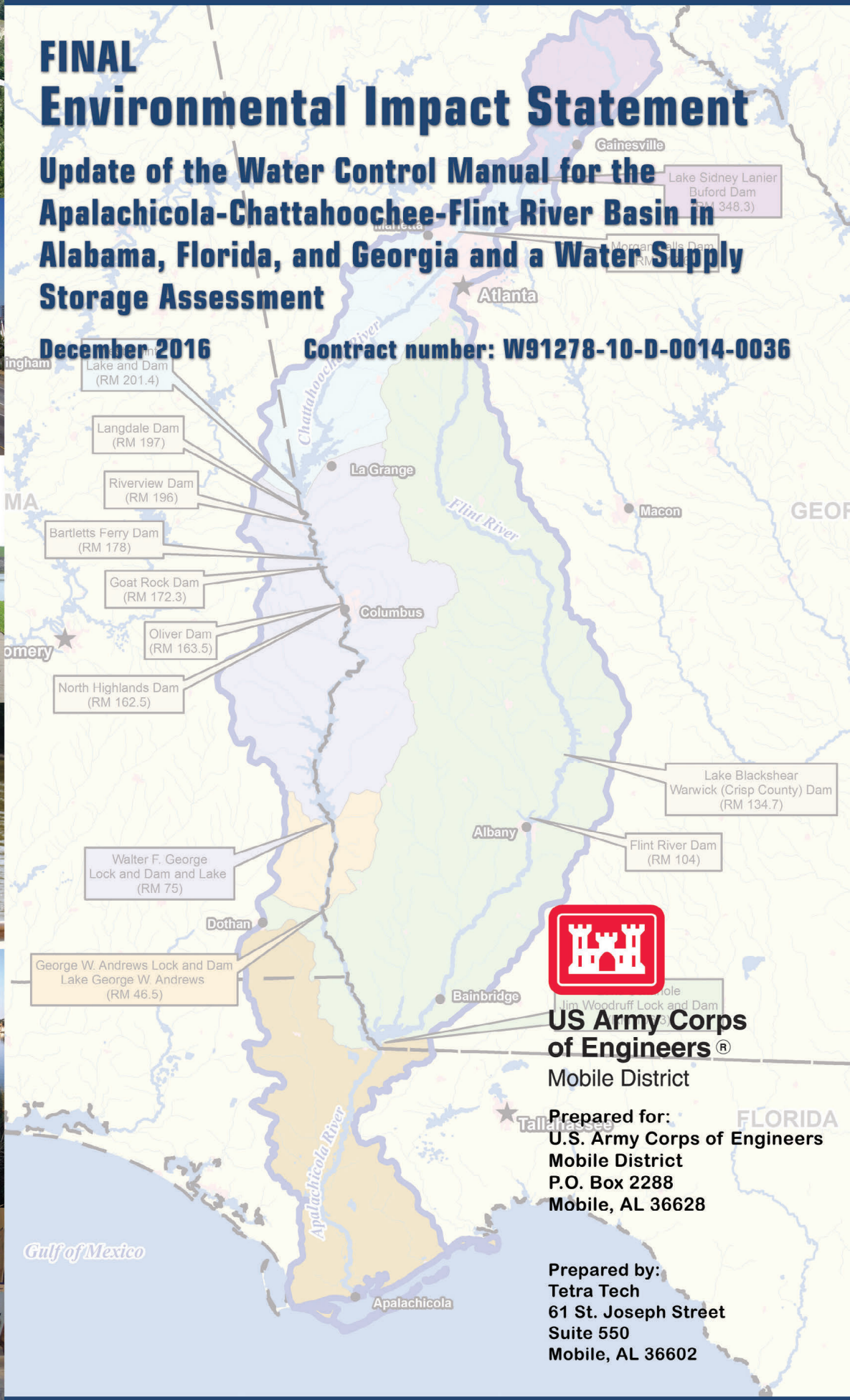
FINAL
Environmental Impact Statement

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 **Contract number: W91278-10-D-0014-0036**



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Response to ACF211 – US Dept of the Interior

United States Department of the Interior

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January 29, 2016

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Re: Comments and Recommendations on the Draft Environmental Impact Statement (DEIS) Department of Defense (DoD), U.S. Army Corps of Engineers (USACE) for Updated Water Control Manuals for the Apalachicola-Chattahoochee-Flint River Basin

Dear Colonel Chytka:

The U.S. Department of the Interior (Department) has reviewed the U.S. Army Corps of Engineers' (Corps) draft Water Control Manual (WCM) for the Apalachicola-Chattahoochee-Flint (ACF) River Basin projects, draft Water Supply Storage Assessment (WSSA), and draft Environmental Impact Statement (DEIS). We offer the following comments:

Over the past 27 years, the Corps' responsibility and capacity in meeting broadly ranging authorities and responsibilities across the entire ACF basin has received numerous challenges. During the basin's history, the purposes of Corps operations have advanced from flood water storage, navigation, hydropower generation, and providing local water supply to also including compliance with state and federal standards, fish & wildlife conservation, outdoor recreation, additional municipal water supplies, and drought storage during periods of limited natural inflow capacity to continue to meet the Corps' authorities. The Corps' integrated approach to managing reservoir operations from a basin-wide perspective has allowed multiple objectives to be achieved throughout the basin during periods requiring a balanced approach.

With this approach in mind, the Department is thankful for the Corps' willingness to make science-based adjustments to operations to address conservation concerns associated with listed species. Specifically, the Department commends the Corps for; (1) investments toward further research to understand the status and biology of listed and at-risk species (2) investments through FWCA to understand the impacts of Corps' operations on Apalachicola bay, and (3) continued

partnership and coordination that have led toward adjustments that allow for improved conservation, additional fish passage, and potential ESA section 7(a) 1 recovery opportunities.

Because of the many important water-dependent fish and wildlife resources in the ACF basin, including several species protected under the Endangered Species Act, diadromous fishes, a National Wildlife Refuge (Eufaula) associated with one of the ACF projects, and significant recreational fisheries, the Department has invested a great deal of time and effort in ACF water issues over the past 25 years. We regard our relationship with the Corps on these issues as a model of outstanding interagency coordination.

The Department's comments on the ACF DEIS are primarily focused on issues raised within the draft Fish & Wildlife Coordination Act Report (2015). Specifically, these comments are focused on concerns associated with; 1) process of formulating and evaluating alternatives, 2) ranking methodology used in evaluating alternatives, 3) performance measures selected to represent project purposes, and 4) limitations in evaluating basin-wide recreation, climate change forecast, water quality impacts, and impact to at-risk species that may become listed. Aside from these issues, the Department accepts the Corps preferred alternative, and continues to offer our assistance in developing improvements through an adaptive management process.

We offer the following comments to consider in advance of the Corps' final decisions to update the WCM and act upon the State of Georgia's request for a reallocation of storage in Lake Lanier to water supply.

GENERAL COMMENTS

The Corps states in the DEIS that the purpose and need of the proposed action is to determine how the Corps should operate the federal projects in the ACF Basin for their authorized purposes, in light of current conditions and applicable law, and to implement those operations through updated water control plans and manuals. These plans and manuals describe how the Corps will govern the magnitude, duration, frequency, timing, and rate of change of water releases from federal dams, which in turn influence the magnitude, duration, frequency, timing, and rate of change of river flows and reservoir levels in the service of project purposes. Authorized project purposes include flood risk management, hydropower, navigation, fish and wildlife conservation, recreation, water quality, and water supply.

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The DEIS describes the process the Corps used to formulate and evaluate alternatives that would accomplish the purpose and need for action, which resulted in a proposed water management alternative. The Corps then defined options for addressing Georgia's water supply request and evaluated these options with the proposed water management alternative, which resulted in a Proposed Action Alternative (PAA). The DEIS compares the environmental effects of the PAA with the No Action Alternative (NAA) to inform the Corps' WCM and WSSA decisions.

The Department has previously shared with the Corps, documented in our draft Fish and Wildlife Coordination Act (FWCA) report that is included in Appendix J of the DEIS, our view that the PAA has emerged from an alternatives formulation and evaluation process that was transparent, but perhaps too narrowly focused in terms of management options and overly simplistic. We are

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A. Updates were made to section 6.4 of the EIS that include a more robust discussion of metrics developed by the USFWS for the evaluation of fish and wildlife conservation between alternatives.

disappointed that the PAA does not incorporate several of the Department's operational recommendations to protect and enhance fish and wildlife resources, e.g., action-zone specific releases from Woodruff Dam that would support both seasonal navigation and floodplain spawning fishes in the Apalachicola River. We are similarly disappointed that the Corps has not used several metrics that the Department developed and provided to evaluate the performance of alternatives relative to the fish and wildlife conservation purpose. However, we acknowledge that it is the Corps' prerogative to adopt or reject recommendations from other agencies based on its authorities, regulations, policies, and informed judgment. With that in mind, the Department will continue to provide reports and results from ongoing modelling efforts that may be valuable toward final decisions.

We provide in the following specific comments our constructive criticism of the methods documented in the DEIS and our reasons for regarding the PAA as acceptable, but not the best outcome for fish and wildlife conservation in the basin. It is the Department's view that with additional time, a more complete effort would have been beneficial in evaluating fish and wildlife conservation and other purposes.

The Department recommends that the Corps revise the alternatives formulation and evaluation process documented in the DEIS to inform its decisions about the WCM update and WSSA. We are confident that by correcting the shortcomings of the DEIS methodology, the Corps can develop one or more alternatives that would substantially improve upon current operations for fish and wildlife conservation and other project purposes. We remain committed to working with the Corps to develop and support the best possible decision for the WCM update.

SPECIFIC COMMENTS

Our specific comments are organized by issues, listed below. For each, we define the issue, explain our concern, and provide a recommendation to remedy our concern. We cite examples from the DEIS that illustrate our concerns, and we do not limit these to fish and wildlife conservation, because our issues are problems with the methodology by which the Corps has developed the PAA considering all authorized project purposes. Our more comprehensive review of the PAA relative to fish and wildlife conservation is documented in our July, 2015, Draft FWCA Report, which is included within Volume 3, Appendix J, of the DEIS.

1. Two phases for formulating and evaluating alternatives.

Issue – The Corps' development of the PAA for the DEIS is two-phased process that is unusual for decision making under the National Environmental Policy Act (NEPA). In Phase 1, the Corps formulated and evaluated management alternatives using water supply withdrawals from Lake Lanier that are currently authorized (20 mgd) and using releases from Lanier that support water supply withdrawals of 277 mgd from the Chattahoochee River in Metro Atlanta. The alternative the Corps selected in Phase 1 was carried into Phase 2, in which the Corps evaluated additional direct withdrawals from Lake Lanier (up to 297 mgd) and releases to support additional withdrawals from the Chattahoochee River in Metro Atlanta (up to 408 mgd). Phase 2 also considered the influence of the proposed Glades Reservoir on water supply and of proposed water treatment

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B. The rationale for the two-phased formulation process is explained in section 4 of the draft EIS. The assumption limiting withdrawals from Lake Lanier to 20 mgd was made to facilitate the comparison of the performance of the water management alternatives using a consistent baseline condition relatively independent of the influence of the water supply withdrawals from Lake Lanier under the expired contracts. Additionally, that assumption aided in determining whether any proposed reallocation would seriously affect the purposes for which the project was authorized or that would involve major structural or operational changes. Required releases for water quality control were considered in phase 1 plan formulation. Detailed HEC-5 modeling, however, was not performed for the phase 1 water management alternatives.

infrastructure in Metro Atlanta on return rates associated with water supply withdrawals. The end result of Phase 2 is the PAA.

Concern – The water supply levels considered in Phase 1 are less than are currently served with Corps' operations of Lake Lanier. Current withdrawals from Lanier are about 128 mgd; i.e., 108 mgd greater than the currently authorized 20 mgd used in Phase 1. Although withdrawals from the Chattahoochee River in Metro Atlanta are about 277 mgd as considered in Phase 1, these are forecast to increase to 408 mgd under all options considered in Phase 2 except "no action." Some of the management alternatives considered under Phase 1 may perform better for various project purposes under the increased water supply scenarios of Phase 2 than the alternative selected in Phase 1. As noted in our general comments, the PAA does not improve upon the NAA for several categories of effects to fish and wildlife habitats and water quality. Further, water quality effects were not modeled and considered in Phase 1, so likewise, alternatives dismissed in Phase 1 may perform better for this project purpose under the increased demands scenarios than the PAA.

Recommendation – Restructure the alternatives formulation and evaluation process so that a range of alternatives are analyzed relative to all project purposes that change appreciably under the management options identified, and analyze each with and without the increased demands considered for the WSSA decision. Collapse Phase 2 into Phase 1, and iteratively formulate alternatives that move the decision towards the best balance among all project purposes. We provide further recommendations for formulating alternatives under Issue #4.

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2. Ranking methodology for selecting the proposed water management alternative.

Issue – To identify the water management alternative that best satisfied the objectives for the WCM update in Phase 1, the Corps interpreted flows and levels from HEC-ResSim modeling results using various performance measures assigned to project purposes. No performance measures for the flood control purpose were identified, because the Corps did not consider changes to reservoir guide curves that would alter the projects' performance for managing flood risk. The water quality purpose was evaluated only in Phase 2. For the remaining five project purposes evaluated in Phase 1, the Corps defined a total of 34 performance measures: 2 for hydropower, 2 for navigation, 6 for fish and wildlife conservation, 18 for recreation (6 at each of the three storage reservoirs), and 6 for water supply (see Issue #3 below). *First*, the Corps ranked the seven Phase 1 alternatives for each of these 34 measures from 1 (best performance) to 7 (worst performance). *Second*, the Corps summed the ranks for all measures for each project purpose, again on a 1 to 7 scale, to derive a composite ranking by project purpose. *In the third and final step* of Phase 1, the Corps summed the five purpose-specific composite ranks, again on a 1 to 7 scale, to derive a final ranking of the seven alternatives, selecting the one with the lowest sum of ranks as the proposed water management alternative.

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Concern – At each of the three iterations of the ranking process for the Phase 1 alternatives, the Corps discarded information by transforming all differences to an information-poor

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C. USACE used a straightforward and transparent ranking methodology. As a result of public and agency comments, USACE reviewed the methodology it used to rank performance of the water management alternatives and considered other methodologies. The Agency determined that other methodologies would not improve on the methodology employed. Section 4 of the final EIS has been revised to better explain the ranking process.

ordinal scale of 1 to 7. While this simplifies identifying a preferred alternative from the seven formulated, we are concerned that so much information is lost at each stage that the final selection is not the best outcome. The Corps' analysis of effects in Phase 2 confirms how the PAA would not improve upon the NAA relative to many categories of resource effects, as noted in our General Comments.

The first iteration of the Corps' ranking process discards the most information by converting all differences between alternatives to the 1-to-7 scale for each of the 34 performance measures. The performance difference between the best and worst alternative for some measures is relatively minor, e.g., the range for the two hydropower measures represents a 0.2% and a 1.3% difference, which the Corps acknowledges. The difference between the best and worst alternatives for other measures is relatively substantial, e.g., the best alternatives for the two navigation measures more than double the time that a 9- and 7-foot deep channel are available under the worst alternatives. Ranking the alternatives for each measure by this method renders substantial performance differences apparent with one measure equivalent to negligible performance differences with another.

The second iteration of the ranking process eliminates the possibility of evaluating the relative significance among performance measures, because each measure receives equal weight in computing a composite rank for each project purpose. This approach is appropriate if all measures represent distinct aspects of the project purpose that are roughly equivalent in importance/significance, which is not the case for the mix of 34 performance measures selected. For example, the 6 reservoir recreation measures for Lanier, West Point, and George (a total of 18 measures) tally the number of weeks and the percent of time that reservoir levels are below three threshold elevations: the initial impact level (IIL), the recreation impact level (RLL), and the water access limited level (WLL). The two WLL performance measures for each reservoir address the most severe effects, and the IIL measures address the least severe, but the ordinal ranking of all measures to compute a composite ranking makes the most and least severe measures equivalent. The composite ranking for the recreation purpose also makes all three reservoirs equivalent in the decision. Recreation visitation among these reservoirs is far from equivalent – Lanier receives more visits per year than West Point and George combined, which the Corps acknowledges, but does not reflect in the ranking process. Further, the pairs of performance measures for each of the three recreation impact levels are duplicative, one counting number of weeks below the level and the other percent of time below the threshold. In all cases, the pair of measures for a particular impact level identically rank the alternatives. Each is providing the same information twice to the composite rank computation, and the same composite ranking is achieved by discarding either member of the pair. Double-counting some measures in a composite ranking process that treats all measures equivalent dilutes the influence of the non-duplicative measures.

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The third iteration of the ranking process combines the multi-measure composite ranks for each project purpose (besides flood control and water quality) for a final Phase 1 ranking of the seven alternatives considered. This iteration gives equal weight to the five

project purposes addressed in Phase 1. As noted in our comments above on the first iteration of the ranking process, the performance measures for the hydropower purpose vary little between the alternatives considered, yet these differences are expressed on the same 1-to-7 scale as for the other purposes considered in Phase 1. For the water supply purpose, the DEIS notes that all alternatives analyzed would fully meet the water supply demands simulated (in both Phase 1 and Phase 2). The only variability among the alternatives for water supply is attributed to performance measures that instead measure various aspects of reservoir storage in Lanier over time (e.g., minimum elevation, percent of time operating in Zone 1, etc., see comments on Issue #3 below). Therefore, the minimal differences among the alternatives in hydropower performance, and no real differences in water supply performance, should largely remove these two purposes from further consideration in selecting an alternative, just as no changes to flood risk management operations and consequences removed flood control from further consideration. If a factor does not vary appreciably among the decision-maker's options, that factor becomes irrelevant to the decision.

Recommendation – Replace the mechanical ordinal ranking process of Phase 1, which treats all differences among the alternatives as equivalent within a performance measure, between performance measures, and between project purposes, with reasoned choices that recognize at each step of the analysis the variable significance and importance of the differences revealed. The Corps has clearly justified its choice to eliminate from further consideration changes in the degree to which it serves the flood risk management purpose of the projects, due to the potentially severe consequences of such changes. Consistent with this rationale, the flood control purpose does not figure at all in the ordinal ranking process of Phase 1. We fully appreciate that making choices among the remaining project purposes is more difficult, as they compete for use of the limited storage capacity beneath the reservoir guide curves that is not used for flood risk management. Some purposes are better served when retaining water in storage, and others when releasing it to augment river flow. We advise against addressing the difficulty of these tradeoff choices through an alternatives formulation and evaluation process that amplifies minor differences and reduces major differences to an ordinal scale corresponding to the number of alternatives examined.

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3. Performance measures selected for project purposes.

Issue – The updated WCM will govern how the Corps manages river flows and reservoir levels by its releases from the project dams; therefore, the outcome of the WCM is the regime of flows and levels over time under variable basin hydrologic conditions and water uses that the Corps doesn't control. To evaluate the performance of WCM alternatives, the DEIS defines numerous measures to interpret the regime of flows and levels simulated with the HEC-ResSim model for each alternative considered. These measures are intended to reflect whether a particular alternative performs better or worse compared to other alternatives, including the "no action" alternative, with respect to a particular authorized project purpose.

D

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D. USACE recognizes that the Department of the Interior's expertise lies in the area of fish and wildlife conservation. The measures evaluate project purpose performance and were created after extensive review of input provided by experts, both internal and external to USACE, in each project field. The measures allowed for direct comparison between alternatives.

Concern – Many of the measures used in Phase 1 of the alternatives evaluation do not directly measure performance relative to the project purpose for which they are identified and/or to how that purpose is served through water management actions. This is a significant concern in the context of the Corps' methodology for selecting the proposed water management alternative (Issue #2 above), because all performance measures figure equally into deriving a purpose-specific composite rank for each alternative, and then all purposes figure equally into the final Phase 1 ranking of alternatives. The Department has little or no expertise with project purposes besides fish and wildlife conservation. Our general concerns and recommendations with the performance measures for each project purpose are provided below only because the outcome of the WCM decision for all project purposes, including fish and wildlife conservation, is strongly influenced by both the nature and number of performance measures used in the Corps' methodology.

Hydropower – the two performance measures used, annual hydropower generation and annual weekday hydropower generation (both in megawatt-hours [MWh]), appear appropriate to the Department, but are largely duplicative, as the latter is invariably slightly more than 5/7ths of the former for all alternatives (range 73.2 – 74.2 percent). Using both confuses the composite ranking for this purpose. The market value of annual generation, which would account for the differential value of weekday and weekend generation, is likely a better measure than annual and weekday MWh separately. Further, based on our analysis, the difference between the best performing alternative and worst performing alternative was roughly 1%; therefore, a more appropriate metric may have been needed to better characterize the differences in performance.

Navigation – the percent of time that a 9-foot and a 7-foot channel is available from January through May in the Apalachicola River are appropriate navigation performance measures; however, the Corps computes this measure as the percent of years during which these channel depths are available for the full duration of the January–May navigation season. This computation is inconsistent with the guidance in the draft WCM to support navigation with releases from storage as necessary when operating in system composite storage Zones 1 and 2, and which indicates that "Water Management will provide the Navigation Section with a forecast of flows over the coming week and the Navigation Section will then issue navigation bulletins to project users" (App. A, pg. 7-21). Because the Corps proposes to operate for navigation in time frames less than the full January–May season, the navigation measures should gage performance on a finer time scale, either as percent of weeks or percent of months instead of percent of years.

