No. 142, Original

In the Supreme Court of the United States

STATE OF FLORIDA, PLAINTIFF

v.

STATE OF GEORGIA

ON EXCEPTIONS TO THE REPORT OF THE SPECIAL MASTER

BRIEF FOR THE UNITED STATES AS AMICUS CURIAE IN SUPPORT OF OVERRULING FLORIDA'S EXCEPTION 2C TO THE REPORT OF THE SPECIAL MASTER

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QUESTION PRESENTED

The United States will address the following question:

Whether the Special Master erred in concluding that the discretion of the United States Army Corps of Engineers (Corps) in operating its system of dams in the Apalachicola-Chattahoochee-Flint river basin precludes a finding of redressability. (Florida Exception No. 2c).

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INTEREST OF THE UNITED STATES

This is an original action brought by the State of Florida against the State of Georgia seeking an equitable apportionment of the waters of the Apalachicola-Chattahoochee-Flint river basin (ACF Basin). The United States Army Corps of Engineers (Corps) operates five federal dams in the ACF Basin for purposes authorized by Congress. The Special Master has concluded that Florida failed to show that its requested relief—a cap on Georgia's consumption of water—would afford adequate relief to Florida without the Corps' participation as a party in this case. Because the Corps' operational protocols for its system of dams in the ACF Basin played a pivotal role in the Special Master's recommendation, the United States submits this brief to ensure that the Court understands those proto-

cols. The United States also has an interest in protecting the Corps' ability to operate its system of dams in the ACF Basin for congressionally authorized purposes and in compliance with other federal statutes. At the Court's invitation, the United States filed a brief as amicus curiae addressing Florida's motion for leave to file a bill of complaint.

STATEMENT

Florida initiated these proceedings by requesting leave to file a complaint against Georgia seeking an equitable apportionment of the waters of the ACF Basin. Compl. ¶ 1. This Court granted Florida leave to file its complaint, 135 S. Ct. 471, and appointed Ralph I. Lancaster, Jr., to serve as the Special Master, 135 S. Ct. 701. In the course of the proceedings, Florida has limited its request for relief to a cap on Georgia's consumption of water. Compl. p. 21 (prayer for relief); Docket entry No. 128, at 10 (June 19, 2015) (explaining that Florida disclaimed any request for a decree that would require a minimum flow at the state line). Special Master Lancaster (the Master) has submitted a Report recommending that the Court deny Florida's request for relief. Report of the Special Master 69-70 (Feb. 14, 2017) (Report or Rep.). The Master concluded that Florida did not prove by clear and convincing evidence that a cap on Georgia's consumption "would provide a material benefit to Florida" during times of drought because the Corps could store increased basin inflow in reservoirs on the Chattahoochee River instead of passing additional water through to Florida. *Ibid.*

The United States files this brief as amicus curiae to provide the Court with a description of the Corps' past and current operational protocols for its system of dams in the ACF Basin. The United States also addresses

Florida's contention that, if this Court entered a decree imposing a cap on Georgia's consumption, the Corps would be likely to provide Florida with additional flows produced by such a cap—either within its existing operational protocols or by altering its operational protocols to do so.

A. The Apalachicola-Chattahoochee-Flint River Basin

The Chattahoochee River originates in north Georgia, flows southwest past Atlanta, and then flows south along Georgia's border, first with Alabama, then with Florida. At Georgia's southwest corner, the Chattahoochee joins the Flint River, which originates south of Atlanta and flows through central Georgia. The Chattahoochee and the Flint join to form the Apalachicola River, which flows south through northwest Florida and into the Apalachicola Bay in the Gulf of Mexico. Rep. App. B1 (map). The ACF Basin drains more than 19,500 square miles in Georgia, Alabama, and Florida. 1 U.S. Army Corps of Eng'rs, *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* 1-1 (Dec. 2016) (*Final EIS*).[1]

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[1] On March 30, 2017, the Corps implemented an updated Master Water Control Manual for the ACF Basin and updated individual reservoir regulation manuals for each federal project in the Basin. The updated manuals and supporting documents, including the Final EIS, are available at http://www.sam.usace.army.mil/Missions/Planning-Environmental/ACF-Master-Water-Control-Manual-Update/ACF-Document-Library/.

