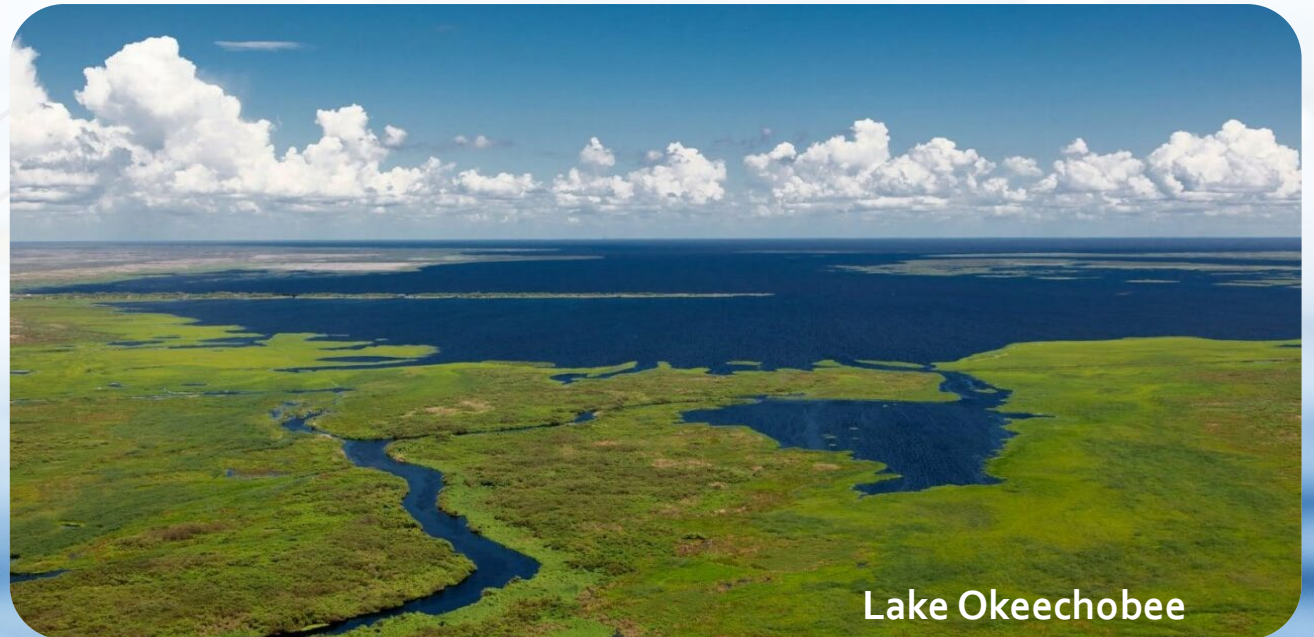


Water Quality in the Lake Okeechobee Watershed

Okeechobee County Board of County Commissioners Meeting
August 10, 2023

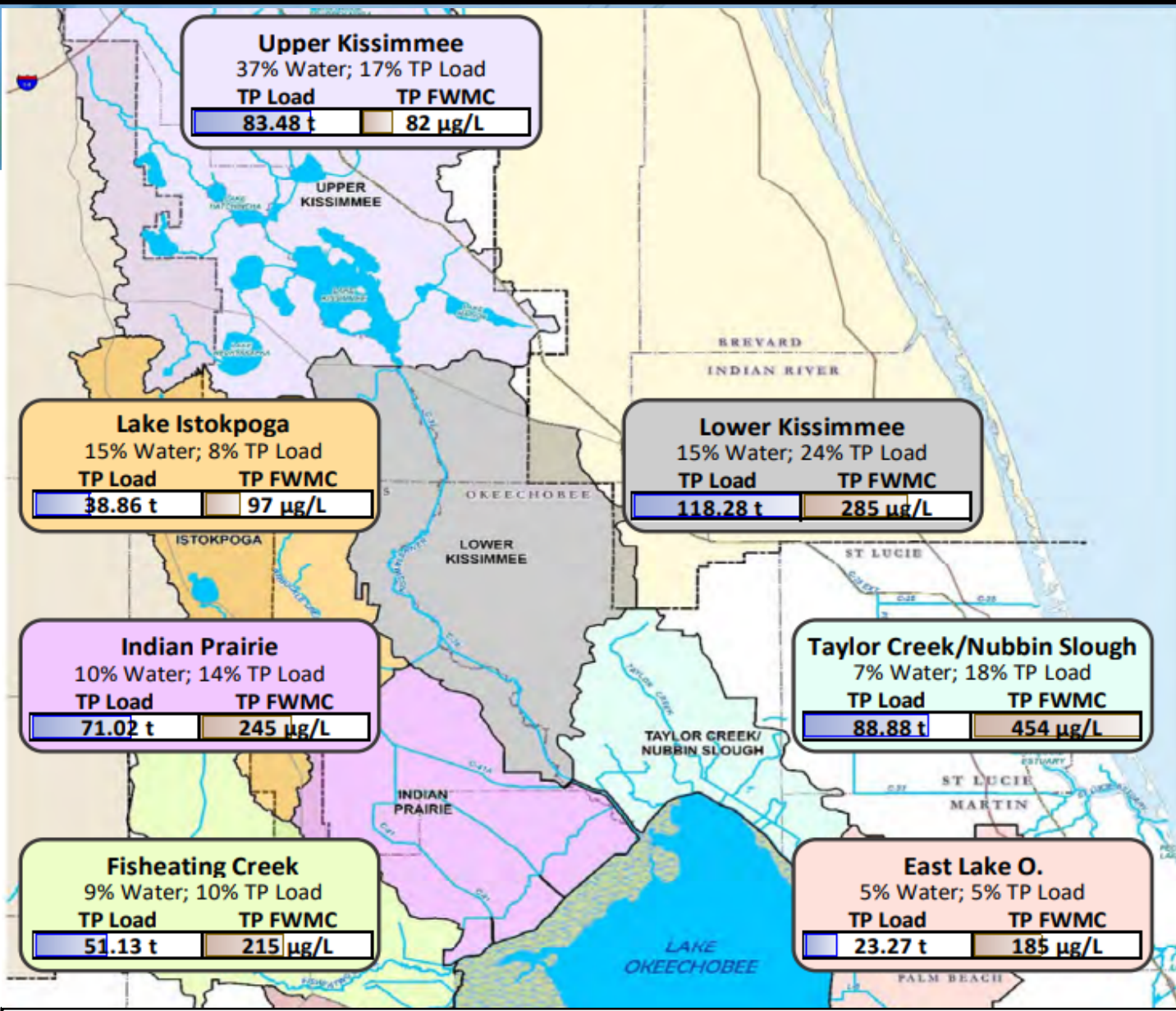
Lake Okeechobee Watershed BMAP

- A Basin Management Action Plan (BMAP) was developed to address high phosphorus loads within the watershed before they get to Lake Okeechobee
- Achieve TMDLs using a combination of :
 - Research
 - Monitoring
 - **Source controls**
 - **Projects**



Lake Okeechobee

Lake Okeechobee Watershed Water Quality



- Monitoring results show more phosphorus reductions are needed north of Lake Okeechobee
- Highest phosphorus concentrations come from:
 - Taylor Creek / Nubbin Slough (454 µg/L)
 - Lower Kissimmee (285 µg/L)
 - Indian Prairie (245 µg/L)

Subwatershed WY2018–WY2022

Relative flow and TP load contributions expressed as percentages of total

Project Background

- May 2021 – District solicited proposals to design, construct and operate a Lower Kissimmee Stormwater Treatment Project to address high phosphorus loading rates
- December 2021 – EIP and the District entered into contract to further develop the Lower Kissimmee Basin STA with planning and preliminary design



Planned Lower Kissimmee Basin STA Area
West portion of site, Okeechobee County

Lower Kissimmee Basin Stormwater Treatment Area Project (LKBSTA)

