



**Chapter 62-42, F.A.C.
Lower Santa Fe and Ichetucknee
River MFL Rulemaking Workshop**

October 14, 2021



Workshop Agenda

- 1. Welcome and Introductions**
- 2. MFL Overview and Update**
- 3. MFL Rule**
- 4. Influence of Withdrawals**
- 5. Projects**
- 6. Strategy Overview**
- 7. Public Comment**



Lower Santa Fe and Ichetucknee Rivers and Priority Springs - Minimum Flows and Levels and Status Assessment



Sean King

Suwannee River Water Management District



Minimum Flows and Minimum Water Levels (MFLs)



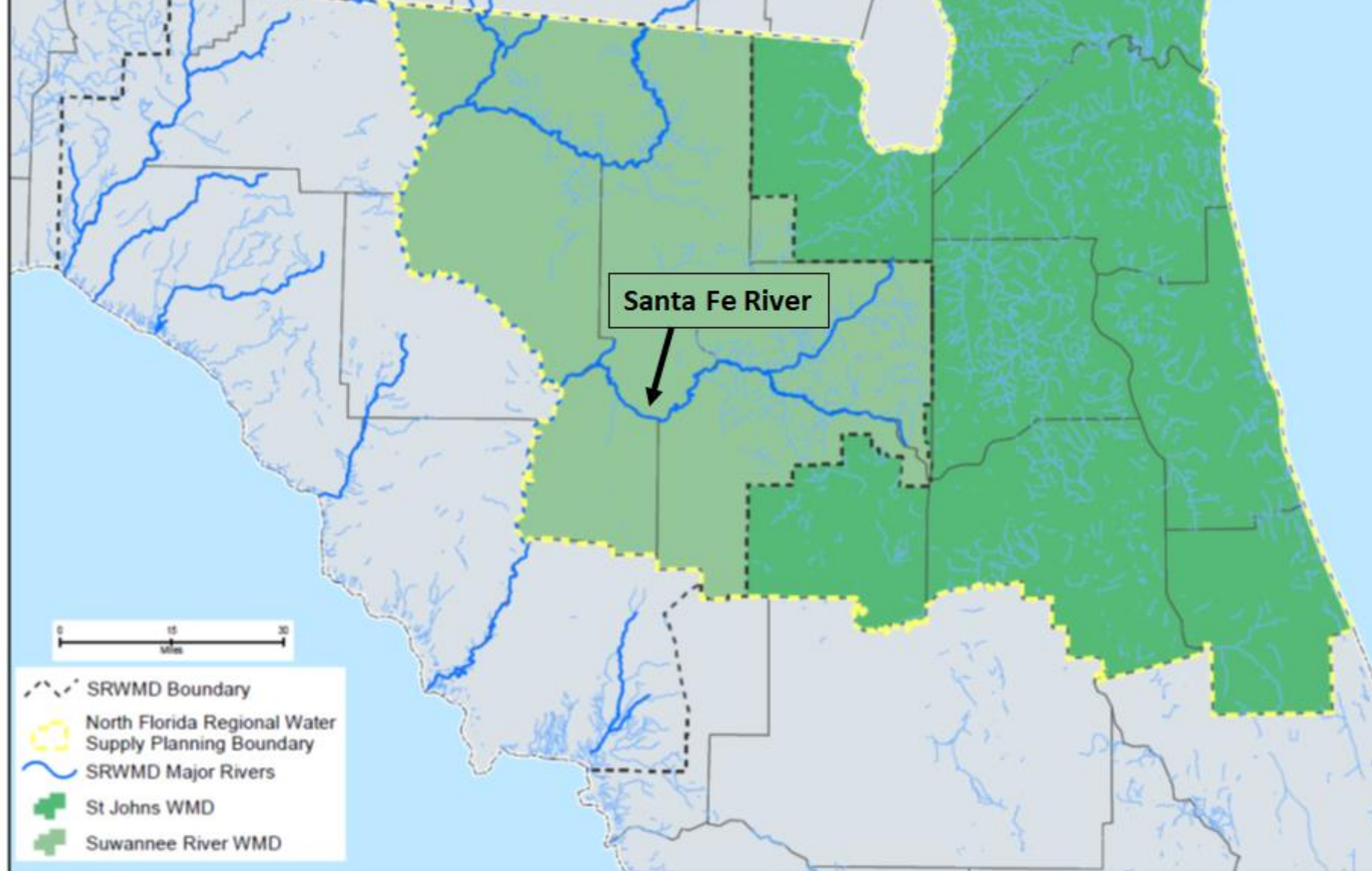
MFLs are required and defined by Florida Statutes in Section 373.042:

Minimum flows and minimum water levels...

...are the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.



