

Statement of Judson H. Turner

U.S. Senate Committee on Environment and Public Works

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My name is Judson H. Turner. I am Director of the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources. Georgia EPD is the state agency that is responsible for managing the State's surface waters and groundwater.

I appreciate this opportunity to appear before you to talk about Georgia's perspectives on the U.S. Army Corps of Engineers' management of federal reservoirs in the ACF and ACT River Basins. Georgia is proud of its water conservation and management record, and it has a long history of working with the Corps to see that the waters in the State of Georgia are soundly managed for the benefit of all users in the basins and for the environment.

Georgia is gratified that the Corps finally is updating its Water Control Manuals for the ACF and ACT Basin reservoirs. After more than twenty years of gridlock and delay caused by litigation, that process is long overdue and much needed—indeed, the last formally regulated plans are several decades old and do not reflect current conditions. Unfortunately, for reasons that are not apparent to the State of Georgia, the scope of these updates differs, and it now appears that the most pressing water supply issues, at least in the ACT Basin, might not be addressed. In the ACF Basin, the Corps is considering, in conjunction with the water control manual update, Georgia's request for an allocation of storage to meet present and future water supply needs from Lake Lanier. In the ACT Basin, however, the Corps has announced that the water control manual update will not address Georgia's pending request for a reallocation of storage in Lake Allatoona to meet water supply needs. Proceeding in that manner will make the new ACT water control manual obsolete on the day it is issued.

The Corps should be allowed the opportunity to complete the studies and plans that it is tasked by law with preparing and that are essential to the Corps' making informed decisions about how to operate the federal reservoirs in the ACF and ACT Basins. Those studies should provide badly-needed information to all stakeholders and decisionmakers. Action by Congress is not needed at this time and could interfere with the work the Corps needs to do.

Georgia and Metropolitan Atlanta's Sound Water Stewardship

The State of Georgia and the Metropolitan Atlanta Region are national leaders in water stewardship. In 2008, Georgia was one of the first states to adopt a statewide water plan, and pursuant to that planning process, eleven Regional Water Councils have recommended, and the State has approved, Regional Water Plans. In 2010, the Georgia General Assembly passed the Georgia Water Stewardship Act. Among the Act's provisions are that it requires state government agencies to examine their programs, practices, and rules to identify opportunities to provide for voluntary water conservation; requires local governments to include water conservation measures in local comprehensive plans; provides incentives for public water systems to use full cost accounting; and provides technical assistance to local governments and public water systems for water loss abatement activities.

Since 2003, the Metropolitan North Georgia Water Planning District (Metro Water District) has imposed comprehensive long-term plans for water supply and conservation, wastewater management, and watershed management for Metro Atlanta. The Metro Water District is comprised of 15 counties, 92 cities, and 56 water supply systems. The plans are implemented by local water systems and local governments and are enforced by the State of Georgia through water permits and through eligibility for grants and loans.

Water conservation is an important element of the Metro Water District's Water Supply and Water Conservation Plan. The water conservation measures in the Plan are the most aggressive in Georgia and among the most aggressive in the United States. The water conservation measures in the Metro Water District Plan include: 1) conservation pricing; 2) replace older, inefficient plumbing fixtures; 3) pre-rinse spray valve retrofit education; 4) rain sensor shut-offs on new irrigation systems; 5) sub-unit meters in new multi-family buildings; 6) assess water losses with IWA/AWWA water audit methodology and develop programs to reduce systems water loss; 7) residential water audits; 8) low-flow retrofit kits for residential; 9) commercial water audits; 10) education and public awareness activities; 11) high-efficiency toilets and urinals in government buildings; 12) new car washes to recycle water; 13) expedited water loss reduction; 14) multi-family HET rebates; 15) meters with point of use leak detection; 16) private fire lines to be metered; 17) maintain a water conservation program; 18) water waste policy or ordinance; and 19) HET plumbing fixtures in new construction consistent with state legislation.

