

Lake Panasoffkee

Restoration and Management

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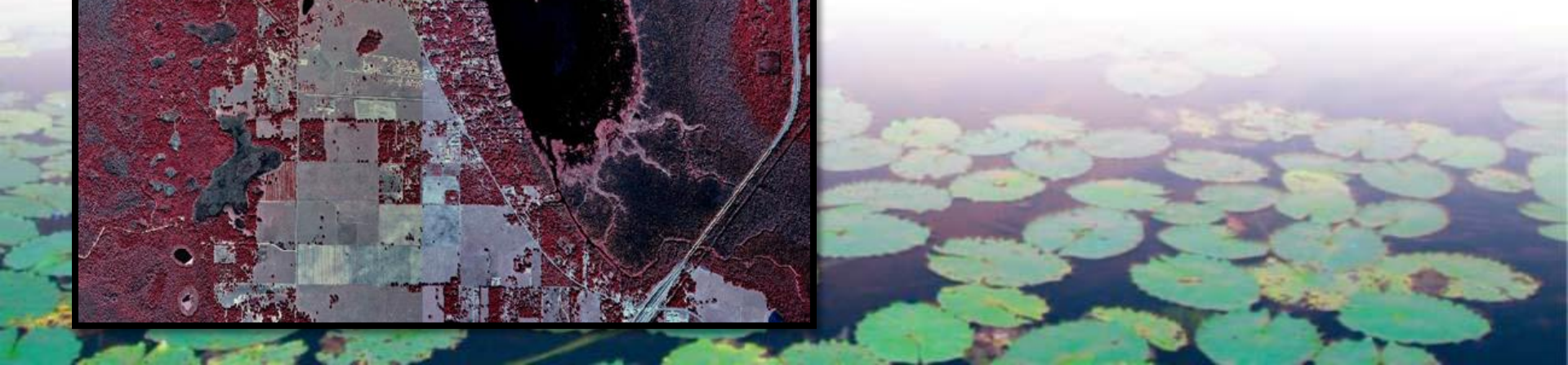
Southwest Florida Water Management
District





Lake Panasoffkee

- Outstanding Florida Water
- 3rd largest lake in the region
 - 3,500 acres
- Nationally recognized freshwater fishery



Historic lake shoreline
shown by blue line

Historic edge of
forested wetlands
shown by yellow line

Historical Issues

- Since 1940s
 - Sediment build-up
 - Emergent vegetation and tussock encroachment
- Fisheries had declined in last 30-40 years