Okeechobee County
Board of County Commissions Meeting
August 10, 2023



**Ecosystem
Investment
Partners**

Introduction

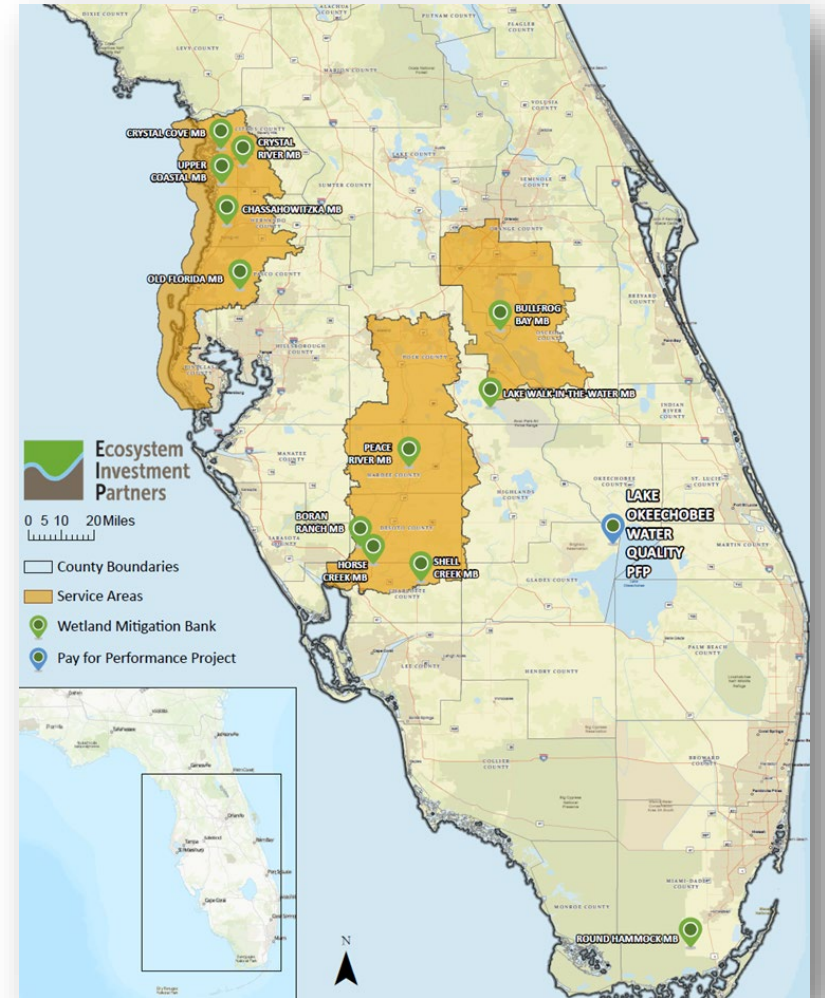


↻ Coming Soon
 💧 Water Quality
 🌿 Species Habitat
 🌊 Stream
