Stormwater Treatment & Recreation Area Contract Amendment & Land Acquisition

Jennifer Reynolds, Director
Ecosystem Restoration Division
South Florida Water Management District
Governing Board Meeting
September 11, 2025

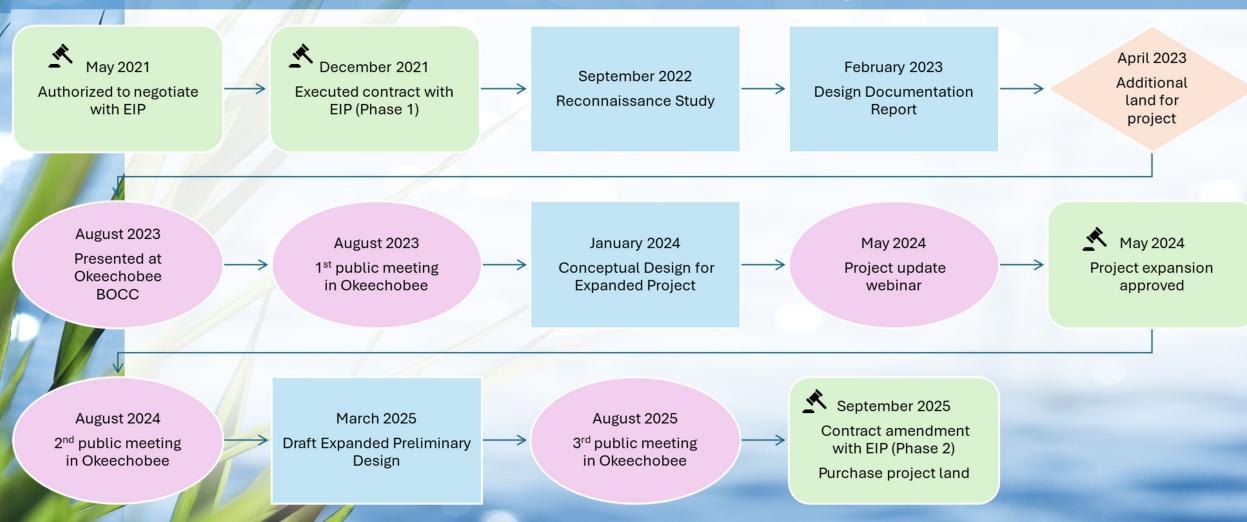


Project Timeline Project Planning: 2019-2021

- **>** 2019
 - September: SFWMD and FDEP begin a public exploration of a project to address Lake Okeechobee pollution
- **>** 2020
 - January: A conceptual project is placed in the Lake Okeechobee BMAP Update to address 3 priority basins
 - October: Grant funding from FDEP is made available for the project
- **>** 2021
 - March: SFWMD solicits proposals to design, construct, and operate the Lower Kissimmee Basin Stormwater Treatment Project
 - April: SFWMD receives proposals from 2 respondents: Ecosystem Investment Partners (EIP) and Resource Environmental Solutions (RES)

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Project Timeline Phase One: 2021-2025

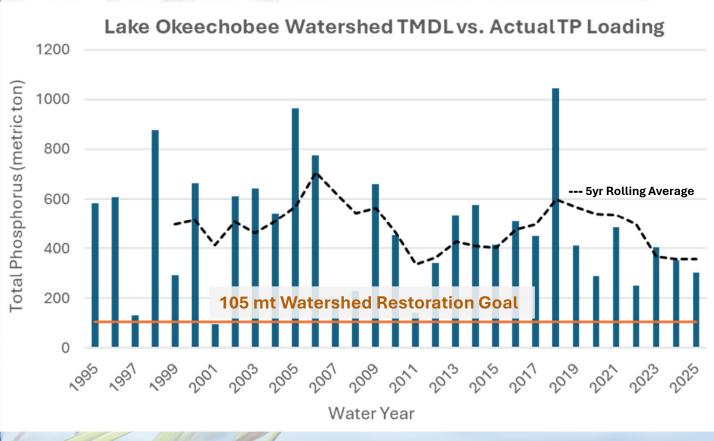


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Presentation Topics

- Location
- Changes in scope
- > Stakeholder input
- Expediting restoration projects
- Price proposal
- Negotiations

