

October 23, 2018

Grove 2030 Parks & Public Spaces Committee

## Climate Change Response Plan for Coconut Grove's Public Waterfront

### **Background**

Grove 2030 Parks and Public Spaces Committee has gathered community input over the past year on effective responses to climate change and sea level rise in Coconut Grove. A community workshop in April 2018 allowed more than 50 residents, business owners, and City of Miami staff to identify these threats and to prioritize areas of greatest need and potential impact. A particular emphasis was placed on Kennedy Park. An array of environmental, legislative and design-based initiatives were proposed for possible implementation as part of a comprehensive response plan. What follows is a synthesis of the community input, organized around an overarching goal, strategies we wish to see employed, and specific initiatives for each of the waterfront parks, as well as connections among them. We also include a map that visually summarizes key concerns of workshop participants.

<u>Goal</u>: Increase resiliency to increased flooding and other climate effects by improving longterm access, functionality, and environmental health within Coconut Grove's public waterfront.

**Strategy 1**: Design and install "green infrastructure" to manage and treat flood and storm water.

### **Initiatives:**

- Expand and enhance capacity and connections of existing swale plantings
  throughout South Bayshore corridor with aquatic tree, palm, shrub and grass
  species to increase soil stabilization and to mitigate storm water, extreme tide
  and sea level rise.
- Install landscape planting along Kennedy, Myers, Regatta and Peacock Park to mitigate flood conditions (review/modify with progression of South Bayshore drainage project).
- 3. Restore sea grass beds adjacent to Coconut Grove shoreline.
- 4. Install mangroves and buttonwoods, interwoven with rip-rap and other natural materials, along Myers and Peacock Park shoreline.



5. Increase permeability of surface parking areas and other hardscapes.

Strategy 2: Design, construct and maintain park access points and "dry-crossings."

#### **Initiatives:**

- 1. Design and construct "dry crossings" into and within Coconut Grove's park system to accommodate increased flooding events.
- 2. Improve storm water and tidal floodwater management along South Bayshore Dr. to assure safe, reliable pedestrian and bike access, in particular as plans to raise South Bayshore Dr. progress.
- 3. Reduce automobile traffic and surface parking needs by expanding free public transport connections throughout Grove park system.
- 4. Grade swales to maximize runoff distance infiltration time.
- 5. Complete Grove baywalk for uninterrupted bike and pedestrian pathways from Peacock to Kennedy Parks.

**Strategy 3**: Identify and install salt-tolerant landscaping and other natural barriers to floodwater encroachment.

### **Initiatives:**

- 1. Install heat and salt tolerant landscaping throughout park system.
- 2. Enhance living shoreline throughout park system by cleaning and restoring mangrove forests.
- 3. Enhance Regatta Park landscaping.
- 4. Remove exotic vegetation throughout park system.

**Strategy 4**: Install and maintain water-quality monitoring network throughout the Grove waterfront.

#### Initiatives:

1. Establish water quality monitoring system throughout waterfront.



2. Restrict Coconut Grove harbor outflow to storm water management only; eliminate non-rain-related flow.

**Strategy 5**: Promote outreach activities along the waterfront to raise awareness of climate change impacts and ongoing responses.

#### **Initiatives:**

- 1. Install educational signage to explain park conditions and vulnerabilities in a changing climate and coastal environment.
- 2. Clean and restore the mangrove strand running through Kennedy Park and construct elevated walkways to provide visitor access to mangrove ecosystems.
- 3. Install water filling stations to lessen plastic waste and raise awareness of marine debris crisis.

**Strategy 6**: Review and update human-use needs and preferences with Coconut Grove waterfront and park network.

# **Strategies:**

- 1. Conduct community workshops to identify present and future park constituent priorities.
- 2. Monitor and assess impact of flooding events on waterfront park space access and functionality.
- 3. Improve public water access through additional kayak/SUP launch throughout park system.
- 4. Increase passive water-viewing sites at all Grove parks.
- 5. Inform citizens of updates and request citizen feedback on South Bayshore Drainage project and Stormwater Master plan.



Map summarizing the locations that participants highlighted during the workshop.

Green dots indicate areas identified as valuable and in good shape; yellow dots indicate areas that are valued but in need of improvements; and problems are indicated by red dots.

