Minutes of the South Fulton Municipal Regional Water And Sewer Authority Meeting Held on June 09^{th,} 2020, VIA Teleconference Dial in: <u>(712) 432-6148</u> Passcode: **788568#**

BOARD MEMBERS PRESENT: Vince R. Williams, J. Clark Boddie, Elizabeth Carr Hurst, Shayla J. Nealy, Sonja Fillingame and Laura Mullis

BOARD MEMBERS ABSENT: James Whitmore

Consultants Present: Dennis Davenport, Dan Post, Laura Benz and Andrea Gray

Others Present: None

Call To Order: Chairwoman Shayla J. Nealy called the meeting to order at 7:03 PM.

<u>Approval Of The Minutes</u>: A motion was made by Vince R. Williams to approve the minutes of the May 14th, 2020 meeting, seconded by Sonja Fillingame. A vote was taken, the motion passed unanimously.

New Business: None

Old Business: None

Reports:

Legal – Dennis Davenport updated the Board on the Legislature.

Finance – Dan Post reviewed with the Board:

- 1. The May 2020 financial statement.
- 2. Requested approval for draw number 205 in the amount of \$7,412.32 from the construction account.

South Fulton Municipal Regional Water and Sewer Authority Minutes of the June 09th, 2020 Meeting Page 1 of 3

- 3. Vince R. Williams made a motion to approve draw number 204 in the amount of \$7,412.32 from the construction account seconded by J. Clark Boddie. A vote was taken, the motion passed unanimously.
- 4. Requested approval for draw number 206 in the amount of \$16,662.50 from the construction account.

J. Clark Boddie made a motion to approve draw number 204 in the amount of \$16,662.50 from the construction account seconded by Vince R. Williams. A vote was taken, the motion passed unanimously.

Project Managers – Laura Benz and Andrea Gray reviewed with the Board:

See attached memorandum for details

- 1. Water Withdrawal Application Draft
 - a. District Audit
 - b. Draft Permit Public Notice/Comments
 - c. Treatability Analysis
 - d. SWAP
 - e. Next Steps
- 2. Mitigation
 - a. Site Specific Sites
 - b. Resale Of Mitigation Credits
 - c. Blur Creek
- 3. Other/MISC
 - d. Waters Of The US
- 4. Water Wars Litigation Update
- 5. Coweta Request to Amend District Plan

Executive Session: None

Elizabeth Carr Hurst made a motion to adjourn the meeting, seconded by Vince R. Williams. A vote was taken, the motion passed unanimously.

The meeting adjourned at 730 PM

South Fulton Municipal Regional Water and Sewer Authority Minutes of the June 09th, 2020 Meeting Page 2 of 3 Shayla J. Nealy, Chairwoman

July 14^{th,} 2020 Date Minutes Approved by Board

South Fulton Municipal Regional Water and Sewer Authority Minutes of the June 09th, 2020 Meeting Page 3 of 3

MEMORANDUM TELEPHONE CONFERENCE – DISTRIBUTED BY EMAIL



Water Withdrawal Application/Process:

<u>District Audits Complete:</u> EPD issued "good faith" letters dated May 19, 2020 and May 20, 2020 to Union City, Fairburn and Palmetto acknowledging that they satisfied the requirements of the District Audits.

<u>Draft Permit on Public Notice</u>: EPD issued notice of the draft surface water withdrawal permit on May 27, 2020 with the comment period expiring on June 29, 2020. The draft permit and supporting documentation were not attached to the public notice but will be available at the Watershed Protection Branch office for review.

<u>*Treatability Analysis*</u>: An engineering report will be required as a part of the Water System Permit (a separate permit required to operate the system which is issued upon construction of the facilities).

<u>SWAP</u>: EPD provided additional revisions which are being incorporated to the SWAP documents. No additional revisions were made to the Authority SWAP. ARC will provide a final version once approved by EPD.

<u>Next Steps</u>: Coordinate with EPD regarding any comments received, update the engineering RFP for the preliminary engineering work and refine the budget and cost estimates accordingly and evaluate sources of funds including additional GEFA loans.

Compensatory Mitigation

<u>Site Specific Sites:</u> The closing has been modified to be on or before December 31, 2020 and the Authority has received its payment of \$5,000.00 for the extension.

Resale of Mitigation Credits:

Monastery: The Authority should receive payment of \$110,880.00 for the closing on 5.28 credits prior to the June meeting. An additional 0.88 credits were reserved leaving 0.19 credits available for sale.

Blue Creek: A credit reservation of 2,102.86 has been made which will provide \$45,632.09 to the Authority.

Other/Miscellaneous

<u>Coweta District Plan Amendment request:</u> The Coweta County WSA withdrew its request for the amendment prior to Board action to allow time to address comments received from the Middle Chattahoochee Regional Water Council, the City of Atlanta, the Chattahoochee Rivekeeper, and the State of Alabama. The primary objection was the large interbasin transfer to the Flint and the implications to energy costs, water quality and the potential for revisiting the Corps' allocation of Lake Lanier to meet metro water supply. Other concerns were the absence of a definitive withdrawal location and that the request was premature given existing water contracts. The letters are attached for your review.