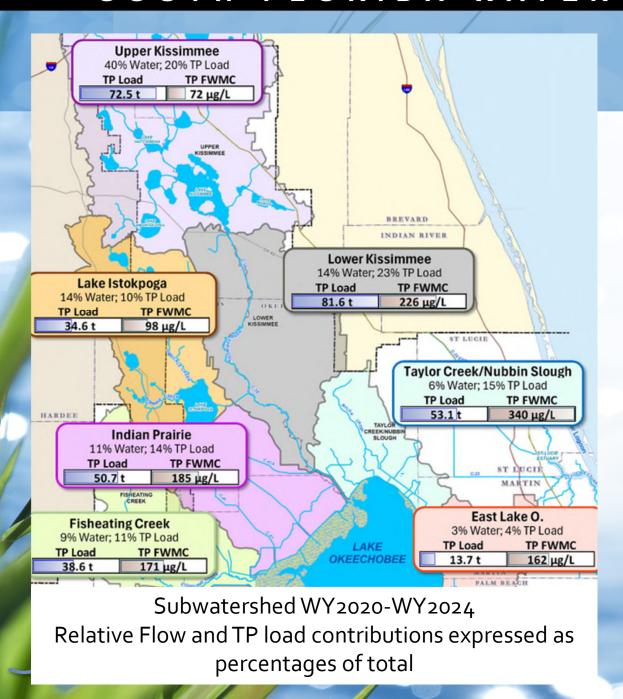
Lake Okeechobee Water Quality



- Latest 5-year average load from the watershed is 358mt
- TP loading is 253mt above the TMDL

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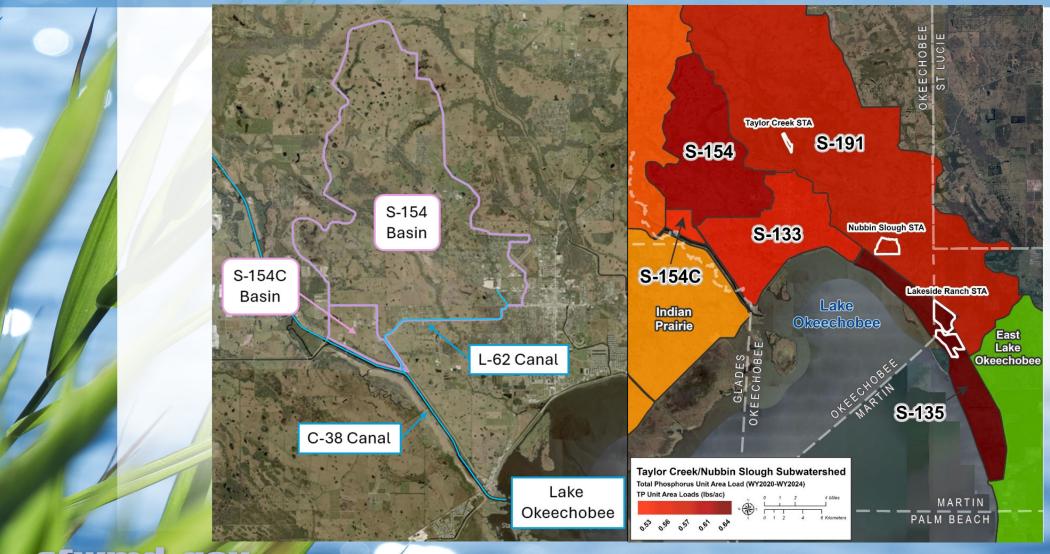
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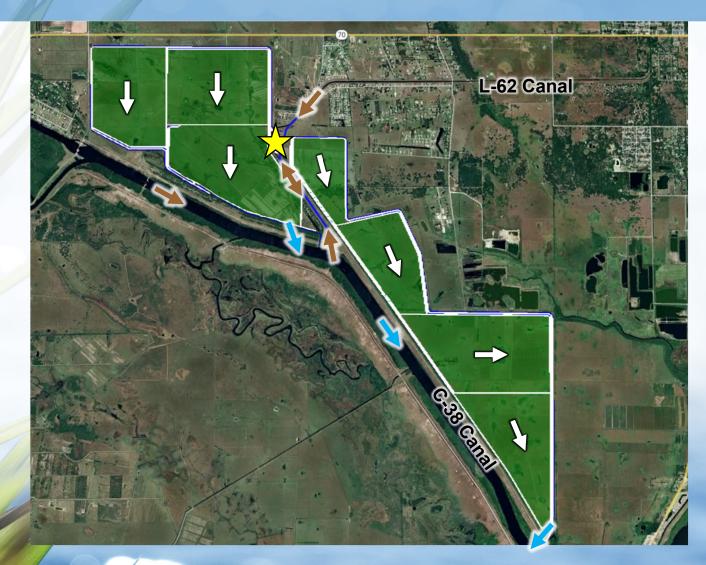
Lake Okeechobee Watershed Water Quality