The Metro Water District has made water conservation a priority, and local water systems have shown a strong record of implementation of water conservation measures. In annual progress surveys, the District has found: that tiered water conservation rates are in place throughout Metro Atlanta; that water systems serving 96% of the population offer toilet rebates, and, to date, over 83,000 older toilets have been replaced since 2008; that the larger systems have implemented programs to reduce system water losses, and, from 2010 through 2012, over 37,000 leaks were repaired; and 98% of the population of the Metro Atlanta area is targeted with educational and outreach programs by local governments.

In 2012, EPD conducted an evaluation of the 2000-2010 rates of growth in water demand compared to rates of population growth in the counties with the 15 largest municipal surface water systems in Georgia. Six of the 15 largest municipal surface water systems are located in five counties (i.e., Fulton, DeKalb, Cobb, Gwinnett, and Hall) that rely upon withdrawals or water supply releases from Lake Lanier. The evaluation showed that water use in each of the five counties demonstrated a consistent decreasing trend over the decade, while population in each of those counties increased over the decade. Trends such as these in the five counties and beyond clearly indicate that the water conservation initiatives being implemented in the Atlanta region by the Metro Water District are significantly reducing per capita water demand.

Due in part to the water conservation measures put into place, the per capita water use rate in the Metropolitan Atlanta Region has fallen in recent years. Data from the Metro District 2009 plan indicates that the estimated use rate for the Atlanta Region is currently 148 gallons per capita per day (gpcd), and is expected to decline to 135 gpcd by the 2035-2040 timeframe. According to a report by the firm CH2MHill based on information provided by state agencies, in 2006, the per capita use rate for Atlanta was even lower than this projection, at 128 gpcd. Rates for major cities in Alabama and Florida were higher: for Tampa, Florida, the use rate was 148 gpcd; for Mobile, Alabama, was

159 gpcd; for Montgomery, Alabama, was 162 gpcd; for Birmingham, Alabama, was 167 gpcd; and for Tallahassee, Florida, was 176 gpcd.

According to the September 2012 Water Efficiency and Conservation State Scorecard by the Alliance for Water Efficiency and the Environmental Law Institute, only five states (four of which are west of the Mississippi River) received a better grade than did Georgia for their laws and policies promoting water efficiency and conservation. Alabama and Florida received lower grades than Georgia.

In January 2011, Governor Nathan Deal ordered the Georgia Environmental Finance Authority (GEFA) to develop and implement the Governor's Water Supply Program (GWSP) to assist local governments in developing new sources of water supply, and to identify innovative approaches to addressing some of Georgia major regional water challenges. This \$300 million state-funded effort will strategically fund several water resources projects that will help "grow the cistern" so that more water is available – during dry times – to meet a host of water needs over time.

ACF Basin

The Chattahoochee, Flint, and Apalachicola Rivers combine to form the ACF Basin. The Chattahoochee River begins near Helen, Georgia, flows through Lake Lanier and to Atlanta, through West Point Lake to Columbus, Lake Walter F. George, and then Lake Seminole which releases to the Apalachicola River in Florida and ultimately Apalachicola Bay and the Gulf of Mexico. The Supreme Court of the United States has confirmed that the entirety of the Chattahoochee River is in the State of Georgia, as the boundary between Georgia and Alabama is the high-water mark on the western bank of the River. Georgia therefore retains regulatory authority over water supply withdrawals and wastewater discharges into waters lying within the State. The Flint River begins near the Atlanta airport, flows southwest to Albany and Bainbridge, and to Lake Seminole. The ACF Basin is nearly 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 approximately 72% of the Basin's population resides in Georgia.

The average flow in the Chattahoochee River as it passes through Atlanta is approximately 2,500 cubic feet per second (cfs) (or 1,621 mgd). The average flow in the Apalachicola River as it enters Florida is 21,587 cfs, or nearly nine times the Chattahoochee flow in Atlanta.

More than 3.3 million Georgians rely upon withdrawals of water directly from Lake Lanier or withdrawals of water that the Corps releases from Lake Lanier to the Chattahoochee River to meet their water supply needs. EPD projects that the number of Georgians who depend upon withdrawals and releases from Lake Lanier for water supply will rise to more than 6 million by around 2040. Counties that rely on Lake Lanier for water supply comprise the majority of the population for the Atlanta Metropolitan Statistical Area, 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.