<u>Waters of the US (WOTUS)</u>. The proposed final rule for the WOTUS was published in the federal register on Tuesday, April 21, 2020. The WOTUS rule will become effective on June 22, 2020. There have been multiple cases filed challenging the narrower definition of WOTUS claiming that it contradicts water law, Supreme Court precedent, and the EPA's own scientific findings.

Waters Wars Litigation Update

As we reported in January, on December 11, 2019, Special Master Paul J. Kelly, Jr. issued his "Report of the Special Master" which concluded with him recommending that the Supreme Court not "grant Florida's request for a decree equitably apportioning the waters of the ACF Basin because the evidence has not shown harm to Florida caused by Georgia; the evidence has shown that Georgia's water use is reasonable; and the evidence has not shown that the benefits of apportionment would substantially outweigh the potential harms."

On January 27, 2020, the Supreme Court scheduled responses to the Report of the Special Master allowing 45 days for exceptions to the report, 30 days thereafter for replies and 30 days after replies for filing of sur-replies. Florida requested an extension which was granted and ultimately filed its Exceptions to Report of Special Master on April 13, 2020. Georgia did not file an exception because the report was in its favor. Georgia must respond to Florida's Exceptions by June 12, 2020 and Florida's sur-reply is due July 13, 2020. Prior to the COVID-19 pandemic, oral arguments, if allowed, were expected to occur in the Fall of 2020. No scheduling orders have been issued.



3 Puritan Mill 916 Joseph Lowery Blvd. Atlanta, GA 30318 404-352-9828 www.chattahoochee.org

May 15, 2020

Hon. Charlotte Nash, Chair, Governing Board Water Resource Management Plans Metropolitan North Georgia Water Planning District 229 Peachtree Street, NE Atlanta, Georgia 30303

Submitted via email to: comments@northgeorgiawater.com

RE: Comments on Amendment Request submitted by: Coweta County Water and Sewerage Authority

To the Honorable Charlotte Nash,

Chattahoochee Riverkeeper appreciates the opportunity to submit the following comments on the Coweta County Water and Sewerage Authority's (CCWSA) request to the Metropolitan North Georgia Water Planning District (District) for a "major amendment" to Appendix B of the 2017 *Water Resource Management Plan* (Plan).

Established in 1994, Chattahoochee Riverkeeper (CRK) is an environmental advocacy and education organization with more than 10,000 members dedicated to making the Chattahoochee River a sustainable resource for the five million people who depend on it. Our mission is to advocate and secure the protection and stewardship of the Chattahoochee River, its lakes, tributaries, and watershed, in order to restore and preserve their ecological health for the people and wildlife that depend on one of the Southeast's hardest working rivers.

CCWSA's amendment request anticipates a long-range plan for a new direct Chattahoochee River water withdrawal permit for 47.4 million gallon per day (MGD) from Georgia Environmental Protection Division (EPD) based on 2070 population served (221,226) and water demand. Such a permit has not been applied for or secured from EPD. When compared to current permits, this assumed permit would be the 12th largest permitted withdrawal in the Chattahoochee River basin, and on par with water withdrawal permits for Forsyth County (52 MGD with a current service population of 138,368) and the City of Gainesville (35 MGD with a current service population of 159,000). The amendment request's short-range and more immediate 'need' (21.3 MGD) is for the year 2050, which conforms to the District's current planning horizon. CCWSA intends to construct a new river withdrawal and pump station that would have the capability to secure the short-range need and have expansion capacity to meet the long-range plan. CRK cannot support the amendment in its current form or based on the available information for the following five reasons:

1. Wastewater Returns

The amendment request does not clearly indicate where wastewater will be returned.

CCWSA vaguely states "a portion of the withdrawn water" will be returned "to surface waters within the county," [Letter, p. 8] but not how much or to which major river basin. The District's policy on return flows is not ambiguous in the Plan [https://northgeorgiawater.org/wp-content/uploads/2015/05/Water-Resource-Management-Plan_Amended-20190227.pdf]:

- "Local wastewater providers should consider the need for returns of highly treated wastewater to local water bodies within the basin of origin," [page 2-2]
- EPD's "planning guidance for this Plan further states that returning highly treated wastewater to" the Chattahoochee River watershed "shall be encouraged." [2-2]
- "Water use" in septic systems "is consumptive when it decreases the amount of water that is returned to surface waters. The District seeks to minimize consumptive uses to the extent possible, while also balancing other goals and considerations." [Table 2-1, p. 2-4]
- Local wastewater providers shall "Consider, where feasible, returning any water sourced from the Chattahoochee River Basin below Buford Dam or Upper Flint River Basin as highly treated wastewater to these basins when making future decisions regarding wastewater treatment plants and related sewer lines, pump stations and other conveyance infrastructure." [Integrated-14: Encouraging the Return of Highly Treated Wastewater to the Chattahoochee and Flint]

When CRK had an early discussion with the applicant, they indicated the Chattahoochee withdrawals will either be sent via interbasin transfer to the Flint River basin or terminate in septic tanks in the short-term. The long-range plan apparently includes construction of a centralized wastewater treatment system with a discharge in the Chattahoochee River basin. However, that plan is not reflected in Appendix B of the Plan (Coweta Water, Summary of Planned Sources and Wastewater, pages 12-13) or described in this amendment request.

