National Wildlife Federation
Florida Wildlife Federation
Apalachicola Riverkeeper

February 1, 2017

Via Email: ACF-WCM@usace.army.mil

Colonel James A. Delapp
District Commander, Mobile District
U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, AL 36628-0001

Re: Comments on the December 2016 Final Environmental Impact Statement Update of the Water Control Manual for the Apalachicola-Chattahoochee-Flint River Basin in Alabama, Florida, and Georgia and a Water Supply Storage Assessment

Dear Col. Delapp:

The National Wildlife Federation, the Florida Wildlife Federation, and Apalachicola Riverkeeper (collectively, the Conservation Organizations) appreciate the opportunity to submit these comments on the Final Environmental Impact Statement Update of the Water Control Manual for the Apalachicola-Chattahoochee-Flint River Basin in Alabama, Florida, and Georgia and a Water Supply Storage Assessment (December 2016) (the "FEIS").

The Conservation Organizations strongly oppose the Proposed Action Alternative in the FEIS, and urge the U.S. Army Corps of Engineers to develop and select an alternative that mimics natural flows to the Chattahoochee and Apalachicola Rivers to the maximum extent practicable.

The National Wildlife Federation (NWF) is the nation's largest conservation education and advocacy organization. NWF has almost six million members and supporters and conservation affiliate organizations in forty-nine states and territories. NWF has a long history of advocating for the protection and restoration of the Apalachicola River, Apalachicola Floodplain, and Apalachicola Bay and the entire Gulf of Mexico. NWF also has a long history of working to modernize federal water resources planning to protect the nation's coasts, rivers, wetlands and floodplains, and the fish and wildlife that depend on those vital resources.

The Florida Wildlife Federation (FWF), a non-profit corporation established in 1936, has approximately 13,000 members and 60,000 supporters statewide. FWF is affiliated with the National Wildlife Federation. FWF has long supported environmental sustainability and conservation in Florida by education, advocacy and litigation. The Apalachicola River and Bay system has been the focus of FWF

efforts over the course of many years, as this region of the state is one of the most biologically rich in the entire nation. Moreover, the River and Bay play a critical role in the overall health of the Gulf of Mexico. FWF has previously worked with the U.S. Army Corps of Engineers and relevant state agencies to restore the Apalachicola to the betterment of both the economy and ecology of this unique area.

Apalachicola Riverkeeper is a 501c3 membership-supported non-profit corporation established in 1998 and licensed by the Waterkeeper Alliance in 1999. The mission of Apalachicola Riverkeeper is to *provide stewardship and advocacy for the protection of the Apalachicola River and Bay, its tributaries and watersheds, in order to improve and maintain its environmental integrity and to preserve the natural, scenic, recreational, and commercial fishing character of these waterways*. Headquartered on the Bay at the mouth of the Apalachicola River, Apalachicola Riverkeeper's 1500 supporting members and their families include those who live within the Apalachicola River Basin and visitors from across the country and the world who visit this premiere natural resource regularly. Apalachicola Riverkeeper is committed to working with the U.S. Army Corps of Engineers and other stakeholders to develop reasonable, equitable and sustainable uses of the water resources of the Apalachicola-Chattahoochee-Flint river system.

General Comments

The Conservation Organizations strongly oppose the Proposed Action Alternative (PAA) in the FEIS and urge the U.S. Army Corps of Engineers (Corps) to abandon the PAA and replace it with an alternative that mimics natural flows to the Chattahoochee and Apalachicola Rivers to the maximum extent practicable. Adoption of the PAA would make the already dire conditions in the Apalachicola River, floodplain, and bay even worse; and the FEIS fails to address the significant ecological and economic implications of the PAA on these vitally important resources.

The Apalachicola River and its floodplain form an incredibly rich and diverse system of exceptional ecological importance. More than 131 species of fresh and estuarine fish live in the Apalachicola River, more than any other river in Florida. More than 50 species of mammals, including the Florida black bear and the endangered West Indian Manatee are found in the Apalachicola drainage basin. More than 40 species of amphibians and 80 species of reptiles live within the Apalachicola River basin, the highest diversity of amphibians and reptiles in the United States and Canada. More than 1,300 species of plants, including 103 that are threatened or endangered, are also found in the Apalachicola drainage basin. Sufficient and properly timed freshwater flows are critical for this rich array of species and for maintaining the estimated $5 billion in free services provided by the Apalachicola ecosystem, including clean water, flood protection, and fish and wildlife habitat.

The Apalachicola River is the lifeblood of the Apalachicola Bay, an estuary of major ecological and economic importance to the eastern Gulf of Mexico. Sufficient freshwater flows are essential for maintaining the salinity regimes needed to sustain an economically viable oyster harvest from the Apalachicola Bay, and for sustaining many other commercially viable fisheries. Apalachicola Bay provides 90 percent of Florida's oysters and over 13 percent of the total oyster production in the United States. It is also a major nursery for shrimp, blue crabs, and many species of fish including striped bass, sturgeon, grouper, snapper, red fish, speckled trout, and flounder. The commercial and recreational fisheries in the Gulf of Mexico generate over $5 billion dollars in sales revenue and support over 50,000 jobs in West Florida. The harvest of shrimp, crab, fish, and oysters is the driving force in the economy of Franklin County, Florida.

