



Reviving
THE river OF grass

River of Grass Phase I Planning

Water Resources Advisory Commission Issues Workshop
March 4, 2009

sfwmd.gov/riverofgrass

A white egret is captured in mid-flight, its wings fully extended, against a background of lush green vegetation. The bird is positioned on the left side of the frame, facing right. The text 'Reviving THE river OF grass' is overlaid on the right side of the image.

Reviving

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Maps and Land Information

Matt Morrison, Lead Project Manager,
Everglades Restoration

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Maps and Land Information

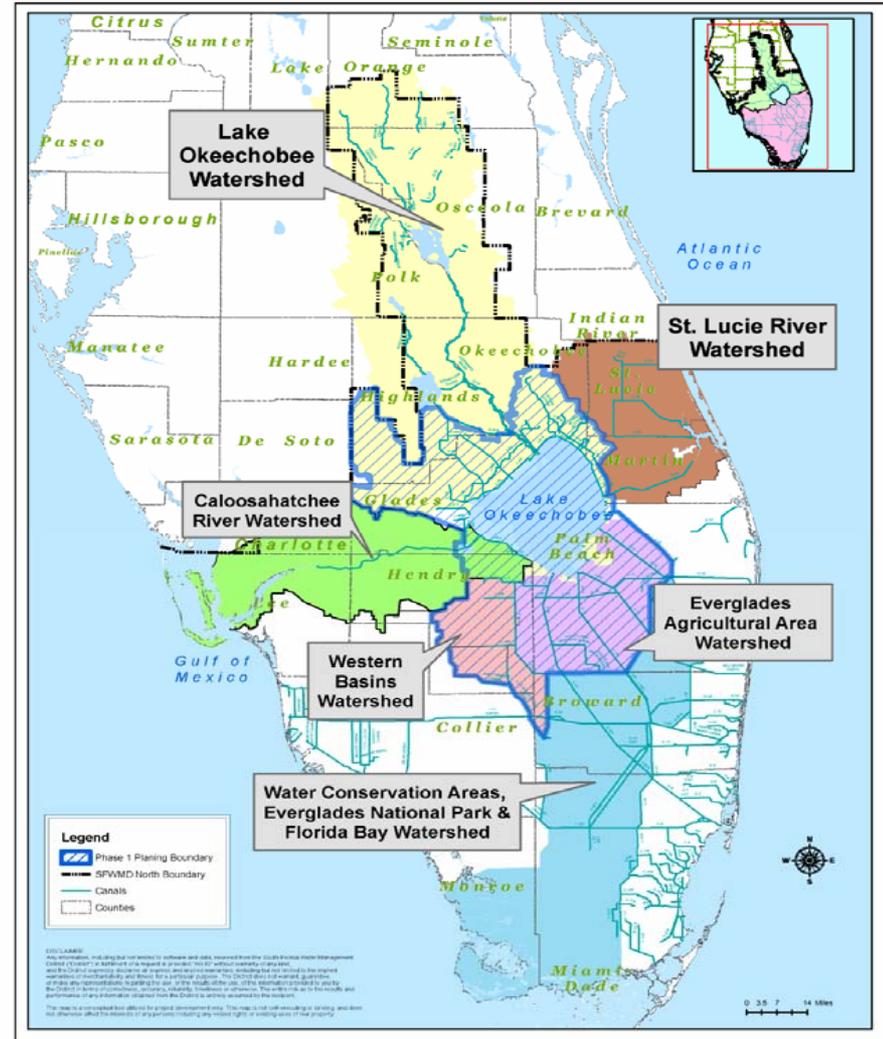
RESTORATION PLANNING

- Graphical Compilation of Land Related Information
 - Includes information on project planning limits, parcel ownership, land use, infrastructure and other planning level land related items
 - Provide assistance to project teams in formulating proposed project footprints and configurations
 - Guide project planning by distinguishing potential cost related impacts based on project location
 - Promote identification of any missing land related information that needs to be considered in project planning

Phase I Planning Boundary

- General area that will be considered for potential project features to assist in achieving the “River of Grass” Vision and Goals

RESTORATION PLANNING



Land Information and Relevance

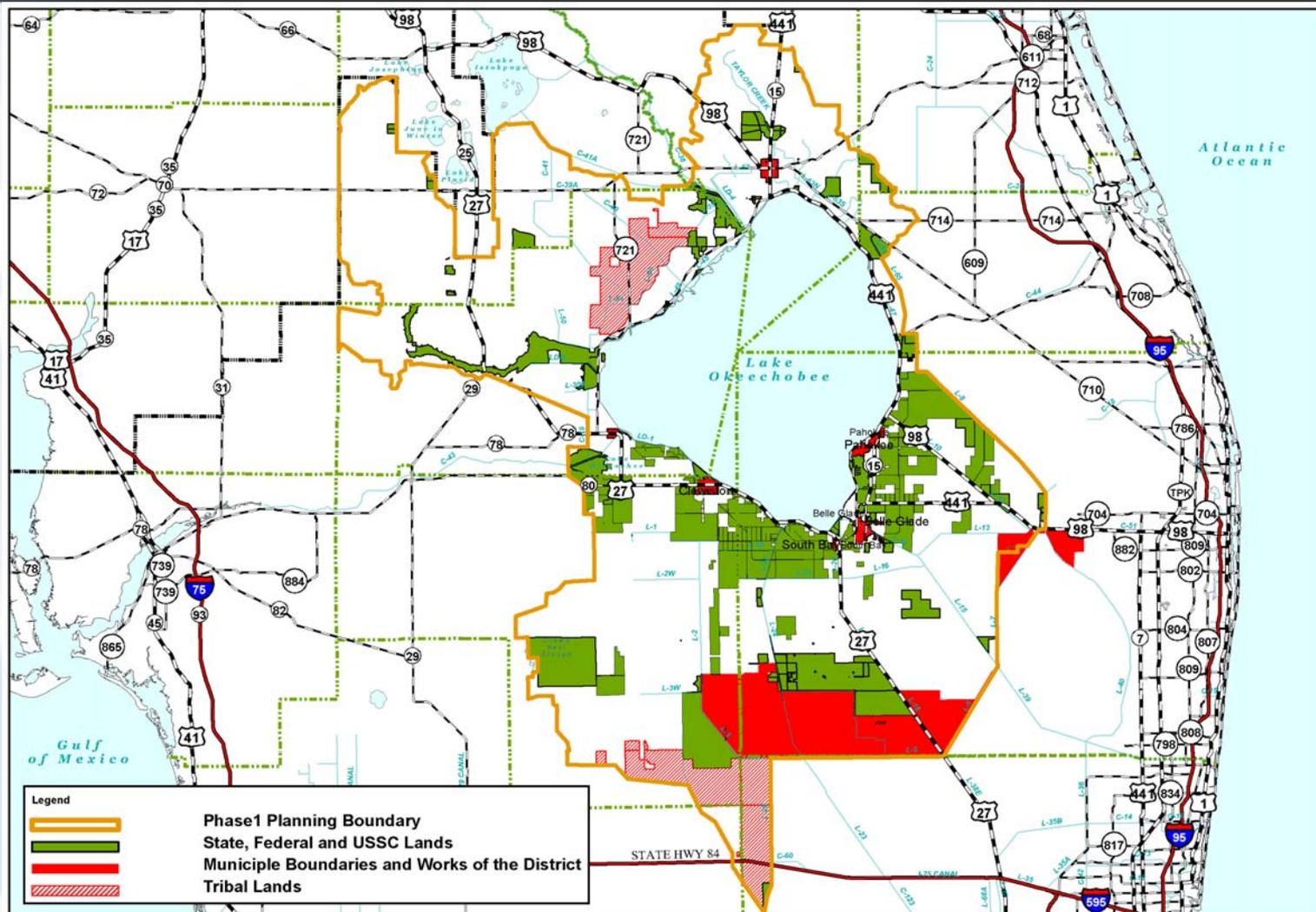
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■ Parcel Ownership

