



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
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MAR 13 2017

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)  
108 ARMY PENTAGON, WASHINGTON, DC 20310-0108

SUBJECT: Apalachicola-Chattahoochee-Flint River Basin Water Control Manual Update, Environmental Impact Statement, and Water Supply Storage Assessment – Final USACE Response to Independent External Peer Review

1. Independent External Peer Review (IEPR) was conducted for the subject study in accordance with Section 2034 of the Water Resources Development Act of 2007, EC 1165-2-214, and the Office of Management and Budget's Final Information Quality Bulletin for Peer Review (2004).
2. The IEPR was conducted by Battelle. The panel consisted of four members with technical expertise in water supply planning, water resources engineering/hydrology, environmental science, and economics.
3. The enclosed approved report contains the final written responses of the U.S. Army Corps of Engineers to the issues raised and the recommendations contained in the IEPR. The report and the USACE responses have been coordinated with the vertical team and will be posted on the Internet, as required in EC 1165-2-214.
4. If you have any questions on this matter, please contact me or have a member of your staff contact Ms. Stacey Brown, Deputy Chief, South Atlantic Division Regional Integration Team, at 202-761-4106.

Encl

A handwritten signature in black ink, appearing to read "J. Dalton".

JAMES C. DALTON, P.E.  
Director of Civil Works

**Apalachicola-Chattahoochee-Flint River Basin  
Water Control Manual Update,  
Environmental Impact Statement, and  
Water Supply Storage Assessment  
U.S. Army Corps of Engineers Response to  
Independent External Peer Review**

Independent External Peer Review (IEPR) was conducted for the subject project in accordance with Section 2034 of WRDA 2007, EC 1165-2-214 and the Office of Management and Budget's *Final Information Quality Bulletin for Peer Review (2004)*.

The goal of the U.S. Army Corps of Engineers (USACE) Civil Works program is to always provide the most scientifically sound, sustainable water resource solutions for the nation. The USACE review processes are essential to ensuring project safety and quality of the products USACE provides to the American people. Battelle, a non-profit science, technology and strategy organization with experience in establishing and administering peer review panels for USACE, was engaged to conduct the IEPR of the Apalachicola-Chattahoochee-Flint (ACF) River Basin Water Control Manual (WCM) Update, Preliminary Draft Environmental Impact Statement (PDEIS) and Water Supply Storage Assessment (WSSA).

The IEPR panel reviewed the WCM/PDEIS/WSSA, as well as supporting documentation. The Final IEPR Report was issued from Battelle on September 9, 2015 and an addendum on Mar 4, 2016. Overall, sixteen comments were identified and documented. Three were identified as having medium/high significance, seven were identified as having medium significance, four were identified as having medium/low significance and two were identified as having low significance. The following discussions present the USACE Final Response to the sixteen comments.

**1. Comment – *Medium/High Significance*: The authorized project purposes are equally weighted for the alternative analysis, which is not consistent with the disproportionate importance of some project purposes.**

This comment included two recommendations. Both were not adopted, as discussed below. The comment expresses a concern that the authorized project purposes appear to be equally weighted for the alternative analysis, which is not consistent with the disproportionate importance of some project purposes.

**USACE Response: Not Adopted**

The IEPR Panel recommended the USACE (1) develop a strategy for weighting the relative importance of project purposes based on factors such as Federal and state legal requirements, project authorizations, monetary and non-monetary benefits/impacts, etc., and (2) apply weights to the evaluation and comparison of the overall performance of water management and water supply alternatives in supporting the authorized project purposes. The ACF Basin projects must be operated to meet all project purposes under a wide range of hydrological conditions, and the relative importance of the purposes may vary somewhat as conditions vary. Therefore, the ranking process used to evaluate the performance of the water management alternatives considered

each project purpose to be equally important and did not employ any unequal weighting of purposes. As an alternative to “weighting” project purposes in the evaluation of alternatives, an array of water management alternatives that emphasized operation for one or more project purposes with a lesser emphasis (or lower priority) on others was formulated and evaluated. The evaluation and ranking process showed that those alternatives specifically favoring one or more project purposes did not perform as well as the Proposed Action Alternative overall. However, text was added to Section 4.3.7 of the Final Environmental Impact Statement (FEIS) to further describe and clarify this aspect of the water management plan formulation and evaluation process.

