



May 15, 2020

Adam Blalock, Director
Office of Water Policy
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

VIA EMAIL: adam.blalock@floridadep.gov

RE: Draft 2020 Central Florida Water Initiative Regional Water Supply Plan

Dear Mr. Blalock:

As Floridians are preoccupied with trying to protect our families and keep our economy going during the COVID-19 Crisis, water planners in Central Florida are busy paving the way for the withdrawal of millions of gallons of water from the St. Johns River to fuel unbridled growth.

On behalf of St. Johns Riverkeeper's (SJRK) and Florida Springs Council (FSC) members, we respectfully submit public comments to identify potential errors and call out the shortcomings of the Central Florida Water Initiative (CFWI) 2020 Water Supply Plan that put our river, our springs and Florida's future at risk. In addition, we request additional information that is necessary for public dialogue and transparency.

The St. Johns River is a treasured watershed that provides ecological, recreational, economic and aesthetic benefits. Approximately 100 springs found largely in the Middle Basin of the St. Johns in Central Florida, provide up to 30% of the St. Johns' natural flow.

Fortunately, the State of Florida, the St. Johns River Water Management District (SJRWMD) and local governments throughout the watershed have invested millions of public dollars in an attempt to mitigate the damage to the St. Johns. However, those efforts have fallen short as evidenced by the current state of the River. Every effort must be made to avoid undermining significant public investment and the health of Florida's only American Heritage River. To do so,

state agencies must focus on cumulative impacts and holistic solutions to protect the St. Johns and springs today and for future generations.

Unfortunately, the health and integrity of the St. Johns River system is threatened due to years of neglect and the cumulative impacts of a growing population.

- Overuse of the Floridan Aquifer in Central Florida has reduced spring flow and freshwater flows to the St. Johns River.
- Development and overuse of the Floridan Aquifer has led to a loss of wetlands.
- Increase nutrient loads from reclaimed water, sewage sludge and runoff from new development has undermined the health of the St. Johns and public investment.
- Dredging at the mouth of the St. Johns has increased saltwater intrusion further damaging wetlands and submerged vegetation.
- Sea level rise has driven saltwater intrusion further up river.
- Increasing temperatures will increase the frequency of algal blooms and rate of evapotranspiration (ET), resulting in ecological degradation, and lower surface water levels.

Clean, fresh water is the lifeblood of the St. Johns River, its springs and tributaries. Our wetlands, forests, riparian zones, and aquatic plants provide the habitat and food sources that sustain healthy plant, fish, and wildlife populations. The St. Johns also sustains nearly 5 million people who live within its watershed. It is our collective duty to protect this natural treasure.

Since 2005, SJRK has actively participated in the public conversation and voiced our concerns regarding the controversial proposals to remove water from the St. Johns River. SJRK remains adamantly opposed to surface water withdrawals to meet future water demand due to the ecological impacts to the St. Johns, its springs and its tributaries. SJRK challenges the need and viability of water withdrawals and questions the societal benefits in light of the enormous economic and environmental costs.

Why spend billions of public dollars and jeopardize the health of our rivers with massive surface water withdrawals when we can meet our future supply needs by allocating and using our current water supply resources more judiciously, responsibly and efficiently?

The bottom line is that water conservation does work and is without question a much more sustainable, cost-effective and environmentally-responsible solution.

Let's keep the straws out of the St. Johns, quit over-allocating our groundwater to feed unbridled growth, and finally get serious about addressing the root causes of our water use problems.

On behalf of the St. Johns Riverkeeper and Florida Springs Council members, we respectfully ask the CFWI Steering Committee to consider the following recommendations:

Stimulate Sustainable Growth, Not Unbridled Growth at our river and our springs' expense. Plan for Florida's population growth to better protect natural lands, promote livable communities, and save taxpayer dollars. Protective growth standards should be based on available water supply and protection of clean water for human consumption and natural systems.

Prioritize Water Conservation, efficiency, and reuse strategies instead of expensive, harmful water withdrawals. Water conservation strategies in the CFWI RWSP are wholly insufficient and exclude even the most obvious and cost-effective water conservation measures in favor of unsustainable, expensive, unnecessary, and damaging surface water projects.