D

Fish and Wildlife Conservation – By letter dated August 29, 2013, the Department provided a planning-aid letter with our recommendations for fish and wildlife conservation performance measures in the context of the WCM update. These measures addressed:

a) Apalachicola floodplain fish spawning and rearing habitat;
b) Gulf sturgeon spawning;
c) Apalachicola River mussels (5 metrics);
d) reservoir fisheries (3 metrics, one each for Lanier, West Point, and George);

e) Chattahoochee River shoal bass recruitment; and
f) Apalachicola Bay salinity (3 metrics corresponding to three locations).

Of these, the Corps used the metrics under a, c, and d above to inform the Phase 1 alternatives analysis. As noted in our general comments, it is the Departments' role under the FWCA to inform the Corps' equal consideration of the fish and wildlife conservation purpose for federal water development projects. Disregarding more than a third (5 out of 14) of the metrics we recommended may be inconsistent with the FWCAs intent that federal agencies rely on the expertise of the Department and state wildlife agencies in formulating and evaluating alternatives in water resources development decisions. However, the Department recognizes that the Corps can perform these evaluations independently of our recommendations.

Recreation – The Department has no specific concerns with the reservoir-recreation performance measures other than how they are used in the alternatives ranking process, discussed above under Issue #2, particularly with how the composite rankings for the recreation purpose are computed. We note that no river-based recreation performance measures were used, such as for recreational fishing and boating, and encourage the Corps to address this important aspect of how the projects affect the public.

Water Supply – As noted under Issue #2, none of the performance measures for water supply relate directly to water supply. All alternatives considered resulted in no water supply shortages in the 73-year HEC-ResSim simulations, yet six performance measures related instead to Lake Lanier levels are used to evaluate this project purpose. Further, as noted under Issue #1, reasonably foreseeable increases in water supply withdrawals from the Chattahoochee River in Metro Atlanta (increase from the current 277 mgd to 408 mgd) were not evaluated in Phase 1. The stated purpose for the six measures of Lake Lanier levels is to serve as "surrogate measures of remaining storage in the lake and capability to meet water supply demand during more severe hydrologic conditions" (DEIS pg. 4-72). The Department respectfully suggests that the Corps measure water supply performance using the percent of time that water supply demands are fully satisfied and the volume of shortages when demands are not fully satisfied. Rather than substituting reservoir-based surrogate measures for water supply reliability during hydrologic conditions more severe than the 73 years simulated, we suggest evaluating such reliability by simulating more severe conditions under reasonably foreseeable climatic trends. In both hydrologic scenarios (period of record and more severe conditions), evaluate water supply performance with direct measures for the frequency and magnitude of shortages. Such simulations would also inform an analysis of impacts to other project purposes.

D

Water Quality – Our concern with performance measures for the water quality purpose is that there were none in Phase 1. By excluding water quality from the Phase 1 evaluations, opportunities to formulate alternatives that would protect, restore, or enhance water quality, consistent with the purpose of decision making under NEPA (40 CFR §1500.1(c)), were foregone. As noted in our general comments above, the PAA would likely have adverse effects to various water quality parameters.

Recommendation – Use metrics that directly measure performance relative to the project purpose for which they are identified and/or to how that purpose is served through water management actions. Use all of the metrics the Department recommended for evaluating the fish and wildlife conservation purpose.

4. Alternatives formulation.

Issue – The analyses of the DEIS indicate that the project purposes of flood control, hydropower, and water supply are relatively equally served under all alternatives considered in Phase 1. Navigation, fish and wildlife conservation, recreation, and water quality are the purposes for which performance varies substantially under the management options considered, yet the PAA does not improve system performance relative to the NAA for all of these.

Concern – The PAA has emerged from an alternatives formulation process that the Department views as too narrowly focused in terms of management options and from an evaluation process that was overly simplistic. Its reliance on an ordinal ranking of alternatives at multiple stages diminished significant differences and magnified insignificant differences. The Department is concerned that the PAA does not represent the best means of achieving the purpose and need for action, which is to more effectively meet authorized project purposes, including the fish and wildlife conservation purpose.

Recommendation – Our final recommendation builds on our previous recommendations to:

(1) collapse Phase 2 into Phase 1, and analyze alternatives relative to all project purposes that change appreciably under the management options considered, and analyze each with and without the increased demands considered for the WSSA decision;
(2) replace the mechanical ordinal ranking process of Phase 1 with reasoned choices that recognize at each step of the analysis the variable significance and importance of the differences revealed; and
(3) use metrics that directly measure performance relative to the project purpose for which they are identified and/or to how that purpose is served through water management actions to steer alternatives formulation.

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In concert with implementing these recommendations, we advise the Corps to craft management alternatives that maximizes system benefits, subject to the legal and physical constraints of the system, for each of the project purposes that the DEIS has already demonstrated are variable: navigation, fish and wildlife conservation, recreation, and water quality. This will identify the best possible outcome for each of these purposes, and disclose the tradeoffs among other purposes that are necessary to achieve that outcome. If these alternatives reveal significant differences to hydropower and water supply, these two purposes would then become relevant to the decision and enter the tradeoffs analysis. Thereafter, iteratively define alternatives that would balance the tradeoffs, and explain the rationale for the compromise selected. To fulfill the stated purpose and need to more effectively meet authorized project purposes, the final compromise should improve upon the NAA for all purposes, and if not, explain why a reduction in service of a project purpose is minor, necessary and advisable, or unavoidable. We know that

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E. USACE recognizes that the Department of the Interior's expertise lies in the area of fish and wildlife conservation. The measures evaluate project purpose performance and were created after extensive review of input provided by experts, both internal and external to USACE, in each project field. The measures allowed for direct comparison between alternatives. USACE operates its projects to ensure a balance across all authorized project purposes.

the Corps has the tools and the talent necessary to implement these recommendations and develop a PAA that the Department would fully support. The Department stands ready to assist.

5. Further Analysis is needed to more adequately evaluate impacts resulting from proposed actions.

Issue 1: Basin-wide Corps' operations coupled with forecasted climate change impacts are likely to lead to additional challenges in achieving Corps' objectives and compliance with regulatory requirements. Though most climate models slightly disagree on forecasted changes in annual precipitation amounts and seasonal patterns; all generally accepted models predict additional consumptive and non-consumptive basin-wide loses and greater frequency of intense storm events, and prolonged dry periods and droughts. These projections indicate greater likelihood of volatile instream-flows, and reduced capacity to ameliorate these differences through storage and release from reservoirs.

Concern 1: The Corps' capacity to meet planned objectives is likely to be challenged when consideration is given to climate change impacts coupled with; 1) greater withdrawal demands (municipal and industrial) from the basin and upstream reservoirs, 2) more frequent dry periods that limit in-stream flows and elevate agricultural consumption in both the Flint and Chattahoochee basins, and 3) the continued need to comply with regulatory standards and meet other authorizations. The combined and interactive influences of climate change impacts coupled with Corps' operations are likely to result in disproportionate consequences toward achieving Corps' objectives. These future consequences may have adverse impacts on the capacity for the Corps to meet their authorities and public expectations, as well as consequences on the fish & wildlife conservation and the overall state and condition of the natural environment. These expectations, coupled with additional demands, may create unrealistic expectations during dry years for a basin that has limited storage, less predictable precipitation, and ever increasing demands near the headwater areas. These coupled effects have yet to be adequately evaluated.

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With the limits of basin-wide storage capacity in mind, one of the consequences of the PAA will be lower average flows to downstream areas for more extended periods, particularly during the summer months when water demands are high. Lower flows during critical periods may, 1) disrupt life history sequences that are necessary for a particular species, 2) alter food-web dynamics and functioning to support species during critical periods, or 3) result in the loss of needed connectivity of between source/sink populations that have significant value at the species level. These impacts result in a corresponding series of change in ecological communities and habitat settings.

In addition to changes in habitat conditions and patterns of occurrence (eg. Fewer acres or stream miles of a particular habitat), the loss of wetland acres will also result from prolonged periods without flooding. The loss of wetland acres will result in reductions in carbon storage. Wetlands and swamps function as carbon "sinks", and provide stable chemical storage environments. As these wetlands dry, or are repeatedly rewetted and dried, stored carbon is lost through decompositional processes and released as greenhouse gases (carbon dioxide, methane, etc.).

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F. Updating WCMs for projects is an inherent USACE function. A WCM update is only a change to operation of existing constructed projects and not a study. During the past 26 years USACE has participated in interagency working groups, comprehensive studies, interstate compacts, settlement discussions, meetings between state governors, litigation, and negotiations led by the U.S. Secretary of the Interior. USACE does not think another attempt at an interagency working group is needed or that it would improve the current process.

Mineralization of the soil, also reduces the capacity of the soil to store nutrients, and other chemical compounds that may pose a risk to wildlife. The released nutrients, coupled with changes in weather patterns, hydrology, and species tolerance may accentuate changes in habitat characteristics and suitability, as well as resistance and resilience to further ecological change. Though these changes may not become expressed for a few decades, once these changes are initiated they become difficult to redirect and have unexpected consequences that can't be easily curtailed. Therefore, consideration of altered or loss of wetland habitat (carbon storage) and wetland function associated with Corps' operations should be fully evaluated.

F

Recommendation 1: With other stakeholders, develop a basin-wide adaptive management strategy that has differential objectives that can accommodate prolonged dry periods, normal periods, and wet periods. Adjustable objectives will require additional metrics to evaluate successful basin-wide operations that are in concert with other stakeholder operations. In partnership, adjustable objectives can be appropriately prioritized depending on current and forecasted basin-wide meteorological conditions. Currently, several research initiatives are on-going to address this issue, and the available results could be used to better evaluate climate change issues.

As an example, the Apalachicola River, floodplain, and Bay are nationally and internationally recognized as being a globally significant natural resource, "hot spot" for diversity, and carbon storage "sink". Therefore, increased focus on impacts to the Apalachicola ecosystem could have important conservation benefits toward minimizing and mitigating for potential future change.

We recommend that the Corps consider elevated attention of impacts from Corps' operations and climate change should be given to this system; and through partnership, a coordinated strategy is needed to minimize future impacts.

Issue 2: Further analysis of consequences of operations toward water quality associated with proposed Corps' operations is needed. In addition to potential impacts to the overall environment, changes in water quality may also have impacts to fish and wildlife conservation.

Concern 2: River flow is regulated by Corps' operations, and variation in flow (water quantity) at various time scales (daily variation to annual variation) influences water quality. Therefore, the capacity of the river to stay within water quality standards (TMDL), and at appropriate concentrations, is influenced by patterns of water release. Therefore, changes in minimum flows from Lake Lanier from 750 cfs to 650 cfs should be evaluated to determine the likelihood of exceeding various TMDL's, and other clean water standards associated with NPDES permits.

The Department feels that the limited benefit of storing 100 cfs of water in Lake Lanier may be outweighed by the potential risks associated with reduced water quality. In addition to risks to public health and wildlife; these changes may disrupt state permitted discharge releases (NPDES) further downstream, and potentially disrupt downstream recreational opportunities.

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Further, contaminants bound to bed- and bank-sediments or stabilized within floodplain soils can become re-suspended or re-dissolved depending on flow patterns and volumes. The Corps' preferred alternative is focused on a more conservative water storage approach, thus, resulting in

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G. GAEPD requested that the minimum flow at Peachtree Creek be reduced to 650 cfs during drought periods. In response to this request, USACE investigated reducing the minimum flow value to 650 cfs from November through April. USACE conducted an environmental assessment in 2008 and concluded that reducing the minimum flow requirement at Peachtree Creek to 650 cfs during that period would not have significant adverse effects on water quality. Over the past decade, USACE has reduced the minimum flow seasonally at Peachtree Creek several times. Monitoring data is available from GAEPD during those periods. The State of Georgia has the responsibility for establishing and regulating water quality standards and should conduct any further analysis that might be required. NEPA requires that USACE capture the impacts to the human environment of any change from the NAA. USACE captured any impacts from the change to a season-varying flow at Peachtree Creek.

The Master WCM update is not a study and is only a change to operation of existing constructed projects. Therefore, USACE has considered water quality changes from the NAA. The EIS has been updated to more explicitly define the effects associated with water management operations and water supply options.

Additional information regarding impacts to dissolved oxygen and other water quality parameters is included in the final EIS. GAEPD has indicated its intention to ensure that water quality standards are met at all flows based on revisions in their 2013 triennial review (GAEPD 2014).

lower flows, and reduced likelihood of short-term floods. In the absence of flooding, wet soils begin to dry and re-oxygenate. Oxygenation then leads to a chemical conversion of reduced soils and otherwise stable contaminants. Of greatest concern is the reintroduction of compounds such as mercury, heavy metals, and organic compounds that are otherwise stabilized, and removed from the food chain. Therefore, future flood events that will periodically occur when inflow exceeds the capacity for water storage in upstream reservoirs, will allow for suspended contaminants and chemically-active contaminants to re-enter the river system from bank erosion, bed sediment suspension, and discharge from flooded swamp and floodplain sources. Though the Corps does not regulate flood discharges, the preferred alternative will minimize or eliminate periodic low-impact flood events and allow for greater risk of contaminant movement across the basin.

Though the likelihood of potential impacts from these issues during normal flow years may be considered to be low, they have not been adequately addressed. Further, these risks; 1) vary from year to year with weather patterns, 2) are often cumulative, and 3) should be expected to be magnified with expected climate change impacts. Therefore, the Department feels that additional analysis is needed to evaluate the proposed alternatives and associated risk in meeting water quality standards across the entire basin, as well as the potential cumulative costs (local, state, federal) of minimizing these risks by other means in the future.

Recommendation 2: With other state and federal agencies, conduct a full evaluation of water quality concerns that may be associated with Corps' operations. These evaluations will consider risks, and identify adaptive measures that can be implemented to eliminate or minimize consequences associated with water quality issues.

Issue 3: The Department considers the PAA to be an incomplete effort in evaluating the preferred and proposed alternatives relative to the economic impacts associated with recreational opportunities as well as the capacity of federal and state agencies in meeting their legally mandated purposes and authorities. Various federal and state agencies have properties and associated recreational initiatives that are dependent upon seasonal patterns of river flow to achieve identified purposes. These state and federal initiatives include fisheries programs to stock sport fish species (rainbow trout, striped bass, etc.) and native species; as well as associated water recreation activities at various federal locations such as Chattahoochee River National Recreation Area, Fort Benning-Uchee Creek recreation area, Eufaula National Wildlife Refuge, Apalachicola National Forest, and influence recreational opportunities associated with St. Vincent's National Wildlife Refuge. In addition to these, each of the three states (AL, GA, and FL) have various publicly accessible areas such as wildlife management areas and state parks across the basin.

H

Concern 3:

The Chattahoochee River National Recreation Area was established with the dependency on appropriate water releases to meet their legally mandated authorities and mission objectives. Similarly, the Eufaula NWR is highly dependent on reservoir operations in meeting their mission objectives. The Department believes that during alternatives analysis and evaluation of the preferred alternative, greater consideration should be given to federal and state agencies with

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H. Updates to the WCMs were developed to be protective of federal resources in the ACF system within USACE legal authority—including the Chattahoochee River National Recreation Area (CRNRA) and Eufaula National Wildlife Refuge—and based on the national benefit, not local benefits. Consistent with the purpose and need for this operational update, consideration was given to authorizations for peaking power and recreation. Section 6.1.1.2.2 of the EIS outlines the changes in streamflows and their expected effect on the CRNRA. Section 6.4.5.1 of the EIS has been updated to reference the changes in water levels expected in Walter F. George Lake by pointing back to section 6.1.1.1.3, where the changes are defined.

mission authorizations and objectives that are co-dependent on Corps' operations. These analyses should include a likelihood analysis of violating dependent-authorizations, as well as the identification of potential mitigation actions.

Recreation across the basin generates hundreds of millions of dollars annually. As an example, based on information received from National Park Service, cumulative direct and indirect income from recreation at the Chattahoochee River National Recreation Area is estimated to be more than 100 million dollars annually, and that value greatly exceeds the economic return from hydropower generation at Buford Dam. However, these benefits and the capacity to optimize on recreational opportunities were not fully considered by the Corps during alternatives analysis or in the development of the PAA. Clearly, in the development of the PAA, full consideration should be given to the collective sum from recreational opportunities across the entire basin.

Aquatic and wetland invasive species as well as the effectiveness of control measures is highly dependent upon reservoir operations and flow regimes. Further, the cost and consequences of addressing invasive species has significant impacts on the capacity to meet mission objectives. Some examples include *Phragmites* and other freshwater marsh invasive species that have little or no wildlife value to migratory waterfowl. *Phragmites* also quickly displaces native freshwater marsh species that have high wildlife value. Invasive macrophyte species such as Eurasian milfoil, *Hydrilla*, and water hyacinth which create thick weedbeds; and after dying, as the biomass decomposes, biological oxygen demand (BOD) increases and dissolved oxygen (DO) is reduced. These changes greatly alter habitat conditions by creating an anoxic layer below shallow surface waters. Because of longer growing seasons and shallow lake profiles that allow for greater expansion from shore, problems associated with invasive species will be most strongly expressed in Coastal Plain riverine environments and reservoirs. To control the establishment and expansion of invasive species, significant financial and labor resources are needed. Without control, these species can quickly limit the capacity for management agencies to meet mission objectives by greatly reducing recreational values, as well as benefits to ecological function and wildlife value.

H

Similarly, water conservation measures that reduce or eliminate growing season inundation of swamp areas allow invasive species to become established. Chinese tallow-tree and Asian privet species, in the absence of periodic inundation, become established in floodplains and swamps. Once established, both species quickly spread and begin to influence ecosystem processes and habitat suitability for native wetland species and migratory birds. Ultimately, these changes influence nutritional quality of detrital material and the rate of decompositional processes, including carbon storage. During infrequent flood events, the altered (quantity, quality) detrital material is then transported to the aquatic system, and may have unexpected consequences on the food chain including aquatic invertebrates, mussels, and fish as well as those species in Apalachicola bay. Altered floodplain conditions already exist in the lower Chattahoochee and Apalachicola rivers, and these species are already established and spreading. Control measures have been ineffective, and in the absence of flooding, these species will continue to spread. However, conservative water storage operations that limit the likelihood of growing season floods are likely to amplify the problem and allow the species to become established in previously flooded areas. The influence on habitat will increase, and the need for control of these species will be expanded. Therefore, the direct and indirect costs may be substantial.

Recommendation 3: A more comprehensive evaluation of the consequences of Corps operations relative to the purposes and authorizations of other federal and state agencies. Further, these evaluations should clearly identify how Corps operations will impact the mission objectives, and the potential consequences or costs associated with these impacts.

Issue 4: The Department believes there was incomplete analysis and evaluation of alternatives relative to other fish and wildlife measures. Biological and ecological metrics need to be considered for the entire basin to evaluate impacts of operations, and evaluate basin-wide differences between alternatives. These evaluations should also include at-risk species assessments. These species may become federally listed without proactive conservation to minimize threats and avoid the need to list these species, and thus, result in additional regulatory requirements.

Concern 4: The alternatives analysis did not consider basin-wide impacts on At-Risk species, or other ecological services that are necessary for maintaining a healthy and sustainable riverine and floodplain ecosystem. Because the Corps regulates water flow through water storage across nearly the entire Chattahoochee basin and roughly 2/3 of the inflow into the Apalachicola, the Department feels that it is necessary to adequately address the impacts to fish and wildlife for the entire area, and in doing so, evaluate the consequences on sustainable natural resources that have important economic value in various sections of the river.

I

As indicated in table 1, in addition to the four (4) federally listed species, fifteen (15) petitioned at-risk species occur within the project area. These species occur across the basin from Lake Lanier/Buford Dam to the Sumatra Gage along the Apalachicola River, and each would be impacted differently by Corps' operations. Evaluation of these impacts for each alternative is needed, as well as a determination of what each at-risk species may potentially represent as an indicator of operational performance. The status, stability, and threats associated with these species in the basin will strongly influence future Department decisions on listing. Therefore, an evaluation of status, potential impacts, and possible conservation measures that can be implemented to potentially avoid listing is needed. If a single at-risk species or a collection of at-risk species become listed, that may result in further regulatory basin-wide restrictions that could be sympatric or asympatric with current or proposed Corps' operations.

Compared to the Corps' evaluation of alternatives, the Department's evaluation of alternatives that was used to develop the DFWCAR considered three additional metrics that represented riverine ecosystem functions as well as recreational opportunities within the various reservoirs. As noted in the concerns section for Performance Metrics (Issue #3), three additional metrics included; 1) salinity in Apalachicola bay, 2) gulf sturgeon reproductive success, and 3) adult shoal bass population recruitment between West Point Lake to Lake Lanier.

Table 1. Petitioned At-Risk Species within the Project Area		Chattahoochee River			Apalachicola River
species	Species Name	Upper	Middle	Lower	Entire

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I. USACE recognizes the importance of documenting and maintaining multidimensional connectivity (i.e., longitudinal, lateral, and vertical) among the components of the ecosystems for effective watershed management. Section 6.4 of the EIS has been updated to include all metrics requested by the USFWS. Lists of species provided in appendix H of the EIS have been updated to include species presented in letter from the Department of Interior. Where habitat suitability indices were available, USACE considered how changes from the NAA might affect species presented in appendix H and presented those effects in the EIS.

group		(Lanier to West Point)	(West Point to Eufuala)	(Eufuala to Seminole)	
crayfish	*Cambarus harti*	X	x		
fish	*Anguilla rostrata*		x	X	x
fish	*Cyprinella callitaenia*	X	x	X	x
fish	*Percina crypta*	X			
fish	*Pteronotropis euryzonus*		X	X	
insect	*Cordulegaster sayi*				x
insect	*Oecetis parva*				x
insect	*Oxyethira setosa*				x
mussel	*Anodonta heardi*		X		
mussel	*Anodontoides radiatus*			x	
mussel	*Elliptio arctata*		X		
salamander	*Amphiuma pholeter*				x
salamander	*Eurycea chamberlaini*		X	x	x
turtle	*Graptemys barbouri*			x	x
turtle	*Macrochelys temmincki*		X	x	x

Recommendation 4: A broader range of fish and wildlife conservation metrics are needed. These metrics should be used to evaluate potential changes resulting from Corps' operations, and should be indicative of impacts resulting from Corps' operations, and representative of targeted conservation conditions. Full consideration of impacts to at-risk species, including, but not limited to those recently petitioned, is needed to determine the risk to these species, and identify any possible conservation actions that may be implemented to eliminate or minimize identified threats.

