#### Lake Apopka Restoration

Proposed projects for 2012-13 Legislative Appropriation











# Background

In 2012, the Legislature appropriated \$4,800,000 for Lake Apopka to:

- Restore and enhance habitat to improve fisheries
- Improve water quality
- Focused sediment removal
- Evaluate innovative new technology



## Proviso Language

From the funds in Specific Appropriation 1863A, the Fish and Wildlife Conservation Commission, in cooperation with the Department of Environmental Protection, the St. Johns River Water Management District, the Lake County Water Authority, and the University of Florida, shall develop and submit a prioritized list of restoration projects designed to improve the water quality and ecology in Lake Apopka to the Chair of the Senate Budget Committee on Appropriations and the Chair of the House Appropriations Committee. Projects to be considered may include, but not be limited to, innovative technologies for water quality improvement, habitat restoration to improve water clarity and recreational fisheries, and focused nutrient-enriched sediment removal.



#### **Proposed Project Goals**

- Achieve 10% coverage of native emergent and submersed vegetation within 10 years of project initiation.
- Enhance utilization of current fishery through improvements in public access (channels and associated facilities), installation of fish attractors, and stocking.
- Test innovative technologies for water quality and habitat improvement.



## Restoration Challenges

- Insufficient desirable fisheries habitat.
- Limited public access during low water periods.
- High volumes of unconsolidated organic substrate.
- Further improvements to water quality and clarity.

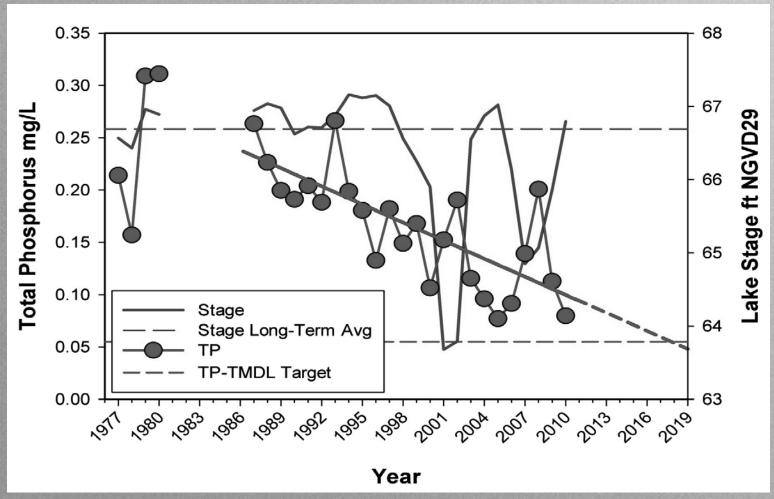


#### Unconsolidated Sediments



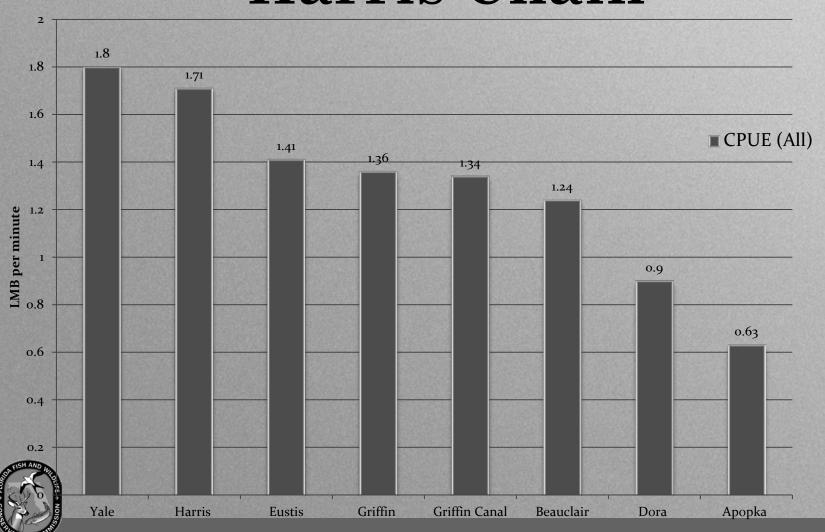


# Lake Apopka water quality improvements





# Bass Populations Harris Chain



## **Project Selection**

- A working group was established to evaluate potential projects.
- The working group was comprised of various State and Local entities, including Orange County.
- The working group has provided a list of potential projects to the Legislature.



