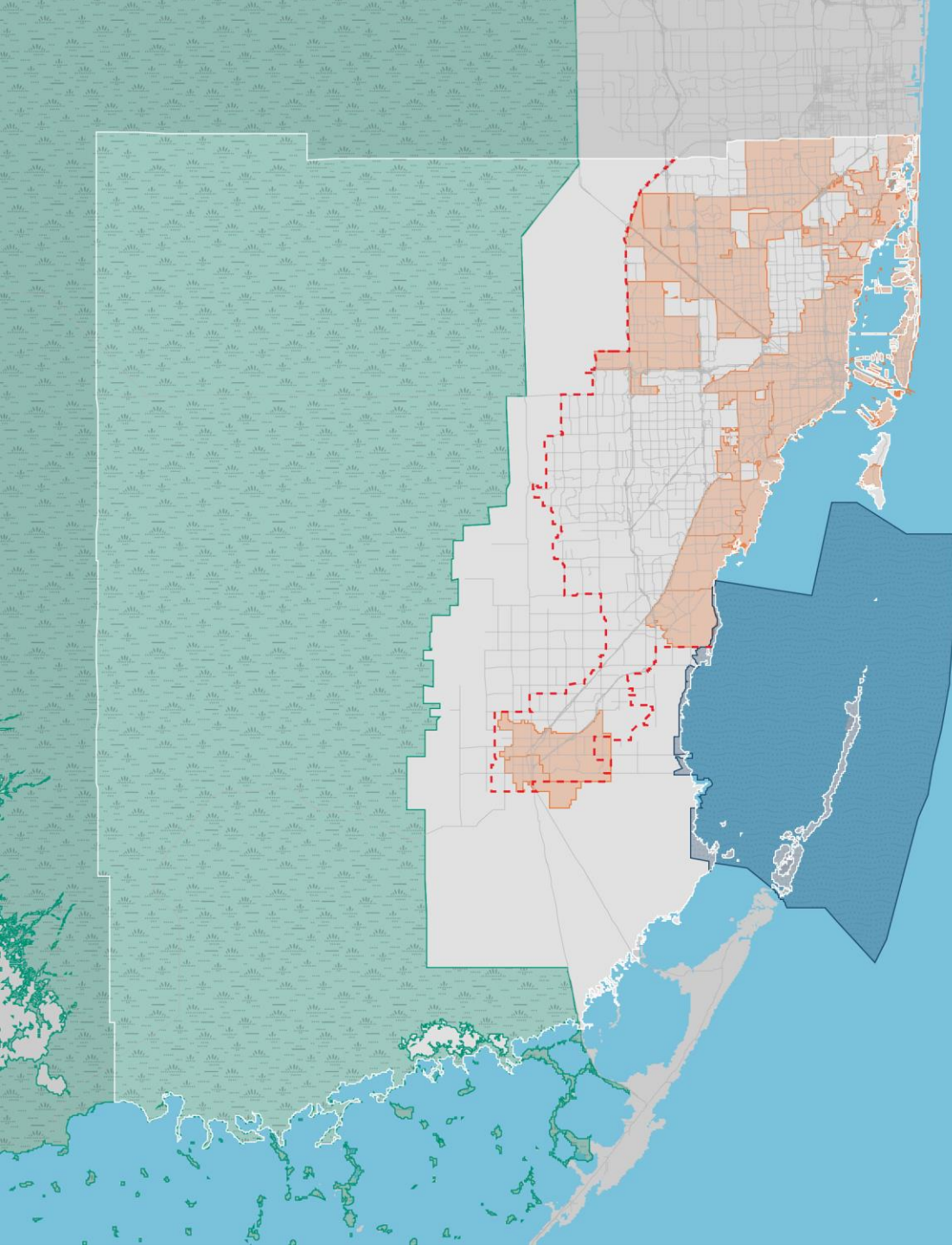


**CUMMINS | CEDERBERG**  
Coastal & Marine Engineering



## **Sea Level Rise Flood Mitigation for Miami-Dade County's Waterfront Parks**

Joe Cornely, Assistant Director Planning, Design &  
Construction Excellence at Miami-Dade County Parks,  
Recreation, and Open Spaces  
Jannek Cederberg, PE, President, Cummins Cederberg, Inc.