 🌳 Wetland
 📍 EIP IV
 📍 EIP III
 📍 EIP II

226+ Miles of Streams Restored and Conserved

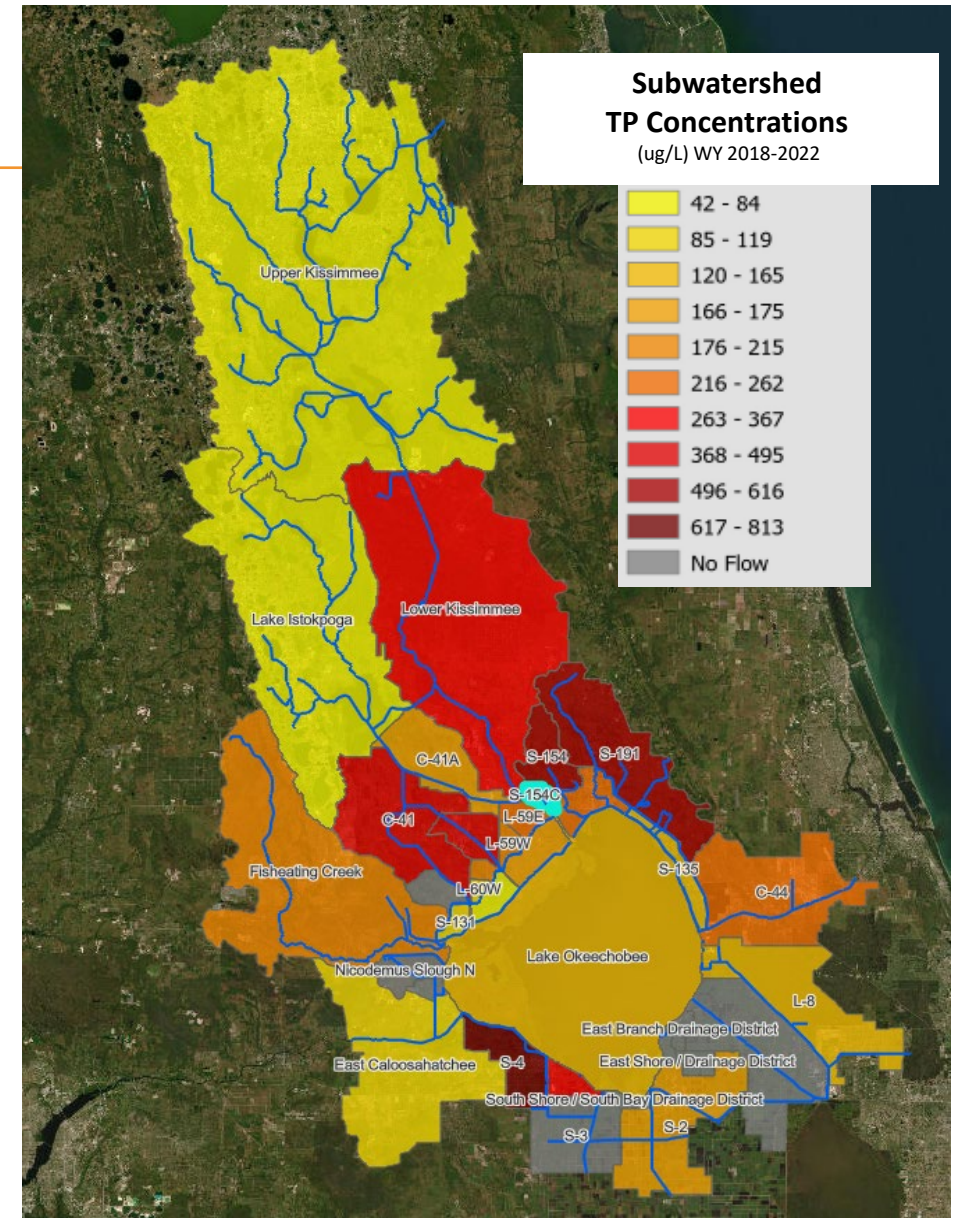
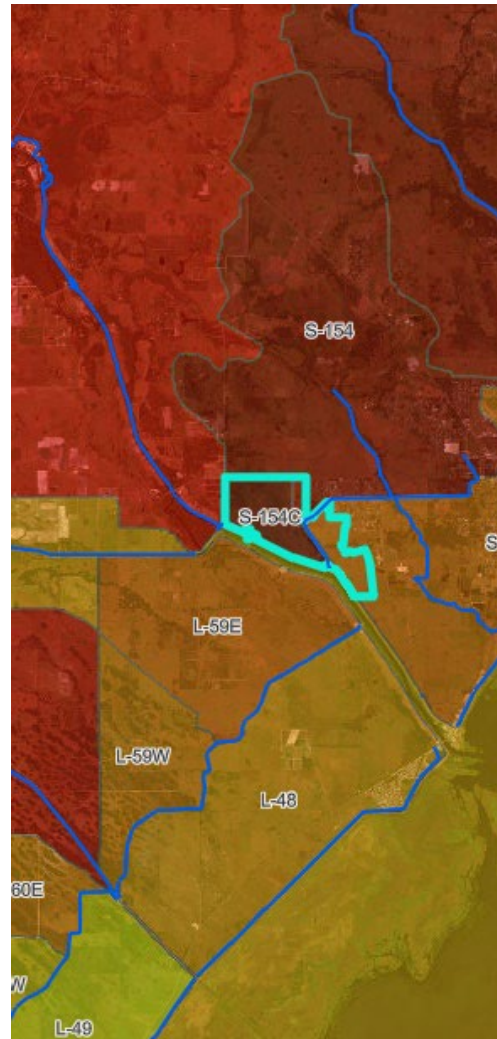
46,900+ Acres of Wetlands Restored and Conserved