- Provides a general range of potential land availability
 - High Potential Availability - State and Federal Lands, United States Sugar Corporation Lands
 - Uncertain Availability - Private Lands, Utility Owned Lands, Urban Service Areas Outside of Municipal Boundaries
 - No Availability - Tribal Lands, Lands within Municipal Boundaries, Existing Projects, Project Under Construction

Parcel Ownership – Potential Availability

RESTORATION PLANNING



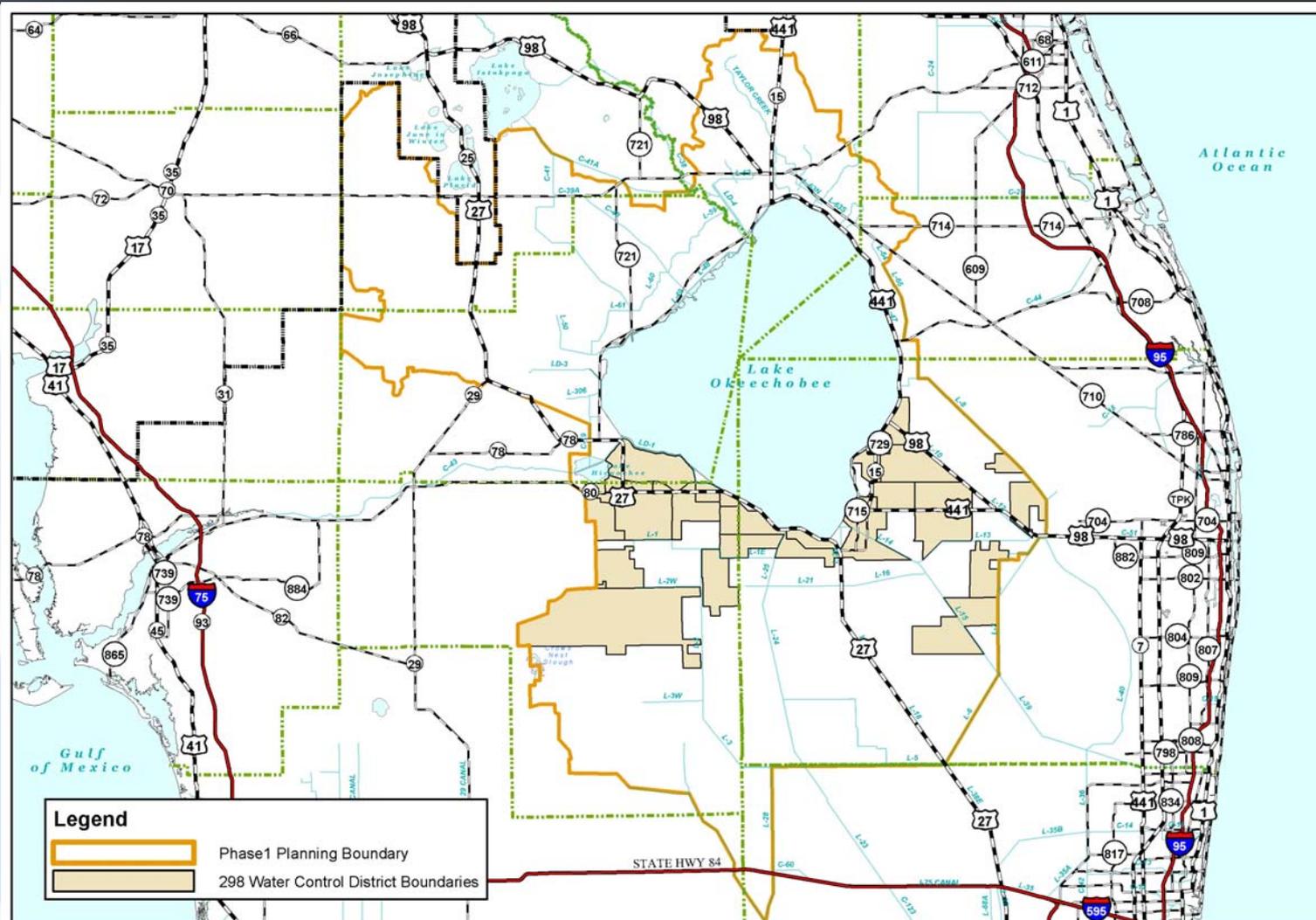
Land Information and Relevance

RESTORATION PLANNING

- 298 Water Control Districts and Other Special Districts
 - Ensure that all remaining lands within a District receive the same level of service with the proposed project configuration
 - Provide necessary offsets for maintaining irrigation, flood control, access and any other services the District provides to land owners