- Monitoring results show more TP reductions are needed north of Lake Okeechobee
- Highest TP concentrations consistently come from Taylor Creek / Nubbin Slough subwatershed

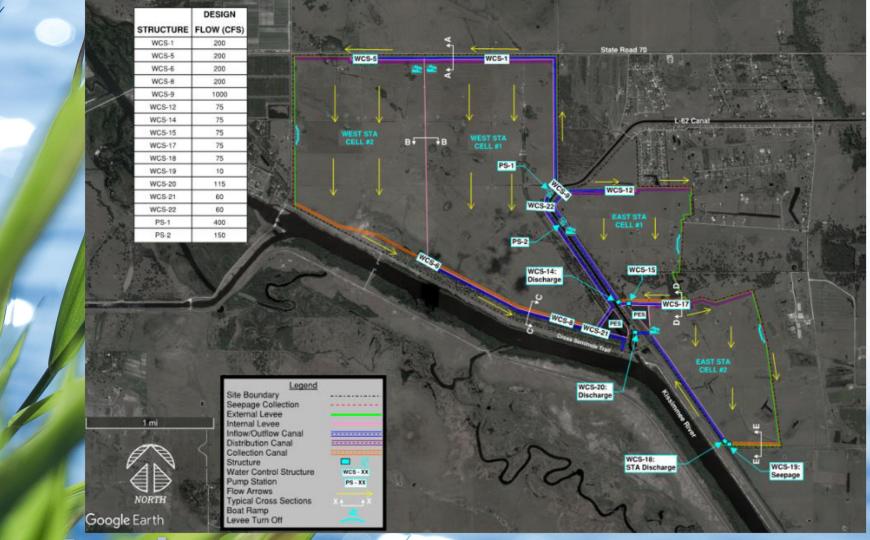
Why This Location?



LKBSTA Project Overview

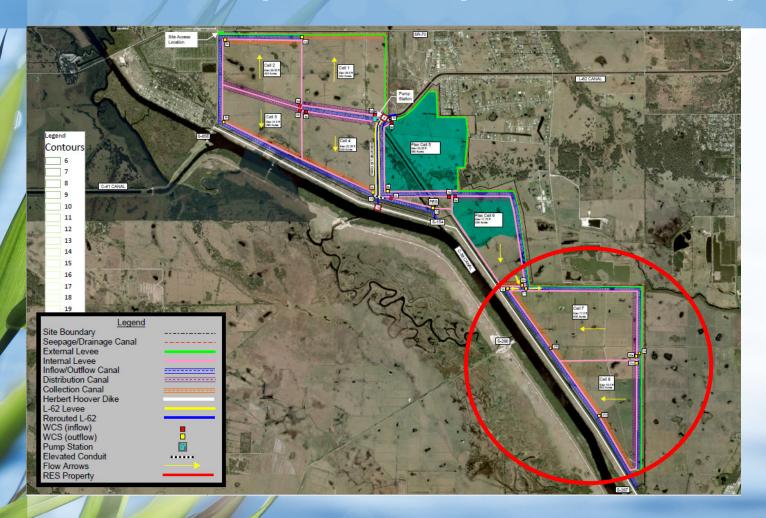


Comparison: Initial Design Concept (Dec 2021)



