RESOLUTION NO. 2021-293

A RESOLUTION BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, APPROVING TERMS, PROVISIONS, CONDITIONS, AND REQUIREMENTS OF A COST PARTICIPATION AGREEMENT FOR CONSTRUCTION AND OPERATION AND MAINTENANCE OF THE BLACK CREEK WATER RESOURCE DEVELOPMENT PROJECT BETWEEN ST. JOHNS COUNTY FLORIDA AND THE ST JOHNS RIVER WATER MANAGEMENT DISTRICT TO ADDRESS IMPACTS TO MINIMUM FLOWS AND LEVELS TO LAKES BROOKLYN AND GENEVA, AND AUTHORIZING THE COUNTY ADMINISTRATOR TO EXECUTE AND RECORD THE AGREEMENT ON BEHALF OF ST JOHNS COUNTY.

WHEREAS, the St. Johns River Water Management District (SJRWMD) and the Suwannee River Water Management District (SRWMD) are undertaking and continuing water supply planning processes using growth projections, groundwater and resource impact models, and other technical tools that will affect local governments and utilities throughout the region and specifically developing MFL Prevention and Recovery Plans that local governments and utilities may be a participant; and

WHEREAS, the St Johns River Water Management District ("SJRWMD") has approved the Recovery Strategy on April 13, 2021 for the proposed minimum flows and levels ("MFLs") for the Lake Brooklyn and Lake Geneva (the "MFLs") pursuant to Section 373.0421, Florida Statutes; and

WHEREAS, the St Johns River Water Management District ("SJRWMD") has approved the updated MFLs for Lake Brooklyn and Lake Geneva on May 11, 2021 pursuant to Section 373.0421, Florida Statutes; and

WHEREAS, the Black Creek Water Resource Development Project ("Project") is a key focus of the approved MFL Recovery Strategy; and

WHEREAS, the SJRWMD has a funding shortfall for the Project and is seeking Project participation from Consumptive Use Permit (CUP) holders to address the funding shortfall; and

WHEREAS, County Staff have successfully negotiated terms with SJRWMD staff to develop a Cost Participation Agreement for Construction and Operation and Maintenance of the Black Creek Water Resource Development Project (Agreement); and

WHEREAS, the SJRWMD Governing Board reviewed and approved the Agreement to proceed with execution on July 13, 2021 ; and

WHEREAS, the County has determined that executing the Agreement is the most economical and efficient method to address mitigation requirements established by the MFLs, and will serve the interests of the County; and

WHEREAS, the funding for this project participation is included in the fiscal year 2022 and 2023 utility budget.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, AS FOLLOWS:

Section 1. The above Recitals are hereby incorporated into the body of this Resolution, and are adopted as Findings of Fact.

Section 2. The Board of County Commissioners hereby approves the terms, provisions, conditions, and requirements of the Cost Participation Agreement for Construction and Operation and Maintenance of the Black Creek Water Resource Development Project between St. Johns County, Florida and the St. Johns River Water Management District, and authorizes the County Administrator to execute and record the Agreement on behalf of St Johns County.

Section 3. The Board of County Commissioners hereby authorizes appropriate funding transfer from Utility Reserves to fund this project, upon approval of the Agreement.

Section 4. If there are typographical or administrative errors or omissions that do not change the tone, tenor, or context of this resolution, this resolution may be revised without subsequent approval of the Board of County Commissioners.

Section 5. This resolution shall be effective upon adoption by the Board of County Commissioners.

PASSED AND ADOPTED by the Board of County Commissioners of St. Johns County, Florida, this 20th day of July, 2021.

BOARD OF COUNTY COMMISSIONERS OF
ST. JOHNS COUNTY, FLORIDA

Attest: Brandon J. Patty, Clerk
of the Circuit Court & Comptroller

Pam Hatterman
Deputy Clerk

By:

Jeremiah R. Blocker, Chair

RENDITION DATE 7/21/21

ST. JOHNS COUNTY FLORIDA

ST. JOHNS COUNTY
UTILITY DEPARTMENT
1205 STATE ROAD 16
St. Augustine, Florida 32084-8646

INTEROFFICE MEMORANDUM

TO: Board of County Commissioners

FROM: Gordon Smith, Assistant Director of Engineering

SUBJECT: SJRWMD Cost Participation Agreement

DATE: July 7, 2021

Purpose:

Background Narrative regarding Black Creek Water Resource Development Project Cost Participation Agreement and the Lake Brooklyn and Lake Geneva Minimum Flows and Levels (MFL):

Summary:

The St. Johns River Water Management District (SJRWMD) Governing Board approved the Recovery Strategy for the Lake Brooklyn and Lake Geneva MFL's on April 13, 2021. The MFL and Recovery Strategy include elements that require Consumptive Use Permit (CUP) holders to address their calculated impacts to the lakes. The approved Recovery Strategy centers on the SJRWMD's Black Creek Water Resource Development Project (Project). St Johns County Utility Department (SJCUD) Staff has negotiated the Cost Participation Agreement for Construction and Operation and Maintenance of the Black Creek Water Resource Development Project (Agreement) with SJRWMD staff to address the County's impacts to Lakes Brooklyn and Geneva for projected water supply needs.

The Agreement allows the County to purchase 0.17 ft lift in Lake Levels generated by the Project to mitigate modeled impacts to meet the required MFL's in Lakes Brooklyn and Geneva through the 20 year term of the agreement. The lift purchased by County was established by applying the same hydrologic modeling practices the SJRWMD will employ during the Consumptive Use Permitting process, and was based on groundwater demands to sustain the County's 2045 medium growth population projections. There is a condition in the agreement that could allow the County to purchase additional lift in the future if it is available and necessary.

The County's maximum cost to participate is $1,843,327 which covers proportional construction, operation, and maintenance costs of the Project. Participation payments for this project will be made in two installments. The first payment will be half of the total estimated participation cost, which will be due November 1, 2021. The second and final payment is due on November 1, 2022 and will pay for the remaining half of the operation and maintenance costs. The construction payment will also include a prorated construction cost component based on the final construction bid for the project. In the event the construction bids are lower than the $83,000,000 construction cost estimate noted in the Agreement, the construction cost component will be reduced. The County will not be responsible to pay additional costs for construction in the event bids exceed the current SJRWMD construction estimate.

The County's participation on this Project is the most economical and effective path forward to meet this regulatory requirement. If the County elected to not participate in this project, severe reductions in ground water withdrawals and substantial and costly alternative water supply projects would be required to be implemented in order meet the County's current water supply needs, which would have substantial impacts on utility rates.

The County, as a member of the NFUCG, participated in submitting petitions challenging aspects of the existing and proposed MFL, and the approved Recovery Strategy in order to preserve rights in the event negotiations to participate in the Project failed to develop an Agreement. Successful execution of the Agreement will cancel the petitions that have been filed to date and end litigation activities related to this MFL.

With the support from the NFUCG technical and legal team, County staff worked closely with SJRWMD to develop the terms and conditions of the Participation Agreement to address the County's impacts to Lakes Brooklyn and Geneva for projected water supply needs. Attached is a final draft of the Participation Agreement that will be presented to the SJRWMD Governing Board meeting scheduled for July 13, 2021 for review and approval.

Funding:

The funding for this Participation Agreement, if approved, will be reflected in the Fiscal Year 2022 and 2023 Utility Budget. The table below summarizes the estimated cost participation required for SJCUD.

SJRWMD Cost Participation Calculation

Details	Construction Cost (Maximum)	Operating Cost NPV	Total Cost Estimate
Base Cost for .10 Feet of Water Level (Lift) Agreement - Page 6-7	$ 837,778	$ 246,532	$ 1,084,310

St. Johns County Responsibility (.17 Feet of Water Level (Lift) **1.7x Multiplier**	**$ 1,424,223**	**$ 419,104**	**$ 1,843,327**
50.0% Payment Due	*November 1st, 2021*	*November 1st, 2021*	
50.0% Payment Due	*November 1st, 2022*	*November 1st, 2022*	

Payment Schedule and Budget Request

Payment Schedule	Construction Cost (Maximum)	Operating Cost NPV	Requested Budget Allocation
Payment 1 (FY 2022)	$ 712,111	$ 209,552	**$ 921,664**
Payment 2 (FY 2023)	$ 712,111	$ 209,552	**$ 921,664**

Recommendation:

Utility Department Staff recommends executing the Agreement, and requests approval for the County Administrator to execute and record the Agreement on behalf of St Johns County, Florida.

COST PARTICIPATION AGREEMENT NO. 2 FOR CONSTRUCTION AND OPERATION AND MAINTENANCE OF THE BLACK CREEK WATER RESOURCE DEVELOPMENT PROJECT

THIS AGREEMENT is entered into as of this _____ day of July 2021 (Effective Date) by and between St. Johns County (County), whose address is 500 San Sebastian View, St. Augustine, Florida 32084-8686, and the St. Johns River Water Management District, a special taxing district created by Chapter 373, Florida Statutes, (the District), whose address is 4049 Reid Street, Palatka, Florida 32177-2529.

RECITALS:

A. The District is charged with the responsibility to prevent harm to the water resources of the District and to administer and enforce Chapter 373, Florida Statutes (F.S.), and the rules promulgated thereunder.

B. The District administers the consumptive use permitting program in part II of Chapter 373, F.S., and has implemented that program, in part, through chapter 40C-2, Florida Administrative Code (F.A.C.), including the Applicant's Handbook: Consumptive Uses of Water (August 29, 2018) (A.H.) incorporated by reference in rule 40C-2.101(1)(a), F.A.C.

C. The District is authorized and directed to develop and implement minimum flows and minimum water levels in sections 373.042 and 373.0421, F.S., and has implemented this program in part through chapter 40C-8, F.A.C.

D. The District issued County consumptive use permit (CUP) number 1198 on November 9, 2004 (latest modification issued March 15, 2021), CUP number 1142 (Ponte Vedra System) on December 12, 2012, and CUP number 1392 (Hastings System) on March 25, 2021, which are herein collectively referenced as "County CUPs" in this agreement. The County CUPs authorize County to withdraw 21.76 MGD for public water supply purposes through October 12,

2024 for the Mainland System, December 11, 2032 for the Ponte Vedra System, and March 25, 2041 for the Hastings System.