Despite the importance of this exceptional ecosystem, the ACF system has been managed for decades in a way that has starved the system of the freshwater flows it needs to thrive. This mismanagement has pushed the Apalachicola River, floodplain, and bay to the brink of collapse. Lack of sufficient flows have led to the loss of more than 4.3 million floodplain trees and harmed the tourism, recreation, and other businesses that rely on a healthy Apalachicola River. Lack of sufficient flows also led to the collapse of the bay's rich oyster population, a devastating loss of income for the region, and a 2013 federal declaration of a commercial fishery failure for the Apalachicola Bay oyster fishery.

Florida's Deputy Secretary of the Department of Environmental Protection has testified that "the ecosystem and, indeed, the very way of life for generations of Floridians will be devastated" if flow patterns that mimic the historic flow regime are not restored for the Apalachicola River.[1] However, instead of working to alleviate this dire situation, the PAA would impose even more restrictions on flows reaching the Apalachicola.

The PAA would hold significantly more water back for water supply purposes—the PAA would **increase total water withdrawals by 216 million gallons a day** over current operations. This is a **more than 53.3 percent** increase in water withdrawals (and a 15 percent increase over the already devastating withdrawals proposed in the DEIS PAA). The PAA would also initiate drought restrictions earlier and more frequently, and severely restrict flows to the Apalachicola River more often and for longer periods of time. This is neither sustainable nor acceptable as it will make the ecological conditions even worse in the Apalachicola River, floodplain, and bay.

In addition, the FEIS fails in almost every way possible to comply with the important, longstanding requirements of the National Environmental Policy Act (NEPA). The FEIS, like the DEIS, uses an inappropriate statement of purpose and need; fails to properly address authorized purposes; fails to evaluate a full range of reasonable alternatives; fails to properly define and analyze baseline conditions; lacks scientific integrity; profoundly understates adverse impacts; fails to include mitigation; and is at odds with longstanding federal policy. These problems were discussed in detail in the Conservation Organization comments on the DEIS, but they were not addressed or corrected in the FEIS.

Importantly, the FEIS fails to adequately address the issues raised by the U.S. Fish and Wildlife Service in the Final Fish and Wildlife Coordination Act Report, including the Service's strong recommendations for utilizing a different approach for analyzing alternatives and for developing alternatives that would reduce the adverse environmental impacts without jeopardizing other authorized purposes. The FEIS also fails to address any of the Endangered Species Act Section 7 discretionary conservation recommendations included in the 2016 Biological Opinion and explicitly states that the PAA does **not** implement any of these measures. FEIS at 6-332. The Conservation Organizations note that the Fish and Wildlife Service has repeatedly offered to work with the Corps to address these many failings.

The Conservation Organizations respectfully urge the Corps to go back to the drawing board and develop and select an alternative that: (1) mimics the amount, timing, and variability of natural flows to the Chattahoochee and Apalachicola Rivers, to the maximum extent practicable; (2) restores river reaches where bed degradation or other changes are causing lower water levels; and (3) makes use of tools such as a drought indicator index, real-time weather forecasting, and/or satellite imagery to adapt

[1] Testimony of Jonathan P. Steverson, Executive Director of the Northwest Florida Water Management District, "Effects of Water Flows on Apalachicola Bay: Short and Long Term Perspectives", United States Senate Committee on Commerce, Science and Transportation Field Hearing, August 13, 2013 at 4.

operations to actual weather conditions. Such an alternative is essential for restoring and maintaining the health of the Chattahoochee River, the Apalachicola River, the Apalachicola River Floodplain, and the Apalachicola Bay.

The Corps should work closely with the U.S. Fish and Wildlife Service and other resource agencies to develop this new alternative. As its first step, the Corps should use the best available science to determine the amount, timing, and variability of flows (natural low, natural moderate, and natural high flows) needed to maintain a healthy and vibrant Apalachicola River, floodplain, and bay. The Corps should then conduct a meaningful assessment of the impacts of modifications to that ecologically sound flow regime. This information is essential for making a reasoned choice among alternatives so must be obtain by the Corps unless the costs of doing so would be "exorbitant." 40 C.F.R. § 1502.22.

As part of this assessment, the Corps should utilize LIDAR (Light Detection and Ranging) and satellite data to assist in meaningfully evaluating the depth and extent of inundation of the Apalachicola River floodplain under various flow regimes. As the Corps is aware, LIDAR data for the floodplain can be obtained from the State of Florida.[2] The Corps should also correct and improve the Unimpaired Flow Data Set (UIF) used for the analysis as the current UIF is known to be inaccurate at extreme high and low flows and to create inconsistent and inaccurate results in the Corps' modeling.