298 Water Control Districts and Other Special Districts

RESTORATION PLANNING



Land Information and Relevance

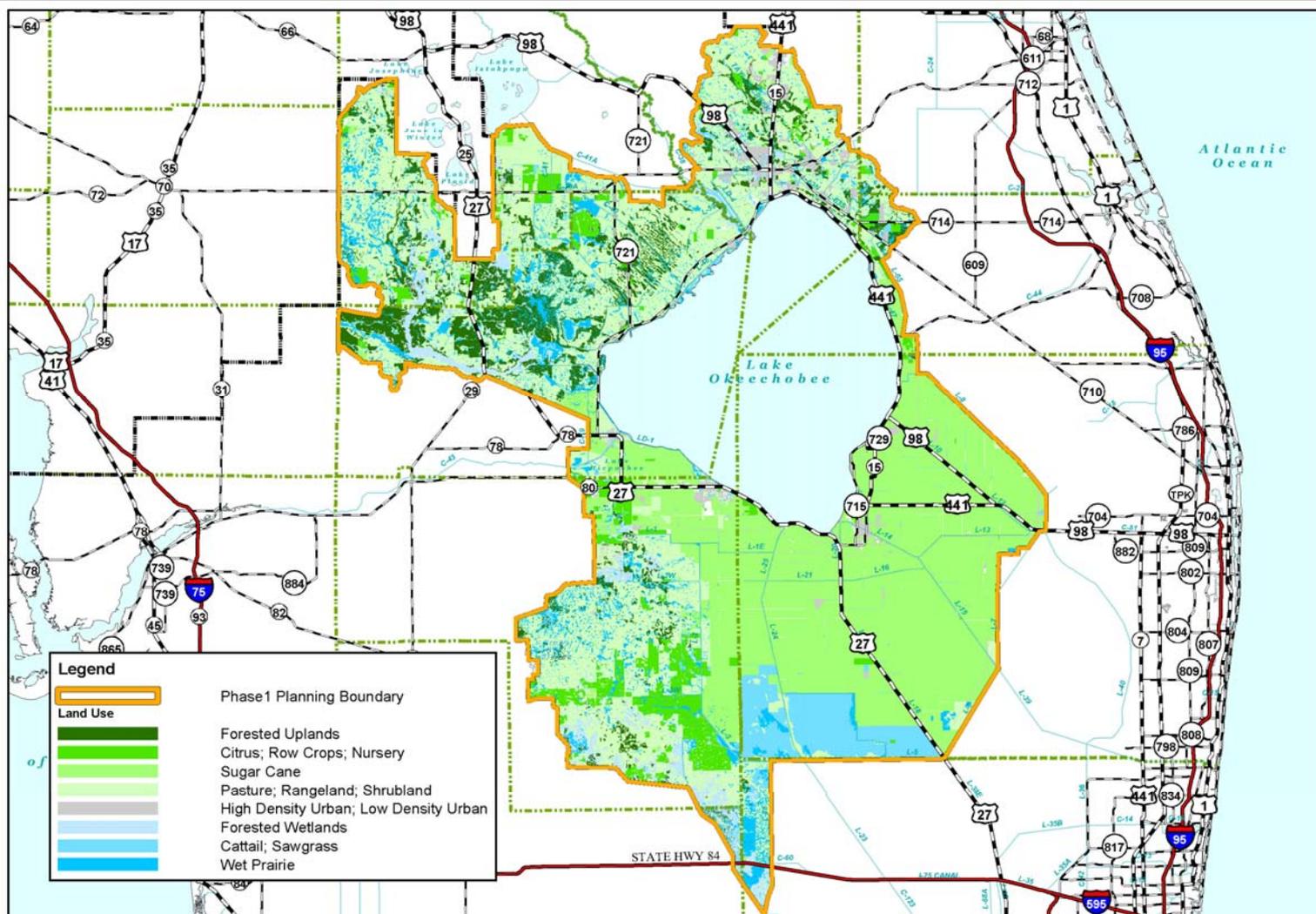
RESTORATION PLANNING

■ Land Use

- Evaluate the potential economic impact of changing land use
 - agricultural parcels based on agriculture type and location
- Assess possible environmental remediation requirements
 - current land use vs. restoration lands
- Minimize impacts to existing wetlands
 - ensure water supply or drainage of existing wetlands is not compromised by proposed configuration