E. Condition number 10 of CUP(s) 1198 and 1392 provides as follows:

> The permittee's consumptive use of water as authorized by this permit shall not reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to Section 373.042 and 373.0421, F.S. If the permittee's use of water causes or contributes to such a reduction, then the District shall revoke the permit, in whole or in part, unless the permittee implements all provisions applicable to the permittee's use in a District approved recovery or prevention strategy.

F. Condition number 10 of CUPs 1142 provides as follows:

> The permittee's consumptive use of water as authorized by this permit shall not reduce a flow or level below any minimum flow or level adopted in Chapter 40C-8, F.A.C. If the permittee's use of water causes or contributes to such a reduction, then the District shall revoke the permit, in whole or in part, unless the permittee implements all provisions applicable to the permittee's use in a District-approved recovery or prevention plan.

G. On April 14, 2021, at the District's request, a notice of proposed rule was published in the Florida Administrative Register. This notice of proposed rule would establish the following new MFLs for Lakes Brooklyn and Geneva:

System Name	County	Minimum Level	Level (ft NAVD)
Brooklyn	Clay	P25	111.5
		P50	106.2
		P75	98.6
Geneva	Bradford,	P25	101.7
	Clay	P50	98.3
		P75	89.3

The minimum P25, P50, and P75 levels for Lake Brooklyn are based on the MFLs condition lake level time series (7/17/1957 – 12/31/2018), effective {*effective*

date}, which is incorporated by reference and available at {insert URL} and upon request from the St. Johns River Water Management District, 4049 Reid Street, Palatka, FL 32177-2529.

MFL status of Lake Brooklyn will be assessed by comparing the minimum P25, P50, and P75 to the current P25, P50, and P75, respectively. The current P25, P50, and P75 for Lake Brooklyn are calculated by updating the current pumping condition lake level time series (7/17/1957 – 12/31/2018) with post-2018 observed data at SJRWMD gage 3360373. The current-pumping condition lake level time series is incorporated by reference and available at {insert URL} and upon request from the St. Johns River Water Management District, 4049 Reid Street, Palatka, FL 32177-2529.

The minimum P25, P50, and P75 levels for Lake Geneva are based on the MFLs condition lake level time series (7/1/1957 – 12/31/2018), effective {*effective date*}, which is incorporated by reference and available at {insert URL} and upon request from the St. Johns River Water Management District, 4049 Reid Street, Palatka, FL 32177-2529.

MFL status of Lake Geneva will be assessed by comparing the minimum P25, P50, and P75 to the current P25, P50, and P75, respectively. The current P25, P50, and P75 for Lake Geneva are calculated by updating the current pumping condition lake level time series (7/1/1957 – 12/31/2018) with post-2018 observed data at SJRWMD gage 11590497. The current-pumping condition lake level time series is incorporated by reference and available at {insert URL} and upon request from the St. Johns River Water Management District, 4049 Reid Street, Palatka, FL 32177-2529.

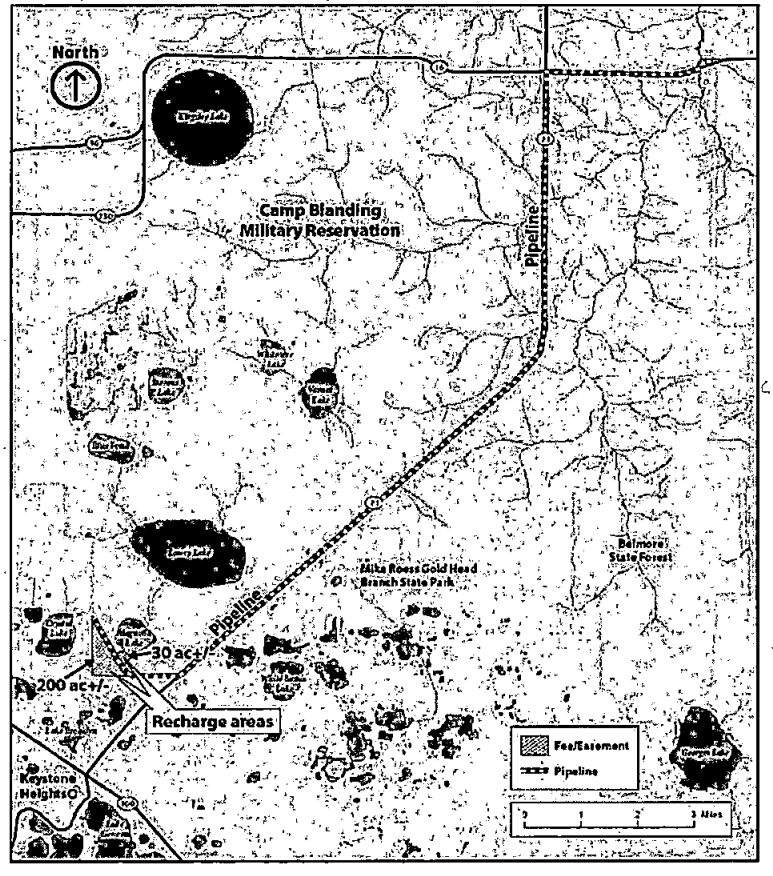
H. At its May 11, 2021, Governing Board meeting, the District's Governing Board voted to adopt the proposed MFLs rule referenced in paragraph G above.

I. By an Order dated May 11, 2021, the District determined that Lakes Brooklyn and Geneva were not meeting (i.e., were below) these new MFLs. That same Order additionally determined that Lakes Brooklyn and Geneva were in recovery and approved a recovery strategy (B&G Recovery Strategy). This recovery strategy estimated a P50 deficit for Lakes Brooklyn and Geneva of 3.9 feet and 1.5 feet, respectively by the year 2045. The B&G Recovery Strategy provides that "[u]pon determination that groundwater withdrawals authorized by individual consumptive use permits held by a permittee will cause or contribute, individually or cumulatively,

to a violation of the MFLs for Lakes Brooklyn or Geneva, the District will notify them pursuant to the standard limiting conditions ...of their responsibility to address their proportional share of the required recovery of the MFLs." A copy of the B&G Recovery Strategy is attached as "Attachment 1."

J. The District will construct, operate and maintain the Black Creek Water Resource Development Project (Black Creek WRD). The Black Creek WRD is described in the B&G Recovery Strategy. The Black Creek WRD is also described in the North Florida Regional Water Supply Plan (NFRWSP). Among other things, the Black Creek WRD involves the construction of an intake facility at Black Creek, a 17-mile transfer pipeline, and a treatment and distribution system at Alligator Creek, which flows into Lake Brooklyn.

K. The Black Creek WRD is illustrated by the following graphic:



L. The Black Creek WRD will directly augment Lakes Brooklyn and Geneva and also recharge the Floridan Aquifer in the vicinity of Lakes Brooklyn and Geneva sufficiently to enable these lakes to meet the MFLs described in section G above until at least the year 2045.

M. In the B&G Recovery Strategy, the District allows entities holding CUPs whose authorized water withdrawals contribute to the deficit for the Lakes Brooklyn and Geneva MFLs to participate financially in the construction and operation of the Black Creek WRD as a means of addressing their proportional share of the required recovery of the MFLs for Lakes Brooklyn and Geneva and to ensure their future water use complies with the Lakes Brooklyn and Geneva MFL criteria by not causing a violation of the Lakes Brooklyn and Geneva MFLs. As used in this Agreement, the phrase "impacts to the Lakes Brooklyn and Geneva MFLs" means County's proportionate share of the required recovery of the MFLs for Lakes Brooklyn and Geneva and compliance with the Lakes Brooklyn and Geneva MFL criteria to ensure no violations of the Lakes Brooklyn and Geneva MFLs, all as specified in the B&G Recovery Strategy.

N. Subject to the terms of this Agreement, County has elected to participate financially in the construction, operation, and maintenance of the Black Creek WRD to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the extent described herein.

O. Subject to the terms of this Agreement, the District has elected to allow County to participate financially in the construction, operation, and maintenance of the Black Creek WRD to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the extent described herein.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual benefits to be derived here from, the District and County agree as provided herein.

Incorporation of Recitals

1. The recitals set forth above are incorporated herein by reference and made a part hereof as fully as if set forth herein verbatim.

County's Purchase of Offsets and Payment for Black Creek WRD

2. The Black Creek WRD has an estimated construction project cost of between $63.8 and $82.9 million. As used herein, "construction cost" means actual costs of constructing project facilities, including construction management. The term "construction cost" does not include land acquisition, engineering design, permitting, and-solicitation costs. The Black Creek WRD is projected to raise the P50 elevation of Lake Brooklyn by 9.9 feet. Therefore, the initial estimated construction cost per each 0.1-foot rise in the elevation of Lake Brooklyn's water level (hereafter referred to as "lift" or "offset") achieved by the Black Creek WRD would be approximately $644,444 to $837,778, but in no case shall the total cost per 0.1 foot of lift used to determine COUNTY's construction cost participation payment exceed $837,778.00. This lift is also sufficient to raise the P50 elevation in Lake Geneva by 4.9 feet.

3. The Black Creek WRD has an estimated initial annual total operation and maintenance cost of $1,230,000. The 20-year net present value of this annual operation and maintenance cost was calculated to be $24,406,674 using an annual inflation rate of 1.4% and a discount factor of 1.34%. The resulting County payment for each 0.1 foot of lake level lift for Black Creek WRD operation and maintenance is $246,532.00.

4. County has elected to purchase 0.17 feet of lift. That purchase consists of 0.04 feet of lift for County's proportionate share of the impact from its 2014 – 2018 average water use towards the 1.6 feet of existing needed recovery in Lake Brooklyn and the 0.3 feet of existing needed recovery in Lake Geneva, and also 0.13 feet of lift so as to offset the impact from County's

water use over and above its 2014-2018 average use towards the 3.9 feet of future recovery in Lake Brooklyn and 1.5 feet of future recovery in Lake Geneva. The determination of the amount of lift needed to offset the impact from County's water use is based on the model simulation run by the District on June 26, 2021, which included a future water use scenario of 23.6 mgd and the impact offset described in condition 36 of CUP 1198-8.