The Corps should then adopt a flow regime and additional measures that will ensure: (1) the appropriate timing, depth, and extent of inundation of the floodplain; and (2) appropriate salinity concentrations in the Apalachicola Bay (which is part of the region of influence of the ACF system). Ensuring appropriate floodplain inundation is critical because inundation is the key driver of the Apalachicola River Floodplain's: wetland hydrology; plant species diversity; and fish and wildlife access, spawning, breeding, rearing, feeding and resting cycles.[3] Inundation is also critical for ensuring the transport of vital nutrients and detritus from the floodplain to the Apalachicola Bay. DEIS at 2-200 ("Nutrients and detritus carried from the floodplain by river floods contribute significantly to the relatively high productivity of Apalachicola Bay.") Ensuring appropriate flows to maintain salinity levels is essential because:

> "River flow is the primary determinant of salinity concentrations in the estuary . . . . Salinity is one of the major limiting factors in oyster production. Prolonged high salinities due to drought or other factors affect freshwater flow and allow for increased [oyster] predation . . . and decreased food availability."

DEIS at 2-216.

Because the return of a more natural flow regime to the system is paramount to restoration of the floodplain and bay, the selected alternative should also further facilitate floodplain inundation by correcting the significant structural changes to the Apalachicola River caused by past ACF system operations and maintenance activities. For example:

[2] U.S. Fish and Wildlife Service Draft Fish and Wildlife Coordination Act Report, July 31, 2015 at 17, DEIS Appendix J; 2010 Planning Aid Letter at 16.

[3] U.S. Fish and Wildlife Service, Planning Aid Letter (April 2, 2010) at 11, 12, 16, DEIS Appendix J ("Assessing the extent of floodplain inundation will be a critical component of the alternatives analysis assessment.")

- Restoring or minimizing the bed degradation below and downstream of Jim Woodruff Lock and Dam would increase water levels in this stretch of the river and facilitate appropriate inundation of the floodplain. As the FEIS recognizes, "[s]ince the construction of Jim Woodruff Lock and Dam, the Apalachicola River bed has degraded by about 5 ft within 1 mi below the dam and by about 2 ft at Blountstown . . . ." FEIS at 2-171.

- Rerouting the Apalachicola River through Battle Bend, the river's natural channel, could provide a key opportunity to provide important ecological benefits by restoring fluvial processes and improving flow in the floodplain. Preliminary estimates suggest that the floodplain flows could be improved, increasing flow through the sloughs during low flow months.

- Manually removing sediment plugs that cut off flow into and through sloughs that convey water from the mainstem of the Apalachicola River to its floodplain would improve floodplain inundation by increasing the flow of water into the complex slough network that extends for many miles through the floodplain. Using very light equipment or manual removal methods would minimize adverse impacts of the sediment plug removal and avoid the substantial impacts that would result from use of large dredging equipment and barges.

These projects could properly be carried out either as a component of the Corps' proposed water control manual or as mitigation for damage caused by the continued operation of the ACF system. The Corps could also work with and fund other federal, state, and local stakeholders to carry out these activities. Additional Congressional authorization would not be required for such activities.

Detailed Comments

The FEIS, like the DEIS, fails to comply with the important, longstanding requirements of the National Environmental Policy Act (NEPA). The FEIS, like the DEIS, selects a PAA that will lead to further significant declines in the ecological health of the Apalachicola ecosystem and to the economic well-being of the families and communities that rely on this vital resource. The Conservation Organizations urge the Corps to correct the many failings in the FEIS and release a new draft environmental impact statement for public review and comment.

As discussed in more detail above, the Conservation Organizations also urge the Corps to develop and select an alternative that: (1) mimics the amount, timing, and variability of natural flows to the Chattahoochee and Apalachicola Rivers, to the maximum extent practicable; (2) restores river reaches where bed degradation or other changes are causing lower water levels; and (3) makes use of tools such as a drought indicator index, real-time weather forecasting, and/or satellite imagery to adapt operations to actual weather conditions.

A. The PAA Will Make Ecological Conditions Worse and Must be Rejected

The Conservation Organizations strongly oppose the PAA because it will make the ecological conditions even worse in the Apalachicola River, floodplain, and bay.[4] The PAA would hold significantly more water back for Georgia water supply, initiate drought restrictions earlier and more frequently, and severely restrict flows to the Apalachicola River more often and for longer periods of time.

[4] The PAA would also cause additional harm by reducing minimum flows in Peachtree Creek in certain situations.

The FEIS ignores the significant degradation that the PAA will cause to the ecological functions and habitats of the Apalachicola River, floodplain, and bay by, among other things, utilizing an inappropriate baseline and failing to meaningfully evaluate impacts, including cumulative impacts. The degradation that will be caused by the PAA is neither sustainable nor acceptable.

The PAA would **increase total water supply withdrawals by 216 million gallons a day** over current operations. This is a **more than 53.3 percent** increase in water withdrawals. Notably, the PAA approves 28 mgd **more** than the withdrawals proposed under the DEIS PAA, which is a 15 percent increase over the already devastating withdrawals proposed in the DEIS PAA. The FEIS increases the total water withdrawals over the levels recommended in the DEIS despite the fact that Georgia has both decreased its water supply request and determined that the Glades Reservoir is no longer needed for water supply purposes. The FEIS does not adequately explain why this increase is necessary.