**2. Comment – *Medium/High Significance*: The future water demand requirements, which are the basis for assessing the impacts of the alternatives on M&I water supply, could not be confirmed.**

This comment included three recommendations, all were adopted as discussed below. The comment expresses a concern that the water supply requested by the state could not be validated because certain assumptions used in the analysis are not supported by the review documents, and sufficient information on parameters such as population and employment served by the public water supply systems, residential per-capita water use, and water use rates per employee is not provided.

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) incorporating the impact of water conservation measures enacted within the basin into the water demand analysis. In response, water conservation measures discussed in the FEIS were added as references in the water demand analysis contained in the Water Supply Storage Assessment (WSSA, FEIS Appendix B), and pertinent summary information was incorporated into the WSSA text. Section 5.1.3.1 (Conservation) in the FEIS was revised to clarify the consideration of water conservation measures in the WSSA. The IEPR Panel recommended (2) verifying that the water demand analysis was developed only for the population served by the public supply systems that currently withdraw, or are projected to withdraw, water from Lake Lanier. In response, the water demand analysis was revised in Section 3 of the WSSA for the population that currently withdraw or are projected to withdraw water from Lake Lanier. The IEPR panel recommended (3) providing the values for parameters used to forecast residential and non-residential water use (population served, employment, residential per-capita water use, and water use per employee). In response, text was added to Section 3 of the WSSA (FEIS Vol 3, Appendix B) to enable confirmation of water use forecasts.

**3. Comment – *Medium/High Significance*: The maximum reasonable withdrawal from Lake Lanier is not identified and as a result, the PDEIS did not evaluate the ability of Lake Lanier to support gross water supply withdrawals between 225 and 297 mgd.**

This comment included two recommendations. Both were adopted as discussed below. The comment expresses a concern that the 225 mgd water supply allocation in the Proposed Action Alternative (PAA) was calculated based on the gross allocation requested by the state of Georgia that was considered reasonable at that time, but the PAA’s water supply allocation does not fully meet Metro Atlanta’s 2040 water supply needs.

### **USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) providing the rationale for assuming 134 mgd is a reasonable net withdrawal rate from Lake Lanier. In response, the net withdrawal is a function of wastewater infrastructure and the capability for returns to the system. The 134 mgd was based on the State of Georgia's 2013 request of 297 mgd and a return rate of 55%. USACE received an updated water supply storage request from the State of Georgia in December 2015 that included a reduced withdrawal rate of 242 mgd and a more detailed discussion of the return flows (43% return rate). The net withdrawal was then revised from 134 mgd to 138 mgd. Based on the detailed analysis and evaluation presented in Section 6 of the FEIS, USACE determined that the impacts associated with net withdrawals of 134 mgd or 138 mgd were reasonable. The IEPR Panel recommended (2) providing an estimate of the maximum withdrawal rate from Lake Lanier that can be made without unreasonable adverse impacts to other project purposes. In response, USACE received an updated water supply storage request from the State of Georgia in December 2015. USACE evaluated the updated request of 242 mgd from Lake Lanier and incorporated it into the PAA in Section 5 of the FEIS.

### **4. Comment – *Medium Significance*: The finding that the PAA would have a substantially beneficial effect on navigation is not supported by data or analysis.**

This comment included two recommendations. Both were not adopted, as discussed below. The comment expresses a concern that an analysis to support the assessment that the PAA would provide a significantly beneficial impact to navigation could not be located.

### **USACE Response: Not Adopted**

The IEPR panel recommended (1) providing analysis to support the assertion that shippers would divert commodity movements to the waterway under navigation conditions expected to occur under the PAA and (2) providing data quantifying the potential amount of cargo that could be diverted to the waterway under the action alternatives. Although one objective of the WCM update process was to increase the reliability of navigation on the ACF system, which is an authorized project purpose, the objective was not to ensure that some sustainable level of commercial navigation would necessarily return to the system. While the conditions conducive to the use of the navigation channel would likely improve under several alternatives, individual shippers would be responsible for making the decision to use the increased channel availability. Use of the waterway under these alternatives would likely be shipment-specific and opportunistic, and not subject to traditional navigation benefit estimation techniques. Text containing this explanation as to why a traditional navigation economic analysis was not performed was added to Sections 4.1.2.6 and 6.5.2.5 of the FEIS.