5. Based on the 0.17 feet of lift that County is purchasing, the total maximum construction cost County will pay based on the 0.1-foot lake level increase construction cost estimate of $837,778 is $ 1,424,222. This maximum construction cost payment may be lower based on the payment methodology in paragraph 6 below. Not later than November 1, 2021, County will pay, deposit and deliver, in escrow, to the Florida Department of Financial Services (DFS) as Escrow Agent under the terms of an Escrow Agreement to be entered into among County, the District, and DFS (Escrow Agreement), cash or cash equivalent in the principal sum of $ 712,111 representing one-half of County's total proportional share of the Black Creek WRD construction cost for the amount of lift County is purchasing. After County pays the Escrow Agent this amount, the District will determine the final award for the construction bid for the Black Creek WRD, and based on that bid award, within 30 days thereafter, the District will notify County of the final construction cost per 0.1 feet of lift and notify County of the dollar amount of the remaining portion of the Black Creek WRD construction cost County must pay the Escrow Agent (determined by final construction cost per 0.1 feet of lift multiplied by feet of lift the County is purchasing). However, regardless of the final construction cost per 0.1 of lift, County's remaining construction cost payments under this Agreement shall not exceed $ 712,111. After the District notifies County of the final construction cost per 0.1 foot of lift multiplied by the feet of lift County is purchasing, and accounting for County's initial construction cost payment specified above, then

not later than November 1, 2022, County will pay, deposit, and deliver, in escrow, to the Escrow Agent, the remaining amount of County's construction cost payment. These construction cost payments are valid for the term of this Agreement and any extensions of this Agreement.

6. As another component of County's lift purchase, County will pay for County's share of the Black Creek WRD operation and maintenance costs as a lump sum payment, representing the net present value of 20 years of annual operation and maintenance costs using an annual inflation rate of 1.4% and a discount factor of 1.34%. Based on the 0.17 feet of lift that County is purchasing, and the net present value operation and maintenance cost of $246,532 per 0.1 feet of lift, COUNTY will pay an amount of $ 419,104. County will pay this amount in two payments. Therefore, in addition to the construction cost payments specified above, by November 1, 2021, County will pay to the Escrow Agent the amount of $ 209,552. By November 1, 2022, County will pay to the Escrow Agent the amount of $ 209,552. This operation and maintenance payment amount is valid only for the term of this Agreement. If County wishes to extend the term of this Agreement, additional sums based on actual costs to operate and maintain the Black Creek WRD must be provided.

Access of Funds Via Escrow Agent

7. After County transfers the above referenced amounts to the Escrow Agent, the District shall access funds from the Escrow Agent pursuant to the terms of the Escrow Agreement to construct, operate and maintain the Black Creek WRD. When requesting disbursements, the District shall use the prescribed forms of DFS and will provide a cover letter to DFS with a copy to County stating the following:

> In accordance with Cost Participation Agreement Number [__], I request disbursement of funds in the amount of _____ DOLLARS ($_____) and certify that an equal amount has been expended by the District for construction or operation and maintenance of the Black Creek Project.

District Design, Permitting and Operation of Black Creek WRD

8. The District will undertake all reasonable efforts to design, permit, construct, operate, and maintain the Black Creek WRD up to its 10 MGD capacity, and in a manner which maximizes the flowrate discharged and aquifer recharge to raise the lake levels of Lakes Brooklyn and Geneva to the levels required to achieve compliance with the applicable minimum levels contained in Chapter 40C-8, F.A.C.

9. The District will use funds disbursed by the Escrow Agent for the sole purpose of payment for the construction or operation and maintenance of the Black Creek WRD.

10. In exchange for County's financial participation in the Black Creek WRD provided in this Agreement, the District assumes all liability and responsibility, through the operation of the Black Creek WRD, of ensuring that sufficient lake augmentation or other water conveyance occurs to enable Lakes Brooklyn and Geneva to meet the applicable minimum levels set forth in Chapter 40C-8, F.A.C., and to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the quantity of lift County has purchased. The District's liability and responsibility includes addressing and resolving any shortfalls in Black Creek WRD function or design, including shortfalls in effective lake augmentation, aquifer recharge and shortfalls or other impediments that may result in lake levels not increasing to the projected levels including, but not limited to, sinkhole formation, water quality issues, regulatory issues, third party lawsuits, and project cost overruns.

11. Any failure to design, permit, construct, operate or maintain the Black Creek WRD in a timely or sufficient manner, and any consequences resulting from the same, shall be the District's sole responsibility.

12. While the Black Creek WRD may provide regional recharge benefits beyond eliminating the recovery deficit of the Lakes Brooklyn and Geneva MFLs, the District will

prioritize the design, permitting, construction, operation and maintenance of the Black Creek WRD to eliminate the recovery deficit of the Lakes Brooklyn and Geneva MFLs and to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the quantity of lift County has purchased before any regional recharge or other non-MFL benefits.

No Ownership of Control by County of Black Creek WRD

13. County will have no ownership in or operational control over the Black Creek WRD, including no ownership or control over any real estate interest needed to support the Black Creek WRD. County shall have no obligation to design, permit, construct, operate or maintain any portion of the Black Creek WRD. Nothing in this Agreement shall be construed to create a joint venture, partnership, or any other co-ownership arrangement between the District and County. County has no obligation to any contractors, materialmen, suppliers, or any other entities performing work on the Black Creek WRD. All contracts or agreements for work on the Black Creek WRD shall be solely between the contractor and the District.

14. Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party, its officers, employees and agents. District accepts all risks arising from construction or operation of the Black Creek WRD. Nothing contained herein shall be construed or interpreted as denying to any party any remedy or defense available under the laws of the state of Florida, nor as a waiver of sovereign immunity of the state of Florida, or of any political subdivision of the state of Florida, beyond the waiver provided for in §768.28, Fla. Stat., as amended. The District shall acquire and maintain throughout the term of this Agreement such liability, workers' compensation, and automobile insurance as required by its current rules and regulations.

District Representations Regarding County's Financial Participation in the Black Creek WRD

15. The District represents and warrants to County that the quantity of lift, lake augmentation, aquifer recharge or other benefit from the Black Creek WRD accrued to County by virtue of County's financial participation in the Black Creek WRD is in excess of any water resource development or general public benefit of that project such as, but not limited to, one or more of the following:

a. quantities reserved or otherwise designated for the benefit of the water resource or for water resource development;

b. quantities needed to offset of deficits associated with existing exempt and sub-threshold consumptive uses;

c. quantities needed to offset deficits associated with anticipated future exempt and sub-threshold consumptive uses;

d. quantities needed to offset deficits associated with permitted consumptive uses located in other water management districts or consumptive uses located outside the State of Florida; and

e. quantities accrued to other participants by virtue of their financial participation in the Black Creek WRD.

16. The District has full authority and ability to enter into this Agreement. The provisions of this Agreement do not conflict with any District regulatory program.

17. The District understands and recognizes that County intends to rely on the District's implementation and operation of the Black Creek WRD as the sole means for County to demonstrate compliance with the Lake Brooklyn and Lake Geneva MFLs and to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the quantity of lift County has purchased to enable County to provide water for public supply purposes pursuant to the terms of the County CUPs.

Compliance with Consumptive Use Permit and Brooklyn and Geneva MFLs and Recovery Strategy

18. If County applies to renew or modify the County CUPs, the District shall accept this Agreement, for its duration, to demonstrate compliance with the requirements of Rule 40-2.301(2)(h), F.A.C., and sections 2.3(h) and 3.8 of the A.H. relative to the Lake Brooklyn and Lake Geneva MFLs and County's proposed groundwater withdrawals up to the amount of lift purchased by County to offset its impacts to the Lakes Brooklyn and Geneva MFLs. County and the District will use the North Florida Southeast Georgia Regional Groundwater Flow Model version 1.1 (NFSEG) in combination with the KHTM local scale model version 2.0 to determine the deficit in Lake Brooklyn MFL caused by County's proposed groundwater withdrawals to be compared to the amount of lift County has purchased under this Agreement. Upon mutual agreement of the parties, alternative groundwater flow models or future updates to the NFSEG Model version 1.1 or KHTM local scale model version 2.0 may be utilized for the determination of deficits and lift.

19. This section shall remain valid regardless of the design, permitting, construction or operational status of the Black Creek WRD.

20. From the Effective Date through the duration of this Agreement, County will bear no responsibility for taking actions to offset lake stage deficits of either Lake Brooklyn or Lake Geneva resulting from County's groundwater withdrawals up to the amounts of lift specified in this Agreement.

21. If County timely makes the payments provided herein, County shall, for the duration of this Agreement, be deemed to have fully complied with the requirements of the conditions described in paragraphs E and F above of the County CUPs and with the requirements of Rule 40C-2.301(2)(h), F.A.C., and Sections 2.3(h) and 3.8 of the Consumptive Uses of Water Applicants Handbook (A.H.), and any statutory provisions, regarding minimum levels for Lakes

Brooklyn and Geneva, and recovery for the same, up to the amounts of lift specified in this Agreement, regardless of any or all of the following:

(i) the status of the District's construction, implementation, or operation of the Black Creek WRD;

(ii) any changes occurring to the construction or operation of the Black Creek WRD;

(iii) the cost of constructing the Black Creek WRD increasing beyond the amounts used in this Agreement;

(iv) any changes to permitted consumptive uses located in other water management districts or consumptive uses located outside of the State of Florida;

(v) the effectiveness or lack thereof of the Black Creek WRD in increasing lake levels of Lakes Brooklyn and Geneva; and

(vi) subsequently approved changes or revisions to the B&G Recovery Strategy.

22. County's ability to address County's impacts to the Lakes Brooklyn and Geneva MFLs to the quantity of lift County purchased, or to be deemed in compliance with the aforementioned permit, rule, B&G Recovery Strategy, and any statutory obligation related to the Lakes Brooklyn and Geneva MFLs, shall not be contingent on the District's construction, operation or maintenance of the Black Creek WRD.

23. Within 90 days of executing this Agreement, the District will amend the B&G Recovery Strategy to include the following language: "Entities who have executed agreements to participate in the Black Creek WRD project have addressed their proportional share of impacts to the MFLs and are in compliance with the B&G Recovery Strategy up to the amount of lift purchased by that Entity." In the interim, this Agreement shall be deemed by the District to satisfy the B&G Recovery Strategy. The District's failure to amend the B&G Recovery Strategy to include this language within the specified timeframe shall not affect the determination that by

entering into this Agreement County has addressed its impacts to the Lakes Brooklyn and Geneva MFLs referenced in section ___ above and is in compliance with the B&G Recovery Strategy up to the amount lift purchased by County.