The FEIS provides the following comparison between the PAA and the "no action" alternative (NAA):

- Under the PAA drought operations would be **triggered 21 times**, compared to just 3 times under the NAA. This is a **600 percent increase** in the triggering of drought operations.
- Under the PAA drought operations would be **in effect 17.6 percent** of the time – a total of 12.8 years over the period of record—compared to just 6.7 percent of the time under the NAA. This is a **163 percent increase** in the percentage of time that drought operations will be in effect.
- Under the PAA, extreme drought operations would be **triggered 1 time**, compared with zero times for the NAA. These operations would reduce flows in the Apalachicola River to **4,500 cfs for 0.3 percent of the time,** compared to zero times for the NAA.
- Under the PAA, **drought operations would be triggered earlier** (when composite conservation storage falls into zone 3), as compared to the later trigger in the NAA (when composite storage reaches the lower level of zone 4).

DEIS at 6-100; 6-102 to 6-103.

These comparisons clearly show that the PAA will put the system into drought operations much more frequently and for significantly longer periods of time.[5] **The PAA would increase the triggering of drought operations by 600 percent, and almost triple the amount of time that drought operations will be in effect.** This in turn will cause additional significant harm to a system that is already starved of critically-needed freshwater flows and nutrients. The damage will be amplified by the drought operations being triggered earlier during key periods for breeding and reproduction when flows are most critical. Indeed, the impacts could be catastrophic.

[5] Contrary to statements in the Corps' responses to public comments, the Conservation Organizations fully understand the difference between a system being in drought, and a system being managed under drought operations. *See* FEIS at C-981 (According to the Corps, "[t]here appears to be a misunderstanding regarding "drought" as compared to reservoir "drought operations." Droughts are a function of hydrologic conditions across the basin, not how the USACE ACF Basin projects are managed.) Moreover, the Conservation Organizations have made very clear that the analysis in this section of our comments applies to "drought operations." The Conservation Organizations strongly disagree with the Corps' contention that drought operations—which severely restrict flows to the Apalachicola River—will not have significant adverse impacts to the Apalachicola River, floodplain, and bay.

The Conservation Organizations note that despite the fact that more water is being held back for water supply purposes and despite the fact that there are no changes in the action zones, the FEIS somehow concludes that the PAA will have slightly fewer impacts than the DEIS PAA. *See* DEIS at ES-27, 5-24, 5-20 to 5-30 (under the DEIS PAA, drought operations would be triggered 22 times; drought operations would be in effect 18.1 percent of the time, extreme drought operations would be triggered 2 times). The FEIS fails to provide an explanation or justification for this apparent anomaly.

As discussed in detail throughout Appendix A to these comments, the FEIS vastly understates the adverse impacts of the PAA on the Apalachicola River, floodplain, and bay. For example, despite the significant changes in the timing, number and duration of drought operations, and the extended time period covered by the PAA, the FEIS like the DEIS concludes that the PAA would have no (or negligible) impact on the Apalachicola River and Bay. For example, the FEIS concludes:

> "The PAA would not appreciably alter flow conditions in the Apalachicola River downstream of Jim Woodruff Lock and Dam and continuing to Apalachicola Bay compared to the NAA (see section 6.1.1.2.5). When flow in the river drops below 5,000 cfs during Drought Zone operations under the PAA, vegetation and wildlife along the Apalachicola River would be expected to experience short-term slightly adverse conditions. Drought Zone operations would occur infrequently and would generally be of relatively short duration (i.e., a few weeks or less). The vegetation and wildlife along the Apalachicola River would be able to endure the conditions with no measureable changes to vegetative community composition or wildlife populations. Thus, implementing the PAA would be expected to have the same effects on terrestrial vegetative communities and wildlife along the Apalachicola River as the NAA."

FEIS at 6-303. *See* also FEIS at 6-313 to 6-314 (discharge rates and floodplain connectivity are "similar across alternatives" and "differences are slight between each of the alternatives and the NAA"); 6-324 ("It is expected that salinity modeling results for the PAA would be similar to those for the 2015 proposed action" which indicated "similar salinity levels in Apalachicola Bay between the NAA and the PAA from the draft EIS."); 6-371 ("differences in freshwater inflow into the Apalachicola Bay among the alternatives would not be expected"). The FEIS also contends that even though drought operations "would occur more frequently under the PAA . . . those operations would likely prevent more severe drought conditions from occurring than under the NAA." FEIS at ES-23.

These FEIS conclusions are not supported by any evidence and indeed are directly contradicted by the Corps' own comparisons between the PAA and the NAA which are discussed at page 6 of these comments.[6] These FEIS conclusions must also be rejected because, as discussed in Section B of these comments, the FEIS fails to meaningfully evaluate the impacts of the PAA.

[6] The DEIS drew similar unsupported conclusions. For example, the DEIS stated that the DEIS PAA would have no impact – i.e., cause "no change" – on the Apalachicola Rivers' vegetation and wildlife, riverine fish and aquatic resources, and estuarine fish and aquatic resources. DEIS at 6-168, 6-173, and 6-185. The DEIS concluded that despite increased drought operations, the PAA will very slightly increase the floodplain connectivity on the Apalachicola. DEIS at 6-179. And the DEIS also concluded that that even though drought operations "would occur more frequently under the PAA" the PAA "would likely prevent more severe drought conditions from occurring than under the NAA." DEIS ES-19.