In addition, we provide relevant background on the CRNRA and highlight specific issues that should be evaluated and considered in the Draft EIS and WCM update. These comments are consistent with and are intended to supplement comments submitted by National Park Service (NPS) during previous scoping periods in 2008, 2009, and 2013.

We understand the purpose of the WCM updates is to identify operating criteria and guidelines for managing water storage and release of water from United States Army Corps of Engineers (USACE) reservoirs within the ACF Basin. The scope of the WCM includes Lake Lanier and the operation of Buford Dam, which forms the upper boundary of CRNRA. We has special expertise regarding the resources and values of the CRNRA and its surrounding areas, which would aid the USACE in its environmental impact analysis and ultimate decision regarding the update of the WCM for the ACF River Basin.

J

The Department has had long standing concerns with the current impacts of Buford Dam operations on park resources. Under the USACE's Preferred Action Alternative (PAA), we anticipate these impacts will actually increase in severity based on USACE's impact analysis, which ranges from "slightly adverse" to "adverse"; however, the significance of this increase on

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J. The EIS has a robust discussion of the modeling used to formulate the alternatives and the impacts associated with the PAA. USACE also included additional discussion in the EIS of both the modeling and, to the extent available, information regarding the impacts to the Chattahoochee Reach below the Buford project.

park resources is unclear in the DEIS as the modeling information and impact analysis does not provide specific information to allow a thorough understanding of what may occur under the PAA. Specific comments regarding the PAA and its potential effects to park resources and values are provided in the attachment to this letter.

We want to ensure that the USACE is aware of aspects of CRNRA legislation that will impact the USACE process for this project. A 1984 Amendment to CRNRA's enabling legislation (Public Law 98-568) outlines a process which must be followed if the USACE, or any Federal agency, proposes to undertake any action which may have a direct and adverse effect on the natural or cultural resources of CRNRA. Specific wording is provided in our attached comments, but the general requirements of the Amendment include:

- Pursuant to the National Environmental Policy Act of 1969, agencies will notify the Secretary of Interior (Secretary) that an action is planned, provide an opportunity to comment, and notify the Secretary of the decisions made related to the action.
- The Secretary will provide comments and recommendations on the proposed action to the notifying agency.
- The notifying agency will provide their decision to the Secretary who will then submit the decision along with the Secretary's comments and recommendations to the appropriate committees of Congress.
- The Secretary must concur with any proposed action prior to the action commencing.

K

The Department recommends that an interagency workgroup be established to better understand alternatives and the science behind achieving a more sustainable dam operation and natural hydrograph for Buford Dam to avoid direct or adverse impacts to CRNRA. This workgroup would evaluate operational and environmental conditions which will change over time, and create a framework to recommend adjustments to the dam's operation that helps ensure impacts to CRNRA are reduced. These adjustments should be anticipated and allowed for within the WCM process.

L

The Department also recommends that a long-term management and monitoring program be established with the key agencies involved in managing the river system through the park, and that this commitment be recorded in the Record of Decision. It will be necessary to monitor and evaluate implementation of the PAA over time and provide for the implementation of measures that can reduce impacts within CRNRA.

M

As a result of our review of the DEIS, we respectfully request that the USACE revise the DEIS or draft a Supplemental EIS to address the issues outlined in this letter and its attachment. An update to the DEIS analysis should more fully evaluate potential impacts on NPS resources and values. The development of this additional information would better inform USACE's permitting decisions. Specifically, additional analysis of the outstanding issues we have identified may assist USACE in determining the Least Environmentally Damaging Practicable Alternative and consideration of the public interest. Moreover, this information would better inform the public regarding the extent of potential impacts and the decision-making process. The NPS remains eager to collaborate with the USACE to achieve an operational outcome below

N

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K. Public Law 98-568 does not apply to the current federal action to update the WCMs.

L. Updating WCMs for projects is an inherent USACE function. A WCM update is only a change to operation of existing constructed projects and not a study. During the past 26 years USACE has participated in interagency working groups, comprehensive studies, interstate compacts, settlement discussions, meetings between state governors, litigation, and negotiations led by the U.S. Secretary of the Interior. The National Park Service (NPS) and the Department of the Interior were involved in several of those cooperative efforts. NPS's comments and input have been addressed along with the comments of other agencies and stakeholders in an effort to update the WCMs.

M. USACE will continue to monitor its operations in the ACF Basin and perform any data collection as required by laws and regulations (as described in chapter 5 of the WCMs). Other state and federal agencies also could monitor conditions in the basin. The final EIS includes a more robust discussion of impacts to the NPS area. Furthermore, the record of decision document will satisfy all requirements of the NEPA. USACE does not anticipate that a commitment to a specific monitoring program will be necessary as a result of the impacts from the proposed action.

N. USACE considered all of the issues and comments raised in the NPS comment cover letter and attachments. USACE included additional information regarding potential impacts to the NPS recreation area in the final EIS. The update of the WCMs does not require any permitting by USACE; therefore, it is unclear how additional information could inform USACE regulatory permitting. Optimum flow regimes for the Chattahoochee River National Recreation Area are displayed in Table 6.1-7 of the final EIS. These flow regimes were developed as part of the MAAWRS in the 1980s. In 2000, CH2M Hill developed a recreational flow preference for the NPS that was similar to the previous effort. Riverine flows were evaluated in various reaches between Buford Dam and West Point Dam and also in the middle and lower Chattahoochee River. Figure 6.1-24 in the EIS displays flows of the NAA and PAA below Buford Dam. Flows exceeded 1,000 cfs approximately 75 percent of the time under the NAA compared to 73 percent of the time under the PAA. For higher flows that would support kayaking (6,000 cfs), there was a negligible difference between the NAA and the PAA over the period of record.

Buford Dam that is mutually beneficial and in keeping with each agency's missions and legal authorities.

National Park Service
Comments

Draft Environmental Impact Statement (EIS): Update of the Water Control Manual for the Apalachicola-Chattahoochee-Flint River Basin in Alabama, Florida, and Georgia and a Water Supply Storage Assessment. October 2015

January 2016

The National Park Service (NPS) has reviewed the Draft Environmental Impact Statement (DEIS) for the updated Water Control Manual (WCM) and provides the following comments. It should be noted that in addition to these comments, NPS previously provided comments on the Notice of Intent (comments dated January 14, 2013). At that time, NPS requested and justified cooperator status in the development of the DEIS. This request was denied by the United States Army Corps of Engineers (USACE). As a result, many environmental concerns and statutory requirements under the purview of the NPS have not been adequately addressed within the DEIS. Chief among these are 1) wide-ranging effects associated with decreasing minimum flows below Buford Dam, 2) effects of the rapid rate of discharge change below Buford Dam, and 3) the statutory requirement that the Department of the Army must formally coordinate with the Secretary of the Interior in accordance with PL 98-568, Section d(1-6). These concerns are further described below. The NPS remains eager to collaborate with the USACE to achieve an operational outcome below Buford Dam that is mutually beneficial and in keeping with each agency's missions and legal authorities.

Background and General Comments

Chattahoochee River National Recreation Area (CRNRA) is a unit of the National Park System managed by the NPS and consisting of 48-river miles from Buford Dam to Peachtree Creek. CRNRA was established in 1978 when Congress determined that the "natural, scenic, recreation, historic, and other values the Chattahoochee River … are of special national significance, and that such values should be preserved and protected from developments and uses which would substantially impair or destroy them" (PL 95-344). In addition to the river itself, CRNRA is comprised a series of 16 land-based park units located between Buford Dam and Peachtree Creek, just north of Atlanta, Georgia. The park provides over 70% of the public green space in the greater Atlanta area and outdoor recreation activities for over three million visitors per year. It is estimated that CRNRA provides an economic benefit to the local economy in excess of $128 million/year. The Chattahoochee River forms the backbone of the park, and CRNRA has a vested interest in the operations of Buford Dam, as the timing of water releases and related flows in the river directly impact the ability of park managers to preserve the "natural, scenic, recreation, historic, and other values" of the park, as mandated by Congress.

Although the CRNRA enabling legislation does not specifically define the "natural, scenic, recreation, historic, and other values" that render the 48-mile segment of the river and adjoining lands of "special national significance," it gives park managers the obligation and authority to protect these values from adverse effects caused by "water resource projects" within the boundary of the park. In 2013, the NPS initiated a multi-stakeholder process to clearly identify

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O. See response to comment ACF138

and describe these "values of special national significance" and to establish a logical, defensible, and consistent framework for evaluating projects that could adversely affect these values (NPS 2013). The process was adapted to meet the specific circumstances of the national recreation area's unique legislation. The NPS and its stakeholders concluded that the following were values of special significance: ecological, cultural and historic, recreational, scenic, geologic, water quality, and water quantity.

The enabling legislation for CRNRA states in part that:

> "*No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such area is established, as determined by the Secretary nor shall such department or agency request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without at least sixty days in advance, (1) advising the Secretary in writing of its intention to do so and (2) reporting to the Committee on Interior and Insular Affairs of the United States House of Representatives and to the Committee on Energy and Natural Resources of the United States Senate the nature of the project involved and the manner in which such project would conflict with the purposes of this Act or would affect the recreation area and the values to be protected by it under this Act, I t is not the intention of Congress by this Act to require the manipulation or reduction of lake water levels in Lake Sidney Lanier. Nothing in this Act shall be construed in any way to restrict, prohibit, or affect any recommendation of the Metropolitan Atlanta Water Resources Study as authorized by the Public Works Committee of the United States Senate on March 2, 1972*." PL95-344, sec 104(b).

The DEIS concludes that the Preferred Action Alternative (PAA) will have "slightly adverse" to "adverse" effects on resources within CRNRA, specifically flow condition, dissolved oxygen, total phosphorus, total nitrogen, riverine fish and aquatic resources, and land use (riverine shoreline). The DEIS defines "slightly adverse" as an impact that is "perceptible and measurable, but will not have an appreciable effect." The DEIS makes no attempt to define "appreciable effect." Further, it should be noted, that the CRNRA legislation makes no distinction between "slightly adverse" and "adverse." Thus, based on the USACE's determination that the PAA will have adverse effects to park resources, these proposed impacts could be considered significant and requiring avoidance and/or mitigation. This may be especially true given the baseline conditions associated with existing operations of Buford Dam. The DEIS does not identify current and ongoing adverse effects of dam operation, nor does the modeling information or analysis related to potential effects of the PAA on park resources provide enough detail to ascertain what the effects could be.

Further analysis of the cumulative impacts should be included in the DEIS along with additional alternatives to reduce the level of impacts on values established by Congress for CRNRA. The NPS recommends that an interagency workgroup comprised of resource agencies and academia be established to better understand the alternatives and science behind achieving a more sustainable dam operation and natural hydrograph for Buford Dam. A long-term monitoring and management program is also needed between the USACE and NPS to evaluate conditions which will change over time, and establish a framework to identify changes to the dam's operations that

helps ensure impacts to CRNRA are reduced. These adjustments should be anticipated and allowed for within the WCM.

We recommend these requests be included in an updated DEIS or Supplemental EIS prior to the USACE issuing a Record of Decision.

Specific Comments

- 33 CFR § 222.5 requires the USACE develop water control plans in concert with all basin interests which are or could be impacted by or have an influence on project regulation. It states in Section F(9) that "close coordination will be maintained with all appropriate international, Federal, State, regional and local agencies in the development and execution of the water control plans." The NPS does not believe this coordination has occurred as part of the development of this DEIS since cooperator status was denied, NPS concerns expressed in previous comments were not addressed in the DEIS, and the DEIS does not adequately define or assess impacts to park resources and values. Therefore, we recommend that coordination with appropriate agencies be initiated through the interagency workgroup recommended above.

- The values for which the park was established are currently being impacted by operations at Buford Dam. These impacts were described in the NPS's scoping letter to the USACE in January 2013, but were not been addressed in the DEIS. In fact, the PAA will create additional impacts for which the level of significance is difficult to determine, and for which no mitigation is offered. These impacts range from "slightly adverse" to "adverse" in the DEIS.

  The 1984 Amendment to CRNRA's enabling legislation (Public Law 98-568) outlines the process which must be followed if the USACE or any Federal agency proposes to undertake any action which may have a direct and adverse effect on the natural or cultural resources of CRNRA. Public Law 98-568, Section d(1-6) states the following:

  "(d)(1) Whenever any Federal department, agency, or instrumentality proposes to undertake any action, or provide Federal assistance for any action, or issue any license or permit for an action within the corridor referred to in section 101 which may have a direct and adverse effect on the natural or cultural resources of the recreation area, the head of such department, agency, or instrumentality shall--

  (A) promptly notify the Secretary of the action at the time it is planning the action, or preparing an environmental assessment regarding the action, or preparing and environmental impact statement under the National Environmental Policy Act of 1969 for the action;

  (B) provide the Secretary a reasonable opportunity to comment and make recommendations regarding the effect of the Federal action on the natural and cultural resources of the recreation area; and

  (C) notify the Secretary of the specific decisions made in respect to the comments and recommendations of the Secretary.

  The requirements of this subsection shall be carried out in accordance with procedures established by the Federal agency responsible for undertaking or approving the Federal

action. These procedures may utilize the procedures developed by such Agency pursuant to the National Environmental Policy Act.

(2) Following receipt of notification pursuant to paragraph (1)(A), the Secretary, after consultation with the Governor of Georgia, shall make such comments and recommendations as the Secretary deems appropriate pursuant to paragraph (1)(B) as promptly as practicable in accordance with the notifying agency's procedures established pursuant to paragraph (1)(A). In any instance in which the Secretary does not provide comments and recommendations under paragraph (1)(B), the Secretary shall notify in writing, the appropriate committees of Congress.

(3) Following receipt of the notifying agency's decisions pursuant to paragraph (1)(C), the Secretary shall submit to the appropriate committees of Congress, including the authorizing committees with primary jurisdiction for the program under which the proposed action is being taken, a copy of the notifying agency's specific decisions made pursuant to paragraph (1)(C), along with a copy of the comments and recommendations made pursuant to paragraph (1)(B).

(4) In any instance in which the Secretary has not been notified of a Federal agency's proposed action within the corridor, and on his or her own determination finds that such action may have significant adverse effects on the natural or cultural resources of the recreation area, the Secretary shall notify the head of such Federal agency in writing. Upon such notification by the Secretary, such agency shall promptly comply with the provisions of subparagraphs (A), (B), and (c) of paragraph (1) of this subsection.

(5) Each agency or instrumentality of the United States conducting Federal action upon federally owned lands or waters which are administered by the Secretary and which are located within the authorized boundary of the recreation area shall not commence such action until such time as the Secretary has concurred in such action.

(6) The following Federal actions which constitute a major and necessary component of an emergency action shall be exempt from the provisions from this subsection--

(A) those necessary for safeguarding of life and property;
(B) those necessary to respond to a declared state of disaster;
(C) those necessary to respond to an imminent threat to national security; and
(D) those that the Secretary has determined to be not inconsistent with the general management plan for the recreation area.

Actions which are part of a project recommended in the study entitled "Metropolitan Atlanta Water Resources Management Study, Georgia: Report of Chief of Engineers", dated June 1, 1982, and any Federal action which pertains to the control of air space, which is regulated under the Clean Air Act, or which is required for maintenance or rehabilitation of existing structures or facilities shall also be exempt from the provisions of this subsection.
(f) Title I of such Act is amended by adding the following at the end thereof:"

Please note that in section (5) above, the Secretary of the Interior is required to concur with any Federal action upon federally owned lands or waters, which are administered by the Secretary, before the action is commenced. As Bureaus within the Department of Interior, comments from both the NPS and the U.S. Fish and Wildlife Service as they relate to CRNRA must be addressed in the development of the WCM.

Safety

- The CRNRA is a heavily used recreational resource that attracts over 3 million visitors a year, approximately a third of whom engage in some form of water-based recreation, including boating, fishing, canoeing, kayaking, rowing, tubing, and swimming. The USACE and the NPS' fundamental concern are ensuring public safety. Current and proposed future operations under the PAA create an unsafe environment for recreational users in CRNRA by operating the dam in a manner that creates significant river flows (10000 cfs). While safety improvements for visitors engaged in park water-based recreation have focused on raising public awareness of the hazards associated with water releases from Buford Dam, visitor deaths have occurred. Deaths attributed to the rapid rise of waters below Buford Dam have been recorded as recently as 2009. During any given year, the park and local municipalities receive numerous reports of individuals who become stranded due to rapidly rising waters. Greater efforts should be made to mitigate public safety risks associated with operation of the dam. The NPS recommends that the DEIS evaluate alternatives that consider other opportunities to ensure or enhance public safety such as modifying dam operations to release water at times of less use or that mimic a natural hydrograph that minimizes instances of extremely high flows.

Water Quantity

- Historically, the operation of Buford Dam has resulted in extreme fluctuations in daily and/or hourly flows that represent an extreme deviation from the natural hydrograph. The NPS recommends that operational alternatives be evaluated that mitigate the extreme nature of short-term (daily/hourly) flow fluctuations while at the same time ensuring ample minimum flows to maintain water quality and waste assimilation, and improving conditions for aquatic resources.

- The DEIS states on page 3-5, lines 9-14, that during the colder months (November-April) minimum flows at Peachtree Creek will be reduced to 650 cubic feet per second (cfs) and during warmer months (May-October) the minimum flow will be 750 cfs. When Congress established CRNRA in 1978, there was an assumption that water needed to support the values for which the park was established would be available. Historically, the State of Georgia established the minimum flow requirement of 750 cfs; however, the State has proposed to eliminate this flow requirement and not establish a substitute.

  In recent years, historically unprecedented and sometimes dramatic reductions in flow have occurred within the central reach of the park, most notably in the area upstream of Morgan Falls Dam. This suggests that the minimum flow standard of 750 cfs was not protective of flows required to support recreational uses and ecological needs throughout CRNRA.

  The NPS is concerned that the PAA reduces flow rates, which could cause significant negative effects on water quality and aquatic species. Proposed flow rates of 650 or 750 cfs lack rigorous scientific analysis to support their use and could lead to an impairment of the values for which the park was established. Impacts from continued use of 750 cfs or from a further reduction of river flow to 650 cfs need to be evaluated and appropriate modeling results provided, which would demonstrate that Buford Dam could be operated in a manner that maintains sufficient flows throughout the recreation area. The previously requested interagency workgroup could help identify and validate an appropriate flow regime through

CRNRA, and provide valuable information that could be incorporated into the DEIS and subsequent Record of Decision.

- The DEIS does not evaluate a range of alternatives that consider how the Buford Dam can be operated in a way that that more closely mimics natural flow regimes through the park. Seasonal changes should be considered and appropriate science needs to be provided to support actions identified in the PAA. We recommend that consideration of a more natural flow regime be included and believe there is opportunity to work together on an interagency basis to establish a more sustainable flow regime that balances the missions of the agencies involved.

Water Quality

- Water releases from Buford Dam play an important role in supporting water quality within CRNRA for a number of parameters, including temperature, dissolved oxygen, bacterial levels, and turbidity. Any reduction, even seasonally, of the minimum flow of 750 cfs at Peachtree Creek should clearly and credibly evaluate the effects on water quality within CRNRA. As noted in background material provided by the USACE, Buford Dam has historically been managed to release base flows of up to 1500 cfs to meet water supply needs and downstream water quality standards. If dam operations are modified to accommodate lower base flows, water quality within CRNRA would likely deteriorate due to the reduction in the positive influence of clean water released from Buford Dam. This information is not provided in the DEIS.

- Currently, over half of the 48-mile CRNRA is 303d-listed for not meeting fecal coliform standards under the state designation as a recreational water body. A U.S. Geological Survey (USGS) study in 1995-96 showed that the density of fecal coliform bacteria, the recognized indicator bacteria in Georgia, regularly exceeded the U.S. Environmental Protection Agency guidelines for recreational waters. Because of the large number of people who use the river for water-based recreation and the historically high levels of indicator bacteria in the Chattahoochee River, the USGS, in partnership with several federal, state, and local agencies, began the BacteriALERT monitoring program in October 2000. The BacteriALERT program has documented widespread variability in water quality within the Chattahoochee River. Bacterial spikes occur during rain events and during peak power generation discharges from the Buford Dam. In 2015, instances of high *E. Coli* estimates occurred during 15 weeks at Paces Ferry Road and 7 weeks at Medlock Bridge Road (USGS 2016). These results highlight the importance of a thorough analysis of the impacts of releases in protection of water quality in CRNRA, which are lacking in the DEIS.

- Georgia's Environmental Protection Division has used historic flow regimes to model the river's capacity to assimilate wastewater discharges. Lower baseline releases should be evaluated for the potential negative effects of wastewater discharges on water quality within CRNRA. Since past studies on the assimilative capacity of the river would be invalidated by changes to the flow regime, the DEIS should clearly evaluate water quality impacts due to wastewater discharges.

