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designed to include animation.

City of Miami Beach

# Stormwater Modeling and Master Plan Six-Month Progress Update

Finance and Economic Resiliency Committee

April 21st, 2023



**AECOM**

**MIAMIBEACH**

# Agenda

- 1 Project Purpose
- 2 Work Completed to Date
- 3 What is a Critical Needs Project?
- 4 Prioritization for Critical Needs
- 5 Prioritization Examples
- 6 Next Steps
- 7 Questions

# Project Purpose

Update the City's stormwater program:

**50-year  
Planning  
Period**

**Address  
Critical Needs  
in the Next  
10 Years**

**Incorporate  
Recent Studies  
into a City-wide  
Stormwater  
Master Plan and  
Capital  
Improvement  
Plan**

**Update the  
Citywide  
Stormwater  
Model**

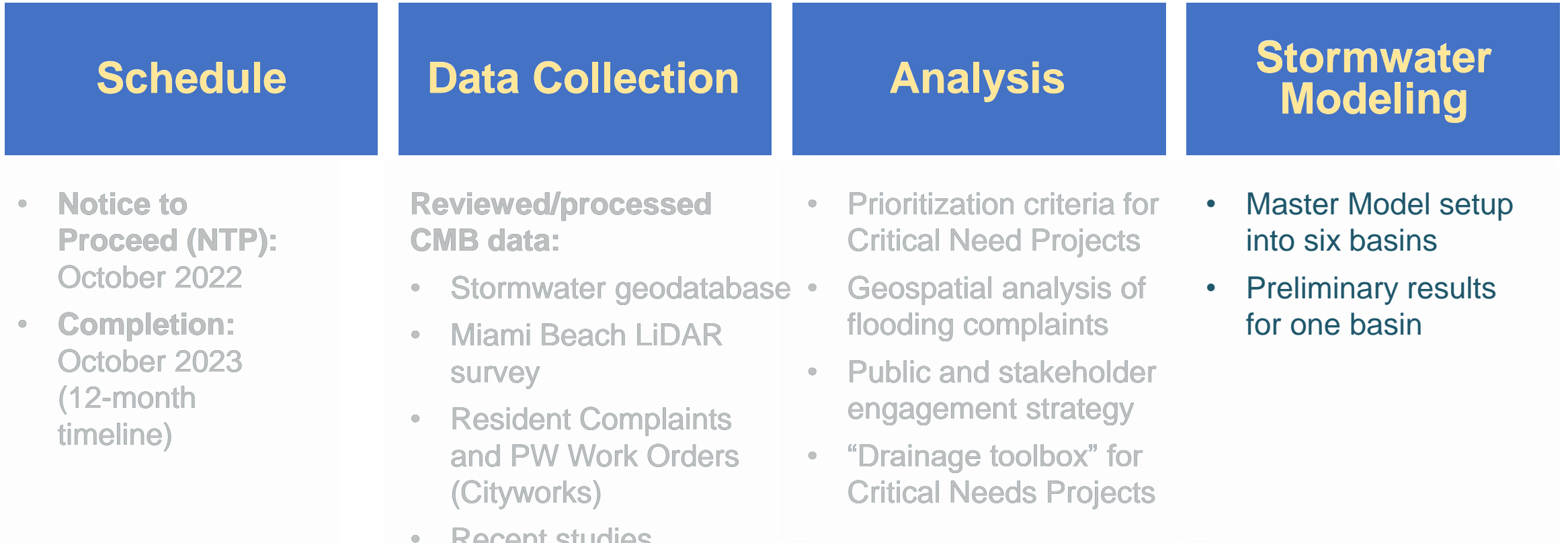
**Provide a  
Phasing Plan  
and  
Construction  
Cost Estimates**

