



LOWER SANTA FE AND ICHETUCKNEE RIVERS MINIMUM FLOWS AND LEVELS RULE DEVELOPMENT WORKSHOP

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Suwannee River Water Management District Headquarters/Live Oak, FL | July 25, 2025



LOWER SANTA FE AND ICHETUCKNEE RIVERS MINIMUM FLOWS AND LEVELS RULE DEVELOPMENT WORKSHOP AGENDA

Workshop Agenda:

1. Call to Order.
2. Overview.
3. Draft Rules and Implementation Strategy.
4. Public Comments.
5. Next Steps.
6. Adjourn.

Link to Rulemaking Website:

<https://floridadep.gov/owper/water-policy/content/lower-santa-fe-and-ichetucknee-rivers-lsfir-and-priority-springs-minimum>

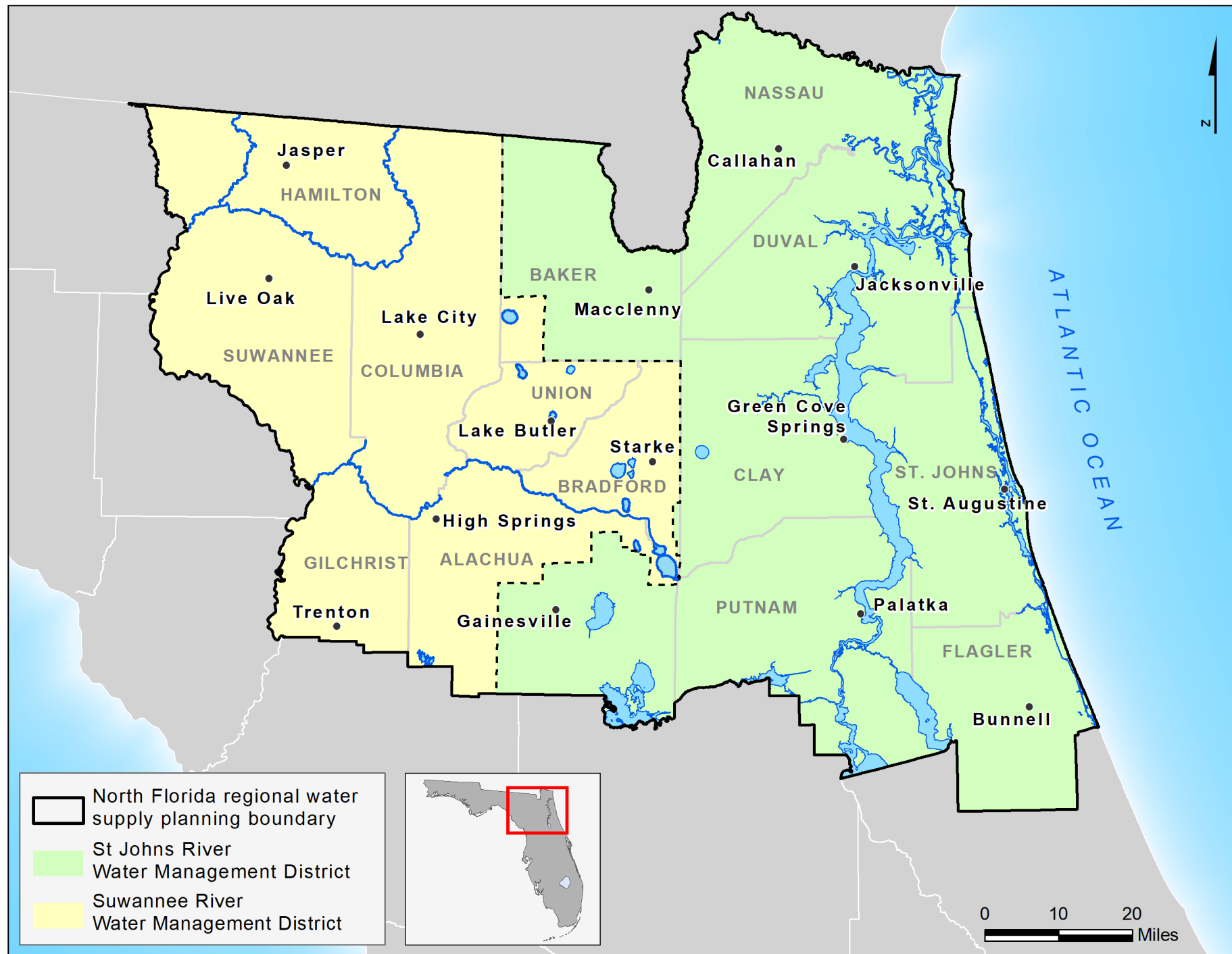


SCAN THE QR CODE TO ACCESS WORKSHOP MATERIALS



OVERVIEW OF LSFIR MFLS RULE DEVELOPMENT

- MFLs are “the limit at which further withdrawals would be significantly harmful to the water resources or the ecology of the area.”
- The purpose of this rule development is to replace the previously-adopted minimum flows (MFLs) for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs (LSFIR) with the adoption of new MFLs and an associated implementation strategy.
- Department-adopted MFLs and applicable implementation strategies are effective in all applicable water management districts without the need for further rulemaking and generally affect water use permittees.





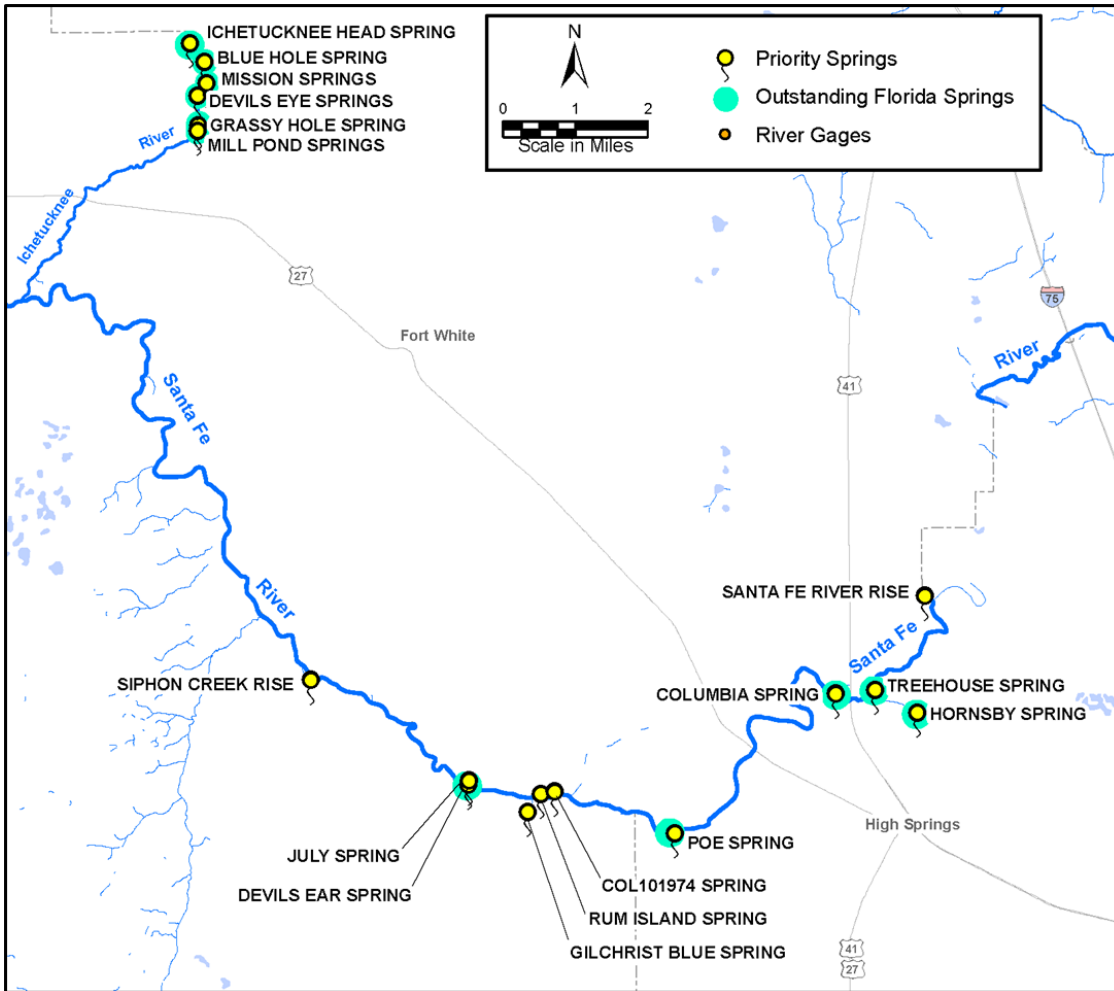
OVERVIEW OF LSFIR MFLS




- **Sets the MFLs as the P50 for the river and springs for each MFL Compliance Point:**