North Florida Regional Water Supply Planning Area





Lower Santa Fe and Ichetucknee Water Resource Values (WRVs) (62-40.473, FAC)



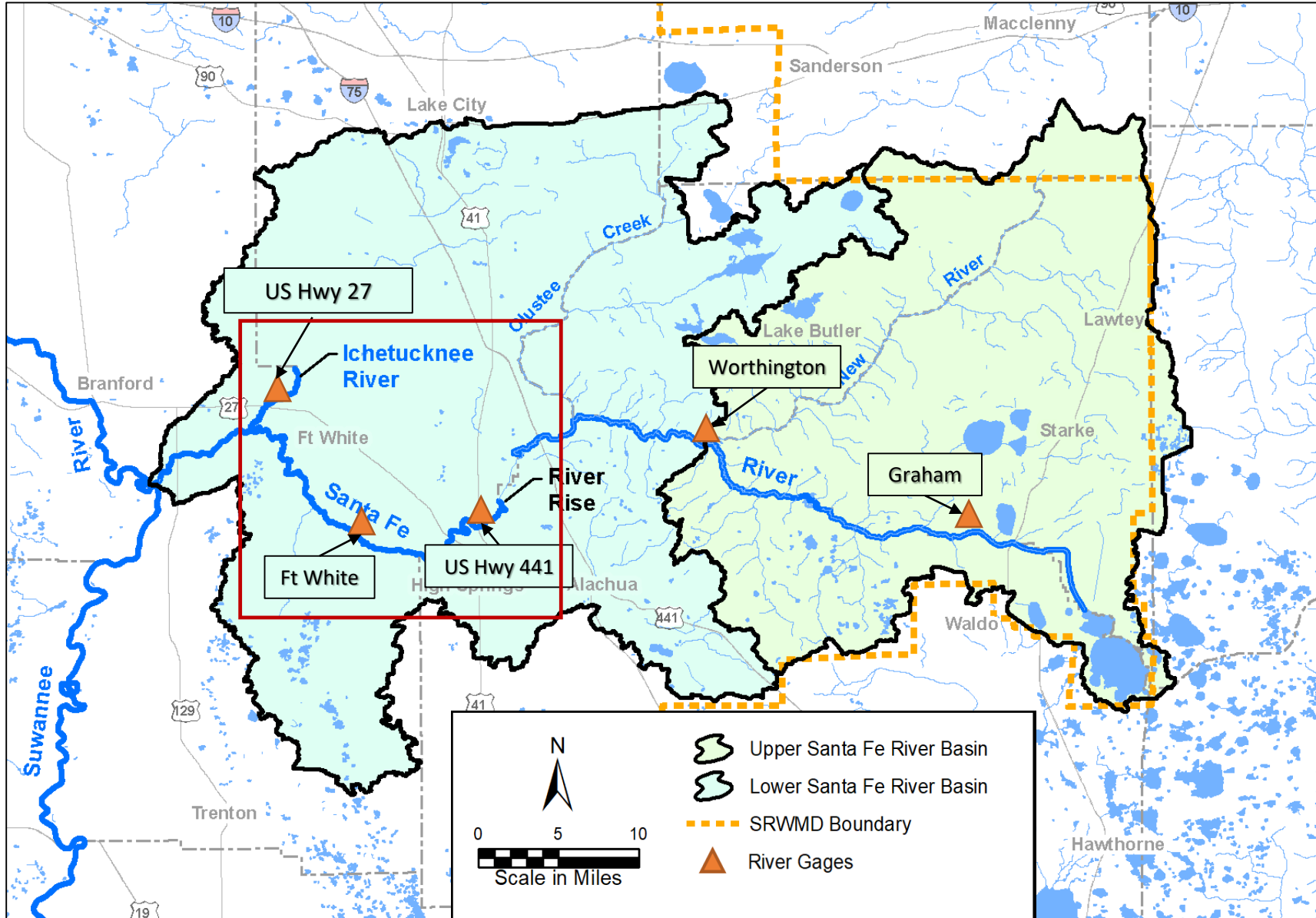
- Estuarine Resources
- Transfer of Detrital Material
- Maintenance of Freshwater Storage and Supply
- Filtration/Absorption of Nutrients and other Pollutants
- Navigation