**5. Comment – *Medium Significance*: There is no evidence to support the use of equal weighting for each water availability and water quality parameter/indicator used to evaluate effects on fish and wildlife resources.**

This comment included four recommendations. One of the recommendations was adopted, and three were not adopted, as discussed below. The comment expresses a concern that the basis for equal weighting of parameters/indicators that were measured in order to evaluate effects to fish and wildlife resources is not explained in the PDEIS.

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (4) providing the rationale for equal weighting of parameters when a ranking system employs equal weighting. In response, text was added to Section 4.3.4 of the FEIS to describe the equal weighting of the various parameters/indicators to evaluate effects on fish and wildlife resources. Text was also added in Section 6.4.3.1 of the FEIS to describe how the water quality parameters were considered from both system-wide and site-specific perspectives.

**USACE Response: Not Adopted**

The IEPR Panel recommended (1) evaluating the relative significance of each parameter/indicator, giving more weight to those parameters/indicators that are more important to fish and wildlife resources, (2) assigning a specific numeric value to each parameter/indicator based on the evaluation, (3) reanalyzing the impacts to fish and wildlife resources based on the newly assigned weights. However, past and ongoing coordination with the US Fish and Wildlife Service has not developed any scientific reason to consider any one of the six fish and wildlife indicators to be more important than another. In the absence of such evidence, the Water Control Manual update considered the indicators to be equally important in assessing the impacts of various alternatives on mussels. The relative importance of the various water quality indicators is likely to vary throughout the system depending on hydrologic conditions and the specific physical and biological characteristics of each segment of the basin. The evaluation of effects on water quality and fish and wildlife resources as presented in the PDEIS considered the relative importance of the water quality parameters based upon the specific conditions and characteristics of each segment of the river basin.

**6. Comment – *Medium Significance*: The finding that the PAA would have a “substantially beneficial” effect on the M&I water supply is not supported by the data or analysis.**

This comment included three recommendations. All were adopted as discussed below. The comment expresses a concern that the stated impact of the PAA on the M&I water supply is not consistent with the criteria for assessing the impacts as stated in the review documents.

**USACE Response: Adopted**

The IEPR Panel recommended (1) revising the assessment of the M&I water supply impact of the PAA on Lake Lanier to be consistent with criteria cited on page 6-189 of the PDEIS. In response, text was added in Section, 6.5.1, Pages 6-363 and 6-364, of the FEIS to better explain the rationale

for characterizing the impacts of each alternative on the water supply purpose as either “substantially adverse” or “substantially beneficial.” The IEPR panel recommended (2) providing the rationale for characterizing the impact on the M&I water supply as being only “substantially adverse” or “substantially beneficial.” In response, additional language was added to Section 6.5.1 of the FEIS to explain that the impact assessment is based on a comparison of the alternatives to the No Action Alternative. The IEPR Panel recommended (3) revising Section 6.5.1.1, page 6-190, in the Environmental Consequences section of the PDEIS to reflect future water demand withdrawals, as requested by the State of Georgia from Lake Lanier of 297 mgd. In response, Section 6.5.1.1, page 6-364, of the FEIS was revised to reflect the State of Georgia’s December 2015 updated water supply request for a withdrawal of up to 242 mgd from Lake Lanier.

**7. Comment – *Medium Significance*: Future Without-Project (FWOP) conditions are not consistent across all alternatives.**

This comment included one recommendation, which was not adopted as discussed below. This comment expresses a concern that the exclusion of the proposed Glades Reservoir from certain alternatives results in an inconsistent definition of the FWOP conditions that are intended to constitute the benchmark against which all the plans are evaluated.

**USACE Response: Not Adopted**

The IEPR Panel recommended (1) including all water supply measures assumed to be in the FWOP conditions, including the Glades Reservoir, as available to meet Georgia’s future water demand requirements for all alternatives. In response, the Glades Reservoir is properly accounted for in the alternatives considered in the PDEIS and in the WSSA. Including the Glades Reservoir in the No Action Alternative (NAA) would not be consistent with “no action” as described in NEPA guidance. Consistent with NEPA requirements, all the alternatives are compared to the NAA in the PDEIS. In Georgia’s December 2015 updated water supply request, Glades Reservoir was no longer considered as a viable water supply source as its certificate of need was withdrawn by the state. As a result, Glades Reservoir was removed from all alternatives evaluated in the FEIS and in the WSSA, except for one alternative that considered Glades Reservoir as a comparison to the PDEIS.