24. County may submit and the District will accept this Agreement as "good cause" justifying County to apply to renew the County CUPs more than one year before the CUP expiration date as required by rule 40C-2.361(1), F.A.C.

25. If County fails to make any of the payments of its proportionate share of the Black Creek WRD construction costs or operation and maintenance costs specified herein, the District may enforce the terms of this Agreement and County shall not be entitled to use this Agreement to demonstrate compliance with the requirements of Rule 40C-2.301(2)(h), F.A.C., and sections 2.3(h) and 3.8 of the A.H. relative to the Lake Brooklyn and Lake Geneva MFLs.

Use of County's Lift Purchased from Black Creek WRD for Other MFLs and Environmental Resources

26. The benefits from the Black Creek WRD associated with County's payments herein will also be considered an offset or benefit toward addressing impacts or deficits of other water bodies with established minimum flows or levels or with other environmental resource impacts attributable to the County CUPs authorized withdrawals to the extent operation of the Black Creek WRD creates such benefits. To the extent permitted by the Florida Department of Environmental Protection's rules, the District shall consider such offset or benefit toward addressing impacts or deficits to the re-evaluated minimum flow or level and recovery or prevention strategy for the Lower Santa Fe and Ichetucknee Rivers and associated priority springs. When the District issues a notice of proposed rule development to establish a new or re-evaluated minimum water flow or water level for waterbodies other than Lakes Brooklyn and Geneva or new minimum levels for groundwater, the District will evaluate the extent to which the operation of the Black Creek WRD

provides benefits to, or offsets impacts from groundwater withdrawals to such other minimum water levels or water flows or environmental resource impacts and inform County of same.

Option for Additional Participation

27. For the duration of this Agreement, County has the option to pay the District for the right to use additional Black Creek WRD benefits to offset future impacts to the Lakes Brooklyn and Geneva MFLs and other impacts or deficits of other water bodies with established minimum flows or levels or with other environmental resource impacts resulting in additional quantities of groundwater County would seek authorization to withdraw under the County CUPs, including any modifications of the CUPs, at the same cost per foot of recovery used to calculate County's original participation costs described herein (i.e., construction, operation and maintenance costs). This option remains so long as the Lakes Brooklyn and Geneva water level augmentation capabilities of the Black Creek WRD have not been otherwise been assigned. If County desires to execute this option, County shall notify the District of the same along with an offer of the additional payment for the right to use the requested additional benefits. Upon receiving the County's notice, the District shall determine whether adequate benefits from the Black Creek WRD remain available for County's use and whether County has correctly calculated the amount of the additional payment required for such use. If the District determines that additional benefits are available for County's use and determines the correct payment amount for such additional benefits, County and the District will amend this Agreement to reflect the payment and use of such additional benefits.

Miscellaneous

28. All notices or other communications which may be required under the terms of this Agreement shall be in writing and shall be deemed to have been duly given if sent by overnight

courier (e.g., Federal Express), or if mailed by United States certified mail, return receipt requested, postage prepaid, addressed to the respective party at the addresses set forth below:

If to County:

St. Johns County Utility Department
1205 State Road 16
St. Augustine, FL 32084
Attn: Utility Director

With copy to:

If to District:

St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177-2529
Attn: Office of General Counsel

29. County will take no action opposing (or encourage any other person or entity to oppose) the District's application to any government body or special district for authorization to construct, operate, and maintain the Black Creek WRD.

30. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Florida.

31. This Agreement constitutes the entire understanding and agreement between the parties hereto with respect to the subject matter hereof. This Agreement may not be modified or amended except by the written agreement of the parties to be bound thereby.

32. In the event of any legal or administrative proceedings arising from or related to this Agreement, including appeals, each party shall bear its own attorney's fees.

33. Two (2) originals of this Agreement shall be executed, with each party provided one (1) fully executed original.

34. The parties intend this Agreement to be an interlocal agreement pursuant to section

163.01, F.S., and County shall file this Agreement at County's expense with the Clerk for the Circuit Court in and for Putnam and St. Johns Counties, Florida.

35. The fact that one of the parties may be deemed to have drafted or structured any provision hereof shall not be considered in construing the particular provision either in favor of or against such party.

36. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable, the same as if the invalid or unenforceable provision had never been a part of the Agreement; and the remaining provisions of the Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement.

37. The terms of this Agreement shall inure to the benefit or obligation of the successors and assigns of the parties. In addition, for the duration of this Agreement, if County determines that it no longer requires all or a portion of the amount of lift County purchased under this Agreement, County may tender all or a portion of that amount of lift to the District. If the District agrees to accept the amount of lift County is tendering, County and the District shall enter into an amendment of this Agreement specifying the terms for County's return of that amount of lift to the District. In general, as of the Effective Date, the parties envision that an amendment to this Agreement allowing County to return to the District all or a portion of the amount of lift purchased will require the District to pay to County an amount of money representing the cost of such lift under the lift payment formulas specified herein. The parties also envision that the District may also sell to a third party some or all of the amount of lift County is returning to the District. County may not directly sell or resell to a third party all or a portion of the amount of lift County has purchased under this Agreement. This Agreement does not create any obligation for the

District to purchase any part of the lift tendered by County nor create any expectation in County that the District would agree to such purchase.

38. The parties acknowledge that a portion of St. Johns County is located in the JEA utility service area (the JEA Utilities). In the event the County acquires all or a portion of the JEA Utilities pursuant to the interlocal agreement between the County and JEA dated July 20, 1999, as subsequently amended, nothing in this Agreement shall prevent the County from receiving credit for the amount of lift purchased by JEA for the JEA Utilities. Such credit shall not be considered a sale to a third party for the purposes of this Agreement.

39. The District shall provide no input nor attempt to influence in any way the source or method County employs to recover costs associated with County's participation in this Agreement or the Black Creek WRD. This prohibition shall not apply if County requests the District input. In such case, the District's input shall be limited to the extent of County's request.

40. This Agreement shall remain in effect through December 31, 2045.

41. County's participation in this Agreement shall not be construed in any way to prejudice County's future ability to rely on other projects or action of the District or other entities for additional benefits or offsets to the Lakes Brooklyn and Geneva MFLs, other established minimum water levels or water flows and associate prevention or recovery strategies, and other water resource impacts.

42. This Agreement may be enforced through specific performance. This Agreement may also be used in any legal or administrative proceeding involving County and the Lakes Brooklyn and Geneva MFLs.

43. Any party to this Agreement may publish notice of the Agreement. If this Agreement is challenged or opposed by a third party, the District and County will jointly defend

against such challenge, including any subsequent appeals.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the dates set forth below.

[SIGNATURES ON FOLLOWING PAGES]

BOARD OF COUNTY
COMMISSIONERS OF
ST. JOHNS COUNTY

By:_____
Jeremiah R. Blocker, Chair

ATTEST: Brandon J. Patty, Clerk of the
Circuit Court and Comptroller

By:_____

Approved as to Form and Legality
St. Johns County Office of General Counsel

By:_____

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

By: _____
Douglas Burnett, Chairman

Attest: _____
Susan Dolan, Secretary

(SEAL)

Approved as to Legal Form and Content:

_____
Mary Ellen Winkler, General Counsel

Filed on this _____ day of _____, 2021.

_____
District Clerk

ATTACHMENT 1

RECOVERY STRATEGY FOR IMPLEMENTATION OF LAKES BROOKLYN AND GENEVA MINIMUM LEVELS

Recovery Strategy for the Implementation of Lakes Brooklyn and Geneva Minimum Levels

May 11, 2021

St. Johns River Water Management District
Division of Water Supply Planning and Assessment
Bureau of Water Supply Planning

Introduction

As a part of fulfilling its mission and statutory responsibilities, the St. Johns River Water Management District (District) establishes minimum flows and levels (MFLs) for priority water bodies within its boundaries. MFLs establish a minimum hydrologic regime and define the limits at which further consumptive use withdrawals would be significantly harmful to the water resources or ecology of an area. MFLs are one of many effective tools used by the District to assist in making sound water management decisions and preventing significant adverse impacts due to water withdrawals.

Lakes Brooklyn and Geneva are sandhill lakes located in Clay and Bradford counties, Florida (see Figure 1) and adjacent to the city of Keystone Heights, Florida. Lakes Brooklyn and Geneva are part of a chain of lakes and wet prairies in the Upper Etonia Creek Basin. Minimum levels for Lakes Brooklyn and Geneva were originally adopted in January 1996. The District completed a reevaluation of minimum levels for Lakes Brooklyn and Geneva in 2020. The reevaluated minimum levels recommended for Lakes Brooklyn and Geneva are based on implementation of updated methods and more appropriate environmental criteria. The updated methods include results from a new regional steady state groundwater model and a local scale transient model used to quantify the effects of local and regional groundwater withdrawals, and the analysis of an additional 20 years of hydrologic data. The status assessment for Lakes Brooklyn and Geneva indicate that they are currently not meeting their proposed MFLs based upon current (average of 2014–2018) groundwater withdrawals with a P50 lake deficit of 1.6 feet for Lake Brooklyn and 0.3 feet for Lake Geneva. Therefore, Lakes Brooklyn and Geneva are in recovery, and a recovery strategy is required (subsection 373.0421(2), *Florida Statutes* (F.S.)). Additionally, the estimated pumping conditions at 2045 were assessed and when added to the current deficit resulted in an estimated total deficit for Lakes Brooklyn and Geneva at the P50 of 3.9 feet and 1.5 feet, respectively.

Consistent with the provisions for establishing and implementing MFLs provided for in section 373.0421, F.S., the Recovery Strategy (Strategy) for the Implementation of Lakes Brooklyn and Geneva MFLs identifies a suite of projects and measures that, when implemented, recovers the MFLs for Lakes Brooklyn and Geneva and prevents the MFLs from being violated in the future due to consumptive uses of water, while also providing sufficient water supplies for all existing and projected reasonable beneficial uses.

To meet the requirements for the Strategy according to subsection 373.0421(2), F.S., this Strategy contains the following information:

- A listing of specific projects and measures identified for implementation of the plan
- A regulatory component to achieve the MFLs
- A timetable for implementation

On January 17, 2017, the St. Johns River Water Management District and the Suwannee River Water Management District Governing Boards approved the 2015–2035 North Florida Regional Water Supply Plan [NFRWSP] (SJRWMD and SRWMD, 2017) which identified that groundwater withdrawals beyond 2010 were not sustainable without creating adverse environmental impacts.