Although Metropolitan Atlanta draws heavily on the Chattahoochee River for water supply, its total consumption is relatively small. Well over half of the water used is returned to the river

downstream of Atlanta. As a result, in 2011, for example, the net use (consumption) of water from Lake Lanier and the Chattahoochee River for the Atlanta area was 110 mgd, or 171 cfs. This equates to less than 1% of the water flowing from Georgia into the Apalachicola River in an average year. During extreme drought, the percentage depletion of the annual water budget is somewhat higher, but it is never much higher than 2-3%. To put this in further context, the stage of the Apalachicola River can fluctuate as much as 2 feet each day as a result of hydropower operations. The depletion attributable to all of Metropolitan Atlanta, representing 72% of the population of the entire ACF River Basin, reduces the stage of the Apalachicola River by less than 2 inches.

The ACF Basin also is home to one of the most productive agricultural regions in the United States. The major crops grown and harvested in southwest Georgia include peanuts, cotton, and pecans. Georgia is by far the largest peanut producing state in the U.S, often producing more than two billion pounds annually. In recent years, only Texas has exceeded Georgia in producing cotton. In 2012 the U.S. produced more than 80% of the world's pecans, and Georgia produced a full one-third of the U.S. total of 302 million pounds. Much of Georgia's peanut, cotton, and pecan production is concentrated in the ACF Basin and is aided by irrigation.

Lake Lanier

Lake Lanier is a multi-purpose project that Congress authorized in the River and Harbor Act of 1946 (1946 RHA) for the purposes of water supply, hydropower, navigation, and flood control. Recreation also is an authorized purpose. Lake Lanier is a large reservoir, but it is located near the headwaters of the Chattahoochee River and is fed by a small drainage area. Less than 6% of the drainage area of the ACF Basin is above Lake Lanier. This means that when the elevation of Lake Lanier drops more than a few feet, it can take a long time, sometimes several years, for it to refill. This important fact must be kept in mind when considering the capacity of Lake Lanier to augment flows hundreds of miles downstream in the Apalachicola River during droughts. The 1946 RHA approved plans that the Corps of Engineers presented to Congress. The Corps predicted Metro Atlanta's growth and recommended that releases from the reservoir to augment the flow in Atlanta be increased over time to meet the growth in water supply needs. In the 1958 Water Supply Act, Congress provided supplemental authority, in addition to that provided in the original authorizing legislation, for water supply.

A number of studies dating back to the 1960s have concluded consistently that Lake Lanier and the Chattahoochee River provide the most economical and environmentally-protective alternative for meeting the water supply needs of the region. In 1972, the U.S. Senate Public Works Committee authorized an interagency study to develop a framework for the orderly development of water resources for the Metropolitan Atlanta area to beyond the year 2000. This study, The Water Management Study Report, released in 1981, identified three alternatives for further study, one of which was to reallocate storage in Lake Lanier from hydropower to water supply. After completing its environmental investigation in accordance with the National Environmental Policy Act, the Corps concluded that the best option for the environment and economy was to allocate storage for water supply in Lake Lanier.

Georgia's Lake Lanier Water Supply Request

Georgia EPD projects that municipal and industrial water supply demands that are dependent upon withdrawals and special releases from Lake Lanier will reach 705 mgd (including 297 mgd lake withdrawals and 408 mgd river withdrawals) sometime between 2035 and 2045. It is reasonable to plan using the assumption that Georgia's water supply needs will be at least 705 mgd by 2040.

A large portion of the Metro Atlanta area's treated wastewater is returned to the Chattahoochee River downstream of Buford Dam. EPD projects that by 2040 (or as of the date when water withdrawals reach 705 mgd), the amount of treated wastewater discharged to the Chattahoochee River for the Atlanta area will be 385 mgd on an annual basis. When combined with return flow directly into Lake Lanier, the total return of wastewater associated with the withdrawal of 705 mgd is projected to be 550 mgd, or 78% of the total withdrawal. Therefore, Georgia projects that as of 2040, the total consumptive use from municipal and industrial water supply from Lake Lanier and from the Chattahoochee River above the Whitesburg gage will be approximately 155 mgd, or 239 cfs, on an annual average basis. To put this amount into perspective, it is a mere 1.1% of the 21,587 cfs annual average daily flow of the Apalachicola River just downstream of the Georgia-Florida state line.