Protect the St. Johns River and Florida Springs from the inevitable harmful impacts of overuse of our Aquifer and surface water withdrawals. A holistic approach, which balances the District's mission to provide water for consumptive use and protect Florida's water resources must be adopted. The current Draft Plan only addresses one side of the equation and therefore is fundamentally unsound. Safeguards must be in place to protect our aquifer, our springs and our river and to provide safe drinking water.

Genuine Participation with Stakeholders and Local Governmental officials must occur throughout the area of impact including throughout the Middle and Lower Basins of the St. Johns River.

CENTRAL FLORIDA WATER INITIATIVE ERRORS PUT FLORIDA WATERS AT RISK

Overview

Central Florida has reached the sustainable limits of its predominant source of water, the Floridan Aquifer, As a result, The St. Johns River, South Florida and Southwest Florida Water Management Districts created the Central Florida Water Initiative (CFWI) to identify strategies to meet the projected demand.

The CFWI Planning Area consists of all of Orange, Osceola, Seminole, and Polk counties and a portion of southern Lake County, covering approximately 5,268 square miles.

The CFWI Planning Area is currently home to approximately 2.9 million people and supports a large tourism industry, significant agricultural industry, and a growing industrial and commercial sector. According to the CFWI, the area's population is projected to reach approximately 4.4 million by 2040, which is a 49 percent increase from the 2015 estimate.

With the current pumping of approximately 659 million gallons of water a day (MGD) within CFWI's 5-county area, signs of significant stress to the Floridan Aquifer, wetlands and springs are evident that are being downplayed within the CFWI 2020 Water Supply Plan.

In addition, current permit allocations, more than 1 billion gallons of water a day (1064 MGD), outpace available water supply putting our springs, our river and our drinking water at risk. It is primarily the Water Management Districts failure to responsibly regulate water use through the Consumptive Use Permitting process that has harmed our most valuable waterways and put Floridians on the hook for expensive water development projects. The CFWI fails by doubling-down on this already failed policy, instead of funding aggressive water conservation measures and requiring reductions in existing permits.

Unfortunately, CFWI does not encourage sustainable growth practices, prioritize water conservation, or reign in existing permit allocations. Instead, the Water Supply Plan relies heavily on unsustainable surface water withdrawals to meet the projected demand, saddling Floridians with unnecessary environmental and economic costs.

Central Florida Water Initiative – Fueling Sprawl

Florida’s future is threatened by unbridled growth.

As Florida returns to its historic growth rate of a thousand new residents a day – another City of Tampa each year – development pressures intensify, as do impacts to our lands and water supply. The pressures of dynamic population growth combined with rising seas comes at a time when Florida’s state process to manage growth has been eviscerated. How Florida’s future governor, legislators and other state and local leaders respond to these increasing challenges will determine the quality of our communities and the ecological health of our natural lands for future generations. – Trouble in Paradise, presented by 1,000 Friends of Florida

CFWI simply accepts a 49% population increase and a 53% increase in public water supply demand without questioning if Central Florida can handle such dramatic growth.

- Is a 49% increase in population within the 5-county CFWI sustainable?
- What State agency is responsible for addressing long-term sustainability?
- Did CFWI consider protective growth standards based on available water supply?

CFWI accepts unsustainable growth without question and takes no responsibility to fully evaluate what level of growth protects the vitality of Central Florida’s economy and water supply and the health of our natural systems.

1. **Stimulate Sustainable Growth**, Not Unbridled Growth at our river and our springs’ expense. Plan for Florida’s population growth to better protect natural lands, promote livable communities, and save taxpayer dollars. Protective growth standards should be based on available water supply and protection of clean water for human consumption and natural systems.

CFWI Fails to Make Water Conservation a Priority

According to the SJRWMD, “**Considerably greater potential for water conservation exists if more incentives are provided, stricter regulation is required, or the cost of new water supplies rises sharply.**”

Unfortunately, many effective tools driving water conservation have been eliminated due to budget cuts and special interests.

- Educational programs designed to promote water conservation have been significantly reduced.
- Incentive programs are limited.
- Deregulation in Tallahassee relies on voluntary, less aggressive conservation measures.

While the 2020 CFWI Water Supply Plan did increase water conservation savings from its 2015 projection of 37 MGD, the 2020 projection of **50.32 to 55.83 MGD of water conservation** savings only meets 5.5% - 6.2% of the projected 907.59 MGD total water demand.

