



# Doing Things!

**Public Works Department  
Environmental Management Division**

**July 18, 2017**



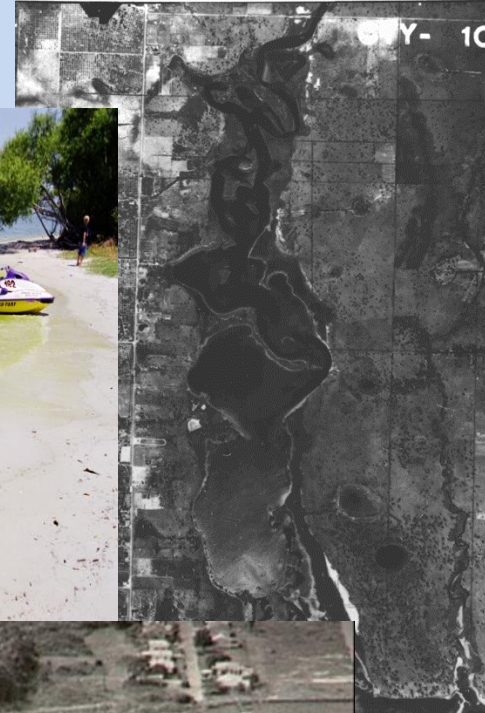
# Overview

- Background
- Watershed Management Plan Implementation
  - Indicators of success
- Overview of dredging project
- Project cost and funding
- Path forward



# Background

- Significant water quality decline beginning in the 1980's
- County Resolution 89-13 initiated development of long-term management program
- 1991 Diagnostic Feasibility Study completed
- 2004 BCC adopted the completed Watershed Management Plan (Plan)
- 2007 State accepts Plan in lieu of Total Maximum Daily Load



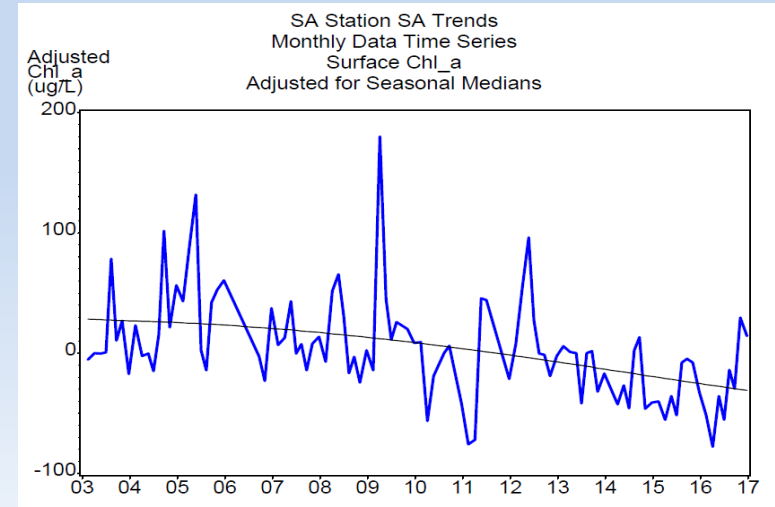
# Watershed Management Plan

- Components:
  - Six structural
  - Five management
  - Two legal
  - Two public education
  - One policy component
  - One compliance and enforcement component
- Regional stormwater treatment facilities ✓
- Bypass canal treatment and diversion ✓
- Shoreline restoration ✓
- Restore priority wetlands ✓
- Install gauging station on outfall structure ✓
- Dredge organic sediments ★
  - #1 ranked project for water quality



# Water Quality Indicators

- Water quality is improving!
  - Nitrogen and phosphorus levels are decreasing
  - Chlorophyll is decreasing
  - Water clarity is improving
- Still too many nutrients in the system to achieve goals



Lake Seminole SA

	Chla	TN	TP	DO
2012	●	●	■	■
2013	●	●	■	■
2014	●	●	■	■
2015	●	●	■	■
2016	●	●	■	■

○ No Data   ■ Pass   ▲ Marginal   ● Fail



# Dredging Project

- Number one recommended project
- Removal of ~900,000 CY of organic sediments
- Results in removal of
  - 416 tons of nitrogen
  - 77 tons of phosphorus
- Goal: reduce internal nutrient loads



