



CITY OF FORT LAUDERDALE City Commission Agenda Memo REGULAR MEETING

TO:	Honorable Mayor & Members of the Fort Lauderdale City Commission
FROM:	Chris Lagerbloom, ICMA-CM, City Manager
DATE:	May 5, 2020
TITLE:	Resolution Accepting the Unified Regional Sea Level Rise Projection 2019 Update of the Southeast Florida Regional Climate Change Compact - (Commission Districts 1, 2, 3, and 4)

Recommendation

It is recommended that the City Commission adopt a resolution accepting the "Unified Regional Sea Level Rise Projection - 2019 Update" of the Southeast Florida Regional Climate Change Compact for use by staff as the basis for sea level rise adaptation planning activities.

Background

In 2011, the Southeast Florida Regional Climate Change Compact (Compact) released its first Unified Regional Sea Level Rise (SLR) Projection for Southeast Florida. The Compact SLR projections are intended to provide a regionally consistent projection for use in adaptation planning across the four county Southeast Florida region. This first projection was highlighted in the City's "We Are Ready" chapter of *Fast Forward Fort Lauderdale: Our City, Our Vision 2035* and again in the *Press Play Fort Lauderdale: Our City, Strategic Plan 2018* under Goal 2: "Be a sustainable and resilient community." In 2015, the Compact released an update of the Unified Regional Sea Level Rise (SLR) Projection for Southeast Florida. That update was adopted by the Fort Lauderdale City Commission by resolution for the purposes of sea level rise planning activities, Resolution 15-279.

The Compact Sea Level Rise Ad Hoc Work Group (Work Group) developed the most recent projections, its third update, in 2019. The Work Group, which includes expert researchers, senior scientists, and lead engineers representing the National Oceanographic and Atmospheric Administration, the South Florida Water Management District, the US Department of the Interior, the University of Miami, Florida International University, was reconvened to review scientific literature released since 2015 to update the SLR projection.

The guidance document provides a summary of the projections; publications reviewed and discussed by the Work Group; the methodology for deriving the projection; description of the recommended unified regional SLR projection; and additional recommendations from the Work Group. The 2019 update presents several adjustments to the 2015 Regional SLR Projection:

- The baseline year has been adjusted to 1992 from 2000 to be consistent with other published projections;
- The planning horizons have been shifted to 2040, 2070, and 2120 to allow 20-, 50- and 100-year planning horizons; and
- The new 2019 projections are 2 inches greater for the year 2030 than the previous 2015 projections, 3-7 inches greater for 2060, and 2-22 inches greater for 2100.

The 2019 SLR projection provides appropriate guidance for land use and infrastructure planning decisions and investments in the region. The anticipated range of sea level rise for the region highlights three planning horizons:

- 1) Short term, by 2040, sea level rise is projected to be 10 to 17 inches above 2000 mean sea level;
- 2) Medium term, by 2070, sea level rise is projected to be 21 to 54 inches above 2000 mean sea level; and
- 3) Long term, by 2120, sea level rise is projected to be 40 to 136 inches above 2000 mean.

Since 3.9 inches of the projected rise has already occurred since the 2000 base year to 2017, this amount can be subtracted from the projections in estimating additional rise relative to today.

Resource Impact

The adoption of the updated SLR projection for planning purposes may result in increased costs required to ensure resilient infrastructure and facilities that are adapted to higher sea level.

Strategic Connections

This item is one of the City Commission Top Priorities 2020, advancing Resiliency.

This item supports the *Press Play Fort Lauderdale 2024* Strategic Plan, specifically advancing:

- The Infrastructure Focus Area
- Goal 1: Build a sustainable and resilient community.
- Objective: Reduce flooding and adapt to sea level rise.

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

Attachments

Exhibit 1 – Unified Regional Sea Level Rise Projection Southeast Florida 2019 Update Exhibit 2 – Resolution

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