- Boating
- Paddling

A conceptual illustration, not to scale

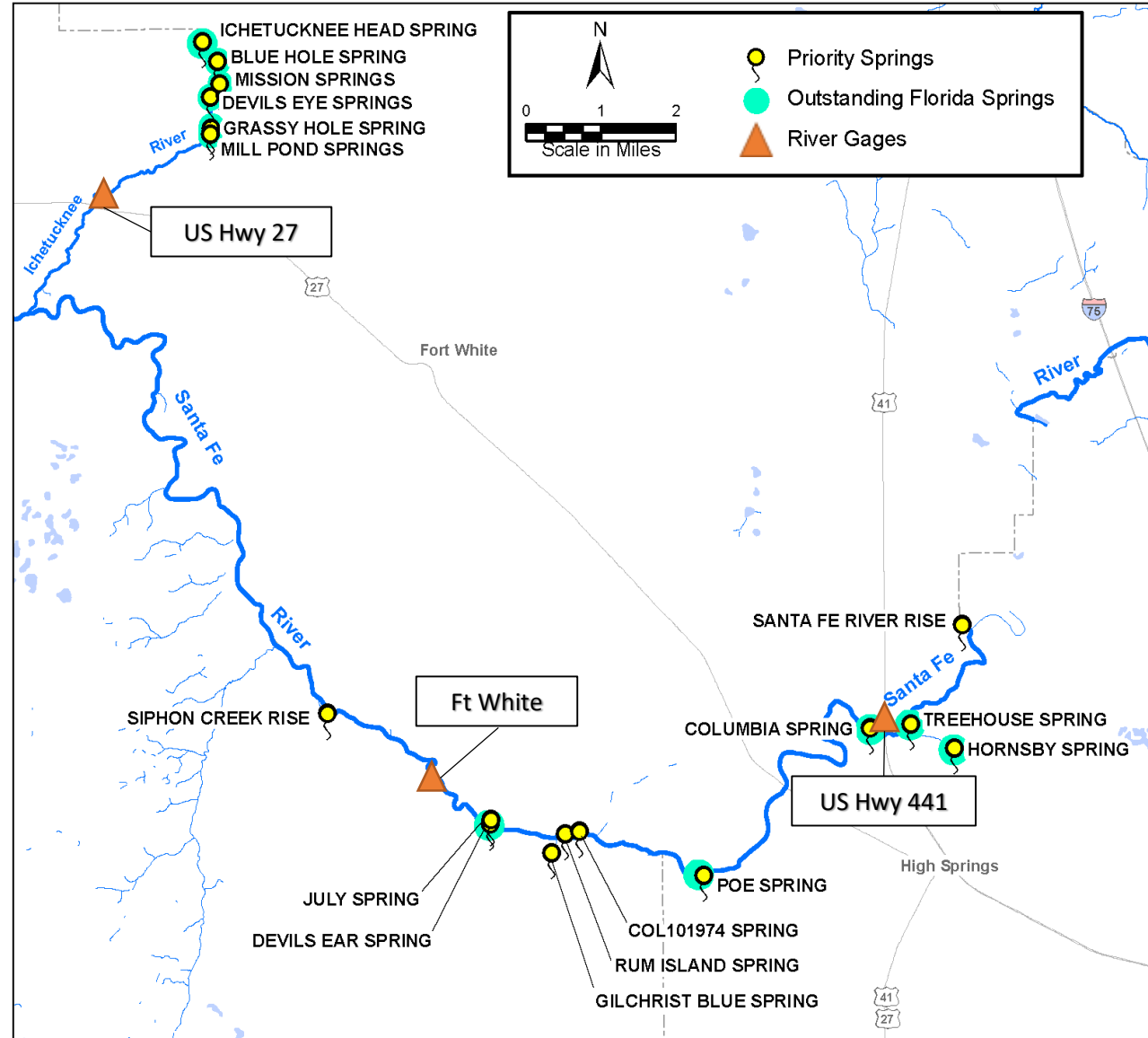


Santa Fe Basin Features





MFL River Gages and Priority & Outstanding Florida Springs





Proposed MFLs for the Lower Santa Fe and Ichetucknee Rivers

	Lower Santa Fe River				Ichetucknee River	
	Fort White		US Hwy 441		US Hwy 27	
	Proposed	Existing	Proposed	Existing	Proposed	Existing
Reference Flow (cfs)	1,270	1,320	552	n/a	356	354
MFL (cfs)	1,167	1,214	502	n/a	346	343
Difference (cfs)	103	106	50	n/a	10	11
Difference (mgd)	66.6	68.5	32.3	n/a	6.5	7.1
Relative flow reduction (%)	8.1%	8.0%	9.1%	n/a	2.8%	3.1%

Note: Median daily values



MFL Status

MFL 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**



Status by River Gage (cfs)

	Lower Santa Fe Fort White	Lower Santa Fe US441	Ichetucknee Hwy 27
Reference Less MFL	103	50	10
Current 2015 Impact	70.7	48.9	15.4
Current 2015 Net	32.3	1.1	-5.4
Projected 2040 Impact	106	71.5	24.0
Projected 2040 Net	-3	-21.5	-14.0

Note: Median daily values



MFL Rule

Stefani Weeks

Department of Environmental Protection



Chapter 62-42, F.A.C.

62-42.200 Definitions

Deletes Flow duration Curve and Frequency

Adds P50 Flow and citation for Outstanding Florida Spring

62-42.300 Minimum Flows and Levels and Prevention and Recovery Strategies

Strikes paragraph (1)(a) through (e) of existing rule

Proposes MFL for LSFIR and Priority Springs

Incorporates by reference the regulatory component of a Prevention and Recovery Strategy



Chapter 62-42, F.A.C.

Minimum Flows for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs are the P50 flows based on the simulated MFL condition flow time series data (1933-2015) at the United States Geological Survey (USGS) gages identified in Table 1-2 below. The simulated MFL condition flow time series data (1933-2015) is incorporated by reference herein and available at [<https://www.flrules.org/gateway/reference.asp?No=Ref-XXXXX>] [effective date] or by contacting the Florida Department of Environmental Protection, Office of Water Policy and Ecosystems Restoration, 3900 Commonwealth Blvd., MS-35, Tallahassee, FL 32399.

