

No. 142, Original

In the
Supreme Court of the United States

STATE OF FLORIDA,
Plaintiff,

v.

STATE OF GEORGIA,
Defendant.

PRE-TRIAL BRIEF FOR ALABAMA AS *AMICUS CURIAE*

Luther Strange
Alabama Attorney General
Andrew L. Brasher
Alabama Solicitor General
OFFICE OF THE ATTORNEY GENERAL
501 Washington Avenue
Montgomery, AL 36104
(334) 242-7300
lstrange@ago.state.al.us
abrasher@ago.state.al.us

David B. Byrne, Jr.
Chief Legal Advisor
OFFICE OF THE GOVERNOR
600 Dexter Avenue, Suite NB-05
Montgomery, AL 36104
(334) 242-7120
david.byrne@governor.alabama.gov

John C. Neiman, Jr.*
Alabama Deputy Attorney General
John A. Earnhardt
J. Ben Segarra
MAYNARD COOPER & GALE P.C.
1901 Sixth Avenue North
2400 Regions/Harbert Plaza
Birmingham, Alabama 35203
(205) 254-1228
jneiman@maynardcooper.com
jearnhardt@maynardcooper.com
bsegarra@maynardcooper.com

October 21, 2016

**Counsel of Record*

TABLE OF CONTENTS

TABLE OF CONTENTS..... i

TABLE OF AUTHORITIES ii

INTEREST OF THE AMICUS CURIAE 1

ARGUMENT 3

THIS COURT SHOULD RESOLVE FLORIDA'S CLAIM IN A WAY THAT ACCOUNTS FOR CURRENT CIRCUMSTANCES IN THE CHATTAHOOCHEE BASIN 3

 A. Florida's Description of the Burden of Proof is Correct.....4

 B. A Cap on Georgia's Withdrawals is the Appropriate Relief 6

FLORIDA'S REQUESTED CAP WOULD COMPLEMENT ALABAMA'S CHALLENGE TO GEORGIA'S EFFORTS TO WITHDRAW EXCESSIVE WATER FROM THE CORPS' FACILITIES ON THE CHATTAHOOCHEE 8

 A. The Corps' Proposed Direct-Withdrawal Allocation Violates the Water Supply Act..... 10

 B. The Corps' Proposed Allocation for Georgia's Downstream Withdrawals is Equally Illegal.....13

CONCLUSION 14

TABLE OF AUTHORITIES

Cases

<i>In re MDL-1824 Tri-State Water Rights Litigation</i> , 644 F.3d 1160 (11th Cir. 2011)	1, 2, 8, 13
<i>Colorado v. New Mexico</i> , 459 U.S. 176 (1982)	4, 5, 6
<i>Nebraska v. Wyoming</i> , 325 U.S. 589 (1945)	6
<i>State of New Jersey v. State of New York</i> , 283 U.S. 336 (1931)	6
<i>Federal Power Customers v. Geren</i> , 514 F.3d 1316, 1324 (D.C. Cir. 2008)	8, 11, 12
<i>United States v. 14.02 Acres of Land More or Less in Fresno Cnty.</i> , 943, 955 (9th Cir. 2008)	9, 10
<i>Winzler v. Toyota Motor Sales U.S.A., Inc.</i> , 681 F.3d 1208 (10th Cir. 2012)	10
<i>Environmental Defense Fund, Inc. v. Alexander</i> , 467 F. Supp. 885, 901 (N.D. Miss 1979)	13, 14

Other Authorites

U.S. Army Corps of Engineers, ACF Water Supply Storage Assessment 27 (Oct. 2015).....	9, 10, 11
--	-----------

INTEREST OF THE AMICUS CURIAE

Alabama has not intervened as a party to this case because Florida and Georgia do not seek relief from Alabama, and Florida has limited its requested relief to a cap on Georgia's consumption. *See Ala. Amicus Br. Re: Non-Joinder 8-15* (filed May 1, 2015). But as Alabama has explained in previous *amicus* submissions, Alabama has substantial interests in the ACF Basin—particularly in the Chattahoochee River, which runs along Alabama's eastern border. *See id.* at 2-7; Alabama Mot. for Leave to File Pre-Trial Amicus Br. 1-2 (Sept. 16, 2016). Approximately 2,800 square miles of the ACF Basin lies within Alabama, and more than 300,000 Alabama residents live in counties encompassed within the Basin. These Alabamians use the Basin's water for numerous purposes, including navigation, water supply, recreation, and tourism. Alabama's experience thus can provide helpful perspective to this Court.

Alabama has protected its citizens' interests in these waters through various judicial and administrative proceedings over the last three decades. Alabama's litigation approach reflects its understanding that flows into the State are primarily affected by two governmental actors: (1) the Army Corps of Engineers, which administers, and releases water from, federally owned reservoirs within the Chattahoochee, and (2) the State of Georgia and its subdivisions, which withdraw water from locations in the basin upstream of

Alabama, including the federally owned reservoir at Lake Lanier. Alabama thus was a party to the litigation involving both the Corps and Georgia and culminating in the Eleventh Circuit's decision in *In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160, 1166 (11th Cir. 2011). That decision addressed, among other things, the Corps' ability to allocate storage from Lake Lanier for Georgia's downstream withdrawals in the ACF Basin.

Since that time, the Corps has proposed a new draft manual for the ACF Basin that allocates storage to Georgia from Lake Lanier for water-supply purposes. Instead of confining that allocation to the limited downstream river withdrawals authorized by the Eleventh Circuit, the Corps' draft manual proposes to allocate storage for much more significant withdrawals by Georgia, including withdrawals directly from the lake itself. As set forth in more detail in the pages that follow, in administrative proceedings, Alabama has objected to the draft manual's proposed water-supply allocation to Georgia, arguing that it violates various federal statutes and will adversely affect Alabama. At the same time, Georgia has objected to the Corps' proposed storage allocation as insufficient. Both Alabama's and Georgia's objections remain pending, and the Corps has not taken final agency action in that regard.

In light of Alabama's long experience combatting Georgia's excessive withdrawals in the Basin, this brief offers perspective on two matters that

could prove instructive as the Court considers Florida's current request for relief. First, Alabama offers its view, as a State both upstream and downstream from other States in the ACF Basin, on the burden of proof in an equitable apportionment action of this sort and on the potential forms of relief available to Florida. Second, Alabama sets out judicially noticeable developments relating to the ACF Basin that directly affect Georgia's potential withdrawals from the Chattahoochee River—namely, the pending administrative proceedings over Georgia's unlawful water-supply request from the Corps' facilities at Lake Lanier.

ARGUMENT

I. This court should resolve Florida's claim in a way that accounts for current circumstances in the Chattahoochee Basin.

In light of Alabama's long experience dealing with Georgia's excessive water consumption from the Chattahoochee River, Alabama would offer two suggestions about the legal analysis the Court should employ when considering Florida's request for relief. The first concerns who bears the burden, as between Florida and Georgia, of establishing whether Georgia's withdrawals have been excessive. The second concerns the relief this Court should issue if Florida prevails.

A. Florida’s description of the burden of proof is correct.

As an initial matter, Florida accurately sets forth how the burden of proof should work in this equitable-apportionment action. *See* Fla. Pretrial Brief 10-15 (Oct. 12, 2016). Alabama has a unique perspective on this matter. It is downstream of Georgia on some parts of the Chattahoochee but upstream of Georgia and Florida on others. In Alabama’s judgment, Florida has articulated the right rule. Once a downstream riparian State has shown by clear and convincing evidence that an upstream State “is diminishing the usual and natural flow” of water in a way that will be “injurious to [the downstream State’s] sovereign interests,” the burden shifts to the upstream State—here, Georgia—to show by clear and convincing evidence “that its diversion is reasonable and equitable.” Fla. Pretrial Br. 14-15. Florida should not have the burden of establishing, as Georgia suggests, both that it is being injured *and* that Georgia is acting unreasonably.

The Supreme Court has stated that this sort of burden-shifting approach applies even in prior-appropriation states. *See Colorado v. New Mexico*, 459 U.S. 176, 187 n.13 (1982). But at the very least, requiring Florida to establish the unreasonableness of Georgia’s diversions would be inconsistent with the system of riparian rights that prevails in the ACF Basin. That is so for at least two reasons.

First, the fundamental principle underlying riparian rights is equality. Each riparian user has the same right to the flow of a given stream “undiminished in quantity, and unpolluted in quantity,” save for the reasonable uses of other riparian users. *Id.* at 179 n.4 (1982). In contrast to prior-appropriation States, “under which the relative rights of water users are ranked in the order of their seniority,” users in riparian jurisdictions are entitled only to “use of the water that is reasonable.” *Id.* Prior use of the water does not establish either reasonableness or its ownership. So it makes little sense for Georgia to insist that Florida, a neighboring riparian State, must affirmatively establish that Georgia’s claimed use is *unreasonable*. It is each State’s burden, as an equal player in this system, to establish that its actions in the Basin are equitable and fair.

Second, Georgia’s characterization of Florida as “the state ‘seeking to disrupt the status quo,’” and thus the party that must bear the burden of proof on this point, is also inconsistent with both riparian principles and the factual realities of this case. Ga. Pretrial Br. 5 (quoting *Colorado I*, 459 U.S. at 187). Riparian States do not gain their rights through prior use, and Florida is not seeking a diversion for any new use here. It instead is seeking to *preserve* a necessary flow of water to an ecosystem that long *preceded* any use by Georgia. It is Georgia that is seeking the relevant diversions in this case—to urban consumption in the case of the upper Chattahoochee, and to

crop irrigation in the case of the Flint. Georgia, as the party seeking to justify those diversions, must establish by clear and convincing evidence that they are reasonable. *See Colorado I*, 459 U.S. at 187 (calling for “the state seeking a diversion” to “demonstrate[] by clear and convincing evidence that the benefits of the diversion outweigh the harm that might result”).

B. A cap on Georgia’s withdrawals is the appropriate relief.

Moreover, the requested relief to which Florida has limited itself, a cap on Georgia’s consumption from the ACF, is appropriate. This Court has imposed similar caps in equitable-apportionment actions. *See Nebraska v. Wyoming*, 325 U.S. 665, 665 (1945) (entering various caps on diversions, storage, and exporting of water by Colorado and Wyoming); *New Jersey v. New York*, 283 U.S. 336, 346 (1931) (capping New York’s diversions from the Delaware River). Should Florida satisfy its burden of proof and Georgia fail to satisfy its own burden, a cap on Georgia’s consumption should follow.

That form of relief is particularly appropriate in light of Florida’s and Georgia’s decision not to assert any claims against Alabama, as well as the Corps’ assertion of sovereign immunity in this case. As Alabama previously has explained, Alabama companies and municipalities withdraw and use water from the Chattahoochee River. *See Ala. Brief on Non-Joinder* 4 (May 1, 2015). The fact that Alabama withdraws this water—and the fact that the

Corps' operations substantially affect the flow of water in the Chattahoochee—should preclude, as both a legal and practical matter, the imposition of any minimum-flow requirement on Georgia with respect to the Chattahoochee in this case. As the Special Master already has noted, “Alabama will not be bound by any judgment in this case absent joinder.” Order on State of Georgia’s Motion to Dismiss for Failure to Join a Required Party 23 (June 19, 2015) (citing *Republic of Philippines v. Pimentel*, 553 U.S. 851, 871 (2008)). The same is true of the Corps. If this Court were to impose any minimum-flow requirement as relief in this case, the most suitable location would be on the Flint River, which does not flow through Alabama, and where the Corps of Engineers administers no reservoirs.

On the other hand, even without Alabama and the Corps present as parties, this Court could equitably impose a cap on Georgia’s consumption from both the Chattahoochee and the Flint. As Alabama previously has explained, Alabama likely would benefit from a cap Florida might obtain on Georgia’s Chattahoochee consumption. *See* Ala. Brief on Non-Joinder 12 (May 1, 2015). Such a cap would not preclude Alabama from filing its own equitable-apportionment action against Georgia should the need arise in the future. In that equitable-apportionment action Alabama could seek, among other relief, an additional cap on Georgia’s consumption from the Chattahoochee. That cap would operate, as the Special Master has explained,

“in addition to the relief (if any) obtained by Florida” in this case. Order on State of Georgia’s Motion to Dismiss for Failure to Join a Required Party 23 (filed June 19, 2015). So if Florida prevails on the merits, this Court should impose a cap on Georgia’s consumption.

II. Florida’s requested cap would complement Alabama’s challenge to Georgia’s efforts to withdraw excessive water from the Corps’ facilities on the Chattahoochee.

Capping Georgia’s withdrawals would be an especially appropriate remedy because it would work hand-in-hand with Alabama’s separate efforts to curb Georgia’s excessive withdrawals from the ACF Basin. As the population of metropolitan Atlanta has grown, Georgia largely has chosen not to invest its resources in reservoirs and other infrastructure that would facilitate the area’s water-supply demands. Instead, Georgia has sought to use federally owned resources, such as the Corps’ reservoirs at Lake Lanier in the ACF Basin and Lake Allatoona in the ACT Basin, to meet its new demands. That dynamic has led to disputes in which various parties have mounted legal challenges to Georgia’s use of those facilities. *See, e.g., See In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160, 1166 (11th Cir. 2011); *Se. Fed. Power Customers v. Geren*, 514 F.3d 1316, 1324 (D.C. Cir. 2008).

Of particular relevance to the present case is the Corps' current proposal to allocate Georgia over 573 mgd for water supply from Lake Lanier. *See* U.S. Army Corps of Engineers, ACF Water Supply Storage Assessment 27 (Oct. 2015), available at http://www.sam.usace.army.mil/Portals/46/docs/planning_environmental/acf/docs/ACF%20DEIS%20Vol3_Appendix%20B-I.pdf. Alabama has objected to the Corps' proposed allocation as too high and thus in violation of federal law, while Georgia has objected to the allocation as too low. *See* Comments of the State of Georgia on Draft ACF Environmental Impact Statement 4-8 (attached w/out exhibits as Exhibit A); Comments of the State of Alabama on Draft ACF Environmental Statement 2-8 (Jan. 29, 2016) (attached w/out exhibits as Exhibit B). If the Corps finalizes its current proposal—and, even more so, if the Corps grants Georgia's even more excessive request—substantially decreased downstream flows will result.

Alabama is not suggesting that this Court should resolve, in this case, the current disputes over the legality of the Corps' proposed water-supply allocation at Lake Lanier. That is a matter the Corps will need to consider in the administrative process that currently is underway, and judicial review may follow. But the judicially noticeable facts about that process, and the legal arguments the parties to that process have made, can provide helpful background as this Court determines how best to fashion relief in this case.