**2,000+**

Square Miles  
Total County Area

**2.7M**

Estimated County  
Population

**34**

Incorporated  
Municipalities

**1.4M**

Unincorporated  
County Residents

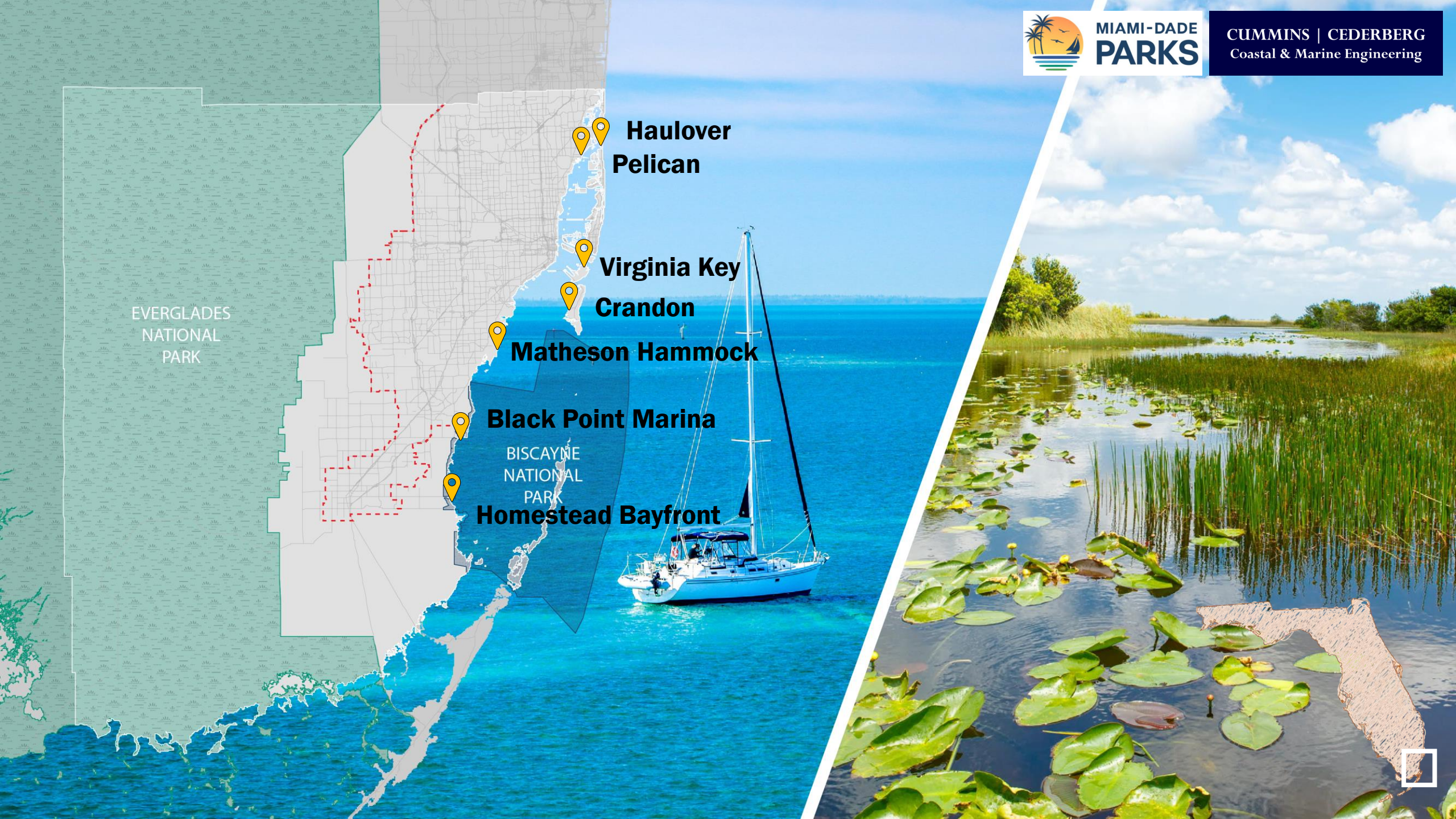






MIAMI-DADE  
**PARKS**

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Coastal & Marine Engineering



EVERGLADES  
NATIONAL  
PARK

BISCAYNE  
NATIONAL  
PARK

**Haulover  
Pelican**

**Virginia Key  
Crandon**

**Matheson Hammock**

**Black Point Marina**

**Homestead Bayfront**



**3RD**

Largest Accredited  
Park System in U.S.