Table 1-2 Minimum Flows for the Lower Santa Fe and Ichetucknee Rivers

<u>Watercourse</u>	<u>Location/Gage</u>	<u>P50 Flow (Minimum Flow) in cubic feet per second (cfs)</u>
<u>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</u>	<u>Lower Santa Fe River at the Ft. White, FL gage/USGS Gage No. 02322500</u>	<u>1,167</u>
<u>Lower Santa Fe River and Santa Fe River Rise, Treehouse Spring, Hornsby Spring and Columbia Springs</u>	<u>Lower Santa Fe River at the HWY 441 gage/USGS Gage No. 02321975</u>	<u>502</u>
<u>Ichetucknee River (Ichetucknee Springs Group)</u>	<u>Ichetucknee River at the HWY 27 gage/USGS Gage No. 02322700</u>	<u>346</u>

The proposed rule addresses status assessment and will incorporate the applicable recovery and prevention strategy.



Statutory Requirements

373.0421, F.S.

Recovery and Prevention Strategy requirements

- **Must include development of additional water supplies**
- **Must achieve recovery as soon as practicable OR prevent the flow from falling below the MFL**
- **Must include phased-in approach/timetable**
- **Must allow for sufficient water supplies for all existing and projects reasonable-beneficial uses (AWS, Conservation, Efficiency upgrades) to offset reductions in permitted withdrawals to the maximum extent practical**

Currently developing Updated Prevention and Recovery Strategy

- **2015 strategy focused on the implementation of the preliminary regulatory strategies to protect the MFL water bodies from additional harm, creation of water resource development project concepts, and the implementation of water conservation measures.**



Outstanding Florida Springs 373.805, F.S.

OFS Statute requires, at a minimum:

- **List and prioritization of specific projects**
- **Cost estimates and dates of completion**
- **Source and amount of financial assistance**
- **Estimate of benefits for each listed project**
- **Implementation plan and target to achieve the MFL no more than 20 years after the adoption of a recovery or prevention strategy**



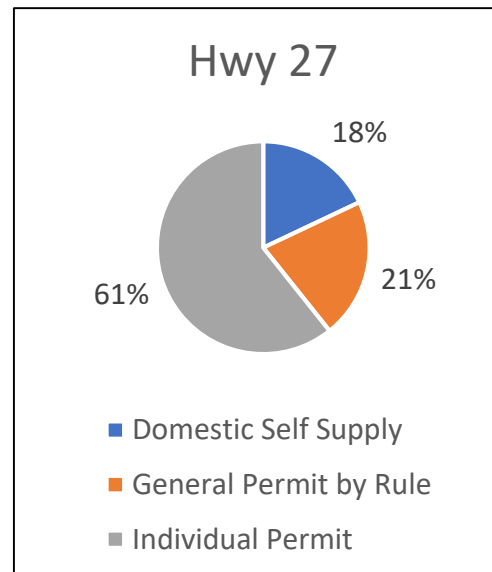
Influence of Water Use in the Basin



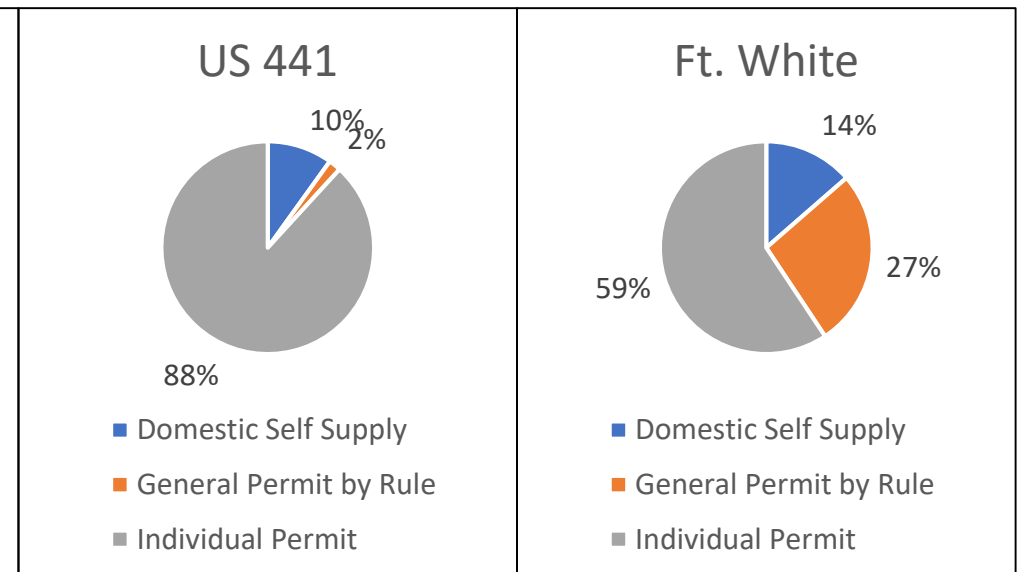
Influence of Withdrawals by Authorization Type

- Ichetucknee - Hwy 27
 - Partnership Area ~ 82%
 - Non-partnership Area ~ 18%
- Santa Fe - US 441
 - Partnership Area ~ 86%
 - Non-partnership Area ~ 14%
- Santa Fe - Ft. White
 - Partnership Area ~ 87%
 - Non-Partnership Area ~ 13%