- The segment of the Chattahoochee River below Buford Dam is classified as a secondary trout stream. The state water quality standard for Dissolved Oxygen (DO) is a minimum daily average of 6.0 mg/l and an instantaneous minimum of 5.0 mg/l. The Georgia Department of Natural Resources operates a trout hatchery a few miles downstream of the dam and regularly monitors DO levels in the tailrace. They have found that in the fall during periods of low/minimum flows, DO levels have been below 5.0 mg/l for extended periods of time and have fallen and remained below 3.0 mg/l at times. These low levels of DO negatively impact the health of fish and other aquatic organisms, which causes secondary impacts on recreational users and local economies. According to the DEIS, implementation of the PAA will adversely affect DO in the river. The NPS recommends that the effects of implementing the PAA be considered for DO and appropriately mitigated.

Ecology

- Neither modeling results nor data related to impacts within the park are included in the DEIS that allows the NPS to determine if the actions identified in the PAA will have a negative impact on the resources and values of the CRNRA. The NPS requests that modeling results of an appropriate scale be provided for the areas that reside within the CRNRA to support the conclusions outlined in the DEIS.

- The DEIS fails to adequately describe existing conditions at CRNRA. Baseline conditions on current impacts on water quality, fish and aquatic species, recreation, or safety caused by ongoing dam operations are included. Specific information or data is not provided regarding existing water quality impairments, existing fisheries data, and recreational information including any existing socioeconomic or current safety data. Therefore, the DEIS fails to provide an adequate assessment of the impacts of the PAA and does not establish measurable impacts to determine whether the impacts are significant or not. Additionally, the DEIS does not include enough detail in the analysis of cumulative impacts to determine how the PAA relates to ongoing or future actions affecting the park.

- The DEIS states that adverse impacts to water quality, water quantity, and fish and aquatic species can be anticipated under the PAA. The DEIS defines "slightly adverse impacts" as those that are perceptible and measureable. However, how these impacts will be perceived and to what degree they can be measured is not provided. The document also indicates that below Buford Dam, the impacts to fish and aquatic resources will result in "adverse impacts," although that duration is not well defined. The DEIS also fails to identify or suggest any measures that could eliminate or mitigate these adverse impacts. The NPS recommends that adverse impacts for this and other resource topics be described in a way that allows an understanding of what the impacts will be, how the impacts will affect park resources and values, and how the impacts relate to the current baseline conditions of the park. Based on this detail, the USACE should identify and suggest mitigation measures that would significantly reduce or eliminate adverse impacts.

- Table 2.5-1, Page 2-197 and in Section 2.5.3.1.3, lines 37-39, page 2-200: Please note that brown trout (*Salmo trutta*) found within the park are not stocked and the river supports a naturally reproducing population. There is also an isolated population of shoal bass

(*Micropterus cataractae*), a species endemic to the greater Chattahoochee basin, in the lower reaches of Big Creek. We recommend correcting this information in the DEIS.

- Section 6.4.3.3.3: This section suggests that the PAA will have a beneficial effect on shoal bass recruitment. This seems to be a sweeping statement regarding a newly described species of which reproduction and life history remains an ongoing endeavor of science. Before such a broad statement can be made, additional location-specific analysis should be conducted. For example, the isolated shoal bass population in Big Creek is currently being studied. The degree to which this population uses the main stem of the Chattahoochee is currently unknown.

- The Chattahoochee River supports many fish species, including both rainbow and brown trout. Past scientific studies examined the effects of varying flow regimes on fish species. Some studies suggest that extreme flow rates are detrimental to fish (Porta, 2006) (Peterson and Craven, 2007), while others identified optimal flows as being between 1000 - 1500 cfs (Nestler, 1986), and others suggest that current conditions suggest that certain fish species are at risk of extinction due to low flows (Sammons and Maceina, 2009). Flow rates identified in the PAA are 650-750 cfs, which will have a negative impact on the fishery in the recreation area. The area between Buford and Morgan Falls dams is a significant fishery within CRNRA. The Georgia Department of Natural Resources estimates approximately 90,000 annual fishing hours occur on this area of the Chattahoochee River, which contributes substantially to the local economy. Impacts of the PAA need to be better understood and mitigated for in the DEIS.

- Flow rates play an important role in supporting the river ecosystem within CRNRA for a number of parameters, including temperature, dissolved oxygen, bacterial levels, and turbidity. With the current target minimum flow of 750 cfs at Peachtree Creek being abandoned and a proposed reduction to 650 cfs, there could be significant effects on water quality from the number and capacity of wastewater treatment plants operating within the boundaries of park. Four wastewater facilities currently exist. These plants have used historic flow regimes to model the assimilation of wastewater discharge into the river. If a baseline release level is lowered, there could be an immediate change in the impact of wastewater on water quality in the river, and past studies on the assimilative capacity of the river would be invalidated. These permits would likely need to be updated and mitigated for, which would be a cost factor that should be addressed in the socio-economic impacts of the PAA.

- The NPS maintains a "no net loss" policy for wetlands. Although the DEIS does discuss wetlands associated with Bull Sluice Lake, it makes no mention of the effects to wetlands within CRNRA. The NPS recommends including additional information and analysis of how lowering minimum flows will affect functions and processes for wetlands within CRNRA (i.e., Bull Sluice Lake, riparian wetlands, wetlands associated with tributary deltas, etc.). The impacts should be described in sufficient detail that allows an understanding of what the impacts will be, how the impacts will affect wetlands, how the impacts relate to current baseline conditions of the park, and what mitigation measures are identified that eliminate or reduce identified wetland impacts and to what degree these impacts are reduced.

Recreation

- Chapter 2, page 2-74 and 75, Section 2.1.1.2.4.5 *Recreation*, lines 38, 39 and 40: This section states "The CRNRA was established in 1978, about 20 years after Buford Dam construction was completed. The operation of Buford Dam to meet authorized project purposes is generally compatible with recreational uses of the river and adjacent lands in the CRNRA". The NPS does not agree with this assessment and requests that additional information be provided to support this statement.

- Table 2.4-2: The CRNRA acreage is listed at 714 acres. This statement is incorrect and should be corrected. The park currently manages 6,548 acres within an authorized boundary of 10,000 acres.

- Chapter 2, page 2-235, Section 2.6.6, line32-33: The CRNRA receives over 3.2 million visitors a year with over 1 million of those recreating on the Chattahoochee River itself.

- Evidence suggests that recreation and navigational uses of the river benefit from moderate and more consistent flows. A Recreation Flow Preference Report completed by CH2M Hill (2000), found the preferred recreation flows for wade/float fishing, rowing, and power boating is between 1000 – 1200 cfs. Nestler (1986) identified optimal canoeing conditions for all user levels as occurring between 1250 cfs – 7000 cfs. Both of these studies provide strong support for base level flows above 1000 cfs as being crucial to support the recreational uses envisioned by Congress when the CRNRA was established. The NPS recommends that any preferred alternative include a sustainable flow regime that meets these flow rates through the park and accounts for seasonal variation. As stated earlier, the flow rate identified in the PAA should mimic a more natural hydrograph through the park.

Geology

- The results of abrupt and dramatic changes in water levels as dictated by hydropower generation have resulted in severe bank erosion and collapse; not only along the main stem of the Chattahoochee River, but within tributary confluences as well. The DEIS fails to evaluate the geomorphologic impact of frequent peak discharges, with particular emphasis on the accelerated erosion of river and tributary banks. It is important to quantify the expected loss of stream banks in order to accurately analyze the environmental, social, and economic effects of accelerated erosion. This information should be included in the DEIS.

Culture and History

- The CRNRA contains cultural resources such as historic structures and archeological sites that are impacted by water releases from Buford Dam. For example, the Ivy Mill ruins in Roswell dates back to the 1830's and are on the National Register of Historic Places. Ivy Mill is prone to flooding during protracted high water releases from Buford dam. In addition, a number of archaeological sites occur adjacent to the Chattahoochee River and its tributaries. These archaeological sites are at high risk of damage and/or loss from accelerated erosion caused by the fluctuating releases from Buford Dam. These cultural resources could be better protected by reducing the causes of significant erosion. The NPS recommends that the DEIS evaluate ways that water releases can be managed to reduce peaking (i.e., ramping up to discharges of 10,000 cfs) in order to generate maximum revenue,

and suggests that USACE consider implementing a more sustainable, science based approached to achieving a flow regime that meets the mission needs of the USACE, NPS, and the Southeastern Power Administration (SEPA).

Economic

- Based on the 2014 SEPA Annual Report, total revenue from the Jim Woodruff System, of which Buford Dam is 1 of 9 USACE projects, generated $11 million in Fiscal Year 2014. Of this amount, $10.9 million was derived from the sale of 222,255 megawatt-hours of energy. As a matter of comparison, CRNRA generated over $128 million in visitor spending during 2014 with a total economic impact of over $167 million. When comparing economic benefits, protection of CRNRA and more specifically, its river resources, potentially has a far greater economic impact and benefit to the region, and thereby deserves protection. As stated earlier, the NPS recommends that peaking releases be gradually phased in order to achieve peak power pricing. We believe this could be done without a loss of energy production, but not without a reduced financial benefit from hydropower. A comparison of the cost-benefit of Buford Dam power generation and the economic benefit of CRNRA should be included and analyzed in the DEIS.

SUMMARY

The Department remains committed to our continued coordination on these issues, and look forward to working with you in the coming months. We respectfully advise the Corps that investing additional time and effort into reaching the best possible decision is worth further delaying a decision that has been in progress since before 1989.

Thank you for the opportunity to provide comments. Please contact Dr. Donald Imm at the Fish and Wildlife Service on (706) 613-9493 extension 230 or Bill Cox at Chattahoochee River National Recreation Area Superintendent via email at Bill_Cox@nps.gov or on (678) 538-1211. I can be reached on (404) 331-4524 or via email at joyce_stanley@ios.doi.gov.

Sincerely,

Joyce Stanley, MPA
Regional Environmental Protection Specialist

cc: Christine Willis – FWS
Gary LeGain - USGS
Anita Barnett – NPS
Robin Ferguson – OSRME
OEPC – WASH

Citations

CH2M Hill. 2000. Recreation Flow Preference Report, Chattahoochee River National Recreation Area. Prepared for the National Park Service, Atlanta, Georgia.

National Park Service. 2013. Chattahoochee River National Recreation Area Values of Special Significance Workshop Report. U.S. Department of the Interior, Chattahoochee River National Recreation Area, Georgia.

Nestler, J.M., et al. 1986. Effects of flow alterations on trout, angling, and recreation in the Chattahoochee River between Buford Dam and Peachtree Creek. Technical Report E-86-10, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Peterson, J.T. and S. W. Craven. 2007. The development of a quantitative decision models for evaluating the effects of river regulation and water use on native fishes in the Chattahoochee River National Recreation Area. Report to the National Park Service, Atlanta, Georgia.

Porta, M.J .. 2006. Effects of Environmental Variation on Conservation-Stocking Success of an Endemic Black Bass Species in the Chattahoochee River, Georgia. Thesis. Frostburg State University.

Sammons, S.M. and Maceina M.J. 2009. Conservation status of shoal bass in Alabama: distribution, abundance, stocking efficiency, and possible effects of sympatric congeneric black bass in selected tributaries of the Chattahoochee River, Alabama. Alabama Division of Wildlife and Freshwater Fisheries. Montgomery, AL.

Southeastern Power Administration. Annual Report 2014. Elberton GA.

USGS Georgia Water Science Center: Chattahoochee River BacteriAlert. U.S. Geological Survey. Web. 26 Jan. 2016.

From: Albares, Mike
Sent: Friday, January 29, 2016 12:12 PM
To: ACF-WCM
Subject: [EXTERNAL] Office of U.S. Representative Martha Roby (AL-2) - DEIS and WCM for ACF
Attachments: Office of U.S. Representative Martha Roby (AL-2) - DEIS and WCM for ACF.pdf

Please see attached. Paper copy in the mail today as well.

Thanks,
Mike

Mike Albares
Legislative Director
U.S. Representative Martha Roby (AL-02)

442 Cannon House Office Building
Washington, DC 20515

MARTHA ROBY
2ND DISTRICT, ALABAMA

CANNON HOUSE OFFICE BUILDING
ROOM 442
WASHINGTON, DC
PHONE: (202) 225–2901

COMMITTEE:
APPROPRIATIONS

Congress of the United States
House of Representatives
Washington, DC 20515–0102

January 30, 2016

Colonel Jon J. Chytka
Commander, Mobile District
U.S. Army Corps of Engineers
ATTN: PD-EI (ACF-DEIS)
P.O. Box 2288
Mobile, AL 36628

Colonel Chytka,

Please find the enclosed resolutions in response to your Draft Environmental Impact Statement and proposed Water Control Manual for the Apalachicola-Chattahoochee Flint River Basin.

As you can see with the wide range of comments from community groups and various city governments, there is wide dissatisfaction with the current operational guidelines you employ and the draft Water Control Manual.

I ask you to review and give all consideration to the thoughts and views of those in these local communities who have written to you on this subject.

Thank you in advance for your consideration, and I look forward to visiting with you again.

Sincerely,

Martha Roby
Member of Congress

Enclosure

! To Commander USACE - Mobile

RESOLUTION
126-2015

A RESOLUTION BY THE CITY OF EUFAULA ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

Response to ACF212 – Office of U.S. Representative Martha Roby

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF EUFAULA that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

A

B

C

2

Response to ACF212 – Office of U.S. Representative Martha Roby

A. Comment noted.

B. Whatever purported agreements were made between the governors of the states of Alabama, Georgia, and Florida in 2003 were never approved by the United States Congress; therefore, USACE has no authority to operate for these flow targets. The stated daily and weekly average flow targets at Columbus, Georgia, are established in the Federal Energy Regulatory Commission (FERC) license for Georgia Power Company projects downstream of West Point Lake (refer to section 6.1.1.2.1). Each of the FERC target flows include an important qualifier, e.g., "a daily average target minimum flow of 1,350 cfs, or inflow, whichever is less" (emphasis added). Model results over the 73-year hydrologic period of record indicate that a daily average flow of 1,350 cfs at Columbus would be achieved on 94 percent of the days for the PAA compared to 95 percent under the NAA (refer to section 6.1.1.2.3.9). The Alabama Office of Water Resources and the Southern Nuclear Operating Company have identified a daily average flow need of 2,000 cfs at Columbia, Alabama, to support continued operation of the Farley Nuclear Plant. Model results indicate that the daily average flow need at Columbia would be met 95 percent of the days over the period of record compared to 96 percent under the NAA.

C. One of the key objectives of the Master WCM update process has been to develop a plan to operate the USACE reservoir projects more effectively as an integrated system in accordance with authorized project purposes. Even with an updated WCM, there will be a greater dependence on releases from the USACE Chattahoochee River reservoirs to meet minimum flow requirements for endangered species conservation below Jim Woodruff Lock and Dam under drought conditions, when uncontrolled flows from the Flint River could be abnormally low. Conversely, abnormally high Flint River flow conditions would not necessarily trigger a corresponding reduction in releases from the Chattahoochee River reservoirs, which would adversely affect middle and lower Chattahoochee River communities. Releases from the USACE Chattahoochee River reservoirs under normal or abnormally high flow conditions in the ACF Basin are governed by project guide curves, action zones, hydropower needs, and other considerations associated directly with each individual reservoir. The rules contain provisions for opportunities to refill the federal storage reservoirs on the Chattahoochee River during periods when endangered species flow requirements can be met primarily by Flint River flows. Refilling the reservoirs is a critical component of managing the system to fulfill authorized project purposes under various hydrologic conditions. During the refill period, USACE continues to manage releases from its reservoirs to fulfill authorized purposes throughout the system.

ADOPTED, this 21st day of December, 2015, by the City Council of the City of Eufaula.

THE CITY OF EUFAULA, ALABAMA
A MUNICIPAL CORPORATION

Robert D. Powers, President

ATTEST:

Joy White, City Clerk/Treasurer

RESOLUTION 03-2015

A RESOLUTION BY THE EUFAULA BARBOUR COUNTY CHAMBER OF COMMERCE ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY THE EUFAULA BARBOUR COUNTRY CHAMBER OF COMMERCE that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this 15th day of December, 2015, by the Eufaula Barbour County Chamber Board of Directors, by unanimous vote.

Ed Richardson, Board President

ATTEST:

Sallie Garrison, Executive Director

January 4, 2016

TriRivers Waterway Development Association
RESOLUTION NO. 2016-1

A RESOLUTION BY TRIRIVERS WATERWAY DEVELOPMENT ASSOCIATION ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY TRIRIVERS WATERWAY DEVELOPMENT ASSOCIATION that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this 4th day of January, 2016, by TriRivers Waterway Development Association, by unanimous vote.

Charles Stover, President
TriRivers Waterway Development Association

Billy Houston, Executive Director
TriRivers Waterway Development Association

1/5/2016

FOLE BOARD OF DIRECTORS RESOLUTION

A RESOLUTION BY THE FRIENDS OF LAKE EUFAULA BOARD OF DIRECTORS ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY THE FRIENDS OF LAKE EUFAULA that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this 5th day of January, 2016, by the Friends of Lake Eufaula.

Brad Moore

Brad Moore, President FOLE

1/11/16

COUNTY OF HOUSTON
RESOLUTION NO. 2016-[01]

ARE SOLUTION BY HOUSTON COUNTY, ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and

operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY HOUSTON COUNTY that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this 11TH day of January, 2016 ,by the Houston County Commission, by unanimous vote.

FOR THE HOUSTON COUNTY COMMISSION

Mark Culver, Chairman

ATTEST:

Bill Dempsey, C.A.O.

2

TROY UNIVERSITY CENTER FOR WATER RESOURCE ECONOMICS

A RESOLUTION BY TROY UNIVERSITY CENTER FOR WATER RESOURCE ECONOMICS ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin, which serve multiple purposes including flood control, hydropower production, water quality, recreation, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for

reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY TROY UNIVERSITY CENTER FOR WATER RESOURCE ECONOMICS that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this ___day of December, 2015, by the Russell County Commission, by unanimous vote.

FOR TROY UNIVERSITY CENTER FOR WATER RESOURCE ECONOMICS:

Billy T. Turner

Billy Turner, Director of Center for Water Resource Economics Troy University

ATTEST:

Maryanne Michael

1414867.1

Russell County Resolution

A resolution by the Russell County Commission to encourage and request that the U.S. Army Corps of Engineers establish flow targets for the Middle and Lower Chattahoochee River.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin, which serve multiple purposes including flood control, hydropower production, water quality, recreation, and navigation from Columbus, Georgia, and Russell County, Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, Russell County, Phenix City, Alabama and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY THE RUSSELL COUNTY COMMISSION that the U.S. Army Corps of Engineers is encouraged and requested:

(1) To establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia and Russell County, Phenix City, Alabama and 2000 cfs weekly average at Columbia, Alabama; and
(2) To operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

ADOPTED, this 23rd day of December, 2015, by the Russell County Commission, by unanimous vote.

Signed: _____
Russell County Commission, Chair

SEAL

Attest: _____
County Administrator

RESOLUTION NO. 2016- 03

A RESOLUTION BY THE CITY OF PHENIX CITY ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin, which serve multiple purposes including flood control, hydropower production, water quality, recreation, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Phenix City, Alabama, that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River Communities.

PASSED, APPROVED AND ADOPTED this 5th day of January, 2016.

Eddie N. Lowe
MAYOR

ATTEST:

CITY CLERK

MEMBERS OF THE CITY COUNCIL OF
THE CITY OF PHENIX CITY, ALABAMA

STATE OF ALABAMA

COUNTY OF RUSSELL

I, Charlotte L. Sierra, City Clerk of the City of Phenix City, Alabama, do hereby certify that this is a true and correct copy of Resolution No. 2016-03 dated the 5th day of January, 2016.

WITNESS my signature, as said City Clerk, under the seal of said City, this the 5th day of January, 2016.

CHARLOTTE L. SIERRA

C.A. 12-1270 (4)

RESOLUTION
NO. 353-15

353-15

A Resolution by the Council of Columbus, Georgia encouraging and requesting that the U.S. Army Corps of Engineers establish flow targets for the middle and lower Chattahoochee River.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, recreation, water quality, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a minimum flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states.

NOW, THEREFORE, THE COUNCIL OF COLUMBUS, GEORGIA HEREBY RESOLVES:

That the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities

Introduced at a regular meeting of the Council of Columbus, Georgia held on the 15th day of December, 2015, and adopted at said meeting by the affirmative vote of seven members of Council.

Councilor Allen voting YES.
Councilor Baker voting YES.
Councilor Barnes voting ABSENT FOR VOTE.
Councilor Buck voting ABSENT FOR VOTE.
Councilor Davis voting YES.
Councilor Henderson voting ABSENT FOR VOTE
Councilor Huff voting YES.
Councilor Pugh voting YES.
Councilor Thomas voting YES.
Councilor Woodson voting YES.

Tiny B. Washington
TINY B. WASHINGTON, CLERK

TERESA PIKE TOMLINSON, MAYOR

A RESOLUTION

A Resolution by the Board of Water Commissioners of Columbus, Georgia encouraging and requesting that the U.S. Army Corps of Engineers establish flow targets for the middle and lower Chattahoochee River.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin for purposes including flood control, recreation, water quality, hydropower production, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a minimum flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF WATER COMMISSIONERS OF COLUMBUS, GEORGIA that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

SO RESOLVED THIS 14TH DAY OF DECEMBER 2015.

Chair

Treasurer

Member

Member

Member

ATTEST:

Secretary

From: Cassie Renfrow
Sent: Friday, January 29, 2016 5:05 PM
To: ACF-WCM
Subject: [EXTERNAL] REVISED Comments PD-EI (ACF-DEIA)
Attachments: Chattahoochee RiverWarden ACF-DEIS Comments - REVISED.pdf

Please accepted the revised comments from Chattahoochee RiverWarden, Inc. attached hereto. Please disregard the previously filed comments from our organization.

