to the 2015 King Tides. The impacts started before and lasted after the predicted dates of October 14-21. While the National Oceanic and Atmospheric Administration predicted tides to peak at one foot above the average high tide, the observed tides were an additional 14 inches higher than predicted. Easterly winds and swells from Hurricane Nicole resulted in the National Weather Service issuing a coastal flood advisory for Broward County during the weekend of October 15-16. With water levels two foot over the average high tide, seawalls breached and groundwater levels rose dramatically causing flooding. Several storm drains not previously known for causing street flooding were identified.

Today's presentation will provide a brief overview of the practicality of using flood barriers, the actions taken during the October 2016 tide, the conditions under which select improvements reduced flooding, and the regulatory impacts as the City begins to address compliance with the new seawall ordinance. As the City moves forward to take the necessary steps to make this a more climate resilient community, we need to effectively communicate realistic expectations. While tidal valves and higher seawalls provide a front line defense to reduce tidal flooding, very low lying areas may still experience some impacts as high tides permeate the porous limestone and temporarily raise the groundwater levels.

Resource Impact

There is no fiscal impact associated with this action.

Strategic Connections

This item is a *Commission Annual Action Plan* priority related to the Stormwater Management Plan.

This item is a *Press Play Fort Lauderdale Strategic Plan 2018* initiative, included within the Neighborhood Enhancement Cylinder of Excellence, specifically advancing:

- Goal 2: Be a sustainable and resilient community.
- Objective 2: Reduce flooding and adapt to sea level rise.

This item advances the *Fast Forward Fort Lauderdale 2035 Vision Plan: We Are Ready*.

Attachment(s)

Exhibit 1 – King Tide Response Presentation

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