

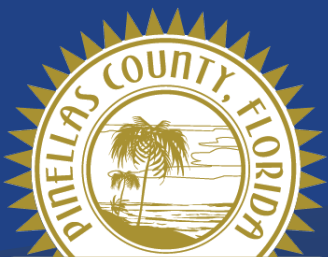
Utilities Master Plan Update



Utilities Department

Megan Ross, PE, Director of Utilities

February 23, 2023



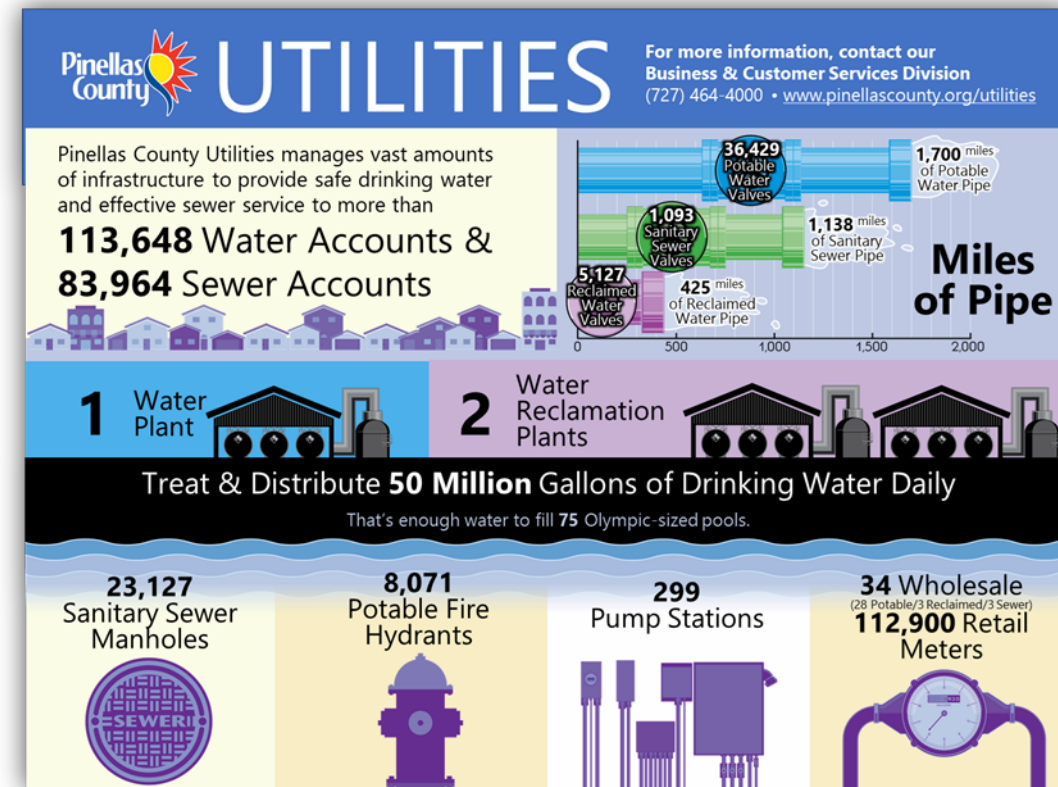
BOARD OF
COUNTY COMMISSIONERS

Our Vision: To Be the Standard for Public Service in America



Overview

- Purpose and Scope
- Master Planning Approach
- Growth and Capacity
- Resiliency
- Asset Renewal and Replacement
- Current and Upcoming Regulations
- Collection System Master Planning
- 20-year Capital Improvement Plan