6,500 Tons of Nutrient and Sediment Pollution Eliminated Annually

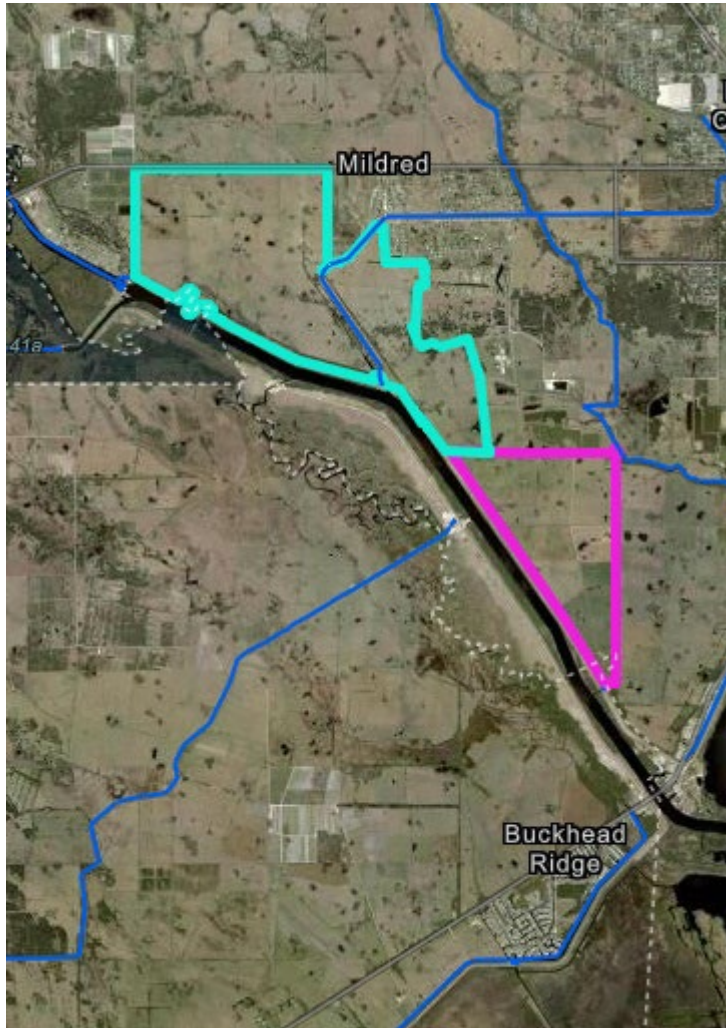


Property Location

- **May 2021:** SFWMD solicited proposals to Design/Build/Operate a stormwater treatment project in the Lower Kissimmee Basin
- **December 2021:** EIP entered into contract with SFWMD



RES Property



- **Spring 2023:** EIP evaluated the possible benefits of adding the RES property to the project.
- **May 11, 2023:** At SFWMD Governing Board Meeting, staff stated they were in discussions with EIP about the possible expansion of the contract to include the RES property.
- **September/October 2023:** SFWMD Governing Board expected to be presented proposal to begin “Exploratory Phase” for EIP land not included in the current proposed project and the RES property.