See United States v. 14.02 Acres of Land More or Less in Fresno Cnty., 547 F.3d 943, 955 (9th Cir. 2008) (“Judicial notice is appropriate for records and reports of administrative bodies.”) (internal quotation marks and citation omitted); *Winzler v. Toyota Motor Sales U.S.A., Inc.*, 681 F.3d 1208, 1213 (10th Cir. 2012) (“The contents of an administrative agency’s publicly available files, after all, traditionally qualify for judicial notice, even when the truthfulness of the documents on file is another matter.”). This brief therefore discusses those facts and arguments below.

A. The Corps’ proposed direct-withdrawal allocation violates the Water Supply Act.

Alabama’s submissions in the administrative proceedings relating to Lake Lanier argue that the Corps’ allocation of storage for Georgia’s direct withdrawals violates federal law. The Corps has allocated at least 165 mgd for Georgia to withdraw directly from the reservoir. *See Water Supply Storage Assessment, supra*, at 27. As the sole legal support for this allocation, the Corps has cited the Water Supply Act, 43 U.S.C. §390b. *See id.* at 5. But as Alabama argues in its administrative filings, the WSA does not give the Corps that authority. The WSA requires the Corps to obtain approval from Congress before it makes any allocation for local water supply from one of its reservoirs that would either: (1) “seriously affect the purposes for which the project was authorized”; or (2) “involve major structural or operational

changes.” 43 U.S.C. §390b(e). Congress has not approved the Corps’ current direct-proposal proposal. And Alabama’s administrative filings show that the Corps’ proposal would trigger both of the considerations requiring congressional approval under the Act.

For example, the direct-withdrawal allocation involves major operational change under a D.C. Circuit decision that is binding on the Corps. *See Se. Fed. Power Customers v. Geren*, 514 F.3d 1316, 1324 (D.C. Cir. 2008). That decision arose when, as Florida has explained, “in the midst of the [ACF] Compact negotiations” involving all three States in 2002 and 2003, Georgia “secretly negotiat[ed] a side-deal with the Corps.” Fla. Pre-Trial Br. 36 (Oct. 12, 2016). Georgia’s negotiations culminated in a settlement of a separate case pending in the D.C. District. *See id.* at 36-37 (citing *Alabama v. U.S. Army Corps of Eng’rs*, 357 F. Supp. 2d 1313, 1318 (N.D. Ala. 2005), vacated and remanded on other grounds, 424 F.3d 1117 (11th Cir. 2005)). Under that settlement, the Corps agreed to allocate “more than twenty-two percent (22%) of the total storage space in Lake Lanier” to Georgia water supply. *Se. Fed. Power Customers*, 514 F.3d at 1320. The D.C. Circuit eventually invalidated Georgia’s settlement with the Corps, reasoning that “[o]n its face, . . . reallocating more than twenty-two percent (22%, approximately 241,000 acre feet) of Lake Lanier’s storage capacity” would “constitute[] the type of major operational change referenced by the WSA.” *Id.*

That ruling is critical for present purposes because the Corps' current proposal for Georgia's direct withdrawals from Lake Lanier, corresponding with 17.4% of the reservoir's conservation pool, is comparable on its face to the one struck down by the D.C. Circuit. *See* Exh. B at 3. Indeed, Alabama has observed that the Corps' regulations separately prohibit the Corps from making an allocation of that magnitude without congressional approval. *See id.* (citing USACE Engineering Regulation 1105-2-100, at 3-33).

Beyond the sheer size of the allocation, the Corps' proposal would both involve "major operational change" and "seriously affect project purposes" in the functioning of the Corps' reservoirs in the ACG Basin. Alabama's filings argue that the direct-withdrawal proposal would substantially reduce hydropower generation at Lanier. *See* Exh. B at 3. Alabama's filings also point out that the withdrawals would require the Corps to substantially change operations at its downstream reservoirs. *See id.* at 4. Alabama's filings observe that, for various reasons, the Corps' proposal may have the practical effect of allocating substantially more than the stated 165 mgd for Georgia's direct withdrawals. *See id.* at 5-7.

In the face of these considerations, Georgia's own administrative filings complain that the proposed direct-withdrawal allocation is insufficient, and assert that Georgia should be able to withdraw even more of the water from Lake Lanier. *See* Exh. A at 4-8. The direct withdrawals Georgia is requesting,

amounting to a total of at least 218 mgd and in all likelihood far more, would even more vividly affect project purposes and cause major operational change, thus making Congress's approval all the more imperative under the Water Supply Act.

B. The Corps' proposed allocation for Georgia's downstream withdrawals is equally illegal.

The Corps' draft ACF manual also proposes releasing an additional 408 mgd from Lanier for Georgia's withdrawals downstream in the Chattahoochee, and Alabama likewise has challenged that aspect of the Corps' draft manual as contrary to federal law. *See* Exh. B at 8. That proposal would require an additional allocation of 43.1% of Lanier's conservation pool for Georgia water supply. That amount of storage, combined with the storage associated with the proposed reallocation for 165 mgd in direct withdrawals by Georgia from Lanier, is equivalent to more than 60% of the reservoir's conservation pool. *See id.* As Alabama has explained in its administrative filings, the Eleventh Circuit has held that the Rivers and Harbors Act of 1946, Pub. L. No. 79-525, 60 Stat. 634 (1946), authorizes the Corps to make *some* releases to accommodate Atlanta's downstream withdrawals. *See In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160, 1166 (11th Cir. 2011). But the Corps has long recognized that it must obtain Congress's approval before making alterations to its reservoirs that would involve

substantial changes in the relative sizes of project purposes. *See Env'tl. Def. Fund v. Alexander*, 467 F. Supp. 885, 901 (N.D. Miss. 1979) (citing memoranda issued by the Corps in 1951 and 1969). No court has held that the Corps can, without first seeking Congress's permission, change Lanier into a project that overwhelmingly focuses on Georgia's water supply.

Alabama thus is challenging the current proposals for Georgia's use of Lake Lanier for water-supply purposes, and this Court should take judicial notice of those realities as it shapes relief for Florida in this case.

CONCLUSION

In assessing Florida's claim for an equitable apportionment on the ACF Basin against Georgia, this Court should require Georgia to establish the reasonableness of the full amounts of its proposed diversions by clear and convincing evidence. If Georgia fails to do so, this Court can properly impose, as an equitable remedy, a cap on Georgia's ACF consumption. Doing so will complement Alabama's efforts to challenge the Corps of Engineers' proposed accommodation of Georgia's water-supply withdrawals from Lake Lanier.

Respectfully submitted,

Luther Strange
Alabama Attorney General
Andrew L. Brasher
Alabama Solicitor General
OFFICE OF THE ATTORNEY GENERAL
501 Washington Avenue
Montgomery, AL 36104
(334) 242-7300
lstrange@ago.state.al.us
abrasher@ago.state.al.us

David B. Byrne, Jr.
Chief Legal Advisor
OFFICE OF THE GOVERNOR
600 Dexter Avenue, Suite NB-05
Montgomery, AL 36104
(334) 242-7120
david.byrne@governor.alabama.gov

/s/ John C. Neiman, Jr.
John C. Neiman, Jr.*
Alabama Deputy Attorney General
John A. Earnhardt
J. Ben Segarra
MAYNARD COOPER & GALE P.C.
1901 Sixth Avenue North
2400 Regions/Harbert Plaza
Birmingham, Alabama 35203
(205) 254-1228
jneiman@maynardcooper.com
jearnhardt@maynardcooper.com
bsegarra@maynardcooper.com
**Counsel of Record*

October 21, 2016

No. 142, Original

In the
Supreme Court of the United States

STATE OF FLORIDA,
Plaintiff,

v.

STATE OF GEORGIA,
Defendant.

Before the Special Master
Hon. Ralph I. Lancaster

CERTIFICATE OF SERVICE

This is to certify that the foregoing Brief of Alabama as Amicus Curiae has been served this 21st day of October, 2016, in the manner specified below:

For State of Florida

By U.S. Mail and Email:

Jonathan L. Williams
Deputy Solicitor General
Office of Florida Attorney General
The Capital, PL-01
Tallahassee, FL 32399
T: (850) 414-3300
jonathan.williams@myfloridalegal.com

Gregory G. Garre
Counsel of Record
Latham & Watkins LLP
555 11th Street, NW
Suite 1000
Washington, DC 20004
T: (202) 637-2207

By Email Only:

Donald G. Blankenau
Jonathan A. Glogau
Christopher M. Kise
Matthew Z. Leopold
Osvaldo Vazquez
Thomas R. Wilmoth
Philip J. Perry
Abid R. Qureshi
Claudia M. O'Brien
Paul N. Signarella
Thomas R. Wilmoth
floridaacf.lwteam@lw.com
floridawaterteam@foley.com

For State of Georgia

By U.S. Mail and Email:

Craig S. Primis, P.C.
Counsel of Record
Kirkland & Ellis, LLP
655 15th St., NW
Washington, DC 20005
T: (202) 879-5000
craig.primis@kirkland.com

By Email Only:

Samuel S. Olens
Britt Grant
Seth P. Waxman
K. Winn Allen
Sarah H. Warren
georgiawaterteam@kirkland.com

For United States of America

By U.S. Mail and Email:

Ian Gershengorn
Solicitor General
Counsel of Record
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
T: (202) 514-2217
supremectbriefs@usdoj.gov

By Email Only:

Michael T. Gray
Michael.gray2@usdoj.gov

James DuBois
James.dubois@usdoj.gov

/s/ John C. Neiman, Jr.
John C. Neiman, Jr.
Alabama Deputy Attorney General
MAYNARD COOPER & GALE P.C.
1901 Sixth Avenue North
2400 Regions/Harbert Plaza
Birmingham, Alabama 35203
(205) 254-1228
jneiman@maynardcooper.com

EXHIBIT A

Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr., Drive, Suite 1152 East Tower, Atlanta, Georgia 30334
Judson H. Turner, Director
(404) 656-4713

January 29, 2016

Via U.S. Mail and Electronic Mail

Colonel Jon J. Chytka
District Commander
Mobile District, U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628

Re: Apalachicola-Chattahoochee-Flint River Basin
Water Control Manual and Draft Environmental Impact Statement (October 2015)
COMMENTS OF THE STATE OF GEORGIA

Dear Colonel Chytka:

In response to the Federal Register Notice of October 2, 2015 (80 Fed. Reg. 59,741), the State of Georgia submits the following comments regarding the U.S. Army Corps of Engineers (“Corps”) Water Control Manual (“WCM”) and Draft Environmental Impact Statement (“DEIS”), including the Water Supply Storage Assessment Report attached in Volume III as Appendix B (the “WSSAR”), for the Apalachicola-Chattahoochee-Flint River Basin (“ACF Basin”).

I. Introduction

Waters within the ACF Basin are critical to the environmental, economic, and social well-being of the citizens of the State of Georgia. The ACF Basin encompasses 20,000 square miles. Approximately 74% of the drainage area of the ACF Basin is in Georgia (15% is in Alabama, and 11% is in Florida), and the ACF Basin covers 50 counties in Georgia (eight in Florida and ten in Alabama). Approximately 72% of the Basin’s population resides in Georgia. The State of Georgia’s economic output exceeds \$400 billion, with metro Atlanta accounting for \$270 billion of that amount.

The main stems of the Apalachicola, Chattahoochee, and Flint Rivers house 16 projects (five federal and 11 non-federal). Uses for the rivers and impoundments within the ACF Basin include water supply, hydropower generation, recreation, flood control, agriculture, and environmental amenities and protection, among others. Water supply is a particularly critical function of the rivers and impoundments within the ACF Basin. The population of metro Atlanta (nearly 5.5 million) derives approximately 73% of its water supply from Lake Lanier and the Chattahoochee River. The population of Gwinnett County (approximately 860,000) relies entirely on withdrawals from Lake Lanier. Counties that rely on Lake Lanier for water supply comprise the majority of the population for the Atlanta Metropolitan Statistical Area (“MSA”) which, according to the U.S. Census Bureau, is the ninth largest MSA by population in the United States. From 2000 to 2010, the Atlanta MSA grew by 24%, a growth rate exceeded by only two other MSA’s in the United States.

Because the ACF Basin is critical to Georgia, commenting throughout the WCM update process has also been critical to Georgia. On January 14, 2013, Georgia submitted comments on the Corps Scoping Memorandum for the Draft EIS for the ACF Basin. Letter from Judson Turner, Director, Georgia Environmental Protection Division, to Tetra-Tech, Inc., regarding State of Georgia’s comments on the ACF WCM scoping (Jan. 14, 2013) (“Georgia Scoping Comments,” **Exhibit A**). As the Georgia Scoping Comments made clear, in addition to evaluation of Georgia’s water supply request (then an estimated 408 mgd from the Chattahoochee River and 297 mgd by direct withdrawal from Lake Lanier), the Draft EIS must fully and completely evaluate the economic, environmental, and social impacts of failing to supply those requested amounts, as well as the economic, environmental, and social impacts of the alternatives that Georgia will be forced to implement if the requested amounts are not available.

At about the same time, on January 11, 2013, the State of Georgia submitted an updated water supply request, providing its estimate of water supply needs from the ACF Basin. Letter from Nathan

Deal, Governor, State of Georgia, to Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works, regarding State of Georgia's Water Supply Request (Jan. 11, 2013) (the "2013 Request," **Exhibit B**). It is the 2013 Request upon which the Corps based its analysis in the DEIS, although for the reasons stated below, the 2013 Request has been updated by a December 4, 2015 request. Letter from Judson Turner, Director, Georgia Environmental Protection Division, to Col. Jon Chytka, District Commander, Mobile District, U.S. Army Corps of Engineers, regarding State of Georgia's Water Supply Request (Dec. 4, 2015) (the "2015 Request," **Exhibit C**).

In February 2014, the Corps asked Georgia for further information on water supply alternatives, particularly those measures identified by the Governor's Water Contingency Task Force. In response to this request, on May 30, 2014, Georgia provided the Corps with an analysis of the extent of potential alternatives to increased withdrawals from Lake Lanier. Letter from Judson Turner, Director, Georgia Environmental Protection Division, to Col. Jon Chytka, District Commander, Mobile District, U.S. Army Corps of Engineers, providing additional information on 2013 Request (May 30, 2014) (the "Georgia Alternatives Analysis," **Exhibit D**). As that analysis made clear, Lake Lanier is by far the most cost-effective and environmentally protective alternative for the supply of water to those metro governments located around and in proximity to it.

In 2015, after submitting the Georgia Alternatives Analysis, the State received revised population projections and updated per capita water use figures. As a result, Georgia submitted the 2015 Request to the Corps. The 2015 Request reduces the request for withdrawals from Lake Lanier to 242 mgd (down from 297 mgd) and from the Chattahoochee River to 355 to 379 mgd (down from 408 mgd). The effect of the 2015 Request is discussed below.