**8. Comment – *Medium Significance*: The conclusion that specific compensatory mitigation measures would not be required for the PAA in resource areas where substantial adverse effects and slightly adverse effects were identified is not supported.**

This comment included one recommendation, which was adopted as discussed below. This comment expresses a concern with the conclusion that no mitigation would be required for the PAA which is contrary to the results of the effects analysis.

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) discussing the need for mitigation specifically for each resource area where adverse effects were determined. In response, Section 6.10 (Mitigation) in the FEIS was revised to present information on mitigation considerations by major resource areas where adverse effects were determined.

**9. Comment – *Medium Significance*: Structural measures that could increase the performance of the Federal reservoirs/dams with minimal changes to their overall physical features are not considered in the formulation of alternatives.**

This comment included two recommendations, both were not adopted, as discussed below. This comment expresses a concern that potential changes to the physical characteristics and flow conditions at each of the ACF flood management dams/reservoirs were not considered and could have a material impact on the selection of the Proposed Action Alternative (PAA) or recommended plan.

**USACE Response: Not Adopted**

The IEPR Panel recommended (1) analyzing potential structural changes to ACF dam features that would enhance downstream flows during peak and low-flow periods and provide benefits that would be sufficient to offset the costs of such changes and (2) adding the results of the analyses to the evaluation criteria when selecting the PAA or recommended plan. However, conducting these sorts of investigations would not be within the scope or purpose of the Water Control Manual (WCM) update and EIS. USACE regulations require that structural changes to the projects, whether major or minor, are subject to specific study and benefit evaluation procedures and authorization and/or approval processes outside the realm of normal operation and maintenance. Other programs are available and are more appropriate for considering and implementing structural changes separately from the water control manual (WCM) update as described in Section 4.1.1 of the FEIS.

**10. Comment – *Medium/Low Significance*: For four resource categories, the rationale for measuring some parameters and/or determining the resulting conclusions or environmental condition changes is not described.**

The comment included four recommendations, all were adopted as discussed below. The comment indicates that insight into the sensitivity analysis of key parameters done in the background, while unlikely to alter the outcome of the preferred alternatives selection, provides clarity and reassurance to audiences that a reasonable range of possible errors were considered.

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) providing credible water quality information related to the establishment of the deltas, such as references to the literature or personal communication with scientific experts, to substantiate the validity of the effects analysis. In response, text and citations were added to Section 6.1.2 of the FEIS to describe the rationale for qualitative summary statements. For example, a discussion was added to more clearly state that the standard range for DO is 6 mg/L from trout waters (below Buford Dam) to 5 mg/L as a daily average and 4 mg/L as a minimum. Therefore, a decrease of 0.1 to 0.5 mg/L was considered slightly adverse. The IEPR Panel recommended (2) providing the rationale for each effects statement for each alternative, or provide the rationale once, and refer to it for the subsequent alternatives in regards to vegetative communities and wildlife. In response, the last sentence in the first paragraph of Section 6.4.2 was revised to read as follows: “Under flood conditions, however, water management operations in the ACF Basin could have the potential, depending on how they are implemented, to affect terrestrial vegetative communities and wildlife beneficially

or adversely.” The IEPR panel recommended (3) discussing the importance of connectivity to the main channel for fish and wildlife resources to support use of this metric to analyze impacts to these resources. In response, Section 6.4.3.1 was revised to more clearly describe the importance of flood plain connectivity to the main channel to fish and aquatic resources and to summarize the relative importance of the flood plain connectivity metric to assess impacts on these resources. The IEPR Panel recommended (4) discussing effects to foraging habitat for Gulf sturgeon juveniles. In response, Section 6.4.4.3.1 was expanded to discuss the general effects to Gulf sturgeon foraging habitat that would be expected under the various alternatives.

