

Lake Trafford Management Plan

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Lake Trafford Background

- Largest natural lake south of Lake Okeechobee
- Classified as hyper-eutrophic with recurrent harmful algal blooms and fish kills
- Critical Restoration Project implemented 2004 – 2010
- Over 6 million cubic yards of sediment removed from lake



Lake Trafford

Lake Trafford Management Team

- Established by SFWMD in 2011
- Originally instrumental in development of vision for Lake Trafford
- Inter-agency partnership for coordination, collaboration, and implementation of management strategies, restoration efforts, and scientific studies as well as leveraging of available resources

Members

- South Florida Water Management District
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Environmental Protection
- Collier County
- U.S. Geological Survey
- U.S. Fish and Wildlife Service
- Florida Gulf Coast University
- University of Florida
- The Nature Conservancy
- Corkscrew Audubon
- Natural Ecosystems
- Peninsula Engineering

Why Prepare a Management Plan?

- Proactive approach to stay engaged with partners and proceed with concerted management efforts
- Continue momentum after SFWMD's shared investment of \$23.5 million for Critical Restoration Project (dredging)



Tri-Color Heron on Lake Trafford



Marshy Shore of Lake Trafford

Lake Trafford Management Plan

➤ Objective

- Develop an adaptive management plan that promotes a healthy lake ecosystem with diverse native plant and animal communities

➤ Goals

- Improve water quality
- Restore and enhance habitat
- Manage invasive vegetation
- Improve public outreach



Alligator near Lake Trafford

Lake Trafford Management Plan - Action Plan Components

- Action
- Background
- Strategy
- Schedule
- Cost
- Expected Benefits
- Monitoring Environmental Responses
- Regulatory needs
- Funding



Lake Trafford

Action Plan Categories

- Water and Sediment Quality (WQ)
- Habitat Restoration and Monitoring (HW)
- Invasive Vegetation Management (IVM)
- Public Use and Outreach (PO)



Lake Trafford Shoreline



Paspalidium
(Kissimmee grass planting area)

Water and Sediment Quality - Example Action Plan

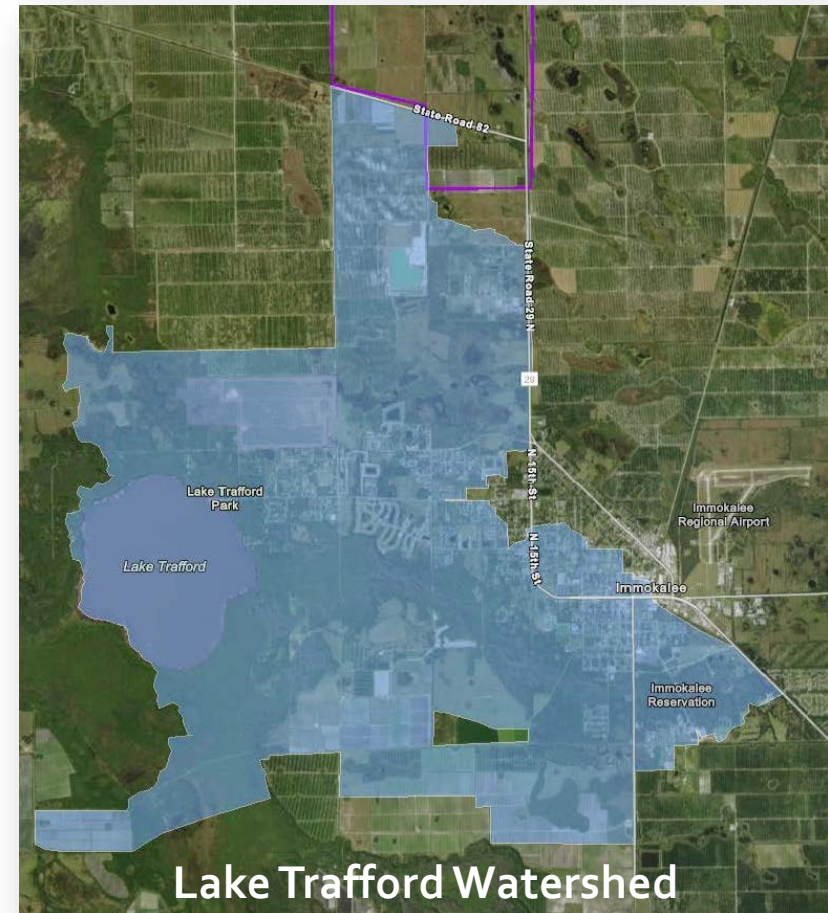
WQ-3: Nutrient Reduction Strategies for Wastewater and Septic Systems

Action

Develop and implement strategies to reduce nutrient inputs from wastewater and septic systems in watershed

Expected Benefits

Reduction of nutrients to lake; improved water quality



Habitat Restoration and Monitoring - Example Action Plan

HR-1: Create Wind Breaks and Living Shorelines

Action

Develop a series of small projects using vegetation to create wind breaks, promote living shorelines throughout the system, and monitor vegetation and turbidity

Expected Benefits

Shoreline stabilization; reduced turbidity; increased native submergent and emergent plant densities; additional wildlife habitat



Black Neck Stilt on Shoreline

Invasive Vegetation Management - Example Action Plan

IVM-1: Develop and Maintain Targets for Invasive Vegetation Action

Create an adaptive Integrated Pest Management (IPM) Plan to maintain invasive and exotic vegetation within the targeted coverage

Expected Benefits

Improved habitat and biodiversity;
sustainability of restoration plantings;
improved overall productivity of the lake;
increased aesthetic and recreational value



Cyperus blepharoleptos (Cuban Bulrush) and *Schinus terebinthifolia* (Brazilian pepper) near the lake edge

Public Use and Outreach - Example Action Plan

PO-2: Install an Information Kiosk at Ann Olesky Park

Action

Install and maintain an informational kiosk at Ann Olesky Park to post maps, bulletins, and relevant information about Lake Trafford

Expected Benefits

Simple and effective way for sharing information with stakeholders



Ann Olesky Park at Lake Trafford

Proposed Timeline

- Complete Draft Plan - August 2018
- Present Draft Plan to Big Cypress Basin Board and receive feedback
- Seek support from partners
- Complete Final Plan - October 2018



Lake Trafford Southern Marsh

Summary

- Introduction to Draft Lake Trafford Management Plan
- Funding is not being requested at this time
- Potential funding sources will be identified by partners and team members

Discussion and Feedback