**Identify  
Smaller Critical  
Need Projects**

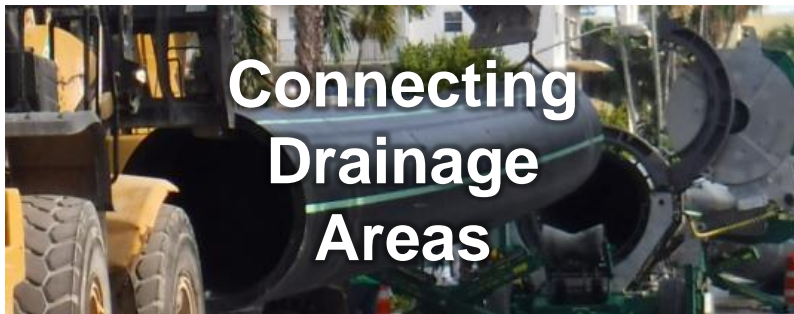
- Incorporate Sea Level Rise (SLR) projections
  - 2040 and 2070
- Add recently completed projects
- Update infrastructure size and location
- Transition to latest software version
- Sea Level Rise Vulnerability Assessment and Adaptation Plan (ongoing)
- Road Elevation Strategy
- Neighborhood Project Prioritization
- Blue-Green Stormwater Infrastructure Concept Plan
- Stormwater Facilities Plan
- Seawall Prioritization Plan
- Basin Drainage Reports for the Flood Mitigation Study
- Stormwater Needs Analysis (HB 53)
- Incremental Adaptation