The MFLs for Lakes Brooklyn and Geneva support the conclusions of the NFRWSP. Like the NFRWSP, this Strategy focuses on water conservation, water supply development and water resource development (WRD) projects. A regulatory component is also included that utilizes existing rules to provide a structure for consumptive use permittees to address individual and cumulative impacts to Lakes Brooklyn and Geneva. The combination of projects and regulatory measures provide assurance that the MFLs for Lakes Brooklyn and Geneva will be achieved while meeting future demands.

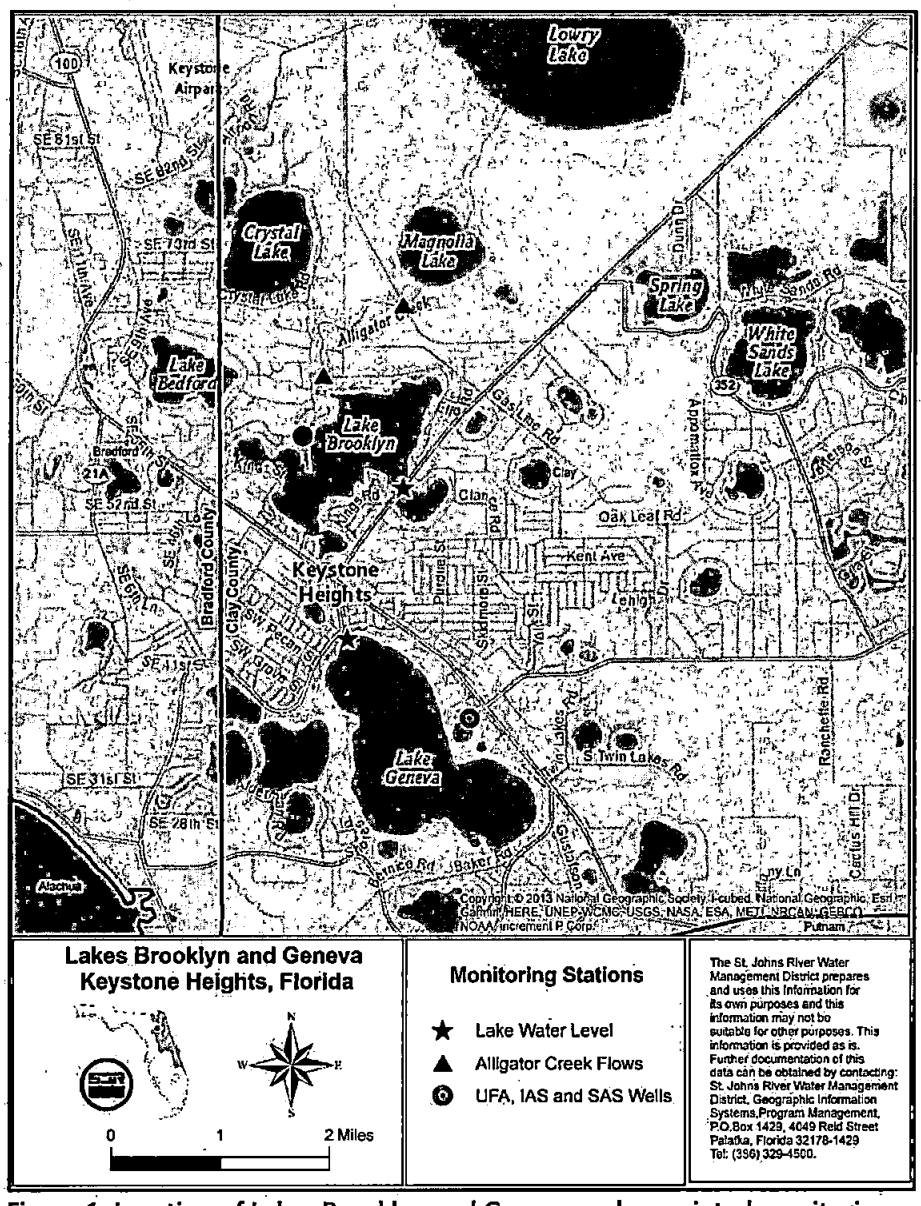


Figure 1. Location of Lakes Brooklyn and Geneva and associated monitoring stations

Stakeholder outreach

The District has been coordinating with stakeholders within the region since 2012 regarding potential projects to benefit Lakes Brooklyn and Geneva. Stakeholder outreach activities specifically related to the updated MFLs and the Strategy began in April 2018 with briefings to members of the Save Our Lakes Organization (SOLO), the North Florida Utility Coordination Group (NFUCG), and the Florida Pulp and Paper Association. On October 26, 2020, all District consumptive use permittees within the NFRWSP area (see Figure 2) were advised by letter of the draft MFLs for Lakes Brooklyn and Geneva and encouraged to participate in the development of the Recovery Strategy. A draft Recovery Strategy for the Implementation of Lakes Brooklyn and Geneva Minimum Levels was posted for public viewing on the District website on December 3, 2020, and a public workshop was held on December 10, 2020, in Palatka, Florida.

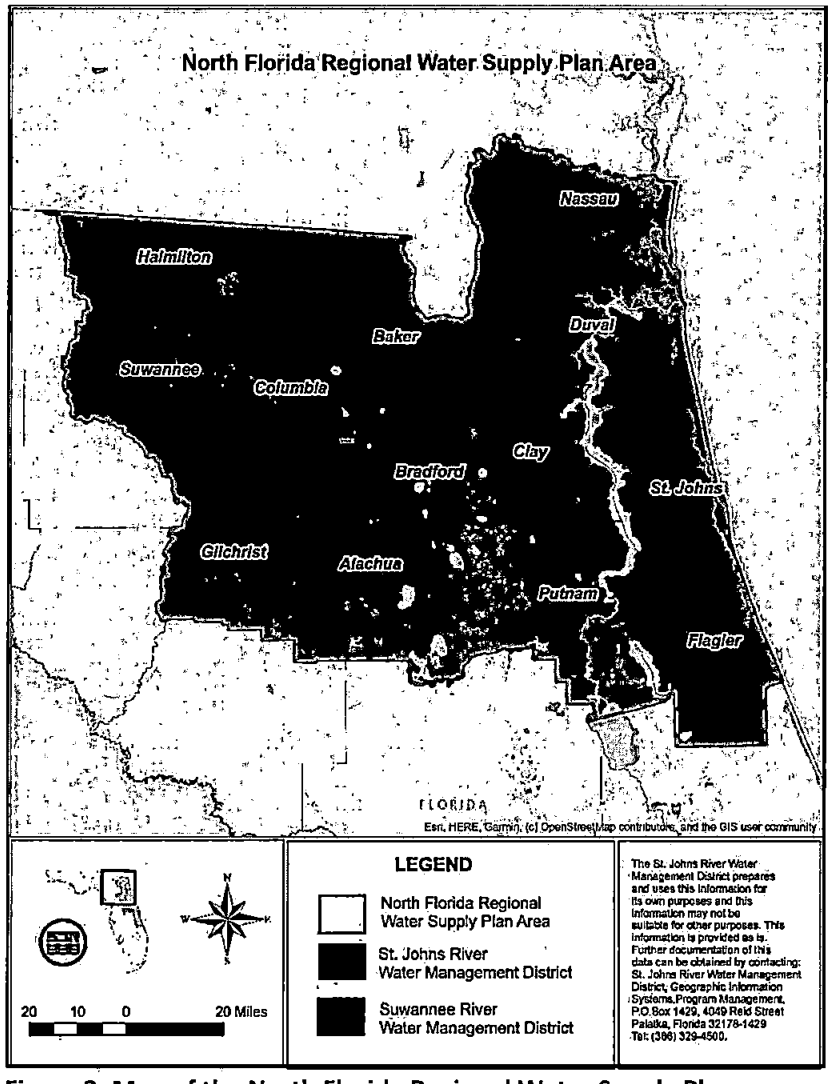


Figure 2. Map of the North Florida Regional Water Supply Plan area.

Lakes Brooklyn and Geneva MFLs and Status Assessment

The District completed a reevaluation of the minimum levels for Lakes Brooklyn and Geneva in 2020. After peer review and staff evaluation of relevant criteria, 10 environmental metrics were chosen for evaluation and assessment at Lakes Brooklyn and Geneva. Of these 10 metrics, the open-water area criterion was determined to be the most sensitive for both Lakes Brooklyn and Geneva. (Sutherland, et. al., 2020).

Three minimum levels (see Table 1) were recommended for Lakes Brooklyn and Geneva. These three levels were calculated from the MFLs condition exceedance curve for each lake. Adopting these three minimum levels will ensure the protection of the minimum hydrologic regime at low, average and high levels for Lakes Brooklyn and Geneva.

Table 1. Recommended minimum levels for Lakes Brooklyn and Geneva, Clay and Bradford counties, Florida (from Sutherland et al, 2020).

System	Percentile	Recommended minimum lake level (ft; NAVD88)
Lake Brooklyn	25	111.5
	50	106.2
	75	98.6
Lake Geneva	25	101.7
	50	98.3
	75	89.3

The recommended minimum levels for Lakes Brooklyn and Geneva will protect relevant water resource values from significant harm due to water withdrawals. The recommended MFLs are preliminary and will not become effective until after adoption.

As part of the reevaluation, an assessment was conducted to compare the proposed minimum levels (minimum MFLs hydrologic regime) to existing and projected hydrologic regimes to determine the current and future status of the MFLs. The status assessment utilized the North Florida Southeast-Georgia Regional Groundwater Flow Model version 1.1 (NFSEG) and the Keystone Heights Transient Groundwater Flow Model v2.0 (KHTM) to determine the current status associated with the MFLs for these two lakes.

Proposed MFLs and current-pumping conditions were compared to determine lake freeboards/deficits for the final suite of environmental criteria. The current-pumping condition represents the average 2014–2018 pumping condition and is based on the best available data as of July 2020. The status assessment for Lakes Brooklyn and Geneva indicate that they are currently not meeting their proposed MFLs. A comparison of the MFLs and current-pumping conditions for Lakes Brooklyn and Geneva yields a lake level deficit of 1.6 feet and 0.3 feet, respectively.