Exploratory Phase Activities to Date

Biological / Environmental Studies

Geological Studies

Field Surveys

Project Concept Development

Treatment Performance Evaluations

Infrastructure Assessments

Operational Strategy Development

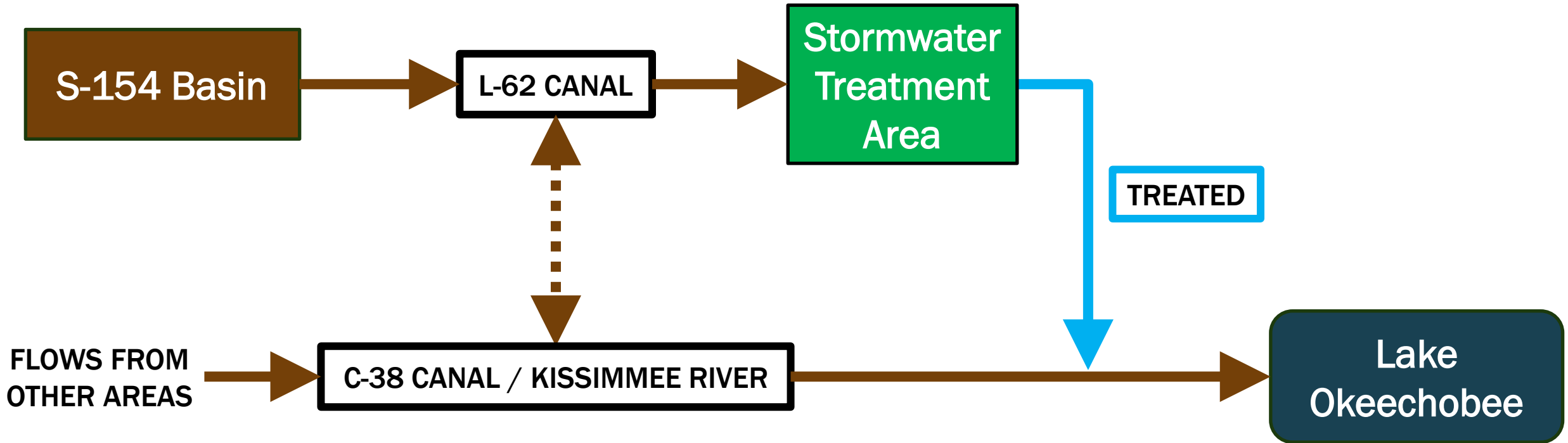
Permit Acquisition Coordination/Planning