**11. Comment – *Medium/Low Significance*: All alternatives are considered to perform equally well in flood control; however, changes in storage capacity during storm events due to differences in lake stages are not considered.**

The comment included one recommendation, which was adopted as discussed below. The comment indicated that differentiating potential changes in flood risk associated with water management and water supply alternatives would provide a more complete disclosure of impacts and strengthen decision-making

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) assessing the HEC-ResSim simulation results for the 73-year period of record to identify differences in stages at Lake Lanier and West Point Lake that occur prior to storm events, and include that information in the evaluation and comparison of water management and water supply alternatives. In response, text was added to the discussion of the flood risk management function for the Lanier and West Point projects (Section 2.1.1.2.4.1 of the FEIS) to explain that flood risk management operations would not be appreciably affected by differences in the reservoir water levels below the guide curve at the beginning of a storm event that may result from water management operations under different alternatives. A new sub-section was created in Section 6.5.6 to briefly discuss the flood risk management effects of the different alternatives, using HEC-ResSim outputs and other information to show that the effects of the alternatives is minor.

**12. Comment – *Medium/Low Significance*: The return rate, an important parameter for estimating the availability of water supply, is not applied in a consistent manner across all water management and water supply alternatives.**

The comment included three recommendations. All three were adopted, as discussed below. The comment expresses a concern that the return rate, which directly affects the availability of water in Lake Lanier and the Chattahoochee River to meet water supply demands, was inconsistently applied among alternatives resulting in evaluations of unrealistic alternatives.

### **USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) estimating return rates to be applied to the water management and water supply alternatives based on historical data, projected water supply deliveries, and planned infrastructure improvements. In response, text was added to Section 5.1.4.1 of the FEIS regarding current and proposed future treatment plant capacities and how the return rates were used in the formulation of alternatives. The IEPR Panel recommended (2) applying the estimates of existing and future return rates in a uniform manner for all water management and water supply alternatives. In response, text was added to Section 5.1.4.1 of the FEIS regarding current and proposed future treatment plant capacities and how the return rates were used in the formulation of alternatives. The IEPR recommended (3) addressing uncertainties in the estimate of future return rates, and performing a sensitivity analysis to identify the potential impacts on the performance of alternative plans. In response, additional HEC-ResSim modeling was performed to determine the effect that return rates have on the plan selection process and further documented in Section 5.1.4 the FEIS.

### **13. Comment – *Medium/Low Significance*: The two-phased approach to the screening of alternatives is not explained, and the use of different terms for alternatives is confusing.**

The comment included two recommendations. Both were adopted as discussed below. The comment indicates that an alternative rankings based on intangibles would demonstrate that the full range of beneficial alternative analysis was performed in the Environmental Impact Statement.

### **USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) including a detailed description of the two-phased approach to alternative screening, and the rationale as to why this two-phased screening was used. In response, additional language was added to Section 4 of the FEIS further explain the rationale for the two-phased formulation process. Text was also added to Section 4.3.7 to clarify the ranking table (Table 4.3-14) and to clarify the selection of the water management alternatives that were carried forward to the second phase of the formulation process. The IEPR Panel recommended (2) using consistent terminology to refer to the water management and water supply alternatives. In response, the terminology used to refer to water management and water supply alternatives has been revised throughout the FEIS to avoid confusion.

### **14. Comment - *Low Significance*: Certain socioeconomic data provided in the PDEIS documents are inconsistent or inaccurate, which could lead to misinterpretation of study area conditions.**

The comment included five recommendations that were all adopted as discussed below. The comment indicates that providing insight into the data Quality Assurance/Quality Control (QA/QC) procedures used by the U.S. Army Corps of Engineers (USACE) will help alleviate audience uncertainty.