- > 3,400 acres
- > 13-15 mt/yr TP
- Sloped cells
- Hybrid w/ Innovative Technology
- > 2 pump stations
- Captures S154 flow from L62
- Processes 183-220 kacft annually
- Most cost-effective project to meet minimum standard

Comparison: Updated Concept (Oct 2023)

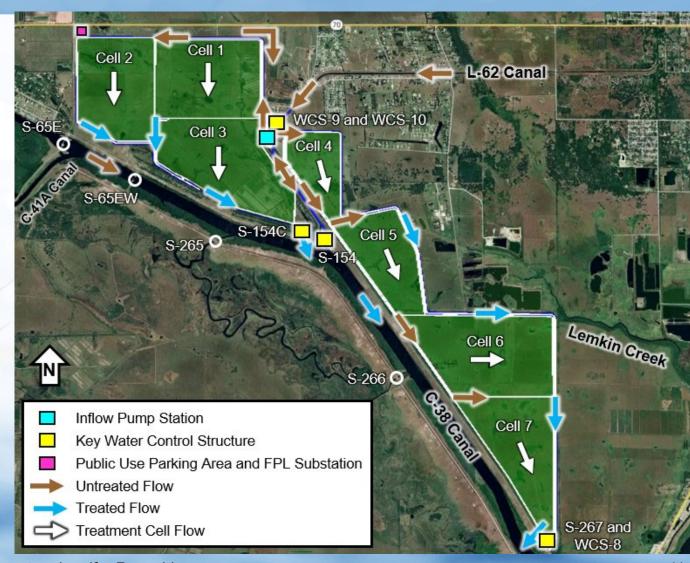


- Adds 50% more treatment area
- Considered various configurations
- > 18-20 mt/yr TP
- Captures 90% of S154 flow from L62

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Comparison: Current Concept (Sept 2025)

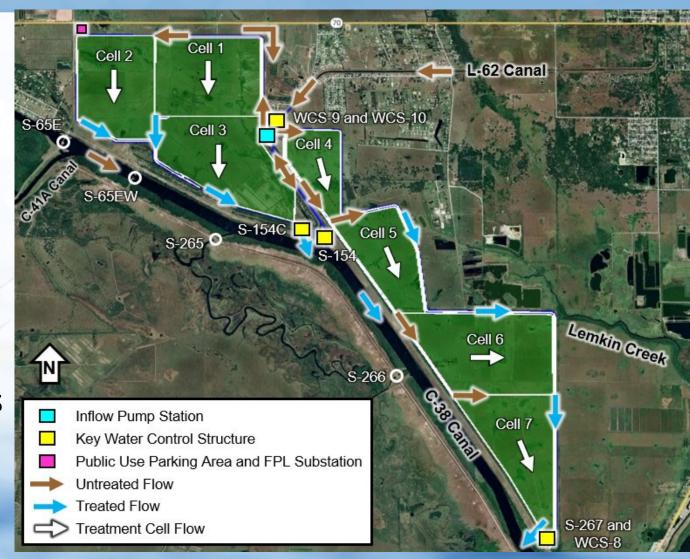
- > 4,800 acres
- > 20-22 mt TP
- Leveled cell floor
- Emergent vegetation
- 600 cfs pump station meets District standards
- Captures 90% of S-154 flow from L62
- Processes 294-359 kac-ft
- Designed to balance cost efficiency and maximum load reduction