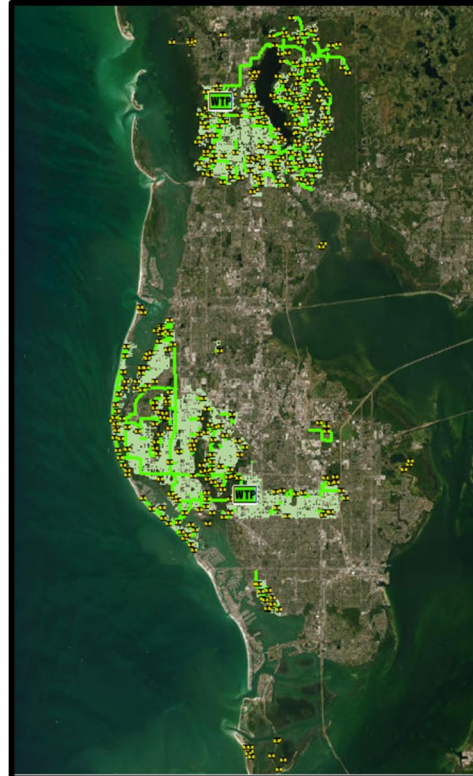
20-Year Master Planning Horizon



W.E. Dunn
Water Reclamation Facility



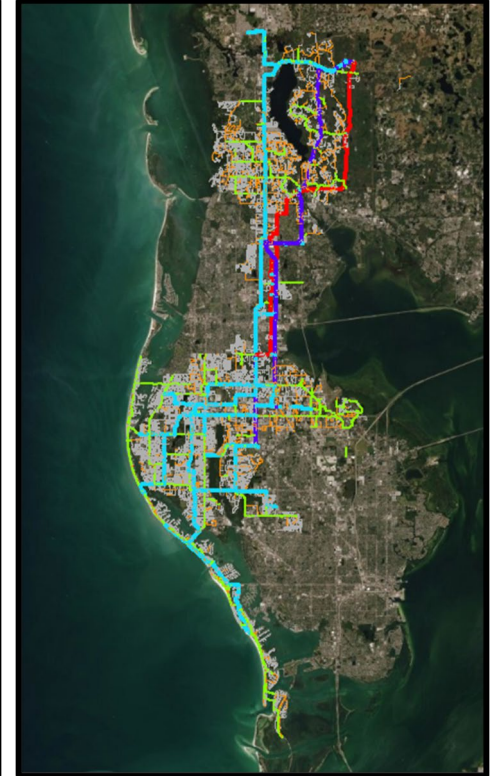
South Cross Bayou
Advanced Water
Reclamation Facility