Ichetucknee River



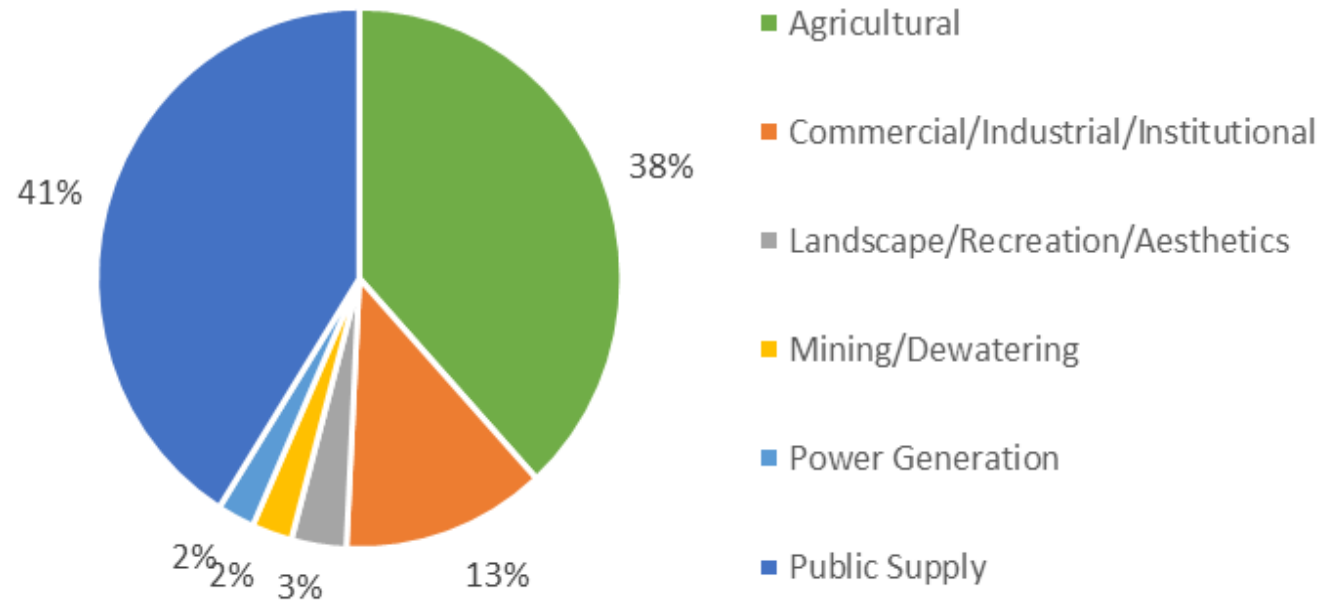
Santa Fe River





Influence of Withdrawals by use type Ichetucknee

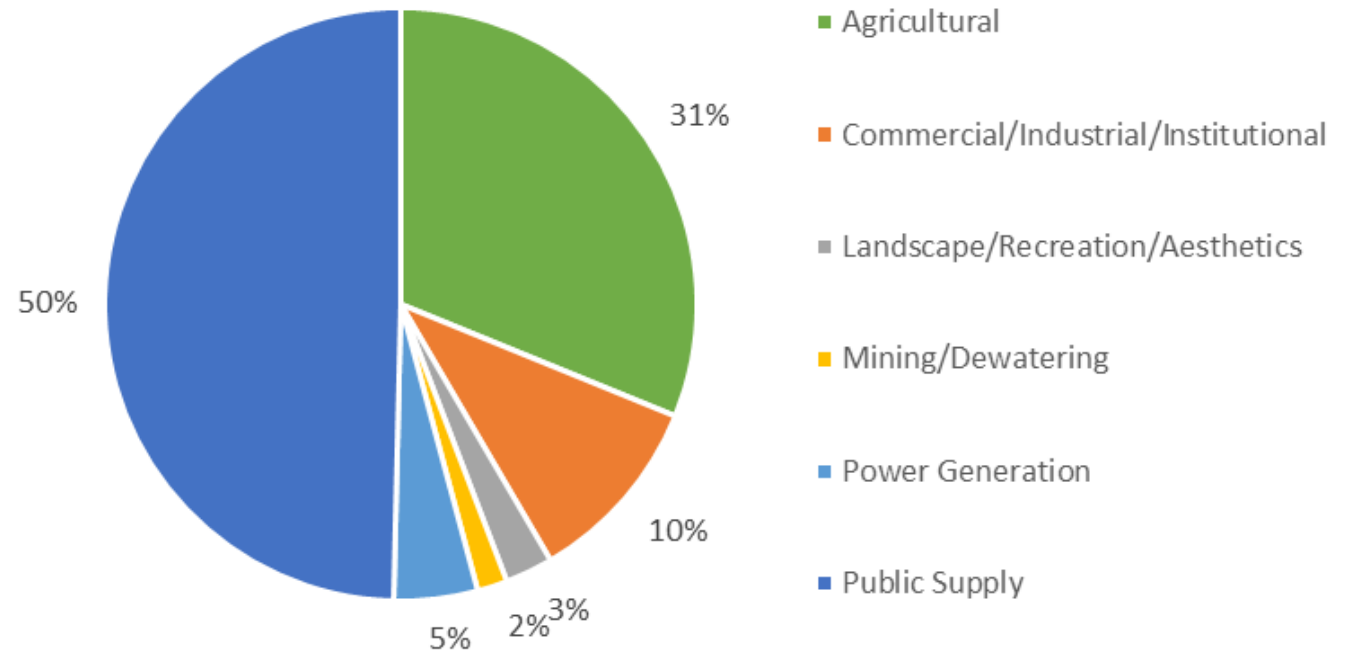
Influence of Withdrawals by Use Type
NFRWS Partnership Area