# Work Completed to Date

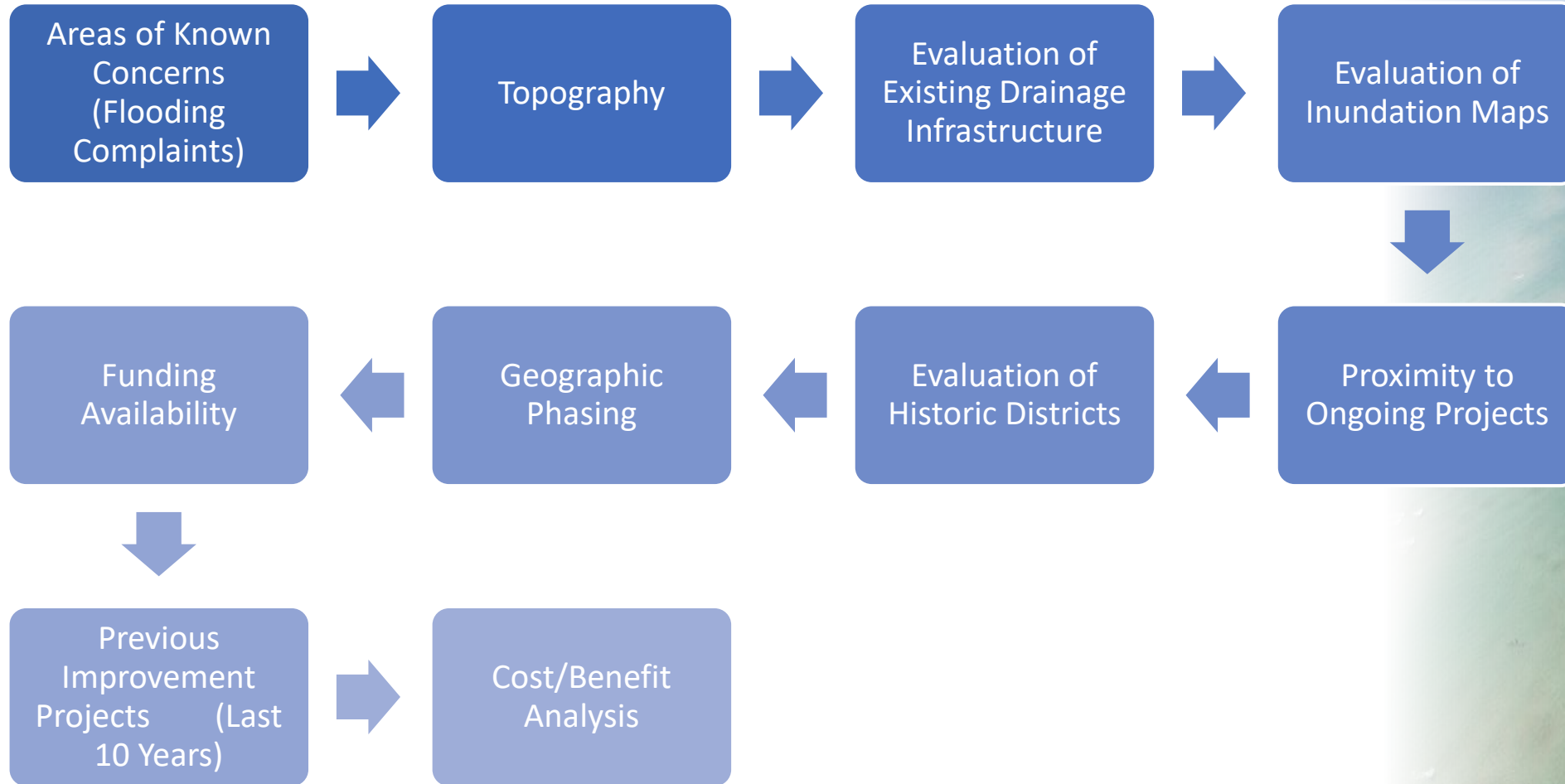
We are here



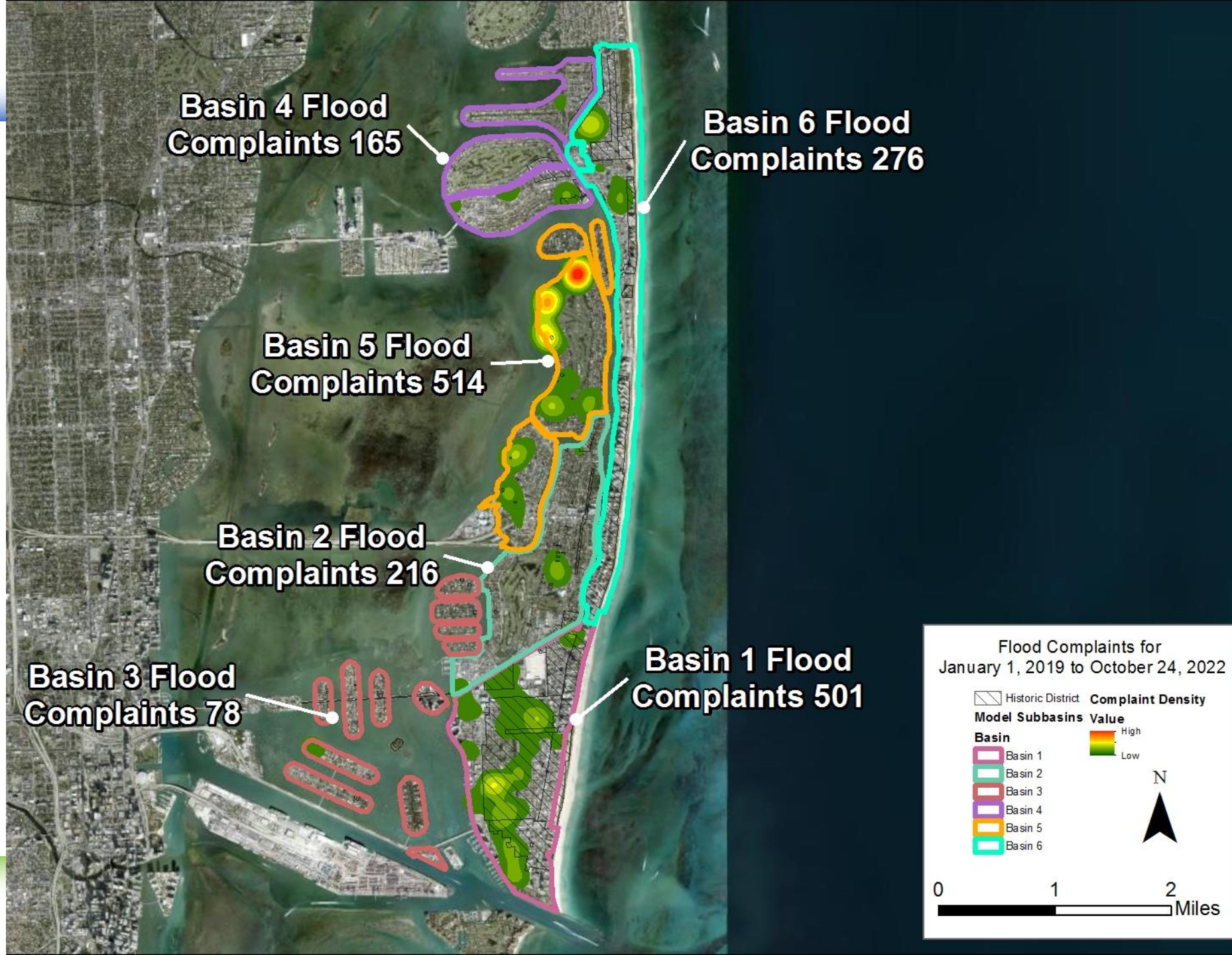
# What is a Critical Needs Project?