**287**

Parks

**40K**

Acres of Passive, Active,  
and Environmentally  
Endangered Land

**170**

Miles of Greenways  
and Blueways

**7**

Heritage Parks

**260+**

Miles of Rights-of-Way  
Beautification & Maintenance

**6**

Marinas

**19**

Pools

**4**

Campgrounds

**2**

Natural Atoll Pools

**2**

Causeway Linear Parks

**57**

Transit Facilities Maintained

**1,000**

Special Taxing District  
Folios

**1**

Zoo Miami

**6**

Nature Centers

**1**

Trail Glades Range

**17**

Miles of Beaches

**660**

Fields and Courts

**73**

Recreation Centers

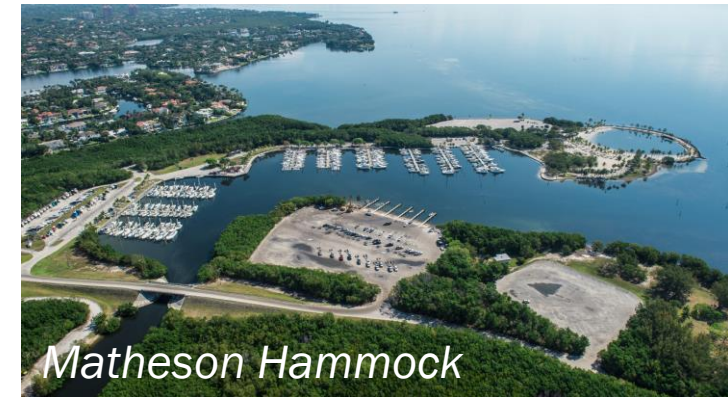
**5**

Golf Courses



# Typical Park Elements

- Roadways
- Parking Lots
- Seawalls
- Buildings
- Marinas
- Boat Ramps
- Beaches
- Trails
- Golf Course
- Historic Landmark Structures