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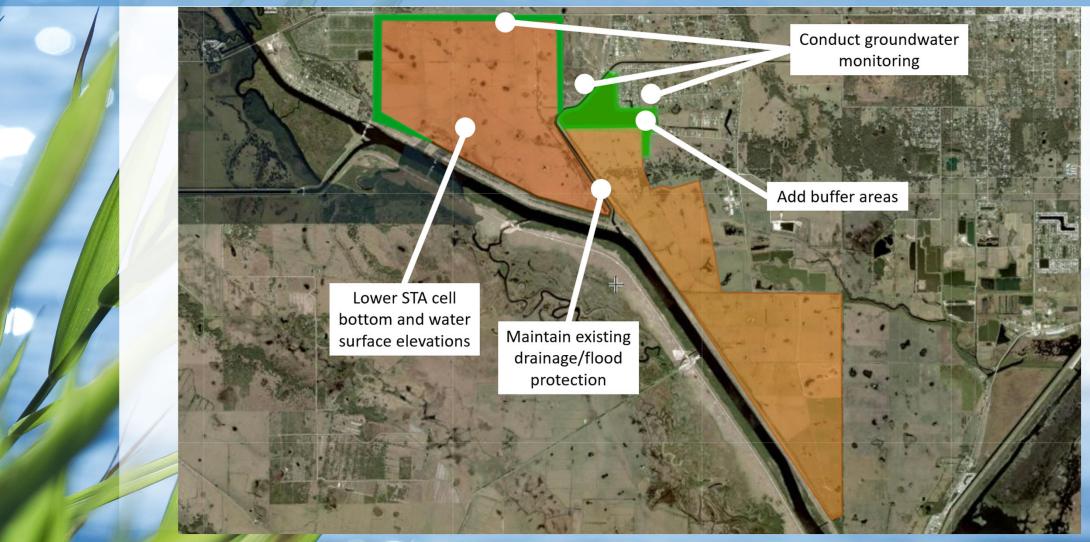
Additional Changes from 2021 to 2025

- Replaces S-154 & S-154C
- Improves L62 Canal
- Allows for operations during maintenance
- Includes FPL substation
- Uses axial flow electric pumps in an enclosed building
- Anticipates long term ops and maintenance



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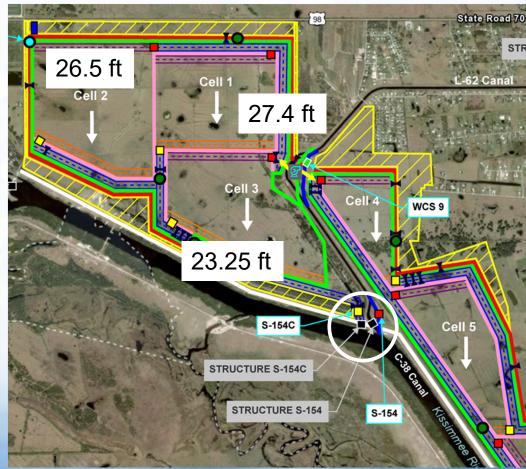
Design Changes Based on Stakeholder Input



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Design Change: Lower Cell Elevations, Improved Flood Protection





Design Change: Groundwater Monitoring

Groundwater Well Data

- LKSTA01M: <u>DbhydroInsightsData</u>
- LKSTA02M: <u>DbhydroInsightsData</u>
- LKSTA03U: DbhydroInsightsData
- LKSTA04U: <u>DbhydroInsightsData</u>
- LKSTA05U: <u>DbhydroInsightsData</u>
- LKSTA06U: DbhydroInsightsData
- LKSTA07U: DbhydroInsightsData
- LKSTA09U: DbhydroInsightsData
- LKSTA10U: <u>DbhydroInsightsData</u>



Groundwater well data available on DBHYDRO Insights.