Watercourse	MFL Compliance Point	Minimum P50 Flow in cubic feet per second (cfs)
Lower Santa Fe River and Santa Fe River Rise, Treehouse Spring, Hornsby Spring and Columbia Springs	Lower Santa Fe River at the HWY 441 gage/USGS Gage No. 02321975	502
Lower Santa Fe River and Poe Spring, COL101974 Spring, Rum Island Spring, Gilchrist Blue Spring, Devil's Ear Spring, July Spring and Siphon Creek Rise	Lower Santa Fe River at the Ft. White, FL gage/USGS Gage No. 02322500	1,167
Ichetucknee River (Ichetucknee Springs Group)	Ichetucknee River at the HWY 27 gage/USGS Gage No. 02322700	346



OVERVIEW OF LSFIR MFLS



- MFL is currently not met  Recovery Strategy needed
- MFL met, expected to fall below MFL during the next 20 years  Prevention Strategy needed
- MFL met, expected to be met for next 20 years  No Recovery or Prevention Strategy needed

Lower Santa Fe Fort White	Lower Santa Fe Hwy 441	Ichetucknee Hwy 27
Meeting	Recovery	Recovery



Implementation Strategy Requirements

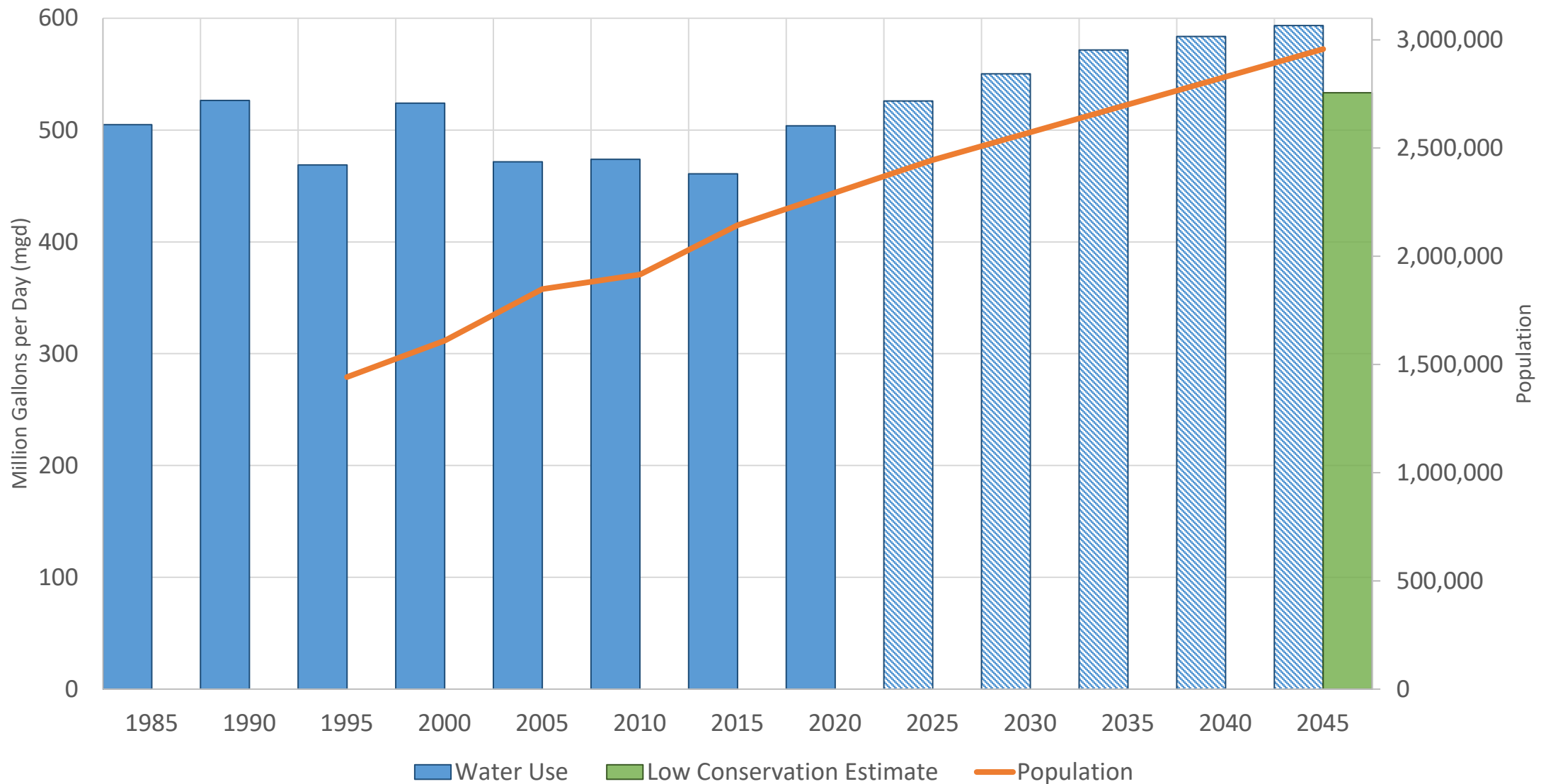


- **The Strategy must:**
 - **Be adopted concurrently with the MFL**
 - **Be expeditiously implemented**
 - **Include a phased approach or timetable:**

“which will allow for the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures concurrent with and, to the maximum extent practical, to offset reductions in permitted withdrawals” (s.373.0421(2), F. S.)