Construction Planning

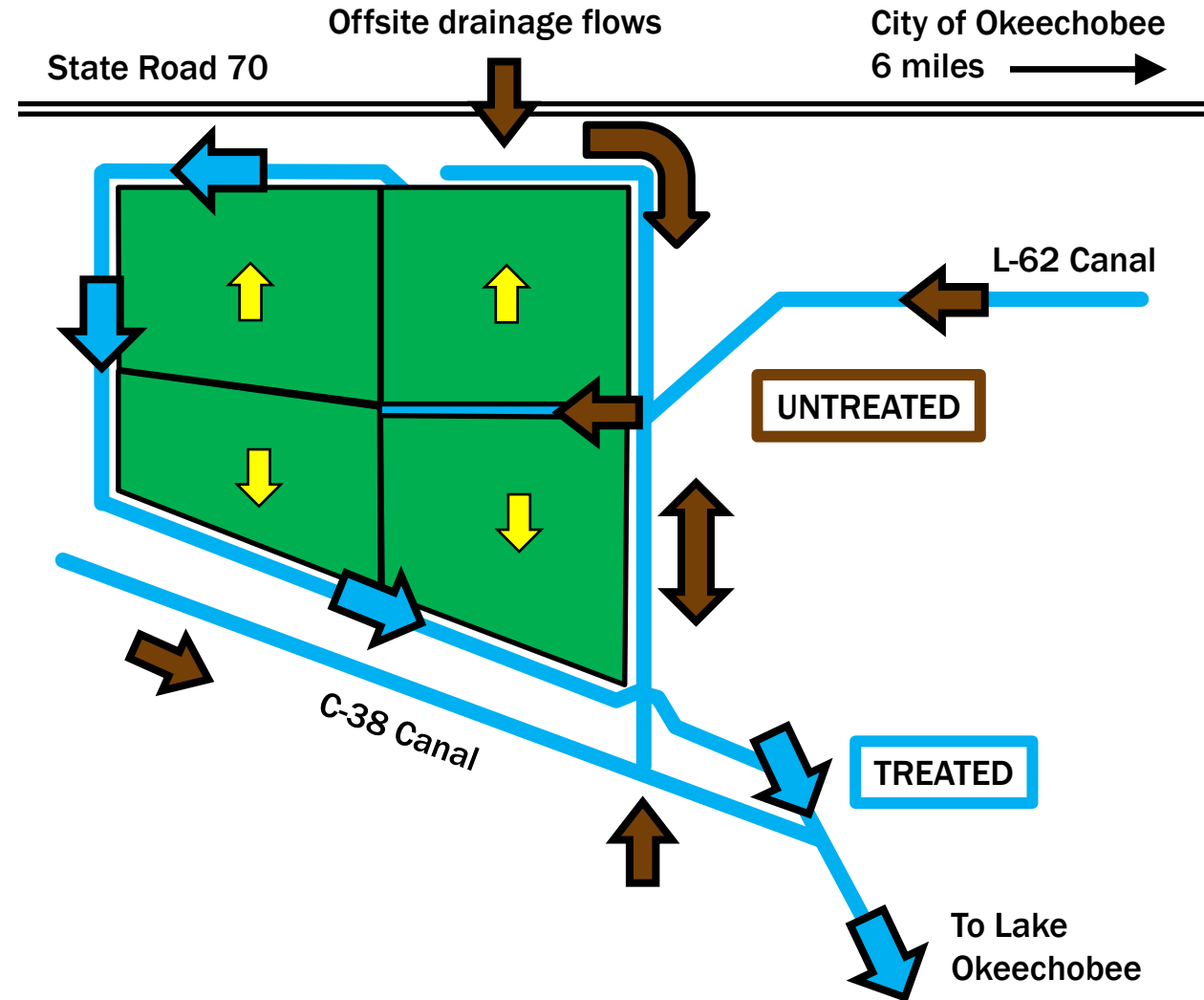
Conclusions

- Project site should be graded flat to facilitate long-term wetland vegetation health and treatment performance
- Re-locating a segment of the L-62 canal enables efficient STA cell configurations and construction methods
- C-38 canal water can be treated if L-62 canal water is not available
- One inflow pump station can convey water from both the L-62 and C-38 Canals