The revised estimates were based, in part, on the success of Georgia's water conservation initiatives. Recognizing both the critical nature of water supply to the economy of Georgia and the

limited availability of that resource, the State has implemented one of the most aggressive and effective water conservation programs in the country. Consequently, per capita water use declined 30 percent from 2000 to 2015, and total water consumption within the metro Atlanta area declined over 10 percent despite a 20 percent increase in population. The Final EIS, including the WSSAR, should address and respond to the 2015 Request as it contains the most recent and best available water use information.

In the sections that follow, Georgia details two areas that the Corps should address in the Final EIS and WCM. First, Georgia discusses the water supply considerations of the DEIS, including the WSSAR. As is shown below, the Corps can fully meet the 2015 Request because the impacts of the 2015 Request are nearly identical to those the Corps has deemed acceptable in the Proposed Action Alternative (Alternative 7H) (“PAA”). In doing so, the Corps will be abiding by the mandate of the Eleventh Circuit decision. *See In re MDL-1824 Tri-State Water Rights Litigation*, 644 F.3d 1160 (11th Cir. 2011) (per curiam), *cert. denied* 133 S. Ct. 25 (2012). Second, the State addresses several areas of the ACF Basin’s proposed water management operations that the Corps should address, including lowering flows at Peachtree Creek during the winter months, modifying its approach to navigation, addressing winter draw-down at West Point Lake, re-evaluating Lake Lanier elevation requirements, using updated information in its Endangered Species analysis, reporting the totality of returns, and properly projecting the effect of conservation measures.

II. The Corps Should Revise the WCM to Provide for Water Supply in the Full Amount of Georgia’s 2015 Request.

A. The Corps has the Legal Authority and Factual Basis to Grant All of Georgia’s 2015 Request.

The DEIS was prepared, in part, in response to Georgia’s 2013 Request. Since that Request was submitted, the Metropolitan North Georgia Water Planning District (“Metro District”), as part of its regular planning process, has updated its water supply projections based on 2015 population and

employment forecasts and recent water use data. In light of these updated numbers, over the weeks and months leading up to the DEIS, the State and Metro District provided information and data to the Corps indicating that the 2013 Request was outdated and would be updated with new, and substantially reduced, demand figures. On December 4, 2015, Georgia submitted the 2015 Request, updating the 2013 Request, extending the planning horizon through the year 2050, and reducing the projected water supply demands.

The 2015 Request reduces the requested amount of water from Lake Lanier from 297 mgd to 242 mgd, and from the Chattahoochee River from 408 mgd to between 355 and 379 mgd. The withdrawals from the River are authorized pursuant to the River and Harbor Act of 1946, Pub. L. No. 79-525 (RHA), thus no contracts with the Corps will be necessary. The Corps has determined that withdrawals from the Lake will occur pursuant to allocations made under the Water Supply Act of 1958, 43 U.S.C. § 390b (“WSA”). Of the total 242 mgd requested from the Lake, however, the Corps is only required to allocate 218.7 mgd to new contracts (208.7 mgd under the WSA and 10 mgd for Gwinnett County under the 1956 Act, Pub. L. No. 84-841). The remaining 23.3 mgd will be provided under the existing relocation contracts for the City of Gainesville and City of Buford.¹

The Corps has both the legal authority and the factual basis to issue a WCM that provides for withdrawals fully meeting the 2015 Request. There are several reasons for this conclusion. First, the Corps has the legal authority to grant the 2015 Request. The question of whether water supply is an authorized purpose of the Buford Project has been litigated and decided. In its 2011 order, the Eleventh Circuit stated that “[t]he language of the RHA clearly indicates that water supply was an authorized purpose of the Buford Project.” *Tri-State Water Rights Litigation*, 644 F.3d at 1192. The court further

¹ The City of Buford’s relocation contract is for 2 mgd. The City of Gainesville’s relocation provides for up to “8,000,000 gallons of water per day from Buford Dam and Reservoir” which has been historically interpreted to mean a net withdrawal of 8 mgd. As provided for in a Supplement to the Relocation Contract, upon execution of a new storage contract, this 8 mgd net withdrawal will become 21.3 mgd.

concluded “that water supply was an authorized purpose of the RHA and that the RHA authorized the Corps to allocate storage in Lake Lanier for water supply storage.” *Id.* In that same opinion, the Court ordered the Corps to reconsider its denial of Georgia’s then-current 2000 water supply request (the “2000 Request”) and provide a timely response.

In response to the Eleventh Circuit’s mandate, the Corps prepared a memorandum outlining its authority to grant Georgia’s 2000 Request. *See* Memorandum from Earl Stockdale, Chief Counsel, U.S. Army Corps of Engineers, for the Chief of Engineers regarding Authority to Provide for Municipal and Industrial Water Supply from the Buford Dam/Lake Lanier Project, Georgia (June 25, 2012) (“Stockdale III,” **Exhibit E**). Stockdale III concluded that “the Corps has the legal authority under the relevant statutes to accommodate Georgia’s request.” *Id.* at 5. The Corps determined it has this authority because:

[I]f the Corps were to change its operations of the ACF system to accommodate Georgia’s [2000 Request], the changes would not be major, and they would not result in serious effects to project purposes systemwide. In fact, the system would be operated in the manner that Congress expected, to achieve all authorized purposes, and the overall hydropower benefits afforded by those operations would exceed the benefits that Congress anticipated when it authorized the ACF plan of development more than 65 years ago.

Id. at 42.

Second, the water supply quantities in the 2015 Request are well within the bounds of the analysis already undertaken by the Corps in the DEIS. The PAA in the DEIS provides a total of 633 mgd of water, including 185 mgd from Lake Lanier, 40 mgd from a potential Glades Reservoir, and 408 mgd from the Chattahoochee River. DEIS at 6-193, 6-194. Other options considered by the Corps used water withdrawal quantities both higher and lower than those specified in the PAA. Thus, the 2015 Request fits within the range of options considered by the Corps in the DEIS, as shown in the table below:

	Low Value Considered By Corps	High Value Considered By Corps	PAA (Option 7H)	Georgia 2015 Request
Lake Lanier Withdrawals	20 mgd (Options B and C*)	297 mgd (Options D, F, and G)	225 mgd**	242 mgd
Chattahoochee River Withdrawals	277 mgd (Options A and B)	408 mgd (Options C,D,E,F,G, and H)	408 mgd	355-379 mgd

From DEIS Table 5.1-2 at 5-8, and 2015 Request.

* Plus withdrawals of 40 mgd from a potential Glades Reservoir

** Including a withdrawal of 40 mgd from a potential Glades Reservoir

Third, as detailed below in Section II.B, given the volumes specified in the 2015 Request, granting the entire 2015 Request produces nearly identical effects on ACF Basin operations as those accepted by the Corps in the PAA. *See* Memorandum from Wei Zeng, Ph.D., Manager, Hydrology Unit, Georgia Environmental Protection Division, to Judson Turner, Director, Georgia Environmental Protection Division, regarding Technical Evaluation of Georgia's 2015 Update Water Supply Request and Comments on the Army Corps of Engineers Apalachicola-Chattahoochee-Flint (ACF) River Basin Water Control Manual Draft Environmental Impact Statement (Jan. 29, 2016) ("Zeng Memorandum, **Exhibit F**). For example, the PAA modeled impacts with total withdrawals (Lake Lanier and Chattahoochee River) at 633 mgd and determined that the PAA created no consequences that would foreclose its selection.² Although the lake-versus-river distribution of the withdrawals under the 2015 Request is somewhat different than that specified under the PAA, the total withdrawal amounts under the 2015 Request is actually 12 mgd *less* than the withdrawal evaluated in the DEIS under the PAA. This is all the more true if the Corps' analysis addresses other water management issues identified herein. Put another way, because the Corps determined a total withdrawal of 633 mgd in the PAA would not have

² In addition to impacts considered in the DEIS, there is virtually no impact on flow at Columbus under 2015 Request modelling. *See* Zeng Memorandum at 8.

unacceptable adverse effects, the Corps should be able to determine that it can satisfy the State's 2015 Request for less water.

B. The Corps has No Rational Basis to Grant the PAA Instead of the 2015 Request.

The Corps chose the PAA, including a total of 225 mgd from upstream of Buford Dam (185 mgd from Lake Lanier and 40 mgd from Glades), over the other alternatives evaluated in the DEIS. Because the PAA and the 2015 Request are strikingly similar and produce strikingly similar impacts, there is no rational basis for the Corps to agree to the PAA but not the 2015 Request. The 2015 Request and the PAA present comparably in terms of the total withdrawal amount sought, total returns projected, total consumptive use, and even distribution of the withdrawal, return and consumptive uses. *See* Zeng Memorandum at 3, Table 3. With respect to the area upstream of Buford Dam, the PAA allows for a net withdrawal of 134 mgd (225 mgd gross withdrawal and 91 mgd return rate). The 2015 Request contains a net withdrawal from the Lake of 137.4 mgd (242 mgd gross withdrawal and 104.6 mgd return rate). *Id.* The delta between what the Corps has approved in the PAA upstream of Buford Dam and the 2015 Request is a mere 3.4 mgd net and 17 mgd gross withdrawal. Because the small amount of additional water from upstream of Buford Dam in the 2015 Request does not negatively affect any project purposes or create any additional environmental impacts, the Corps must grant the entirety of the 2015 Request.

In order to evaluate the impacts of the 2015 Request, the State compared the 2015 Request to the PAA in two different scenarios, both focusing on different record drought data. In the first, the State compared the PAA to the 2015 Request using relevant 2011 withdrawal data (the "2011 Comparison") instead of the withdrawal data relied on in the DEIS, referring to each as PAA' and Scenario C, respectively. Zeng Memorandum at 4-5. The epicenter of the 2011 drought was the lower portion of the ACF Basin and resulted in the highest agricultural water use on record. In the second scenario, the State compared the PAA to the 2015 Request using the same withdrawal data as the Corps relied upon in the

DEIS, including 2007 municipal and industrial (M&I) withdrawal data (the “2007 Comparison”), referring to each as PAA and Scenario D, respectively. Zeng Memorandum at 5. The 2007 drought had the greatest effects in the upper basin and resulted in one of the highest M&I water uses on record.

Under the 2011 and 2007 Comparisons – both potential worst-case drought years in separate parts of the Basin – the difference between the PAA’ and PAA on one side and Scenarios C and D on the other is virtually negligible, and, in some cases, Scenarios C and D produce impacts more beneficial than the PAA’ or PAA. *See* Zeng Memorandum at 6-11. This general statement holds true across eight different parameters: (1) average reservoir elevations; (2) minimal reservoir elevations; (3) reservoir elevation duration curves; (4) power generation; (5) recreational impacts; (6) Columbus flow; (7) state line flow; and (8) navigation. *Id.* Because the difference in impacts between the PAA and the 2015 Request is virtually negligible under both scenarios for eight separate ACF Basin parameters, there is no rational basis for granting the PAA instead of the 2015 Request.

C. Allocation of 40 mgd Presently Assigned to the Glades Reservoir Should Remain in Lake Lanier.

The PAA provides that a yet-to-be-constructed or even permitted Glades Reservoir will fulfill part of the State’s 2013 Request. Given the revised 2050 needs projections contained in the 2015 Request, it is clear that Glades Reservoir is no longer part of any strategy to meet the water supply needs of the State through 2050.³ As explained above, because the Corps can grant the entirety of the 2015 Request, including 242 mgd from the Lake, the Corps should not consider water sources outside of the Lake.

³ Had the State’s water supply needs remained at the 2013 Request level (297 from Lake Lanier or something close to that amount), Glades may have remained part of the region’s long term water supply strategy. Conversely, had Hall County’s, the pending Section 404 permit applicant, population projection through 2050 not decreased as drastically as contained in the new Office of Planning and Budget’s projections, there may have remained some additional water supply need for Hall County from Glades Reservoir. Given those two facts, however, the State can say unequivocally that Glades no longer remains part of the region’s 2050 water supply strategy.

Because a water-supply Glades is not needed through 2050, the Corps must not assign 40 mgd of the State's water supply request to Glades instead of the Lake. As demonstrated by Georgia EPD hydrologic modeling, the impacts from allocating 40 mgd from Glades compared to an additional 40 mgd from the Lake are virtually identical (i.e., the impacts of allocating 242 mgd from the Lake are nearly identical to the impacts the Corps has already evaluated and accepted in the PAA). *See* Zeng Memorandum at 6-11. The Corps concurs. In the DEIS, Alternatives 7D and 7E both provide for 297 mgd of withdrawals above Buford Dam. The only difference is that in Alternative 7D, all 297 mgd come from Lake Lanier, while Alternative 7E provides 257 mgd from Lake Lanier and 40 mgd from Glades. The DEIS explains that these alternatives are "essentially the same." Draft EIS at 5-26. Based on this alone, the Corps should provide for all 242 mgd to come directly from Lake Lanier.

If, however, the Corps needs an additional reason not to allocate water to Glades, the State asserts that Glades will not be constructed and operated for water supply during the current 2015 Request horizon because it is no longer needed for this purpose. The State is aware of the request from the Savannah District asking Hall County, the current Glades Section 404 permit applicant, to address its current population demand projection in light of the new population numbers. *See* Letter from Richard Morgan, Senior Project Manager, Savannah District, U.S. Army Corps of Engineers, to Richard Mecum, Chairman, Hall County Board of Commissioners, requesting updated Hall County population projection (Dec. 21, 2015) (**Exhibit G**). While the State will be working with Hall County on a revised certification of need, the old certification of need provided by EPD Director Jud Turner on April 9, 2013 is outdated and has been rescinded. Letter from Judson Turner, Director, Georgia Environmental Protection Division, to David Lekson, Chief, Regulatory Division, Savannah District, U.S. Army Corps of Engineers, rescinding prior certification of need (Jan. 22, 2016) (**Exhibit H**).

Given Hall County's decreased population and corresponding reduced water supply need, the State was able to account for all of Hall County's projected water supply need through 2050 in the 2015 Request. Given that the Corps can and should meet all of the 2015 Request, there is no outstanding water that would need to come from Glades instead of Lake Lanier. These two points lead to the same inevitable conclusion: there is no need for a water supply Glades through 2050.

If a reservoir in the anticipated Glades location is constructed at all during the current 2050 planning horizon, it will be redesigned⁴ and will operate pursuant to a revised Section 404 permit to provide additional basin storage. This additional storage will be used to support downstream needs during times of low flow and drought.⁵

Because a water-supply Glades will not exist, the Corps' allocation of 40 mgd from Glades is unrealistic and would serve to arbitrarily reduce the State's requested water supply allocation by this amount. The Corps is required to evaluate only "reasonable alternatives" (40 C.F.R. § 1502.14(a)) and Glades, as contemplated in the Glades DEIS and the DEIS, is no longer reasonable or even viable. Thus, the Corps cannot use any amount of water from Glades to calculate an allowable allocation of water supply from Lake Lanier. Put another way, the Corps must grant the entirety of the 2015 Request of 242 mgd from the Lake without allocating any of that amount to a reservoir that will not be permitted, constructed or operated for water supply. *See also, N. Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1541 (11th Cir. 1990) ("consideration need be given only to reasonable, non-speculative alternatives.");

⁴ These revised purposes need to be evaluated based on current hydrology, but the State's concept includes storage during high flow times for dispersal downstream during low flow conditions to provide a myriad of benefits, namely support for Lake Lanier and its multiple purposes, including possible downstream environmental flows.