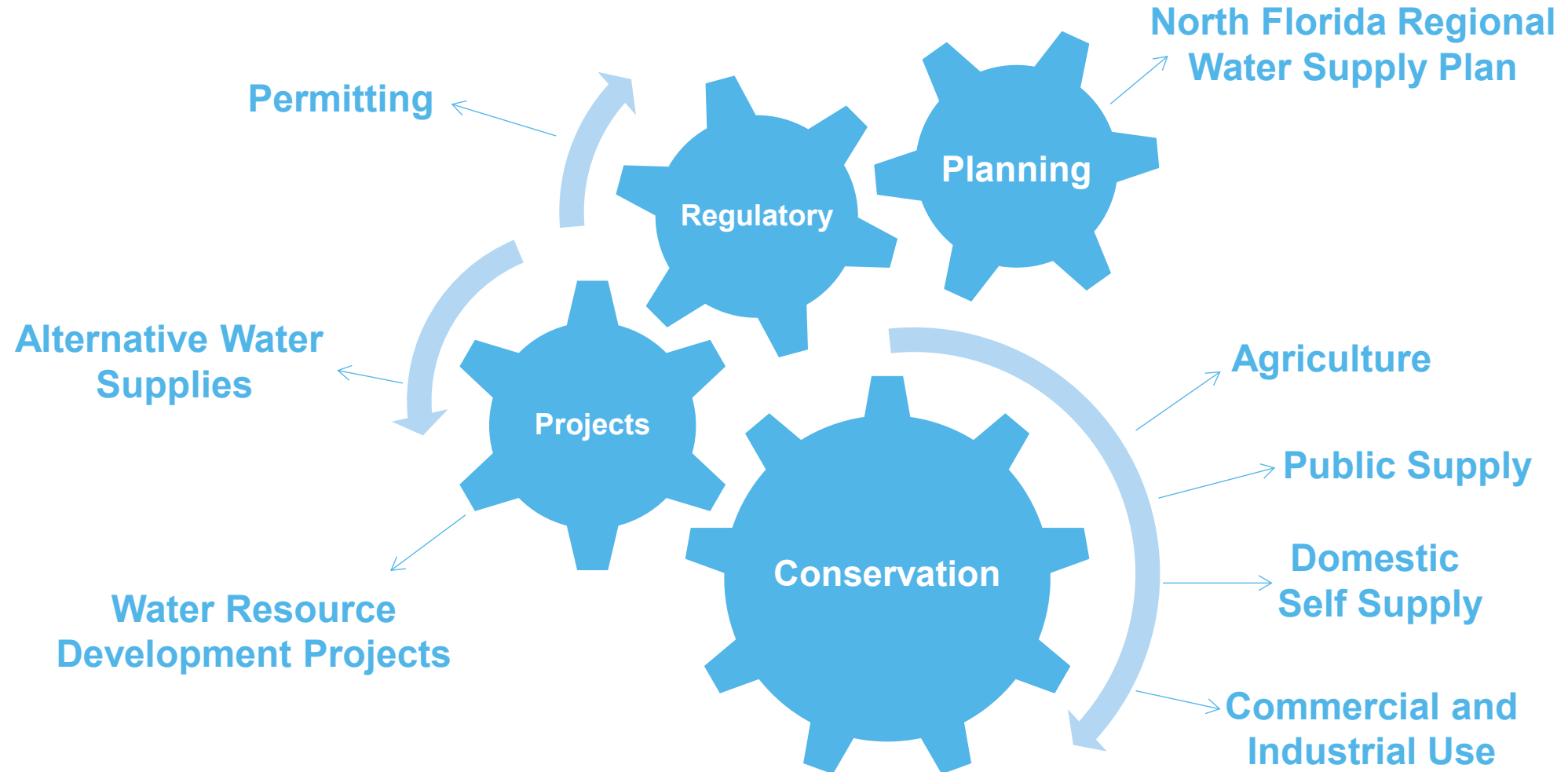


NFRWSP Water Use Estimates, Population and Projections with Conservation





Implementation Strategy Components





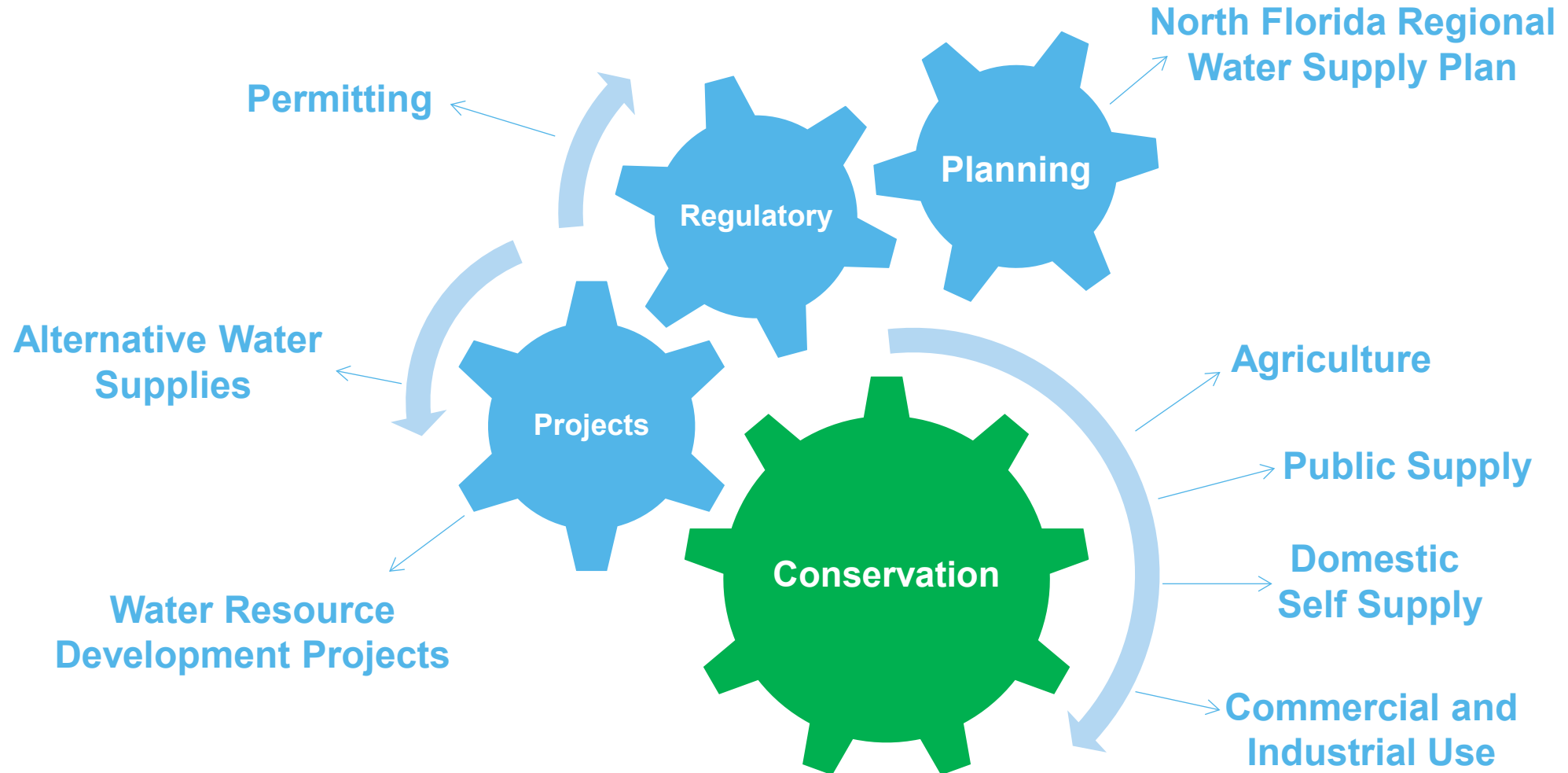
Regional Project Options



- **Agricultural Water Conservation**
- **Florida Water Star Silver Plus Implementation**
- **Black Creek Water Resource Development Projects**
- **WATER FIRST North Florida**
- **115 additional project options are included in Appendix B of the implementation strategy**



COMPONENT 1 - CONSERVATION





Agricultural Water Conservation Cost Share



Cost share on water saving measures including:

- **Soil Moisture Sensor Based Scheduling**
- **Irrigation System Retrofits**
- **Remote Control and Monitoring**