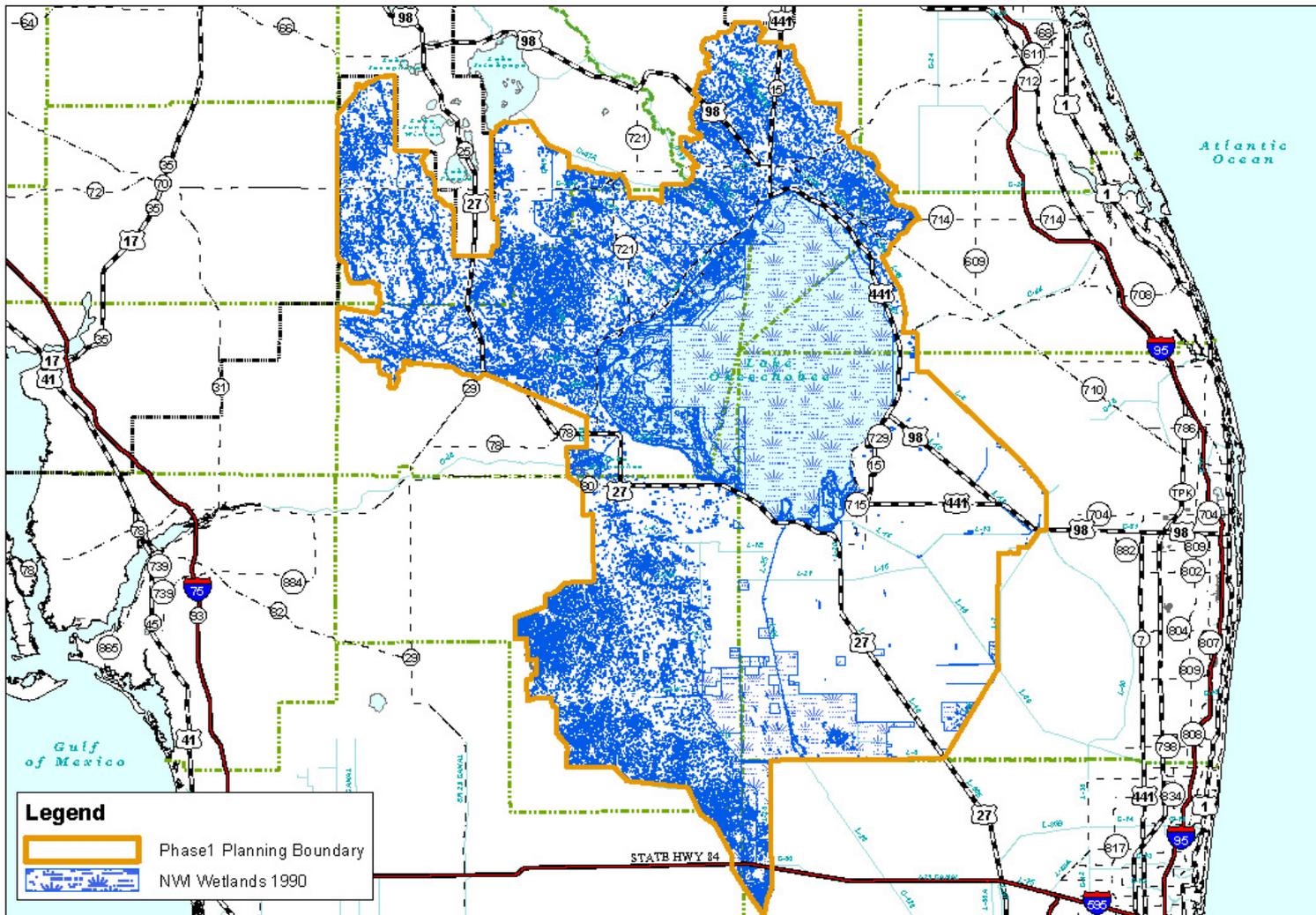
Florida Land Use and Cover Classification System (FLUCCS)

RESTORATION PLANNING



National Wetlands Inventory

RESTORATION PLANNING



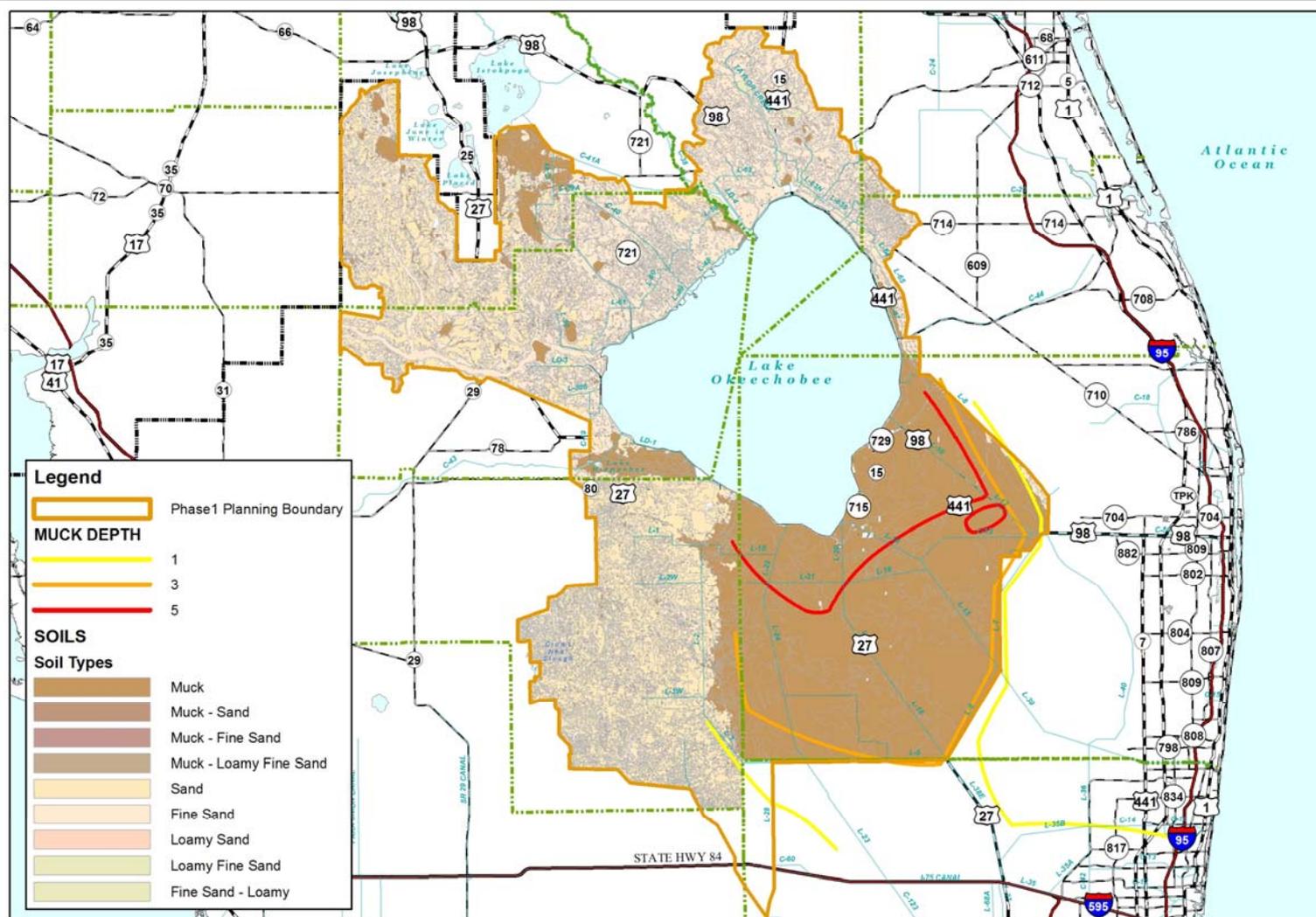
Land Information and Relevance

RESTORATION PLANNING

- Soil Characteristics
 - Soil type and depth can have a significant impact on the ability and cost to construct certain project features
 - Muck soils may need to be removed underneath embankment footprints for structural stability
 - Soil type and depth can have a significant impact on crop yield and ability to sustain long term agricultural production

US Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey

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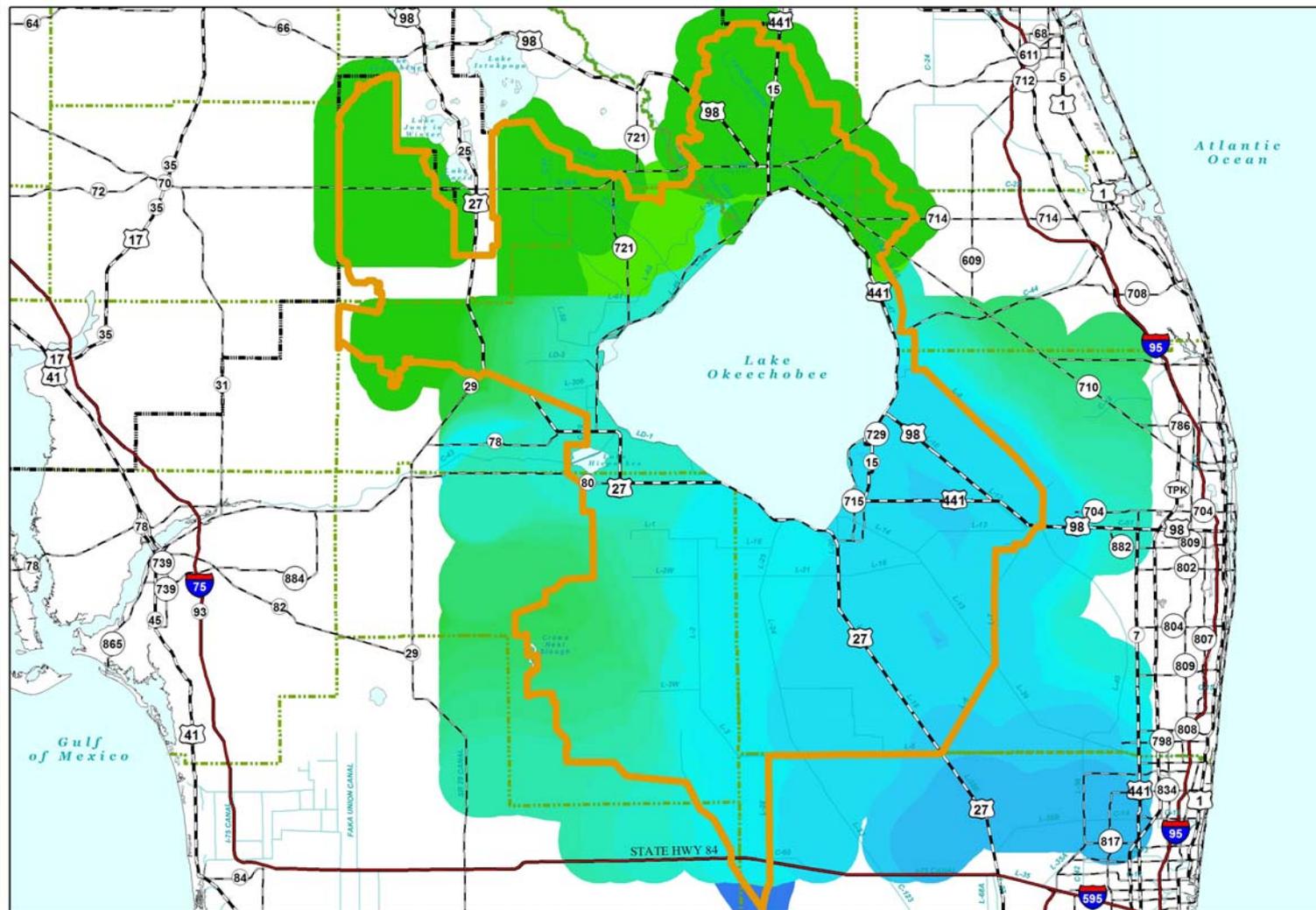
Land Information and Relevance

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- Topography
 - Land contours have a significant influence on ability for water to gravity flow over long distances
 - Topographic differences within a project footprint affect available storage
 - Depending on the type of feature selected, topography differences are evaluated to determine amount and cost of dirt to be removed

Topography

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Land Information and Relevance

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- Threatened and Endangered Species Habitat
 - Consideration of proposed project location and construction relative to Threatened and Endangered Species
 - Panthers, Rookeries, Caracara, Bald Eagles
 - Potential impacts to the design and location of a proposed configuration depending on Permit Requirements
 - Certain time of year construction requirements resulting in higher capital costs