The 2017 District Plan included a clear water return policy for the first time. This amendment request may be the first time the District has been presented with the opportunity to implement this policy and fulfill an intention to return water to its basin of origin. Additional detail on the final destination of water withdrawn from the Chattahoochee River is needed before the District can approve this amendment request.

2. Population & Non-revenue Water Data

The amendment request seeks to alter the volume and location of CCWSA's water withdrawal points within the Chattahoochee River basin. The population and non-revenue data raise a number of concerns and questions.

The *population dynamics* used to justify a short-range need for a 21.3 MGD withdrawal and long-range needs for a 47.4 MGD withdrawal are circumspect. For example, the 2017 District plan assumed a 2050 population in Coweta County to be between 247,779 and 256,038. The most recent Governor's Office of Planning and Budget (OPB, 2019) numbers and the draft Atlanta Regional Commission (ARC) forecast put the 2050 population in Coweta County at much lower figures: 212,357 and 215,000, respectively. Looking back at previous projections, for example, in 2012 OPB anticipated Coweta County's population in 2018 would be 155,486. The most recent U.S. Census estimate of the 2018 population was 145,864.

	2000	2010	2018	2050
US Census Data & Estimates	89,215	127,317	145,864	
(Intercensal)				
OPB 2012 Projections			155,486	
OPB 2015 Projections			146,828	247,779
OPB 2019 Projections			144,823	212,357
District, Water Resource				256,038
Management Plan (2017). See page				
4-2.				
ARC, The Atlanta Regional Plan				215,000
Draft 2050 (October 2019)				

The fluid data is particularly concerning given the Great Recession's known historic effect on economic development and water supply planning. For example, EPD ultimately determined in 2016 that the Glades Reservoir in Hall County was "no longer part of any strategy to meet the water supply needs of the State" as a result of revised population and demand "projections."¹ Given the current COVID-19 conditions and their unknown effects on water supply operations and planning, it is highly probable that the region's current public health and economic conditions will further reduce future population growth.

The long-range 2070 withdrawal request may not be sustainable or perhaps even necessary. The April 9, 2020 letter (Letter) submitted on behalf of CCWSA with the major amendment request

¹ Comment of the State Of Georgia on the Apalachicola-Chattahoochee-Flint River Basin Water Control Manual and Draft Environmental Impact Statement (October 2015), January 29, 2016, Page 9.

suggests that if the population projections are indeed inflated and do not materialize, than the excess water supply will mitigate for climate change and reduced water availability. [page 2]

This leads to the basic question: What is the real purpose and need for this withdrawal?

CCWSA's water loss audits also indicate a fluctuating *non-revenue water loss* rate that also tracks a fluctuating data validity score. The relatively high validity scores indicate general good management of data and water, but wide fluctuation in three audit years suggests a lack of consistency.

Water Loss Audit Year	Non-Revenue Water as % by	Water Audit Data Validity
	Volume of Water Supplied	Score
2016	4.2%	79
2017	9.2%	68
2018	7.1%	84

3. Demand Projections

The future *demand projection* for 60 gallons per capita per day in 50 years is an aspirational and laudable goal. However, the calculation used to reach this data point—based upon the Water Research Foundation's report titled *Residential End Users of Water, Version 2 Executive Report*—makes two critical assumptions. [Letter, p. 3] First, that improved efficiencies will reduce demand. And second, that "more stringent plumbing codes" will be implemented in Georgia.

While some improved efficiencies will likely occur on their own, in 2019 the Georgia Department of Community Affairs (DCA) rejected a well-crafted and reasoned District-led proposal to amend plumbing codes that would have dramatically reduced water use in metro Atlanta. Among the justifications DCA staff employed to table the proposal was a desire to keep such a proposal in reserve in case Georgia needed a bargaining chip in the on-going *Florida v. Georgia* U.S. Supreme Court challenge. Such a rationale and thinking suggest that if Florida fails to obtain a favorable verdict and equitable apportionment, than Georgia will see no need to alter the state's plumbing code and reduce water use.

Additionally, outdoor water use is significant component of residential use. How did the applicant calculate for outdoor water use and peak demands to reach future demand projections?

With these considerations in mind, the CCWSA service area's demand projection may be significantly under-estimated in this amendment request.

4. Diversion structure

The withdrawal may require construction of a diversion structure or dam. Early discussion between CRK and the applicant indicated a diversion structure may be constructed across the

Chattahoochee River to direct water into the proposed raw water intake depending upon the selected location. The river already has multiple diversion structures that pose navigational hazards at municipal and power generation station withdrawal points.

The proposed location could be upstream of between Georgia Power's diversion structure at Plant Yates and a public boat ramp on the immediate Northside of Georgia Highway 16 (east of Whitesburg). Unfortunately, the new diversion structure could be less than 2 miles upstream of Plant Yates, which would render an existing and popular public boat ramp at Georgia Highway 16 in between of limited value.