# Plan Components

2,000+ Acres of Parks



Vulnerability  
Analyses

Implementation  
Strategy

Capital  
Improvement  
Program

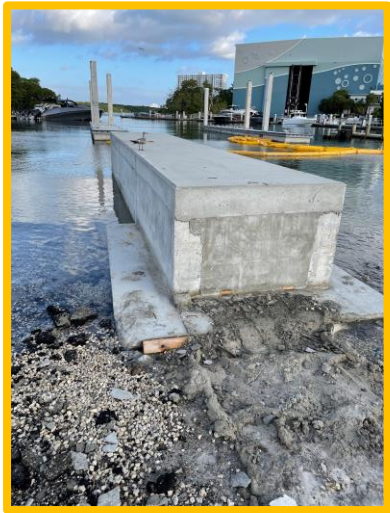
Flood  
Mitigation

Cost  
Projections

Actionable  
Feasible Capital  
Projects

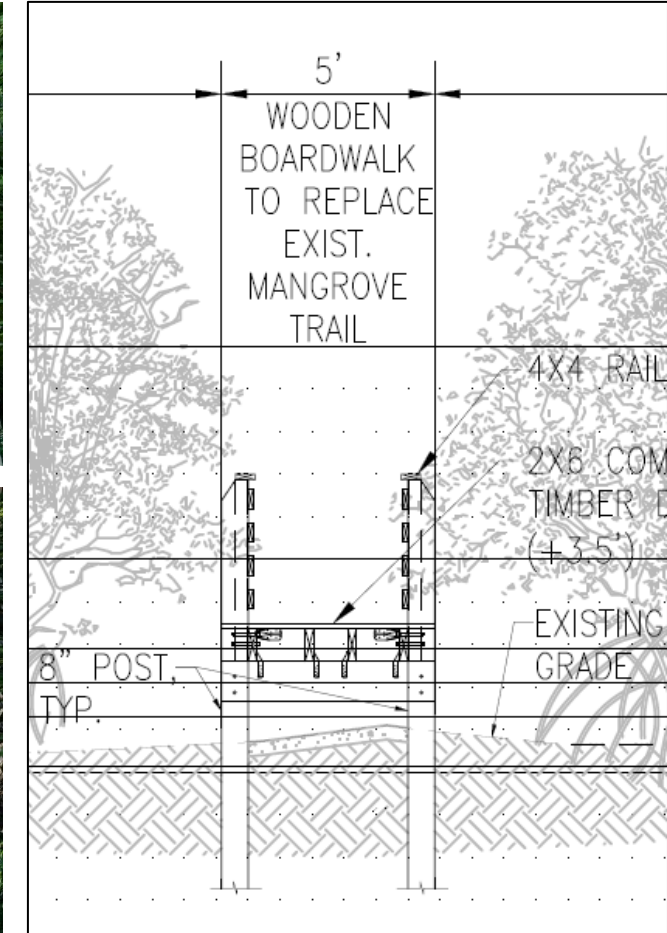
Adaptation  
Planning

Stakeholder  
Involvement



## Actionable Plan:

- ✓ Concepts
- ✓ Construction Cost
- ✓ Smaller Separate Projects
- ✓ Phasing of Projects by Decade
- ✓ Positioning Projects for Grants





# Progress To Date



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- ✓ Significant grant contributions
- ✓ 2 Coastal Construction Projects
- ✓ 28 Active Design Projects
- ✓ 35 Future Projects Funded
- ✓ Majority of design projects are under smaller continuing service contracts
- ✓ Miscellaneous Construction Contract (MCC) Program
- ✓ Overall Plan tying all projects together





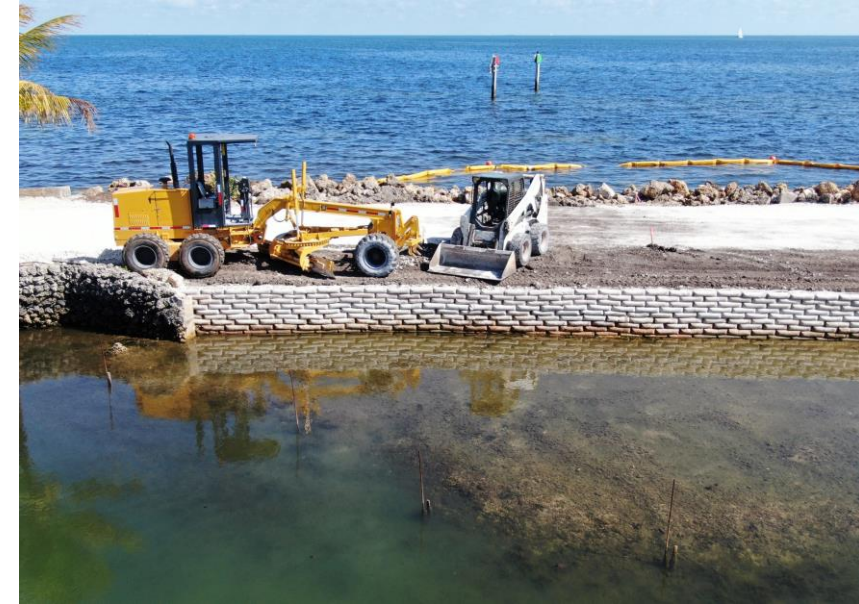
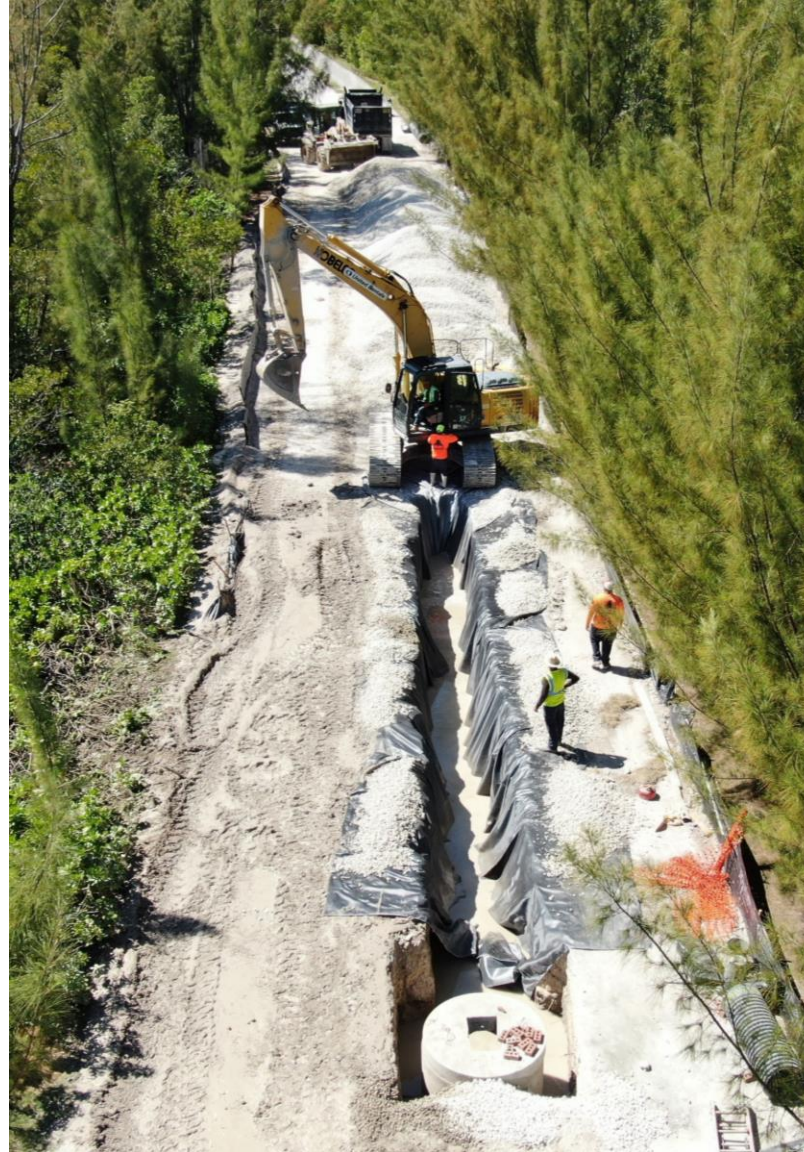
# Progress To Date