Therefore, Lakes Brooklyn and Geneva are in recovery, and a recovery strategy is required. The 2035 water use estimations were extrapolated out to 2045 resulting in an 8% increase over expected 2035 withdrawals. This 8% increase was applied to the results of the 2035 status assessment for Lakes Brooklyn and Geneva levels producing an estimated 2045 deficit for Lakes Brooklyn and Geneva of 3.9 feet and 1.5 feet, respectively.

Consistent with the provisions for establishing and implementing MFLs provided for in section 373.0421, F.S., the recovery strategy for Lakes Brooklyn and Geneva MFLs identifies a suite of projects and measures that, when implemented, will recover these lakes from impacts due to withdrawals. Since the MFLs status of Lakes Brooklyn and Geneva are in recovery, a portion of the current groundwater pumping and all future groundwater demands that have a potential impact will need to be met through increased water conservation, alternative water supplies, or impact offsets (e.g., recharge).

Influence by use type

Identifying the water uses that have the largest potential impact on the water resource of concern is an important first step in the development of a recovery strategy. This assessment guides the development of strategies, including projects, that result in the greatest benefit to the constrained water resource. The NFSEG model was used to determine the impact by use type for Lake Brooklyn, because it has the greater recovery deficit. Public supply water use represents 44.3% of the change in the potentiometric surface of the Upper Floridan aquifer (UFA) at Lake Brooklyn from current pumping within the District (see Figure 3). The second largest user group is domestic self-supply at 27.0%.

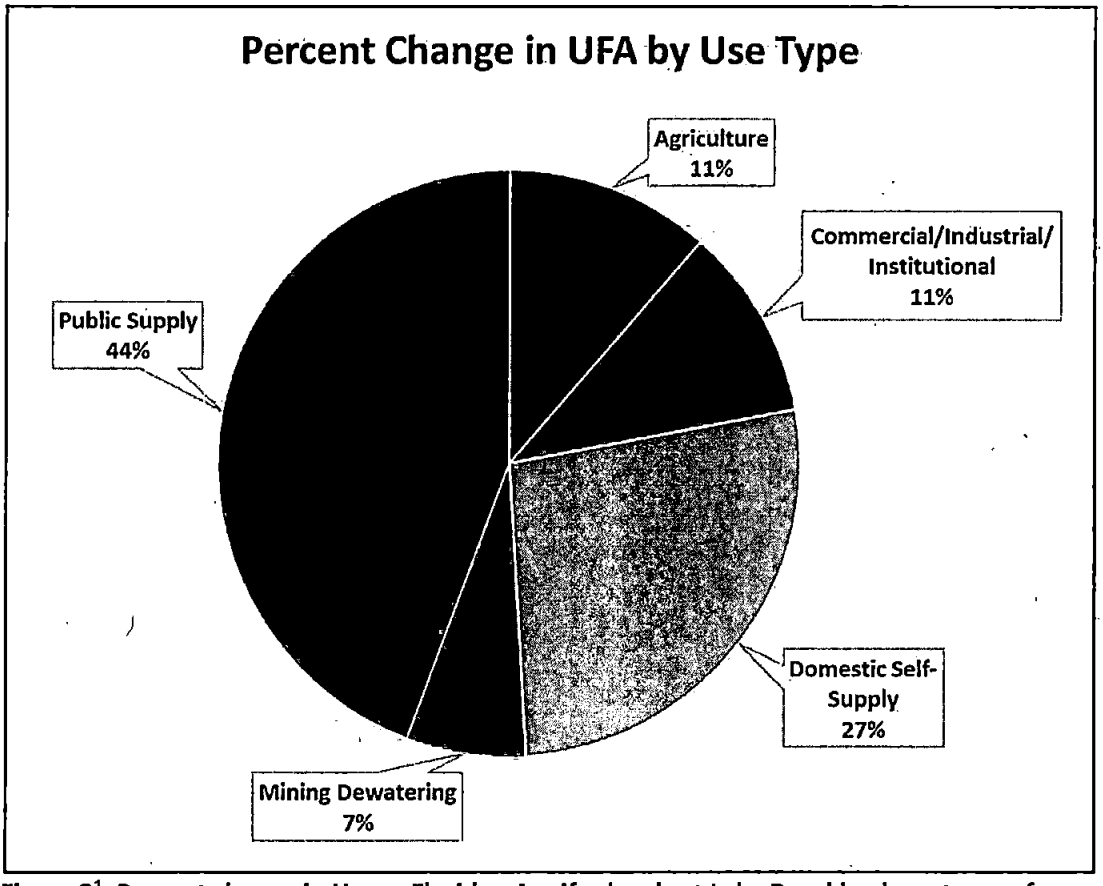


Figure 3[1]. Percent change in Upper Floridan Aquifer levels at Lake Brooklyn by category from withdrawals in the District.

Domestic Self-Supply near Keystone Heights

Impacts from domestic self-supply withdrawals within 10 miles of Lake Brooklyn in the District were investigated. The results of this investigation indicate that current pumping from domestic self-supply withdrawals near Keystone Heights represent nearly 50% of the total DSS change in the

[1] The combined change to UFA at Lake Brooklyn from current pumping for the landscape/recreation/aesthetic, power generation, and other small categories make up less than 1.0% of the remaining change and thus are not shown in Figure 2, but are considered in this Strategy.

UFA levels at Lake Brooklyn from withdrawals in the District. This investigation highlights how, cumulatively, nearby small withdrawals can significantly influence the UFA levels at Lake Brooklyn.

The impact from domestic self-supply withdrawals could be mitigated by development of a source of supply other than the UFA or by relocating the UFA withdrawals farther from the lakes. For example, the development of a public water supply system would allow for the centralization of the UFA withdrawal to a location farther away from the lakes and thus provide a benefit to the UFA at Lake Brooklyn. Optimization of the UFA withdrawal location and the individuals served could be further explored to address the impact from domestic self-supply withdrawals near Lake Brooklyn.

Projects and Measures that Achieve the Strategy Objective

Achieving and ensuring the maintenance of the MFLs for Lakes Brooklyn and Geneva will require the implementation of projects and measures in addition to the careful management of local and regional groundwater withdrawals. Projects and measures include enhanced conservation, aquifer recharge, development of alternative water supplies, and expansion of reclaimed water systems. The benefits predicted from the suite of proposed projects and measures, together with the regulatory component, provide assurance that the MFLs for Lakes Brooklyn and Geneva will be achieved through 2045.

Numerous projects and measures within the District from the NFRWSP were completed between 2014 and 2020. Examples of these projects include water conservation measures utilizing technological improvements such as soil moisture monitoring and advanced metering, implementation of best management practices, and reuse system expansion through increased treatment, distribution and storage systems. Appendix A provides further information on projects from the NFRWSP that have been completed. The primary benefit from these completed projects is reducing future demand from the Floridan aquifer.

Additional water conservation measures, water resource development projects, and water supply projects will be necessary to meet future water use demands while ensuring that the MFLs for Lakes Brooklyn and Geneva will be met. Potential stakeholder projects and measures from the NFRWSP along with their estimated benefits are listed in Appendix B.

Actual projects and measures implemented to achieve the goals of the Strategy objective may differ from those described in this document. Moreover, projects and measures identified in the Strategy do not become permit conditions by virtue of their inclusion in an approved Strategy. The projects described in this Strategy or alternative projects that the District concurs will provide an equivalent benefit, may be developed and incorporated as consumptive use permit (CUP) conditions through standard permitting procedures and future Strategy revisions, as appropriate.

Water conservation

Water conservation is an important component of any prevention or recovery strategy as it directly affects projected water demand and, therefore, the magnitude of resource impacts. Best

management practices such as improved irrigation scheduling, conversion to more efficient irrigation systems, and moisture sensor-controlled automation can reduce the amount of water applied to crops and landscape. A large portion of these savings occurs through passive water conservation. Passive water conservation occurs when showerheads, appliances, urinals, and faucet aerators are replaced with more efficient fixtures or systems in homes, commercial establishments, institutions, or any facility with household type use.

Potential water conservation quantities were estimated based on the methodologies employed for the NFRWSP. The conservation savings potential within the District was estimated to be 23 million gallons per day (mgd) through both passive water conservation strategies and active water conservation programs funded by local governments or public water supply utilities.

Reclaimed water potential

The reclaimed water projects summarized in Appendixes A and B provide details on the actual projects completed or planned to be constructed to expand the use of reclaimed water as identified in the NFRWSP. Implementation of reclaimed water provides an offset to withdrawals from traditional water sources and reduces potential impacts. Much of this reclaimed water will provide a source of irrigation water for recreational, residential, and commercial users.

Black Creek WRD project

The 10 mgd Black Creek WRD project, identified in the NFRWSP, is currently in the design and permitting phase. The Black Creek WRD development project will provide regional recharge to the Floridan aquifer. In addition to these regional benefits, when fully implemented, this project has the potential to increase median lake levels in Lakes Brooklyn and Geneva by up to 9.9 ft and 4.9 ft, respectively. The estimated construction and 20-year operation and maintenance cost for the project is $81.4 million. The St. Johns River and Keystone Heights Lake Region Projects legislative appropriations provided nearly $43.4 million to the Black Creek WRD Project, and the District is also contributing $5 million toward the project. Once the necessary permits have been issued and sufficient funding has been secured, construction could be completed within 3 years.

The project will provide sufficient benefits to Lakes Brooklyn and Geneva to offset the impacts from current and future water uses that are not subject to individual permitting requirements such as domestic self-supply and other water uses that are below consumptive use permitting thresholds. It is anticipated that additional benefits could be available to offset a portion of existing impacts from individual consumptive use permittees. Permittees would also have the opportunity to partner with the District on the project to ensure the project could be constructed and operated in a manner such that sufficient benefits would be available to fully offset their current and future impacts to Lakes Brooklyn and Geneva.

Regulatory Component

A regulatory component to the recovery strategy is necessary to not only ensure that existing and future groundwater use is consistent with the recovery and maintenance of the MFLs for Lakes Brooklyn and Geneva, but also to outline the necessary actions by permittees to address their proportional share of the required recovery of the minimum levels for Lakes Brooklyn and Geneva.