Cassie Renfrow - Executive Director

Chattahoochee RiverWarden
P.O. Box 985
Columbus, GA 31902
(706) 649-2326 Office

Blockedwww.chattahoocheeriverwarden.org
Blockedwww.facebook.com/chattahoocheeriverwarden

PO Box 985 • Columbus, Georgia 31902 • 706-649-2326

January 27, 2016

Colonel Jon J. Chytka
Commander, Mobile District
U.S. Army Corps of Engineers
ATTN: PD-EI (ACF-DEIS)
P.O. Box 2288
Mobile, AL 36628

Re: REVISED Apalachicola-Chattahoochee-Flint River Basin Water Control Manual and Draft Environmental Impact Statement

Dear Colonel Chytka:

Please accept this revised version of comments from Chattahoochee RiverWarden, Inc. regarding the Draft Environmental Impact Statement (DEIS) for a new Water Control Manual for the Apalachicola-Chattahoochee-Flint (ACF) River Basin.

Chattahoochee RiverWarden, Inc. is a 501(c)3 non-profit organization whose mission is the use of science, education, and advocacy for the protection and stewardship of the middle Chattahoochee and its tributaries from West Point Dam in West Point, Georgia to Jim Woodruff Dam in Bainbridge, Georgia. Our organization represents over 650 members, businesses, and affiliations. We greatly appreciate the opportunity to provide our comments and thoughts to the United States Army Corps of Engineers (USACE) regarding the DEIS for the updating of the ACF Water Control Manuals. The ACF basin has undergone significant changes since the development of the original 1958 Master Manual. The changing dynamics of land use, population growth, increasing consumptive demand, lack of water conservation, industrial usage, agricultural irrigation, waste water assimilation, and public water supply are stressing the system to the point that the ACF projects are currently unable to meet all of their federally mandated authorizations. The proposed revisions to the Basin Master Manuals and individual federal lakes operating plans should be considered to address issues experienced throughout the basin. Additionally, some concerns about the Proposed Action Alternative in the DEIS have arisen and should be taken into account. Thank you again for the opportunity to provide our comments.

The following items address needed revisions and current concerns:

1. The use of 2007 withdrawal amounts not only inaccurately represents needs of the basin, but use of these values is a clear violation of the National Environmental Policy Act (NEPA).

a. Use of the 2007 value as a baseline for the DEIS is a clear violation of NEPA requirements. Because NEPA was passed in 1969, signed into law in 1970, the baseline to be used should be this year. Our organization has been unable to locate any complete NEPA study for the basin, a violation of federal law. A comprehensive NEPA report should reach back to the 1970s to accurately reflect the basin and effects of USACE actions. Arbitrarily choosing 2007 as the baseline year is an inaccurate representation of the effects of the Proposed Action Alternative (PAA).

A

b. The No Action Alternative (NAA) model uses basin net withdrawals for 2007, which was a year of record low precipitations, especially in the northern area of the basin. This resulted in an extreme drought throughout the watershed. During 2007, water supply variables were at critical stages. 2007 represents a year with great withdrawal stress based on human consumption and agricultural irrigation. As a whole, the basin experienced lower returns and higher demands than it does in a more typical, better representative year. As a result of using these 2007 numbers, needs other than water supply in the basin, particularly in the middle and lower Chattahoochee areas, are not being acknowledged as they should be. For example, use of water for the generation of hydroelectricity was lower in 2007 due to drought conditions. Using 2007 as the baseline for proposed alternatives is masking the basin's reliance on this authorized purpose of the federal reservoirs, and this is just one example of why 2007 is not an appropriate baseline year.

c. The U.S. Geological Survey's Historic Streamflow Conditions for Georgia, 2007 states the following:

> "The 2007 water year was an extremely dry year and was classified by the State climatologist as a 'severe' to 'exceptional' drought with the most extreme conditions occurring in northern Georgia… Streamflow data from the 2007 water year indicates this is one of the worst droughts on record as compared to previous drought periods of 1950 –1957, 1985 –1989, 1999 – 2002… North Georgia received less than 75 percent of normal precipitation (30-year average). New record low monthly streamflows occurred at 80 of 101 stations with 20 or more years of record. New record low 7-day-average streamflows occurred at 21 of 101 stations with 20 or more years of record… Reservoirs—most operated by the U.S. Army Corps of Engineers and the Southern Company— had water levels that were among the lowest recorded since the impoundments were constructed. Lake Lanier, for example, experienced 12 percent more outflow than inflow during the 2007 water year."

These historic, but most notably unrepresentative, 2007 records used as the baseline could have had impacts on the models and simulations of other alternatives listed in the DEIS.

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2. Lack of specific target flows downstream of West Point Lake and West Point Dam presents a serious concern.

Response to ACF213 – Chattahoochee River Warden

A. Council on Environmental Quality (CEQ) regulations for implementing NEPA require consideration of the NAA (section 1502.14). In the CEQ's memorandum of March 23, 1981, Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, question no. 3 addresses the NAA. The response to question no. 3 states, in part:

The first situation might involve an action … where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases, "no action" is "no change" from the current management direction or level of management intensity. To construct an alternative that is based on no management at all would be a useless academic exercise. Therefore, the "no action" alternative may be thought of in terms of continuing with the present course of action until that action is changed.

Consequently, for purposes of the Master WCM update process, the NAA reflects current reservoir operations as they have evolved over time in response to laws, regulations, policy, and new technical information. Basing the NAA for the ACF Basin on a pre-NEPA 1958 WCM or a predam condition to assess the effects of alternative WCM update plans would neither accurately reflect current baseline operations nor be consistent with "no action" as defined in the referenced CEQ memorandum.

a. Currently, the FERC Middle Chattahoochee Project License (P-2177-053) at Bartlett's Ferry Dam at Lake Harding and downstream projects provides the following terms regarding flow regimes: The Middle Chattahoochee Project would be operated to provide (1) an instantaneous target minimum flow release of 800 cubic feet per second (cfs), or inflow, whichever is less, downstream of each development; (2) a daily average target minimum flow of 1,350 cfs, or inflow, whichever is less, downstream of the North Highlands development; and (3) a weekly average target minimum flow of 1,850 cfs, or inflow, whichever is less, downstream of the North Highlands development. These flow targets were recommended by the States of Georgia and Alabama in a letter from Georgia Department of Natural Resources dated August 9, 2002 and a letter from the Alabama Office of Water Resources dated July 2, 2003. Additionally, flow targets at Columbia, Alabama should be set at a weekly average of 2,000 cfs. USACE has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir in the system, were controlled so as to allow reservoir elevations to maintain, even increase. The USACE justifies this operational procedure by citing a lack of binding flow targets in the Middle and Lower Chattahoochee River. USACE claims the following: "The balanced water management strategy for the Corps reservoirs in the ACF Basin does not prioritize any project function but seeks to balance all project authorized purposes" (Appendix C, 7-1). USACE also claims the following: "The Buford Project is regulated using a system-wide, balanced approach to meet the federally authorized purposes for the Buford Project as well as the other federal projects within the ACF Basin" (Appendix B, 1-2). However, careful analysis of the DEIS easily uncovers that water supply needs at Lake Lanier is the USACE's main focus of the manual update.

B

b. Not only do the current and proposed operating procedures clearly violate the previous claim of a balanced system and raise environmental concerns, but they also leave areas downstream of Metro Atlanta with a financial burden, creating a clear violation of environmental justice. Without these flow targets specifically stated in the Water Control Manual, and thus, potentially not met, municipal waste water treatment plants will be forced to incorporate tertiary treatment to address the potential issues of water quality with less flow for waste water assimilation. Costs of upgrades to treatment facilities would be a burden of rate payers, who are disproportionately more likely to be at or below the poverty line. Neither the income statistics shown in Table 2.6-26 in the Executive Summary, nor tables in individual reservoir projects (Table 4-11 in Appendix A, Table 4-16 in Appendix B, Table 4-8 in Appendix C, Table 4-7 in Appendix D, Table 4-12 in Appendix E) highlight the true discrepancy in per capita income levels between counties in the upper stretch and lower stretch of the watershed. More appropriate income information would be similar to the tables below. The tables shown below do not include those counties found in the watersheds both above and below West Point Lake; these counties are Troup County, Georgia and Chambers County, Alabama. The average per capita income for counties in the watershed located above West Point Lake (WPL) is $25,689.80, while the counties located below West Point Lake have an average per capita income of $19,240.00, which is almost thirty percent less than that of the upstream counties. Metro Atlanta represents one of the wealthiest areas in the state. According to the 2010-2014 American Community Survey 5-Year Estimates, nine of the twelve Georgia counties found above West Point Dam rank in the top 30 for

C

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B. The authorized purposes of the federal ACF system do not include a specific directive to meet flow targets at Columbus, Georgia, or Columbia, Alabama. The stated daily and weekly average flow targets at Columbus, Georgia, are established in the Federal Energy Regulatory Commission (FERC) license for Georgia Power Company projects downstream of West Point Lake (see section 6.1.1.2.1 of the EIS). Each of the FERC target flows include an important qualifier, (e.g., "a daily average target minimum flow of 1,350 cfs, *or inflow, whichever is less*" [emphasis added]). Model results over the 73-year hydrologic period of record indicate that a daily average flow of 1,350 cfs at Columbus would be achieved on 94 percent of the days for the PAA compared to 95 percent for the NAA (refer to section 6.1.1.2.3.9 of the EIS). The Alabama Office of Water Resources and the Southern Nuclear Operating Company have identified a daily average flow need of 2,000 cfs at Columbia, Alabama, to support continued operation of the Farley Nuclear Plant. Model results indicate that the daily average flow need at Columbia would be met 95 percent of the days over the period of record for the PAA compared to 96 percent for the NAA.

C. Language has been added to section 2.6.8 of the EIS to discuss the disparity of incomes throughout the ACF Basin. USACE is unaware of specific adverse impacts to water quality, fish and wildlife habitat, business and economic development, or recreational services and employment in the middle Chattahoochee River area downstream of West Point Dam as a direct result of current USACE project operations. Analyses presented in section 6.1.1.2.3.9 and 6.1.1.2.4.9 of the EIS indicate that the requested minimum flow targets at Columbus, Georgia, and Columbia, Alabama, would be achieved about the same percentage of the time over the modeled period of record for both the NAA and the PAA. The PAA would not impose a disproportionate economic impact on the middle Chattahoochee River area.

Median Household Income. In fact, Forsyth County has the highest Median Household income for the entire state. Conversely, Clay County, a county found below West Point Dam, shows the lowest Median Household Income for the state. Stewart County, also located downstream of West Pont Dam, has the second lowest Median Household Income for the state. This dichotomy of county wealth and subsequent favoring by federal agencies cannot be ignored. It is the opinion of our organization that when authorizing USACE to manage this system, Congress did not intend for any one part of the state to be favored over another, particularly for a wealthy area to be favored over a disadvantaged one.

C

County (State) – Located Above WPL	Per capita (2009-2013)	Median Household Income (2009-2013)	Persons Below Poverty (2009-2013)
Cobb (GA)	$33,069.00	$63,920.00	12.8%
Coweta (GA)	$26,757.00	$60,813.00	12.7%
Dawson (GA)	$27,330.00	$53,525.00	15.6%
DeKalb (GA)	$28,810.00	$50,856.00	19.0%
Douglas (GA)	$23,626.00	$52,691.00	16.1%
Forsyth (GA)	$34,582.00	$86,569.00	7.6%
Fulton (GA)	$36,757.00	$56,857.00	17.6%
Gwinnett (GA)	$25,932.00	$60,445.00	13.9%
Habersham (GA)	$18,910.00	$39,306.00	20.8%
Hall (GA)	$23,645.00	$50,853.00	18.7%
Heard (GA)	$18,964.00	$39,909.00	24.3%
Lumpkin (GA)	$20,908.00	$43,775.00	18.1%
Paulding (GA)	$24,168.00	$61,837.00	11.4%
White (GA)	$22,059.00	$40,670.00	20.1%
Randolph (AL)	$19,830.00	$35,213.00	24.5%
AVERAGE	**$25,689.80**	**$53,149.27**	**17.0%**
County (State) – Located Below WPL	Per capita (2009-2013)	Median Household Income (2009-2013)	Persons Below Poverty (2009-2013)
Chattahoochee (GA)	$20,042.00	$48,758.00	11.9%
Clay (GA)	$12,982.00	$21,192.00	44.5%
Early (GA)	$17,579.00	$28,853.00	31.6%
Harris (GA)	$31,482.00	$69,223.00	8.0%
Marion (GA)	$17,479.00	$33,301.00	20.5%
Muscogee (GA)	$22,856.00	$41,339.00	19.6%
Quitman (GA)	$14,201.00	$31,068.00	26.4%
Randolph (GA)	$18,094.00	$30,023.00	25.4%
Seminole (GA)	$17,641.00	$30,521.00	26.0%
Stewart (GA)	$13,238.00	$23,451.00	30.7%
Talbot (GA)	$16,993.00	$32,424.00	21.8%
Barbour (AL)	$16,829.00	$32,911.00	26.7%
Henry (AL)	$21,924.00	$41,650.00	14.4%
Houston (AL)	$23,316.00	$40,948.00	18.0%
Lee (AL)	$23,506.00	$43,542.00	22.0%
Russell (AL)	$19,678.00	$36,143.00	22.0%
AVERAGE	**$19,240.00**	**$36,584.19**	**23.0%**

Source for above tables: U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits Last Revised: Tuesday, 01-Dec-2015 16:11:41 EST

3. Chattahoochee RiverWarden urges the USACE to adopt the aforementioned binding target flows. Please see the attached resolution regarding these concerns. D

4. Inconsistency in delineation of proposed action zones suggests that authorized purposes at upstream reservoirs are weighted more heavily than those downstream reservoirs.

    a. Specifically, the compression of the action zones at the top of the conservation pool for Lake Lanier represents a bias to keep water in the upper stretches of the basin. Because of this compression in Lake Lanier, slight drops of the reservoir will result in less water being released from Lake Lanier while actions zone levels at West Point Lake and Walter F. George Lake are much wider, especially towards the end of the summer. USACE claims their actions and the PAA would balance the needs of the region and the authorized uses of the reservoirs throughout the system. If true balance is sought, then the system should be managed so that if one reservoir is in Zone 2, all reservoirs are in Zone 2. Management of the reservoirs' action zones should take into account differences in reservoir characteristics, such as surface area and depth. West Point Lake only has fifteen (15) feet from top of conservation pool to bottom conservation, while Lake Lanier has thirty-six (36) feet. More pronounced effects at downstream reservoirs due to discrepancy in action zones and overall management presents an environmental justice concern for residents of the middle and lower Chattahoochee. Current operations of West Point Lake have left the reservoir at levels which dramatically impact the economic health of the region. The use of the 2007 baseline, which includes historic lows for West Point Lake, slant the impact to be felt downstream of Metro Atlanta. Should the PAA be put into place, lake levels at West Point Lake and reservoirs downstream will experience adverse impacts. The number of years West Point Lake's summer pool will drop below the Initial Impact Level over the modeled period (1938-2011) would be an additional six years – 38 increased to 44. This is peak time for recreational use. Lower lake levels would make swim areas only marginally usable; unmarked recreational navigation hazards would begin to appear. Approximately 35 percent of private docks would become marginally usable, the land use around the lake area would be less desirable and potentially unusable, and most beaches would be unusable or minimally usable. The number of years Walter F. George Lake's summer pool will drop below the Initial Impact Level over the modeled period (1938-2011) would be an additional 15 years – 5 increased to 20. This is peak time for recreational use. Impacts listed above for West Point Lake are the same for Walter F. George Lake. Should lake levels be low during the spring season, fish spawn will be affected. This creates not only ecological concerns, but also economic and environmental justice concerns. Many residents downstream of Metro Atlanta rely on the river for a variety of reasons, especially for fishing. Should fishermen not have access to beaches or the use of boat docks, they might not be able to obtain necessary protein for a healthy diet. USACE should note that many residents downstream from Metro Atlanta are of minority and more likely to fall at or below the poverty line. By not addressing the differences in impacts at upstream and downstream reservoirs during times of drought, USACE clearly disregards the true needs of the basin and is doing a disservice to downstream users. E

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D. See response to Q below.

E. The rationale for the revised action zones included in the PAA is presented in section 4.1.2.2.2.2 of the draft EIS. The action zones included in the PAA achieve a more equitable balance between action zone sizing based on the project's watershed size and the proportionately balanced drawdown among the projects when operating in Zone 1. As the action zones were refined, they were generally revised upward in the winter months at Lake Lanier and West Point Lake and downward in the summer months at Walter F. George Lake. The revised action zones achieve the objectives of putting the greater burden of the system demands on the lower two reservoirs when in the upper action zones and on Lake Lanier when the system reaches drought operation. In that balanced operation, particularly during the drought periods and the reservoir recovery, there will be instances during which the upstream reservoir is in a lower zone than the downstream storage reservoir. That situation typically occurs when inflows are insufficient to raise the upstream reservoirs at a similar rate to the downstream reservoir. For example, in 2008, both West Point and Walter F. George reservoirs were able to refill to the top of conservation (top of Action Zone 1) by June 1, 2008. Buford Dam (Lake Lanier) remained in Zone 4, the lowest action zone, until almost a year later (mid-May 2009). Buford Dam did not reach the top of conservation until October 13, 2008.

b. Furthermore, our organization is convinced that the favoritism towards Metro Atlanta and consequent injustice to downstream communities is known to USACE and has been ignored. Table 6-1.3 shows percentages of action zone levels for Lake Lanier for all proposed alternatives, including the No Action Alternative. Nowhere else in the document shows a table like this for any of the other reservoirs. Table 8-2 in Appendix E shows Reservoir Impact Levels for West Point Lake but shows only one set of data for the 73 modeling period, not to the extent that Lake Lanier's table shows. Table 8-3 in Appendix C shows Reservoir Impact Levels for Walter F. George. Does the USACE openly acknowledge the effects the PAA will have on downstream reservoirs and specifically choose not to show this information in table form? F

5. Why should one reservoir or its authorized uses be considered more important than another reservoir? If this pattern is representative of the views of USACE, it is safe to assume that residents downstream of Metro Atlanta are not valued as highly as those residents of the major city by USACE.

6. No other alternatives are expanded upon within the document. No specific details are given about any of the potential actions of the other alternatives. Modeling methodology is insufficient, and failure to give any information about other alternatives should be addressed, especially because Table ES-6, Summary of Effects, shows that several of the alternatives have no change or slightly beneficial effects for several categories. The use of the 2007 baseline could have drastic impacts on the findings of other alternatives' modeling results. Stakeholders of the region would like to know what the other alternatives mentioned were specifically and why these were not more fully explained and/or explored. G

7. USACE used Atlanta the existing water supply numbers prior to Atlanta Regional Commission and the State of Georgia updated their population projections. This was noted by the USACE when the DEIS was released, however its inclusion as a footnote is not acceptable. Reduced population projection will have effects on the total amount of water allocation needed to serve Metro Atlanta. Because of the significant reduction of projected residents and subsequent need for water, there should be a lesser significance placed on Atlanta's need for water supply in the WCM. The use of these incorrect population projections used for modeling could also have affected the results for other alternatives that may have been more beneficial for the system as a whole. Because population projections are incorrect and the need for water will be less, the PAA should include the movement of more water downstream to accommodate other residents of the region. Furthermore, no attention is given to potential growth and development in any other community other than Metro Atlanta. H

8. The executive summary states the following: "Reallocation of Lake Lanier conservation storage (with or without Glades Reservoir) was determined to be the most viable and cost-effective measure to meet the water supply need identified by Georgia" (ES-17). Our organization is interested to know what other needs were identified by the state of Georgia? How are those needs being met with the DEIS? No other authorized use is considered to the extent that Atlanta's water supply is. This violates USACE's purported claims of a balanced system. It is the opinion of this organization that the PAA's penchant for addressing the needs of Metro Atlanta, and only the needs of Metro Atlanta, is a violation of their responsibility to the citizens of the ACF region. It is our assumption that Congress did not authorize the USACE to manage the system with only one area to be favored. I

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F. Lake Lanier accounts for about 66 percent of the conservation storage in the USACE projects in the ACF Basin (versus only about 19 percent for West Point Lake and 15 percent for Walter F. George Lake). Consequently, USACE selected and presented Table 6.1-3 in section 6 of the EIS to provide general information on the percent of time that conservation storage at Lake Lanier would be in each of the action zones 1 through 4. Since the operational guidelines for the PAA call for water management activities to be conducted so the Lanier, West Point, and Walter F. George projects are managed within the same action zone at all times to the extent practicable, the percentages of time within each action zone at each project should not vary appreciably from those for Lake Lanier.

G. The plan formulation process, including development of the alternatives that were thoroughly evaluated, is presented in detail in sections 4 and 5 of the EIS. Table ES-6 in the executive summary was intended to provide a broad, generalized overview of the expected impacts associated with each alternative. The supporting details are presented throughout section 6 of the EIS for each major resource area. The use of the 2007 baseline values for water withdrawals in the HEC-ResSim model is explained in the response to comment A above.

H. The revised water supply projections were developed and presented to USACE by the GAEPD as the draft EIS was being readied for public review. Based on the updated information formally presented to USACE by GAEPD letter dated December 4, 2015, USACE developed additional alternatives (Alt7I, Alt7J, Alt7K, Alt7L, and Alt7M) to reflect the revised water withdrawal demands, modeled them, and incorporated them into the final EIS. The specific focus on water supply demands associated with Metro Atlanta is directed at the long-standing need to address formal reallocation of storage in Lake Lanier for both current and proposed future needs. There are currently no other active reallocation requests in the basin. Requests for USACE consideration of any such future demands would be the responsibility of the respective states.