#### Prioritized Projects Summary

Winter Garden/Lakeshore Park Dredging \$2,000,000

 (an additional \$1 million from SJRWMD
 is pending final approval by Governing
 Board)

Magnolia Landing Access/Improvement \$1,000,000

Fisheries Habitat Restoration \$1,000,000

• Fish attractor construction \$ 200,000

 Innovative Techniques for Phosphorus/ Nutrient Removal

\$ 600,000

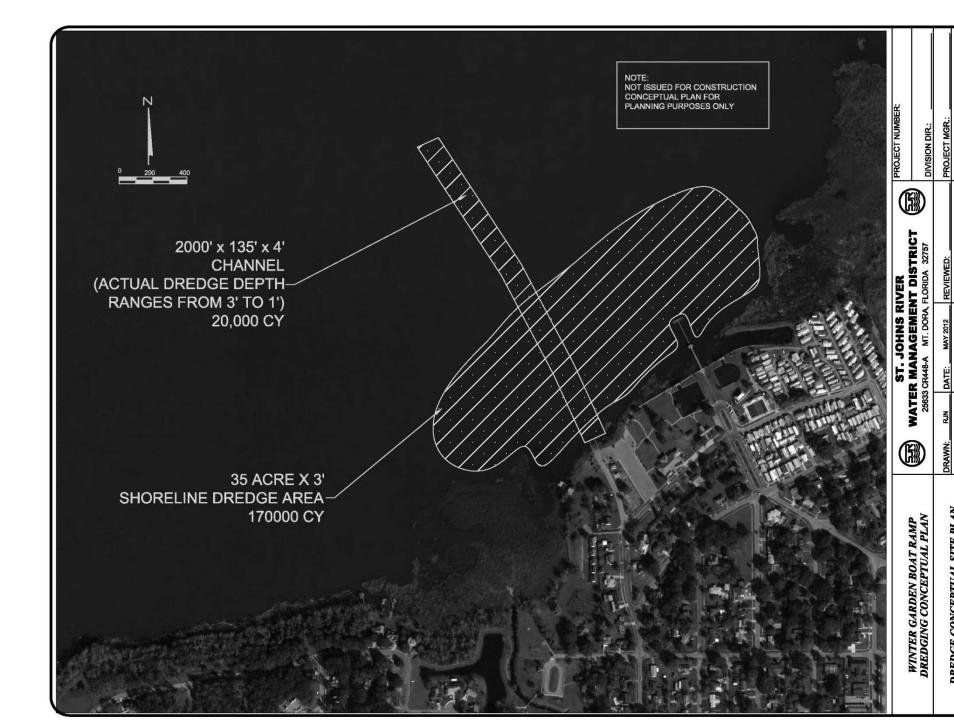
■ Total \$4,800,000

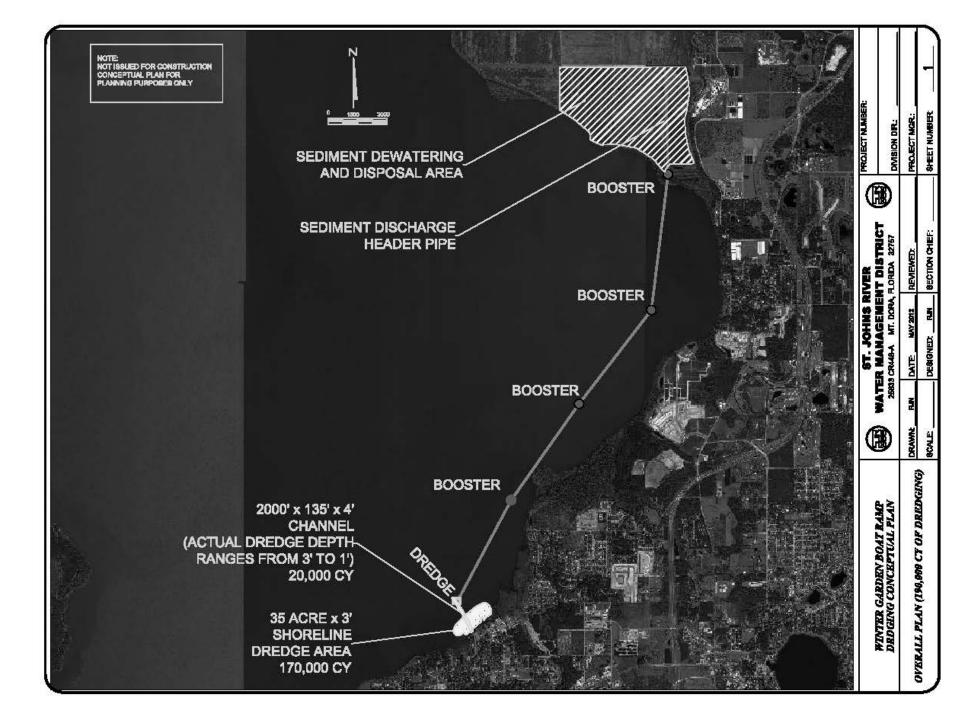


# Winter Garden Dredging

- SJRWMD will be lead agency.
- Dredge an access channel from the ramp to deeper water to provide boater access.
- Dredge sediment adjacent to park to create a fishing area and to improve habitat.





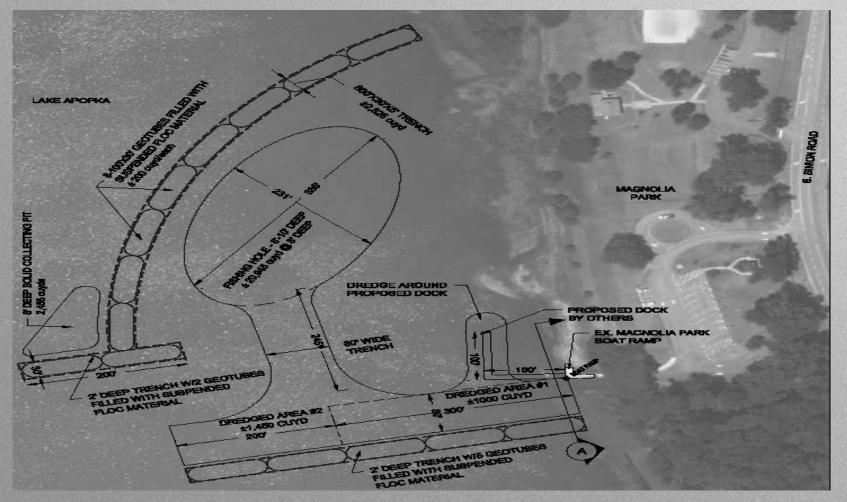


# Magnolia Park Dredging

- UF-IFAS will be lead agency.
- Dredge an access channel from the ramp to deeper water to provide boater access.