B. The FEIS Fails to Adequately Address Extensive and Significant Concerns Raised in Comments on the DEIS

The FEIS, like the DEIS, fails to comply with NEPA because it uses an inappropriate statement of purpose and need; fails to properly address authorized purposes; fails to evaluate a full range of reasonable alternatives; fails to properly define and analyze baseline conditions; lacks scientific integrity; profoundly understates adverse impacts; fails to include mitigation; and is at odds with longstanding federal policy. As a result, the FEIS cannot—and does not–adequately evaluate the impacts of the PAA on the environment, including notably, the ecologically significant Apalachicola River, floodplain, and bay.

These problems, and recommended solutions to these problems, were discussed in detail in the 2016 Conservation Organization comments on the DEIS.[7] However, the FEIS fails to meaningfully address or correct these many problems. As a result, the 2016 Conservation Organization comments remain fully applicable to the FEIS and are incorporated by reference into these comments as though fully set forth herein. A copy of the 2016 Conservation Organization comments are attached at Appendix A to these comments.

The FEIS also fails to adequately address the issues raised by the U.S. Fish and Wildlife Service in the Final Fish and Wildlife Coordination Act Report, including the Service's strong recommendations for utilizing a different approach for analyzing alternatives and for developing alternatives that would reduce the adverse environmental impacts without jeopardizing other authorized purposes. The Conservation Organizations note that the Fish and Wildlife Service has repeatedly offered to work with the Corps to address these many failings.

The FEIS also fails to evaluate any of the Endangered Species Act Section 7 discretionary conservation recommendations included in the 2016 Biological Opinion, and the FEIS explicitly states that the PAA does **not** implement any of these measures. FEIS at 6-332. While these measures are discretionary in the context of ensuring the avoidance of jeopardy to listed species, these measures are nonetheless vitally important and should be included in the PAA. At an absolute minimum, these measures should be fully evaluated in the FEIS.

The Conservation Organizations are also extremely concerned about the ability of the Corps to comply with the 2016 Biological Opinion's directives on reinitiation of Endangered Species Act consultation. The 2016 Biological Opinion "was issued with the understanding" that pursuant to Corps policy, the Water Control Manual will be reviewed every 5 years, and that as part of those reviews, the Biological Opinion would also be reviewed or consultation would be reinitiated. FEIS at ES-42. However, as evidenced by the history of the development of this FEIS and Water Control Manual and the Corps' longstanding lack of compliance with its internal reservoir operation review requirements,[8] the Corps is unlikely to be in a position to review the Water Control Manual every 5 years, leaving the critical element of reinitating consultation in limbo.

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[7] Comments of the National Wildlife Federation, Florida Wildlife Federation, Apalachicola Riverkeeper, and 1000 Friends of Florida on the October 2015 Draft Environmental Impact Statement Update of the Water Control Manual for the Apalachicola-Chattahoochee-Flint River Basin in Alabama, Florida, and Georgia and a Water Supply Storage Assessment, dated January 29, 2016.

[8] *See* Government Accountability Office, *Army Corps of Engineers Additional Steps Needed for Review and Revision of Water Control Manuals*, GAO 16-685 (September 2016). A copy of this report is attached at Appendix B to these comments.

C. The FEIS Fails to Evaluate the Highly Reasonable Alternative Recommended by the Conservation Organizations and Fails to Meaningfully Evaluate the Sustainable Water Management Plan Alternative

The FEIS fails to evaluate the highly reasonable alternative recommended by the Conservation Organizations in our 2016 Comments on the Draft EIS (and recommended again in these comments). To the contrary, the FEIS dismisses this highly reasonable alternative with just five sentences that do not address the alternative's merits. The Corps' entire response to the alternative recommended by the Conservation Organizations is as follows:

> "The PAA was selected to maintain the health of the ACF Basin within USACE's authorities. The scope of USACE's authorities to manage projects in the ACF Basin limits the Agency's ability to mimic natural flows to the Chattahoochee and Apalachicola rivers. Its authorities include the responsibility to produce peaking hydropower, operate for flood damage reduction, and release minimum flows from Jim Woodruff Dam for threatened and endangered species to comply with the terms and conditions in the biological opinion. This EIS compares the PAA to current operations (represented by the NAA). The NAA does not represent conditions before construction of Jim Woodruff Dam, therefore, mitigation to restore the river's natural channel would not apply in this action.
>
> USACE water management staff work closely with meteorologists and consider the drought indicator index, realtime weather forecasting, and/or satellite imagery to adapt real-time operations to actual weather conditions."

FEIS at C-979.

For the reasons described in detail in Appendix A to these comments, the FEIS must fully analyze this highly reasonable alternative.

The FEIS also fails to meaningfully evaluate the Sustainable Water Management Plan Alternative Recommended by the ACF Stakeholders. Instead the FEIS summarily concludes that:

> "As evaluated by USACE, the ACFS SWMP would violate several of the screening criteria for the Master WCM update process. Additionally, due to the lack of technical details and assumptions associated with the modeling in support of the ACFS SWMP, it is impossible to determine if the ACFS SWMP would meet the purpose and need of this EIS, the degree to which authorized project purposes would be met, or whether the USACE responsibilities under the ESA would be met. Raising the winter pool at West Point Lake is not consistent with the screening criteria that any alternative considered by USACE should not increase flood risk above the current level. For these reasons, the ACFS SWMP was not considered any further."