Current permitting rules

Presently, the District possesses a comprehensive system of rules, which regulate consumptive uses of water. These permit criteria are listed in Chapter 40C-2, Florida Administrative Code (F.A.C.), and are expanded upon in the District's *Applicant's Handbook: Consumptive Uses of Water* (A.H). Several existing permit requirements will continue to provide assurance that existing and new permitted consumptive uses are consistent with the Strategy objective:

- Permitting criterion requiring that reasonable-beneficial uses *must not cause harm to the water resources of the area*. See Rule 40C-2.301(2)(g), F.A.C. According to the definition of an MFL, withdrawals that result in MFLs not being achieved are considered significantly harmful to that water body.
- Permitting criterion requiring that reasonable-beneficial uses *must be in accordance with any minimum flow or minimum level and implementation strategy*. See Rule 40C-2.301(2)(h), F.A.C.
- Permitting criterion requiring that reasonable-beneficial uses *must be in such quantity as is necessary for economic and efficient use*. See Rule 40C-2.301(2)(a), F.A.C. To meet the requirements of this criterion, water use must be consistent with the demonstrated water demand for a particular water use.
- A standard limiting condition is placed on consumptive use permits requiring that the permittee's consumptive use of water as authorized by the permit shall not reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to sections 373.042 and 373.0421, F.S. The condition further requires that if the permittee's use of water causes or contributes to such a reduction, then the District shall revoke the permit, in whole or in part, unless the permittee implements all provisions applicable to the permittee's use in a District-approved recovery or prevention strategy. See Rule 40C-2.381(2)(a)10., F.A.C.
- Another standard limiting condition requires that the permittee's consumptive use of water as authorized by this permit shall not significantly and adversely impact wetlands, lakes, rivers, or springs. If significant adverse impacts occur, the District shall revoke the permit, in whole or in part, to curtail or abate the adverse impacts, unless the impacts associated with the permittee's consumptive use of water are mitigated by the permittee pursuant to a District-approved plan. See Rule 40C-2.381(2)(a)9., F.A.C.

Existing Permitted Uses

Nothing in this strategy shall be construed to automatically modify any consumptive use permits to reduce previously authorized allocations. Upon determination that groundwater withdrawals authorized by individual consumptive use permits held by a permittee will cause or contribute,

individually or cumulatively, to a violation of the MFLs for Lakes Brooklyn or Geneva, the District will notify them pursuant to the standard limiting conditions above of their responsibility to address their proportional share of the required recovery of the MFLs. Any modifications to existing consumptive use permits would be in accordance with chapter 373, Florida Statutes, and District rules.

Applications for New Quantities and Renewals

Requests for withdrawals of new quantities of water or renewals of existing allocations that are projected to impact the MFLs for Lakes Brooklyn or Geneva would need to meet the conditions for issuance described above, including a demonstration that the proposed use will not cause or contribute, individually or cumulatively, to violations of the Minimum Levels for Lakes Brooklyn or Geneva.

Timeline

The following timeline highlights the milestones toward achieving the recovery of the MFLs within 20 years.

- **Ongoing efforts**
  - Continue implementation of projects from the NFRWSP (Appendix B).
  - Incentivize water conservation and water supply projects through the District's cost-share programs.
  - Utilize existing Consumptive Use Permitting rules to require applicants to demonstrate their proposed use of water will not cause or contribute, individually or cumulatively to harm to the water resources of the area or to a violation of the Minimum Levels for Lakes Brooklyn and Geneva.
- **2021-2025**
  - Approval of MFL for Lakes Brooklyn and Geneva and associated Recovery Strategy by the District Governing Board.
  - Initiation of construction of Black Creek WRD project.
  - District's Consumptive use permittees whose groundwater withdrawals cause or contribute, individually or cumulatively, to the reduction of the water levels in Lakes Brooklyn or Geneva below their minimum levels will be notified that they must address their proportional share of required recovery of the minimum levels for Lakes Brooklyn and Geneva in accordance with this strategy.
  - Complete construction and begin operation of the Black Creek WRD project.
- **2025-2040**
  - Continue to work with the District's consumptive use permittees to implement their selected methods for addressing their proportional share of the required recovery of the minimum levels for Lakes Brooklyn and Geneva.
  - Continued operation of the Black Creek WRD project.

Funding

Black Creek WRD Project

The St. Johns River and Keystone Heights Lake Region Projects legislative appropriations provided nearly $43.4 million to the Black Creek WRD Project. The District is also contributing $5 million toward the project. The Black Creek WRD Project is an example of a regional project whereby entities could partner with the District by contributing to construction and operation and maintenance costs to offset their impacts.

Districtwide/REDI Cost-Share programs

The District primarily provides funding assistance through the Districtwide Cost-Share program, which is administered annually and supports projects that benefit one or more of the District's four core missions: water supply (alternative water supply, non-traditional sources, and water conservation), water quality, natural systems restoration (including projects that provide a significant percent recovery for an MFL waterbody whose status is in prevention or recovery), and flood protection.

This funding assistance is exclusively available for construction-related costs with the District's percent match typically at 33% or up to 50% for conservation projects. The District's scoring criteria is geared such that projects that benefit an MFL water body that is determined to be in prevention or recovery receive the highest score in the core mission benefit ranking criterion, thereby giving weight to projects with demonstrated benefits that are listed within a prevention or recovery strategy. For the current fiscal year (FY), there is approximately $20 million in the district-wide/REDI cost-share programs.

Agricultural Cost-Share program

The District's Agricultural Cost-share Program provides funding assistance districtwide to agricultural operations for the implementation of projects that conserve water and/or result in nutrient loading reductions. This cost-share program provides up to 75%, not to exceed $250,000 per project, for engineering, design, and construction costs of an approved project. The grower is expected to cover operation and maintenance costs; however, future requests for long-term maintenance items (such as drip tape) may be considered for funding. For FY 2019/20, the District funded about $1.9 million and for the current fiscal year is expecting to fund $1.1 million.

Tri-County Agricultural Area (TCAA) Water Management Partnership

Multiple agencies are contributing funding, education, and technical assistance for growers in the TCAA of Flagler, Putnam, and St. Johns counties to implement projects that contribute to improving the health of the St. Johns River and implementation of effective water conservation measures. These projects are anticipated to contribute to the improved health of the river through on-farm and regional water management projects and practices that reduce the movement of nutrients to the river, improve irrigation efficiencies, which will result in more efficient farm management practices, while maintaining the long-term viability of agriculture in the TCAA. Funds allocated to this program vary year-to-year based upon funding availability from the Florida

Department of Agriculture and Consumer Services, Florida Department of Environmental Protection, and the District. For the FY 2019/20, there was about $1.9 million funded for the TCAA Water management Partnership. Funding in the current fiscal year is expected be similar.

Other funding sources

There are several grant programs being administered by the Florida Department of Environmental Protection at: *https://protectingfloridatogether.gov/state-action/grants-submissions*, which would provide funding for projects to assist in the recovery of these lakes. Specifically, in FY 2020, the Rivers and Springs Grants had $25 million available for projects and the Alternative Water Supply Grants had $40 million available.

References

SJRWMD and SRWMD. 2017. *North Florida Regional Water Supply Plan (2015–2035).* St. Johns River Water Management District and Suwannee River Water Management District. Palatka, FL.

Sutherland, A.B., F. Gordu, and S. Jennewein. 2020. *Minimum Levels Revaluation for Lakes Brooklyn and Geneva; Clay and Bradford Counties, Florida (Draft).* St. Johns River Water Management District. Palatka, FL.

Appendices

Appendix A: NFRWSP projects completed from 2014-2020

Appendix B: NFRWSP projects planned to be completed by 2030

Appendix A

NFRWSP projects completed from 2014–2020 (updated October 2020)

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2014	Duval	Queens Harbor Reclaimed Water Main Expansion	JEA and Queens Harbor Golf and Country Club	Reuse - Pipeline	Reclaimed Water	0.30	0.5
2015	Clay	AMI	CCUA	Conservation	Floridan	0.08	0.0
2015	Duval	Atlantic Beach Selva Marina Reclaimed Water System Expansion	City of Atlantic Beach	Reuse - Supply	Reclaimed Water	0.50	1.1
2015	Duval	Gate Pkwy - Shiloh Mill Blvd to Town Ctr Pkwy - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.01	0.3
2015	Flagler	Palm Coast Royal Palms Parkway Reclaimed Water Line	City of Palm Coast	Reuse - Pipeline	Reclaimed Water	0.05	0.3
2015	Flagler	Palm Coast Utilization of Concentrate as Raw Water Supply	City of Palm Coast	AWS	Concentrate	0.75	1.2
2015	St. Johns	Nocatee Coastal Oaks Phase 4	JEA	Reuse - Supply	Reclaimed Water	2.00	1.1
2015	St. Johns	AMR - Ponte Vedra System	SJCUD	Conservation	N/A	0.39	4.3
2015	St. Johns	Outdoor BMP Retrofit	SJCUD	Conservation	N/A	0.00	0.1
2015	St. Johns	Soil Moisture Sensor Pilot Project	SJCUD	Conservation	N/A	0.04	0.3
2016	Clay	Reclaimed Water SCADA System	CCUA	Reuse	Reclaimed Water	4.51	0.7
2016	Duval	Arlington East Water Reclamation Facility - Onsite Reuse Pump Upgrade	JEA	Reuse - Pipeline and Pumping	Reclaimed Water	0.60	0.6
2016	Duval	District II - Broward River Crossing Replacement	JEA	Reuse - Pipeline	Reclaimed Water	0.08	4.8
2016	Duval	Intermediate Well Conversion	San Jose Country Club	AWS	Intermediate aquifer	0.27	0.0

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2016	Flagler	State Street Irrigation System Expansion	City of Bunnell	Reuse - Pipeline	Reclaimed Water	0.10	0.1
2016	Flagler	Palm Coast Matanzas Woods Reclaimed Pipeline	City of Palm Coast	Reuse - Pipeline	Reclaimed Water	2.00	2.5
2016	St. Johns	Nocatee Area - Artisan Lakes - N10 - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.2
2016	St. Johns	Nocatee Area - Riverwood POD 17 - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.2
2016	St. Johns	Nocatee Area - Twenty Mile Village - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.3
2016	St. Johns	Nocatee Storage and Repump Facility Tank Expansion	JEA	Reuse - Storage	Reclaimed Water	0.00	0.3
2016	St. Johns	Al WWTP Reuse Storage Tank and Booster Pump Station	SJCUD	Reuse - Storage and Pumping	Reclaimed Water	2.00	1.5
2016	St. Johns	International Golf Parkway - Reclaimed Water System Expansion	SJCUD	Reuse - Pipeline	Reclaimed Water	0.42	2.4
2016	St. Johns	NW WWTF Reclaimed Water System Expansions/Improvements	SJCUD	Reuse - Pipeline, Storage, Pumping	Reclaimed Water	3.00	2.6
2016	St. Johns	SR 16 Corridor Reclaimed Water System Expansions/Improvements	SJCUD	Reuse - Pipeline, Storage, Pumping	Reclaimed Water	1.00	3.1