Influence of Withdrawals by use type Santa Fe 441

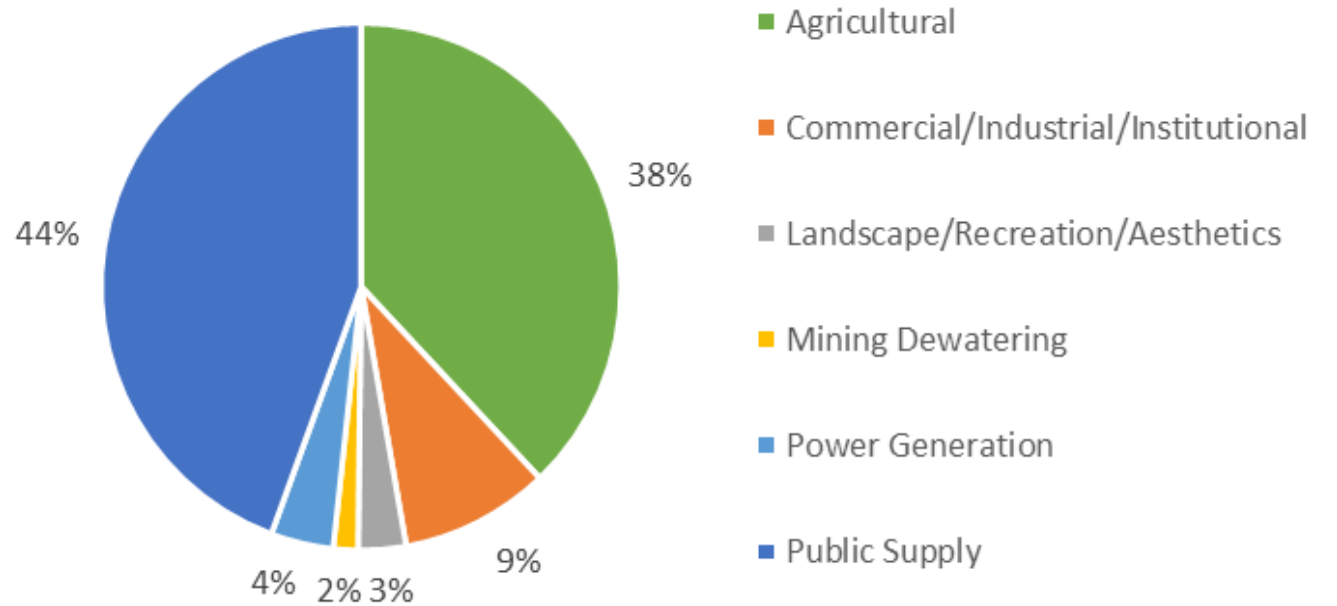
Influence of Withdrawals by Use Type NFRWS Partnership Area





Influence of Withdrawals by use type Santa Fe Ft. White

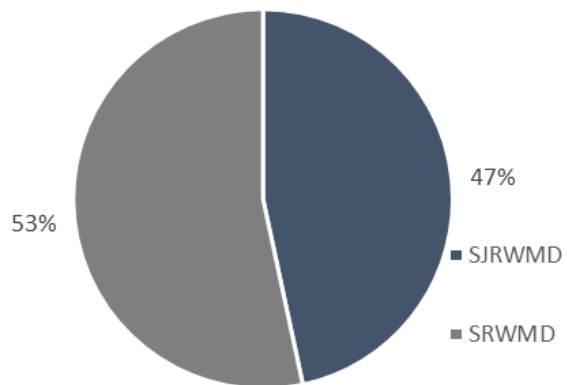
Influence of Withdrawals by Use Type
NFRWS Partnership Area





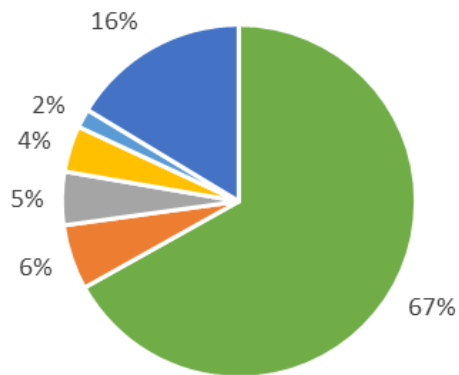
Influence of Water Use by District by Use Type Ichetucknee