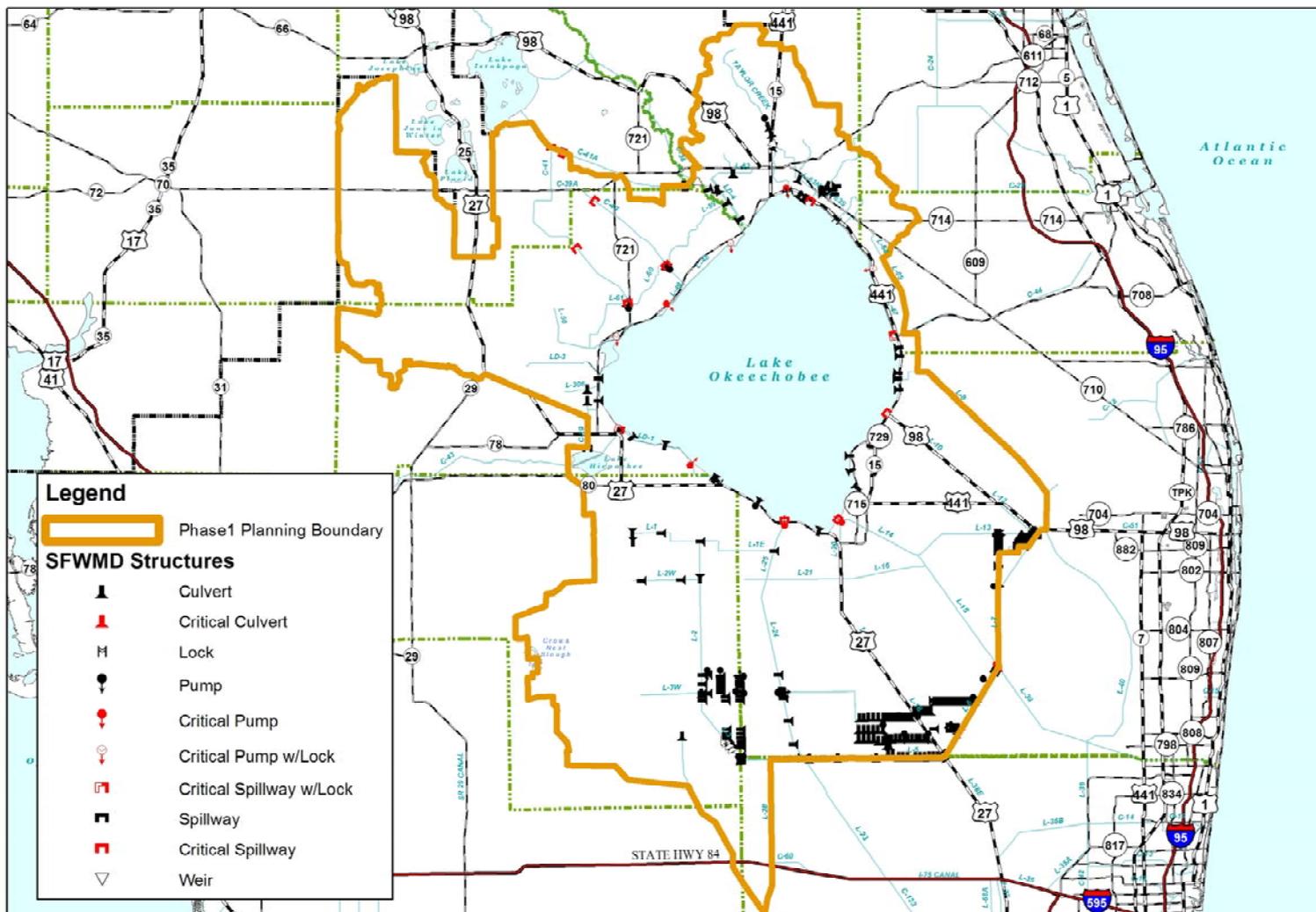
Land Information and Relevance

RESTORATION PLANNING

- Canals and Water Control Structures
 - Potentially reduce project costs by locating near existing canals, pump stations, gates, and other water control structures
 - Existing facilities provide a means to control and convey water to and from a new proposed project feature
 - If an existing canal or water control structure needs to be modified, there is a good possibility that the modification can take place within the existing right-of-way and require little or no additional land acquisition