I. Refer to the response to comment H above.

9. The executive summary also states the following: "The PAA would represent substantially beneficial effect relative to M&I water supply in the upper Chattahoochee River basin compared to the NAA. All of the other M&I water supplies in the basin are not likely to be affected by the implementation of the PAA" (ES-30). In the event that municipal and industrial water supplies are affected by the PAA, what will be the USACE's adjustments to the WCM to address this? Will downstream interests be forced to suffer for another 59 years for an update to this WCM? J

10. Currently, the WCM assumes the construction of Glades Reservoir will undoubtedly take place. Our organization considers the existence of this reservoir as total fallacy seeing as how the project has not even yet gotten approved for its 404 permit. Glades should not be considered as a legitimate water supply source in the WCM until its 404 permit is authorized by the Savannah District Office. K

11. Our organization supports the release of water for navigation, but only under the condition that parcels are scheduled and approved by USACE prior to water release. Currently, USACE has no water quality permit from the state of Florida to dredge in order to maintain channel depth. Also, there exists a lack of dredge material disposal sites. For nearly a year, the lock at Walter F. George has been inoperable. Our organization understands that it will take an additional 1-3 years before funds are authorized for its repair. How can a congressionally authorized purpose for this reservoir go unserved for up to four years? Funding for maintenance for locks should have been previously appropriated for in USACE's operating budget. Additionally, requests to Congress to address this funding issue have not even yet been submitted by the USACE. This is a failure on USACE's part to fully address authorized purposes of this reservoir. L

12. At our discussions with USACE officials, we discussed return rates. They shared that the included return rate percentages were given to them by the state of Georgia. Should these return rates not be met by the City of Atlanta, please explain how and to what extent Atlanta's water supply will be reduced so that no further effects are realized downstream. There should exist a penalty clause addressing Atlanta's responsibility to return the amount of water specified. Additionally, based on those discussions with USACE officials, CSO volumes are being included in those return rates in an attempt to skew the amount of water being pulled and released from the basin. Did USACE do any independent research on the ability of Metro Atlanta to return the water amount claimed? M

13. Implementation of drought management is listed as a stated objective of the update. However, the PAA drought management operations would result in the trigger of drought operations seven times more often than current operations over the 73 year modeling period. This is considered "adverse" by the Corps compared to the NAA. Why did the USACE pick the alternative that results in the worst drought management procedure when that drought management is a stated purpose of the update? N

14. The U.S. Geological Survey is expected to soon release a Water Smart study for the lower Flint River. Before final approval of the DIES and WCM, the USACE needs to fully analyze in the study and made sure no adjustments to the PAA need to be made. O

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J. There are no other municipal and industrial (M&I) water supply storage contracts in the ACF Basin. The EIS contains an analysis of the impacts to M&I water supply in the basin.

K. In the State of Georgia's 2013 water supply request to USACE, the state clearly supported the proposed Glades Reservoir and considered it to be an integral part of its long-range plan. Consequently, USACE considered the project to be reasonably foreseeable for purposes of evaluating the state's request for reallocation of storage from Lake Lanier, contingent on a final decision on the permit application for the reservoir project by the USACE, Savannah District. Subsequently, in accordance with GAEPD's letter dated January 29, 2016, Hall County's certification of need for water supply from Glades Reservoir has been rescinded. Accordingly, USACE has revised the water supply options presented in the final EIS to exclude Glades Reservoir as a reasonably foreseeable action with regard to water supply.

L. USACE has attempted to obtain water quality certification for the ACF Basin for over a decade, but Florida Department of Environmental Protection has denied USACE's request. Therefore, USACE has deferred dredging on the Apalachicola River reach of the ACF Basin.
Navigation is an authorized project purpose of the ACF Basin, and the Master WCM update provides for navigation as part of a balanced operation to fulfill all authorized purposes. USACE believes the navigation season proposed in the updated Master Manual best meets the navigation mission while staying consistent with the purpose and need of the WCM update. This comment mentions many of the challenges facing navigation in the ACF Basin. USACE's infrastructure maintenance needs far exceed its available budget and navigation funding is primarily distributed based on a river system's commercial traffic. As a system with little to no commercial traffic, the ACF Basin locks have received minimal maintenance funding and are not well placed to compete for funding for major repairs such as those needed at the Walter F. George Lock.

M. The return rates used in the EIS were intended to approximate the impacts of the net withdrawal of water from the ACF Basin. Whether or not these return rates are actually achieved is a matter within the purview of the State of Georgia. USACE has no authority to require or enforce a given rate of return. The final EIS in section 5.1.4.1 documents the rationale for the return rates used in the analyses.

N. There 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. The NAA includes a drought contingency plan developed in the 1980s. That plan was included as part of the revised interim operating plan in consultation with the USFWS under section 7 of the Endangered Species Act. The PAA includes a more robust drought contingency plan than the NAA under which drought operations are triggered more often because the drought trigger has been revised to promote faster recovery of the reservoirs and less severe impacts throughout the basin. As described in section 6.1.1.3 of the EIS, drought operations would be triggered more frequently under the PAA than under the NAA, but that fact does not mean that droughts would be occurring more frequently. Under the PAA, USACE would more proactively manage water resources in the reservoirs as drier conditions emerge in the basin. In the early stages of drought operations, the water management constraints on the projects would be subtle and the effects in the system barely noticeable. Operations would become progressively more constrained as drought conditions become more severe. Conserving storage in that way would enable the projects to continue to fulfill all authorized project purposes and needs in the basin until drought conditions improve and would promote faster recovery of the reservoirs.

O. USACE used the best available science information as part of the NEPA process. Any additional technical information provided by the WaterSMART study that might be relevant to the Master WCM update process will be considered if it can be accommodated within the project schedule.

Response to ACF213 – Chattahoochee River Warden

Our organization appreciates the opportunity to offer these comments as the USACE continues the development of the Water Control Manuals for the ACF River system.

Sincerely,

Cassie Renfrow
Executive Director

Enc: Resolution by Chattahoochee RiverWarden, 01/14/2016

Response to ACF213 – Chattahoochee River Warden

CHATTAHOOCHEE RIVERWARDEN

A RESOLUTION BY THE CHATTAHOOCHEE RIVERWARDEN ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin, which serve multiple purposes including flood control, hydropower production, water quality, recreation, and navigation from Columbus, Georgia and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from the Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from the Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and stream-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

P

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flow from Lake Lanier, the largest storage reservoir in the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

P. Comment noted

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, these principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1,350 cubic feet per second (cfs) daily average and 1,850 cfs weekly average at Columbus, Georgia and 2,000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states.

NOW, THEREFORE, LET IT BE RESOLVED BY THE CHATTAHOOCHEE RIVERWARDEN that the U.S. Army Corps of Engineers is encouraged and requested:

(1) To establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, the 1,350 cubic feet per second (cfs) daily average and 1,850 cfs weekly average at Columbus, Georgia and 2,000 cfs weekly average at Columbia, Alabama; and

Q

(2) To operate the Chattahoochee River reservoirs as an integrated system in the service of all the population along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

R

ADOPTED, this 14th day of January, 2015, by the CHATTAHOOCHEE RIVERWARDEN, by unanimous vote.

FOR THE CHATTAHOOCHEE RIVERWARDEN:

Cassie Renfrow

Cassie Renfrow, Executive Director

ATTEST:

Response to ACF213 – Chattahoochee River Warden

Q. Whatever purported agreements were made between the governors of the states of Alabama, Georgia, and Florida in 2003 were never approved by the United States Congress; therefore, USACE has no authority to operate for these flow targets. The stated daily and weekly average flow targets at Columbus, Georgia, are established in the Federal Energy Regulatory Commission (FERC) license for Georgia Power Company projects downstream of West Point Lake (refer to section 6.1.1.2.1). Each of the FERC target flows include an important qualifier, e.g., "a daily average target minimum flow of 1,350 cfs, *or inflow, whichever is less" (emphasis added).* Model results over the 73-year hydrologic period of record indicate that a daily average flow of 1,350 cfs at Columbus would be achieved on 94 percent of the days for the PAA compared to 95 percent under the NAA (refer to section 6.1.1.2.3.9). The Alabama Office of Water Resources and the Southern Nuclear Operating Company have identified a daily average flow need of 2,000 cfs at Columbia, Alabama, to support continued operation of the Farley Nuclear Plant. Model results indicate that the daily average flow need at Columbia would be met 95 percent of the days over the period of record compared to 96 percent under the NAA.

R. One of the key objectives of the Master WCM update process has been to develop a plan to operate the USACE reservoir projects more effectively as an integrated system in accordance with authorized project purposes. Even with an updated WCM, there will be a greater dependence on releases from the USACE Chattahoochee River reservoirs to meet minimum flow requirements for endangered species conservation below Jim Woodruff Lock and Dam under drought conditions, when uncontrolled flows from the Flint River could be abnormally low. Conversely, abnormally high Flint River flow conditions would not necessarily trigger a corresponding reduction in releases from the Chattahoochee River reservoirs, which would adversely affect middle and lower Chattahoochee River communities. Releases from the USACE Chattahoochee River reservoirs under normal or abnormally high flow conditions in the ACF Basin are governed by project guide curves, action zones, hydropower needs, and other considerations associated directly with each individual reservoir. The rules contain provisions for opportunities to refill the federal storage reservoirs on the Chattahoochee River during periods when endangered species flow requirements can be met primarily by Flint River flows. Refilling the reservoirs is a critical component of managing the system to fulfill authorized project purposes under various hydrologic conditions. During the refill period, USACE continues to manage releases from its reservoirs to fulfill authorized purposes throughout the system

From: STEVE MCNITT
Sent: Friday, January 29, 2016 12:45 PM
To: ACF-WCM
Subject: [EXTERNAL] Comments regarding update of ACF Water Control Manual

To the Army Corps of Engineers,

Thank you for the opportunity to submit comments regarding the Corps of Engineers' ("Corps") revision of the Water Control Manual ("WCM") for the Apalachicola-Chattahoochee-Flint River ("ACF") system. As a full time resident at Lake Lanier for the past 23 years, I would like to provide some input for consideration. In general, I feel the corp does a good job of managing the level of Lake Lanier under the current mandates for use. However, I agree there are certain aspects of the current use plan that are outdated and either need to be enhance and / or revised.

Specifically, Navigation. While this may have been an appropriate designation 50 years ago, I see this as an outdated and irrelevant need in the 21st century. The economic value of releasing significant amounts of water and spending considerable effort to support a small navigation need does not seem like a good use of our resources. Use of these resources for recreation would seem a much more appropriate and applicable use in today's environment and provide a much bigger economic benefit to the entire AFC basin. A

Also, I fully support the DEIS rejection of any proposal to raise the full pool level of Lake Lanier. Yes there are times of drought (every 20 years) that we are all inconvenienced by lower lake levels. But raising the full pool level will just cause more issues in shore erosion, trees dying/falling and added silt/debris in the lake. Further, Lake Lanier has seen significant development in park facilities, residential and community dock, marina facilities, etc. which are all designed around a full pool level of 1071. Raising the full pool level would impose undue burden on a large number residents while lowering the quality of experience currently provided to all using the recreation facilities at Lake Lanier. B

Thanks again for the opportunity share my comments,

Best Regards,

Steve McNitt
Gainesville, GA

Response to ACF214 – Steve McNitt

A. The purpose of the EIS is to support the update of the water control plans and manuals for the ACF Basin, as directed by Secretary of the Army Pete Geren on January 30, 2008. Specifically, the purpose and need for the federal action is to determine how the USACE projects in the ACF Basin should be operated for their authorized purposes, in light of current conditions and applicable laws, and to implement those operations through updated water control plans and manuals. Development of a navigation maintenance plan for dredging the Apalachicola River does not fall within the scope of the Master WCM update process as directed by the Secretary of the Army. Because navigation is one of the congressionally authorized purposes in the ACF Basin, however, it was considered in making operational decisions regarding water management. It is anticipated that little or no dredging of the navigation channel in the Apalachicola River will be possible in the immediate future. Accordingly, USACE explored several options to provide the most reliable navigation season possible within the constraints of water availability and a lack of dredging. USACE used updated channel survey data collected during 2009 for the Apalachicola River in developing management measures for navigation. The PAA includes actions that, when supported by ACF Basin hydrologic conditions, will increase the availability of a navigable 7-ft channel in the Apalachicola River for a portion of the year (January–April/May) by making additional releases. Augmenting flows at other times of the year would jeopardize the ACF Basin projects' abilities to fulfill other authorized project purposes.
B. The PAA does not include any increase in the normal pool elevations of Lake Lanier and maintains the current level of flood risk management protection.

From: Janice Watson
Sent: Friday, January 29, 2016 12:46 PM
To: ACF-WCM
Subject: [EXTERNAL] Water Control Manual Update EIS Comments
Attachments: RCSC WCM comments 012516.pdf

Please accept the attached comments from the Riparian County Stakeholder Coalition (RCSC) on the Master Water Control Manual Update Environmental Impact Statement for the Apalachicola – Chattahoochee – Flint River Basin. If you have any questions or need any additional information, please do not hesitate to contact me.

Janice Watson, Administrator
Riparian County Stakeholder Coalition
c/o The Apalachee Regional Planning Council
2507 Callaway Road, Suite 200
Tallahassee, FL 32303

RIPARIAN COUNTY STAKEHOLDER COALITION

2507 Callaway Road, Suite 200
Tallahassee, FL 32303

January 25, 2016

Colonel Jon Chytka
District Commander
US Army Corps of Engineers - Mobile District
PO Box 2288
Mobile AL 36628-0001

Tetra Tech, Inc.
61 St. Joseph Street
Suite 550
Mobile, Al 36602-3521

RE: Update to the Water Control Manual (WCM) and Environmental Impact Statement (EIS) for the Apalachicola-Chattahoochee-Flint River Basin

Dear Colonel Chytka:

Please accept these comments in the above referenced matter on behalf of the Riparian County Stakeholder Coalition (RCSC). We submit these comments that reflect our work and concerns that cumulative impacts along with current and proposed operations of the US Army Corps of Engineers (USACE) continue to degrade the Apalachicola River, Floodplain, Bay and Eastern Gulf of Mexico.

The RCSC was formed by Resolution in 2007 and through inter-local agreement in 2012 by the six riparian county Board of County Commissions of the Apalachicola River basin in Florida; Jackson, Gadsden, Calhoun, Liberty, Gulf and Franklin. Each county has two appointments to the RCSC. The purpose is for our Counties' interests on the River to be consolidated into a single position; to allow for a single point of contact for management issues and programs relating to the River; and to provide a unified interest in seeking State and Federal funds to conduct technical evaluations and documentation to establish and support our actual water needs from and within the Apalachicola River.

The RCSC supported and provided funding assistance to the ACF Stakeholders, Inc. (ACFS) that completed and accepted the Sustainable Water Management Plan (SWMP) in May 2015 and by reference here made a part of these comments. The ACFS has met with the Corps regarding the plan and is submitting the plan for consideration as well. The SWMP is also available on line at www.acfstakeholders.org.

Representing the Riparian Florida Counties of Apalachicola River
Calhoun, Franklin, Gadsden, Gulf, Jackson and Liberty
Chad Taylor, Coordinator – Janice Watson, Administrator

Colonel Jon Chytka
January 25, 2016
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The RCSC participation in the development of the SWMP was through our support, funding and membership in the Apalachicola Sub-basin Caucus of the ACFS and the 14 stakeholder interest categories. The ACFS SWMP is a consensus developed and accepted plan. **However**, for our purposes in these RCSC comments we also **specifically** direct your attention to Appendix B: Stakeholder Perspectives, Geographic Stakeholder Interests, Apalachicola Sub-basin, beginning at Page 100 – 107 for your consideration where applicable, and attached herewith.

In our support of the SWMP it is our belief that an ACF Transboundary Water Management Institution (TWMI) basin wide is necessary to avoid the fatal flaws in the Corps operations that do not include cumulative impacts on the Apalachicola River, Floodplain, Bay and Gulf as a complete system as part of the ACF basin. **"The Corps interpretation of the congressionally authorized purpose for Fish and Wildlife Conservation on the ACF System should set a solid foundation for equitable treatment of upstream and downstream water users by addressing Apalachicola needs on a broader Ecosystem foundation rather than just the Endangered Species Act." The EIS should address the impacts that are being realized in this portion of the basin from the ongoing management by the Corps.** A

We share similar concerns as expressed by our Florida Congressional delegation in their letter of October 6, 2015 in these matters and in proposed Congressional Legislation, H.R. 2492, both attached.

In collaboration and discussion with other stakeholders throughout the ACF Basin we have considered a common set of concerns and suggestions the Corps should consider as additional work and a better outcome for the Fish and Wildlife Conservation authorized purpose like, not limited to:

1) What impacts would be identified if the baseline being considered was prior to 2006, instead of the current baseline condition (2012) being considered; and what would the mitigation for those accumulating impacts be for those differences. Is the data available to adequately make this comparison (operations, inflow, consumption, etc.)? We believe the answer is "Yes". A concept of shifting baselines is on full display in the ACF Basin where one can witness the resulting cumulative negative impacts. The canaries in the mine are getting groggy! B
2) During dry periods, is it possible to allow for pulses of elevated flow to accommodate lower salinity levels in the Apalachicola Bay? C
3) Existing condition (current operations) should use pre 2007 instead of RIOP 2012 condition for comparison with proposed and preferred alternatives. D
4) How can we develop Adaptive Management approaches to scheduling water releases to meet conservation and other needs, including climate change issues? E

Response to ACF215 – Riparian County Stakeholder Coalition-Janice Watson

A. USACE believes that it appropriately interpreted its statutory authority for fish and wildlife conservation. USACE reiterates that the Apalachicola Bay is not a part of the ACF system and that the authorized purposes of the ACF system do not include a specific directive to provide freshwater inflows to Apalachicola Bay to sustain the resources of the bay. USACE remains ready to review any agreement between the states or the Supreme Court ruling regarding water allocation.

B. USACE used the appropriate baseline under NEPA. The data used in the HEC-ResSim model contains data for the entire 73-year period of record.

C. The authorized purposes of the USACE ACF system do not include a specific directive to provide freshwater inflows to Apalachicola Bay to sustain the resources of the bay.

D. The NAA is the baseline against which all other alternatives are compared in the draft EIS. The NAA does not include Glades Reservoir but does include the 2012 Revised Interim Operating Plan. As explained in section 4.1.2.9 of the EIS, for modeling purposes, a fixed water supply demand was identified to enable effective comparison of alternatives. The highest levels of basinwide water supply withdrawals occurred in 2007, during the 2006–2008 drought. Although basinwide withdrawals since 2007 have been lower overall, 2007 was selected as representative of "current" demand because using the highest recent figure provides the most conservative estimate of the storage available for all purposes, assuming the highest reasonably forecasted water supply demand, including during times of drought. The project life, referred to as the "period of analysis" in the WSSA (appendix B of the EIS), is 50 years. The WSSA states on page 30 that storage contracts for reallocated storage for water supply would be expected to be signed in 2017. Accordingly, the 50-year period of analysis would begin in 2017.

E. USACE is mandated to review its WCMs on a periodic basis to determine if they should be updated. Water control plans are inherently adaptive in the management of water that can enter a system. The effects of climate change also are considered in developing water control plans (see section 6.7 of the final EIS).

Colonel Jon Chytka
January 25, 2016
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5) Identify opportunities to improve wetland function and associated ecological services, which could be diminished through the preferred alternatives. F

6) Enhancing recreational opportunities, Peach Tree Creek flows, Shoal bass population and ecological and environmental quality of the Chattahoochee stream sections. G

7) Improve patterns of flow at the National Recreational Area, both above and below Morgan Falls. H

8) A stream rating curve should be considered to allow for a forecast of habitat change differences between 650 minimum flow, and 750 minimum flow, among others. I

9) Consider interaction effects of these and other changes with forecasted climate change. J

Please accept these comments in a spirit of cooperation and willingness to help. If we can be of any further assistance please don't hesitate to contact the Riparian County Stakeholder Coalition.

Sincerely yours,

C. Chadwick Taylor

C. Chadwick Taylor
Coordinator

Attachments

- ACFS – SWMP – Appendix B, pages 100-107
- FL Congressional Delegation Letter – 10/6/15
- Proposed Congressional Legislation – H.R. 2492

Response to ACF215 – Riparian County Stakeholder Coalition-Janice Watson

F. The referenced guidance applies to federal investment in water resources planning efforts. This EIS is not a water resources planning study. It supports an operational update to the WCMs in light of current conditions and applicable laws.

G. Recreational opportunities (section 6.5.7 of the EIS), Peachtree Creek flows (section 6.1.1.1 of the EIS), shoal bass population (section 6.4.4.3.3 of the EIS), and ecological and environmental quality of the Chattahoochee stream sections (various subsections in section 6 of the EIS) were considered in the update of the WCMs.