B. Federal Projects In The ACF Basin

In 1939, the Corps transmitted a report to Congress recommending development of the ACF Basin for multiple purposes, including navigation, hydroelectric power, national defense, commercial value of riparian lands, recreation, and industrial and municipal water supply. H.R. Doc. No. 342, 76th Cong., 1st Sess. 77 (1939). Congress approved the Corps' plan in the River and Harbor Act of 1945, ch. 19, § 2, 59 Stat. 17. In 1946, the Corps recommended several changes to the original plan, including moving one of the proposed hydropower generating dams further upstream from Atlanta to Buford, Georgia. H.R. Doc. No. 300, 80th Cong., 1st Sess. 27-28 (1947). Congress authorized the modified plan in the River and Harbor Act of 1946, ch. 595, § 1, 60 Stat. 635. In 1962, Congress authorized the construction of an additional dam at West Point, Georgia. See Flood Control Act of 1962, Pub. L. No. 87-874, Tit. II, § 203, 76 Stat. 1182.

The Corps currently operates five federal dams in the ACF Basin for the purposes authorized by Congress. The northernmost dam is Buford Dam, on the Chattahoochee north of Atlanta, which forms Lake Sidney Lanier. Next is West Point Dam, followed by Walter F. George Dam and then George W. Andrews Dam, each of which is located on the Chattahoochee along the Georgia-Alabama border. The southernmost dam is Jim Woodruff Dam, which is at the confluence of the Flint and Chattahoochee Rivers and forms Lake Seminole. Water released from Woodruff Dam flows south into the Apalachicola River in Florida. Rep. App. B1, C1 (maps); see *Final EIS* 2-25.

The Corps operates the system of dams in the ACF Basin pursuant to a Master Water Control Manual

(Master Manual) governing all federal projects in the ACF Basin and separate reservoir regulation manuals for each individual project. In addition to operating the dams to accomplish their congressionally authorized purposes, the Corps operates the system to comply with the Endangered Species Act of 1973 (ESA), 16 U.S.C. 1531 *et seq.*, and other federal statutory requirements. See, *e.g.*, Fish and Wildlife Coordination Act, 16 U.S.C. 661-667c; Water Supply Act of 1958, 43 U.S.C. 390b (2012 & Supp. III 2015); Flood Control Act of 1944, 16 U.S.C. 460d, 33 U.S.C. 708. An updated Master Manual and updated project-specific manuals for each federal project in the ACF Basin were implemented on March 30, 2017. See note 1, *supra*.

1. Operating procedures under the 2012 Revised Interim Operations Plan

Until the recent adoption of the revised Master Manual and reservoir regulation manuals in March of this year, the Corps operated pursuant to manuals first adopted in 1958 and a series of interim operating plans reached in consultation with the Fish and Wildlife Service under the ESA to protect the threatened Gulf sturgeon and three threatened or endangered species of mussels in the Apalachicola River and adjacent waters in Florida. See *Final EIS* 2-63 to 2-64, 2-72 to 2-73. Before the Master, the parties presented evidence based on the latest iteration of the interim operating plan, the 2012 Revised Interim Operations Plan (RIOP). *Id.* at 2-72 to 2-77. The basic framework of the RIOP has been carried forward in the Master Manual issued in March 2017. Thus, although the RIOP is no longer in effect, its provisions are relevant to the Master's recommendation.

The RIOP guided the Corps' coordinated operations and releases from its system of dams in the ACF Basin to produce flows from Woodruff Dam. *Final EIS* 2-72 to 2-77. The RIOP set the minimum flow levels from Woodruff Dam under varying conditions, as well as the maximum fall rate, which is the maximum daily vertical drop in river stage for the Apalachicola River as flows are reduced. The maximum fall rate is designed to protect the species downstream of Woodruff Dam that are listed under the ESA. *Id.* at 2-73; see p. 10, *infra*. Under the RIOP, the Corps' decisions to release water from upstream reservoirs to achieve a particular minimum flow from Woodruff Dam were keyed to three variables: the time of year, the combined amount of water in the Corps' reservoirs, and the current Basin inflow. *Final EIS* 2-73.

There were three seasons under the RIOP—spawning (March-May), non-spawning (June-November), and winter (December-February). *Final EIS* 2-73. In general, the guide curves of the RIOP, which are unchanged in the revised Master Manual, represent the desired surface elevation of the reservoirs at a given point in time. *Id.* at 2-25. The guide curves prescribed lower reservoir levels in the winter and spring to maintain capacity for flood control, and higher levels in the summer. *Id.* at 2-65 to 2-67, 4-10 to 4-11. The refill period ran from late winter into the spawning season, and the drawdown period began in the fall. *Id.* at 2-66.