⁵ The state recognizes that a facility of the nature described above has not yet been permitted in Georgia and for that type of facility to be permitted in Georgia, extensive work will have to occur pursuant to the revised Partnership Agreement between the State, the Corps, and its federal partners to establish the permitting protocol and parameters to study and, ultimately if justified, permit such a facility.

Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152, 1172 (10th Cir. 2002) (“To be a reasonable alternative, it must be non-speculative.”).

D. The Corps Must Correct its Approach To The Calculation of Wastewater Returns.

As discussed above, the Final EIS should analyze whether the Corps can grant the entirety of Georgia’s 2015 Request. As part of that analysis, the Corps must use the best available and current data,⁶ including the most recent and accurate data related to wastewater return projections. On January 25, 2016, the Metro District released current wastewater return projections stating that 98.96 mgd will be returned to the Lake by the Metro District entities. Memorandum from Katherine Zitsch, Director, Metro District, to Judson Turner, Director, Georgia Environmental Protection Division, regarding Projected Future Treated Wastewater Returns for the Chattahoochee River and Lake Lanier System (Jan. 25, 2016) at 6, Table 3 (**Exhibit I**). EPD projects that another 5.6 mgd will be returned by the upper counties. Zeng Memorandum at 2. The Corps, therefore, should use the Metro District and EPD’s wastewater return projections in its Final EIS, as both represent the most accurate data on returns.

The Corps’ method of calculating return flows in the DEIS is misdirected. In the 2013 Request, Georgia provided the volume of treated wastewater that the State estimated would be returned to Lake Lanier. The Corps rejected that value and instead developed its own methodology to calculate returns. The fundamental error in the Corps’ methodology is that the Corps looked to historical facility utilization rates (namely 58%) and assumed that utilization will remain constant. This is not a reasonable assumption. Rather, standard industry practice dictates that flows are often initially less than the permitted capacity. This results from the fact that municipalities design their facilities looking five, ten,

⁶ See, e.g. *Strahan v. Linnon*, 967 F. Supp. 581, 604 (D. Mass. 1997) (the NEPA decision making process “must be based on current data.”); *Nw. Ecosystem All. v. Rey*, 380 F. Supp. 2d 1175, 1195 (W.D. Wash. 2005) (“Relying on outdated data or not acknowledging the limitations in a methodology are grounds for setting aside an EIS.”).

or even more years into the future. When a new treatment facility is opened, the initial flows may only be a fraction of its design capacity. As the population in the facility's service area grows, the flows coming into the treatment facility necessarily increase. By the end of the design period, flows being treated will begin to approach the treatment facility's permitted capacity. As this occurs, planning and construction begins for new or expanded facilities. The Corps' assumption that utilization will remain constant at 58% over the course of facility operations contradicts general wastewater treatment facility engineering.

The Corps then compounds this error by using projected return flows as a basis for calculating permissible withdrawals. Specifically, the Corps stated, "Adding net withdrawals of 134 mgd (a net withdrawal that can be accommodated while satisfying other withdrawals) and returns of 91 mgd (the expected return in 2040) results in a figure of 225 mgd in gross withdrawal that can be supported by some combination of Lake Lanier and Glades Reservoir." DEIS at 5-7. This method of "backing into" permitted water supply withdrawals by adding an artificial return should not form the rationale for something as essential as a region's water supply future. Again, the Corps must use the correct analysis (such as the Metro District's 99 mgd, and the upper counties' 5.6 mgd return flows) in evaluating return flows, and not use inaccurate return flow projections to back into allowable withdrawals.

E. The Corps Failed to Fully Assess the Social, Environmental, and Economic Effects of Failing to Meet Georgia's Water Supply Needs.

As noted in the Georgia Scoping Comments, a failure to fully meet Georgia's water supply needs from Lake Lanier will have substantial adverse consequences within the State, and for that reason the Corps is legally obligated to evaluate the full economic, social, and environmental consequences of failing to meet Georgia's water supply request. Such consequences and costs include loss of jobs,

industry, and limitations on economic growth, on the one hand, and the economic and environmental costs associated with procuring alternative water supplies, on the other.

In the Georgia Alternatives Analysis, the State analyzed a number of alternatives that were theoretically conceivable as sources of water supply, and using the most recent economic data, concluded that “Lake Lanier is by far the most cost-effective and environmentally protective alternative for the supply of water to those metro governments located around and downstream of it.” Memorandum from Wei Zeng, Hydrology Unity, to Judson Turner, Director Regarding Response to Corps Request for Additional Information (May 30, 2014), attached to Georgia Alternatives Analysis. Despite this well-reasoned conclusion, the PAA does not grant Georgia the entirety of its 2013 Request from the Lake.

The Corps should include the conclusions from and reasoning of the Georgia Alternatives Analysis in the Final EIS, and then either propose a Water Control Manual for Lake Lanier that fully satisfies the 2015 Request or, if that request is not granted in its entirety, fully and completely assess the collective costs of refusing to do so.

F. The Corps Must Abide by the Eleventh Circuit Mandate to Determine How Much of Georgia’s Water Supply Request It Can Grant.

As shown above, the State believes the Corps must correct several aspects of the Corps’ water supply analysis. Reconsideration along these lines is required by the Eleventh Circuit. In its “Remand Instructions to the Corps,” the Eleventh Circuit stated:

As part of the final, definitive statement of the Corps’ water supply analysis, if the agency ultimately concludes that it does not have the authority to grant the Georgia request, it nevertheless should indicate the scope of the authority it thinks it does have, under the RHA, the WSA, and the 1956 Act. This way, the parties will have some further instruction, based on sophisticated analysis, of what the Corps believes to be the limitations on its power.

Tri-State Water Rights Litigation, 644 F.3d at 1201. The DEIS asserts that it can “satisfy a substantial

portion” – but not the entirety – of Georgia’s 2013 Request. DEIS at 5-25, 6-193. Since the Corps does not “grant the Georgia request,” the Eleventh Circuit requires that the Corps must indicate based on “sophisticated analysis,” the amount of Georgia’s request that it can grant. *Tri-State Water Rights Litigation*, 644 F.3d at 1201.

The DEIS does not follow the Eleventh Circuit’s instructions. Without providing any analysis detailing the Corps’ perceived bounds of its authority, the DEIS states that it cannot grant the 2013 Request (combined withdrawals of 705 mgd), but can accommodate withdrawals of 633 mgd as detailed in the PAA. Because the Corps does not explain at which point between 633 mgd and 705 mgd it encounters “limitations on its power,” the DEIS is inconsistent with the Eleventh Circuit instructions.

The need to provide this incremental analysis is unnecessary if the Corps grants the entirety of the 2015 Request. If, however, the Corps does not grant the entirety of the 2015 Request, the Corps should provide the Eleventh Circuit’s required analysis explaining exactly how many millions of gallons per day, per location, the Corps can allow before it encounters “limitations on its power,” and further explain exactly what environmental, hydrologic, or other factors trigger those limitations.

G. The Corps Should Defer to the State on Crediting Return Flows.

The DEIS treats all contributed flows (whether return flows from a wastewater treatment plant or made inflows from a reservoir) in the same manner as all other Lake inflows. Georgia believes that this manner of accounting for return flows is bad policy and an intrusion on its state water rights.

Subject to an allocation by the State, entities that contribute flows to a federal project should receive full credit for the flow, such that withdrawals of such volumes are not debited against the contributor’s storage account. Treating contributed flows in this manner not only has no adverse effect on the overall project, but also reflects sound policy in that a refusal to treat contributed flows in this manner significantly lessens the incentive for entities to build storage projects, construct water

reclamation facilities, and otherwise engage in environmentally sound water management practices. Return flows to reservoirs increase the yield of the reservoir by reducing the net withdrawals. As a result, return flows keep reservoir levels higher and mitigate the impact of water supply withdrawals. Return flows to reservoirs are a form of water reuse that Georgia's state-wide water plan favors. The Corps cannot expect billions of dollars to be spent developing infrastructure to generate these return flows if the Corps declines to credit them to the storage account of the entity responsible for the return of that wastewater (or the made inflow as the case may be), and instead simply transfers the benefits they provide to other users.

In addition, the Corp's treatment of return flows in the DEIS is an intrusion on the State's right to allocate water. The Corps has long acknowledged that while federal projects provide storage space for water, it is the states that allocate the rights to the water. Georgia has a rule discussing this specific issue and acknowledging the balance between state and federal rights:

When a user has contracted for the right to utilize storage space within a reservoir that is owned or operated by an agency of the federal government, the Director shall retain authority to allocate any State water rights subject to regulation under O.C.G.A §12-5-31, including the right to withdraw State waters from the project as well as the right to impound made inflow to the reservoir. When the Director allocates to a specific user made inflows to a reservoir, pursuant to the permitting authority and procedure provided by O.C.G.A. §12-5-31, that user will have the right to impound such flows in the storage space for which it has contracted, to the extent storage space is available.

Ga. Comp. R & Regs. 361-3-6-.07(16).

The State has previously exercised this authority by allocating return flows to Allatoona Lake, located in the Alabama-Coosa-Tallapoosa Basin, to the Cobb County-Marietta Water Authority.⁷ The State plans to make a similar allocation at Lake Lanier once a storage contract or contracts are executed.

⁷ See Georgia EPD Permit No. 008-1491-05 (Modified November 7, 2014).

The best way for the Corps to abide by the state versus federal balance is for the Corps to include in the Final EIS an acknowledgement of the Georgia rule and propose a return flow policy that credits contributed flows “in whatever manner such flows are handled under state law.” To provide otherwise would be an intrusion on Georgia’s sovereign rights.

We understand that the Corps is considering a national rulemaking on this topic and thus, at a minimum, the Corps should retain flexibility in any final language regarding return flow credits until such time as a final federal rulemaking becomes effective.

H. The Corps Should Provide its Storage Accounting Methodology and Draft Contracts to the State for Comment.

To effectively operate the ACF Basin – and specifically Lake Lanier – the Corps must establish a storage accounting methodology that tracks multiple water storage accounts. Because the Corps’ chosen storage accounting methodology is a critical factor in basin operations, the Corps must provide this methodology to Georgia so the State can evaluate it and make informed comments. This common-sense request aligns with Corps policy: the Corps is required to “identify any methodologies used and [] make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.” 40 C.F.R. § 1502.24. Courts have continually held “that any supporting data or studies expressly relied upon in an EIS must be ‘available and accessible’ to the public.” *State of Cal. v. Block*, 690 F.2d 753, 764-65 (9th Cir. 1982). Thus, the Corps must provide the storage accounting methodology and the resources it relied on to reach the methodology.

In addition, as required by the Eleventh Circuit, one of the purposes of the DEIS is to address Georgia’s request for storage in Lake Lanier to be used for water supply. For direct Lake storage withdrawals (as opposed to releases made from the Lake to the River for water supply), the State assumes

that this agreement will be memorialized in a contract. The State is left merely guessing, however, as to the contractual terms and provisions because the Corps did not propose draft contracts in the DEIS.

The State requests that the Corps rectify these omissions in the DEIS by providing both the storage accounting methodology and proposed draft contracts in the Final EIS. Once the Corps has done so, the State expressly reserves the right to comment on the chosen methodology and proposed contracts.

III. Water Management Changes

In addition to hydrologic modeling of the 2015 Request, Georgia also modeled the effects of a number of other water management changes the Corps should make in operating the ACF system. The results of that water management modeling show that those changes did not significantly adversely impact any authorized purposes while at the same time enhancing the Corps' ability to fulfill the water supply purpose.

A. The Corps Could Operate Buford Dam for a Flow Target of 550 cfs at Peachtree Creek During Winter Months.

To ensure adequate flows to meet water quality standards downstream of wastewater treatment plant discharges in the metropolitan Atlanta area, the Corps historically operated Buford Dam to provide a minimum flow of 750 cfs at Peachtree Creek throughout the year. The PAA, however, proposes an adjustment in the Peachtree Creek Flow Target to 650 cfs for the cooler winter months of November through April; 750 cfs from May through October. As explained below, (1) reducing the flow target to 550 cfs during the winter months could provide significant benefits to the ACF Basin and these benefits can be obtained (2) without adverse effects on water quality and (3) within the scope of the Corps' operating authority.

1. A 550 cfs Flow Target Has Significant Benefits to the ACF Basin.

Reducing the flow target to 550 cfs during the winter months could provide a significant benefit to Lake Lanier storage. A 550 cfs reduced flow target will provide storage benefits in Lake Lanier that are the equivalent of 1.4 feet of elevation higher than the PAA in the most severe drought (2007-2009) (equivalent to 44,000 acre-feet of storage), and 0.6 to 0.9 feet higher in Lake elevation throughout a history of relatively dry years. Zeng Memorandum at 12-13. Those higher Lake levels then provide system benefits to the entire Basin. In a drought year, when basin inflow is lower than average and competing needs in the basin stretch limited resources, maintaining storage in Lake Lanier, the most upstream storage reservoir, preserves maximum operational flexibility to meet all authorized purposes and reduces the amount of time – by five months – that the Basin is in drought operations. Zeng Memorandum at 13; *see also* Letter from F. Allen Barnes, Director, Georgia Environmental Protection Division, to Col. Steven Roemhildt, District Engineer, Mobile District, U.S. Army Corps of Engineers, regarding reduced flows at Peachtree Creek (Nov. 7, 2011) (“Barnes 2011 Letter,” **Exhibit J**).

2. Operating to a Winter Flow Target of 550 cfs Will Not Produce Adverse Water Quality Effects.

Georgia analyzed the effect on water quality of reducing the flow target at Peachtree Creek to 550 cfs during the November through April timeframe. Reducing winter flows to 550 cfs does not adversely affect dissolved oxygen (DO) levels, the parameter that has long been tracked as a key indicator of conditions in the upper Chattahoochee River. Zeng Memorandum at 13; Barnes 2011 Letter at Attachment B to Attachment B. Other water quality parameters are either maintained at these lower winter flows or are or will be addressed by current or planned Georgia Environmental Protection Division regulatory programs to assure that all designated uses are achieved and maintained. Zeng

Memorandum at 14. As a result, there are no water quality impacts that would require flows higher than 550 cfs during the winter months.

3. Operating to a Winter Flow Target of 550 cfs is Within the Corps' Operating Authority and Does Not Violate State Law.

The Corps has previously asserted that the authorizing legislation for the Buford Dam project requires releases sufficient to meet a water quality flow target of 650 cfs at Atlanta. Georgia believes that the Corps is misreading the authorizing documents.