H. Riverine flows are evaluated in various reaches between Buford Dam and West Point Dam and also in the middle and lower Chattahoochee River. Figure 6.1-24 of the EIS displays flows of the NAA and the PAA below Buford Dam. Flows exceeded 1,000 cfs approximately 75 percent of the time under the NAA as compared to 73 percent of the time under the PAA. For higher flows that would support kayaking (6,000 cfs), there was negligible difference between the NAA and the PAA over the period of record. Given the minimal-to-negligible difference in flows between the NAA and the PAA, any economic impacts would likely be the same.
USACE proposed and evaluated water management measures and alternatives that balance across all authorized project purposes, while considering Georgia's water supply storage request as directed by the 11th Circuit Court of Appeals. USACE does not have an authorized project purpose to operate and optimize flows for downstream recreation

I. The location of the minimum flow requirement, which is just upstream of the confluence of the Chattahoochee River and Peachtree Creek, does not allow for a conventional stage-discharge relationship, according to the U.S. Geological Survey. Therefore, USACE is unable to develop the relationship between habitat change and minimum flow

J. USACE addresses the effects of climate change in section 6.8 of the EIS.

APPENDIX B:

Stakeholder Perspectives

Basin stakeholders' perspectives are presented in the following sections. The perspectives presented were prepared by subgroups of stakeholders, both at a regional sub-basin and stakeholder interest group level. They do not reflect a consensus of ACFS membership, the various sub-basin groups, or stakeholder interest groups and members of a sub-basin group or stakeholder interest group may disagree with the perspective included in this Appendix.

Geographic Stakeholder Interests

Apalachicola Sub-basin

The development of this Sustainable Water Management Plan for our Caucus has demonstrated the importance and enjoyment of the relationships, knowledge and experience gained from our fellow stakeholders within the Apalachicola Sub-basin Caucus as well as our fellow stakeholders in the Chattahoochee and Flint ACF sub-basins. As a Caucus and as individuals, we want to thank our fellow stakeholders and others, funders, state and federal stakeholders, and consultants that have joined and supported our enterprise and journey and express our desire to continue to work together with sufficient resources.

Having now lived the ACFS challenges of the legal aspects of the courts since Oct. 2013 and experienced that as an obstacle to a good outcome for us all we do recognize that perhaps there may be some potential benefit to the "jurisdiction" of the court to forcing the issues and parties to one table.

Using the best available, commonly accepted data and science to work from creates understanding and provides for discussion not otherwise possible. Using an ACF Basin-wide/watershed approach, collaborative, facilitated transparent process, structure and commitment has been the key to our potential success through the ACFS proposed Sustainable Water Management Plan and a Transboundary Water Management Institution. Adaptive management has been and must continue to be a component for both the Basin and the process over the years into the future. To that end we offer the following Apalachicola Sub-basin Caucus perspective.

Sub-basin Organization and Perspective

Six years ago, stakeholders representing various water needs in the Apalachicola Basin began an initiative to "build bridges" to other ACF Basin stakeholders to our north in Georgia and Alabama. After years of personal effort on the part of Basin leaders, this initiative resulted in a joint intent by stakeholders in the ACF Basin to institutionalize common ground and seek an equitable distribution of ACF waters through change in the

management of the shared waters of the ACF Basin. Stakeholders of Florida, Georgia, and Alabama came together in crafting a Charter and By-laws for a 501c3 Stakeholder organization.

The resultant Apalachicola Sub-Basin Stakeholders were drawn from each of the six counties along the River and Bay (Calhoun, Franklin, Gadsden, Gulf, Liberty, and Jackson). The 14 ACF Stakeholder Governing Board members represent Charter specific interest groups. Six of these members are also appointed representatives of the Apalachicola Riparian County Stakeholder Coalition (RCSC). These RCSC members, while representing an ACFS identified Interest Group, additionally serve from each of the six counties and report the overall progress of the ACFS back to their respective County Commissions It is the conviction of the Apalachicola Sub-Basin Caucus that a substantive, scientifically validated, and equitable water management plan for the ACF Basin is still achievable and critical to the interests of all ACF Stakeholders. Further, that the final form of that Sustainable Water Management Plan (SWMP – including the supporting technical documents) must be successfully implemented through a Transboundary Water Management Institution involving the Stakeholders, the Federal Agencies (USACE, USFWS, NPS, EPA, NOAA, etc.), Congressional representation, and the riparian States in a new transparent process.

It was a profound, shared dissatisfaction with 20-plus years of fruitless negotiation, mediation and litigation that motivated us to join in forming ACF Stakeholders some five years ago. Our "Holy Grail" from that time unto today is institutionalizing the Mission of the ACFS in a Sustainable Water Management Plan (SWMP) and Transboundary Water Management Institution (TWIO). A recent return to the failed path of lawyer-led litigation, adversarial posturing and attorney-client "privilege" has threatened to destroy more than four years of substantive, shared progress. Only sheer determination to realize the projected "return on investment" of our Stakeholders and retained commitment to this grassroots process motivates continuation.

Preserving Natural Flow Variability

The Apalachicola River and Estuary system is of exceptional ecological importance, constituting one of the least polluted, most undeveloped, resource-rich systems left in the United States (Edmiston 2008). Combined, the river and bay have been designated by the United Nations as an International Biosphere Reserve, by the United States as a National Estuarine Research Reserve, and by the State of Florida as an Outstanding Florida Water with significant portions of the lower river and Bay designated as Aquatic Preserves. The river harbors the most diverse assemblage of freshwater fish in Florida, the largest number of species of freshwater snails and mussels, and the most endemic species in western Florida. Apalachicola Bay is one of the most productive estuaries in the Northern Hemisphere, historically supporting commercially important oyster beds and a wide variety of fish, and providing habitat for migratory birds and other animals. The river basin is home to some of the highest densities of reptile and amphibian species on the continent. The Apalachicola River and Bay are closely linked, as the river waters and its inundated floodplain are the biological factory that fuels the productivity of the estuary.

Despite its enormous ecological value, the Apalachicola River, Floodplain and Bay ecosystem has been degraded through a long history of human alterations, including impoundment of water by upstream reservoirs, consumptive use of water by farms and cities upstream, 19th -20th century navigational dredging and channel alterations by the U.S. Army Corps of Engineers (Corps), and bank alterations. The combined effect of these activities has been to alter the river's flow regime; destabilize and widen the river channel; reduce the river's hydraulic complexity and habitat diversity; smother and displace habitat in the river's rich sloughs, floodplains, and channel margins. Restoration assessments and activities are required to reverse the trends and loss of the biological, physical and chemical integrity of the ecosystem.

In addition to its high ecological diversity and seafood productivity, the Apalachicola portion of the Basin provides significant economic activity resulting from agriculture, tourism, forest products, manufacturing among others. For instance Jackson County is one of the highest peanut producing counties in the nation and has one of the largest wood pellet manufacturing mills in the world, providing a large export industry that helps foreign countries meet their commitments to reduce carbon emissions. Tourist flock to the six county area along the Apalachicola for excellent hunting and fishing and unique natural attractions such as Jackson Blue Springs Recreation Area (A first magnitude spring in Jackson County), USACE Lake Seminole Park and Angus Gholson Nature Park (featuring endangered plants and excellent birding) in the City of Chattahoochee and Gadsden County, Torreya State Park, TNC Apalachicola Bluffs and Ravines Preserve, TNC Dog Island Preserve, Little St. George Island State Preserve, NWFWMD Florida River Water Management Area in Liberty County, Dead Lakes State Park in Wewahitchka, the Apalachicola Wildlife and Environmental area, St. George Island State Park (ranked one of the best in the country) St. Vincent Island Wildlife Reserve, Apalachicola National Forest, and Apalachicola National Estuarine Research Reserve education center in Franklin County. The history of the area can be seen still alive at The Pioneer Settlement in Blountstown and historic community of Apalachicola. A major effort is underway by RiverWay South Apalachicola/Chattahoochee (RWSAC) to make these unique natural, historic and cultural tourist amenities an international destination.

Because the Apalachicola Sub-basin is both the natural and consequent termination point of upstream stakeholder water needs, management of freshwater flows into the Apalachicola can put at risk floodplain inundation and the critical salinity levels for seafood and marine life productivity in the Estuary and Eastern Gulf of Mexico. The following analysis provides the limits and quantities of freshwater flows stakeholders in the sub-basin have concluded are needed to sustain the health and productivity of this unique ecological, and cultural asset. It is a starting point and requires an over-riding commitment to adaptive management to:

- Preserve the natural flow variability and ecological functions of a river and bay system. The first principle of protecting instream flow is that the natural variability of flows (magnitude, timing, duration, frequency) in natural channels provides favorable conditions for native plants and animals.

- Minimize the loss of acres of river and floodplain habitat that are occurring under specific flow reductions for the Apalachicola River.

- Maintain flow regimes at the Sumatra gage that provide salinity conditions in the Bay to sustain historic acres of healthy oyster bars and submerged aquatic habitat in the lower river, delta and estuary.

- Based on a review of existing literature, available data and analysis accomplished by stakeholders' consultants and performance metrics to achieve a maximum overall 13% habitat loss for dry year flows, sub-basin stakeholders concluded that a maximum 6% reduction in flow from pre-dam dry years provides adequate inundation of the floodplain for this ecosystem to be sustainable.

In the development of alternative water management concepts, Apalachicola sub-basin stakeholders used this performance metric, the Presumptive Flow Standards recommended by The Nature Conservancy, and the alternative habitat loss/flow relationships to evaluate the extent to which modeled flows and the resultant loss of habitat and floodplain function are significant, and fundamentally alter the integrity of the ecosystem.

Measuring the Health and Productivity of the Sub-basin: Critical Flow Needs

The salinity and water quality of the Bay is driven by and closely correlated with the freshwater inflow from the river and surrounding floodplain. Desirable salinity conditions, water levels and quality, and nutrients can serve as true indicators of the health and productivity of the river, floodplain and bay. Historic observable measurements are necessary to understand the flows needed to sustain the functions, health and productivity of the floodplain/bay habitat and fisheries at historic levels. Apalachicola sub-basin stakeholders seek to regain sufficient freshwater flows into the River, Floodplain and Bay that recover the economy upon which their social and cultural heritage is based. Performance metrics were developed from IFA results, Bay Assessment evaluations, local knowledge of the fishermen, and GWRI modeled outputs. Specific performance metrics include:

- Maximize monthly flows at the Blountstown gauge during non-drought conditions fluctuating between 18,000 cubic feet per second (cfs) and 14,000 cfs for the months of Feb thru May, then between 16,000 cfs and 10,000 cfs annually.

- Minimize the time flows during drought conditions go below 14,000 cfs for the months of April thru June (Spat Set) and minimize the time flows go below 8000 cfs for the months of July thru November (oyster growth). This may be accomplished by instituting pulses that would achieve or approach pre-dam flow. This, in essence, is a spring pulse from mid-April thru mid-June and a second mid-summer pulse in July/August time period that would keep the salinity conditions moderated thru the summer and fall. The spring pulse is considered the most important and the timing and volume of the second pulse will be dependent on additional modeling to determine how quickly the Bay reacts to pulses from the river.

- Provide flows at the USGS Sumatra Gage during droughts that maintain salinities within the desirable range (10 - 24 PPT as defined in the Bay Assessment) for a minimum of 50-55% of the time at locations specified throughout the Bay during the spawning, reproduction and recruitment season from May thru October. During the late fall and winter (primary growth season) months of November, December, and January-April, salinities should be maintained in the desirable range a minimum of 75-80% of the time at locations throughout the Bay.

The following assumptions and considerations are provided to understand the basis for the above flow requirements:

- The flow regime at the USGS gauge at Sumatra that will produce between 10 and 24 PSU at specified points in the Bay when entered in the hydro-dynamic model. The timing and duration of increased flows and/or reduced flows for pulses should be correlated to these salinities in the desired range for oyster productivity and growth.

- Metric performance should be monitored and adapted for as required both as weekly average flows at Sumatra in cfs and weekly average salinity levels in PSU at locations in the Bay.

- Management approaches should consider conjunctive release opportunities we should model and seek to exploit. (e.g. The timing of pulses to accommodate optimum timing for spat generation/spat set and spat and oyster growth should be aligned with potential Navigation and Power Generation "releases".

- *The Corps' interpretation of the Congressionally authorized purpose for Fish and Wildlife on the ACF System should set a solid foundation for equitable treatment of upstream and downstream water users by addressing Apalachicola's needs on a broader Ecosystem function foundation rather than just the Endangered Species Act.* This authority has been provided by a number of federal laws including but not limited to: WRDA 2007, Endangered Species Act, Clean Water Act, Safe Drinking Water Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Coastal Zone Management Act, other laws, executive orders, and national policies promulgated in the past decade, and mitigation requirements applicable to Corps civil works projects.

Flow Augmentation Opportunities

The Apalachicola Sub-Basin Caucus has identified additional interests and concerns that members believe will improve the likelihood of future success in achieving adequate and dependable river flows. These include:

1. Basin-wide water conservation programs, supported by state legislation, that will achieve water demand reduction, including such measures as conservation pricing, leak elimination, public education, provide water saving devises, and water reuse where feasible and practical, including phased drought management planning with water reduction thresholds based on the nature and extent of drought conditions.

2. Long-range water supply planning (needs and sources) by all water utilities and major water users by 2020

3. Water use permitting in each State which incorporates significant conservation measures into its permitted allocation criteria.

4. Drought management planning, incorporating a water loss limit for the ACF Basin based on the occurrence of drought and meeting basic water demand needs during that climatological condition.

5. Objective and agreed-upon "triggers" for forecasting/indicating a condition of drought in the ACF Basin; and prioritization of water uses to provide for use cutbacks with implementation of the Drought Management Plan.

6. Changing the USACE flow management rules during drought conditions to reflect the USACE requirement to protect the Federal fishery that is the Apalachicola Estuary as an "essential use" of up-stream dam/reservoir operations.
7. Identifying measurable flow nodes in the Basin where imposition of required controls might have the greatest potential impact on relieving negative impacts of prolonged drought on the community of ACF Stakeholders.

8. Enactment of comprehensive state agriculture water use permitting systems to reduce the increasing demand on ground and surface water supplies in the ACF Basin. Sub-basin stakeholders believe the new permitting system should include:

    - Establishment of maximum daily uses based on type of crop and type of irrigation application system.

    - Permit issuance periods in areas of potential water supply deficits to five years.

- Mandatory threshold reductions in water withdrawals based on level reductions in regional monitor wells and prevent the mining of water.
- Permit enforcement including: site inspections, flow monitors, weekly pumping completion reports, irrigation system efficiencies, and other auditing procedures.
- Permits based on actual water pumpage and not on well sizes, capacities, or acres irrigated.
- Utilization of available irrigation technologies (e.g. drip irrigation, sod-based practices, crop selection) and the costs/benefits of these alternatives and also consider limits on agriculture water uses from center pivot systems.

9. Assessment of the feasibility for the development of Alternative Water Supply sources in the ACF Basin where projected water demands exceed current uses.
10. Evaluation of need and the development of recommendations for securing alternative water supply sources to support the increasing water needs of the Upper Chattahoochee Sub-Basin metropolitan areas including: the purchase of water from other regional sources on a wholesale basis, the development and/or enhancement of additional water storage capacity (both above and below ground in periods of excess flows), water reuse, and elimination of water losses within the existing supply systems.
11. Opportunities to support projected Upper Basin water demands by the purchase of wholesale waters from the Tennessee Valley Authority (TVA) within the State of Georgia.
12. Water reuse systems for domestic and industrial wastewater, storm water, and other waters to maximize utilization potentials for all waters.
13. An audit of each public water and sewer system to identify and eliminate water losses from these systems.
14. Comparative evaluation of the water use regulatory and permitting systems in Alabama, Florida, and Georgia and recommend approaches in these systems which would effectively enhance water availability for the existing and future uses/needs of the Basin.
15. Emphasis by local governments on water conservation, conservation pricing, controlling stormwater, wetlands preservation, water losses from faulty utility systems, and the development of long-range water supply plans.
16. Designation of the ACF Basin in their respective States as an Area of State Water Supply Concern, which should trigger an extensive number of water control applications for both water conservation and alternative water supply development.

17. Creation of a Regional Water Supply Authority with the specific mission of planning, developing, and managing water supplies for existing and future Upper Basin metropolitan water supply needs.
18. Regional Water Management based on hydrologic boundaries along the lines of the system of regional districts in Florida with the authority for permitting water wells, water withdrawals and uses, managed storage of surface waters, artificial recharge, and water supply.
19. In order that all three states have adequate and equivalent enabling legislation to conduct comprehensive water management in their respective states, Georgia and Alabama should consider passing language comparable to the Florida Model Water Code (1972) which provides the basis for Florida's water management programs. Florida should keep this Model Water Code and adopt legislation where Georgia or Alabama legislation would improve control of water resources. The intent of this legislation is to give more control over management of the water resources in each state

In summary, the Apalachicola Sub-Basin Caucus has attempted to explain our perspective on the issues relating to the critical needs of the Apalachicola River, Floodplain, and Estuary and to present management objectives intended to recover natural conditions and productivity. We feel strongly that this Sustainable Water Management Planning process has become a positive and permanent milestone in our Basin's water management for current and future generations. While the Plan does not include everything we have suggested, it does represent a substantial improvement to the current situation and should provide some enlightened and workable solutions to optimize our collective river and bay management as we continue to work towards our collective sustainable future. We thank our fellow stakeholders for this opportunity to plan with them.

Middle and Lower Chattahoochee

The essential goals of the middle-lower Chattahoochee sub basin are sustainability of historical flows since the Corps' ACF project was completed in 1975 and better flow management to benefit hydropower, recreational, navigational, industry water quality purposes, flood control, domestic water supply and protection of endangered species. The middle-lower Chattahoochee River reaches extend some 130 miles across the piedmont and coastal plain regions of Georgia and Alabama. Included are three major federal projects: West Point, Walter F. George, and J. Woodruff. Although some 40% of the total ACF Basin drainage feeds the river along this stretch, the three main reservoirs can only hold about 27% of the total storage capacity of the system.

Congress of the United States
Washington, DC 20515

October 6, 2015

The Honorable Jo-Ellen Darcy
Assistant Secretary of the Army (Civil Works)
U.S. Department of the Army
108 Army Pentagon
Washington, DC 20310

Lieutenant General Thomas P. Bostick
Commanding General
U.S. Army Corps of Engineers
2600 Army Pentagon
Washington, DC 20310

Dear Assistant Secretary Darcy and Lieutenant General Bostick:

We write to express our serious concerns regarding the draft Environmental Impact Statement (EIS) and Master Water Control Manual for the Apalachicola-Chattahoochee-Flint (ACF) River Basin. We are very disappointed that this latest plan falls short of fixing the long-running failure of the U.S. Army Corps of Engineers to properly operate the dams and reservoirs along the ACF river basin. The Corps' recommended changes will do nothing to protect the health of the full ACF system.

After years of being shortchanged from the freshwater it needs, the Apalachicola Bay's oyster population totally collapsed in 2012. Now, many more Bay residents may lose their way of life, including livelihoods and recreational activities that have been passed down for generations.

Historically, Apalachicola Bay has been one of the most productive estuaries in the Northern Hemisphere, supporting numerous species of oysters, shrimp, crab, grouper, snapper, redfish, and baitfish. The sustainability of these species is at risk due to the persistent salinity levels and nutrients flowing from Apalachicola Bay into the Gulf of Mexico.

As representatives of Floridians across the state, we are deeply troubled by the Corps' consistent mismanagement of this shared resource. We strongly urge you to reconsider the proposals in the draft EIS and to remedy them in the final version.

Sincerely,

Bill Nelson

Marco Rubio

Vern Buchanan

114TH CONGRESS
1ST SESSION

H. R. 2492

To direct the Secretary of the Army to provide for modification of certain Federal water resources development projects on the Apalachicola, Chattahoochee, and Flint Rivers, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 21, 2015

Ms. GRAHAM (for herself, Mr. BUCHANAN, Mr. DEUTCH, Mr. MURPHY of Florida, Mr. JOLLY, Ms. FRANKEL of Florida, Ms. WILSON of Florida, Mr. DIAZ-BALART, Mr. ROONEY of Florida, Mr. MILLER of Florida, Mr. HASTINGS, Ms. ROS-LEHTINEN, Ms. CASTOR of Florida, Mr. CURBELO of Florida, Ms. WASSERMAN SCHULTZ, Mr. GRAYSON, Ms. BROWN of Florida, Mr. YOHO, Mr. ROSS, and Mr. NUGENT) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

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A BILL

To direct the Secretary of the Army to provide for modification of certain Federal water resources development projects on the Apalachicola, Chattahoochee, and Flint Rivers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. APALACHICOLA, CHATTAHOOCHEE, AND FLINT RIVER PROJECTS.

(a) DEFINITIONS.—In this section:

(1) APALACHICOLA-CHATTAHOOCHEE-FLINT PROJECTS.—The term "Apalachicola-Chattahoochee-Flint projects" means the Federal water resources projects on the Apalachicola, Chattahoochee, and Flint Rivers in the States of Alabama, Florida, and Georgia authorized by section 2 of the Act of March 2, 1945 (59 Stat. 17, chapter 19; 60 Stat. 635, chapter 595) and section 203 of the Flood Control Act of 1962 (76 Stat. 1182), including—

(A) Buford Dam and Reservoir;

(B) West Point Dam and Reservoir;

(C) George W. Andrews Dam and Reservoir;

(D) Walter F. George Dam and Reservoir; and

(E) Jim Woodruff Dam and Reservoir.

(2) FRESHWATER FLOWS.—The term "freshwater flows" means the quality, quantity, timing, and variability of freshwater flows required—

(A) to support and reestablish—

(i) the physical, chemical, biological, and overall ecological integrity of the components, functions, and natural processes required for a thriving and resilient Chattahoochee River, Apalachicola River, Apalachicola River floodplain, and Apalachicola Bay;

(ii) commercial and recreational fisheries dependent on freshwater flows into Apalachicola Bay and adjacent waters, including the Gulf of Mexico; and

(iii) thriving and diverse fish, wildlife, and plant populations having species composition, diversity, adaptability, and functional organization similar to those found in the Chattahoochee River and Apalachicola River ecosystems prior to construction of the Apalachicola-Chattahoochee-Flint projects;

(B) to restore and recover species that are endangered, threatened, or at risk; and

(C) to prevent significantly harmful adverse impacts to the Chattahoochee River and Apalachicola River ecosystems.