Over the last decade, numerous stakeholders have invested time and resources to improve recreational options and access in this section of the Chattahoochee River. The Chattahoochee Riverlands initiative—a partnership between the Trust for Public Land, the Atlanta Regional Commission, the city of Atlanta and Cobb County—proposes a recreation corridor that would transit this part of the Chattahoochee River. Specifically, Carroll County's historic Moore's Bridge Park and the Moore's Bridge public boat ramp would function as the transition point between land and water for up/down stream access and a water trail.

The proposed diversion dam could stymie the Riverlands' plans, limit overall recreational options and use of this river section, and would introduce yet another navigational hazard to the Chattahoochee River.

5. Water Quality

For over 25 years, CRK has worked to improve the Chattahoochee River's water quality and supply. Beginning in the 1970s, the state of Georgia's policy was not to allow or permit direct municipal water withdrawals from the river between Atlanta and West Point Lake due to poor water quality. After the City of Atlanta was legally obliged to address chronic sewage and stormwater infrastructure failures and deficiencies, today's average bacteria levels are 80 percent lower than in the 1990s. CRK is pleased that our organization's advocacy has improved the Chattahoochee River's quality to the point that CCWSA—and communities in south Fulton County—can even consider a municipal withdrawal that was unthinkable 50 years ago.

However, according to Georgia's Draft 2020 305(b)/303(d) Integrated Report (Water Quality in Georgia Report), the 21 miles of river where CCWSA's withdrawal may be located are not meeting their water quality designation. The Pea Creek to Snake Creek, and Snake Creek to Wahoo Creek are designated for "fishing" and are impaired due to fecal coliform.

What actions will be employed to improve the river's water quality so the sections can be upgraded to a "drinking water" use to support a municipal water withdrawal?

Conclusion

CRK cannot support the amendment request in its current form because it is unclear if the water withdrawn will be returned to the Chattahoochee River basin; the population, non-revenue and water demand data raise a number of concerns; and the proposed withdrawal location may require construction of a new dam.

If you have any questions, please contact me directly.

Sincerely,

(125) America

Chris Manganiello, PhD Water Policy Director <u>cmanganiello@chattahoochee.org</u> Direct line: 404.924.4509



Middle Chattahoochee Regional Water Council

May 13, 2020

Chairperson Charlotte Nash Metropolitan North Georgia Water Planning District Water Resource Management Plans 229 Peachtree Street N.E. Atlanta, Georgia 30303 <u>comments@northgeorgiawater.com</u>

Dear Ms. Nash:

The Middle Chattahoochee Regional Water Council (the Council) appreciates the opportunity to review the proposed amendment regarding Coweta County Water and Sewerage Authority to the District's Water Resource Management Plan. I am submitting this letter to you on behalf of the Council during the public comment period on this proposed amendment. The Council held a called virtual meeting to review and approve this letter on May 13.

Regarding the proposed amendment, the Council submits the following comments:

• The projections for wastewater treatment by septic tanks across the planning period appears quite low relative to the experience of neighboring counties, some of which are a part of our water planning region. What is the basis for this projection? One of the high priority management practices in the Middle Chattahoochee Regional Water Plan is focused on the importance of wastewater returns:

Management Practice WW-1: Encourage use of point source discharges for wastewater treatment effluent disposal for major facilities

- The Council is concerned about the return of water to the Chattahoochee River and the larger ACF System to support downstream water uses and flows. We encourage the Metro Water District Board to address the need for wastewater infrastructure planning as well as water infrastructure planning in Coweta County as it considers this amendment. Achieving high return rates is a key to sustainability, particularly when the resource is stressed. In areas of more intense development, we recommend that the County require centralized wastewater treatment for new development.
- The projected future per capita water use rate of 60 gpcd seems quite low. It assumes a linear extrapolation of a projected decline of 18.4% over 20 to 25 years to a 50-year

period. However, additional reductions are likely to become more difficult to attain over time. Is a linear assumption valid? If the future water use rates are higher than projected, what will the impacts be to the Chattahoochee river withdrawal by the Coweta County Water and Sewerage Authority?

Over the past several years, the Metro Water District and the Council have increased coordination in regional water planning, and we applaud this joint effort and commitment to working together. We have greatly appreciated the efforts of the District, and Danny Johnson in particular, to coordinate with our Council.

I hope you will address the Council's comments as you consider the proposed plan amendment. If you have any questions about the Council's comments, please contact me. The Middle Chattahoochee Regional Water Council thanks you for your consideration, and we look forward to our continued work together to protect and sustain the water resources of this state.

Sincerely,

Steve Davis, Chair Middle Chattahoochee Regional Water Council

OFFICE OF THE GOVERNOR



ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

> KENNETH W. BOSWELL DIRECTOR

KAY IVEY GOVERNOR

o mil or r

May 15, 2020

Metropolitan North Georgia Water Planning District Water Resource Management Plans 229 Peachstreet N.E. Atlanta, Georgia 30303 <u>comments@northgeorgiawater.com</u> **VIA EMAIL**

Re: Proposed Amendment to MNGWPD's Water Resource Management Plan

To whom it may concern:

The State of Alabama, through its Office of Water Resources, submits these comments on the amendment to the Metropolitan North Georgia Water Planning District's Water Resource Management Plan that was recently proposed by the Coweta County Water and Sewerage Authority. For the reasons below, the District should reject the CCWSA's proposed amendment.