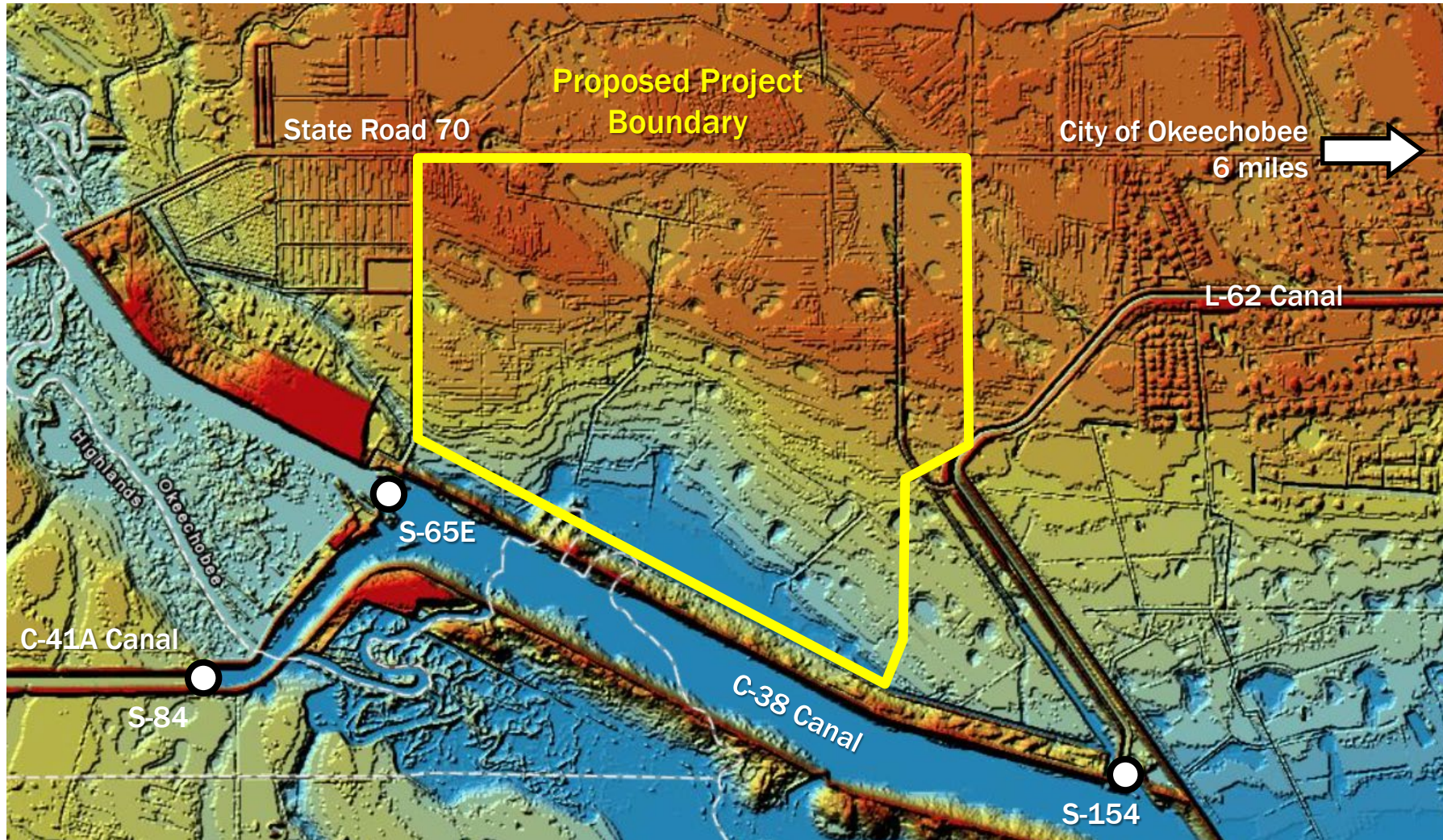
Proposed Project – Concept



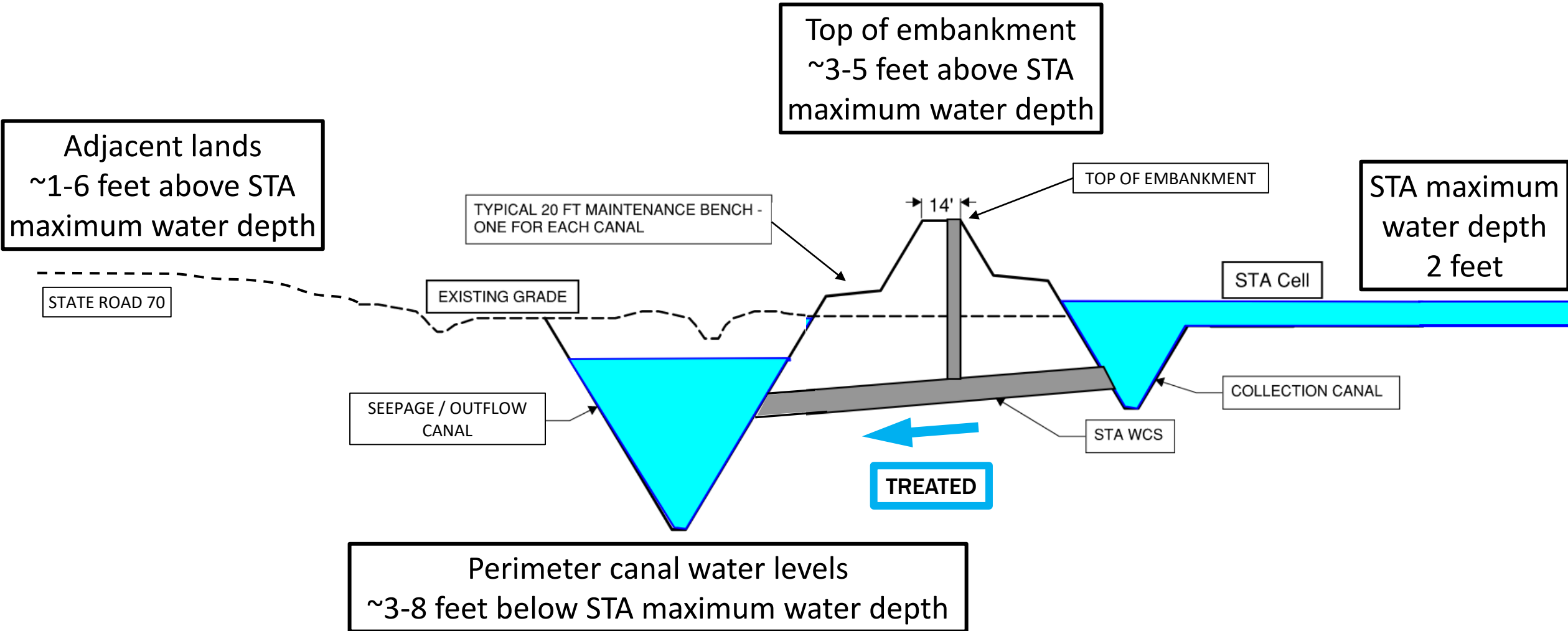
Proposed Project – Concept (cont'd)