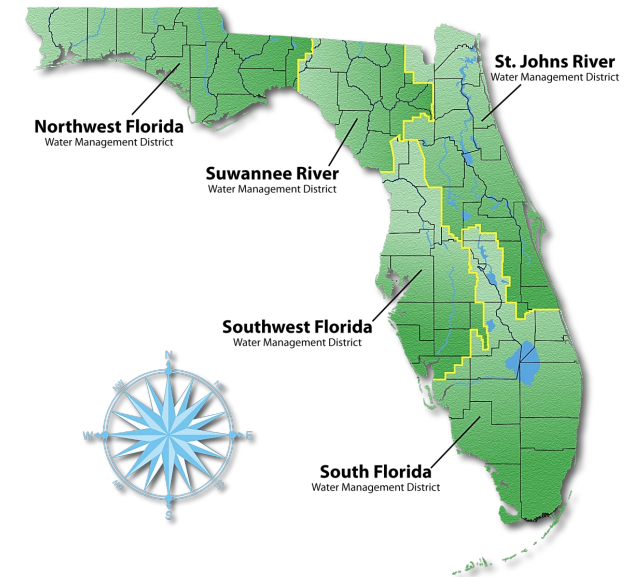




Public Water Supply-Florida Water Star

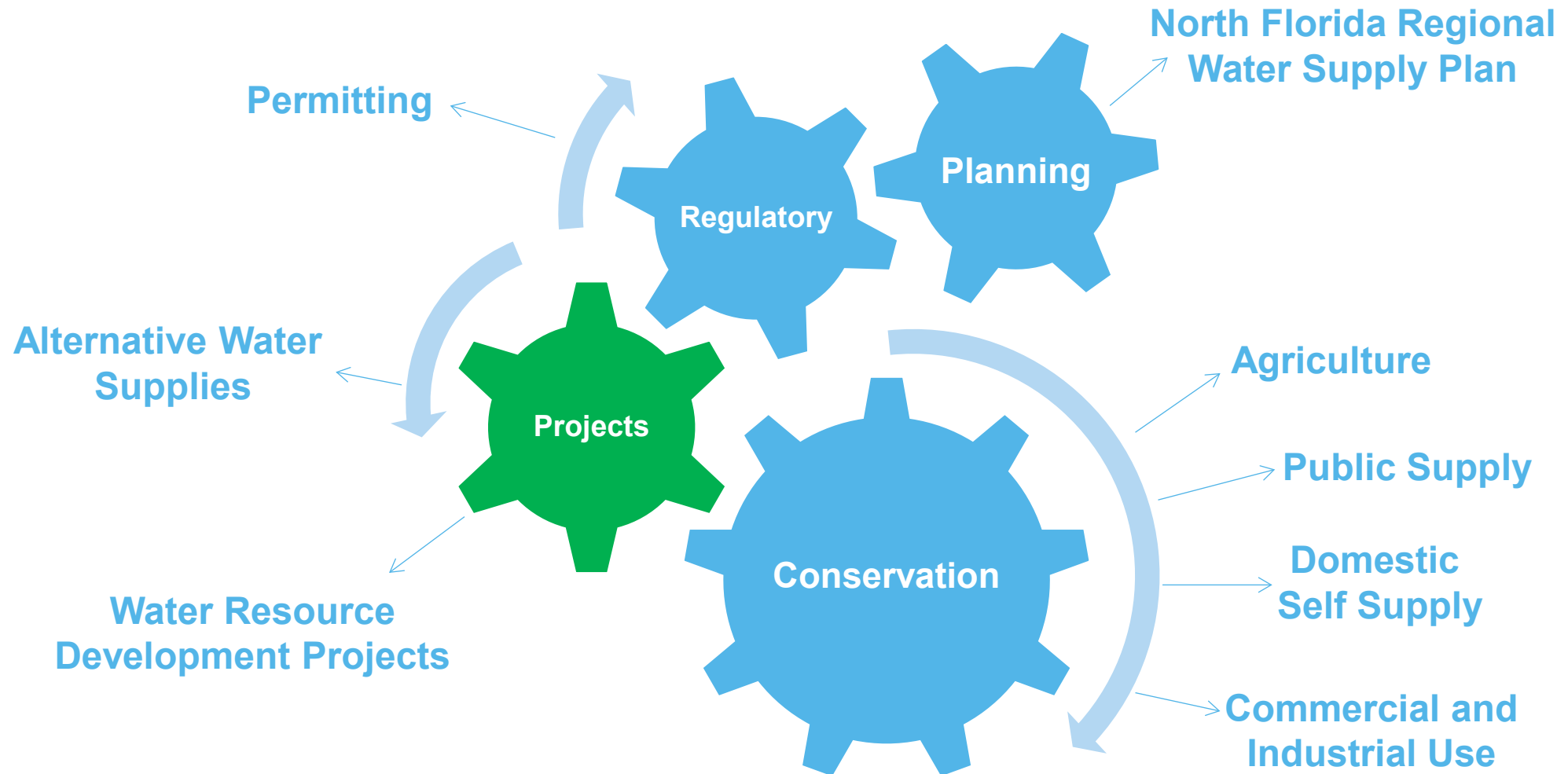


A FWS home saves an average of 48,000 gallons annually and its criteria are included in many local codes. Over 12,000 certifications to date.





COMPONENT 2 - PROJECTS





Public Supply Water Supply Projects



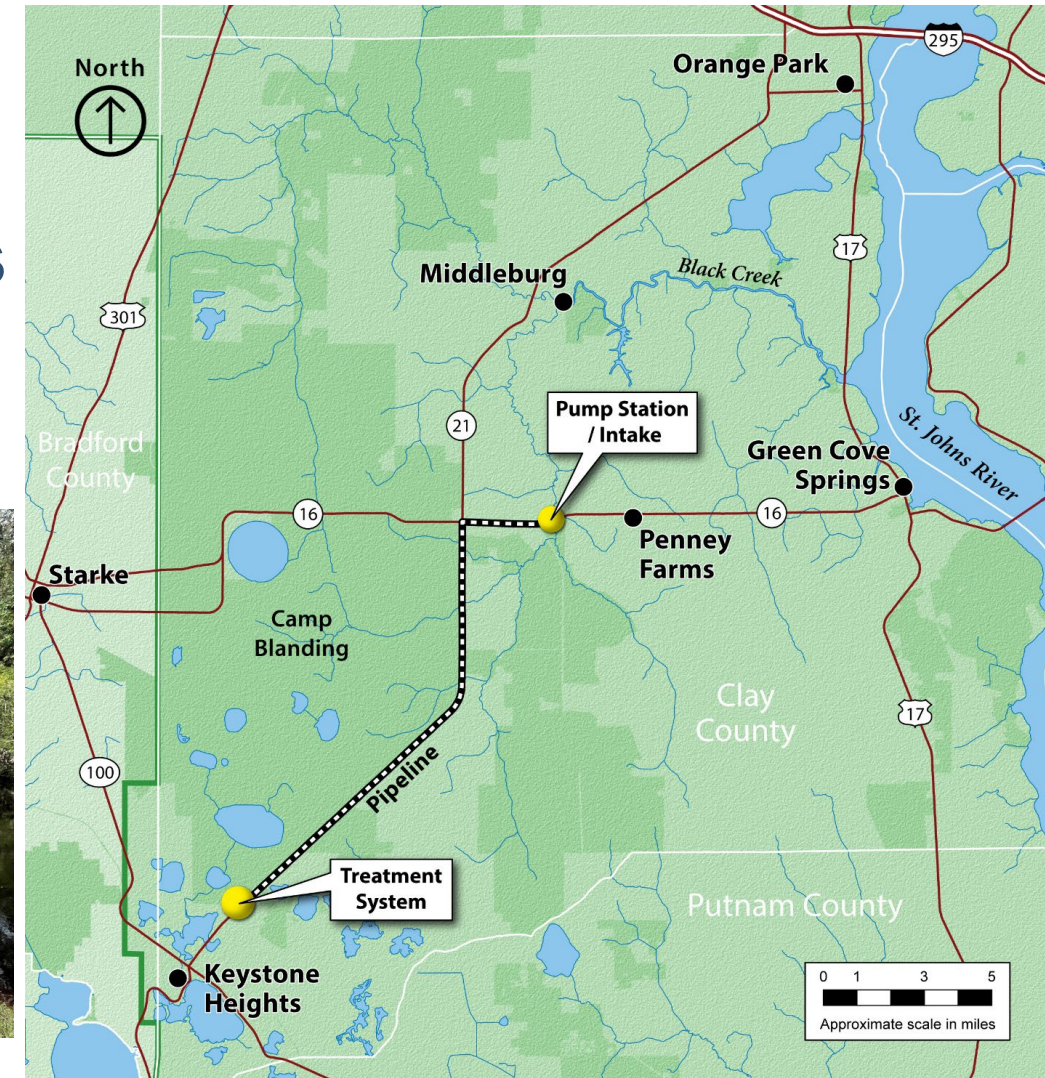
	Total # of projects completed	Water /Reuse Made Available (MGD)	State & District Funding	Project Cost
2015-present	54	50.1	\$24,000,000	\$159,000,000