# Prioritization Strategy for Critical Need Projects

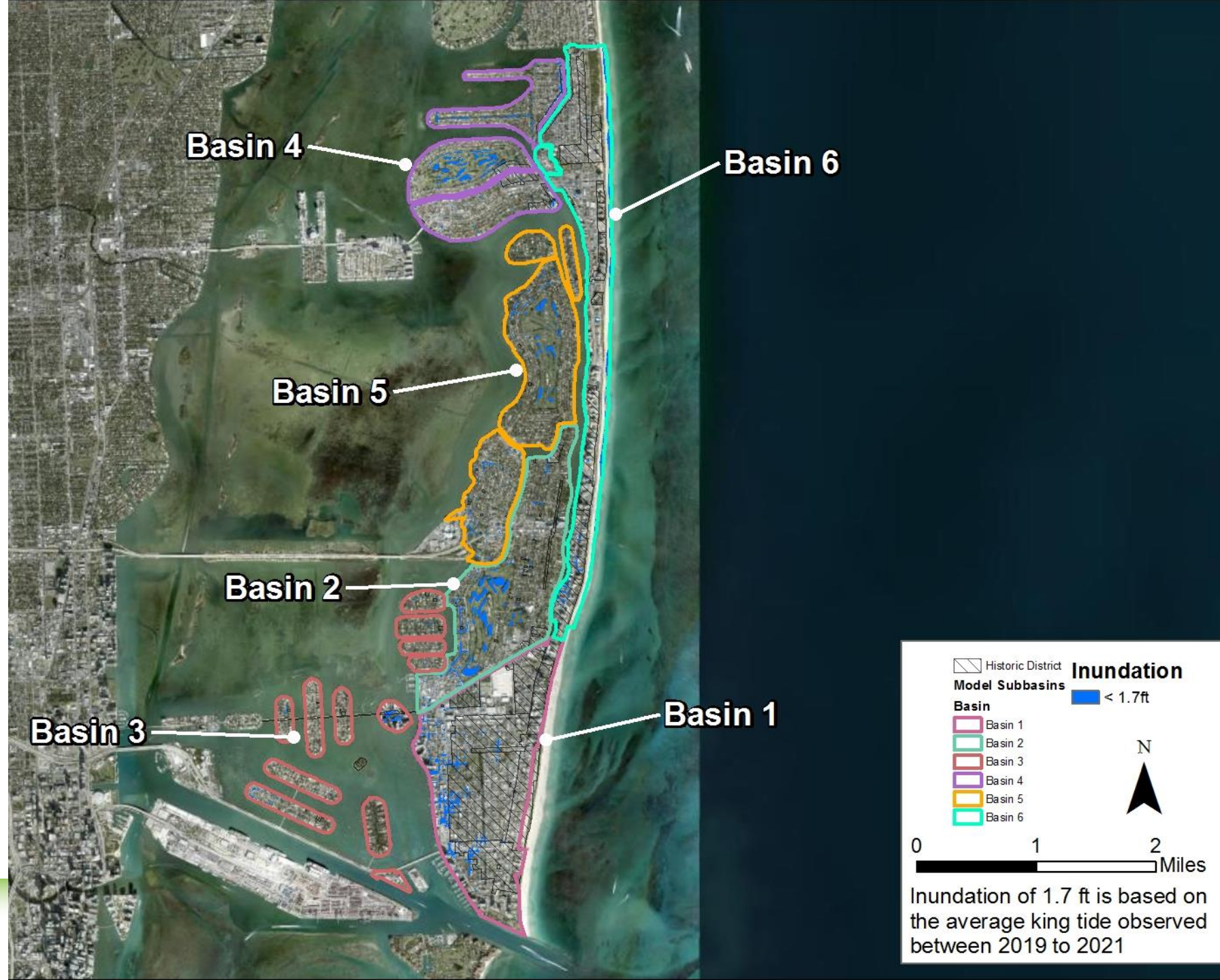


# Prioritization Examples





# Prioritization Examples





- Flood Complaint
- ▨ Historic District
- Completed ROW Projects
- Construction ROW Projects
- Design ROW Projects
- Planning ROW Projects
- ▨ Completed Project Areas
- ▨ Construction Project Areas
- ▨ Design Project Areas
- ▨ Planning Project Areas