Influence of Withdrawals NFRWS Partnership Area

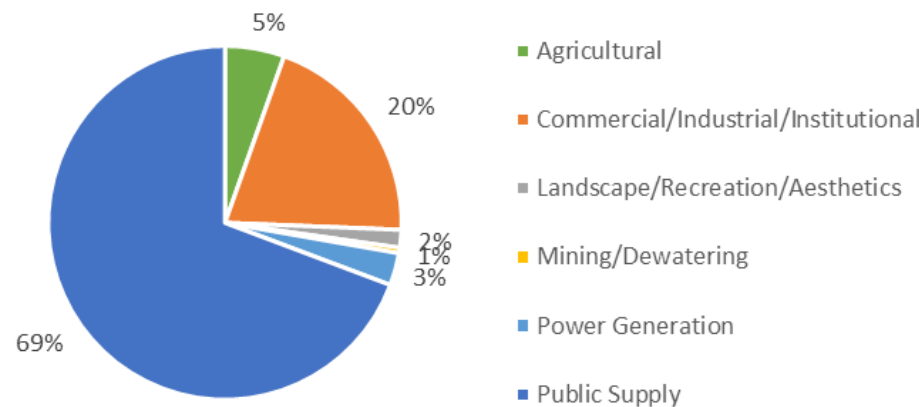


Influence of Withdrawals SRWMD NFRWS Partnership Area

- Agricultural
- Commercial/Industrial/Institutional
- Landscape/Recreation/Aesthetics
- Mining/Dewatering
- Power Generation
- Public Supply



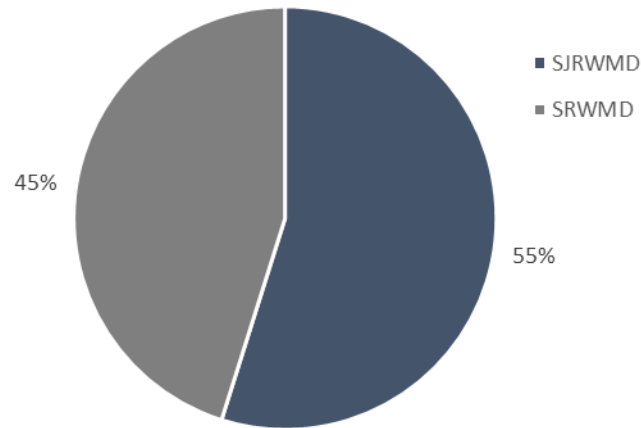
Influence of Withdrawals SJRWMD NFRWS Partnership Area



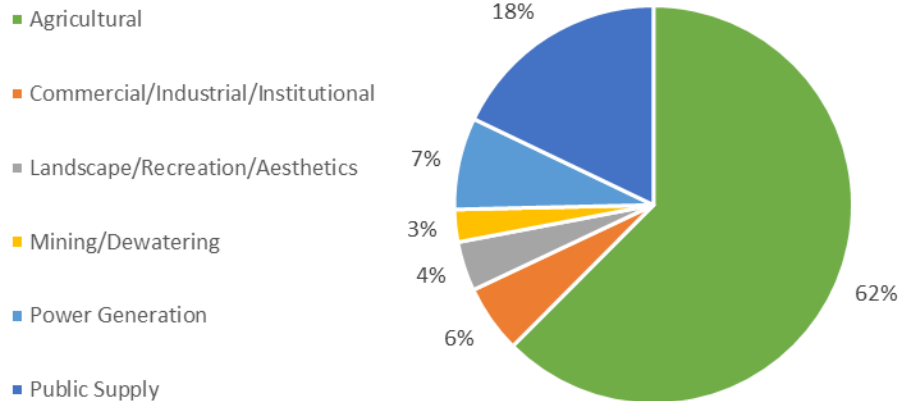


Influence of Water Use by District by Use Type Santa Fe – US 441

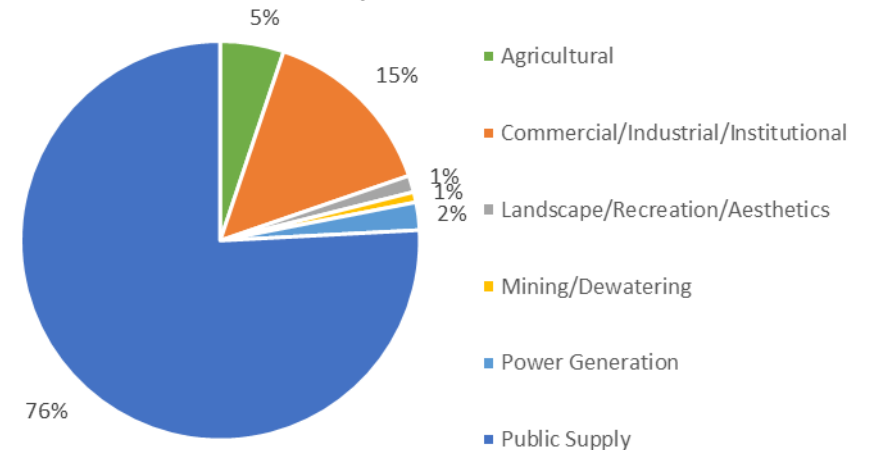
Influence of Withdrawals
NFRWS Partnership Area