First, the CCWSA's proposal – which seeks to pump water directly out of the Chattahoochee River into BT Brown Reservoir and then discharge some of that treated wastewater back into the Flint River Basin – will harm Alabama, as well Georgia. As you know, the Alabama/Georgia border south of West Point is delineated by the Chattahoochee River. Many state-line cities, businesses and individuals rely on a dependable flow of water coming down the river. The proposed interbasin transfer here will negatively impact these local communities in a number of ways. For example, reduced downstream flows will result in fewer releases being made for hydropower generation at the various dams on the river, ultimately leading to higher electricity costs. Likewise, reduced flow will impair water quality. Not only will that hurt the river's ecosystems and limit recreational opportunities, but it will make it more difficult for businesses with pollutant discharge permits to comply with those permits and attendant state water quality standards. These are just some of the adverse downstream effects – there are more – that would result if the CCWSA's proposal is approved.

Second, the proposed interbasin transfer undermines the decision-making process that led the U.S. Army Corps of Engineers to adopting new operations for the

Page 2 of 2 May 15, 2020

ACF River Basin in 2017. One important decision the Corps reached as part of that process was to allocate additional storage space in Lake Lanier (which is part of the Chattahoochee River Basin) for water supply to ensure that metro Atlanta's demands could be met. That decision was premised in part upon the Corps' assessment that, notwithstanding that allocation, sufficient water would still flow downstream such that the impact on hydropower, the environment and other criteria would be minimal. The CCWSA's proposal, if adopted, would call that assessment into question. Had the Corps accounted for the interbasin transfer, its determination very well may have been different, and the allocation may never have been approved. Thus, in the event that the District approves CCWSA's proposal, the Corps' allocation of storage space at Lake Lanier will need to be revisited. More specifically, the storage space allocated to Georgia's direct withdrawals from Lake Lanier will need to be diminished by an amount that offsets the CCWSA's withdrawal from the Chattahoochee and interbasin transfer into the Flint.

Third, in addition to revisiting the allocation at Lake Lanier, the Corps will need to reconsider whether it has to make additional releases from Lanier and West Point Lakes to ensure that minimum flows are met downstream. Under the Corps' current operations, minimum flows must be maintained below Jim Woodruff Reservoir (as measured at the gage near Blountstown, FL). Any additional water removed from the Chattahoochee River during a drought of record would require additional releases, which may be drawn from either Lanier or West Point or a combination of the two.

Finally, these comments are based in part on the attached report in which Alabama has attempted to quantify the impact to downstream river flows and reservoir levels that would result if the CCWSA's proposal is approved.

Sincerely,

J. Brian attins

J. Brian Atkins Division Chief Alabama Officer of Water Resources

JBA/jn

cc: Governor Kay Ivey Kenneth W. Boswell, ADECA Director

Attachment

Analysis of the Proposed Chattahoochee River Withdrawal in Coweta County

May 2020

This analysis was conducted using data from the application to the MNGWPD for revision of the Coweta County water plan. To evaluate river and reservoir impacts DSS files from the 2014 ACF Corps of Engineers study were accessed to obtain actual flows and elevations from 2007, the drought of record. Because the Coweta County report presented data for 2050 and 2070, this analysis computes the impact of those proposed withdrawals should a drought of record reoccur.



Figure 1 Schematic Diagram of the ACF River System Related to this Analysis

Since portions of Coweta County water are returned through sewer systems to both the Flint and Chattahoochee Rivers some estimate of future returns is needed. Though not a lot of information is provided as to future systems an assumption was made here that the same percentages from today would apply in the future.

Es	timating Return Flows From Appendix B Co	weta County - Wastew	vater				
	Notes: There is no change in the Dra	ft Amendment					
	Wastewater numbers taken from the tables are 2050 Scenario 2						
	Withdrawal numbers taken from amended table monthly 2050						
	All values in mgd						
(a)	Sewered Needs	13.4					
(b)	Septic Flows	6.4					
(c)	Total wastewater	19.8					
(d)	Plant Capacity in Flint	13.5					
(e)	Plant Capacity in the Chattahoochee	18.4					
(f)	Total Capacity	31.9					
()		27.4					
(g)	lotal peak month withdrawai	37.1					
(h)	Withdrawal returned to river (a/g)	36.1%					
(i)	Sewered capacity in Flint (d/f)	42.3%					
(j)	Sewered capacity in Chattahoochee (e/f)	57.7%					
<i></i> .	% of withdrawal assumed to be						
(k)	returned to the Flint (h*i)	15.3%					
	% of withdrawal assumed to be						
(1)	returned to the Chattahoochee (h*j)	20.8%					

Table 1 Return Flows

During the drought of record in 2007, both Lanier and West Point were drawn down and the minimum flow was being discharged into the Apalachicola as data from the Blountstown Gage shows. Arguably the drought lasted considerably longer, which would show even greater





