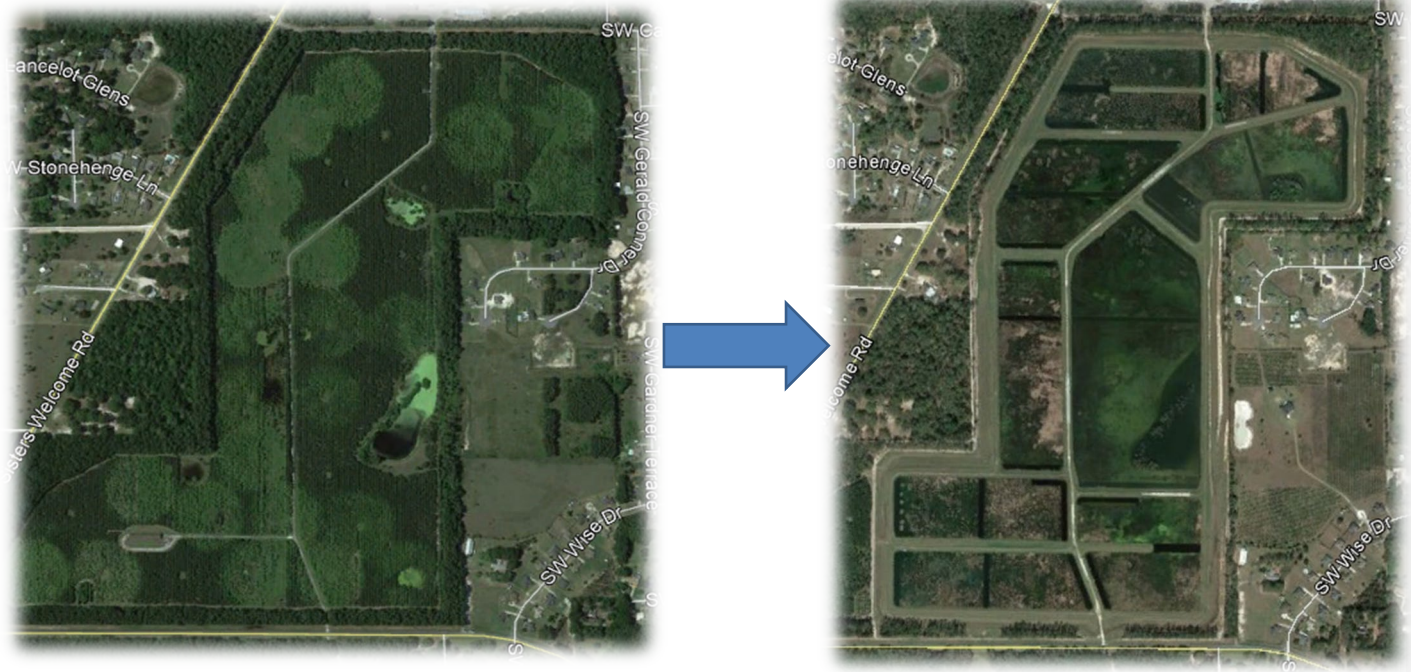


Proposed Recharge Wetland Expansions



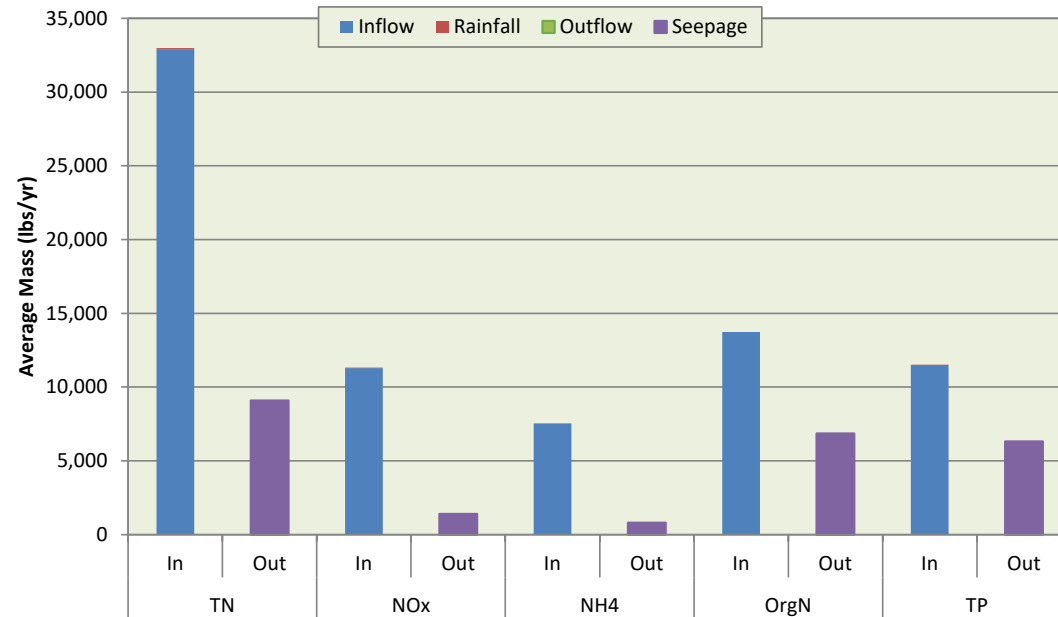
Existing Wetland Project Timeline

- 2006 – Concept proposed
- 2013 – SRWMD submitted project for FDEP “Springs Funding”
- 2014/15 – RFP, Design and Permitting
- 2015/17 – Construction