Influence of Withdrawals SRWMD
NFRWS Partnership Area



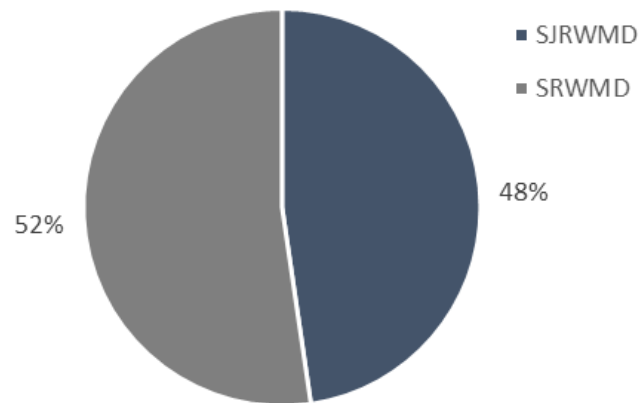
Influence of Withdrawals SJRWMD
NFRWS Partnership Area



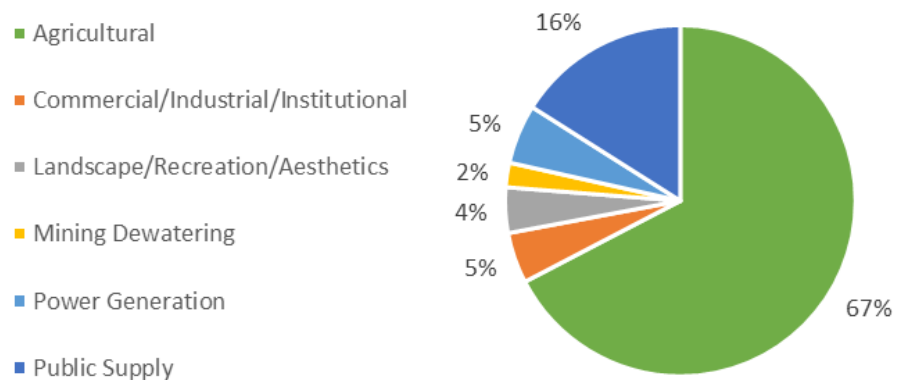


Influence of Water Use by District by Use Type Santa Fe – Ft White

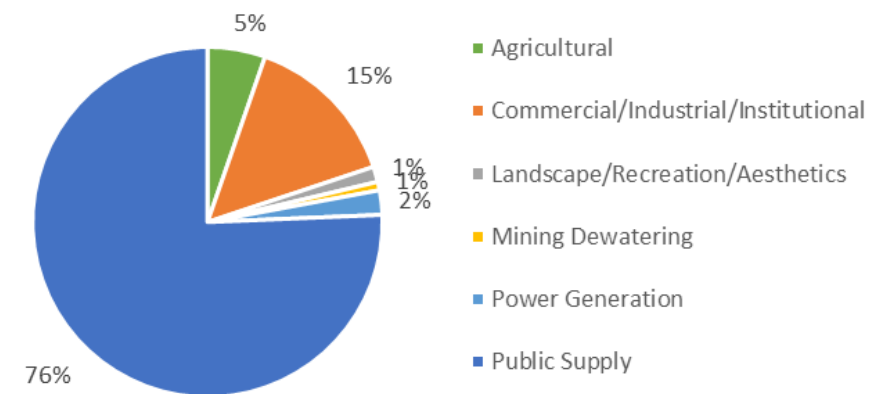
Influence of Withdrawals
NFRWS Partnership Area



Influence of Withdrawals SRWMD
NFRWS Partnership Area



Influence of Withdrawals SJRWMD
NFRWS Partnership Area





Projects

Clay Coarsey

St. Johns River Water Management District

Amy Brown

Suwannee River Water Management District



Project Concepts



- **Public Supply and Commercial Industrial Institutional**
 - Water conservation
 - Florida-friendly™ landscaping
 - Stormwater harvesting
 - Potable reuse
 - Reclaimed water
 - Treatment Wetlands
 - Recharge





Project Concepts



- **Agriculture**
 - Accelerating Suwannee Program
 - Efficiency improvements (such as soil moisture sensors, pivot retrofits, centralized remote-control systems)
- **Forest Management for Ecosystem Services**
 - Manage forests to increase groundwater recharge





Project Concepts



John Fitzgerald
jfitzgerald@sjrwmd.com
386-329-4876



Leroy Marshall
Leroy.Marshall@srwmd.org
386-362-1001



Strategy Overview

Stefani Weeks

Department of Environmental Protection



Status and the Development of a Strategy

- Will apply best available information throughout rule development
- Rule development will include the regulatory portion of a strategy with both recovery and prevention components
- Objectives in developing a strategy:
 - Meet statutory requirements including OFS Statute
 - Recovery based on proportionate share of impacts
 - Must provide for protection of the resource and reasonable-beneficial uses of water



Next Steps, As Anticipated

- Review all public comments
- Review any project option suggestions
- Develop Regulatory Strategy language to be presented at a future workshop



Public Comment

Participants will be given 3 minutes to make their comments.

Written comments may be submitted to the email address below.

A black rectangular box containing a white circular timer graphic with the text "3:00" in the center, indicating a 3-minute duration.

3:00

www.floridadep.gov/water-policy
OWP_rulemaking@floridadep.gov

Please submit public comments by November 4