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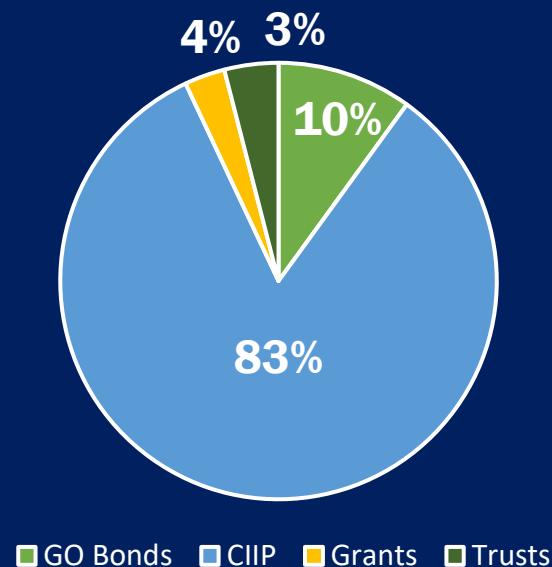
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## Overall Funding

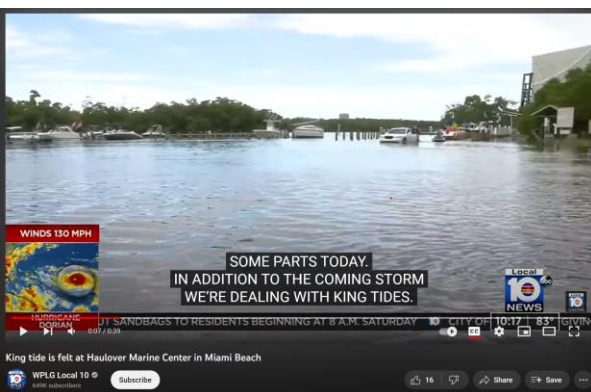
- ✓ General obligation bonds – 10%
- ✓ Countywide Infrastructure Investment Program (CIIP) – 83%
- ✓ Grants – 3%
- ✓ Trusts – 4%



## Total Grants - \$45M

## Active Grants - \$21M

- ✓ Florida Division of Emergency Management (FDEM) Hazard Mitigation Grant Program
- ✓ Florida Department of Environmental Protection
- ✓ Florida Department of Transportation
- ✓ Florida Inland Navigation District







 **Let's connect!**



**Joe Cornely**

Assistant Director Planning,  
Design & Construction Excellence  
Miami-Dade County Parks,  
Recreation, and Open Spaces



 **Let's connect!**



**Jannek Cederberg, PE**

President  
Cummins Cederberg, Inc.



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this presentation**