Wastewater Collection
System + Lift Stations

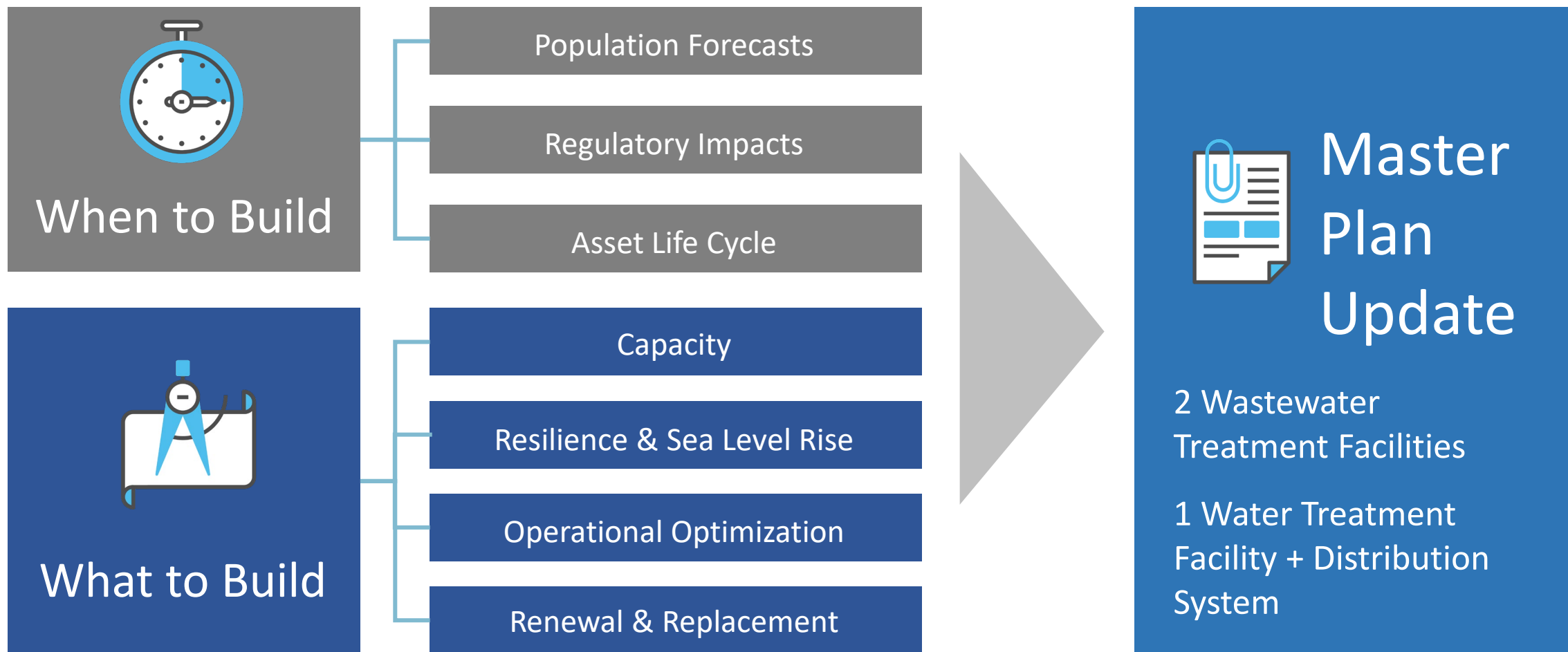


Keller Water Treatment