The second factor governing the Corps' release decisions under the RIOP was the amount of usable water in the system. *Final EIS* 2-73. Each of the three reservoirs with significant storage capacity—Lake Lanier, West Point Lake, and Walter F. George Lake—is divided into storage pools that are distinguished by their

elevation above sea level. *Id.* at 2-73 to 2-74. At the top of Lake Lanier and West Point Lake is flood storage, which is usually empty, and at the bottom of all three reservoirs is the inactive pool, which is generally not used to meet project purposes. See *id.* at 2-25, 2-28, 2-35.[2] In the middle is the conservation storage pool, which is used to meet all project purposes other than flood risk management. *Ibid.*

Because the Corps operates its reservoirs as an integrated system, it used what is called "Composite Conservation Storage" to make release decisions under the RIOP. *Final EIS* 2-73. Composite Conservation Storage is calculated by combining the conservation storage —again, the storage pools used to meet project purposes other than flood control—of Lake Lanier, West Point Lake, and Walter F. George Lake. *Ibid.* That system-wide Composite Conservation Storage is divided into four operational zones, based on the elevation of the water level and the time of year. *Id.* at 2-25, 2-73, 5-52 to 5-54. The Composite Conservation Storage Zones are derived by adding the conservation storage available in each zone for each of the three storage reservoirs. *Id.* at 2-73. That total is used to determine which of the Composite Conservation Storage Zones the overall system is in. Below Composite Conservation Storage Zone 4 is the Drought Zone (roughly equivalent to the inactive storage in Lake Lanier, West Point Lake, and Walter F. George Lake, plus Zone 4 storage in Lake Lanier). *Ibid.*

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[2] Walter F. George Lake does not have a formally designated flood-control pool, but the Corps has historically drawn down that reservoir as well to provide capacity for flood risk management in the winter months. *Final EIS* 2-40, 2-42.

The third factor governing the Corps' release decisions is the basin inflow above Woodruff Dam. *Final EIS* 2-73. "Basin [i]nflow" is defined as the amount of water that would flow by Woodruff Dam if all of the Corps' upstream reservoirs were kept at their then-existing surface elevation. *Id.* at 4-27. Basin inflow thus "reflects the influences of reservoir evaporative losses, inter-basin water transfers, and consumptive water uses" upstream of Woodruff Dam. *Ibid.* Accordingly, basin inflow will vary as consumptive water-use rates change. The Corps estimates basin inflow daily, and the RIOP (like the revised Master Manual) used a seven-day moving average of daily basin inflow calculations for daily release decisions. *Id.* at 2-73, 5-60; see U.S. Army Corps of Eng'rs, *Finding of No Significant Impact, Revised Interim Operations Plan for Support of Endangered and Threatened Species, Jim Woodruff Dam, Gadsden and Jackson Counties, Florida and Decatur County, Georgia* EA-24 to EA-25 (May 22, 2012).[3]

A table from the Final EIS for the Master Manual that summarizes the RIOP's minimum-discharge schedule for Woodruff Dam, applying those three factors, is included in an appendix to this brief. App., *infra*, 1a; see *Final EIS* 2-73.[4] The various flow rates included in the table are minimum flow rates and not targets. *Final EIS* 2-75. The Corps may release more water from upstream dams than the amount necessary to

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[3] Available at www.sam.usace.army.mil/Portals/46/docs/planning_environmental/acf/docs/May2012RIOP-EA.pdf.

[4] A substantially similar table appears in the record at JX124, Tbl. 2.1-5. A list of trial exhibits appears at Docket entry No. 532 (Oct. 26, 2016). Docket entries for the proceedings before the Master are available at https://www.pierceatwood.com/florida-v-georgia-no-142-original.

make the minimum releases from Woodruff Dam to further other project purposes, such as to generate hydropower, to prevent the fall rate from exceeding the maximum, to preserve the structural integrity of the projects, in response to an emergency, or in the interests of flood risk management. *Id.* at 2-60 to 2-61, 2-75, 5-56; see U.S. Fish & Wildlife Serv., *Biological Opinion on the U.S. Army Corps of Engineers, Mobile District, Revised Interim Operations Plan for the Jim Woodruff Dam and Associated Releases to the Apalachicola River* 9-10 (May 22, 2012).[5]