- 2017 to Present – Operation



Existing Project Performance

- Reduced TN from 7.0 mg/L to 1.9 mg/L
- Removed 162,000 lbs TN
- Removed 28,000 lbs TP
- Recharged ~3.6 billion gallons
- ~500,000 GPD increase in recharge



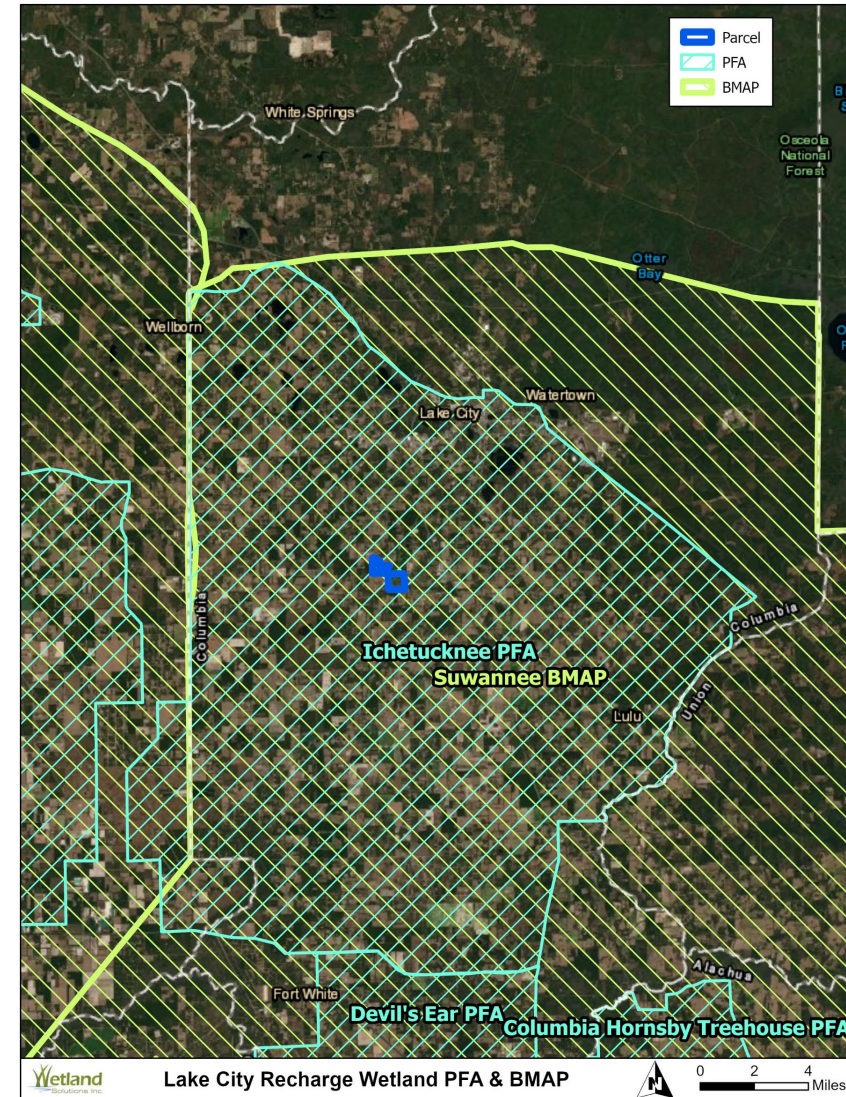
Existing Wetland Grant Project (LP 12031)