In concluding that there exists a water quality minimum flow of 650 cfs, the Corps has cited language from a report prepared by General Newman, Division Engineer for the South Atlantic Division, (the "Newman Report"). DEIS at 2-76. In paragraph 80 of the Newman Report, General Newman described the total estimated water needs for the Atlanta area as of 1946. He stated,

In order to meet the estimated present needs of the city, and to prevent damage to fish, riparian owners, and other interests by complete shutdown of the Buford plan during the daily and week-end off-peak periods, varying flows up to a maximum of 600 second-feet should be released from Buford *so as to insure at all times a flow at Atlanta not less than 650 second-feet.*

Report of Gen. James B. Newman, Jr., Division Engineer, *reprinted in* H.R. Doc. No. 80-300, at ¶ 80 (June 6, 1947) (**Exhibit K**) (emphasis added).

The "needs and other interests" of the area at the time included 70 cfs for domestic and industrial purposes and 415 cfs for condensing water for the Georgia Power Atkinson steam plant. Thus, as the sentence makes clear, the value of 650 cfs was not a target for *water quality flow*, but the *total flow* designed to accommodate the sum of all interests, including water quality among other issues.

Focusing, therefore, on the total flow at Atlanta, releases sufficient to meet combined water supply withdrawals and 550 cfs water quality flows will more than meet the 650 cfs threshold specified by General Newman. For example, even under the minimum release of the 2015 Request for water

supply (549 cfs), releasing sufficient quantities to meet that amount plus a water quality flow of 550 cfs would result in a total flow of 1099 cfs, far in excess of the 650 cfs threshold contemplated in the Newman Report.

To the extent the Corps believes that Georgia law prevents it from operating to 550 cfs, that belief is misplaced. The DEIS states that the State has “established a minimum flow standard of 750 cfs downstream of Atlanta’s water supply intake and just upstream of Peachtree Creek.” DEIS at 2-219. It is important to note that the 750 cfs value is not and was never a “standard.” It merely set a flow above which the criteria for the designated use of “fishing” must be met. 750 cfs was used historically for setting waste load allocations and similar purposes, akin to the State’s use of 7Q10 values for unregulated streams. As water quality in the Chattahoochee River improved over the decades, the 750 cfs language was no longer needed. Thus, after proper notice and comment, in August 2015, the State amended Rule 391-3-6-.03(14), the rule containing the reference to 750 cfs, to delete any reference to 750 cfs. Accordingly, no reference to a 750 cfs flow exists in Georgia rules and the Corps should not cite to that value in evaluating operation of the ACF system.

For this reason, the Corps can operate Buford Dam to provide for water quality flows, net of water supply withdrawals, of 550 cfs at Peachtree Creek during the months of November through April (with 750 cfs during the rest of the year). There are no water quality or legal impediments to reduced-flow operations on this basis, and there will be considerable benefits to Lake Lanier storage by doing so which will benefit all authorized purposes.

B. The Corps Should Establish a Process for Determining When Navigation is Appropriate.

As part of its evaluation of the DEIS, Georgia studied and modeled the Corps’ operation of the ACF system with regard to navigation. That evaluation shows that PAA navigation operations are more

detrimental to other authorized purposes than need be, and are extremely detrimental to the ACF system. *See Zeng Memorandum at 17-19.* As a result, the Corps should consider other operational means to meet the navigation purpose.

EPD modeled two scenarios: (1) the PAA and (2) the PAA No Navigation. For the latter, EPD used the Corps' PAA model and made only one change – it turned navigation operations off. The comparison between the PAA and the PAA No Navigation reveals a number of adverse impacts. First, navigation operations substantially increase the number of days when the ACF system is under drought operation by 33%. Second, over the 73 year period of simulation, PAA navigation operations force the system into Extreme Drought Operations (EDO) on 61 days as opposed to zero days of EDO under the PAA No Navigation. Third, in typical drought years, PAA navigation operations prompt drought operations earlier and make them last longer; in typical non-drought years, navigation operations trigger drought operations. *Zeng Memorandum at 17-19.*

Because of these extreme results, Georgia believes the Corps should re-evaluate its PAA navigation operations. Among other things, the Corps should consider (1) establishing an inflow forecast mechanism that allows the Corps to trigger navigation operations only when system conditions warrant the navigation release; and (2) implementing navigation operations only where there is an express demand for navigation. To that end, Georgia would like the opportunity to work with the Corps to develop a navigation plan containing such appropriate navigation procedures.

C. Flood Control Management at West Point Lake Should be Conducted More Beneficially.

As part of its evaluation of the DEIS, Georgia addressed how the Corps conducts its West Point Reservoir flood control operations. Georgia understands the Corps' concern regarding flood risk management. Results of EPD's modelling indicate that the Corps could operate West Point Reservoir in

a manner which would accomplish both improved flood risk management and minimize actions that would lower reservoir elevations unnecessarily. Among the issues Georgia identified are: (1) the drawdown occurs in what would otherwise be the period used for refill of the reservoir and (2) the need to refill the reservoir after drawdown is in direct competition with the need for higher releases for Sturgeon Spawning Season (March through May). Zeng Memorandum at 14-15.

Georgia requests that the Corps modify the West Point Water Control Manual to incorporate flexible flood storage management practices at the West Point project, based on better real-time and probability-based forecast information, and do the same wherever else such practices provide real water resource benefits without compromising the federal flood risk management purpose.⁸

D. The Corps Improperly Eliminated The Possibility of Changes in Lake Lanier Elevation.

For decades, many Basin interests have encouraged the Corps to raise the elevation of Lake Lanier at full pool, however the DEIS eliminated this option at first screening without any analysis. The Corps' stated reasons for this decision were that it would not consider (1) "management measures that suggest the use of flood storage for purposes other than flood storage" and (2) "measures that would potentially change the existing head limits" of an ACF Basin project. DEIS at 4-7, 4-8. The DEIS, however, presents no data or analysis suggesting that raising the pool elevation would adversely impact flood risk management or affect structural integrity.

Despite acknowledging that the Corps has the authority to allocate flood storage to other purposes, the DEIS dismisses raising the Lake pool stating that the Corps "is not exercising that discretionary authority as part of this Master Manual update." DEIS at 4-7. Without further explanation,

⁸ Appropriate modification by the Corps of reservoir operation in the Columbus, Georgia and middle Chattahoochee River region would also help mitigate water quality concerns that arise in extremely low flow periods.

this logic appears circular: the Corps has the authority but cannot exercise it because the Corps has determined it cannot. The State requests that the Corps revisit this decision and consider whether, in light of a WCM update nearly 60 years in the making, it can and should use its authority at this time to raise the Lanier pool.

The DEIS states that “[c]hanges to the existing head [at Buford Dam] *could* increase the risk to the structural integrity of the [Dam.]” DEIS at 4-8 (emphasis added). It is also possible that raising the Lake by two feet “could not” affect the structural integrity. The Corps does not know because it did not conduct any study regarding whether a change in the elevation of Lake Lanier at full pool would pose any increased risk to the structural integrity of the project. Because it did no analysis, the Corps has no basis for eliminating that action as a possible alternative.

Instead of eliminating at first screen the option of raising Lake Lanier elevation at full pool, the Corps should analyze this option to determine whether, in fact, it would impact the Corps’ flood control operations or Buford Dam’s structural integrity. Georgia suggests that raising the Lake elevation would likely have a positive effect on nearly all of the Corps’ stated objectives for updating the Master WCM.⁹ Because of this and because of the strong ACF Basin support for raising the elevation of Lake Lanier, the State requests that the Corps raise the elevation of Lake Lanier at full pool as part of its water management plan.

⁹ Those objectives are to: (1) define action zones on a scientific basis that eliminate a disproportionate impact on reservoirs and address current system needs; (2) develop and implement a basinwide Corps reservoir drought operation plan; (3) reduce or eliminate the chance of prematurely returning to drought operations and reducing flows downstream from Jim Woodruff Dam below 5,000 cfs; (4) reduce or eliminate the adverse effect of system operations on federally listed threatened and endangered species; (5) improve system performance to achieve congressionally authorized project purposes; and (6) increase the reliability of navigation on the ACF system. DEIS at 4-3.

E. The Corps' Analysis Regarding Endangered Species is Flawed.

The Corps has not used the most updated and accurate information in connection with its assessment of the effects of various alternatives on endangered species. In addition, the performance measures used by the Corps are inappropriate.¹⁰ For example, the Corps used a metric for effects on mussels based on the number of days of flow between 5,000 cfs and 10,000 cfs. Using the U.S. Fish & Wildlife Service ("USFWS") criteria indicating appropriate conditions for fat threeridge mussels and bathymetric data from the Corps, Georgia analyzed potential habitat for the mussels in the Apalachicola River. The results indicate that the area of fat threeridge mussel habitat does not increase with higher flows. In fact, evidence indicates that the maximum amount of habitat seems to correspond to flows much lower than 5,000 cfs. Zeng Memorandum at 19-20; Memorandum from Wei Zeng, Hydrology Unity, to Judson Turner, Director, Regarding alternative operations in the ACF Basin (Jan. 11, 2013) at 5-6, attached to Georgia Scoping Comments. In addition, USFWS has conducted a more recent unpublished study indicating large amount of mussel habitat and the existence of large populations of fat threeridge mussels, estimated at between five and six million, several times the mussel population upon which its listing as an endangered species was made, with habitats under a low flow of 5,000 cfs. Put another way, the latest study identifying both a large amount of habitat and a large population of mussels does not point to any gains associated with flows above 5,000 cfs. Zeng Memorandum at 19-20. Based on this data, there is no rationale for the Corps to use flows greater than 5,000 cfs as a performance

¹⁰ On January 14, 2013, Georgia provided the Corps with a set of suggested modeled operational changes in system management, referenced as the "Georgia Contemplation," along with modeling results on a range of a performance measures. Georgia's modeling demonstrated that performance measures for meeting all authorized purposes, the including biological needs of endangered species in the Apalachicola River, can be met under the operation set in Georgia Contemplation. In addition, the Georgia Contemplation results in better performance regarding desired flows in the Columbus, Georgia area of the Chattahoochee River. See Georgia Scoping Comments and attachments.

measure for endangered mussels. The Corps should use up-to-date and scientifically valid information in its evaluation of the effects of the 2015 Request on endangered species.

F. The 2015 Request Will Not Have a Material Impact on the Production of Hydropower.

As part of its evaluation of the DEIS, Georgia undertook a study of the effect of the 2015 Request on hydropower production. The 2015 Request will have only minimal impact on hydropower production. Zeng Memorandum at 7. For example, even assuming the 2015 Request water supply demand, the reduction at Lake Lanier in power generation 35 years from today is essentially no different than under the PAA, and the difference would be slighter in the years before Georgia's water demand reaches 621 mgd. A similar result is shown in relation to the total amount of energy production by all the federal reservoirs in the ACF Basin where the difference between the 2015 Request compared to the PAA is very small.

G. The Corps Erroneously Calculates Returns on a Reach-by-Reach Basis.

The DEIS indicates that the Corps evaluates returns to the Chattahoochee River on a reach-by-reach basis. DEIS at 5-5 to 5-8. Water supply operation in the metropolitan Atlanta area is a complex process. Most of the withdrawals within the metro district take place in Lake Lanier and in the Chattahoochee River between Buford Dam and the confluence with Peachtree Creek. The majority of the return flow, however, takes place between Peachtree Creek and the USGS Whitesburg gage. This makes comparing withdrawals and returns in any one metro-Atlanta reach unwise. Thus, the State suggests that the Corps report the totality of returns so the public and decision-makers can accurately evaluate return rates to the ACF Basin. The Corps should report the withdrawal as the sum of withdrawal across the Buford, Norcross, Morgan Falls, and Atlanta reaches, and the return as the sum of discharged amounts across the Buford, Norcross, Morgan Falls, Atlanta, and Whitesburg reaches.

H. The Corps Incorrectly Projected the Effect of Future Conservation Measures.

After correctly noting that Georgia has successfully implemented numerous effective water conservation measures, and that water conservation is the cornerstone of the metro area's water supply plan, the Corps states, "In 2011 per capita water use for the metro area was 148 gpcd (gallons per capita per day). EPD projects water use will decrease to an average of 135 gpcd by 2040. It is unlikely that additional conservation measures would result in a significant reduction in Georgia's 2040 need." DEIS at 5-3 to 5-4.

This erroneous conclusion is a specific example of why it is necessary when carrying out its assessment of alternatives that the Corps use the 2015 Request. As shown by the Metro District, not only is a reduction in the 135 gpcd figure possible, it has already occurred. In fact, present per capita water consumption averages 108 gpcd across the Metro District. This is twenty percent lower than the 135 gpcd used by the Corps to define peak efficiency in 2040. Future per capita water consumption in 2050 is projected to decrease even further:

Water conservation and efficiency measures adopted by the Metro Water District and the State of Georgia have dramatically decreased water demands within the Metro Water District. In fact, per capita water demand use has declined by over 30 percent since 2000. Similarly, total water withdrawals have decreased by over 10 percent, despite a 20-percent increase in total population. . . . The efficiency measures put in place are expected to drive per capita water use lower into the future.

Memorandum from Katherine Zitsch, Director, Metro District to Judson Turner, Director, Georgia Environmental Protection Division, Regarding projected future water supply demand for the Chattahoochee River and Lake Lanier System (Dec. 2, 2015) at 5, attached to 2015 Request. The effect of these reduced water demand projections was incorporated into the Georgia 2015 Request and these projections confirm that the Corps should use the 2015 Request in the ACF Final EIS.

I. Georgia Wildlife Management Comments

Georgia's Wildlife Resources Division previously submitted comments in November 2008 and January 2013 during WCM development, and also has provided comments to the USFWS in May 2011 and May and June 2015, under the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 *et seq.* These comments document the State's fisheries objectives for the ACF system, operational impacts on fisheries resources in the basin, and operating procedures to mitigate impacts and support fisheries resources. Those comments are included by reference.

IV. Aspects of the DEIS Require Corrections or Clarifications.

In addition to the above discussion, the DEIS contains a number of factual errors or ambiguities that the State requests the Corps address in the FEIS. Some of these are briefly itemized below:

- a. Section 2.6.1.5.3 Mead Westvaco: The DEIS states that Mead Westvaco has a permit to withdraw 27.6 mgd from Walter F. George, but does not say who the permitting authority is. The DEIS should include the permitting authority.
- b. Section 2.6.1.5.5 Farley Nuclear Power Plant: The DEIS states that Southern Nuclear defines 2,000 cfs and 74.5 ft at Jim Woodruff as minimum conditions for operation. The Corps should use observed data to determine that these flows historically have been unnecessary, given the percent of time when flow has been lower than 2,000 cfs.
- c. Page 4-13, Figure 4.1-5: The caption is not consistent with title of the figure. The revised action zones shown in figure should be of Level 1 action zones, rather than Revised Level 1 action zones.
- d. Section 4.1.2.2.2 Revised Level 1 action zones: There appears to be insufficient information justifying the selection of Revised Level 1 action zones as opposed to Level 1 action zones. For example, Georgia is unaware of any quantitative work determining that the Revised Level 1 action zones yields better results in comparison to Level 1 action zones. If such work exists, the Corps should include a figure showing these results.