- Dredge an area next to shore to provide a bank fishing area.
- Evaluate rapid dewatering technology for dredged sediments/geotubes.



# Magnolia Landing – UF





# Fisheries Habitat Restoration

- FWC will be lead agency.
- Plant native aquatic plants to provide fish/wildlife habitat and improve water quality.
- Install brush fish attractors to help anglers catch existing fish populations.
- Stock Sunshine Bass to maintain/improve a popular existing fishery.



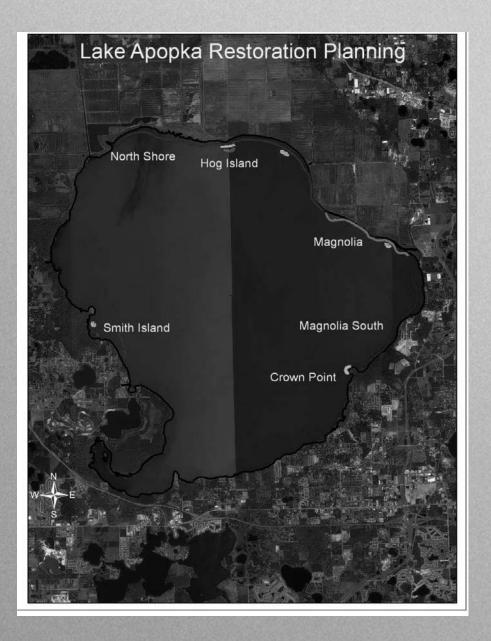
# FWC Planting







#### Planting Locations





#### Fish Attractors





# Innovative Technologies for Phosphorus Reduction

 DEP and SJRWMD will investigate innovative new technologies to remove phosphorus from the lake.

• UF Institute for the Commercialization of Public Research.



# Questions?