- Permit and Construct Recharge Well
 - UIC Permit Issued – 5/9/2022
 - Requires exemptions for color and odor
 - Requires filtration and disinfection prior to discharge
 - Routine monitoring costs estimated at \$50,000/yr
- Construct Gravity Pipeline Modifications
 - Design complete – February 2022
 - Construction permit complete – April 2022
 - Materials delivered
 - Construction – March/April 2023
- Construct Inlet Structure Modifications
 - Design and permitting completed
 - Bids solicited – March 2022
 - Bids rejected – April 2022
 - Design revisions underway
 - Rebid package late 2023
- Recharge Alternative
 - 5-yr expiration on UIC permit
 - Modify grant to allow for passive recharge zone design and construction
 - Proceed with design and construction
 - Goal to complete within original grant budget



Drivers for Wetland Expansions

- Existing wetland and sprayfields located in the Ichetucknee PFA
- Santa Fe River BMAP, AO227NE (SM), AO242NE (KL) require enhanced treatment for nitrogen (3 mg/L)
- Growth in the City's service area increasing flows to treatment facilities



AO 227 NE – St. Margarets WRF

- March 2022 – Plan
- September 2022 – Implementation
- September 2025 – Compliance
 - Annual average TN < 3 mg/L

	ACTION ITEM	DUE DATE
i.	Submit a plan of action to achieve the total nitrogen (TN) limit within Specific Condition Number I.A.1.	March 1, 2022
ii.	Implement the plan of action	September 1, 2022
iii.	Submit first report summarizing progress toward compliance with final limit for TN.	March 1, 2023
iv.	Submit second report summarizing progress toward compliance with final limit for TN.	September 1, 2023
v.	Submit third report summarizing progress toward compliance with final limit for TN.	March 1, 2024
vi.	Submit fourth report summarizing progress toward compliance with final limit for TN.	September 1, 2024
vii.	Submit fifth report summarizing progress toward compliance with final limit for TN.	March 1, 2025
viii.	Submit final report summarizing the facility will meet and be in compliance with final limit for TN.	September 1, 2025



AO 242 NE – Kicklighter WRF

- March 2023 – Plan (same as SM plan)
- September 2023 – Implementation
- September 2025 – Compliance
 - Annual average TN < 3 mg/L

	ACTION ITEM	DUE DATE
i.	Submit a plan of action to achieve the total nitrogen (TN) limit within Specific Condition Number I.A.1.	March 1, 2023
ii.	Implement the plan of action	September 1, 2023
iii.	Submit first report summarizing progress toward compliance with final limit for TN.	March 1, 2024
iv.	Submit second report summarizing progress toward compliance with final limit for TN.	September 1, 2024
v.	Submit third report summarizing progress toward compliance with final limit for TN.	March 1, 2025
vi.	Submit final report summarizing the facility will meet and be in compliance with final limit for TN.	September 1, 2025



Wetland Expansion – Steedley

- Grant LPS0090
- Meets BMAP requirements for flow sent to the site
- Reduces TN load by additional 5,000 lbs/yr
- Increases recharge by 225,000 GPD
- Cost-effectiveness compared to AWT upgrades for St. Margarets and Kicklighter
- Can be operational by AO deadline



Steedley Submitted to SRWMD on 12/15/21

Task	Date	Duration (Months)	Estimated Cost
Funding Received/Contracting	10/1/2022	3	
Design Commencement	1/1/2023	12	
Permitting	1/1/2023	6	\$490,000
Construction Bidding	1/1/2024	3	\$30,000
Construction Commencement	4/1/2024	18	\$4,540,000
Construction Oversight/Inspection	4/1/2024	18	\$320,000
Construction Completed	9/30/2025	0	
Monitoring & Reporting	10/1/2025	24	\$110,000
Contingency			\$610,000
Total			\$6,100,000



Wetland Expansion - South Field

- Meets BMAP requirements for flow sent to the site
- Reduces TN load by additional 13,000 lbs/yr
- Increases recharge by 660,000 GPD
- Cost-effectiveness compared to AWT upgrades for St. Margarets and Kicklighter
- Likely not operational by AO deadline, but actual flows will meet BMAP requirements



South Submitted to SRWMD on 12/16/22

Task	Date	Duration (Months)	Estimated Cost
Funding Received/Contracting	12/1/2023	3	\$920,000
Design Commencement	1/1/2024	12	
Permitting	1/1/2024	6	
Construction Bidding	1/1/2025	3	\$30,000
Construction Commencement	4/1/2025	18	\$8,390,000
Construction Oversight/Inspection	4/1/2025	18	\$610,000
Construction Completed	9/30/2026	0	\$150,000
Monitoring & Reporting	10/1/2026	24	
Contingency			\$1,200,000
Total			\$11,300,000



Questions?