It is clear that there is much greater opportunity for water conservation savings if CFWI included reasonable, responsible regulations to ensure CFWI counties live within their water means.

Unfortunately, CFWI assumed current levels of water conservation to continue until 2040 instead of prioritizing responsible water use reductions:

Appendix A For this 2020 CFWI RWSP it is assumed that current levels of water conservation and use of reclaimed water will continue through the year 2040 planning horizon; additional conservation and the use of reclaimed water will be effective in reducing future water demands.

The CFWI’s myopic focus on developing alternative water supplies misses even the most obvious, cost-effective, and beneficial water conservation projects. For example, the Plan projects agricultural water use demand to be 163.49 MGD in 2040 but only anticipates a savings of 4.19 MGD from water conservation, a measly 2.5 percent reduction. Not only does this paltry projection not include future technological advancements, it ignores potential savings from currently available technologies like soil moisture sensors. According to scientists at the University of Florida’s Institute of Food and Agricultural Sciences (UF/IFAS) the instillation and utilization of soil moisture sensors can save between 30 percent and 60 percent depending on current water practices, crop type, and land characteristics. The absence of such cost-effective water conservation projects brings into question the approach, seriousness, and utility of the CFWI RWSP.

In addition, it is not clear how much groundwater is currently being used and projected for outdoor irrigation.

- What percentage of public supply is residential?
- What percentage of residential use is for irrigation?
- What amount is used for irrigation by businesses serviced by public supply?
- What percentage of the 21.56 MGD used by Domestic self-supply/small public self-supply is for irrigation?
- What percentage of Commercial/Industrial/Institutional (53.5 MGD) is used for irrigation?
- Did CFWI quantify potential water saving yields of reasonable, responsible water conservation regulations instead of relying on voluntary measures?
- What percentage of agricultural producers utilize soil moisture sensors?

2. **Prioritize Water Conservation**, efficiency, and reuse strategies instead of expensive, harmful water withdrawals. Water conservation strategies in the CFWI RWSP are wholly insufficient and exclude even the most obvious and cost-effective water conservation measures in favor of unsustainable, expensive, unnecessary, and damaging surface water projects.

- a. Water conservation must be the top priority in meeting future water demands. CFWI's focus should create a reasonable demand based on living within our water means. To do so, CFWI should develop a water policy that prioritizes water conservation; mandates sustainable building, landscaping and planning practices; incentivizes the efficient use of water; establishes regulations that protect our water resources and mandate efficiency where needed; and implements market solutions, such as aggressive tiered conservation rates and CUP pricing strategies.
- b. Establish rules and regulations necessary to mandate and incentivize efficiency and protect our water resources. First and foremost, reinstate the rulemaking process to implement the following nine water conservation "rule enhancements" to the Consumptive Use Permit (CUP) and Environmental Resource Permit (ERP) application processes proposed by SRJWMD staff in 2010 to require: 1) landscape irrigation ordinance, 2) informative billing, 3) stormwater reuse, 4) water use reporting for per capita calculations, 5) updated regulatory approach for public supply water conservation, 6) ERP water conservation provisions, 7) concurrent ERP/CUP application processing, 8) water conservation rate structure, and 9) landscape irrigation system design/installation constraints.
- c. The State of Florida needs bold leadership to craft statewide water policy that prioritizes water conservation, sustainable building and planning practices, incentives and policies that encourage and/or mandate the efficient use of water, and market solutions, such as aggressive- tiered rate structures and quantity-based fees for CUP withdrawals.

CFWI Fails to Protect the St. Johns River and Florida Springs

The CFWI 2020 Water Supply Plan continues to allow unsustainable use of our aquifer, downplays existing environmental harm within the 5-county CFWI area, ignores downstream impacts to the St. Johns River from harmful **water withdrawals**.

CFWI Downplays environmental impact to our aquifer and springs within CFWI area -

The CFWI 2020 Water Supply Plan does not provide a full accounting of existing environmental harm within its 5-county area. Sink holes, damage to wetlands, reduction of spring flow, upward migration of poor groundwater quality, and dropping lake levels are all indicators of overuse of our aquifer.

CFWI estimates that there are more than 1 million acres of wetlands within CFWI Planning Area, but limited their focus on groundwater-dominated wetlands that make up less than 20% of total wetland acreage. Within that 20%, only 47 of the existing 107 were actually analyzed leaving a more than 90% of wetlands within the CFWI area out of the equation.