- e. Section 4.1.2.3 Drought Operations (Page 4-17) (Lines 7-9): “If recovery...above Zone 4.” It is unclear if this is an example of how a drought operation is suspended, or a special case for the months of February and March. It appears that this is an example explaining how a recovery in February would trigger the suspension of a drought operation in March. If this is correct, then the text should say “for example.”
- f. Section 4.1.2.3.2 Revised drought operations suspension trigger (Page 4-18): The Corps at different places in the DEIS used the months of February, March, and April as examples to explain how suspension of a drought operation is carried out. However, the Corps did not say that these are examples, which leaves the impression that these are months with a special suspension mechanism.
- g. Section 4.1.2.8.8.4 Revised seasonal flows and Section 4.1.2.8.8.5 Pulse flows: The Corps has incorrectly considered the state line flows prescribed in Georgia Contemplation.
- h. Section 4.2.1.2.3 Navigation (Page 4-45, Lines 7-9): “Under this water...of the time.” The percentage of time when a 9-foot or a 7-foot channel is available appears to be an objective, rather than what “this alternative” is able to achieve. This language should be clarified on how the percentage numbers have been obtained.
- i. Section 4.2.6.1 Description of Water Management Alternative 6: The Corps misstates that the PTC flow targets in the Alternative are the same as in Alternative 2. According to an earlier table and description, this Alternative contains PTC flow targets proposed by USFWS (with a 2400+ cfs flow target).
- j. Section 4.3.2 Hydroelectric Power Generation: The Corps incorrectly modeled Georgia Contemplation (Water Management Alternative 5). Even with this mis-modeling, Georgia Contemplation ranks 3rd in system power, 3rd in Buford power, 2nd in West Point power, and 6th in Walter F. George power. The overall ranking for Georgia Contemplation in power generation is 3rd. If correct settings were used in the model, it is expected that the amount of power generation would increase and the rankings in hydropower generation would also increase.
- k. Section 2.1.2.3 Water Quality Standards (Page 2-129)(Lines 29-30 and 35-37): The DEIS makes inaccurate statements about Georgia’s actions regarding U.S. EPA’s recommendations for

numeric nutrient criteria for waterbodies. U.S. EPA requested that each State develop a strategy for adopting nutrient water quality criteria to protect waters from the adverse effects of nutrient over-enrichment. Development of nutrient criteria is a highly complex matter because some level of nutrients are necessary for the health of the aquatic ecosystem, but concentrations that are too high can cause an imbalance in the natural flora and fauna. Therefore, in order to protect its natural resources, it is important that a state's criteria not be set too low or too high. Georgia developed a plan for adopting nutrient criteria in 2005, subsequently revising the plan in 2008 and 2013. The revised plan specifies the State's conceptual approach and schedule for development of nutrient criteria for specific waterbody types, and has been reviewed and agreed to by U.S. EPA.

- l. Executive Summary, Page 12: In discussing revised drought operations the DEIS states that "If recovery conditions are not achieved in February, drought plan provisions will not be suspended until April, provided composite storage remains above Zone 4." The correct reference is to Zone 2.
- m. Section 2.1.1.1.6.10, Table 2.1-4: The DEIS reports that the yield of the Yahoola Creek Reservoir (Lake Zwerner) is 25.5 mgd. However, the safe yield of the Yahoola Creek Reservoir is 5.7 mgd.
- n. Section 2.1.1.2.5.2 Current Water Use – Georgia - Groundwater: The DEIS states "There, the close connection between surface water and the Floridan aquifer cause groundwater withdrawals to lower surface water levels in droughts, causing the basin to exceed the safe yield for freshwater mussels (Hook et al. 2005)." Georgia has reviewed the referenced report and no such description was found.
- o. Section 2.5.3.2 Reservoirs: The DEIS states "Samples from Walter F. George Lake also violated the 15 parts per thousand (ppt) federal standards for total dioxans and furans, with a value of 0.45 ppt." The sentence is contradictory as the cited 0.45 ppt would not violate the cited standard.
- p. Section 4.2.6.2.4 Fish and Wildlife Conservation: The DEIS states the median fall rate as 0.00 feet per day rather than 0.12. The cited 0.00 feet per day median fall rate appears to be incorrect.
- q. Section 6.1.1.2.2.4 Alternative 7A: The DEIS incorrectly references Alt1A when discussing a 600 cfs minimum flow. The correct citation is to Alt7A.

- r. Section 6.1.1.2.5.1 No Action Alternative: The DEIS states “Downstream of the Chattahoochee gage, basin inflow to the Apalachicola River is essentially uncontrolled. Therefore, flows at the Chattahoochee gage plus the uncontrolled inflows from downstream tributaries to the Apalachicola River comprise virtually all of the freshwater inflow to the Apalachicola Bay.” This is incorrect. Freshwater inflow to the Apalachicola Bay is correctly stated as comprising flows at the Chattahoochee gage, uncontrolled inflows from downstream tributaries to the Apalachicola River, other streams draining into the Bay, minus any depletions taking place in the Florida portion of the ACF Basin.

V. Summary and Conclusion

Please give the foregoing comments careful consideration in making necessary revisions to the ACF WCM and DEIS. As shown above, the Proposed ACF WCM and DEIS should be reworked to incorporate the water supply demands of the 2015 Request. The 2013 Request has been updated, and implementation of a Water Control Manual based on the 2013 Request is no longer appropriate. Upon that correction, the State requests that you consider water management changes as discussed in this letter. Once so modified and corrected, the Corps should issue the ACF Final EIS and WCM granting the entire 2015 Request.

Do not hesitate to contact me if you have any questions or if I can be a resource for additional information that would assist you in this process.

Respectfully submitted,



Judson H. Turner
Director
Georgia Environmental Protection Division
On behalf of the State of Georgia

EXHIBIT B

ROBERT BENTLEY
GOVERNOR



JIM BYARD, JR.
DIRECTOR

STATE OF ALABAMA

January 29, 2016

Colonel Jon J. Chytka
Commander and District Engineer (acf-wcm@usace.army.mil)
Mobile District, U.S. Army Corps of Engineers
Attn: PD-EI (ACF-DEIS)
P.O. Box 2288
Mobile, AL 36628-0001
VIA EMAIL

*Re: Draft Environmental Impact Statement
Update of Water Control Manual for Apalachicola-Chattahoochee-Flint Basin*

Dear Colonel Chytka:

The State of Alabama, through its Office of Water Resources, submits these comments on the draft Master Water Control Manual and Environmental Impact Statement for the Apalachicola-Chattahoochee-Flint River Basin. The draft WCM and EIS are contrary to law and sensible public policy. The draft WCM elevates Atlanta's water-supply interests at the expense of Alabama's environment and economy, and the draft EIS obscures the harm the draft WCM would cause. The Corps must fix these problems before it issues a final WCM and EIS.

I. Alabama has substantial interests in the basin.

The Corps should consider Alabama's interests as it revises the WCM and EIS. Approximately 2,800 square miles of the ACF lie within Alabama's borders, and more than 300,000 people live in the Alabama counties there. The basin serves three major functions for Alabamians in this area.

A. Water supply and economic growth. The ACF serves important water-supply functions. A number of local governments, farms, and companies use the basin's water. Alabama Power Company's Farley Nuclear Plant in Columbia and WestRock's Mahrt Mill in Cottonton make significant industrial use of the Chattahoochee's water. Alabama's use of the basin's waters for agricultural purposes will likely increase in the years to come. And when less water flows through the ACF Basin, it becomes more difficult for these entities to make discharges without violating state and federal water-quality standards. As a result,

entities may incur increased costs when they treat water they withdraw and discharge.

B. Recreation. Alabama also has substantial recreational interests in the ACF. Lake G.W. Andrews, Walter F. George Lake, and West Point Lake provide tourism opportunities and economic benefits. Alabama maintains a significant park, Lakepoint Resort State Park, at Walter F. George. Decreased flows and water levels can negatively impact the park's revenues and adversely affect fisheries.

C. Navigation. Navigation has been an important ACF function historically. A 9-by-100 foot navigation channel runs through the Chattahoochee River from Phenix City to the Gulf Intracoastal Waterway in Florida. Alabama's government owns and maintains three dock and terminal facilities along this channel. Beginning in the 1990s, an absence of reliable flows caused substantial reductions in shipments at the docks. In addition, reduced flows pose navigation problems for the Farley Nuclear Plant, which sometimes needs critical equipment to be delivered by barge.

The Corps should not alter its operations in a way that sacrifices these interests for Georgia's sake. Unfortunately, as explained below and in the attached technical exhibits, it appears that the draft WCM would have that effect. *See* Exh. A (Glenn declaration and attached technical exhibits A-1–A-20).

II. The direct-withdrawal allocation violates the Water Supply Act.

The draft WCM's accommodation of Georgia's direct withdrawals from Lake Lanier is especially troubling. For years, Georgia governments have illegally taken water from Corps projects in the ACF and Alabama-Coosa-Tallapoosa basins. Even though the Corps has acknowledged in some instances that those governments were acting illegally, the Corps has maintained that it is helpless to enforce limits on them. *See* Exh. B (Correspondence regarding Lake Allatoona); Exh. G at 15-19 (committee hearing transcript). The Corps can ameliorate these problems by limiting withdrawals to congressionally approved levels and enforcing the limits in its contracts with Georgia. Yet without setting up any mechanism to curb Georgia's violations of its contracts, the draft WCM proposes to bypass Congress and to allocate at least 165 mgd in additional storage for Georgia's direct withdrawals. The draft WCM premises this proposal on the Water Supply Act of 1958, 43 U.S.C. §390b, but the WSA does not give the Corps authority to bypass Congress in that way. To the contrary, the WSA requires the Corps to obtain approval from Congress before it makes any allocation that would "seriously affect the purposes for which the project was authorized" or "involve major structural or operational changes." 43 U.S.C. §390b(e). The direct-withdrawal proposal would do both those things.

A. The PAA's direct-withdrawal allocation would involve major operational change and seriously affect the Buford Project's purposes.

The direct-withdrawal allocation involves major operational change under the Water Supply Act. The draft WCM and EIS purport to allocate 165 mgd for direct withdrawals. The storage space associated with an allocation of that magnitude would constitute 189,500 acre-feet and thus 17.4% of Lake Lanier's acre-foot conservation pool. *See* Exh. A-1 at 1-2. Alabama does not know of any reallocation the Corps has made of this magnitude without Congress's approval. Indeed, the Corps' engineer regulations state that even when the WSA otherwise would allow a reallocation, a reallocation from other project purposes can amount to no more than "15 percent of the total storage capacity allocated to all authorized project purposes or 50,000 acre feet, whichever is less." ER 1105-2-100, at 3-33. Storage capacity of 50,000 acre-feet corresponds to only 43.54 mgd, significantly less than the 165 mgd contemplated in the Proposed Action Alternative. *See* Exh. A-19 at 2. And the D.C. Circuit has stated that even a 9% allocation of conservation storage at Lake Lanier would qualify as major operational change for WSA purposes. *See Se. Fed. Power Customers v. Geren*, 514 F.3d 1316, 1324 (D.C. Cir. 2008).

The proposed allocation also would seriously affect the Buford Project's purposes by subverting hydropower generation for the sake of Atlanta's water supply. Proposed alternative 7B in the draft EIS reflects the Corps' projection of conditions in the system if it implemented the WCM's other proposed changes without allocating the 165 mgd for direct withdrawals. Under alternative 7B, the Buford Project would generate an average annual amount of 139,173 mwh. *See* Exh A-2 at 2-3. The PAA would generate only 119,593 mwh annually. The difference in these two values is 19,580, marking a 14.07% drop in Buford generation.

The D.C. Circuit properly found these sorts of considerations compelling when it held, in invalidating a secret settlement involving the Corps and Georgia, that the WSA required the Corps to obtain Congress's approval of a proposed allocation of 241,000 acre-feet at Lake Lanier for Georgia water supply. *See SeFPC*, 514 F.3d at 1324. Despite this ruling, the Corps has brushed aside these concerns on the theory that "operations or impacts at Lake Lanier alone" do not govern the WSA analysis. Exh. C at 39 (2012 Stockdale Memo). A memo the Corps' General Counsel issued in 2012 claims that to determine whether a direct-withdrawal allocation amounts to major operational change or seriously affects project purposes, the Corps must consider the allocation's impact on the ACF system *as a whole*. *See id.* at 38-39. As Alabama previously has explained in its ACF scoping comments, the Corps had not breezed past the inquiry in that way before, and the WSA's plain language will not allow the Corps to do so now. *See* Exh. D at 10 (Alabama ACF Scoping Comments). The statute's terms speak of the project, not

the system. The Act requires congressional authorization if a modification “of a reservoir *project*” would “seriously affect the purposes for which *the project* was authorized . . . or would involve major structural or operational changes.” 43 U.S.C. §390b(e) (emphasis added). Thus, as the D.C. Circuit recognized, it is when a reallocation of storage for withdrawals involves major operational changes at the project in question, or affects the purposes of that particular project, that the Act requires the Corps to seek congressional approval. In light of the considerations discussed above, the PAA’s allocation of direct withdrawals involves major operational change at the Buford Project and seriously affects its purposes.

B. The PAA’s direct-withdrawal allocation would involve major operational change and seriously affect project purposes for the ACF system as a whole.

Even if the WSA allowed the Corps to look past the direct withdrawals’ effects at Buford, the PAA still would require congressional approval, for it entails major operational change and seriously affects project purposes throughout the system. Assuming that the draft WCM’s projected 40.4% return rate for Lanier direct withdrawals is not unrealistically high—an assumption that, as explained below, is dubious—the Corps’ downstream projects will have 98.34 mgd less to work with. The annual equivalent storage space associated with the 98.34 mgd reduction, 109,948 acre-feet, would correspond with 36% of the West Point conservation pool and 45% of the Walter F. George conservation pool. *See* Exh. A-3 at 1. Those volumes, in turn, account for approximately 5 feet of elevation in the West Point’s 15-foot conservation pool and 3 feet of elevation in Walter F. George’s 6-foot conservation pool. *See id.* at 2. The Corps either would have to allow elevations in those two lakes to go down by those amounts or make fewer releases downstream. Either way, the alterations will involve major operational change.