FEIS at 4-44.

This highly reasonable alternative should be fully examined in the FEIS. The Corps may not refuse to fully evaluate the Sustainable Water Management Plan Alternative because the ACF Stakeholders did not provide the Corps with technical details and modeling data. It is the job of the Corps—not the public—to conduct a legally adequate NEPA analysis, and the Corps must analyze all reasonable

alternatives to satisfy NEPA. The public is not required to provide detailed technical information for the Corps' consideration. It is enough that the public put the Corps on notice that alternatives exist, as the courts have consistently ruled:

> "'Specifics' are not required. . . . [T]he purpose of public participation regulations is simply 'to provide notice' to the agency, not to 'present technical or precise scientific or legal challenges to specific provisions' of the document in question. . . . Moreover, NEPA requires the agency to try on its own to develop alternatives that will 'mitigate the adverse environmental consequences' of a proposed project."[9]

Courts have likewise consistently ruled that compliance with NEPA "is a primary duty of every federal agency; fulfillment of this vital responsibility should not depend on the vigilance and limited resources of [the public]."[10]

D. The FEIS Underestimates Impacts by Utilizing Inconsistent and Unjustified Return Rates

Numerous commenters on the DEIS raised concerns with the Corps' assumptions regarding return rates for water withdrawals, noting that those return rates were both unrealistic and unenforceable. *E.g.*, FEIS at 1-15 ("Alabama is concerned that the treated wastewater return rates assumption associated with proposed Georgia withdrawals are unrealistic and the ability of USACE to enforce the assumed level of returns."), FEIS C-309, FEIS C-153, FEIS C-569. These problems also plague the FEIS. The FEIS' overestimate of return rates results in a distorted and flawed assessment of the impacts of the more than 54 percent increase in water withdrawals approved by the PAA.

The FEIS states that "USACE used the following water supply withdrawal assumptions to evaluate and compare the water management alternatives for ACF system operations": a 50-percent return rate to Lake Lanier and an 82-percent return rate to the Chattahoochee River. FEIS at ES-16. However, Table ES-4 demonstrates that the FEIS actually uses a wide variety of return rates to evaluate different water supply options. FEIS at ES-21 to ES-22. Utilization of different return rates precludes an accurate comparison of impacts across the various water supply options.

In addition, the return rates used to evaluate the PAA appear to be significantly higher than either the actual return rates, or the return rate "assumption" established for the Chattahoochee River:

- Evaluation of the PAA appears to have used a 43-percent return rate for Lake Lanier. FEIS at ES-22. However, the "current return rate of water withdrawn from Lake Lanier is 29 percent." FEIS at ES-20. While the FEIS states that "overall return rate assumed in Georgia's 2015 request was 43 percent based on additional information provided by the Metropolitan North Georgia Water

[9] *Dubois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1291 (1st Cir. 1996) quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989).

[10] *City of Carmel-by-the-Sea v. U.S. Dept. of Transportation*, 123 F.3d 1142, 1161 (9th Cir. 1997) quoting *City of Davis v. Coleman*, 521 F.2d 661, 671 (9th Cir. 1975). *See also*, *Center for Biological Diversity v. U.S. Forest Service*, 349 F.3d1157, 1166 (9th Cir. 2003) ("The procedures prescribed both in NEPA and the implementing regulations are to be strictly interpreted 'to the fullest extent possible' in accord with the policies embodied in the Act ... 'Grudging, pro forma compliance will not do.'") (citations omitted).

Planning District" that overall return rate would appear to be a target that will not be achieved until 2040.[11] FEIS at ES-20.

- Evaluation of the PAA appears to have used a 95 percent return rate for the Chattahoochee River. FEIS at ES-22. However, the actual rate of return to the Chattahoochee has never exceeded 79 percent and has typically been much lower. For example, in 2000, the return rate was 56 percent, in 2007 the return rate was 61 percent, and in 2008 the return rate was 68 percent. FEIS at 2-103. According to the FEIS, Georgia's 2015 water supply request does predict a 95 percent return rate, but that rate would not be achieved until 2040: "The State of Georgia provided updated water supply demand projections in December 2015 that included revised return rates. The return rate from Metro Atlanta wastewater utilities in 2040 is expected to be 95 percent." FEIS C-569.

- The Chattahoochee River return rates also appear to be significantly overstated due to an incorrect assumption regarding interbasin transfers. The FEIS states that the "return rates used for Metro Atlanta include interbasin transfer so that discharges from wastewater treatment plants exceed the amount of water withdrawn." FEIS at C-309. However, the FEIS appears to contradict this conclusion through its acknowledgement of "large net transfer from the Chattahoochee River Basin to the Ocmulgee River Basin" as a result of "water withdrawals and returns in Gwinnett and DeKalb counties. FEIS at 2-103. Lake Lanier is the primary water supply source for Gwinnett County and the Chattahoochee River is the primary water supply source for DeKalb County. FEIS at 2-103. According to the FEIS, "a disproportionate share of the water supply withdrawals from the Chattahoochee River Basin for those counties is discharged into the Ocmulgee River Basin as treated wastewater." FEIS at 2-103.