In May 2000, Georgia's Governor submitted a formal request to the Assistant Secretary of the Army asking that the Corps allocate storage in Lake Lanier sufficient to meet projected needs of up to 705 mgd for the Metro Atlanta region. That request remains pending. It was delayed for more than a decade by litigation over whether the Corps had the authority to grant the request. The Eleventh Circuit Court of Appeals in 2011 held that water supply for the Metropolitan Atlanta Region was an originally-authorized purpose of Lake Lanier, and that, to the extent it may be needed, the Water Supply Act of 1958 would provide additional authority for water supply. The Court of Appeals remanded the case to the Corps for it to make a determination whether its statutory authority, as clarified by the court, was sufficient to grant Georgia's May 2000 request. The Corps has completed that extensive analysis and determined that it indeed has adequate authority to meet Georgia's water supply request. The Corps is now undertaking an Environmental Impact Statement as required by the National Environmental Policy Act to assess the effects of granting Georgia's water supply request as compared with alternatives.

The projected water withdrawals and Corps operations necessary to support them will not have a material impact on the production of hydropower at Buford Dam or the federal reservoirs in the ACF Basin as a whole, and any impact will be gradual over the next several decades. EPD's modeling indicates that, if viewed in terms of hydropower generation for the federal reservoirs in the ACF Basin as a whole, when Georgia has reached demands of 705 mgd and year 2040 water supply needs are met throughout the rest of Georgia, average annual power generation will be 970,900 MWh, as compared with the 988,055 MWh of (simulated) annual average generation with 2011 water supply levels. Thus, EPD projects a mere 1.7% decrease in hydropower generation basin-wide. Georgia's conclusions are consistent with those reached by the Corps in its assessment of the impact to hydropower from granting Georgia's water supply request as compared with a baseline that assumed virtually no water supply operations at all. Using that baseline of comparison, the Corps concluded that the water supply operations and lake withdrawals would result in less than a 1% reduction to ACF Basin dependable hydropower capacity, and that the lake withdrawals and water supply releases contemplated by Georgia's

water supply request would result in reductions in basinwide hydropower value of 4.4% and less than 1%, respectively.

As the ACF Basin reservoirs, for reasons unrelated to Georgia's water supply usage, are no longer used to support commercial navigation except under rare circumstances, Georgia's water supply request will not impact navigation. The current request to reallocate the conservation storage to meet Georgia's projected future water supply needs does not involve changing the elevation of the top of conservation pool or the size of the flood control pool. Thus, reallocating part of the conservation storage to accommodate Georgia's water supply needs will have no impact on the flood control capability of Lake Lanier or the ACF system. Although changes to the size of the flood control pool are not necessary for the Corps to grant Georgia's request, Georgia may still recommend raising the conservation pool, at the appropriate time, if and when it determines that the benefits of doing so exceed any costs. Granting Georgia's request also will have a relatively small impact to recreation.

Threatened and Endangered Species in Apalachicola River and Bay

The United States Fish and Wildlife Service has designated portions of the Apalachicola River and its tributaries as critical habitat for the threatened Gulf sturgeon, the endangered fat threeridge mussel, the threatened purple bankclimber mussel, and the threatened chipola slabshell mussel. The Gulf sturgeon spawns in the Apalachicola River. The fat threeridge, purple bankclimber, and chipola slabshell mussels live at locations within the Apalachicola River and its tributaries. Recent studies show these species to be stable or recovering within the Apalachicola River and its tributaries. In particular, studies conducted by the Fish and Wildlife Service show the population of the fat threeridge in the Apalachicola River and its tributaries to be much greater than previously believed. In a May 2012 Biological Opinion, the Fish and Wildlife Service reported that its "surveys demonstrated that the fat threeridge was more abundant than we previously believed, and recent recruitment was documented at many locations." The Gulf sturgeon has seen significant recovery since the closing of the Florida fishery in the 1980s.