2000 Imagery

Lake Panasoffkee Restoration Project

Activities 2004 to 2008

- Shoreline Restoration
- Sediment Removal

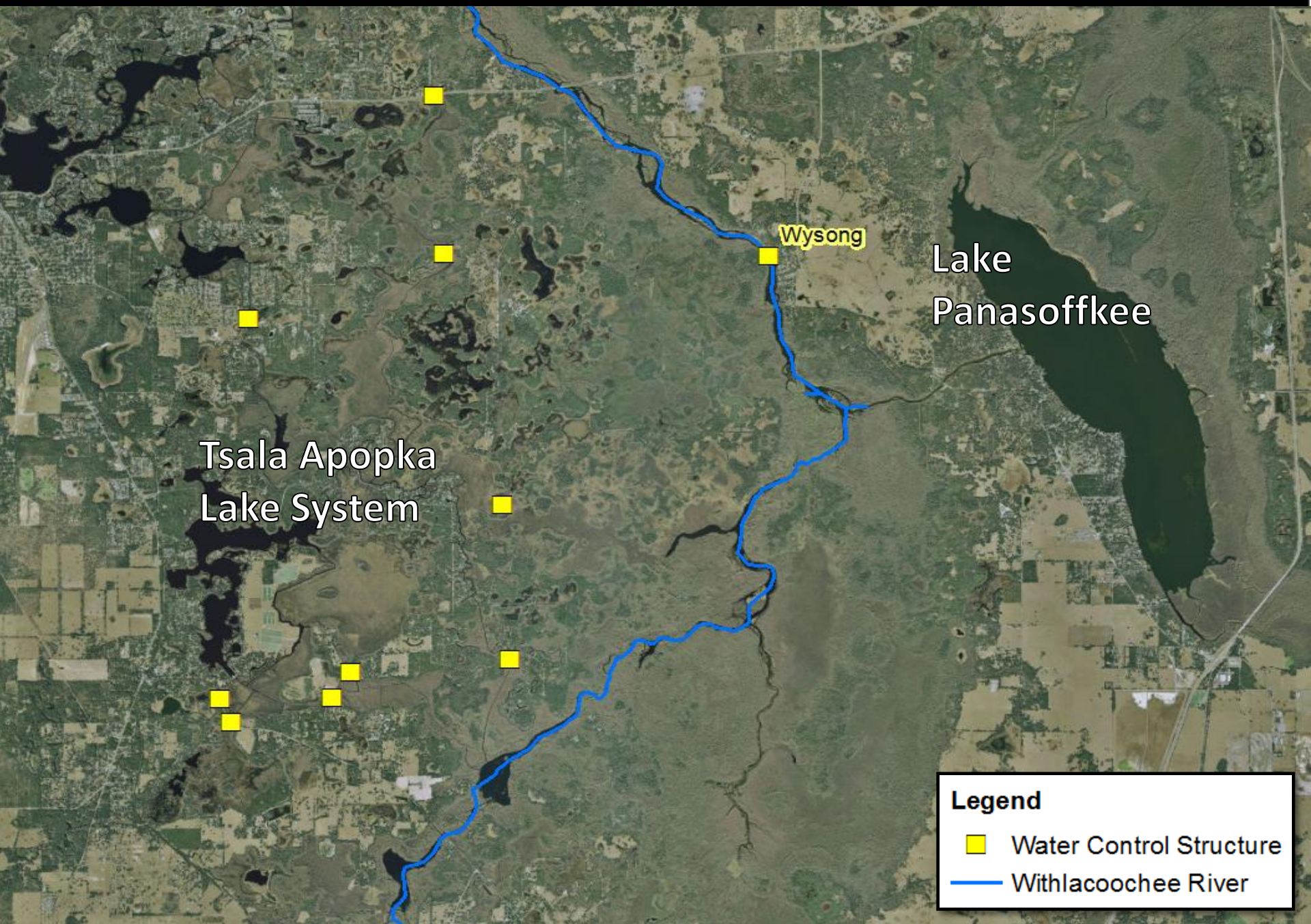




Achievements

- Increases in:
 - fish spawning areas
 - open water habitat
- Improved lake bottom to support native submerged vegetation
- Enhanced fishery





Tsala Apopka
Lake System

Wysong

Lake
Panasoffkee

Legend

- Water Control Structure
- Withlacoochee River

Current Lake Management

- **Continued Operation for the Wysong-Coogler Water Conservation Structure**
 - **Control outflows from Lake Panasoffkee**
 - **Discharge based on historic discharges and maintaining Good Water Quality**
 - **Maintaining optimal coverage of desirable submerged Vegetation**
 - **Providing optimal conditions for healthy fisheries**