N

0 0.15 0.3 0.6 Miles



**Flood Complaints for  
January 1, 2017 to October 24, 2022**

- Flood Complaint
- Lateral
- Main Line
- Main Line (Null Diameter)
- ▨ Historic District
- ▨ Completed ROW Projects
- ▨ Construction ROW Projects
- ▨ Design ROW Projects
- ▨ Planning ROW Projects
- ▨ Completed Project Areas
- ▨ Construction Project Areas
- ▨ Design Project Areas
- ▨ Planning Project Areas

**Complaint Density Value**

High  
Low

N

0 0.05 0.1 Miles



**Basin 5**

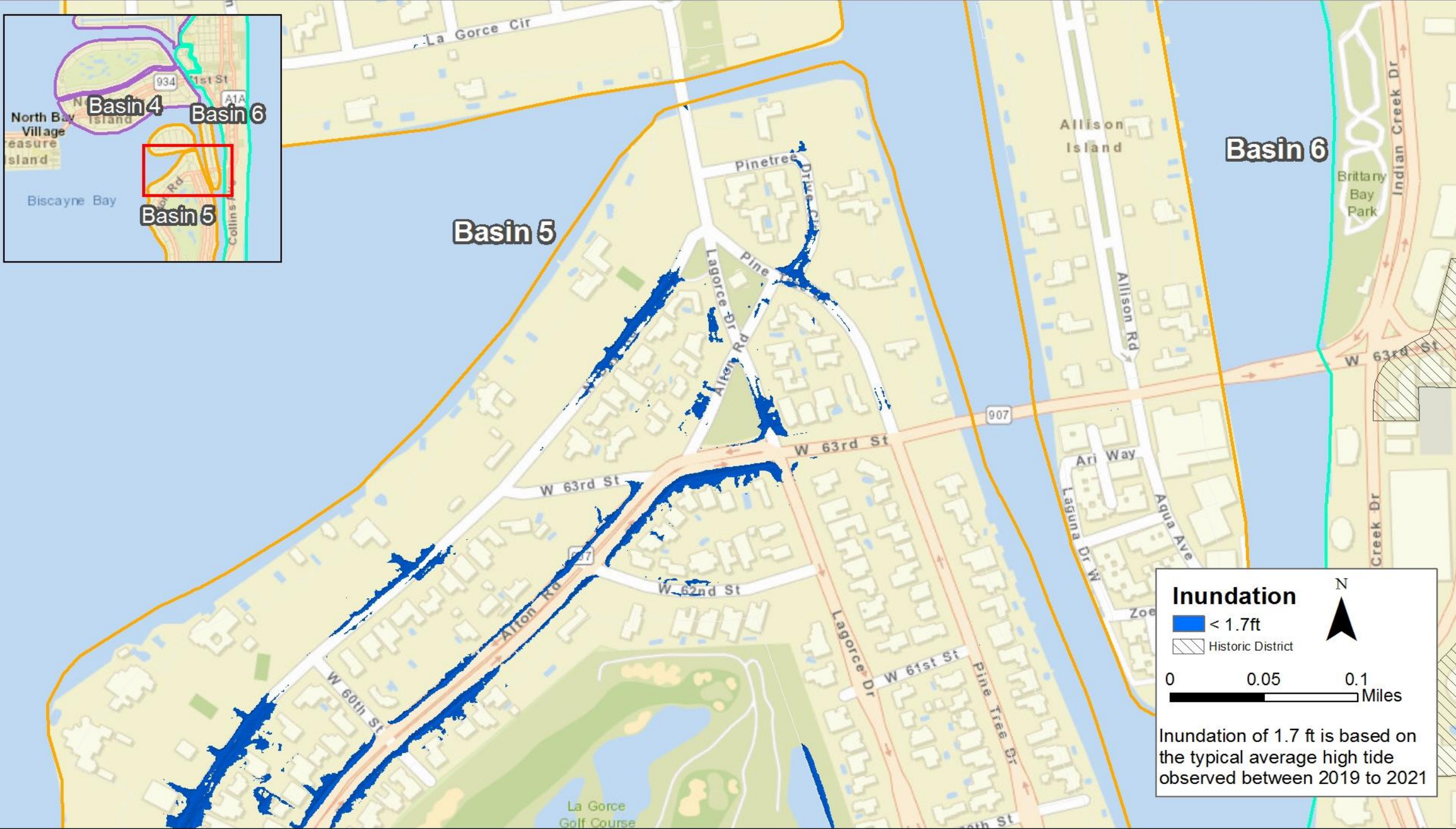
**Basin 6**

**Inundation**

- < 1.7ft
- Historic District

0 0.05 0.1 Miles

Inundation of 1.7 ft is based on the typical average high tide observed between 2019 to 2021