Revised Interim Operating Plan

The Corps developed the Revised Interim Operations Plan for Jim Woodruff Dam (RIOP) to help protect threatened and endangered species in the Apalachicola River and Bay. The RIOP produces higher flows in the Apalachicola River than would otherwise be provided by nature in times of drought. Although it is not a water control plan for the entire ACF River Basin, the RIOP ultimately affects the elevations of the federal reservoirs up and down the basin.

The Corps began operating under the original form of the RIOP in 2006. The drought of 2007 highlighted the flaws in the original IOP, which had a devastating effect on reservoir storage levels throughout the ACF River Basin. By December 26, 2007, the change in operations mandated by the original IOP resulted in a loss of roughly 850,000 acre-feet of storage throughout the ACF system and reduced Lake Lanier to its lowest level in history. By November 2007, only 33% of all conservation storage within the ACF system remained.

The Corps has revised the original RIOP a number of times to prevent a repeat of 2007 and in response to new information regarding the species in the Apalachicola River. Despite these changes, however, Georgia remains unconvinced that the current flow provisions are necessary and supported

by sound science. As an example, there is no evidence to support a conclusion that a flow of 11,000 cfs from March to May is necessary to support a successful spawn of the Gulf sturgeon.

Although Georgia recognizes the Corps' obligation under the Endangered Species Act to operate in a way so as not to jeopardize threatened and endangered species, the RIOP is not Georgia's preferred plan and could be improved in several respects. Opportunities to store water in the federal reservoirs in the ACF Basin are very limited under the RIOP. The minimum flow requirements prevent virtually any storage of water during the late spring, the summer, or the fall in drought years. Moreover, the RIOP requires the Corps to draw from storage, sometimes for extended periods and in amounts that cause major draw-down of the ACF Basin reservoirs, to maintain a flow of at least 5,000 cfs in the Apalachicola River at all times. There is some question as to the need to maintain such a high minimum flow during periods of extreme drought.

The RIOP has been the subject of a number of legal challenges, particularly by the State of Florida. Florida first challenged the original IOP in 2006 and updated its complaint a number of times to challenge subsequent revisions to the RIOP. Florida's claims were rejected in 2010 and Florida later withdrew its appeal of the district court's opinion as a result of further modifications to the RIOP.

ACF Water Control Manual Update

The last formally-adopted Water Control Manual for the ACF River Basin is out of date and must be revised and updated to reflect current conditions in the Basin. The current Master Water Control Manual for the ACF River Basin was completed in 1958 and does not include Water Control Manuals for the West Point, Walter F. George, or George W. Andrews projects. Manuals were developed for individual projects in the ACF River Basin as they came on line or as operations changed to accommodate changing conditions within the system. The existing Water Control Manuals do not address water supply operations.

The Corps first attempted to update the ACF Water Control Manual in 1989 with a the issuance of a "draft" Water Control Plan that was never formally adopted. Litigation filed by Alabama in 1990 blocked the Corps' adoption of the 1989 Draft Water Control Manual and prevented the Corps from being able to complete the update process. In arguments to the Eleventh Circuit Court of Appeals, the Corps stated that "every single day since 1990 the Corps was either operating under an agreement that barred it from formally taking any steps to reallocate storage, or was actively engaged in a process that could have led to a final agency action reallocating storage." The historical sequence of events supports this claim.

The Corps continued to operate under the 1989 Draft Water Control Manual without an update to the Manual through 2003, apparently on the belief that an agreement between the states would eventually be reached and that a revised water control plan could then be prepared to implement that agreement. The Corps attempted on multiple occasions after 2003 to begin the process of making final decisions on water allocations, but it was consistently thwarted by the litigation process. The statements by the Corps in 2005 that it intended to move forward with updating the water control manuals, a settlement agreement in litigation in the D.C. Circuit, which was struck down in 2008, and a Corps memorandum issued in 2009, demonstrate that the Corps intended to move forward in consummating a decision-making process after 2003 but could not.