Nor can the Corps write off the withdrawals’ effects on system-wide hydropower. Even assuming the 40.4% return rate, direct withdrawals of 165 mgd would reduce system-wide hydropower generation by a substantial amount. As noted above in the comparison of Alternative 7H and Alternative 7B, average annual generation at Buford would drop by 14.07%, from 139,173 mwh to 119,593 mwh. Meanwhile, average annual West Point generation would drop by 3.16%, from 181,217 mwh to 175,491 mwh. Average annual generation at W.F. George would drop by 1.38%, from 472,882 mwh to 466,377 mwh. The total average annual loss at these projects would amount to 31,811 mwh. *See* Exh. A-2 at 2-3. The draft WCM and EIS cannot water down these changes by comparing them to the aggregate power generation in the entire ACF system. According to the results from Alternative 7B, facilities at Buford, West Point, and W.F. George traditionally produce approximately 793,000 mwh of generation annually. *Id.* at 3. Allowing Georgia 165 mgd in direct withdrawals, and decreasing total generation by 31,811 mwh annually, is tantamount to turning off hydropower generation at these three

projects for more than two weeks each year. *See id.* Flipping the switch in that way requires major operational change that seriously affects these projects' hydropower purposes.

C. The draft WCM understates the amount it is allocating for direct withdrawals.

While a 165 mgd allocation would be large enough to require congressional approval under the WSA for all the reasons given above, the draft WCM actually allows for even more direct withdrawals by Georgia. The PAA's effects on project operations and purposes thus will be even more pronounced, and the need to obtain congressional approval will be all the more imperative.

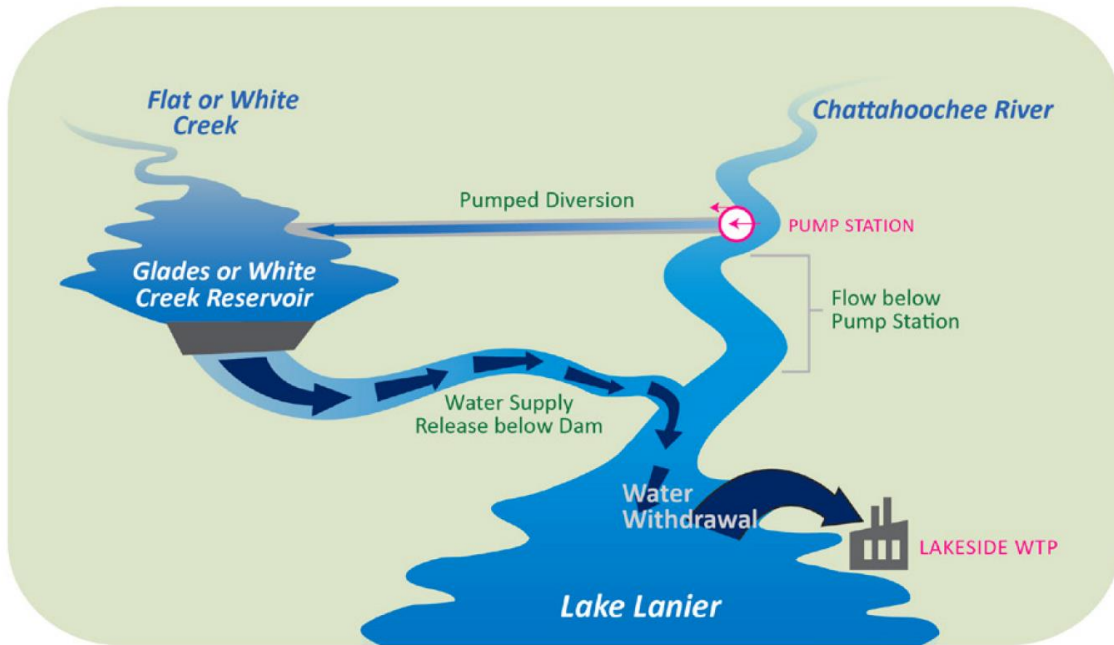
1. Baseline of authorized withdrawals. As an initial matter, the draft WCM effectively allocates an additional 10 mgd of Lanier storage for direct withdrawals because it overstates, by 10 mgd, the amount of direct withdrawals that currently are authorized from the Buford Project. The only currently authorized withdrawals arise from relocation contracts with the cities of Buford and Gainesville; the Fifth Amendment authorizes those contracts as compensation for the flooding of these cities' lands during Lanier's construction. The draft WCM and EIS assert that these contracts authorize 20 mgd in withdrawals, but the correct amount is 10 mgd. The Buford contract authorizes Buford to withdraw no more than 2 mgd from the lake, and the Gainesville contract authorizes Gainesville to withdraw no more than 8 mgd. *See* Exh. C at 14 n.45, 15 (2012 Stockdale Memo); *In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160, 1169 & nn.5-6 (11th Cir. 2011). The draft EIS and WCM double that figure to 20 mgd on the theory that the Gainesville relocation contract allowed it to withdraw 18 mgd if it returned 10 mgd. *See* DEIS 5-8 tbl. 5.1-2; DEIS 1-9 & n.2; DEIS 2-77 & n.1. But the Gainesville contract, by its terms, allowed the city to "remove" only 8 mgd. *See* Exh. E (Gainesville and Buford contracts); DEIS 2-77 n.1 It did not allow the city to remove an additional 10 mgd, especially in light of the Corps' nationwide policy not to provide credits for return flows. Although the Corps' General Counsel asserted in a 2012 memorandum that Corps has no policy precluding return-flow credits, the Commander of the Corps' South Atlantic Division, Brigadier General Donald Jackson, later testified under oath to a Senate committee that the Corps' nationwide policy is not to grant those credits. *See* Exh. F at 16 (Hearing Transcript). The draft WCM thus is effectively proposing to allocate an additional 10 mgd of Buford storage, on top of the 165 mgd discussed above, for Georgia's direct withdrawals.

2. Return flows. The draft WCM also understates the proposed allocation's effects by simply assuming that Georgia governments will return 40.4% of their withdrawals to the lake. The draft manual does not explain how the Corps can monitor those flows, guarantee any return amount, or enforce any return

requirement. And the General Counsel conceded in the 2012 memo that, if Georgia failed to make its promised returns, Georgia's requested withdrawals could exhaust the reservoir's storage pool during periods of critical drought. *See* Exh. C at 40 n.172 (2012 Stockdale Memo). If the return-flow projections are not fully realized, then the effects on project operations and purposes will only be more significant.

3. Assumed adherence to water-supply contracts. The draft WCM further understates the proposed allocation's effects by arbitrarily assuming that Georgia will adhere to the limits placed on its withdrawals by its water-supply contracts. History shows that this assumption is irrational. The Corps has acknowledged that the Cobb-County Marietta Water Authority has repeatedly violated contractual limitations on withdrawals from Lake Allatoona in the ACT without suffering any consequence. *See* Exh. F at 15-19 (Hearing Transcript). Thus, for any WSA analysis associated with this WCM to be valid, the final WCM must establish an enforcement mechanism to ensure that Georgia adheres to contractually specified limitations on its withdrawals. The final WCM should require that for any direct-withdrawal contracts the Corps enters into with Georgia, the limitations will be enforceable by the Corps and other affected parties, including downstream states, through enforcement mechanisms that include actions for damages and revocation of Georgia's contracts. The final WCM also must set standards to guide the Corps' discretion when entering into and enforcing these contracts. And the final WCM should specify with whom the Corps intends to contract and how long any contracts will last.

4. Glades Reservoir. The draft WCM's treatment of the Glades Reservoir raises concern that the PAA is understating the proposed withdrawals at the Buford Project by an additional 40 mgd. The draft EIS assumes that Georgia will withdraw 40 mgd from Glades itself, such that the Corps need not reallocate that amount for direct withdrawals from Lake Lanier. But as the draft EIS acknowledges, "[a]s currently proposed by Hall County, reservoir operations to meet water supply demands would involve releases from Glades Reservoir to Lake Lanier, via Flat Creek, *for withdrawal (at the same rate of release) from Lake Lanier.*" DEIS 2-51 (emphasis added). The draft EIS suggests that the Corps need not allocate this 40 mgd in Buford because Hall County has "a plan for the necessary infrastructure to transmit water from Glades Reservoir directly to existing water treatment facilities in lieu of moving water to those facilities via discharges to Lake Lanier." DEIS 2-52. But that does not appear to be Hall County's plan. The draft EIS for the Glades Reservoir, which the Corps issued in the same month as the draft ACF EIS, states that Hall County proposes that "[w]ater would be released from the reservoir into Flat Creek and would flow into the headwaters of Lake Lanier," where "[t]he same quantity of water released from the reservoir would be withdrawn from Lake Lanier." Exh. H at ES-7 (Glades EIS Executive Summary). The draft Glades EIS uses the following diagram to explain the proposal:



See *id.* at ES-8. If these withdrawals occur as the draft Glades EIS envisions, then the Corps is effectively allocating an additional 40 mgd for direct withdrawals at the Buford Project. A 165 mgd allocation is substantial enough to lead to major operational change and seriously affect project purposes, and an additional 40 mgd would only make matters worse.

* * *

In light of all these considerations, the WSA precludes the Corps from unilaterally allocating this amount of storage for direct withdrawals. To make an allocation of this magnitude, the Corps must first seek approval from Congress.

III. The PAA's other operational changes substantially reorder project purposes and thus require additional authorization from Congress.

Whereas the WSA blocks the Corps from implementing the proposed direct withdrawals, other legal constraints independently require the Corps to seek Congress's approval of the draft WCM more generally. The Corps long has recognized that it must obtain Congress's approval before making alterations that would involve substantial changes in the relative sizes of project purposes. Exh. I at 10-12 (Corps Memorandum, April 15, 2002); *accord* Exh. J at 2 (Corps Memorandum, January 21, 1969); *Env'tl. Def. Fund v. Alexander*, 467 F. Supp. 885, 901 (N.D. Miss. 1979). The various changes proposed in the draft WCM, above and beyond the direct-withdrawal allocation, would have that effect. The draft would convert the Buford Project almost exclusively to use for Atlanta's water supply,

substantially diminishing hydropower generation and downstream navigation. The Corps must go to Congress before it can re-prioritize these purposes in this way.

A. The draft WCM's operational provisions elevate water supply over the Buford Project's other purposes.

The draft WCM's operational provisions make Georgia's water supply the paramount purpose of Buford in a number of ways.

1. Allocation for downstream withdrawals. As an initial matter, on top of the direct-withdrawal allocation for Georgia's water supply, the draft WCM would direct the Corps to release an additional 408 mgd from Lake Lanier for Georgia's downstream withdrawals. This proposal would require an additional allocation of 468,590 acre-feet, which is 43.1% of Lanier's 1,087,600 acre-foot conservation pool. See Exh. A-1 at 2. That amount of storage, combined with the storage associated with the proposed reallocation for direct withdrawals, is equivalent to more than 60% of Lanier's conservation pool. The Eleventh Circuit has held that the Rivers and Harbors Act of 1946 authorizes the Corps to make *some* releases to accommodate Atlanta's downstream withdrawals. See *In re MDL-1824 Tri-State Water Litig.*, 644 F.3d at 1166. But the Court did not hold that the Corps could, without first seeking Congress's approval, change Buford into a project that overwhelmingly focuses on water supply.

2. Action zones. The draft WCM's action zones reorder the project purposes in favor of water supply even further. The last approved WCM in 1958 did not have action zones, and even the zones proposed in the never-finalized 1989 draft WCM required the Corps to generate hydropower when a project was in the upper portion of the conservation pool. See Exh. K (1958 ACF Manual); Exh. L (excerpts from 1989 Draft Manual). Yet the current draft would give the Corps discretion to generate zero hydropower in all action zones at all times, even when reservoirs are in Zone 1 and relatively full. See DEIS 5-27; DWCM 7-2 to 7-5, 7-18 to 7-19. The draft thus allows the Corps to keep Lanier's elevation high for water-supply purposes in circumstances in which earlier manuals required the Corps to make releases and generate power.

These problems are exacerbated by the way the draft WCM raises the lowest zone, Zone 4, in which "[h]ydroelectric power demands will be met at a minimum level and might occur for concurrent uses only." DWCM 7-6. The draft increases the minimum level of Buford's Zone 4 from 49% to 64% of the conservation pool, and indeed raises Zone 4 in each month between July and February. See Exh. A-4 at 1. This means Zone 4 will encompass between 64% and 80% of Buford's conservation pool. See *id.* at 3; DWCM 7-3. In the aggregate, the draft WCM raises composite Zone 4 at the Corps' ACF projects by elevations that correspond to over 160,000 acre-feet at the beginning of the calendar year. See Exh. A-5 at 6. Like the other

operational provisions in the draft WCM, the action-zone changes will work in favor of Georgia water supply.

B. The draft WCM diminishes the importance of project purposes other than water supply.

The draft WCM's transformation of the Buford Project would come at a substantial cost. Hydropower generation would go down. The ACF system would be non-navigable most of the year. And downstream projects would suffer serious harm.

1. Hydropower effects. The draft EIS significantly understates the PAA's impact on hydropower at the Buford Project and on the ACF system as a whole.

The draft EIS understates the hydropower impacts at Buford because it references the wrong baseline for comparison. The draft EIS erroneously posits that Alternative 1A is the No Action Alternative. Alternative 1A, however, assumes direct withdrawals at Lanier of 128 mgd, above and beyond those authorized by the Buford and Gainesville relocation contracts. DEIS 5-8 tbl. 5.1-2. Congress has not authorized direct withdrawals from Lanier other than those provided by the relocation contracts, so the baseline for comparison cannot involve 128 mgd in direct withdrawals. The more appropriate baseline is Alternative 1B, which involves no direct withdrawals other than those associated with the relocation contracts. The Corps' data shows that the PAA involves a 14% decrease in hydropower generation at Buford compared to Alternative 1B. *See* Exh. A-2. The Corps' data also shows that the PAA will cause Lanier's conservation pool to drop out of Zone 1, where hydropower generation is likely at its highest, 15% more frequently than would Alternative 1B. *See* Exh. A-6 at 3-4.

Due to the same error, the draft EIS understates the PAA's impact on hydropower generation in the ACF system as a whole. In addition to the 14% drop in generation at Buford, the Corps' data shows that the PAA would cause a 3.14% drop at West Point. *See* Exh. A-2 at 3. The data also shows a 1.52% drop at W.F. George. *See id.* Thus, whereas the draft EIS asserts that the PAA will decrease system generation by 0.97%, the drop in generation from Alternative 1B is 3.14%. *See* Exh. A-7 at 3.

The draft EIS also glosses over the PAA's impact on hydropower by using long-term averages encompassing a period of 73 years. In individual years, the hydropower impacts are more pronounced. In 2000, for example, the PAA would have led to a 12.01% drop in generation over alternative 1B. *See* Exh. A-7 at 4. At individual projects, the effects would have been even more pronounced that year. As compared to Alternative 1B, the PAA would have reduced generation by 49.36% at Buford, by 13.84% at West Point, and by 7.50% at W.F. George. *See* Exh. A-2 at 4.