Regional Project - Black Creek



- Up to 10 mgd of aquifer recharge
- 30-inch transmission main, 17-miles
- Regional aquifer recharge

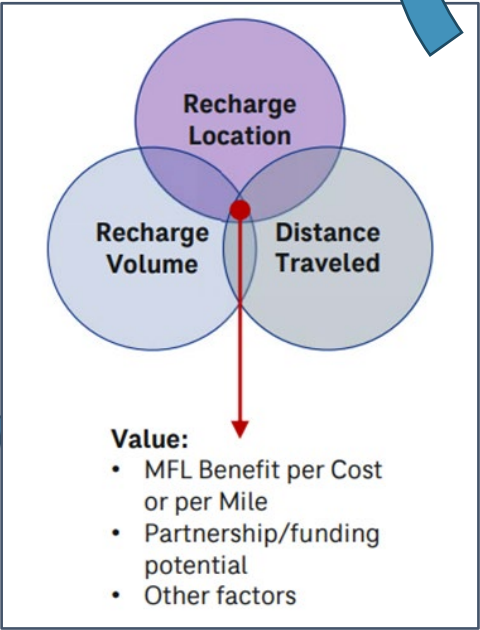
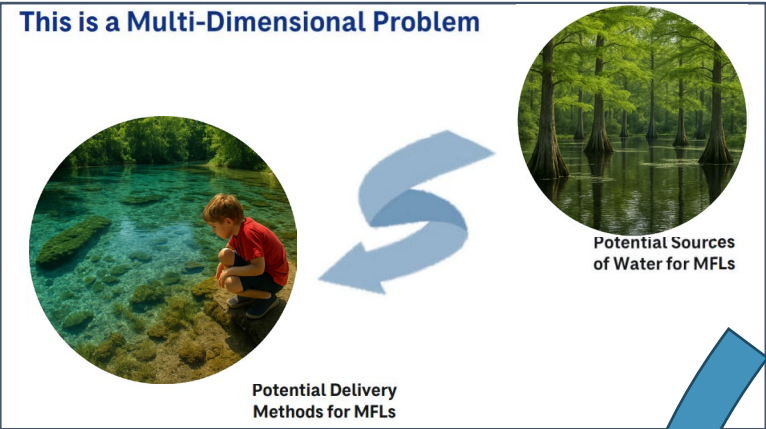




North Florida Regional Water Supply Plan Project Conceptualization



- Cooperative funding agreement with SJRWMD, SRWMD, FDEP and four NE Florida utilities
- Evaluate potential project options for the North Florida Partnership area



Comparative process to select project that results in aquifer recharge and flow restoration in Outstanding Florida Springs

DEFINITIONS OF ALTERNATIVES					PRINCIPAL QUANTITATIVE FACTORS						QUALITATIVE FACTORS			OTHER QUANTITATIVE FACTORS						
ID #	Source	Recharge Site (see note 1)	Volume (MGD)	Recharge Efficiency	Recharge Method	MFL Benefit (Schubert) (\$/yr)	MFL Benefit (Snyder) (\$/yr)	TOTAL COST (Source: Buckman, Tulliver, Commercial, Heritage)				ANCILLARY BENEFITS	IMPLEMENTATION EASE	PROJECT DEVELOPMENT TIME	OPERATIONAL COMPLEXITY	SOURCE WATER RELIABILITY	POTENTIAL FOR REGIONAL BENEFITS (CFS)	OTHER CONSIDERATIONS		
								Capital Cost (High) (\$M)	Capital Cost (Low) (\$M)	Operating Cost (High) (\$/yr)	Operating Cost (Low) (\$/yr)									
1	Buckman WRF Full	Best Full MFL Target Balance	25	100%	Injection	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	506.2	12.5	506.2	12.5	22.2	• \$5.0M • Recharge restoration • Land acquisition (H) • Compliance (H)	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	20+ Years	• Governance (H) • Monitoring (H) • Training (H)	100%	1.5		
2		Initially Shovelcast 3. Move to Kirby PG based on Hydrogeologic Analysis	25	90%	Wetland	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	425.5	9.0	318.3	2.2	21.3	• \$5.0M • Recharge restoration • Water quality improvement	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	20+ Years	• Governance (H) • Monitoring (H) • Training (H)	100%	0.9		
3	Buckman + Southwest (NEW TREATMENT OPTIONS)	Best Full MFL Target Balance (OR Kirby PG if Wetland/Reg)	40	90%	Wetland Treatment + RD	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	857.0	15.0	706.6	6.6	25.4	• \$10.0M • Recharge restoration • Water quality improvement	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	20+ Years	• Governance (H) • Monitoring (H) • Training (H)	100%	1.8	Treatment wetland in Duval County, 1500 Acres on Peterson Tract accessible to SRW. Future flexibility with using water. Could use RD or injection in recharge zones, as well as multiple recharge sites (not currently owned). High cost is RD recharge with RD + AOC treatment, low cost is injection with only wetland treatment.	
4	GRU WWTP Transfer	Initially Santa Fe High Influence - Move to Kirby PG	3	90%	Wetland	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	88.1	2.5	80.3	0.3	10.5	• \$5.0M • Recharge restoration • Water quality improvement	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	10-20 Years	• Governance (H) • Monitoring (H) • Training (H)	100%	0.11	Moved one of these alternatives to Kirby PG, the other is Best Incremental Balance Site.	
5		Initially Shovelcast 3. Move to Best Incremental Target Balance	3	80%	Wetland	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	72.6	2.5	43.1	0.3	11.1	• \$5.0M • Recharge restoration • Water quality improvement	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	10-20 Years	• Governance (H) • Monitoring (H) • Training (H)	100%	0.10		
10	Suwannee River	Lake City Parcel 1	40	100%	Injection	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	784.1	23.0	633.9	14.6	23.2	None	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	10-20 Years	• Governance (H) • Monitoring (H) • Training (H)	100%	5.6	request from SRWMD to evaluate 8 1/2% flowback available for flow above the median. How much time is the excess water available above these criteria.
13	Suwannee River	Shilohville 1	40	100%	Injection	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	718.0	25.0	567.8	14.6	21.8	None	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	10-20 Years	• Governance (H) • Monitoring (H) • Training (H)	100%	2.5	request from SRWMD to evaluate 8 1/2% flowback available for flow above the median. How much time is the excess water available above these criteria.
19	NF Black Creek	Santa Fe High Influence	5.2	100%	Injection	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	273.0	7.3	228.5	4.4	14.8	None	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	• Recharging (H) • Public/private (H) • Land acquisition (H) • Compliance (H)	10-20 Years	• Governance (H) • Monitoring (H) • Training (H)	100%	0.2	request from SRWMD to evaluate 8 1/2% flowback available for flow above the median. How much time is the excess water available above these criteria.



