MEMORANDUM

To: Howard Tipton, Town Manager

From: Charles Mopps, Assistant Public Works Director

Report date: March 22, 2023

Meeting date: April 3, 2023

Subject: Sea Level Rise & Resiliency Comprehensive Adaptation

Plan

Recommended Action

Accept the Sea Level Rise & Resiliency Comprehensive Adaptation Plan

Background

The Town initially engaged APTIM Environmental and Infrastructure (APTIM) in 2018 to provide a practical, high-level overview of impacts from sea level rise and recurrent flooding, and then to develop recommendations for adaptation. The APTIM team developed a four-step approach to accomplish this effort:

- 1. Initial Assessment
- 2. Define Impacts
- 3. Adaptation Strategies
- 4. Implementation Plan.

The Initial Assessment to establish a practical baseline and projection period was completed in the Fall of 2018. Subsequently, the Town authorized APTIM to work on the Phase 2 data collection and analysis. That effort was completed in 2021 and an update provided to the Town Commission at their November 15, 2021, Regular Workshop Meeting.

The Town previously authorized APTIM to complete Phase 3 and Phase 4. APTIM has provided the results of their Phase 3 efforts at the Town Commission's June 20, 2022 Regular Workshop Meeting. Phase 3 included rebaselining to the State-required scenario years of 2040 and 2070, and also using the National Oceanic and Atmospheric Administration (NOAA) Intermediate Low and Intermediate High predicted curves.

The Phase 4 Comprehensive Adaptation Plan was presented to the Town Commission at the March 20, 2023 Regular Workshop Meeting which included:

A depiction of the baseline projections.

- A collection of best practices, administrative actions and projects intended to prepare the Town of Longboat Key for changes in asset management and operational needs likely to manifest as sea level rises. The plan consists of six overarching objectives and twenty-five actions to be implemented in the next 5, 10, and 20 years. No major immediate actions need to be taken. The schedule is flexible. Some of the actions are new, while some overlap with existing programs and projects. The objectives include the following strategies:
 - Mitigate tidal flooding
 - Prepare for active stormwater management
 - Protect public assets and natural areas
 - Leverage redevelopment to implement adaptation
 - Engage community to build resilience
 - Continue to integrate resilience into the capital program.
- Capital Plan Recommendations. Although the Town has worked to protect critical assets to date, changes in future conditions will require effort for some stormwater, recreation, and community assets to remain operational. Estimates of the project costs by time horizon are provided. With this plan, the Town is now eligible for State funding for resilience projects and prepared with a list of priorities to address.

Next Steps

Use the Comprehensive Adaptation Plan to pursue grant funding opportunities, plan Capital Improvement Program projects with available project and matching grant funding, and adopt modifications to Town Code over time as needed.

Staff Recommendation

Accept the Sea Level Rise & Resiliency Comprehensive Adaptation Plan

Attachments

Sea Level Rise and Recurring Flooding Resilience Plan (Available in Town Clerk's Office)

End of Agenda Item