CFWI reports that several communities within the CFWI area are known to have poor quality water. Yet, CFWI concluded that the additional drawdown of the aquifer will not lead to “unacceptable additional water quality degradation” even though CFWI did not model this known problem.

Mean annual flows of Wekiwa Springs dropped below acceptable levels after 2006 and are not in compliance with its Minimum Flow & Level. However, the 2020 CFWI Plan allows for the additional reduction in flow for both Wekiwa Springs and the St. Johns River. Spring flow contributes approximately 30% to the overall St. Johns River water budget. Where there are spring flow decreases, those decreases are mirrored by downstream flow declines in the St. Johns.

CFWI Ignores Downstream Impacts to the St. Johns River -

The CFWI 2020 Water Supply Plan **incorrectly states** that the SJRWMD 2012 Water Supply Impact Study (WSIS) “**confirms** that the St. Johns River is a viable alternative water supply source, with combined withdrawals of up to 155 MGD from three locations, would result in minimal to negligible environmental impacts to both surface and groundwater resources.”

The WSIS does not “confirm” or give a green light to withdraw water from the St. Johns River.

CFWI is justifying risky surface water withdrawals based on the findings of a flawed, incomplete study by SJRWMD. A group of independent scientists and experts from the National Research Council (NRC) conducted a peer review¹ of the St. Johns River Water Supply Impact Study (WSIS), identifying significant shortcomings in the study and expressing concerns regarding many of the conclusions. **According to the NRC, “the WSIS operated within a range of**

¹ <https://www.sjrwmd.com/documents/water-supply/#nrc-reports>

constraints that ultimately imposed both limitations and uncertainties on the study's overall conclusions."

The WSIS came to the conclusion that:

"Sea level rise, land use changes, and completion of regional water projects in the Upper St. Johns River Basin project would reduce or eliminate the effects of water withdrawals. "

"Intensification of land uses would increase runoff and river flows. Sea level rise will cause saline water to move farther upstream and will raise water levels in the lower and middle reaches."

WSIS failed to fully evaluate the water quality impacts of the resulting saltwater intrusion and increased pollution loads due to increased runoff:

"Although increases in runoff associated with the intensification of land uses would significantly reduce the effects of water withdrawals, they could increase pollutant loadings. This important factor was not evaluated by the WSIS, and this limitation was a concern raised by the National Research Council during peer review."

Based on the WSIS conclusions and the NRC's review, it is clear that is significant risks that water quality degradation will be a direct impact of surface water withdrawals that has not been adequately studied or accounted for.

The NRC also raised concerns about the lack of regulatory safeguards and the ability of SJRWMD's Minimum Flows and Levels (MFLs) ability to protect the St. Johns River during times of low flow and drought:

"Finally, insofar as the MFL regulations limit the withdrawal allowable during low flow periods, these conclusions may be technically correct, but the **Committee maintains substantial concern as to whether MFLs will be rigidly enforced in the future. If there is an extended drought in the future, when increased water supply demands have led to surface withdrawals, water suppliers might not be able to withdraw water from the river for months or even years on end. It is not obvious that this would be socially acceptable.**"

St. Johns Riverkeeper has serious concerns that these proposed withdrawals would:

- Worsen existing pollution problems,
- Increase the frequency of toxic algal blooms,
- Further reduce freshwater flow and increase salinity levels farther upstream, and
- Adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.

Full analysis and remedy of WSIS shortcomings cited within the NRC's Peer Review must be conducted prior to the inclusion of surface water projects within the CFWI Plans.

- How will CFWI address the identified NRC shortcomings of the WSIS?
 - “...the workgroups **did not appear to consider the possibility of back-to-back extreme events** in their analyses, e.g., two or three years of extreme drought in a row, which the Committee considers to be reasonably likely future situations.”
 - **Several critical issues that are beyond the control of the District or were considered to be outside the boundaries of the WSIS limit the robustness of the conclusions.** These issues include **future sea-level rises and increased stormwater runoff and changes in surface water quality** engendered by future population growth and land-use changes.
 - “Committee maintains **substantial concern as to whether MFLs will be rigidly enforced in the future.**”
- What is the status of the SJRWMD WSIS update including model enhancements and much needed Water Quality Analysis?
- How did CFWI factor in climate change and sea level rise impacts to surface water sources? “Increasing temperatures could increase evapotranspiration (ET), resulting in lower surface water levels, and increased irrigation demand, as well as impacts to stormwater runoff, soil moisture, aquifer recharge, and water quality.” (pg. 8 2020 CFWI)
- How is CFWI addressing water quality impacts outside the CFWI area? Did CFWI review MFLs outside CFWI area?
- What is the current status of the St. Johns River MFL at DeLand?