Desalination Options Explored

Source	Volume (mgd)	Santa Fe Benefit (cfs)	Ichetucknee Benefit (cfs)	Capital Cost	Full MFL Goals Met?
Desalination-Atlantic Ocean	40	19	15	\$2.8 Billion	Yes
Desalination-Gulf of America	40	19	15	\$3 Billion	Yes
Desalination- Pumping Replacement	182	20.6	4.7	\$12 Billion	No

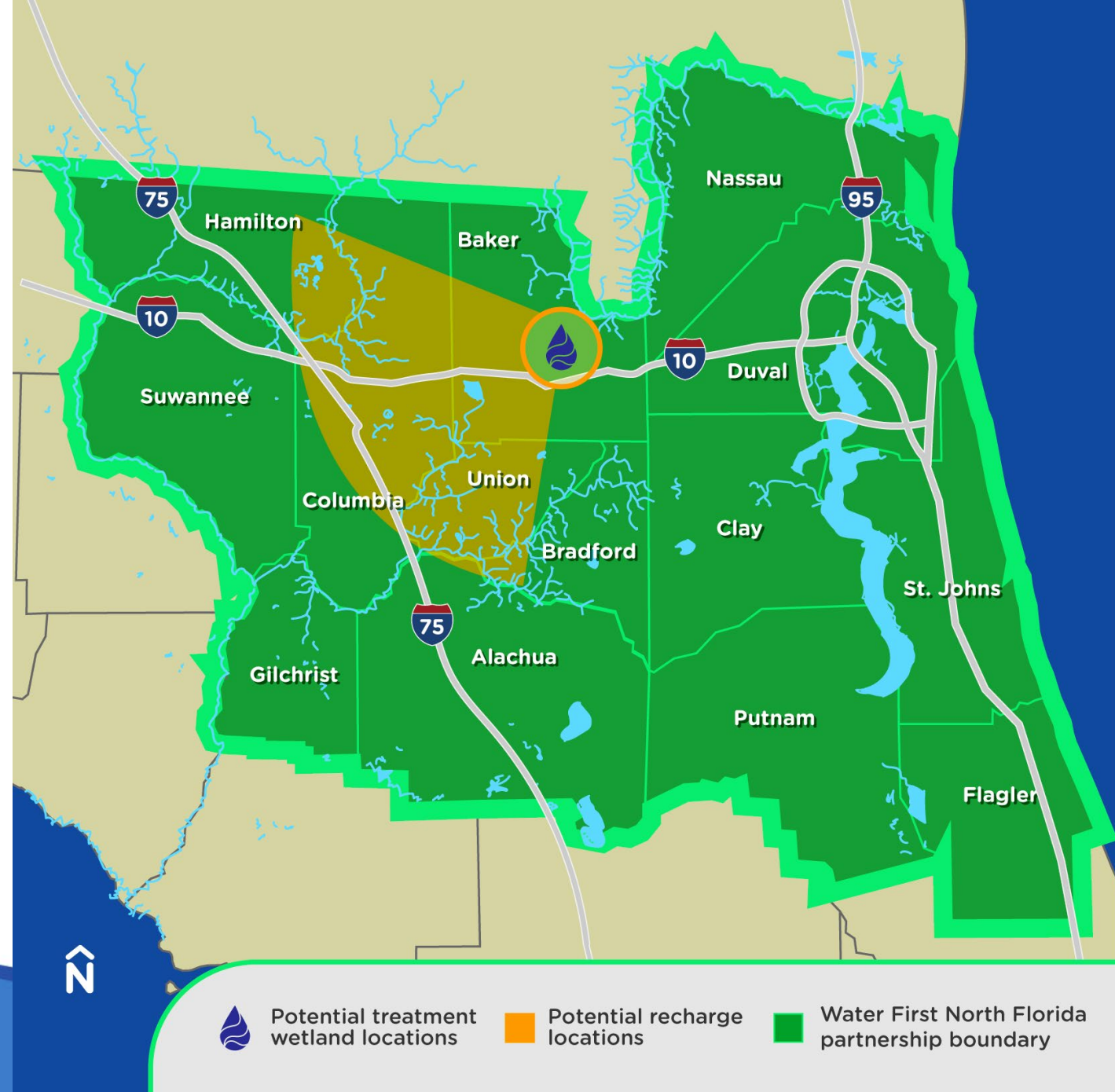




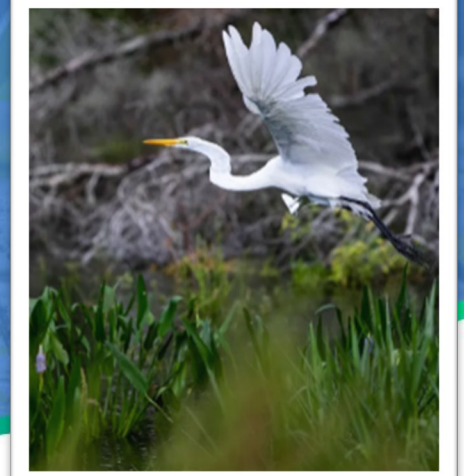
WATER FIRST NORTH FLORIDA

Partnership today for a sustainable tomorrow.

WATER FIRST is a 40-mgd project utilizing treated reclaimed water that will receive additional natural filtration via a treatment wetland for aquifer recharge in the North Florida region.