Wysong-Coogler Water Conservation Structure

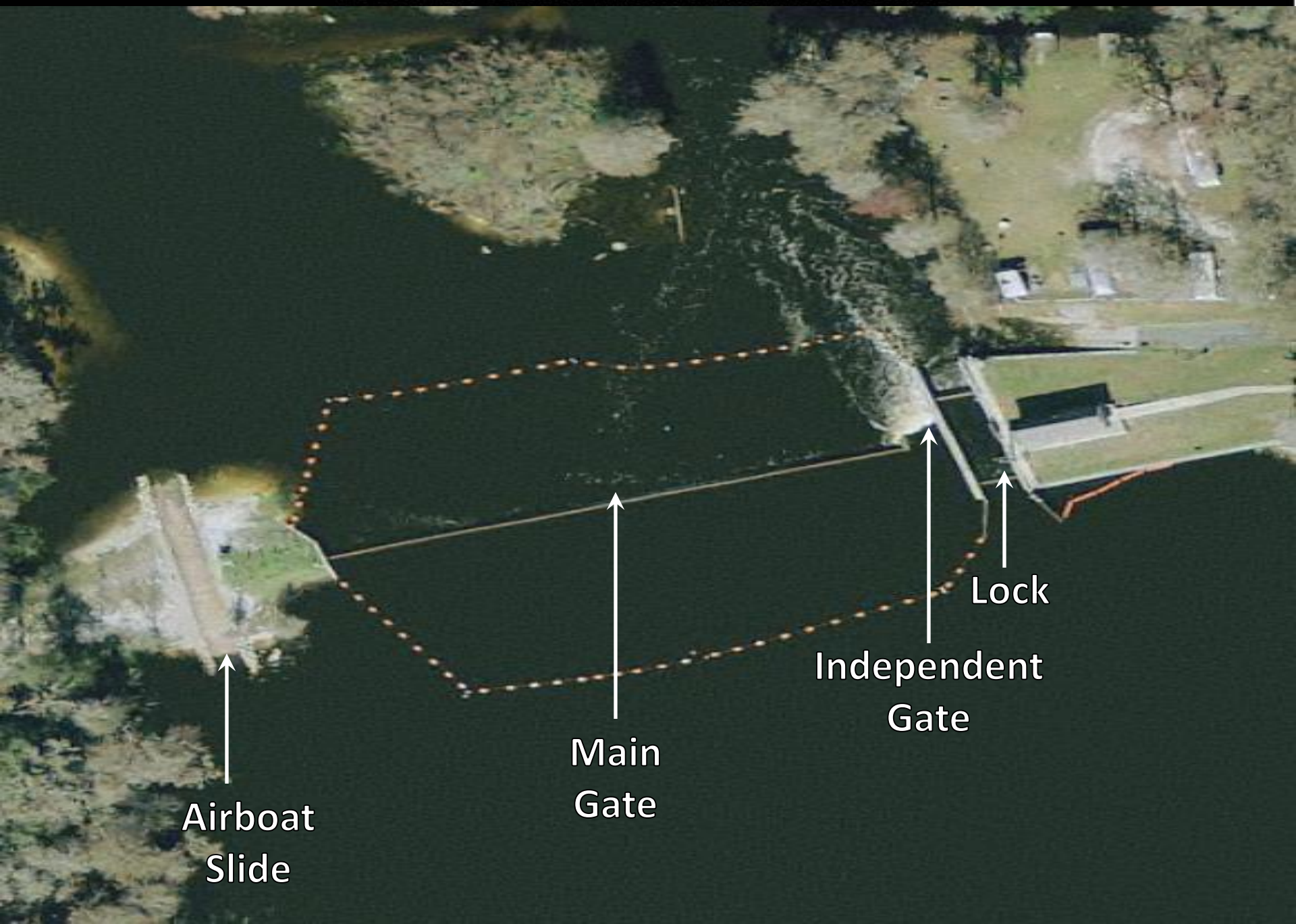


Main Gate



Independent Gate

- 249 feet long
- Inflatable polyester reinforced bags
- Galvanized steel gate panels
- Two operable gates with a lock and airboat slide