# Dredging Project Approach



DMMA: Dredge Material Management Area

# Project Cost and Funding

- Phase I
  - Permit amendments and DMMA design
  - \$668,670
- Phase II
  - Dredging, dewatering, and disposal
  - Base bid: \$15,244,650
  - Contingency: \$2,749,900
  - Total: \$18,663,220
- Penny for Pinellas
  - \$8,000,000
- SWFWMD
  - \$8,000,000
- RESTORE Act
  - \$5,200,000
- Other grant/funding opportunities being explored



LAKE SEMINOLE SEDIMENT  
REMOVAL

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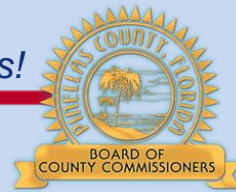
**Allocation \$8,000,000**

Removal of organic sediments in Lake Seminole that are causing water quality, habitat and recreational problems in the lake and Boca Ciega Bay.

2010-2020

CURRENT PENNY EXTENSION  
PLANNED PENNY PROJECTS



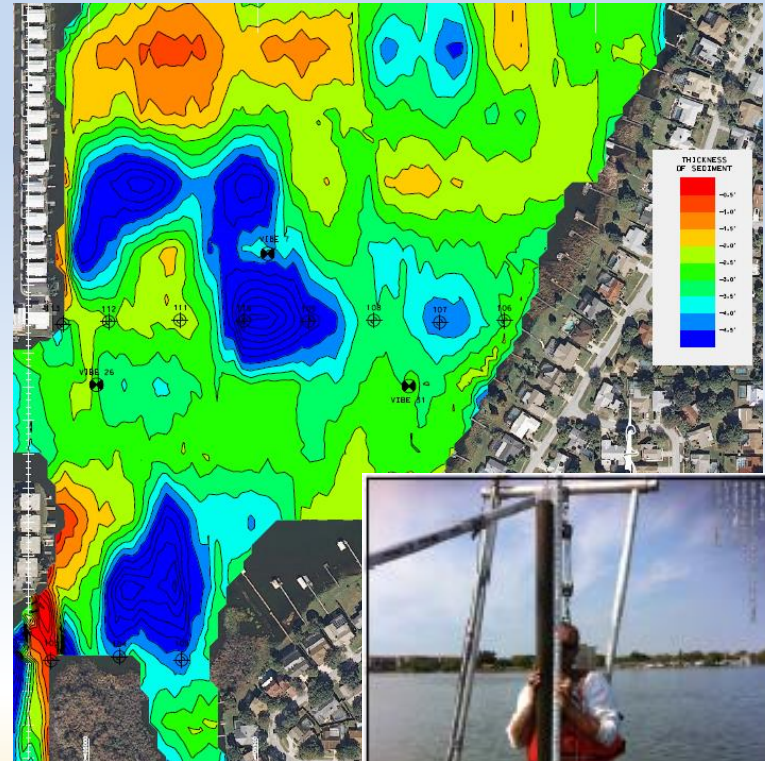


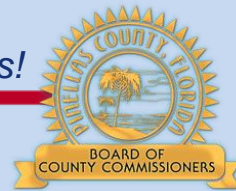
# Return on Investment

- Achieve project goals at lower cost
  - Flexibility in process resulted in bid \$8.8M under estimate
- Multiple benefits
  - Environmental (water quality, fisheries, beneficial habitats)
  - Recreation (boating, public health)
  - Area prepared for future opportunities:
    - Expanded youth sports in the unincorporated Seminole area
  - Reduces traffic and road impacts on 98<sup>th</sup> St.
  - Dredge project related work saves ~\$1M on future site development

# Path Forward

- Notice to proceed: August 31, 2017
- Permit modifications complete: July 31, 2018
  - FDEP and USACE
- Commence dredging and site work: August 31, 2018
- Project completion: December 31, 2023





# *Questions?*