The Corps published a Federal Register Notice of Intent (NOI) on October 12, 2012 to reopen public scoping to account for the Eleventh Circuit's June 28, 2011 Decision, which concluded that water supply is an authorized purpose for Lake Lanier. As part of the current process for updating the ACF Water Control Manual, the Corps has correctly decided to study as an action alternative allowing withdrawals from Lake Lanier and making releases from Lake Lanier to meet the projected water supply demands included in the Georgia Water Supply Request. The Corps must decide how it will accommodate Georgia's future water supply demands, and it only makes sense to coordinate the decision on Georgia's water supply request with the Water Control Manual update so that the Water Control Manual reflects that decision. All alternatives considered by the Corps for operations in the ACF Basin should be evaluated against the criterion of whether and how they accomplish the purpose of meeting Georgia's projected water needs.

Any alternatives that do not involve releases to support up to 408 mgd of withdrawal from the Chattahoochee River above the Peachtree Creek confluence and 297 mgd withdrawal from Lake Lanier by 2040 must account for the economic, environmental, and sociological effects of other water projects that the State or local water systems will have to develop to meet the shortfall. The substantially higher cost and environmental impact of projects to replace Lake Lanier likely render some or all of those alternatives unfeasible.

The State of Georgia continues to believe that the Corps should consider, as part of the update process for the Water Control Manual, alternatives to the RIOP. Although the Corps has modified the RIOP to be more protective of both system storage and protected species, recent science demonstrates that the flow requirements and thresholds used in the RIOP are based on overestimations of the biological needs of those species at the expense of needs upstream. This has resulted, in part, from the use of indirect or surrogate measures based on limited scientific information on biological needs. Direct measures based on recent science can and should be utilized. Doing so will provide the basis for alternatives to the RIOP that offer equal or even better results for the protected species, while producing higher reservoir levels.

The State of Georgia requests that the Corps at least carefully reexamine the RIOP using better-refined performance measures. Georgia suggests that the Corps apply the following principles in evaluating the RIOP and alternatives:

- Develop objective, direct, measurable, quantifiable, and scientifically-defensible performance measures;
- Consider performance measures in the entire ACF Basin as a whole, instead of just those in the Apalachicola River, when evaluating alternatives;
- Use these performance measures to compare and evaluate all alternatives in a consistent manner;
- Favor alternatives that demonstrate improved performance related to multiple purposes or interests while also achieving performance measures with the greatest efficiency of individual project and system reservoir storage; and
- Restrain from drawing conclusions or formulating operations based on incomplete data or insufficient scientific understandings.

Using performance measures that were developed using Corps and Fish and Wildlife Service data, the State of Georgia has developed and shared with the Service an alternative to the RIOP. Georgia's proposal aims to out-perform the RIOP with regard to performance measures for protected species while conserving system storage to meet water supply and other authorized reservoir purposes.

ACT Basin

The Etowah River rises in north Georgia, flows through Dawson, Forsyth, and Cherokee Counties, through Lake Allatoona, towards Rome, where it joins the Oostanaula River to form the Coosa River, and into Alabama. Inside Alabama, the Coosa River is impounded by a series of Alabama Power lakes, as is the Tallapoosa, which also begins in Georgia and joins the Coosa at Montgomery to form the Alabama River. The Alabama River flows south through Alabama to Mobile Bay. The ACT Basin covers nearly 23,000 square miles, 23% of which is in Georgia, about 76% of which is in Alabama, and the small remainder of which in Tennessee. As is the case in the ACF Basin, the ACT Basin rivers are very small in the Atlanta area and become much larger downstream. The average flow in the Etowah River at the Allatoona Dam Site is 1,947 cfs (1,250 mgd). The average flow in the Coosa River near Rome is 6,810 cfs (4,400 mgd). The average flow in the Coosa River at Jordan Dam (just upstream of Montgomery, before the Coosa River joins the Tallapoosa to form the Alabama River) is 16,420 cfs (10,600 mgd).