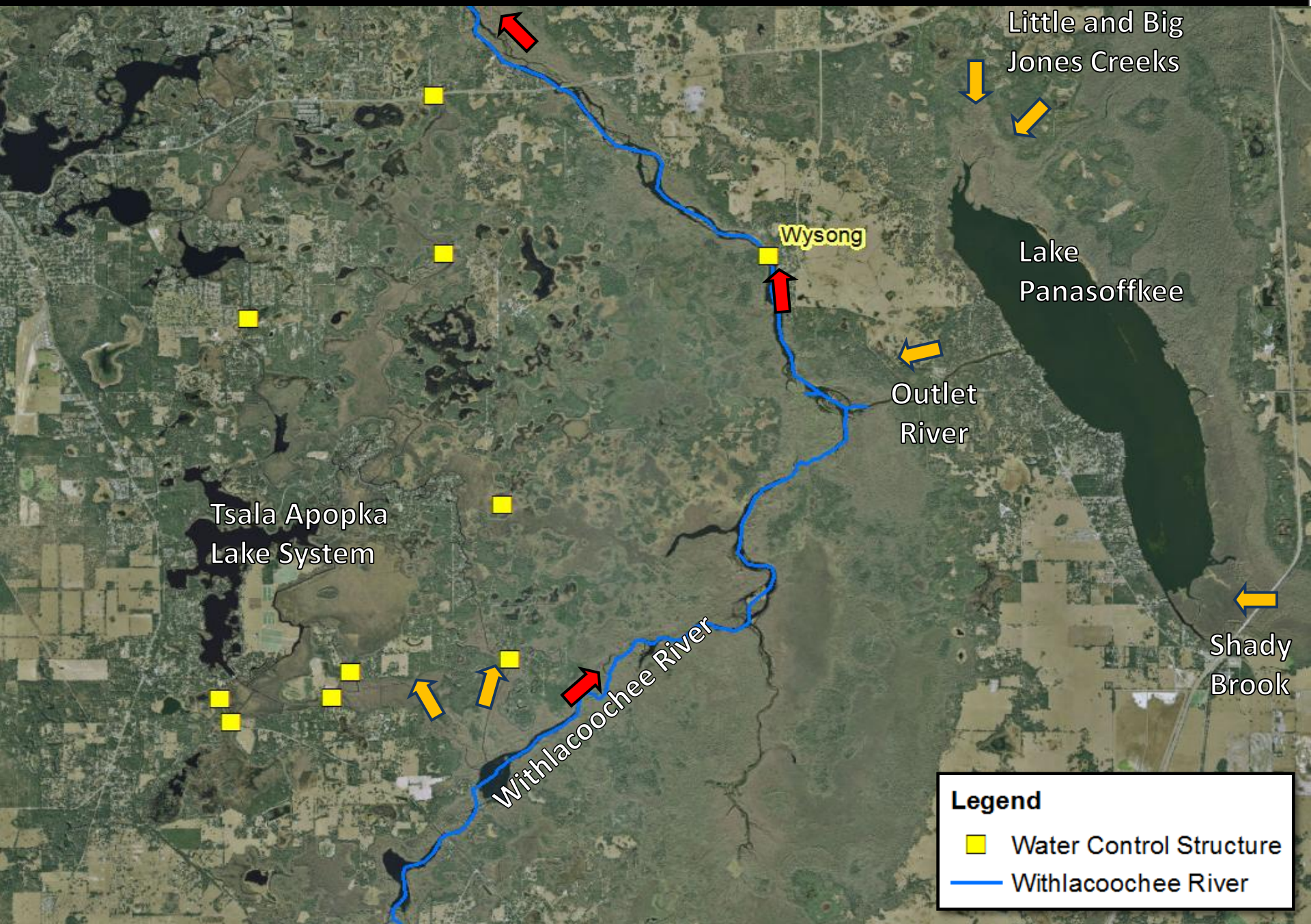
Airboat
Slide

Main
Gate

Independent
Gate

Lock

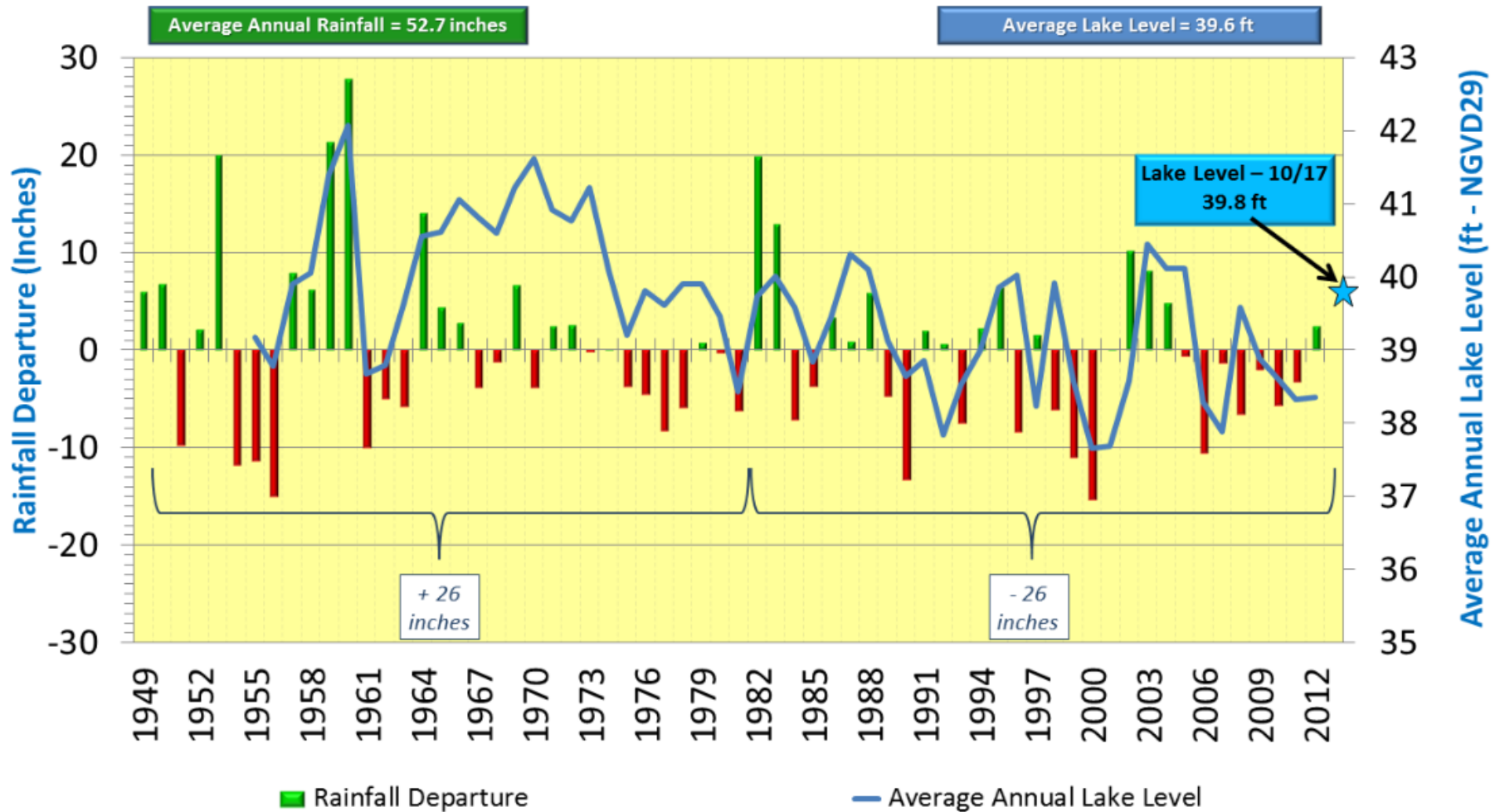
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT





Comparison of Regional Rainfall¹ to Lake Panasoffkee Lake Levels

1949 - 2013



(¹ NWS rainfall stations in Inverness, Bushnell and Brooksville)

Conclusions

- **Successful restoration of Lake Panasoffkee**
- **Lake management balances water quality and lake levels**
- **Dynamics of the Withlacoochee River, Lake Panasoffkee and Tsala Apopka are related**
- **Current efforts to optimize the system**