Treatment Wetland Additional Benefits

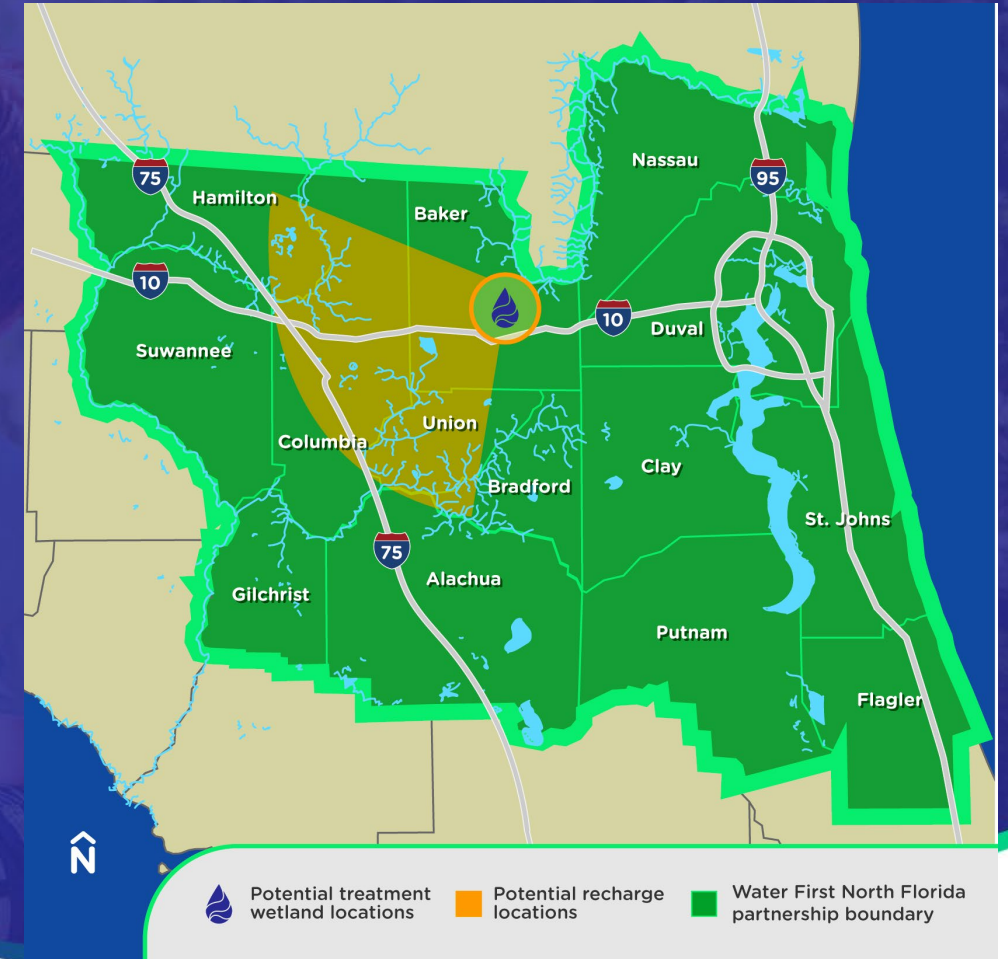


Initial Work Underway

Pilot Study - \$7M

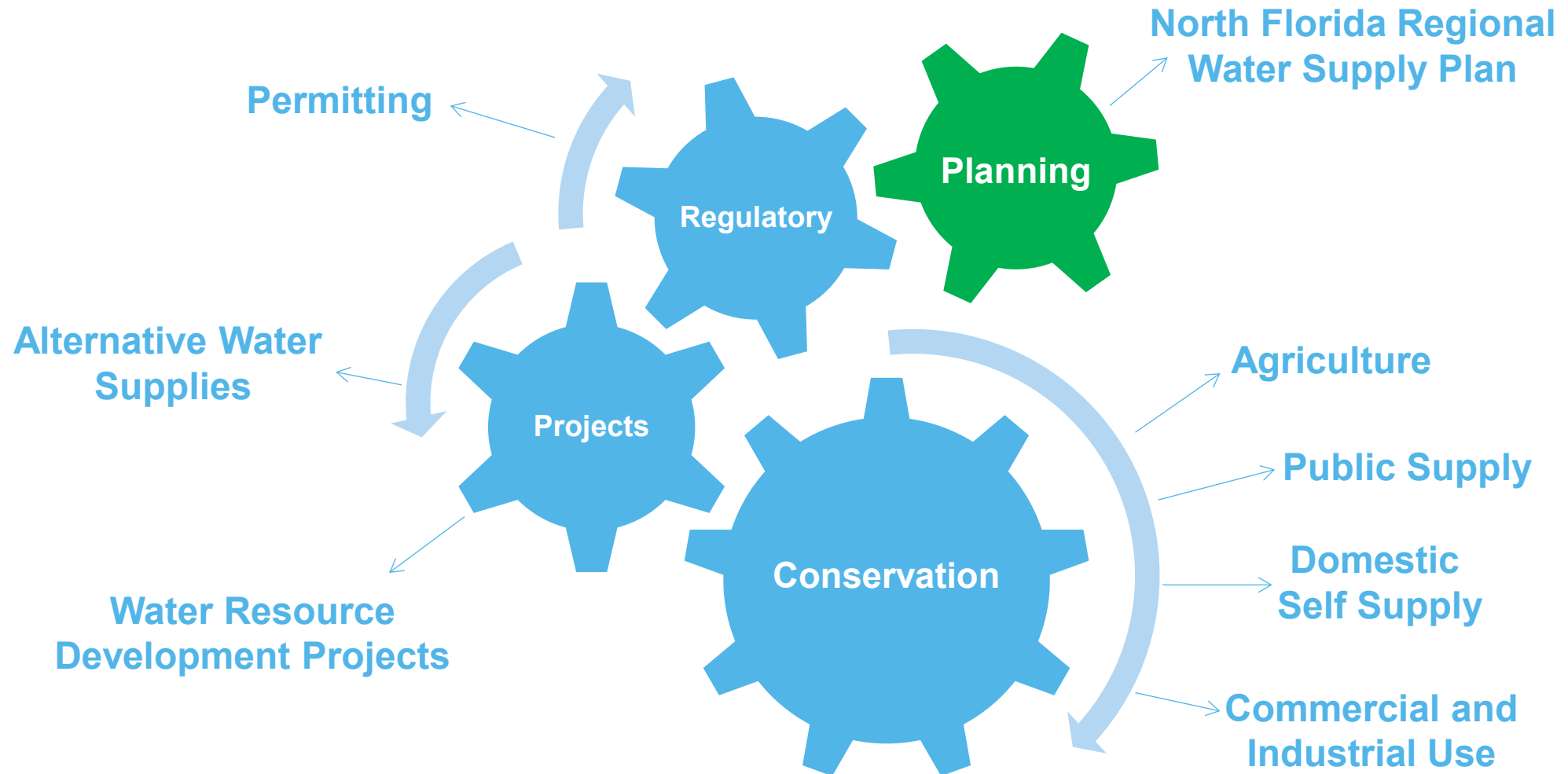


Siting Study RFQ - \$2M





COMPONENT 3 - PLANNING

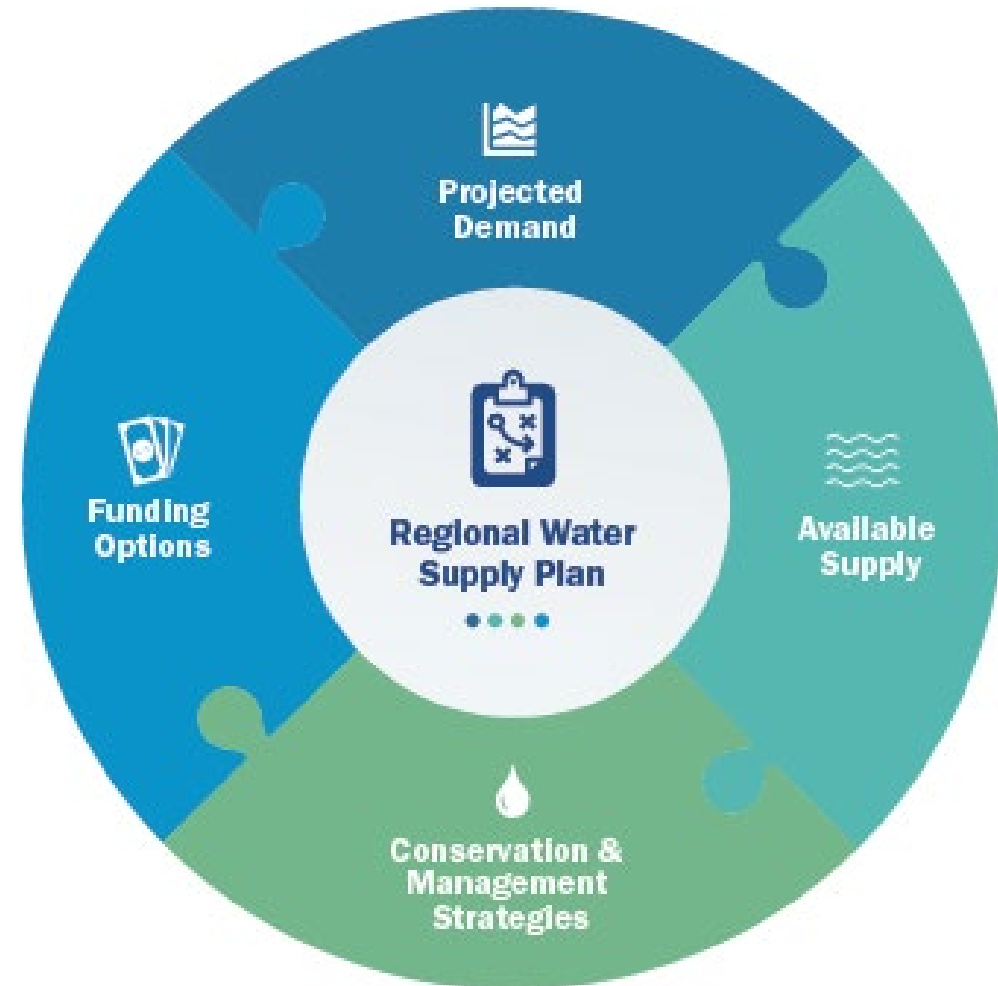




Regional Water Supply Planning Process

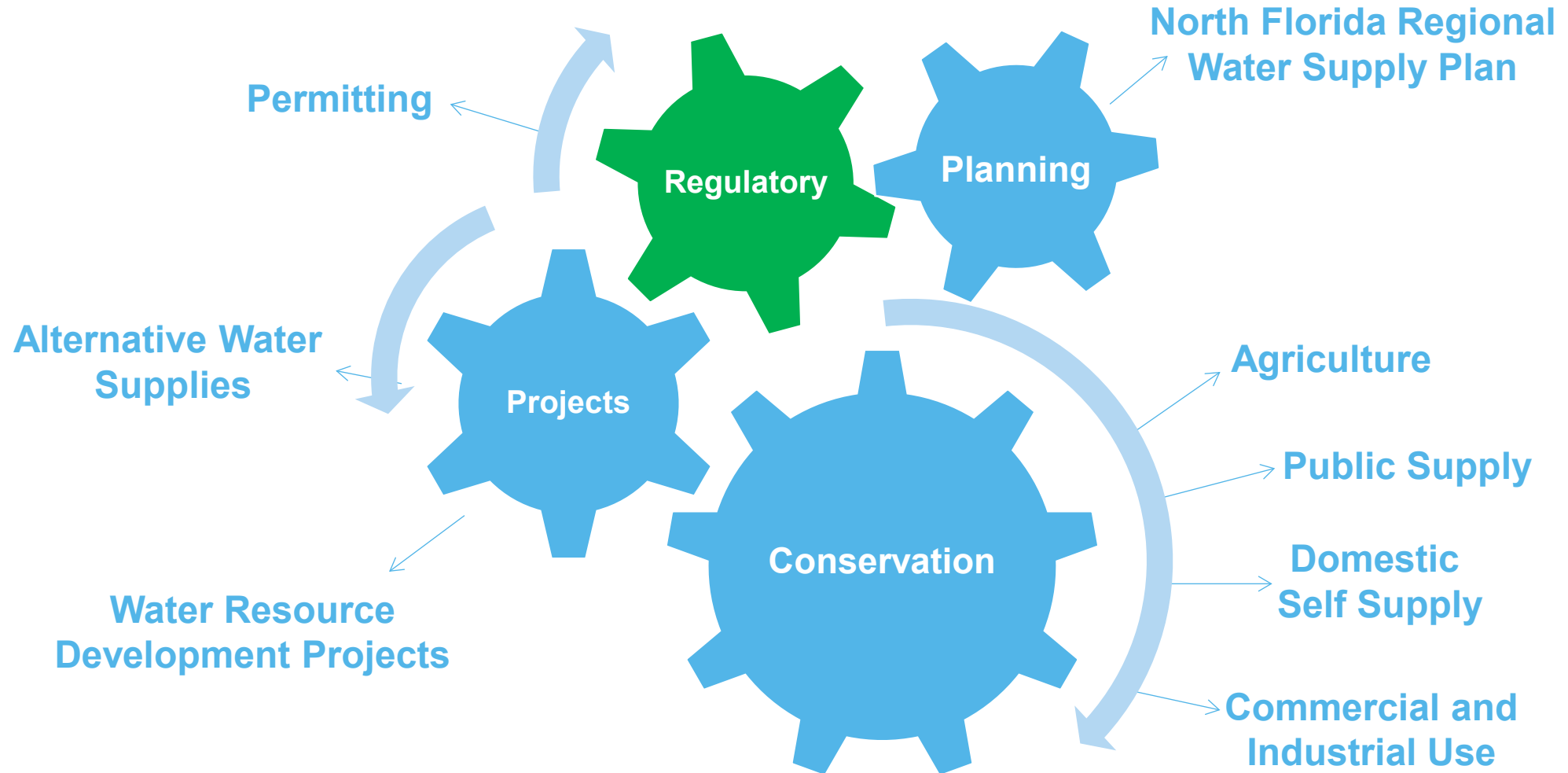


- **20-year planning horizon**
- **Conducted in an open public process**
- **Coordination with other agencies**
- **Approval by the Governing Board**
- **Updated every five years**





COMPONENT 4 - REGULATORY





REGULATORY COMPONENTS

The Draft Rule includes:

- Water Conservation
- Offsets
- Monitoring
- And other components



DRAFT RULES:

62-42.300(7) - WATER CONSERVATION REQUIREMENTS

Water Conservation requirements include:

- Public Water Supply.
- Agriculture.
- Other Use types:
 - Commercial/Industrial/Institutional (CII).
 - Landscape Recreation (LR).
 - Mining/Dewatering (MD).



DRAFT RULES:

62-42.300(7) - WATER CONSERVATION: PUBLIC SUPPLY

PUBLIC SUPPLY

- Amendments to the standard and goal-based conservation plans.
- Adds a residential per capita water use goal.
- Submittal of Public Supply Annual Report (PSAR).
- Submittal of a water conservation report every 5 years.



DRAFT RULES:

62-42.300(7) - WATER CONSERVATION: AGRICULTURAL

AGRICULTURE

- Includes distribution uniformity provisions.
- Includes implementation of water-saving practices appropriate to field conditions to the maximum extent environmentally, economically, and technically feasible.
- Includes a water conservation reporting.
- Includes water conservation measures for small agricultural uses.



DRAFT RULES:

62-42.300(7) - WATER CONSERVATION: ALL OTHER USE TYPES

COMMERCIAL/INDUSTRIAL/INSTITUTIONAL, LANDSCAPE RECREATION, AND MINING/DEWATERING

- Includes utilization of the most water conserving practices in all processes and components of water use that are environmentally, technically and economically feasible.
- Includes conservation reporting.



DRAFT RULES:

62-42.300(8) – OFFSET REQUIREMENTS

- **Authorized Uses will be consistent with the strategy through their Demonstrated 2025 Demand.**
- **Offsets will be necessary for growth.**