Lake Allatoona

Lake Allatoona, like Lake Lanier, sits in north Georgia, near the top of the basin. Only approximately 4% of the basin lies above and drains into Lake Allatoona. Unlike Lake Lanier, Lake Allatoona does not provide a large portion of the storage within its basin. Lake Allatoona provides only 11.4% of the ACT Basin's total storage, and Carters Lake provides an additional 5.7%. Thus, more than 82% of the storage capacity in the ACT Basin is in Alabama, in nine Alabama Power projects and two Corps projects. All of that storage, and much larger drainage area and stream flow, helps Alabama mitigate the effects of drought. Nevertheless, during droughts, the Corps has provided a hugely disproportionate percentage of the flow in the Alabama River from water stored in Lake Allatoona and Carters Lake. During the drought of 2007, for example, for prolonged periods, the overwhelming majority of the flow in the Coosa River and the Alabama River downstream of Jordan Dam was provided by inflow from Georgia.

Georgia's Lake Allatoona Water Supply Request

More than 915,000 Georgians currently rely upon withdrawals of water from Lake Allatoona to meet their water supply needs. Two municipal water systems withdraw water from Lake Allatoona: Cobb County-Marietta Water Authority (CCMWA) and the City of Cartersville. CCMWA provides water within Cobb, Cherokee, Douglas, Fulton, and Paulding Counties. Cartersville provides most of the water within Bartow County. The rates of population growth of Bartow, Cherokee, Cobb, Douglas, and Paulding counties from 1990 to 2010 all exceeded the rate of growth of the population of the State of Georgia as a whole for the same period. The projected rates of population growth of these counties from 2010 through 2040 is also expected to be greater than the projected rate of population growth of the State of Georgia as a whole. Counties that rely on water withdrawals from Lake Allatoona comprise a portion of the population for the Atlanta MSA, which, as discussed above, is the ninth-largest MSA in the United States.

As with Lake Lanier, requests for reallocation of additional storage to water supply from Lake Allatoona have been pending for years. Requests from CCMWA and Cartersville date back to as far as the 1980s. In January 2013, Governor Nathan Deal submitted to the Assistant Secretary of the Army for Civil Works a formal request that the Corps manage the resources of Lake Allatoona to meet the projected water supply needs for water stored in Lake Allatoona. Governor Deal requested that the Corps: (1) allow gross municipal and industrial water withdrawals from Lake Allatoona to increase to between 123.9 and 147.9 mgd annual average to meet 2040 demands; (2) allow CCMWA to withdraw from its existing intake in Lake Allatoona water that is released from the Hickory Log Creek Reservoir specifically for CCMWA, without requiring CCMWA to acquire additional storage space for such withdrawals; (3) in determining the amount of water that may be withdrawn without exhausting the storage that a water supply user has purchased, credit to that user exclusively all returns of treated wastewater that the Georgia EPD has permitted and allocated to that user for withdrawal, as doing so will not adversely affect any other project purpose or clash with any federal objective and will incentivize the substantial local investment required to make these returns, which enable water reuse and increased efficiency; and (4) enter into contracts that document the parties' understanding as to how the Corps will operate in support of Georgia's water supply needs.

The projected water withdrawals and Corps operations necessary to support them will have only a small impact on hydropower production at Lake Allatoona, and an even smaller impact on the combined hydropower production at the two federal reservoirs in the ACT River Basin. The impact is even smaller when one looks at the entire Alabama-Georgia-South Carolina system of reservoirs of which Lake Allatoona is a part. The annual production of power at Lake Allatoona in 2011 was 86,308 MWh. By comparison, the other federal hydropower project within the ACT Basin, Carters Lake, has 575 MW of installed capacity and generated 536,199 MWh in 2011. Lake Allatoona is a relatively small source of energy. To give some perspective on the relative quantity of power generated at Lake Allatoona, as a percentage of the total electricity consumed within the State of Georgia in 2010, 137.6 million MWh, Lake Allatoona's power production was only 0.063%. Assuming that the Corps allows the withdrawals from Lake Allatoona that Georgia is requesting, the power generated by the two federal ACT Basin reservoirs combined will decrease by only 1.5%.