Figure 2 Lake Lanier Elevations 2007



Figure 3 West Point Elevations 2007



Figure 4 West Point Inflow By Month 2007



Figure 5 Flows at Blountstown, FL 2007

Impact of projected withdrawals on River Flow					
		2050		2070	
Projected Chattahoochee wit	hdrawals	21.3	mgd	47.4	mgd
Note: There are no existing pe	rmitted withdrawals				
Withdrawal		-21.3	mgd	-47.4	mgd
Return		4.4	mgd	9.9	mgd
Net Change in Chattahoochee River Flows in mgd		-16.9	mgd	-37.5	mgd
Net Change in Chattahoochee River Flows in cfs		-26.1	cfs	-58.1	cfs
August 2007 West Point Inflow		1163	cfs	1163	cfs
% reduction of inflow into West Point Reservoir -2.2% -5.0%					

Table 2 Flow impact of withdrawals during drought of record

Under the Corps' current operating plan minimum flows must be maintained below Jim Woodruff Reservoir (as measured at Blountstown). Any additional water removed from the river during the drought of record would require additional reservoir releases. That might be drawn from Lanier or West Point or a combination of the two. The estimated amounts are shown in Table 3.

Estimated drop in Reservoirs to maintain Blountstown Flow									
	Return					3.3	mgd	7.2	mgd
Net Chan	ge in Flint I	River Flows	s in cfs			5.0	cfs	11.2	cfs
Net Chan	ge in Chatt	ahoochee	River Flows in cfs	5		-26.1	cfs	-58.1	cfs
Net Chan	ge in Flow	at Blountst	own			-21.1	cfs	-46.9	cfs
Loss from	June 2007	thru Nove	mber 2007	183	days	(3,853)	cfs-days	(8,574)	cfs-days
Storage between 1051 and 1052 at Lanier		14,923	cfs-days						
Drop in Lanier to maintain Blountstown flow				0.26	feet	0.57	feet		
Storage b	etween 62	1 and 622 a	t West Point	8,268	cfs-days				
Drop in West point to maintain Blountstown flow		w		0.47	feet	1.04	feet		
Note: cfs/	′mgd	1.5473							

Table 3	Potential Additional Draw in Reservoirs
Tuble 5	



Keisha Lance Bottoms MAYOR CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT 72 Marietta Street, NW

Atlanta, Georgia 30303

Mikita K. Browning INTERIM COMMISSIONER

May 15, 2020

CERTIFIED MAIL 7018 0680 0001 9658 0261

Katherine Zitsch Director Water Resources Management Plans 229 Peachtree Street, NE Atlanta, GA 30303

Subject: Coweta Amendment Request Comments from City of Atlanta

The City of Atlanta Department of Watershed Management (DWM) respectively submits our comments to the Coweta County Water and Sewerage Authority Amendment Request to the District's Water Resource Management Plan.

Background

The City of Atlanta and the Coweta County Water and Sewerage Authority (CCWSA) have a 20-year Interjurisdictional Agreement (IJA) that is scheduled to expire December 31, 2021. The contract may be renewed for two consecutive, separate 10-year terms. The IJA indicates Atlanta will provide CCWSA with a maximum of 2.8 mgd (2,000 gpm) beginning July 1, 2001; 6.6 mgd (5,000 gpm) beginning July 2005; and 11.8 mgd (10,000 gpm) beginning July 2010; and 22.2 mgd (20,000 gpm) beginning July 2020.

CCWSA is proposing a new Chattahoochee River water withdrawal to fill the existing BT Brown Reservoir which current receives inflow from Alexander Creek and pumped inflow from Cedar Creek. The BT Brown Water Treatment Plant (WTP) would be expanded and the existing connection to the Atlanta water system would be converted to an emergency only connection.

At this time, the City of Atlanta considers the CCWSA amendment request to be premature and potentially ill-advised. The City's rationale behind this position and our concerns for the possible water withdrawal are detailed below.

Water Withdrawal Near Major Effluent Discharges

Approval of a new water withdrawal for CCWSA will mean withdrawing raw water downstream of, and relatively close to, the existing effluent discharge locations for all the

City's effluent discharge locations. It is difficult to assess the exact impact without knowing where CCWSA intends to locate the withdrawal. The City's major wastewater treatment plant, the R.M. Clayton Water Reclamation Center (WRC) discharges effluent into the Chattahoochee River immediately downstream of its confluence with Peachtree Creek. Effluent discharge from the City's second largest treatment plant, the South River WRC, is pumped across the Eastern Continental Divide to discharge into the Chattahoochee River further downstream. Finally, effluent from the City's third treatment plant, the Utoy WRC, is discharged into the Chattahoochee River just downstream from the South River discharge location. NPDES permitted flows for these major wastewater treatment plants are listed in Table 1. It should be noted that the City at its raw water intakes. In 2019, the daily average withdrawal totaled approximately 32.7 million gallons but the WRCs returned treated wastewater totaling roughly 48.4 million gallons.