These numbers will be even greater if the projected Chattahoochee river returns—which the draft manual pegs at 94% without adequate justification, *see* DEIS 5-7—are not realized.

2. Abandonment of navigation. Far from improving navigation as compared to the last authorized manual, the draft WCM effectively abandons this purpose. The Newman Report envisioned that the Buford Project would provide year-long navigational benefits to the lower Chattahoochee, facilitating a 9-foot channel between Phenix City and the Gulf Intracoastal Waterway. *See* Exh. M at 11, 22, 28-29 (Newman Report). The last FEIS for the ACF system documented that this channel remained navigable. *See* Exh. N at 1-2 (FEIS). Yet in devoting more than 60% of Lanier's storage to water supply, the draft WCM envisions reducing the channel to 7 feet, providing no dredging, and effectively making the channel available only during relatively wet months. *See* DEIS 5-32 to 5-33. If these provisions amount to an improvement over current conditions, it is only because the Corps has informally, and unlawfully, abandoned navigation in recent years. The Corps cannot formalize and finalize that abandonment of this congressionally authorized project purpose without first seeking approval from Congress.

3. Downstream flows. The draft WCM's novel emphasis on Atlanta's water supply also undermines Congress's purpose of providing sufficient flows in the Middle Chattahoochee. The Newman Report contemplated that releases from Buford would ensure higher minimum flows downstream of Columbus. *See* Exh. M at 39 (Newman Report). As Alabama previously has noted in its scoping comments, the final WCM thus should include specific operational considerations regarding flow requirements at Columbus and Columbia.

The downstream effects are evident in the way the draft WCM addresses action zones at Walter F. George. Whereas the draft WCM generally raises action zones at Buford, the draft WCM substantially lowers them at Walter F. George. *See* Exh. A-4 at 1; Exh. A-8 at 1; DEIS 4-15 to 4-16. This means that even when the Corps keeps Lanier's elevations high for Georgia's water supply, it may simultaneously release water from Walter F. George to satisfy downstream needs. Under the No Action Alternative, the lake's elevation would have dropped below the initial impact level for recreational use in only 5 of the 73 years modeled by the Corps. *See* Exh. A-9 at 2; DEIS 6-28 tbl. 6.1-5. The Corps concedes that this number would have increased to 20 under the PAA. *See* DEIS 6-28 tbl. 6.1-5. In other words, the PAA increases the number of years Walter F. George fell below the initial impact level by a three-fold count, and the PAA would have placed the lake below that level in approximately one out of every four years. *See id.* Moreover, during certain times the PAA's effects on W.F. George's elevations are more significant when compared to Alternative 1B, in which Lanier withdrawals are limited to those authorized by the relocation contracts, rather than the NAA. *See* Exh. A-20.

The PAA raises similar concerns about flows at Columbus and Columbia. By the Corps' reckoning, the PAA would substantially decrease flows at Columbus as

compared to the Corps' proposed NAA, including by up to 33% at certain times. *See* Exh. A-10 at 2-3. Meanwhile, the PAA would result in a substantial increase in the number of days, by 33%, that flows at Columbia will not exceed 2000 cfs. *See* Exh. A-11 at 2.

Previous experience shows how the Corps can cause substantial harm to downstream flows and elevations when it emphasizes Georgia water supply. In 2009, even though the ACF was not in natural drought conditions, flows in the Middle Chattahoochee below West Point Lake fell precipitously. *See* Exh. O (Riley Letter); Exh. P (Glenn Letter). On repeated occasions, the daily flow at Columbus fell below 1350 cfs, the minimum level needed to support water quality in the area. It became clear that the Corps was overfilling West Point Lake to protect elevations at Lanier and preserve Atlanta's ability to make withdrawals for water supply. *See* Exh. O (Riley Letter). Now, the draft WCM is proposing to increase the number of times daily flow at Columbus falls below 1350 cfs. *See* Exh. A-18 at 1.

The draft WCM raises similar concerns through its drought-operations provisions. The draft EIS concedes that the PAA would trigger drought operations 2100% more often than Alternative 1B, and 633% more often than Alternative 1A. *See* Exh. A-12 at 1. When projects go into drought operations, the Corps is allowed to curtail releases, further harming downstream interests and favoring Georgia's water supply. *See* DEIS 5-39 to 5-31.

* * *

No court has held, and no court could possibly hold, that the Corps can unilaterally transform Buford and the ACF into a system whose predominant purpose is to provide water supply to Atlanta. The WCM's various operational provisions would have that effect. If the Corps wishes to make that transformation, it must first seek approval from Congress.

IV. The draft manual violates the Clean Water Act and Corps regulations.

As was true of the ACT manual, the draft ACF manual proposes to violate the Corps' obligation to maintain and ensure water quality in two ways: by failing to account for the PAA's adverse water-quality impacts and by shifting the burden of dealing with those impacts on other parties.

A. The draft WCM will cause water-quality violations.

The draft WCM would violate provisions in the Clean Water Act and regulations requiring the Corps to consider adverse impacts of its operations on water quality. The Corps has adopted a “policy to develop and implement a holistic, environmentally sound water quality management strategy for each project.” ER 1110-2-8154 at 2. The Corps must “[e]nsure that water quality, as affected by the project and its operation, is suitable for project purposes, existing water uses, and public health and safety and is in compliance with applicable Federal and state water quality standards.” *Id.* at 3. The Corps must maintain “the existing instream water uses and the water quality necessary to protect them” and must implement water-quality management plans that are “scoped to include all areas influencing and influenced by the project.” *Id.* at 2, 3. The Corps also must “[e]nsure that the project and its operation offer the lowest stress possible to the aquatic environment.” *Id.* at 4; *see also* 33 C.F.R. §222.5(f). The draft EIS runs contrary to these statutory and regulatory commands. The draft EIS acknowledges that under the PAA, “substantially adverse effects” are to “be expected downstream of West Point Lake to the headwaters of Walter F. George Lake” in Alabama. DEIS ES-33. The draft EIS also acknowledges an adverse effect on downstream levels of dissolved oxygen, phosphorous, nitrogen, and chlorophyll *a*. *See* DEIS 6-118 to 6-154.

B. The draft WCM unlawfully passes on responsibility for the water-quality violations.

To make matters worse, the draft EIS shirks any responsibility for these problems. Rather than assessing measures the Corps can take to mitigate these consequences, the draft EIS suggests that compliance with water-quality standards will fall on “state water quality regulating agencies—ADEM, Florida DEP, and Georgia EDP.” DEIS 6-212; *see also, e.g.*, DEIS ES-33 to ES-34. The Clean Water Act and the Corps’ regulations and guidance do not allow the Corps to transfer the burdens in that way. Corps regulations provide that the Corps must “manage its projects in accordance with all applicable Federal and state environmental laws, criteria, and standards.” ER 1110-2-8154 at 2. The Corps also must “protect all existing and future uses including assimilative capacity, aquatic life, water supply, recreation, industrial use, hydropower, etc.” *Id.* These “management responsibilities extend throughout the area influenced by” the Corps’ operations. *Id.*

EPA previously criticized the Corps for making the same mistake in the ACT Basin. In comments on the final ACT manual, EPA stated that it “disagree[d]” with the Corps’ attempt to shift “responsibility” for the adverse water-quality conditions caused by its operations in that basin to “the respective states that manage the NPDES program.” Exh. Q at 2 (EPA ACT comments). EPA informed the Corps that “[p]ursuant to the CWA and the USACE’s guidance regulations at ER1110-2-8154,

compliance with water quality standards means that the existing instream water uses and the water quality necessary to protect them will be maintained.” *Id.* EPA concluded that “the USACE cannot, through its operational decisions, create conditions (e.g., decreased flow) that cause permittees to fall out of compliance.” *Id.* The final ACF manual should not commit the same error.

V. *The draft EIS is contrary to NEPA.*

Finally, the Corps must bring the draft EIS in line with the National Environmental Protection Act. The draft EIS does not accurately portray the environmental impacts the draft WCM would cause. In purporting to comply with NEPA’s requirement of setting out a No Action Alternative against which the government and public can evaluate the PAA’s environmental impacts, the draft EIS repeats two errors similar to the ones that permeate the final EIS for the ACT Basin.

A. *The draft EIS fails to use the 1958 baseline.*

The draft EIS takes the wrong approach when determining the NAA. The NAA in the draft EIS erroneously references current operations, rather than the last set of operations subjected to NEPA analysis. For most of the Corps’ operations in the ACF Basin, the most recent NEPA review occurred contemporaneously with NEPA’s enactment in the 1970s. Alabama understands that the Corps produced final environmental impact statements for Lake Lanier and the Buford Dam in 1974, for Lake Seminole, the Woodruff Dam, and the ACF system generally in 1976, and for Walter F. George in 1979. Each of those FEISs corresponded to the Corps’ operations under the water-control manual issued in 1958. *See* Exh. R (Buford EIS); Exh. S (Woodruff EIS); Exh. T (Walter F. George EIS); Exh. N (ACF FEIS).

Rather than referencing an NAA that incorporates the last operations that the Corps subjected to NEPA, the draft EIS relies on different operations. The draft EIS explains that “Water Management Alternative 1,” which it designates as the NAA, consists of, among other things, “[c]urrent guide curves” and “[c]urrent action zones.” DEIS 4-43 to 4-44. That approach is problematic because, as the draft EIS concedes, the Corps’ current operations are based on draft manuals the Corps proposed in 1989. *See* DEIS ES-11. Although the Corps currently is operating under those manuals, it is doing so illegally, for it has never subjected them to final NEPA review. Indeed, in obtaining the dismissal of the lawsuit Alabama filed challenging the 1989 draft manual, the Corps successfully argued that the manual did not constitute “final agency action” subject to judicial review because the Corps “ha[d] not performed the cost analyses or prepared the written reports required by the WSA, the Corps’ internal guidelines, and the National Environmental Policy Act to

make permanent reallocations.” *In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d at 1181.

As Alabama has explained in its comments on the ACT manual, NEPA does not allow the Corps to adopt non-NEPA-approved operations into the NAA. That is so even when the Corps has been illegally implementing those operations for decades. *See, e.g., N.C. Wildlife Fed’n v. N.C. Dep’t of Transp.*, 677 F.3d 596, 603 (4th Cir. 2012); *Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1037-38 (9th Cir. 2008). If the rule were otherwise, the Corps could evade accountability for the environmental effects of elements in the 1989 draft plan. That would encourage federal agencies to illegally implement operations on a provisional basis and then, when later proposing final agency action, to claim that the illegally implemented operations are not subject to NEPA review. That cannot be the law. Instead of using the 1989 draft manual’s operations as the NAA, the Corps must use the operations from the Corps’ last final EIS in the 1970s.

B. The draft EIS’s portrayal of current operations conflicts with historical observations.

Even if it were appropriate to reference current operations as the baseline for comparison to the PAA, the draft EIS’s calculation of the NAA still is flawed. Due to modeling and methodological errors, the draft EIS’s NAA does not even accurately reflect current water-control operations in several ways.

First, the Corps’ proffered NAA does not line up with historical flows at Columbus or Columbia. For example, the Columbia flows reported by the NAA between May and October 2007 were 13% lower than the flows actually observed during that time. *See Exh. A-13 at 2-3.* Likewise, the Columbus flows reported by the NAA for June through November 2007 were 17% lower than observed flows at that location. *See Exh. A-14 at 3.*

Second, the NAA is equally problematic when compared to historic elevations at the Corps’ projects. At Lanier, the NAA portrays elevations that are at times higher than what actually occurred. *See Exh. A-15 at 2.* At West Point, the NAA portrays elevations that are at times lower than what actually occurred. *See Exh. A-16 at 2.* Meanwhile, at Walter F. George, the NAA portrays elevations that are at times higher and more stable than what history shows. *See Exh. A-17 at 2.*

Thus, to the extent that the Corps is endeavoring to reflect current operations in its NAA, the draft EIS has failed in that task. But because the Corps’ current ACF operations did not go through the NEPA process, it is inappropriate for the NAA to reflect those operations in any event. To convey the significant effects that the draft WCM would cause—complete with substantial operational changes designed to transform Buford into a project whose predominant purpose is to supply water to Atlanta—the draft EIS must use the 1958 operations as the NAA.

Page 15 of 15

January 29, 2016

State of Alabama Comments, ACF draft WCM and EIS

* * *

For all these reasons, the draft WCM and EIS violate federal law. The Corps should not implement the draft WCM, and it should engage in substantial revisions before implementing any manual regarding the ACF system.

Sincerely,

A handwritten signature in blue ink that reads "J. Brian Atkins". The signature is written in a cursive style with a large initial "J".

J. Brian Atkins, P.E.
Division Chief
Alabama Office of Water Resources

JBA/jn

cc: Governor Robert Bentley
Senator Richard Shelby
Senator Jeff Sessions

OFFICE OF THE GOVERNOR

ROBERT BENTLEY
GOVERNOR



STATE OF ALABAMA

ALABAMA DEPARTMENT OF ECONOMIC
AND COMMUNITY AFFAIRS

JIM BYARD, JR.
DIRECTOR

May 25, 2016

Colonel Jon J. Chytka
Commander and District Engineer (acf-wcm@usace.army.mil)
Mobile District, U.S. Army Corps of Engineers
Attn: PD-EI (ACF-DEIS)
P.O. Box 2288
Mobile, AL 36628-0001
VIA EMAIL

*Re: Draft Environmental Impact Statement
Update of Water Control Manual for Apalachicola-Chattahoochee-Flint Basin*

Dear Colonel Chytka:

The State of Alabama, through its Office of Water Resources, submitted comments on the draft Master Water Control Manual and Environmental Impact Statement for the Apalachicola-Chattahoochee-Flint River Basin on January 29, 2016. Since that time, it has come to Alabama's attention that its comments about the hydropower impacts of 165 mgd in direct withdrawals from Lake Lanier was based on a comparison (between the PAA and Option 7B) that, in addition to showing the effects of the 165 mgd in direct withdrawals from Lake Lanier, also shows the effects of the 40 mgd in withdrawals associated with the Glades Reservoir and certain changes in assumptions about returns and river withdrawals. *See Ala. Comments 3-4.* As Alabama has noted, the Corps has been unclear on whether the additional 40 mgd will be withdrawn from Lanier. *See id.* at 6-7. Alabama's end conclusion remains the same: the Corps must obtain approval before reallocating storage for these withdrawals under the Water Supply Act. Alabama is submitting this supplemental letter to clarify the record.

Sincerely,

J. Brian Atkins, P.E.
Division Chief
Alabama Office of Water Resources

Page 2 of 2

May 25, 2016

State of Alabama Supplemental Comments, ACF draft WCM and EIS

JBA/jn

cc: Governor Robert Bentley
Senator Richard Shelby
Senator Jeff Sessions