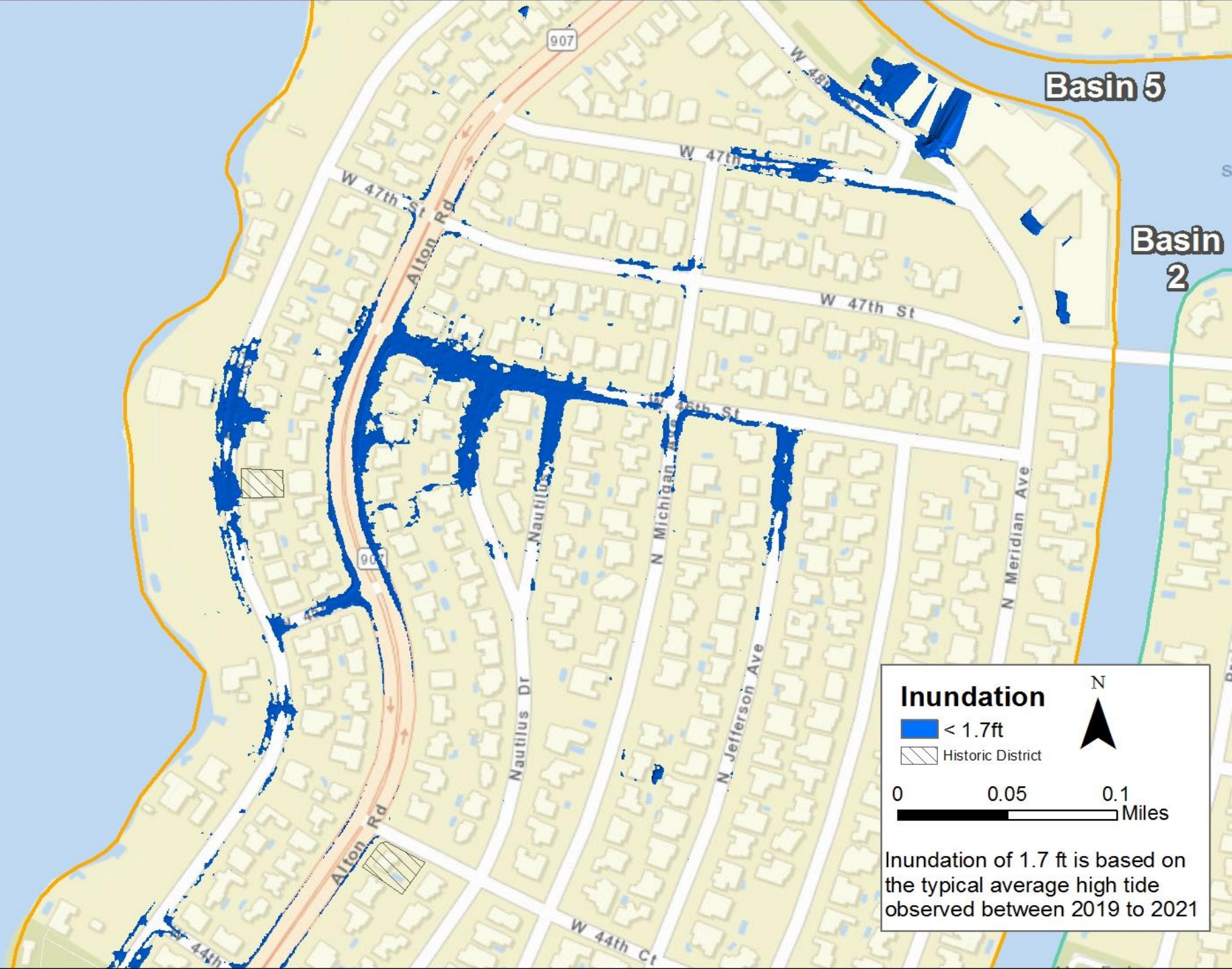
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**Proposed  
Conditions  
Stormwater  
Model**