Find links to specific wells at project website:
SFWMD.gov/LKBSTA



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Design Change: Buffer Areas



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Proposed Recreation Features



- Nature-based recreation activities
 - Hiking
 - Bicycling
 - Wildlife viewing
 - Day use picnic
 - Bank Fishing
- Possible additional recreation
 - Horseback riding
 - Hunting
 - Canoeing or kayaking

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Comments from Public Meeting

- Project website
 - Make procurement information (RFP, contracts) more easily available on project website
 - Post technical reports on project website
- > Technical questions
 - Concerns about raising the water table
 - Questions about drainage and flood protection
- > Recreation
 - Feedback on equestrian access points
 - Feedback on buffer area near Lazy 7

Phase Two Draft Price Proposal

Costs So Far	Price	Paid to Date
Planning & Preliminary Design	\$24M	\$20M

Notes -

• Land: \$41M

Planning & Design: \$82M (\$24M+ \$58M)

• Construction: \$483M

Operations: \$10M

• TOTAL: \$616M

Phase Two Land Acquisition	Price	
Land Acquisition	\$41M	
Phase Two Milestone/Task	Price	Percentage of Phase Two Contract Price
Final Design & Engineering	\$58M	11%
Construction	\$483M	87%
Facility Startup	\$10M	2%
Phase Two Total Price	\$551M	100%

Phase One Payments Tasks 1-3

Task 1: Reconnaissance Study \$2M

- Certified boundary survey and topography
- Phase I Environmental
- Cultural Resources Assessment Survey
- Workshops
- Final Reconnaissance Study approved

Task 2: Design Documentation Report \$4M

- Workshops
- Draft DDR submitted and deemed complete
- Final DDR approved

Task 3: Preliminary Design \$4.6M

- Workshops
- Draft Preliminary Design, specifications, and schedule
- Updated draft Project Operations Manual

Task 1-3 Total: \$10.6M

Phase One Payments Tasks 4-6

Task 4: Project Expansion Planning \$2M

Project expansion planning and expanded project layout development

Task 5: Preliminary Design for the Expanded Project \$9.2M

- Workshops
- Geotechnical data report, early hydraulic & seepage modeling
- Draft expanded preliminary design
- Draft project operations manual
- Permit applications
- Conformed preliminary design
- Groundwater Monitoring

Task 6: Land Transfer Documentation \$1M

- Cultural Resources Assessment Survey
- Environmental Site Assessment
- Boundary Survey

Task 4-6 Total: \$13M

Phase Two Costs – Land Acquisition

- Appraised Value = \$41.25M
- Risk and carrying costs
- District assumes land management
- > Includes land for FPL substation

Phase Two Milestone/Task	Price
Land Acquisition	\$41M
Final Design & Eng	\$58M
Construction	\$483M
Facility Startup	\$10M
Phase Two Total Price	\$592M

Project	Acres	Price per acre
C-25 Reservoir & STA	1583	\$10,100 (\$16M)
S-27 Pump Station	1	\$5M
C23/24 South Reservoir	1167	\$6,900 (\$8M)
Paradise Run	varied	\$8,500-11,000

Phase Two Costs – Final Design

- Industry Standard 5%-20%
- Complexity, scope, & changes
- > Feasibility level modeling in-house
- Pre-engineering during planning
- Engineering during construction
- Investor risk

Phase Two Milestone/Task	Price
Land Acquisition	\$41M
Final Design & Eng	\$58M
Construction	\$483M
Facility Startup	\$10M
Phase Two Total Price	\$592M

Project	Design Price	Construction
C23/24 S Reservoir	\$37M	Out for Bid
A ₂ STA	\$24M	\$265M
Boma Storage	\$7M	\$140M
STA 1W Exp2	\$19.5M	\$97M