Proposed Project – Concept (cont'd)



Proposed Project – Canals and Embankments



Proposed Project – Canals and Embankments (cont'd)



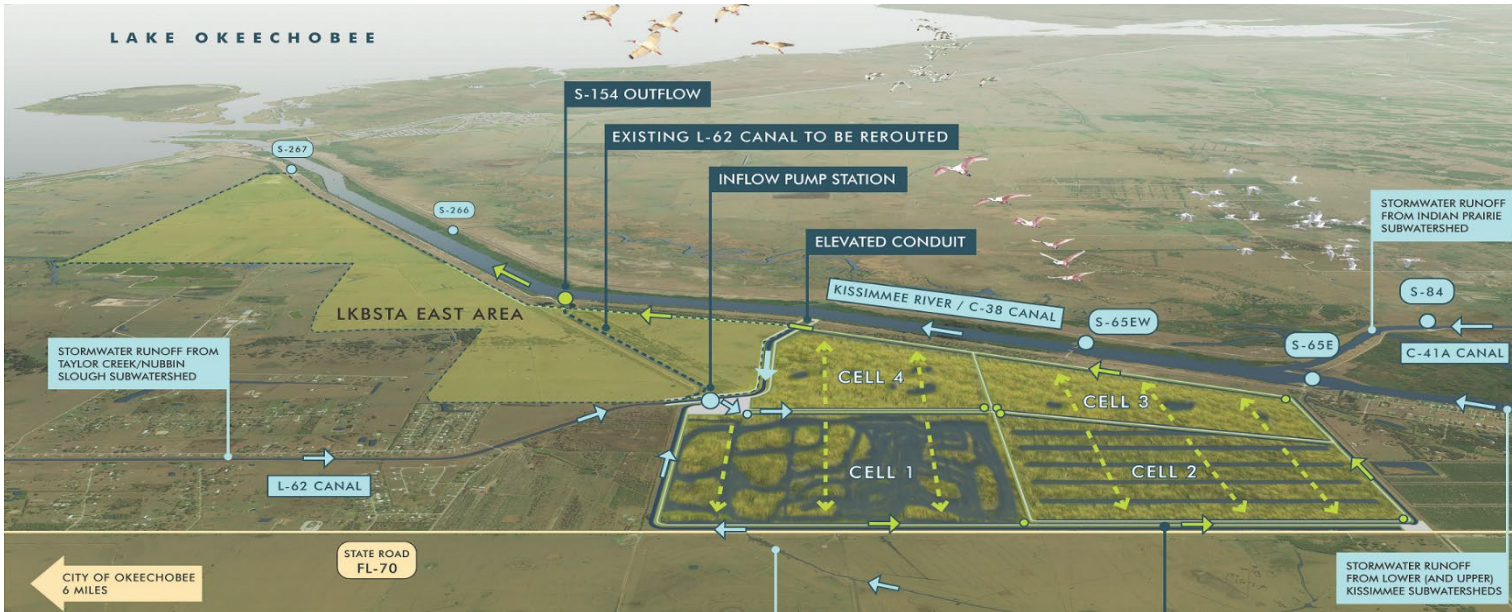
Proposed Project – Water Control Structures



Proposed Project – Public Access and Recreation



Next Steps



August 29, 2023

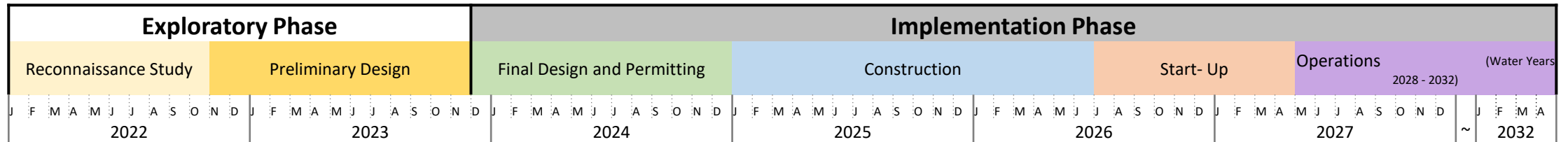
- EIP to hold public information session at Okeechobee Civic Center

September/October 2023

- BOCC briefing (proposed)

November/December 2023

- SFWMD reviews and considers EIP's proposal for Implementation Phase



Questions

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LOWER KISSIMMEE BASIN STORMWATER TREATMENT AREA



LAKE OKEECHOBEE