The return rates used in the FEIS are also highly problematic because they do not appear to be based on the actual return rates at the withdrawal locations at Lake Lanier or the Chattahoochee River. Instead, the rates used appear to be based on averages across large segments of the basin. Such averages may have little to no bearing on the actual return rates for the withdrawals at issue in the FEIS.

Use of these inappropriately high and unsupported return rates would translate into inaccurate projections of reservoir levels and river flows that will be much higher than they actually are.

Moreover, even if it were somehow appropriate to use never-before-achieved rates of return projected in Georgia's 2015 water supply demand projections, it would not be appropriate to apply those higher rates of returns for the entire period of record because Georgia does not expect to achieve those returns until 2040—**23 years from now**:

> "The 94-percent river return rate was part of Georgia's January 2013 water supply request. That value included the assumption that wastewater treatment capacities would be expanded by the year 2035. . . . The State of Georgia provided updated water supply demand projections in December 2015 that included revised return rates. The return rate from Metro Atlanta wastewater utilities in 2040 is expected to be 95 percent."

FEIS at C-569.

[11] Despite diligent efforts, the Conservation Organizations have not been able to locate the actual projected return rates in Georgia's 2015 request.

Over reliance on rates of return, including inappropriately high rates of return, is also problematic because Georgia may have the authority to allocate return flows in a way that would limit their use. According to comments submitted on the DEIS by Atlanta Water Supply Providers:

> "In 2013, the Department of Natural Resources of the State of Georgia promulgated a rule to reaffirm the authority of the State to allocate the right to store and utilize return flows:
>
> > 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 [of the Environmental Protection Division] 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.
>
> The State has now exercised this authority by allocating return flows to Allatoona Lake to the Cobb County-Marietta Water Authority. We anticipate a similar allocation will be made when storage contracts are executed for Lake Lanier. Any Army policy that refuses to recognize this allocation would exceed the Army's authority, render these investments wasted, and create a windfall for users that have done nothing to return water to Lake Lanier."

FEIS at C-1312 to C-1313 (footnotes omitted).

Also highly problematic is the suggestion by the Atlanta Regional Commission that it intends to count high stormwater flows in its return flow measurements. Stormwater flows are, to a large degree, simply rainfall runoff. Including rainfall runoff in a return flow measurement would grossly overestimate the actual rate of return of water withdrawn from the Chattahoochee River. This would add to the significant problems created by the current method of calculating "basin inflow" used in the FEIS. This current method "grandfathers" in Georgia water consumption and results in the triggering of drought operations earlier than would otherwise occur if the measure of "basin inflow" properly accounted for the reduction of basin inflow due to consumptive uses and evaporation from federal and private reservoirs and farm ponds.

To adequately assess the impacts of water withdrawals on downstream users and ecosystems, it is imperative that the Corps establish an accurate rate of return that accounts for the timeliness of the return flows. The final Water Control Manual and PAA should also require that the water supply withdrawals comply with this critical rate of return metric to fully protect downstream users and ecosystems, including the Apalachicola River, floodplain, and bay.

E. The FEIS Fails to Meaningfully and Accurately Assess Cumulative Impacts

The many failings with the FEIS cumulative impact analysis are detailed in Appendix A to these comments. These failings prevent the FEIS from meaningfully evaluating the significance of the impacts of the PAA.

The extremely limited (four pages) FEIS cumulative impacts analysis, like the analysis in the DEIS,[12] includes just a single reference to the Apalachicola River, no reference to the Apalachicola River Floodplain, and only a passing reference to the Apalachicola Bay. According to the FEIS, there will be no cumulative impacts to the Apalachicola River ecosystem because the PAA will likely have only a negligible effect on that system:

> "Apalachicola Bay estuary faces a variety of anthropogenic pressures. Amid that pressure, even with variable system conditions, the estuary has generally remained a productive estuarine ecosystem. The PAA for update of the Master WCM would likely have negligible effect on the aquatic resources and ecological function of the Apalachicola Bay estuary. Review of HEC-ResSim model outputs for flow on the Apalachicola River at Chattahoochee and Blountstown indicate that the PAA would have little effect on the flow regime in the river at those locations compared to the NAA and, consequently, little effect on inflow to the Apalachicola Bay estuary compared to the NAA. Therefore, the PAA, or any of the other alternatives, would be expected to have a negligible incremental effect on the hydrodynamic regime, aquatic resources, and ecological function of the Apalachicola Bay estuary compared to the NAA. Any likely be inconsequential compared to the cumulative effects of anticipated sea level rise on physical and ecological conditions in the estuary." [13]

FEIS at ES-45 to ES-46.

Notably missing from this analysis is anything remotely close to a meaningful determination of whether the past degradation of the system combined with the PAA will significantly affect the ecological health and functioning of the Apalachicola River, floodplain, and bay. Indeed, the cumulative impacts analysis fails even to acknowledge or discuss any of the significant adverse impacts to the Apalachicola River, floodplain, and bay that have resulted from decades of the Corps' own construction, operation, and mismanagement of the system. *See* FEIS at 6-385 to 6-389. Instead, the FEIS provides only the most general information on past non-Corps activities in the ACF basin. And even as to those activities, the FEIS fails to provide any meaningful insight into, or analysis of, the implications of those activities when combined with the adverse impacts of the PAA.