Under the RIOP, the amount of water released and stored varied with basin inflow as long as the reservoirs remained in Composite Conservation Storage Zones 1-3. *Final EIS* 2-74. Once the Composite Conservation Storage fell below the top of Zone 4, the Corps began drought operations on the first of the following month. *Ibid.* The term "drought operations" refers to more conservative operations that are intended to enable the Corps to preserve water and operate its reservoir projects more effectively as drought conditions arise. *Id.* at 6-99. Under the RIOP's drought operations, the Corps maintained a minimum release from Woodruff Dam of 5000 cubic feet per second (cfs) and could store up to 100% of basin inflow above that amount, regardless of season, until Composite Conservation Storage rose into Zone 1. *Id.* at 2-76. The 5000 cfs minimum release was determined in consultation with the Fish and Wildlife Service to protect the threatened Gulf sturgeon and three species of threatened or endangered mussels pursuant to the ESA. *Id.* at 2-72 to 2-73.

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[5] Available at www.sam.usace.army.mil/Portals/46/docs/planning_environmental/acf/docs/Final_RIOP_EA_Appendix_A_5-22-12.pdf.

The RIOP also established maximum fall rates, *i.e.*, the maximum vertical drop in river stage from day to day, *Final EIS* 2-73, to protect mussels that live in shallow water from becoming stranded by fluctuations in water level that occur too quickly, *id.* at 2-211, 6-344. Maximum fall rates during drought operations were suspended after the flow rate at Woodruff Dam reached 5000 cfs, which allowed the Corps, for example, to continue to store water after locally significant rainfall events raised the stage of the river. *Id.* at 2-75 to 2-76. Fall rates under drought operations instead were managed to match the fall rate of the basin inflow. *Id.* at 2-75. When Composite Conservation Storage fell into the Drought Zone, the minimum release from Woodruff Dam was 4500 cfs and any basin inflow above 4500 cfs could be stored. *Id.* at 2-76.

Once Composite Conservation Storage rose back to the bottom of Zone 1, drought operations ceased and normal operations under the RIOP resumed. *Final EIS* 2-76. When the reservoir levels were at the top of Zone 1—the levels at which the Corps would ideally keep the reservoirs—any additional inflow would be passed through to maintain capacity in the reservoirs for flood control. *Id.* at 2-65 to 2-66.

2. The current Master Manual

The Corps recently completed the administrative process for updating the Master Manual and the individual reservoir regulation manuals. See note 1, *supra*. The record of decision adopting the new manuals was signed on March 30, 2017. See U.S. Army Corps of Eng'rs, *Record of Decision, Apalachicola-Chattahoochee-Flint River Basin Master Water Control Manual Update and Water Supply Storage Assessment, Alabama, Florida, and Georgia* (*Record of Decision*). The Master

Manual retains the same basic framework as the RIOP, with a few alterations. First, the Corps redefined both the action zones within each reservoir and the composite action zones. *Final EIS* 5-52. Second, drought operations no longer begin at the top of Zone 4. Instead, on the first of each month, the Corps will initiate drought operations if Composite Conservation Storage falls into Zone 3. *Id.* at 5-54. As under the RIOP, maximum fall rates are suspended after flow at Woodruff Dam reaches 5000 cfs during drought operations. *Ibid.* Finally, the Master Manual also suspends the maximum fall rates in times of prolonged low flows, defined to mean 30 consecutive days of flows at Woodruff Dam of 7000 cfs or lower, even if drought operations have not been triggered. *Id.* at 5-62. Fall rates under drought operations and prolonged low-flow operations instead are managed to match the fall rate of the basin inflow. *Ibid.*

The changes to drought operations in the Master Manual reflect "a more proactive approach to conserve reservoir storage as drier conditions develop in the basin, while continuing to meet downstream commitments and needs." *Final EIS* 6-99; see *id.* at 6-99, Tbl. 6.1-13; *id.* at 6-102 to 6-103. Storage of water during drought operations is critically important to retain sufficient water in the system "to ensure that project purposes can at least be minimally satisfied" if the drought conditions persist. *Id.* at 5-51. The revised drought operations "could trigger slightly constrained operations more frequently and over slightly longer periods, and the extent of those constrained operations would gradually increase only as worsening drought conditions may dictate over time." *Id.* at 6-99. The Master Manual is projected to trigger drought operations, and the flows they

require, 11% more often than the RIOP. *Id.* at 6-100, Tbl. 6.1-14. But at the same time, the Master Manual is projected to reduce the total amount of time the reservoirs are in Zones 3 and 4, and "Composite conservation storage values for the reservoirs would tend to remain higher for a greater portion of the modeled period." *Id.* at 6-102.