Treatment Plant Name	Permitted Monthly Average Daily Flow (mgd)	Permitted Weekly Average Daily Flow (mgd)
R.M. Clayton WRC	100	125
South River WRC	48	60
Utoy Creek WRC	40	50
Totals	188	235

Table 1. Atlanta WRC NPDES Permitted Effluent Discharge Flows

In addition to WRC effluent discharges to the Chattahoochee River, the City's West Area Water Quality Control Facility (WQCF) discharges to the Chattahoochee River immediately downstream of the confluence with Peachtree Creek. The West Area Combined Sewer Facilities includes the West Area WQCF and three Combined Sewer Control Facilities (CSCFs). The Clear Creek CSCF discharges to Clear Creek; the North Avenue CSCF discharges to an unnamed tributary to Proctor Creek; and the Tanyard Creek CSCF discharges to Tanyard Creek. These creeks ultimately feed the Chattahoochee River. During dry weather, the combined sewer sub-basins deliver flow to the downstream sanitary trunk sewer systems for delivery of water to the WRCs. When wet weather events cause flow to exceed the capacity of the downstream sewer system, excess flow is automatically routed by gravity to the CSCFs. Each CSCF provides screening and delivers the first flush and ongoing combined sewer flows to the West Area Tunnel for storage/conveyance to the downstream West Area WQCF. The West Area WQCF provides equivalent primary treatment to remove settleable solids, disinfect, and dechlorinate the flow. Flows exceeding the WRC, WQCF, and tunnel capacity are discharged to local creeks through the CSCFs. The CSCFs provide minimum treatment with the first flush already captured within the tunnel, and the flow to be discharged to

Coweta Amendment Request Comments from City of Atlanta Page 3

the receiving waterbody undergoes screening, disinfection, and dechlorination prior to discharge.

Siting a drinking water withdrawal within a relatively close stream travel time to these major effluent discharge locations reduces the mixing time within the Chattahoochee River available to assimilate and diffuse remaining pollutants within the discharges. In effect, such siting may be considered to create a potential situation of defacto, non-engineered potable reuse where the effluent discharged from the City's wastewater treatment plants is used for drinking water purposes after withdrawal from the Chattahoochee.

Water Quality Concerns

Siting a drinking water intake in proximity to such significant upstream pollutant discharges will require a detailed source water assessment to evaluate the suitability of a downstream Chattahoochee River to serve as a raw water intake location. Such a study should include a temporal assessment of microbiological, physical, and chemical parameters. Allowing an amendment of the *Water Resource Management Plan* is believed to be premature until such technical studies can be completed to demonstrate such suitability. It is anticipated that an instream mixing study will be required to supplement water quality modeling of the Chattahoochee River under various stream flow conditions during both drought and high flow conditions.

The City believes that CCWSA should be required to perform the analytical analysis, including water quality dispersion modeling of the discharges from Atlanta's WRCs to determine any impact to raw water quality at the proposed intake rom the Chattahoochee River as proposed by CCWSA. Such analysis must demonstrate that CCWSA's proposed withdrawal will not require Atlanta to upgrade the City's WRCs. If there are water quality concerns that arise from the modeling or other assessments, CCWSA should provide a study on the water treatment processes required to provide safe, reliable drinking water.

Future Impacts on Effluent Discharge Limitations

The City is also concerned with potential future budgetary and technical operational impacts on the WRCs, WQCFs, and CSCFs. Siting a raw water intake downstream of these effluent discharge locations may be expected to result in more stringent effluent discharge limitations thus creating significant additional technological and budgetary challenges for the City to upgrade its treatment facilities. Even now, it has become increasingly difficult for the City to meet the ever more stringent effluent limitations. Current weekly average limitations for biochemical oxygen demand (BOD) is 8.2 mg/L; total suspended solids (TSS) is 10 mg/L; chemical oxygen demand (COD) is 45 mg/L; ammonia as N is 1.8 mg/L; and phosphorus is 0.5 mg/L. The WRCs have at times been challenged to meet the ammonia and phosphorus limits, especially during extreme wet

weather events or during operational disruptions. Similarly, the CSCFs have been challenged to meet fecal coliform limits during wet weather events. Available land to site new treatment processes and upgraded facilities is limited as development occurs surrounding each treatment site. Sophisticated technology required to remove pollutants to lower and lower detection levels is expensive both to build and to maintain both in terms of capital expenditures and operational budgets.

While the City has been generally able to meet current effluent limitations, as these limitations become more stringent, any potential disruption in normal plant operations or typical influent concentrations becomes more challenging to meet. The existing permit for the combined sewer facilities is requiring site-specific studies for metals and an approvable total recoverable water-effect ratio (WER) analysis for the total recoverable and dissolved cadmium, copper, nickel, lead, and zinc. If WRC effluent effectively becomes defacto reuse water, similar additional permit requirements for further studies and more stringent limitations become more likely, all of which will cause greater budgetary impacts on sewer rates.

Further, during emergency situations caused by more extreme weather conditions that are expected due to adverse climate change impacts, the facilities may not be capable of meeting either current or the more stringent discharge limitations. Thus, CCWSA may be at risk of shutdown of the new water withdrawal during such potential emergency conditions.

Water Supply Watershed Designation

In addition to anticipated more stringent effluent limitations at the City's treatment facilities, other property owners adjacent to the Chattahoochee River upstream of the new water withdrawal location will be affected. The watersheds adjacent to the new withdrawal location will become water supply watersheds and thus will become subject to more stringent nonpoint source controls required to protect such withdrawal locations from pollutant loads. Each water supply watershed will need to identity both point source and nonpoint source dischargers that have the potential to adversely impact water withdrawals. Those dischargers will, in turn, need to address identified risks either through increased regulatory requirements or implementation of best management practices.