South Florida Water Management District Water Control Structures

RESTORATION PLANNING



Land Information and Relevance

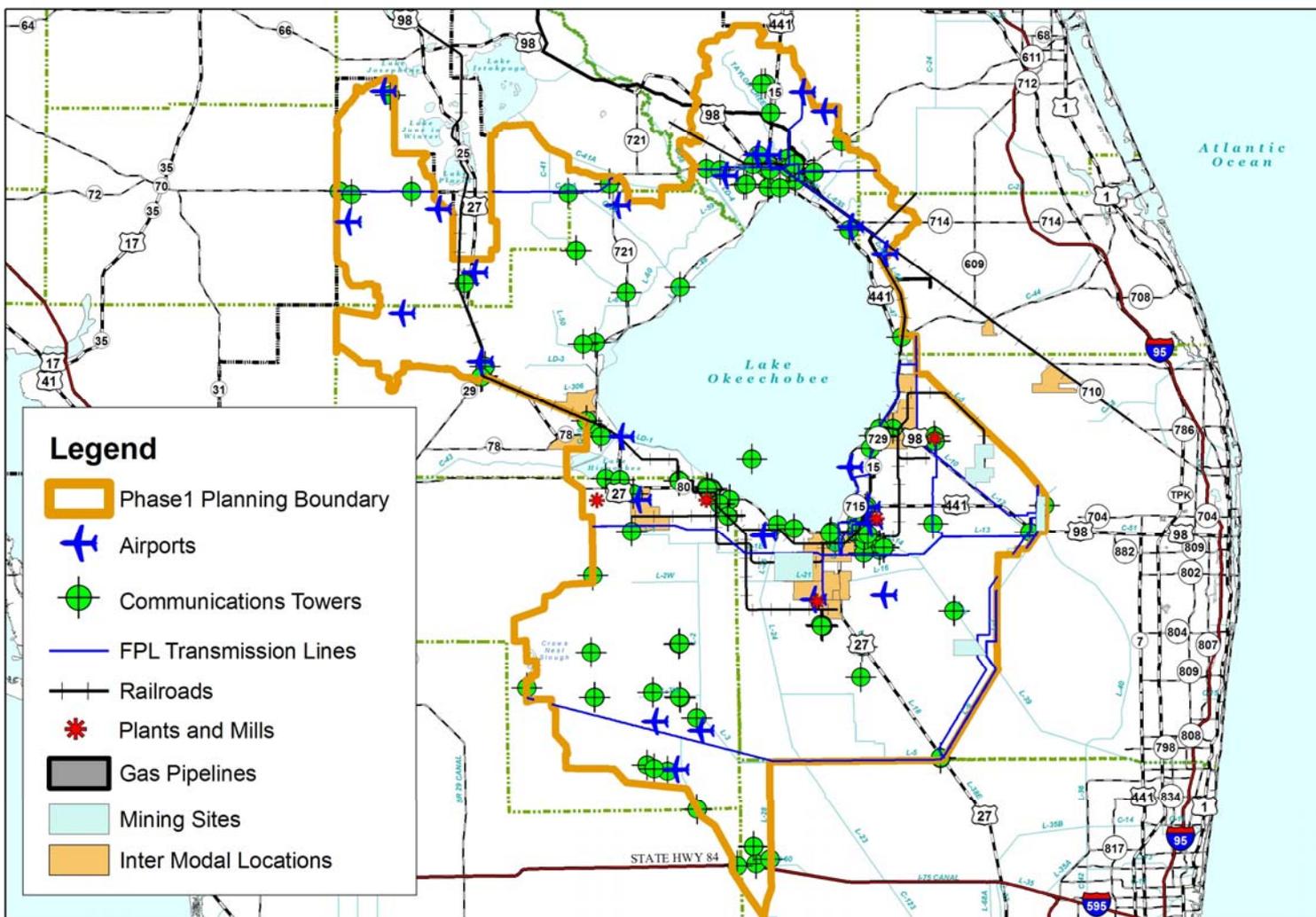
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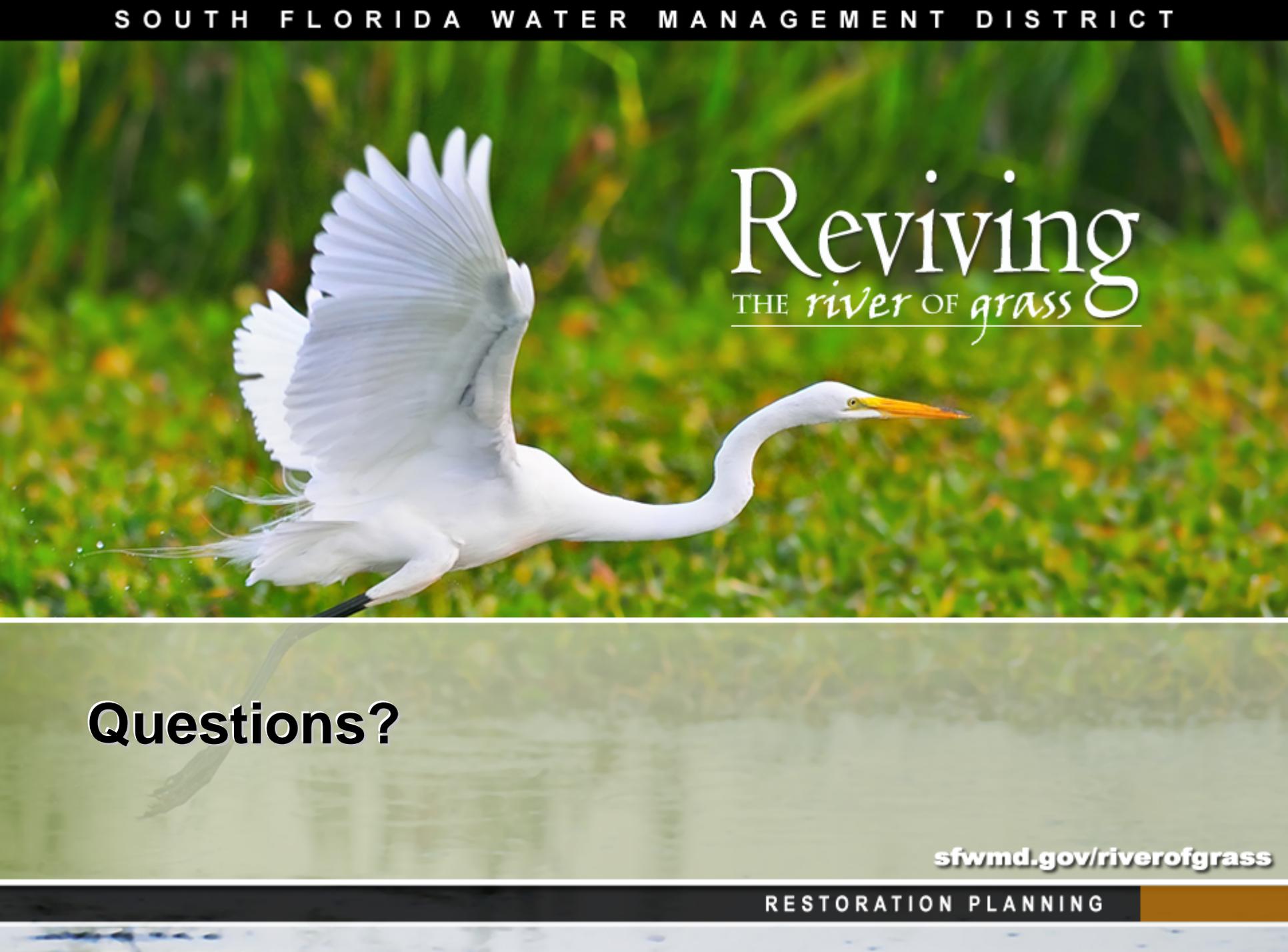
■ Existing Infrastructure

- Considerations for the additional costs to remove, widen, and/or relocate - Roads, Bridges, Railroads, Power Lines, Natural Gas Lines, Communication Towers, Airports, Agriculture Processing Plants
- Widening of canals typically require new and longer bridges
- Relocation of Roads and Railroads can be costly
- High Voltage Transmission Lines can only be relocated during a short time frame every year (weather dependent)
- Federal Aviation Agency (FAA) recommends not constructing a wildlife attractant within 5,000 or 10,000 feet of an airport depending on the type of aircraft using the airport
- Relocating an agricultural processing plant is unlikely and cost prohibitive

Infrastructure

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A white egret is captured in mid-flight, its wings fully extended, flying over a body of water. The background is a lush, green, out-of-focus field of grass or reeds. The text 'Reviving THE river OF grass' is overlaid on the right side of the image.

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Questions?