(b) PROJECT MODIFICATION.—Notwithstanding any authorized purpose of the Apalachicola-Chattahoochee-Flint projects, the Secretary shall operate the Apalachicola-Chattahoochee-Flint projects in a manner that ensures the maintenance of freshwater flows.

(c) REVISION OF WATER CONTROL MANUALS.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary shall complete the ongoing revision of the water control manuals for the Apalachicola-Chattahoochee-Flint projects and issue revised water control manuals for those projects that ensure the maintenance of freshwater flows.

(2) OPERATIONAL MODIFICATIONS.—In carrying out paragraph (1), the Secretary shall ensure that operational modifications needed to maintain freshwater flows are achieved, to the maximum extent practicable, while providing system-wide balance in conservation storage through the maintenance of water levels within the same action zone for each of the Apalachicola-Chattahoochee-Flint project reservoirs.

(3) INDEPENDENT PEER REVIEW OF WATER CONTROL MANUALS.—

(A) IN GENERAL.—The Secretary shall enter into an arrangement with the National Academy of Sciences under which the National Academy of Sciences shall carry out an independent peer review of each revised water control manual, as required under section 2034 of

the Water Resources Development Act of 2007 (33 U.S.C. 2343).

(B) COMPLIANCE.—Each independent peer review under this paragraph shall comply with section 2034 of the Water Resources Development Act of 2007 (33 U.S.C. 2343).

(4) FINAL APPROVAL.—Before a final water control manual may be issued, the Secretary shall obtain written approval of each water control manual developed under this subsection from—

(A) the Administrator of the Environmental Protection Agency;

(B) the Director of the United States Fish and Wildlife Service;

(C) the Director of the National Oceanic and Atmospheric Administration; and

(D) the Director of the United States Geological Survey.

(d) APPLICABILITY OF OTHER FEDERAL AND STATE LAWS.—Except as provided in subsection (b), nothing in this section waives, limits, or otherwise affects the applicability of any provision of Federal or State law that would otherwise apply to the Apalachicola-Chattahoochee-Flint projects.

Response to ACF216 – Apalachee Regional Planning Council- Chris Rietow

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From: Chris Rietow
Sent: Friday, January 29, 2016 1:20 PM
To: ACF-WCM
Cc: Randy Merritt
Subject: [EXTERNAL] ARPC ACF-WCM Resolution
Attachments: ARPC Resolution 16-02.pdf

To Whom It May Concern:

Please find the attached Resolution that was approved on January 28, 2016 at the regular Board of Directors meeting of the Apalachee Regional Planning Council. Please feel free to contact me if you have any questions.

Thanks,
Chris

Chris Rietow, Executive Director/ Apalachee LEPC Coordinator
Apalachee Regional Planning Council
2507 Callaway Road, Suite 200
Tallahassee, FL 32303

RESOLUTION No. 16 – 02

A RESOLUTION OF THE APALACHEE REGIONAL PLANNING COUNCIL (ARPC) IN SUPPORT OF THE APALACHICOLA–CHATTAHOOCHEE-FLINT-STAKEHOLDERS' (ACFS) SUSTAINABLE WATER MANAGEMENT PLAN (SWMP) FOR THE APALACHICOLA CHATTAHOOCHEE FLINT (ACF) BASIN.

WHEREAS, the ACFS, have considered, approved and published a SWMP for the ACF watershed, and;

WHEREAS, the ACFS has expended years of effort and significant private funds to understand the flow regimes, environmental and ecological factors, hydropower requirements, recreational and navigational needs and other stakeholder considerations, and;

WHEREAS, the fifty-six diverse members of the ACFS Governing Board has approved by consensus vote a SWMP that considers and respects the needs of all of the stakeholders, and;

WHEREAS, the SWMP contains specific recommendations for consideration by the US Army Corps of Engineers (USACE) in the update to its Water Control Manual for the ACF basin, and;

WHEREAS, the public comment period is currently underway, and;

WHEREAS, these recommendations will substantially improve the management of the waters in the ACF basin in both flood and draught conditions;

WHEREAS, the USACE Environmental Impact Statement did not but should, give equal consideration to the authorized fish and wildlife conservation purpose as to other authorized purposes, which includes consideration of the Apalachicola River, Floodplain and Bay as part of the Fish and Wildlife Conservation authorized purpose;

And WHEREAS, the ARPC finds that these recommendations to the USACE will benefit not only the six riparian counties in Florida, but will bring benefit to all stakeholders and users of the public waters in the ACF basin:

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

1. The ARPC finds the recommendations of the ACFS to be well considered and appropriate for further study by the USACE. A
2. The ACFS's SWMP will benefit the update process of the USACE Water Control Manual. B
3. The incorporation of the Recommendations of the ACFS SWMP will benefit future citizens of the entire ACF basin from its origins in North Georgia to Apalachicola Bay. C
4. The Apalachee Regional Planning Council recommends the review team of the US Army Corps of Engineers' Mobile District should seriously consider the Recommendations contained in the Apalachicola-Chattahoochee-Flint-Stakeholders' Sustainable Water Management Plan for the Apalachicola Chattahoochee Flint Basin. D

Approved by unanimous vote of the Apalachee Regional Planning Council meeting in regular session on the 28th day of January, 2016.

BY:

Randy Merritt . ARPC Chairman

ATTEST:

Chris Rietow, ARPC Executive Director

Response to ACF216 – Apalachee Regional Planning Council- Chris Rietow

A. The ACF Stakeholder's sustainable water management plan (SWMP) was received by USACE in early June 2015. USACE received the report and its recommendations too late to be fully evaluated and considered in the draft EIS. Further, the SWMP, as initially submitted to USACE, did not include the necessary supporting technical documentation and underlying assumptions to fully evaluate the recommended management measures. The SWMP recommendations were considered to the extent possible in the final EIS.
B. The plan submitted by the ACF Stakeholders was considered and is discussed in section 4.1.4 of the final EIS.
C. The plan submitted by the ACF Stakeholders was considered and is discussed in section 4.1.4 of the final EIS.
D. The plan submitted by the ACF Stakeholders was considered and is discussed in section 4.1.4 of the final EIS.

From: Kathy Hart
Sent: Friday, January 29, 2016 1:24 PM
To: ACF-WCM
Subject: [EXTERNAL] Comment from recreational user and homeowner on Lake Lanier

Dear Army Corps of Engineers,

I am deeply concerned about the proposed changes to the navigation plan of Lake Lanier, as an Atlanta citizen water user, recreational user of Lake Lanier for 20 years and a homeowner on the lake for 8 years. We bought our home in Dec. 2007. We know what drought conditions look like up front and close -- from their lowest levels and as they gradually work their way back to "normal."

It is time for a "new normal." We need to the lake pool to be declared full at 1073 and not 1071.

We see all the debris, huge items and materials that float on the lake or stick up from the lake bottom when the water is low. I have ruined one boat prop already on an unseen tree trunk as a boat driver. As a water skier, I have had to maneuver around logs, floats, sticks, and trash. And it worries me when my kids ski. I have towed a huge black plastic dock float to shore from the middle of lake to avoid possible boat collisions. A

It's a clear and true safety issue as well as an aesthetic junk yard when the lake is low.

I urge you and the Corps to adopt the following prudent, rational and much needed approaches to good management of Lake Lanier. B

1. Revise the navigation plan to avoid the severe impact the proposed plan will have on Lanier's water levels.
2. Incorporate rigorous drought prediction that will trigger changes in reservoir operations to preserve lake levels during drought. C
3. Manage the reservoirs to retain maximum storage levels in the reservoirs so that drought conditions will not have the devastating impact that was experienced in December 2007. D
4. Model and plan for raising Lake Lanier's full pool level to 1073. E

Please take the public's input seriously into what you do to manage our state's most beautiful lake. Today's and future generations are counting on what ***you*** do now.

Respectfully submitted,

Kathy Hart

1

Response to ACF217 – Kathy Hart

A. USACE operates Lakes Lanier as part of the ACF system while balancing a range of project purposes in accordance with our operation manuals. In times of drought, lake levels would be lower throughout the system than they would be during a season with normal hydrologic conditions.

Under the drought operations provisions in the PAA, USACE would more proactively manage water resources in the reservoirs as drier conditions emerge in the basin. In the early stages of drought operations, the water management constraints on the projects would be subtle and the effects in the system barely noticeable. Operations would become progressively more constrained as drought conditions become more severe. Conserving storage in this way would enable the projects to continue meeting all authorized project purposes and needs in the basin until drought conditions improve and would promote faster recovery of the reservoirs. Compared to the drought operations provisions in the NAA, the provisions in the PAA would result in improved conditions in Lake Lanier under extreme drought conditions such as occurred in 2007–2008.

Low water action plans developed for Lake Lanier, West Point Lake, and Walter F. George Lake identify the types of public safety notifications that will be issued at various lake levels such as press releases, telephone safety messages, marking of navigation hazards, and posting signs warning of swimming hazards.

B. As shown in Figure 6.1-6 of the EIS, the PAA would likely result in lake levels at Lake Lanier ranging from about 2 to 4 ft lower than those for the NAA. That condition would be expected to occur less than 2 percent of the days over the entire modeled period of record (73 years) during the worst drought conditions for that period. The differences would be attributable largely to increased water supply withdrawals from the lake as well as increased releases from Buford Dam to meet future water supply demands for Metro Atlanta users (i.e., Cobb, Fulton, and DeKalb counties and the City of Atlanta). It should be noted that navigation is not supported when drought operations are in effect.

C. USACE regulations do not allow use of forecasts in real-time project operations. Forecasted conditions may be used for planning future operations, but releases will follow the water control operations plan based on observed conditions within the watershed to the extent practicable. The Drought Contingency Plan (DCP) sections 3-02 and 3-03 contained as an exhibit in the WCMs in appendix A of the EIS includes discussion of drought identification and National Integrated Drought Information System (NIDIS). An NIDIS pilot program has been established for the ACF River Basin with the goal of developing a regional Drought Early Warning Information System. The system will use key indicators of drought to make timely drought forecast. USACE is a contributor and user of the NIDIS pilot project tools.

D. Under the drought operations provisions in the PAA, USACE would more proactively manage water resources in the reservoirs as drier conditions emerge in the basin. In the early stages of drought operations, the water management constraints on the projects would be subtle and the effects in the system barely noticeable. Operations would become progressively more constrained as drought conditions become more severe. Conserving storage in that way would enable the projects to continue meeting all authorized project purposes and needs in the basin until drought conditions improve and would promote faster recovery of the reservoirs. Compared to the drought operations in the NAA, the provisions in the PAA would result in improved conditions in Lake Lanier under extreme drought conditions such as occurred in 2007–2008.

E. Subsequent to this comment, the comment period was extended from 60 days to 105 days (ending on January 15, 2016).

From:
Sent: Friday, January 29, 2016 1:32 PM
To: ACF-WCM
Cc: lakeinfo@lakelanier.org
Subject: [EXTERNAL] Comments of proposed WCM

To Whom it Concerns:

I have been a lake resident for over 20 years and I must say that in our area (upper Chestatee) the Corps has done a pretty good job in managing the lake, other than needing to place more 'No Wake' buoys in narrow coves. While overall fairly satisfied with Corps operations, I do now feel the need to comment on the proposed WCM. A

I would ask that the Corps consider revising the proposed navigation plan to avoid or reduce the large and undesirable effect that the proposed plan will have on Lake Lanier's water levels. Specifically, I ask that you include aggressive and proactive drought prediction data or models that will lead to advance changes in reservoir operations to keep our lake levels up during drought, as well as managing water release to maintain maximum storage capacity in anticipation of impending drought conditions. B

Furthermore, I ask that you develop a plan to raise Lanier's full pool water level to 1073. Thanks for listening and I look forward to your response. C

Dave Montrois

Sent from Windows Mail

Response to ACF218 – Dave Montrois

A. Comment noted.
B. USACE regulations do not allow use of forecasts in real-time project operations. Forecasted conditions may be used for planning future operations, but releases will follow the water control operations plan based on observed conditions within the watershed to the extent practicable. The Drought Contingency Plan (DCP) sections 3-02 and 3-03 contained as an exhibit in the WCMs in appendix A of the EIS includes discussion of drought identification and National Integrated Drought Information System (NIDIS). An NIDIS pilot program has been established for the ACF River Basin with the goal of developing a regional Drought Early Warning Information System. The system will use key indicators of drought to make timely drought forecast. USACE is a contributor and user of the NIDIS pilot project tools.

   Under the drought operations provisions in the PAA, USACE would more proactively manage water resources in the reservoirs as drier conditions emerge in the basin. In the early stages of drought operations, the water management constraints on the projects would be subtle and the effects in the system barely noticeable. Operations would become progressively more constrained as drought conditions become more severe. Conserving storage in that way would enable the projects to continue meeting all authorized project purposes and needs in the basin until drought conditions improve and would promote faster recovery of the reservoirs. Compared to the drought operations provisions in the NAA, the provisions in the PAA would result in improved conditions in Lake Lanier under extreme drought conditions such as occurred in 2007–2008.

   Navigation is one of several project purposes for which Congress authorized the ACF Basin project, and USACE considers that purpose along with all other authorized purposes when making operational decisions.

   Under the drought operations provisions in the PAA, USACE would more proactively manage water resources in the reservoirs as drier conditions emerge in the basin. In the early stages of drought operations, the water management constraints on the projects would be subtle and the effects in the system barely noticeable. Operations would become progressively more constrained as drought conditions become more severe. Conserving storage in that way would enable the projects to continue meeting all authorized project purposes and needs in the basin until drought conditions improve and would promote faster recovery of the reservoirs. Compared to the drought operations provisions in the NAA, the provisions in the PAA would result in improved conditions in Lake Lanier under extreme drought conditions such as occurred in 2007–2008. It should be noted that navigation is not supported when drought operations are in effect.
C. As stated in section 4.1.1, the Master WCM update has been conducted to determine how the federal projects in the ACF Basin should be operated for their authorized purposes, in light of current conditions and applicable laws. Raising the top of the conservation pool at Lake Lanier would require reallocating storage from the flood control pool and would adversely affect the level of flood risk management provided by the project. One of the screening criteria described in EIS section 1.4.4 was to maintain at least the current level of flood risk management. Accordingly, raising the conservation pool at Lake Lanier by 2 ft would not meet this criterion and was not carried forward.

From: Andy Morris
Sent: Tuesday, February 02, 2016 10:15 AM
To: ACF-WCM
Subject: [EXTERNAL]
Attachments: resolution 001.jpg; resolution 002.jpg; resolution 003.jpg; resolution 004.jpg

The resolution for Smiths Water & Sewer Authority is attached. The hard copy was returned in the mail today.

Andy Morris, Utilities Director
Smiths Water & Sewer Authority
P.O. Box 727
Smiths Station, AL 36877

Toll Free 800.298.6342
Fax 334.298.6412

SMITHS WATER AND SEWER AUTHORITY

Ph (334) 298-6342 Fax (334) 298-6412
2848 Lee Road 243 · PO Box 727 · Smiths Station · Alabama
www.smithswater.com

January, 25, 2016

Dear Sir/Madam:

The Smiths Water and Sewer Authority Board of Directors recently adopted the resolution that is included concerning flows on the middle and lower Appalachicola-Chattahoochee Flint River Basin. Thank you for your consideration.

Sincerely,

SMITHS WATER AND SEWER AUTHORITY

Andy Morris- Utilities Director

Smiths Water and Sewer Authority, Alabama
RESOLUTION NO. 2016-01

A RESOLUTION BY Smiths Water and Sewer Authority OF Smiths Station, Alabama ENCOURAGING AND REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS ESTABLISH FLOW TARGETS FOR THE MIDDLE AND LOWER CHATTAHOOCHEE RIVER.

WHEREAS, Congress authorized the construction of locks and dams in the Apalachicola-Chattahoochee-Flint River Basin, which serve multiple purposes including flood control, hydropower production, water quality, recreation, and navigation from Columbus, Georgia, and Phenix City, Alabama, to and from the Gulf of Mexico; and

WHEREAS, flows from Corps of Engineers reservoirs on the Chattahoochee River provide important and necessary water resources for downstream municipalities and industries; and

WHEREAS, cities and businesses on both sides of the Chattahoochee River, in reliance and anticipation of flows from Corps of Engineers reservoirs, have made substantial investments in water infrastructure, industrial facilities, and steam-driven electrical generation; and

WHEREAS, the continued and future social, economic, and ecological vitality of communities along the Middle and Lower Chattahoochee River depends on the Corps of Engineers providing a steady and reliable source of flow; and

WHEREAS, the Corps of Engineers has accorded special legal status to flow targets at Peachtree Creek and the Jim Woodruff Dam; and

WHEREAS, from time to time, the Corps of Engineers is able to rely on uncontrolled flows from the Flint River to satisfy Jim Woodruff requirements without augmenting flows from its Chattahoochee River reservoirs; and

WHEREAS, the Corps of Engineers has allowed flows in the middle and lower sections of the Chattahoochee River to fall to dangerously low levels while flows from Lake Lanier, the largest storage reservoir on the system, were controlled so as to allow reservoir elevation levels to maintain and even increase; and

A

WHEREAS, the Corps of Engineers justifies operating in that manner by citing a lack of a binding flow target in the Middle and Lower Chattahoochee River; and

WHEREAS, as a consequence, the Corps of Engineers favors one region at the direct expense of another, through water management decisions that allow one region to improve through the refilling of water storage while another region worsens due to

Response to ACF219 – Smiths Water and Sewer Authority

A. Comment noted.

diminished flow; and

WHEREAS, it is inconceivable that Congress, in authorizing the construction and operation of projects in the Apalachicola-Chattahoochee-Flint River Basin, intended for reservoir operations to favor one region over another; and

WHEREAS, despite protracted conflict and controversy over the management of Chattahoochee River reservoirs of the Corps of Engineers, the Governors of the States of Alabama, Florida, and Georgia in 2003 reached an agreement that set forth principles to allocate water flow among the three states; and

WHEREAS, those principles included flow requirements to be included in a water allocation among the states, to be met in part by state action and in part through operation of Corps of Engineers reservoirs; and

WHEREAS, those targets included a flow of 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

WHEREAS, current operational guidelines of the Corps of Engineers and the draft Water Control Manual, are, therefore, inconsistent with both statutory requirements and flows agreed upon by the three states;

NOW, THEREFORE, BE IT RESOLVED BY Smiths Water and Sewer Authority OF Smiths Station, Alabama that the U.S. Army Corps of Engineers is encouraged and requested:

(1) to establish and honor the flow requirements identified by the Governors of Alabama, Florida, and Georgia, namely, 1350 cubic feet per second (cfs) daily average and 1850 cfs weekly average at Columbus, Georgia, and 2000 cfs weekly average at Columbia, Alabama; and

B

(2) to operate the Chattahoochee River reservoirs as an integrated system in the service of all the populations along the full extent of the river, without reliance on uncontrolled flows from the Flint River as a basis to reduce support for certain Chattahoochee River communities.

C

1414867.1

Response to ACF219 – Smiths Water and Sewer Authority

B. Whatever purported agreements were made between the governors of the states of Alabama, Georgia, and Florida in 2003 were never approved by the United States Congress; therefore, USACE has no authority to operate for these flow targets. The stated daily and weekly average flow targets at Columbus, Georgia, are established in the Federal Energy Regulatory Commission (FERC) license for Georgia Power Company projects downstream of West Point Lake (refer to section 6.1.1.2.1). Each of the FERC target flows include an important qualifier, e.g., "a daily average target minimum flow of 1,350 cfs, *or inflow, whichever is less" (emphasis added).* Model results over the 73-year hydrologic period of record indicate that a daily average flow of 1,350 cfs at Columbus would be achieved on 94 percent of the days for the PAA compared to 95 percent under the NAA (refer to section 6.1.1.2.3.9). The Alabama Office of Water Resources and the Southern Nuclear Operating Company have identified a daily average flow need of 2,000 cfs at Columbia, Alabama, to support continued operation of the Farley Nuclear Plant. Model results indicate that the daily average flow need at Columbia would be met 95 percent of the days over the period of record compared to 96 percent under the NAA.

C. One of the key objectives of the Master WCM update process has been to develop a plan to operate the USACE reservoir projects more effectively as an integrated system in accordance with authorized project purposes. Even with an updated WCM, there will be a greater dependence on releases from the USACE Chattahoochee River reservoirs to meet minimum flow requirements for endangered species conservation below Jim Woodruff Lock and Dam under drought conditions, when uncontrolled flows from the Flint River could be abnormally low. Conversely, abnormally high Flint River flow conditions would not necessarily trigger a corresponding reduction in releases from the Chattahoochee River reservoirs, which would adversely affect middle and lower Chattahoochee River communities. Releases from the USACE Chattahoochee River reservoirs under normal or abnormally high flow conditions in the ACF Basin are governed by project guide curves, action zones, hydropower needs, and other considerations associated directly with each individual reservoir. The rules contain provisions for opportunities to refill the federal storage reservoirs on the Chattahoochee River during periods when endangered species flow requirements can be met primarily by Flint River flows. Refilling the reservoirs is a critical component of managing the system to fulfill authorized project purposes under various hydrologic conditions. During the refill period, USACE continues to manage releases from its reservoirs to fulfill authorized purposes throughout the system.

ADOPTED, this 25th day of January, 2016, by the Board of Directors of Smiths Water and Sewer Authority of Smiths Station, Alabama, by unanimous vote.

FOR Smiths Water and Sewer Authority OF Smiths Station, Alabama

Kenneth Vann, Chairman

ATTEST:

Mary Henry, Secretary

1414867.1