Plant + Regional Treatment
Facility

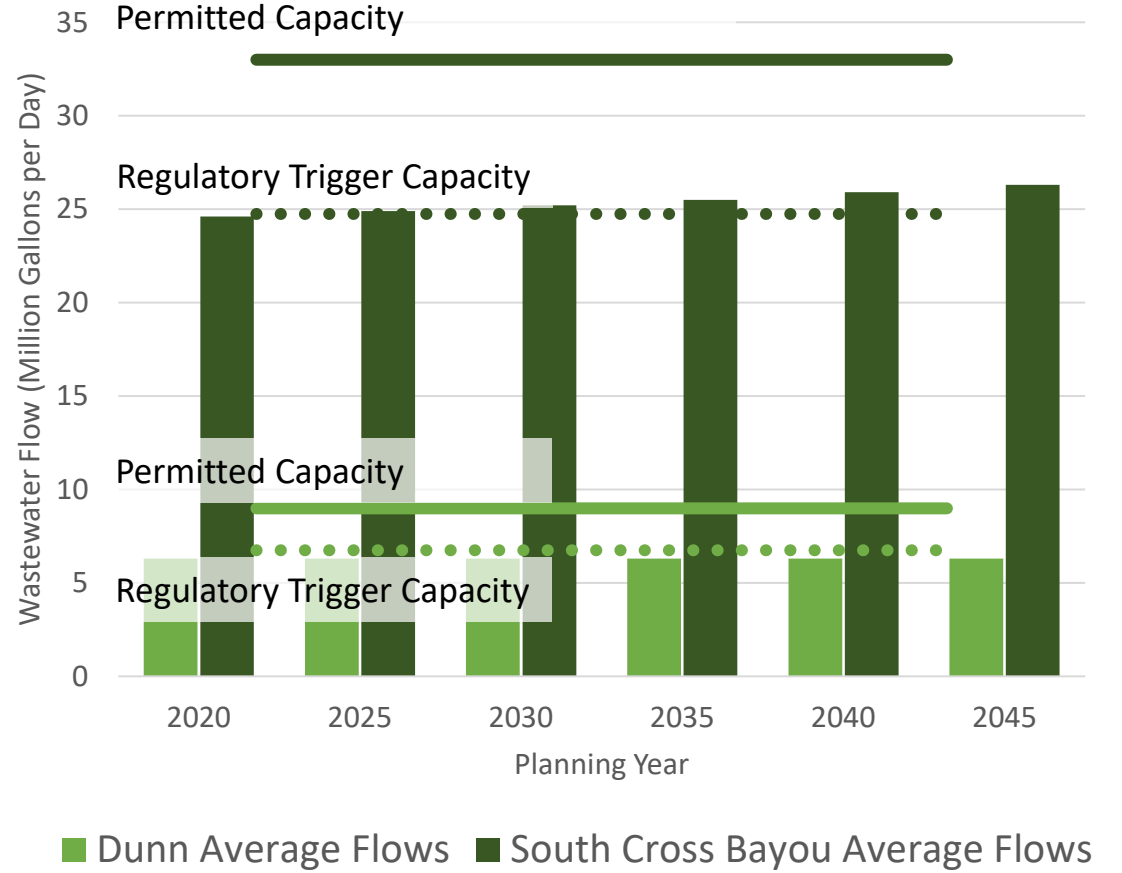
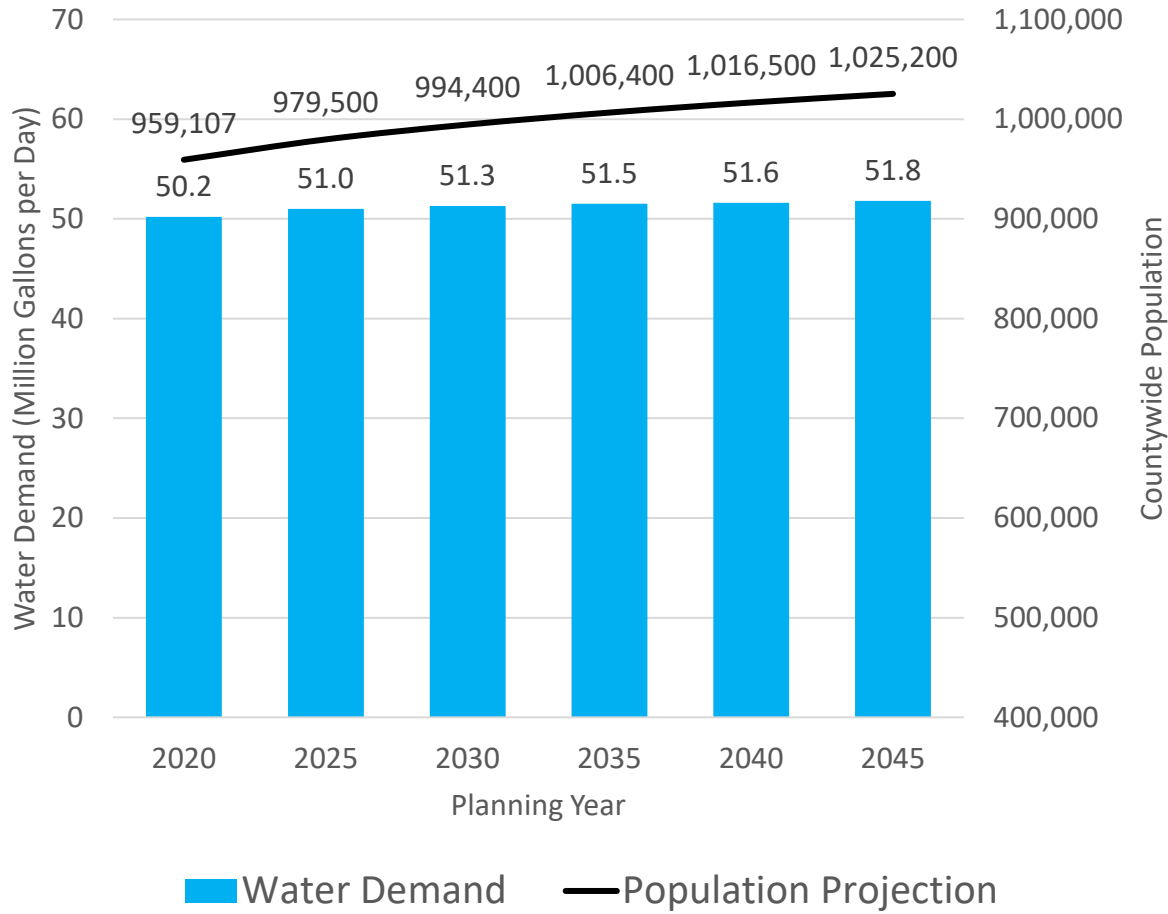