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Next Meeting/Future Meeting Topics

Temperince Morgan, River of Grass Project Liaison/Northern Everglades Program Implementation Manager

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Next Meeting- Date and Location

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Next WRAC Issues Workshop

March 20, 2009
UF/IFAS Hendry County Extension Office
Dallas B. Townsend Agricultural Center
1085 Pratt Blvd.
LaBelle, FL
10:00 a.m. – 4:00 p.m.

Next Meeting- Meeting Topics

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Meeting Topics

- Local Government Presentations
- Performance Summary Maps
- Water Quality, Economic and Cost Information
- Preparation for March 31/April 1 Group Configuration Exercise

Phase I Planning

Future Meetings and Topics

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Future Meetings

(10:00 a.m. – 4:00 p.m.)

- March 31/April 1, Royal Palm Beach Cultural Center, Royal Palm Beach, FL
- April 16/17, SFWMD Lower West Coast Service Center, Ft. Myers

Future Meeting Topics

- Identification and Evaluation of Alternative Configurations
- Modeling Assessments
- Cost Estimating
- Presentations and Topics as Identified by Participants

Phase I Planning

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- Water Restrictions
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- Recreation
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- Technical Data & Docs
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- Weather
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- ☞ Kissimmee
- ☞ Lake Okeechobee
- ☞ Everglades
- ☞ Coastal Areas

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Restoration Project Planning

On December 16, 2008, the South Florida Water Management District Governing Board voted to accept a contract with the United States Sugar Corporation to acquire more than 180,000 acres of agricultural land for Everglades restoration. This historic transaction provides water managers with the unprecedented opportunity to store and treat water on a scale never before envisioned for the benefit of America's Everglades, Lake Okeechobee and the St. Lucie and Caloosahatchee rivers and estuaries.

With full public involvement, the first phase of *River of Grass* restoration project planning is under way. Through a series of [Water Resources Advisory Commission](#) Issues Workshops, the Phase 1 planning process will determine viable configurations for constructing a managed system of water storage and treatment to support ecosystem restoration efforts.

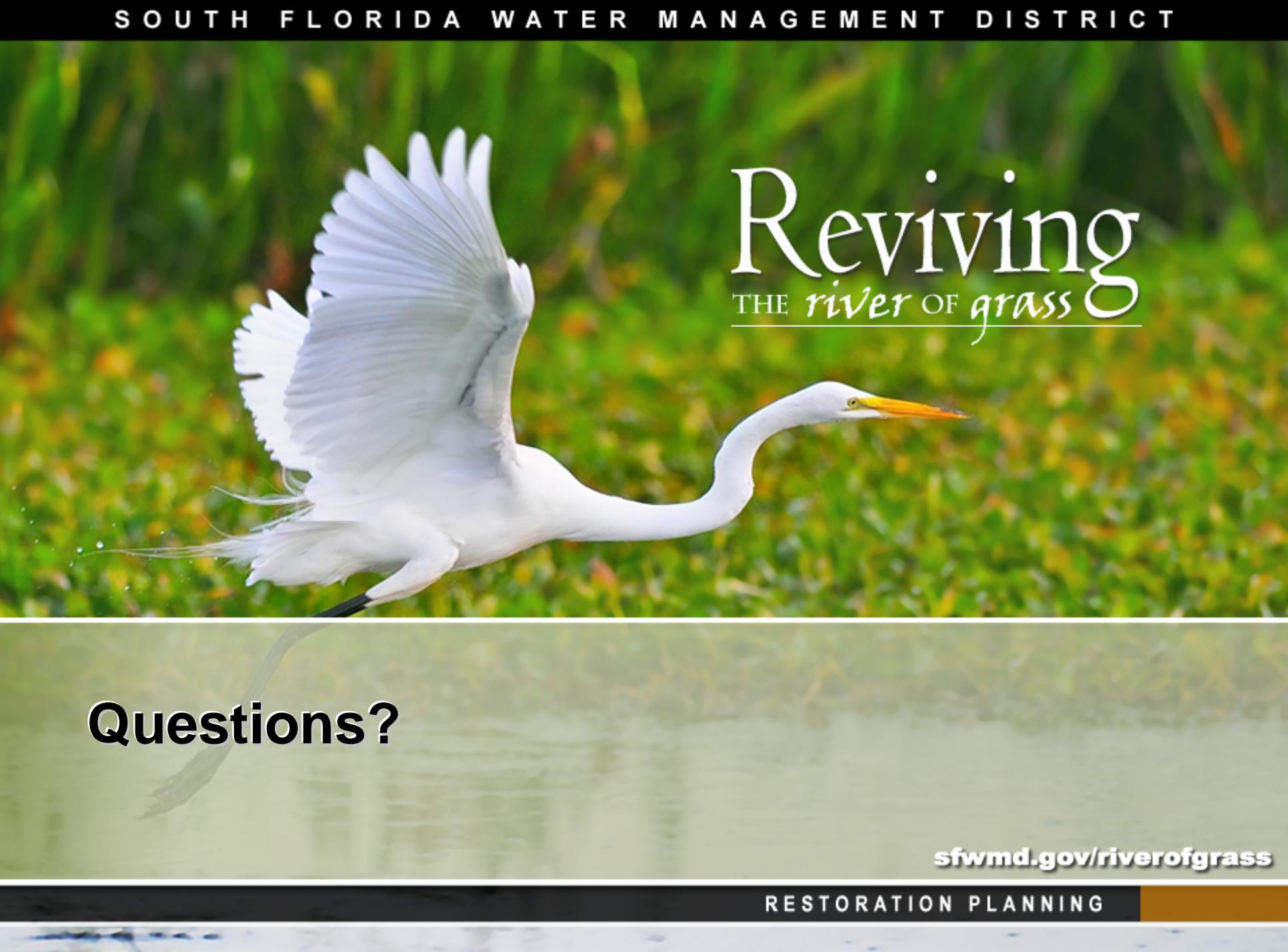
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RELATED MATERIALS

- ☞ [Public Workshops: Dates, Agendas, Presentations, Minutes](#)
- ☞ [News, Fact Sheets, Public Information](#)
- ☞ [Reservoir Sizing and Operations Screening \(RESOPS\) Model](#)



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