- June 2023

**Public  
Outreach  
Meeting**

- July-August 2023

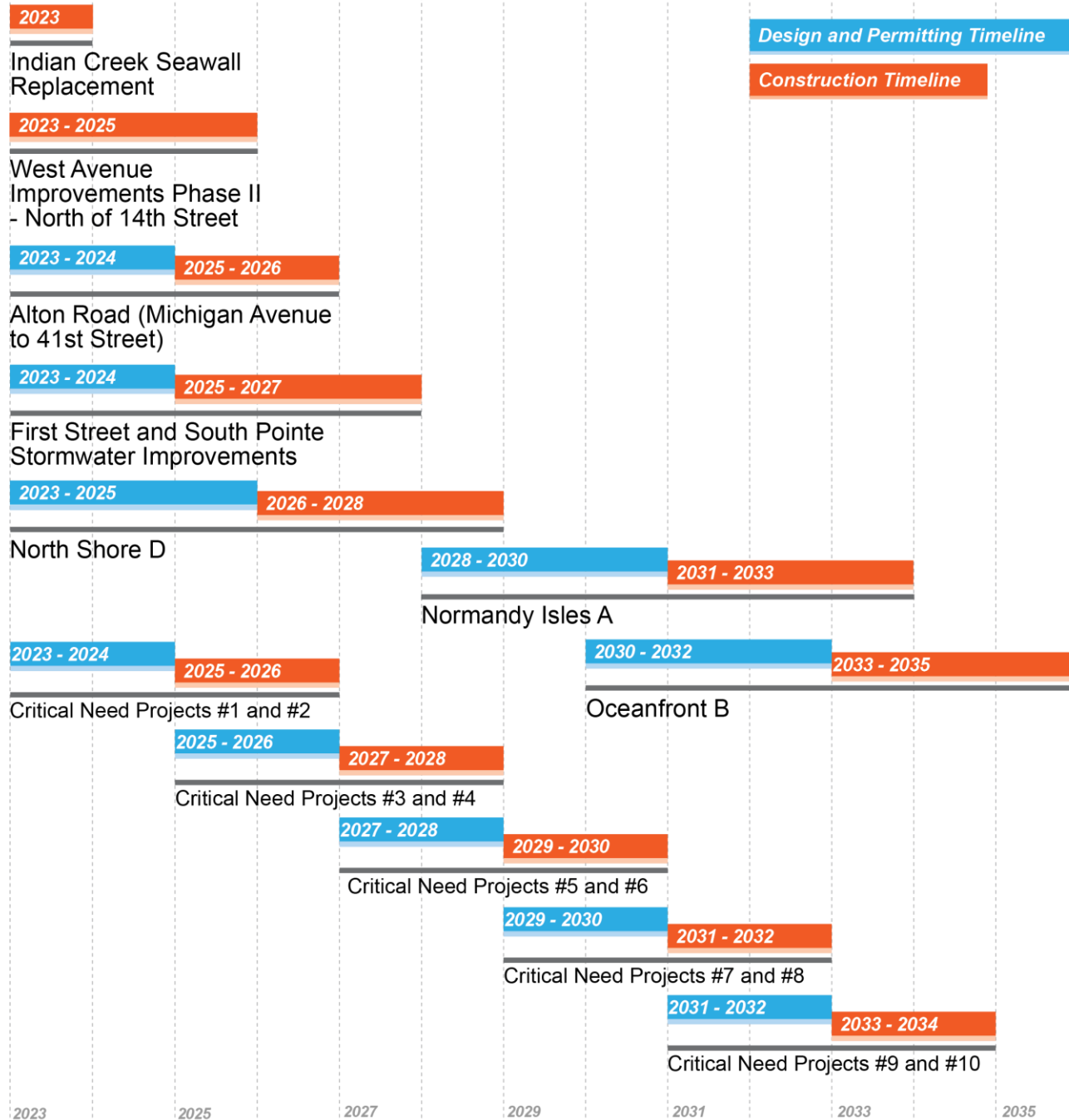
**Stormwater  
Modeling  
Technical  
Memorandum**

- August 2023

**Prioritized  
Capital  
Improvement  
Plan (CIP)  
Report**

- **September 2023**  
Including phasing plan  
and project cost  
estimates

# Conceptual Schedule







**Questions?**

**Thank You!**