We continue to urge the CFWI to remove surface water withdrawal projects from the water supply plans and prioritize planning within our water means through water conservation and sustainable growth.

3. **Protect the St. Johns River and Florida Springs** from the inevitable harmful impacts of overuse of our Aquifer and surface water withdrawals. A holistic approach, which balances the District’s mission to provide water for consumptive use and protect Florida’s water resources must be adopted. The current Draft Plan only addresses one side of the equation and therefore is fundamentally unsound. Safeguards must be in place to protect our aquifer, our springs and our river and to provide safe drinking water.
 - a. **Must Conduct Full-Accounting of Existing Environmental Harm within CFWI Area**
 - b. **Must Fix WSIS Shortcomings Prior to Water Withdrawals/Ensure Safeguards**
 - Full/Transparent/Peer Reviewed Update to WSIS to include Water Quality Element
 - Fully incorporate water quality degradation risks associated with increased run-off due to development and saltwater intrusion

- Amend CFWI language acknowledging shortcomings of the WSIS and unexamined risks to the St. Johns River that must be addressed. The WSIS does not “**confirm**” SJR as viable AWS source.
- Fully explain how St. Johns River MFLs will be enforced to provide much needed safeguard for the St. Johns

Lack of Public Participation in Areas at Risk

CFWI has not adequately engaged the public outside the CFWI five county area. In 2015, Jacksonville Mayor Lenny Curry submitted the following in his official comments:

The official position of the consolidated City of Jacksonville, as stated in City Council Resolution 2014-37-A, is that we are opposed to surface water withdrawals from the upper and middle basins of the St. Johns River at this time and under these circumstances. Instead, we recommend revisiting the issue of surface water withdrawals when the plan is updated in 2020.

There is no mention within the 2020 CFWI Water Supply Plan of any attempt to address Northeast Florida’s concerns.

Stakeholders throughout the SJRWMD, SFWMD and SWFWMD have little chance of participating in important water policy discussions. This ongoing lack of stakeholder involvement and transparency could lead to rules, regulations, and water supply projects that are not in the best interest of the public, St. Johns River or Florida Springs.

At a time when elected officials across the state are dealing with the threats of Coronavirus, it is critical that the CFWI planning team make every effort to reach out to the municipalities impacted by the CFWI projects, not just those within the CFWI Project area. With significant impacts outside the CFWI area, it is critical that CFWI engages citizens and elected leaders throughout the St. Johns River watershed in the SJRWMD area.

4. **Genuine participation with stakeholders and local governmental** officials must occur throughout the area of impact including throughout the Middle and Lower Basins of the St. Johns River.

Conclusion

On behalf of the St. Johns River and the St. Johns Riverkeeper members, as well as the Florida Springs Council, we submit these comments for your consideration. We look forward to the opportunity to participate in a fully open, public process that will further explore the flaws noted in the comments above and will strive to achieve a balanced approach to Florida’s water needs and the protection of Florida’s natural resources.

St. Johns Riverkeeper and Florida Springs Council Recommendations

1. **Stimulate Sustainable Growth**, Not Unbridled Growth at our river and our springs' expense. Plan for Florida's population growth to better protect natural lands, promote livable communities, and save taxpayer dollars. Protective growth standards should be based on available water supply and protection of clean water for human consumption and natural systems.
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 - c. The State of Florida needs bold leadership to craft statewide water policy that prioritizes water conservation, sustainable building and planning practices, incentives and policies that encourage and/or mandate the efficient use of water, and market solutions, such as aggressive- tiered rate structures and quantity-based fees for CUP withdrawals.
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For Florida Waters,



Lisa Rinaman
Riverkeeper
St. Johns Riverkeeper



Ryan Smart
Executive Director
Florida Springs Council