Near-Term CIP Projects Serving the South Fulton Service Area to Exceed \$200 Million

Atlanta has in good faith planned short-term, intermediate, and long-term Capital Improvement Program (CIP) projects to provide adequate, quality drinking water services to its entire service area. Relative to the south Fulton service area that includes the two connections to the CCWSA system, the City has in excess of \$200 million of near-term CIP projects detailed in the 2020 Water Master Plan that are designed to serve projected growth in the area. These near-term CIP projects are detailed in Table 2.

The project listing of planned CIP projects in Table 2 only shows planned CIP projects through 2030. The City's 2020 Water Master Plan also includes significant CIP expenditures during the intermediate and long-term planning periods through the Year 2040 and 2060, respectively. It is noteworthy that one of these major CIP activities is an option to develop a new water treatment facility to further ensure adequate service and system resiliency for the south Fulton area. The facility would transport water from the current Chattahoochee River withdrawal to the proposed new facility. Due to the distances involved, the City is also considering a raw water intake further downstream and has included a feasibility assessment as a short-term project (Project WA-WR-RI-NT-01) as listed in Table 2 on the next page. While this is currently considered a secondary option, the City is considering initiating the planning necessary to determine the feasibility of installing another Chattahoochee River withdrawal. The cost assessment will also consider the projected impacts on the City's wastewater facilities. The difference in a proposed Atlanta raw water withdrawal from a CCWSA water withdrawal is that Atlanta would be able to offset the additional costs of wastewater improvements with additional revenue from the water and sewer charges.

No siting location has been identified for either of the options at this juncture. Siting considerations will include evaluating the costs of transmitting water from the current raw water intake versus the costs of installing a new intake further south. Further, the costs of adding more processes to the possible drinking water plant will be evaluated in terms of the costs, and feasibility, of additional wastewater processes at each of the WRCs.

Inter Basin Transfer Ramifications

While all Atlanta wastewater is discharged back to the Chattahoochee River Basin, CCWSA has several wastewater treatment plants discharging to the Flint River Basin. According to the Plant Capacity at End of Period table in the CCWSA amendment request, Year 2025 flows of 7.3 mgd of the 18.3 mgd total capacity, or 40 percent, of the flow will be discharged to the Flint River Basin. With the current "water war" situation between the States of Georgia, Alabama, and Florida, it is expected that at least Florida and possibly Alabama will object to any flow diversion from the Chattahoochee River Basin. Should CCWSA be forced to pump effluent discharges back to the Chattahoochee River, this will be an additional cost to CCWSA. The adjacent states are also expected to object to this new withdrawal as an "additional" amount to be withdrawn since the City's withdrawal remains the same.

Project ID	Project Name	Purpose	Cost (2019 Dollars)
WA-DS-OT-NT-01	Chattahoochee- Adamsville Redundant Main	Resiliency for critical water main supplying South Fulton through the Adamsville Repump Station.	\$ 28,000,000
WA-DS-OT-NT-02	Adamsville-Fairburn Road Redundant Mains	Resiliency for critical water main supplying South Fulton through the Adamsville Repump Station.	\$ 30,150,000
WA-DS-OT-NT-04	Hartsfield Fill Line Redundant Mains	Resiliency for critical water mains supplying South Fulton through the Hartsfield Repump Station.	\$ 33,300,000
WA-DS-OT-NT-05	Sullivan Road 24" Redundant Main	Resiliency for critical water mains supplying South Fulton through the Hartsfield Repump Station.	\$ 5,250,000
WA-DS-OT-NT-18	Southwest Fulton Piping Loop and Flusher Improvements	Improve local water quality on the extreme southwestern end of system with new loops, reducing the size of underutilized pipes, and boosting a nearby auto flusher.	\$ 7,450,000
WA-DS-OT-NT-19	Northside Drive Central Main	Provide capacity to support other proposed mains heading south from the Hemphill WTP.	\$ 13,900,000
WA-DS-OT-NT-20	Northside Drive South Main	Boost filling support for Hartsfield Repump Station to minimize low pressures as it works to support growing South Fulton demands.	\$ 46,600,000
WA-DS-OT-NT-25	Cascade Road Main	Extend part of Project WA-DS-OT-NT- 02 toward the Hemphill WTP to boost South Fulton pressures, especially during emergencies.	\$ 43,800,000
WA-WR-RI-NT-01	Adamsville-Hartsfield Service Area Long Term Supply Plan	Source water assessment, feasibility assessment, and conceptual planning for a South Fulton WTP.	\$ 780,000
		Total:	\$209,230,000

Coweta Amendment Request Comments from City of Atlanta Page 7

Thank you for your consideration of the points raised in this letter. If you have any questions or need additional information, please contact me at 404-546-3333 or <u>mbrowningl@atlantaga.gov</u>.

Sincerely,

Kit. le K. Pring

Mikita K. Browning Interim Commissioner Department of Watershed Management

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