Water Distribution System
+ Water Booster Stations

Master Planning Approach

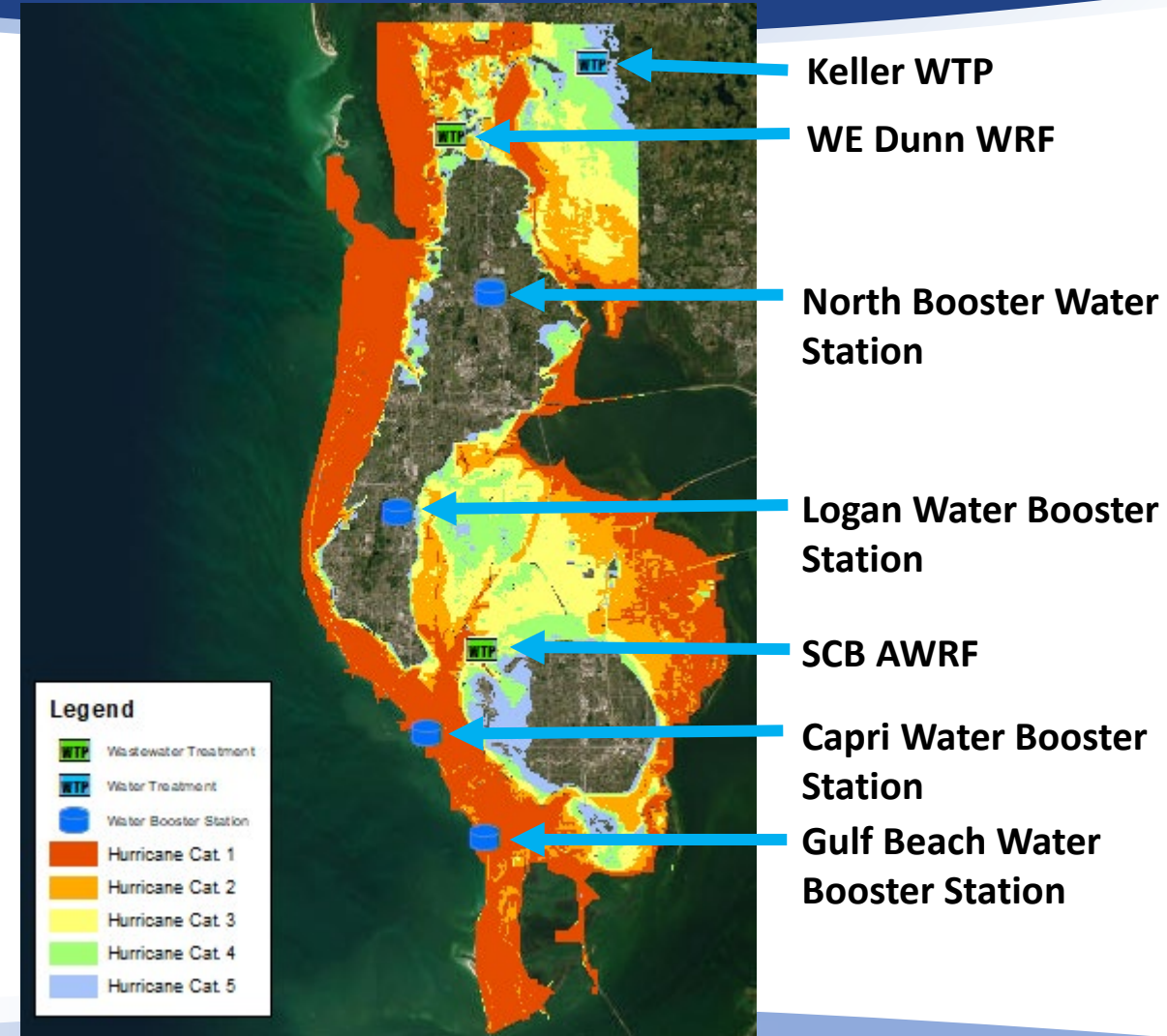


Growth and Capacity Projections



Resiliency

- **Highly resilient potable water system**
- **Evaluated asset failure scenarios and interconnections**
- **Practiced emergency response scenarios**
- **Screened projects through Sea Level Rise Planning Tool**









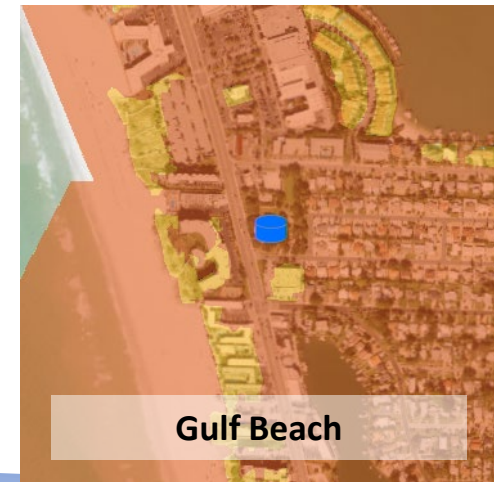
Resiliency

- **Hardening vulnerable facilities and assets**
 - Electrical equipment
 - Generators
 - Barrier Walls
- **Ensuring buildings are hurricane rated**



Legend

	Wastewater Treatment
	Water Treatment
	Water Booster Station
	Hurricane Cat. 1
	Hurricane Cat. 2
	Hurricane Cat. 3
	Hurricane Cat. 4
	Hurricane Cat. 5



Asset Renewal and Replacement

Evaluation Criteria:

- **Physical condition**
- **Remaining useful life**
- **Reliability**
- **Pipe material**
- **Critical locations**
- **Performance**

W.E. Dunn

- Grit system
- Structural repairs
- Mechanical equipment and pumps
- Buildings

South Cross Bayou

- Electrical, instrumentation and controls upgrades
- Structural repairs
- Mechanical equipment and pumps

Water System

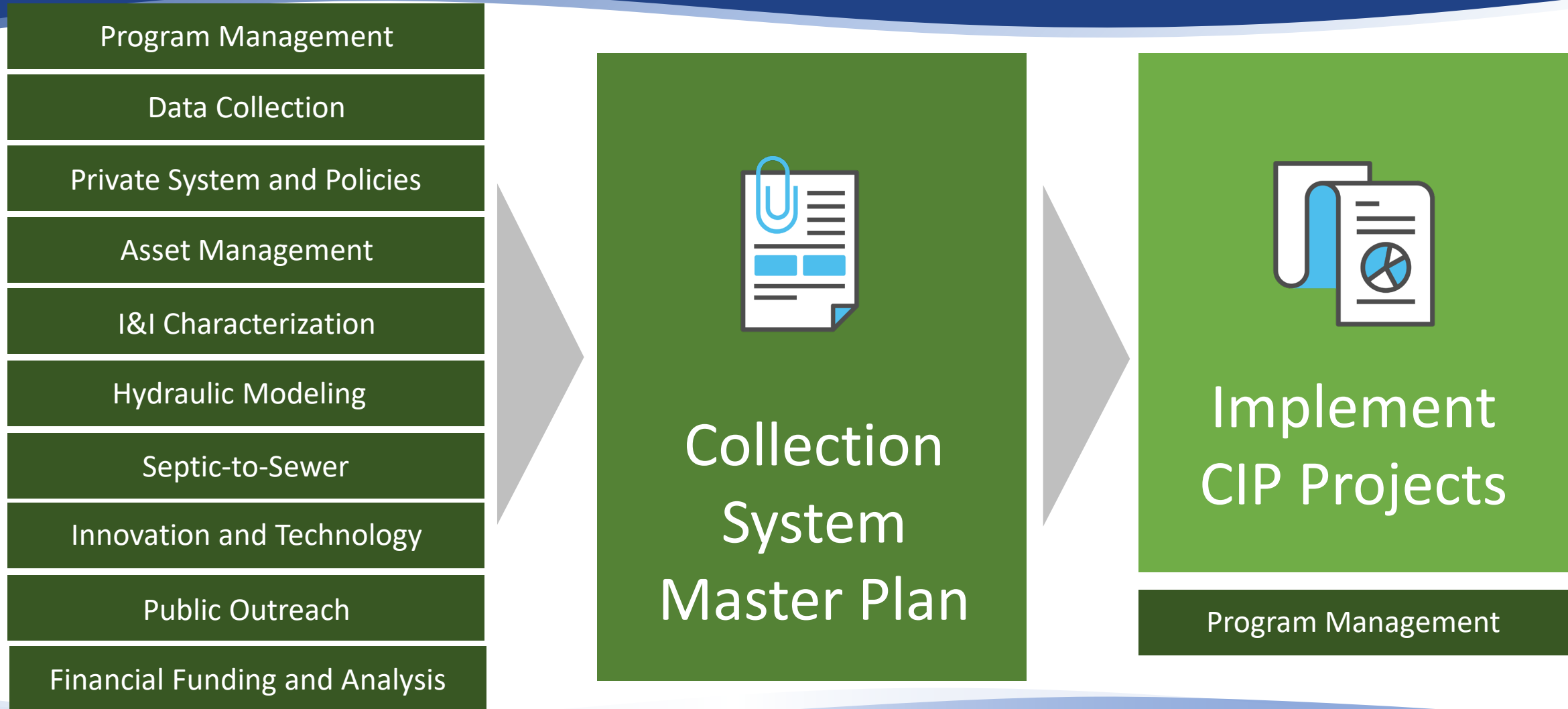
- Gulf Beach water booster station
- 74 miles of water main replacement
- Structural enhancements
- Electrical upgrades