On the Etowah River downstream of Lake Allatoona, there are several municipal and industrial facilities that rely on flow in the Etowah River for their water supply needs. According to EPD's analysis, the withdrawals from Lake Allatoona that are contemplated in Georgia's water supply request will not prevent or impair the supply of water for these downstream needs. The current request to reallocate the conservation storage to meet Georgia's projected future water supply needs does not involve changing the elevation of the top of conservation pool. As a result, the size of the flood control pool does not change. Thus, reallocating part of the conservation storage to accommodate Georgia's increased water supply should have no negative effect on flood control capability of Allatoona or the ACT system. Although changes to the size of the flood control pool are not necessary for the Corps to grant Georgia's request, Georgia may still recommend changes to the conservation pool, at the appropriate time, if and when it determines that the benefits of doing so exceed any costs. Meeting Georgia's water supply needs also will not seriously affect recreation.

The water supply withdrawals contemplated in Georgia's water supply request will have only a minor effect on the flow in the Coosa River at the state line. Further, the impact on total stream flows into Lake Weiss at the state line is even more attenuated. The effect of such withdrawals, when they

reach their maximum amount, at most will be around 120 cfs, which is less than 2% of the annual average daily flow in the Coosa River near the Georgia-Alabama state line.

ACT Water Control Manual Update

The Corps is in the process of updating its Water Control Manual for the ACT Basin. It has issued a draft Manual and draft Environmental Impact Statement. There are some positive changes proposed in the draft Manual, including some new drought provisions, but there is a major flaw in that it does not address current and future levels of water withdrawal from Lake Allatoona. In the EIS, the Corps fails to consider increased water supply withdrawals from Lake Allatoona as an action alternative. The Corps suggests that it has chosen this approach because Georgia's Allatoona water supply request is under consideration and apparently will be addressed in a separate decision, ostensibly with another EIS. Georgia has pointed out that its future water supply need is reasonably foreseeable, and, therefore, must be considered in the EIS. Further, because the Corps is authorized by the Water Supply Act of 1958 to allocate additional storage in Lake Allatoona to water supply, water supply is a fully authorized purpose of Lake Allatoona. Without considering future levels of supply, the EIS has not rigorously explored and objectively evaluated all reasonable alternatives. It will not adequately address the cumulative effects of adopting the proposed Water Control Manual. And the Corps will not have incorporated the NEPA evaluation into its decision-making process at the earliest possible time, contrary to the NEPA regulations.

Water Resources Development Act of 2013

Sections 2014 and 2015 of the Water Resources Development Act of 2013 that the Senate passed earlier this year have the potential to affect the ACF and ACT Basins in ways that may be detrimental to the State of Georgia. These provisions may adversely affect many other states as well. As Georgia understands it, the legislation is not intended to limit the Corps' existing authority to reallocate storage to water supply, to interpret that authority, or to discourage the Corps from undertaking a reallocation. Georgia is concerned that the language is vague and, particularly in light of the specific reference to the ACT and ACF Basins, could be misinterpreted. Therefore, Georgia would prefer that those sections be eliminated from any version of the bill that becomes law, or that the language be revised to ensure that it is fully consistent with Chairman Vitter's and Chairwoman Boxer's statements on the floor relating to this provision.

Conclusion

For more than two decades, the Corps has been operating the reservoirs in the ACF and ACT Basins without current water control manuals and without a plan for how the storage in Lake Lanier and Lake Allatoona will be used to meet Georgia's water supply needs. The courts have now made rulings that have cleared away the litigation that was blocking the Corps from taking the actions that are needed and required by federal law, and the Corps finally is updating its plans and manuals. Among other things, the Corps is preparing Environmental Impact Statements to evaluate the effects of different alternatives on the environment and the economy. The Corps should be allowed the opportunity to make the administrative determinations that it needs to make, including with regard to water supply. Congress should not take any action that might interfere with that administrative process, as doing so will only return us to the period of gridlock

and uncertainty that has plagued the citizens of Alabama, Florida, and Georgia for nearly a quarter-century.