 - Offsets may include a regional project, conservation, or a local project.



DRAFT RULES:

62-42.300(6) - MONITORING AND REPORTING REQUIREMENTS

- **Incorporates Monitoring and Reporting Requirements and associated forms.**
 - All individual permits must measure the quantity of water used and must assure certain level of accuracy.
 - Provides requirements for monitoring based on permit size and timelines based on status (i.e., new, existing, modification).
 - Requires compliance monitoring and reporting of water use.



DRAFT RULES:

62-42.300(5) - PRIVATE RESIDENTIAL IRRIGATION WATER USE

- **Applies to water use from a private residential irrigation well in the Floridan Aquifer where the residence is otherwise supplied by Public Supply (i.e., a utility).**
- **Requires a no-fee noticed general permit.**
 - Permit Conditions include water conservation and leak detection devices
 - Permit requires homeowner acknowledge days of the week restrictions, comply with other watering restrictions, and identify that the well was drilled by a licensed water well contractor
 - Permits have a duration of 10 years and carry forward to subsequent owners for the duration of the authorization.



DRAFT RULES:

OTHER TOPICS

- **62-42.200** creates definitions that are applicable to any rule in the chapter.
- **62-42.300(3)** provides for stepped allocations where needed.
- **62-42.300(4)** provides clarity when an ERP and CUP are needed for the same project.
- **62-42.300(9)** delegates to each District the authority to accept and grant, where conditions have been met, applications for extension pursuant to section 373.805(5), F.S.



PUBLIC COMMENTS

Participants will be given 3 minutes to make their comments.

Written comments may be submitted to the email address below:

OWP_rulemaking@floridadep.gov

Please submit public comments by Aug. 8, 2025.



NEXT STEPS

Where do we go from here?

- Final revisions based on comments received at this public workshop or during the subsequent comment period.
- Develop Statement of Estimated Regulatory Cost based on final regulatory components.
- Consideration by each Governing Board of the Non-Regulatory Components.
- Publish the Notice of Proposed Rule.
- Submission for Ratification by Legislature.