Current and Upcoming Regulations

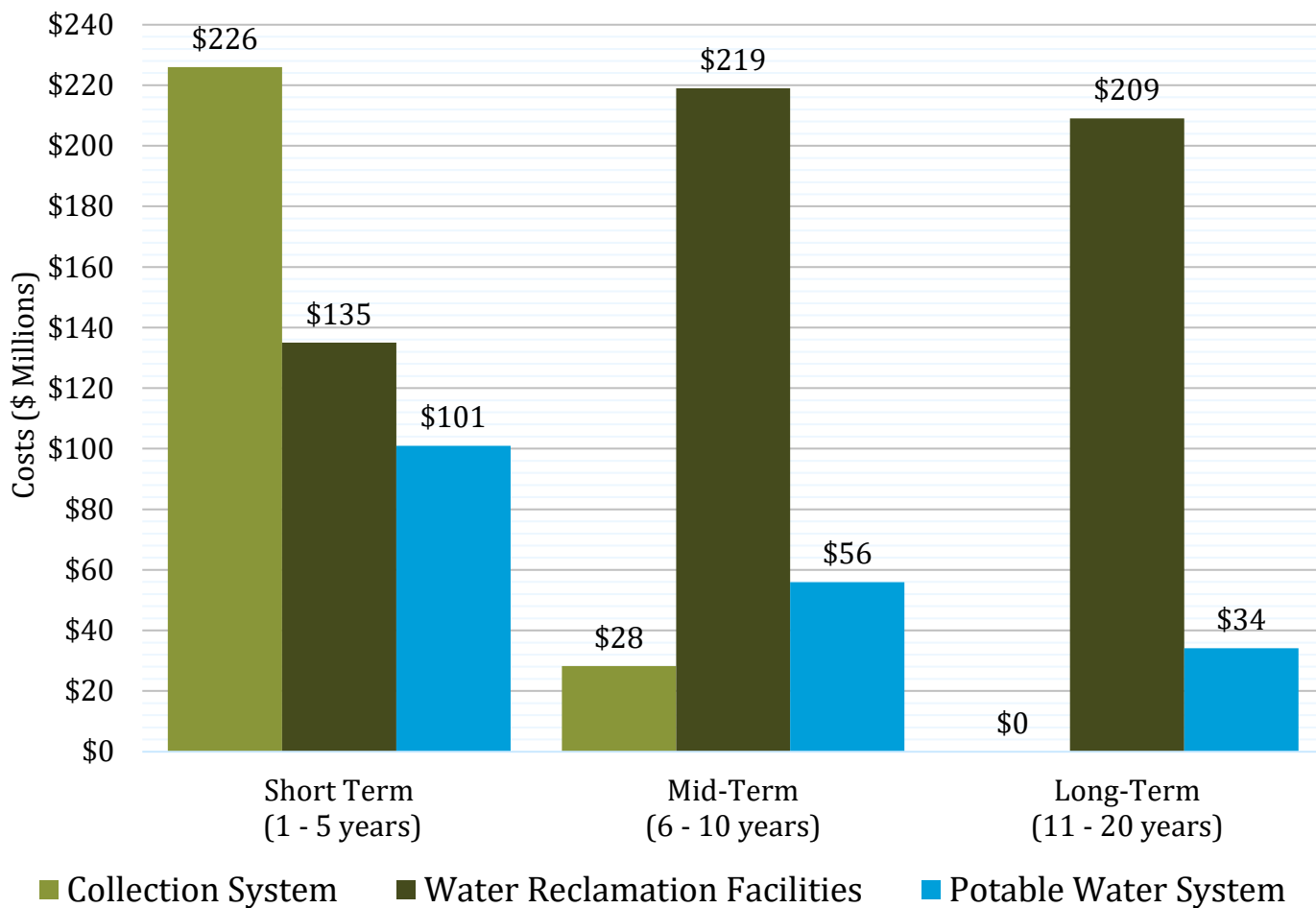
- **Lead and Copper Rule Revision**
- **Emerging Contaminates**
- **Senate Bill 64 Surface Water Discharge Elimination**



Ongoing Collection System Master Planning



20-Year Capital Improvement Plan



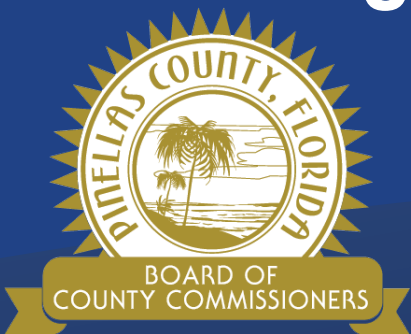
Thank You!



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Cross Bar/Al Bar Property