Moreover, instead of recognizing the full extent of past damage and the certain additional damage that will be caused by the PAA, the cumulative impacts analysis incorrectly contends that the PAA would

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[12] *See* DEIS 6-208 to 6-212.

[13] These conclusions are essentially unchanged from those contained in the DEIS. DEIS at 6-211 ("the PAA, or any of the other alternatives, would be expected to have a negligible incremental effect on the hydrodynamic regime, aquatic resources, and ecological function of the Apalachicola Bay estuary compared to the NAA. Any negligible changes to hydrodynamic conditions in the bay that would occur under the PAA would most likely be inconsequential compared to the cumulative effects of anticipated sea level rise on physical and ecological conditions in the estuary.")

actually reduce future adverse impacts to the system by negating the need to construct new reservoirs. According to the FEIS, the PAA would in fact "negate the need to construct Glades Reservoir," however the state of Georgia had already determined that there was no need to construct Glades Reservoir before the Corps developed the FEIS PAA. FEIS at ES-45. Any suggestion that the PAA would reduce the need to construct other reservoirs is also not supported by the FEIS which concludes that additional reservoir construction in Georgia "would be highly speculative (i.e., not reasonably foreseeable for purposes of this cumulative effects analysis)" and that Alabama and Florida "have no known plans for water supply reservoir development in their portions of the ACF Basin." FEIS at 6-386.

The FEIS cumulative impacts analysis is dramatically oversimplified and generalized, incredibly incomplete, and incorrect. It does not—and cannot—satisfy the requirement to conduct a meaningful cumulative impacts assessment.

F. The FEIS Fails to Comply With, or Even Acknowledge, Federal Mitigation Requirements

The many failings with the FEIS mitigation analysis are detailed in Appendix A to these comments. At the most fundamental level, none of these problems can even begin to be rectified until the Corps meaningfully assesses the full extent of the harm to fish and wildlife as a result of the direct, indirect, and cumulative impacts of the project. Only then can the Corps properly analyze needed mitigation. As discussed throughout these comments (including in Appendix A), the DEIS abjectly fails to assess project impacts.

The FEIS also clearly misconstrues the mitigation requirements applicable to Corps civil works projects. The Water Resources Development Acts require that the Corps mitigate all losses to fish and wildlife created by a project unless the Secretary determines that the adverse impacts to fish and wildlife would be "negligible." 33 U.S.C. § 2283(d)(1). As a result, the Corps must mitigate adverse impacts to fish and wildlife from any activity that will cause more than negligible impacts—including impacts that the Corps classifies as "slightly adverse." However, the FEIS clearly ignores this requirement. *See* FEIS at ES-46 (concluding that specific compensatory mitigation measures are not required for impacts that "generally range from negligible to slightly adverse").

The FEIS also improperly concludes that no mitigation would be required for the "adverse water quality effects" created by "increased treated wastewater discharges" associated with the increased water withdrawals of the PAA. FEIS at ES-46. According to the Corps mitigation is not required because these impacts "would principally be associated with increased treated wastewater discharges to the river rather than USACE project operations." FEIS at ES-46. This is a completely flawed analysis as increased wastewater discharges are a direct (or at a minimum, an indirect) impact of the increased water withdrawals allowed under the PAA. As a result, compensatory mitigation is required for these acknowledged impacts.

Conclusion

The deeply flawed FEIS and PAA do nothing to address the decades-long mismanagement of the ACF system that has pushed the Apalachicola ecosystem to the brink. If finalized, the PAA will instead make these already dire conditions far worse in violation of the National Water Resources Planning Policy, and a host of Congressional directives that require and/or promote the protection and restoration of the nation's waters and fish and wildlife resources. *See*, e.g., Appendix A at 70-71. It is essential that the

Corps adopt a new approach to managing the ACF system that will improve the health of the Apalachicola River, floodplain, and bay and ensure the sustainability of the entire ACF system.

As discussed above, the Conservation Organizations strongly oppose the PAA and urge the Corps to develop and select an alternative that: (1) mimics the amount, timing, and variability of natural flows to the Chattahoochee and Apalachicola Rivers, to the maximum extent practicable; (2) restores river reaches where bed degradation or other changes are causing lower water levels; and (3) makes use of tools such as a drought indicator index, real-time weather forecasting, and/or satellite imagery to adapt operations to actual weather conditions. In developing this alternative, the Corps should address the many legal and scientific deficiencies discussed throughout these comments, including those discussed in Appendix A.

The Conservation Organizations urge the Corps to respond to, and fully adopt, the recommendations made throughout these comments.

Respectfully submitted,

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Attachments:
Appendix A—2016 Conservation Organization Comments on the DEIS
Appendix B—2016 GAO Report on Water Control Manual Review and Revisions

cc:
Lieutenant General Todd Semonite, USACE Commanding General and Chief of Engineers
Major General Donald Jackson, USACE Deputy Commanding General for Civil and Emergency Operations
Brigadier General C. David Turner, USACE Commander, South Atlantic Division
The Honorable Bill Nelson, United States Senator
The Honorable Marco Rubio, United States Senator