### **USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) verifying the government employment for the study area. In response, government employment data was verified and corrected in Section 2.6 of the FEIS. The IEPR Panel recommended (2) eliminating inconsistencies/conflicts between employment data presented in the review documents. In response, Table 2.6-29 in the FEIS was revised to correct the employment figures for the indicated occupations. The revisions to Table 2.6-29 also eliminated the inconsistency with Table 4-4 of the ACF Master Manual. The IEPR Panel recommended (3) verifying data concerning all families and families with female householder living in poverty within the basin. In response, revisions were made to Table 2.6-31 in the FEIS and associated text to correct the statistics regarding families with income in 2012 that were below the poverty level. The IEPR Panel recommended (4) eliminating inconsistencies/conflicts between data presented in the tables and in text concerning families and persons living in poverty. In response, revisions were made to Table 2.6-31 in the EIS and associated text to correct the statistics regarding families with income in 2012 that were below the poverty level. The IEPR Panel recommended (5) revising socioeconomic data to reflect resources physically within the ACF basin, or indicating throughout the review documents that the socioeconomic data presented accounts for resources that are in portions of counties that extend beyond the ACF basin. In response, pertinent tables in Section 2.6 of the FEIS were footnoted to state that they reflect county-level data which, despite some overlap with adjacent drainage basins, are considered to be representative values for the ACF Basin. Most of the information is not readily available at a sub-county level along drainage basin lines. The values presented in the FEIS for the various socioeconomic resources provide a reasonable representation of the population, employment, housing units, etc. within the ACF Basin, or are directly served by waters withdrawn from reservoirs or rivers and streams in the basin.

**15. Comment - *Low Significance*: The PDEIS does not acknowledge that variations in the amount of hydroelectric power generated under the alternatives would be offset by increases or decreases in power generation from another source, which could change greenhouse gas emissions.**

The comment included two recommendations that were both adopted as discussed below. The comment indicates that impacts from greenhouse gas emissions were not evaluated, therefore the analysis of water management and water supply alternatives in the PDEIS were incomplete.

### **USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) identifying increases or decreases in power generation that would be required from other power sources under the various alternatives, based on their average annual hydroelectric power generation data. In response, further discussion was added to the FEIS, as an appendix to the Hydropower Analysis Report, found in Volume 3, Appendix B, on the relative effect of decreased hydropower production under the alternative plans and increases/decreases in power generation that may be required from other sources. The IEPR Panel recommended (2) analyzing the impacts of greenhouse gas emissions from sources using fossil fuels under the water management and water supply alternatives. In response, a more definitive assessment of the effects of the alternatives on greenhouse gas emissions was added to Section 6.8.1 of the FEIS.

**16. Comment - *Medium Significance*: Public concerns have resulted in three potential issues that have not been sufficiently presented or described in the PDEIS.**

The comment included one recommendation, which has been adopted as discussed below. The comment indicates that the public comments should be directly examined regarding the details of Glades Reservoir, population projections, and the level of ecological protections from releases downstream of Lake Seminole/Jim Woodruff Lock and Dam.

**USACE Response: Adopted**

**Action Taken:** The IEPR Panel recommended (1) conducting additional investigations, incorporating documentation, and carrying out further consultation on the issues described in the comment. In response, the recommended actions were taken where warranted. In the case of the Glades Reservoir, that alternative was deleted from the HEC-ResSim modeling and analyses in the FEIS due to the State of Georgia's permit withdrawal. Accordingly, this reservoir is no longer seen as a water supply source for the foreseeable future. The water use/population projections in the FEIS were also revised based on an amended submittal by the State of Georgia in December 2015. The FEIS was updated from the DEIS to include substantial additional details on the metrics and analysis developed by USFWS to assess impacts on fish and wildlife resources. The FEIS also includes the final BO, as an appendix, that contains specific information on reasonable and prudent measures (RPMs) to avoid take of protected species and conservation measures. However, this additional information did not result in a substantive change from proposed water management operations in the PAA at Jim Woodruff Lock and Dam. These operations, even after eliminating Glades Reservoir and revising upstream population and water demand projections, would not be expected to have appreciable adverse effects on Apalachicola River and bay resources as compared to the NAA. This conclusion is presented and supported in the FEIS. Section 6.4.3.3 of the FEIS refers to metrics used to evaluate impacts to protected species (those listed as threatened or endangered under the ESA) from potential changes in releases from Jim Woodruff Lock and Dam. These metrics were developed in consultation with US Fish and Wildlife Service. The FEIS described specific parameters (flow, fall rate, floodplain inundation, etc.), along with numeric values for those parameters, that were determined necessary during ESA consultation to conserve these listed species. Specific parameters for the conservation of other non-listed species in the basin, including those in Apalachicola Bay, are not identified or established.