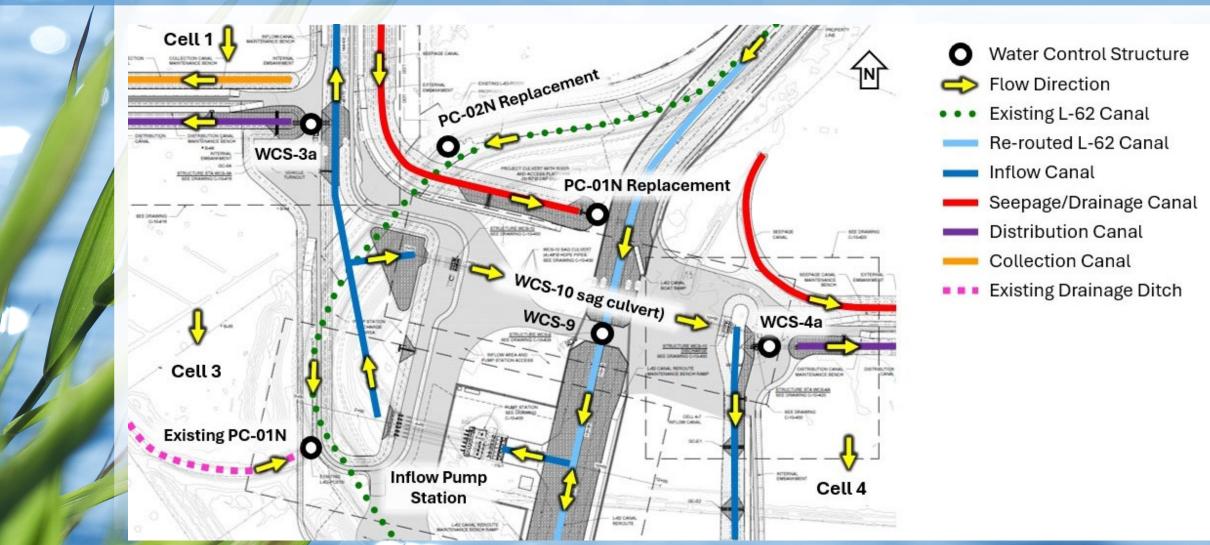
Phase Two Costs – Construction

- Accountable for cost and schedule
- Comparable to recent bids
- Complexity of features
- Proximity to Herbert Hoover Dike
- > Topography requires earthwork

Phase Two Milestone/Task	Price
Land Acquisistion	\$41M
Final Design & Eng	\$58M
Construction	\$483M
Facility Startup	\$10M
Phase Two Total Price	\$592M

Project	Acres	Construction
Hicpochee Phase II	2,000	\$126M
C23/24 S Reservoir	1,167	Out for Bid
A ₂ STA	6,500	\$290M
Pump Station	\$10M	\$10M
L ₂ 8 Culverts – 3 structures	250-400 cfs each	\$50.6M

Pump Station and Structures



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What's Next?

- > Today's resolutions
 - A) LKBSTA Phase Two: Final Design, Construction, Operations
 - Project total not to exceed amount: \$616M
 - B) Land Acquisition
 - Appraised value: \$41.25M
 - C) Advise FDEP of the proposed acquisition and request the release of funds for the acquisition
- Negotiate Phase Two Amendment
- Final Design and Permitting: 2025-2027
- Construction: 2027-2030
- Facility Start Up: 2030-2031

Resolution A

A Resolution of the Governing Board of the South Florida Water Management District authorizing an amendment to the Project Agreement with Ecosystem Investment Partners Florida Water Quality, LLC, for Phase Two of the Lower Kissimmee Basin Stormwater Treatment and Recreation Area (LKBSTA) Project in an amount not to exceed \$615,691,600, for which \$63,800,000 in dedicated funds (State Grant MNo22), including funding for land acquisition, are budgeted in Fiscal Year 2024-2025 and subject to a grant amendment, and the remainder is subject to future DEP grant funding and Governing Board approval of future years' budgets; providing an effective date. (Contract No. 4600004527-A2)

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Resolution B

A Resolution of the Governing Board of the South Florida Water Management District authorizing acquiring land interests containing 4,824.90 acres, more or less, for the Lower Kissimmee Basin Stormwater Treatment and Recreation Area Project in Okeechobee County, in the amount of \$41,250,000, plus associated costs, for which dedicated funds (State Grant MNo22) are budgeted in Fiscal Year 2024-2025; providing an effective date.

Resolution C

A Resolution of the Governing Board of the South Florida Water Management District advising the Florida Department of Environmental Protection of the proposed acquisition of land interests containing 4,824.90 acres, more or less, for the Lower Kissimmee Basin Stormwater Treatment and Recreation Area Project in Okeechobee County, and requesting the release of funds in the amount of \$41,250,000, and associated costs, from the dedicated funds (State Grant MNo22) for the acquisition of such land interests; providing an effective date.