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2016	St. Johns	Al WWTP Reuse Storage Tank and Booster Pump Station	SJCUD/ SJRWMD	Reuse - Storage and Pumping	Reclaimed Water	2.00	1.5
2016	St. Johns	International Golf Parkway - Reclaimed Water System Expansion	SJCUD/ SJRWMD	Reuse - Pipeline	Reclaimed Water	0.42	2.4
2017	Duval	Bartram Park WTP - RW - Storage Expansion	JEA	Reuse - Storage	Reclaimed Water	0.05	2.2
2017	Flagler	Palm Coast Grand Landing Reclaimed Water Transmission Main	City of Palm Coast	Reuse - Pipeline	Reclaimed Water	0.56	0.7
2017	Flagler	Palm Coast RCW Irrigation Along US-1 & Palm Coast Park	City of Palm Coast	Reuse - Pipeline	Reclaimed Water	1.00	1.5
2017	St. Johns	Bartram Park Reclaimed Water Storage Tank Expansion	JEA	Reuse - Storage	Reclaimed Water	0.53	2.1
2017	St. Johns	Nocatee Area - Crosswater Pkwy - Coastal Oaks to South Village - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.04	0.4
2017	St. Johns	Nocatee Area - Twenty Mile Village Ph 4A - 4B - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.3
2017	St. Johns	Nocatee Booster Station	JEA	Reuse - Pumping	Reclaimed Water	1.20	1.4
2017	St. Johns	Nocatee North Storage and Repump Facility - New 3.5 MG Reclaimed Water Storage Tank	JEA	Reuse - Storage	Reclaimed Water	0.07	2.5
2017	St. Johns	City of St. Augustine Beach Reclaimed Water System Expansion	SJCUD	Reuse - Pipeline	Reclaimed Water	0.02	0.6

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2017	St. Johns	NW Automated Metering Infrastructure System Expansion	SJCUD	Conservation	N/A	0.14	0.1
2017	St. Johns	Web Based Customer Portal	SJCUD	Conservation	N/A	0.37	0.0
2018	Clay	Old Jenning Road Reclaimed Storage Tank	CCUA	Reuse - Storage	Reclaimed Water	1.70	1.3
2018	Clay	Tynes Blvd. Reclaimed Water Main Extension	CCUA	Reuse - Pipeline	Reclaimed Water	1.92	0.3
2018	Duval	Jacksonville Beach Water & Sewer Mains Extension	City of Jacksonville Beach	Reuse - Supply	Reclaimed Water	0.00	0.4
2018	Duval	9B Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	13.00	0.5
2018	Duval	Monument Rd - Cancun Dr to Hidden Hills Ln - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.36	0.6
2018	Duval	RG Skinner Area - 9B to Parcels 10A - 11 - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.12	1.1
2018	Duval	RG Skinner Area - 9B to T-Line - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.12	1.2
2018	St. Johns	Rivertown - Parcel 13 - Southern POD - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.1
2018	St. Johns	St Johns Pkwy - Racetrack Rd to Espada Ln - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.01	0.6

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2019	Duval	Baymeadows Rd - Point Meadows Rd to Old Still PUD - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.01	1.0
2019	Duval	JP - FDOT - SR 9A (I-295) - Managed Lanes - JTB - 9B Extension - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	0.3
2019	Duval	Mandarin Water Reclamation Facility - Equalization Storage Tank and Transfer Pump Station	JEA	Reuse - Storage and Pumping	Reclaimed Water	0.03	2.6
2019	Duval	Mandarin Water Reclamation Facility - High Level UV Upgrade	JEA	Reuse - Supply	Reclaimed Water	3.05	4.2
2019	Duval	RG Skinner - North Rd - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.47	3.0
2019	Nassau	Nassau RW Main - Radio Av to Harts Rd - Trans - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.04	2.3
2019	Nassau	William Burgess Rd - SR200 to Harts Rd - Trans - New - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.46	2.5
2019	St. Johns	Bannon Lakes 2 MG Reclaimed Water Storage and Booster Pump Station	SJCUD	Reuse - Storage and Pumping	Reclaimed Water	0.42	3.2
2020	Clay	Stormwater Harvest Pilot Project	CCUA	Reuse - Pipeline	Stormwater	0.40	1.2

Completion Date	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2020	Clay	Tynes Reclaimed Storage Tank and Pumping Facility	CCUA	Reuse - Storage	Reclaimed Water	1.10	4.0
2020	Duval	WTP SCADA System Upgrade	City of Atlantic Beach	Conservation	N/A	0.48	0.2
2020	Duval	Gate Pkwy - Glen Kernan to T-Line - Trans - New - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.18	8.5
2020	Duval	Tredinick Pkwy - Millcoe Rd to Mill Creek Rd - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.04	1.6
2020	St. Johns	CR210 - Old Dixie Hwy to Twin Creeks - Trans - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	2.3
2020	St. Johns	Oak Bridge Golf Course Reuse Modification	SJCUD	Reuse - Storage and Pumping, and Pipeline	Reclaimed Water	0.50	1.9

Appendix B

NFRWSP projects planned to be completed by 2030 (updated October 2020)

Timeframe for Completion	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2021	St. Johns	Twin Creeks Reclaimed Water Storage Tank and Booster Pump Station	JEA	Reuse - Storage and Pumping	Reclaimed Water	2.00	3.5
2022	Alachua	Low-Income Water Efficient Toilet Exchange Program	GRU	Conservation	N/A	0.00	0.1
2022	Clay	Potable Reuse Pilot Project	CCUA	Supply/Storage	Reclaimed Water	0.03	4.0
2022	Clay	Ridaught Reclaimed Water Ground Storage Tank	CCUA	Reuse - Storage	Reclaimed Water	1.10	1.3
2022	Clay	Saratoga Springs Reclaimed Water Storage and Pumping Facility	CCUA	Reuse - Storage	Reclaimed Water	1.10	4.3
2022	Clay	Saratoga Springs Reclaimed Water Transmission/Distribution Main Extensions	CCUA	Reuse - Pipeline	Reclaimed Water	1.91	1.2
2022	Duval/St. Johns	US 1 - Greenland WRF to CR 210 - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	7.8
2022	Nassau	Nassau Area - Radio Av - Reclaimed Water Storage Tank and Booster Pump Station	JEA	Reuse - Storage and Pumping	Reclaimed Water	1.44	3.3
2022	St. Johns	CR210 - South Hampton to Ashford Mills - Trans - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.02	0.6
2023	St. Johns	CR210 - Longleaf Pine Pkwy to Ashford Mills Rd - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.16	5.0

Timeframe for Completion	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2024	Clay	Peter's Creek AWT Plant Expansion and Reclaimed Water Facility (f.k.a. Green Cove Regional Reclaimed WTP)	CCUA	Reuse - Supply	Reclaimed Water	1.50	22.0
2024	St. Johns	Nocatee South Reclaimed Water Storage Tank and Booster Pump Station	JEA	Reuse - Storage and Pumping	Reclaimed Water	2.00	3.5
2024	St. Johns	SR 16 Corridor Reuse Transmission Main Expansion	SJCUD	Reuse - Storage and Pumping, and Pipeline	Reclaimed Water	1.00	3.7
2025	Duval	Davis - Gate Pkwy to RG Skinner - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.12	5.0
2025	Duval	Greenland Reclaimed Water Repump Facility - Storage Tank and Booster Pump Station	JEA	Reuse - Storage and Pumping	Reclaimed Water	4.00	5.0
2025	Duval	T-Line - Greenland Substation to GEC - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.12	3.1
2025	Nassau	Nassau Regional WWTF Reclaimed Water Storage Tank, UV Disinfection and Pumps	JEA	Reuse - Storage, Pumping and Supply	Reclaimed Water	2.16	6.1
2025	St. Johns	NW Wellfield VFD addition	SJCUD	Conservation	Floridan	1.55	1.0
2025	St. Johns	NW WRF Expansion (3 MGD to 6 MGD)	SJCUD	Reuse - treatment, Storage, and Pumping	Reclaimed Water	3.00	40.0
2025	St. Johns	Promote Cost-Effective Conservation Programs	SJCUD	Conservation	N/A	1.14	3.8

Timeframe for Completion	County	Project Name	Implementing Entity	Project Type	Water Source	Project Capacity (mgd)	Total Capital ($M)
2026	Duval	Arlington East WRF - Reclaimed Water Filtration Expansion - Increase Capacity from 8.0 to 10.0 MGD	JEA	Reuse - Supply	Reclaimed Water	2.00	2.8
2026	Duval	Monument Rd - Arlington East WRF to St Johns Bluff Rd - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	3.3
2026	Duval	Ridenour WTP - Reclaimed Water Storage and Repump	JEA	Reuse - Storage and Pumping	Reclaimed Water	3.00	3.7
2026	St. Johns	CR210 - Twin Creeks to Russell Sampson Rd - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	3.0
2027	St. Johns	RiverTown WTP - Reclaimed Water - New Storage and Pumping System	JEA	Reuse - Storage and Pumping	Reclaimed Water	2.00	4.0
2027	St. Johns	Veterans Pkwy - Longleaf Pine Pkwy to CR210 - Reclaimed Water System Expansion	JEA	Reuse - Pipeline	Reclaimed Water	0.06	8.8
2027	St. Johns	Develop supplemental reclaimed water source from stormwater harvesting (Potential I-95 Corridor)	SJCUD	Reuse - Supply	Stormwater	2.00	14.5
2027	St. Johns	SR 207 WRF Expansion	SJCUD	Reuse - Storage and Pumping, and Pipeline	Reclaimed Water	2.25	40.0
2030	Alachua	Brytan subdivision Reclaimed Water system expansion	GRU	Reuse - Pipeline	Reclaimed Water	0.07	1.1
2030	Clay	FCOB Stormwater Ponds	CCUA	Reuse - Pipeline	Stormwater	2.50	27.0