Overall, the Corps determined that operations under the Master Manual are "likely to have no appreciable incremental effect on flow conditions in the Apalachicola River compared to the [RIOP]" and no more than "negligible effects" on estuarine fish and aquatic resources in the Apalachicola Bay. *Final EIS* 6-93, 6-324 to 6-325, Tbl. 6.4-6. Low-flow periods would be increased slightly because the percentage of days in which flows in the Apalachicola are greater than or equal to 6000 cfs would be reduced from 95.8% to 95.3%. *Id.* at 6-93, Tbl. 6.1-12. Conversely, the number of days in which the flows would be greater than 12,000 and 16,000 cfs are expected to increase. *Ibid.*

A table from the Final EIS for the new Master Manual describing the operational procedures for releases from Woodruff Dam is included in the appendix to this brief. App., *infra*, 2a; see *Final EIS* 5-61.

C. Proceedings In This Original Action

1. In 2013, Florida sought leave to file this original action to obtain an equitable apportionment of the waters of the ACF Basin. Compl. ¶ 1 & p. 21 (prayer for relief). In particular, Florida sought an order "capping Georgia's overall depletive water uses at the level then existing on January 3, 1992." Compl. p. 21. Georgia opposed the filing of the complaint.

At the Court's invitation, the United States filed a brief as amicus curiae on September 18, 2014, recommending that the Court deny Florida leave to file its complaint without prejudice to refiling after the Corps had completed the then-ongoing process to revise the Master Manual for the ACF Basin. U.S. Amicus Br. 1, 17-24. The United States' brief described the Corps' efforts to update the Master Manual, which had been interrupted by litigation on multiple occasions. *Id.* at 8-10. Alternatively, the United States recommended that if the Court granted Florida leave to file, the Court should stay or provide for tailoring of any further proceedings until the Corps completed its process of updating the Master Manual. *Id.* at 1, 22-24. The United States advised the Court that it expected to complete the Master Manual update by March 2017, *id.* at 9-10, 22.

On November 3, 2014, the Court granted Florida leave to file its complaint. 135 S. Ct. 471.

2. After the case was referred to the Master, Georgia moved to dismiss the complaint for failure to join the United States as a required party under Federal Rule of Civil Procedure 19. Docket entry No. 48 (Feb. 16, 2015). The United States filed a brief as amicus curiae opposing Georgia's motion. Docket entry No. 66 (Mar. 11, 2015). In that brief, the United States explained that it is a required party given the extensive federal regulation of the Chattahoochee River, but that it could not be joined because its sovereign immunity had not been waived. *Id.* at 7-9. Nevertheless, the United States concluded that the case could proceed in equity and good conscience. *Id.* at 10-22; see Fed. R. Civ. P. 19(b). Florida made clear to the Master that it was seeking only a cap on Georgia's consumption and disclaimed any request for a decree that would require a minimum flow

at the state line, the location of Woodruff Dam, which would directly affect the Corps' operations. Docket entry No. 128, at 9-10. The United States explained that it could not "say at th[at] juncture, without further factual development, that Florida will not be able to receive any minimum flow that might be adjudicated entirely through the imposition of a consumption cap on Georgia that does not affect the Corps' operation of the projects." Docket entry No. 66, at 19. "If it can," the United States explained, "then the case may proceed to judgment without the United States." *Ibid.*

The Master denied Georgia's motion to dismiss. Docket entry No. 128, at 25. The Master concluded that the United States was a required party because there was a "real possibility that a judgment might impede the United States' ability to protect its interest in managing the flow of water in the Chattahoochee River." *Id.* at 9 (brackets, citation, and internal quotation marks omitted). The Master further concluded, however, that the case could proceed because it might be possible for the Court to shape relief, in particular by entering a cap on Georgia's consumption, that would not require any alteration of the Corps' operations. *Id.* at 12-20. The Master observed that Florida's strategy to request a consumption cap instead of a minimum flow requirement, which "sidestep[s] the need to join the United States as a party," may be a two-edged sword. *Id.* at 12-13 (citing *Idaho* v. *Oregon*, 444 U.S. 380, 392 (1980)). The Master explained that, "[h]aving voluntarily narrowed its requested relief and shouldered the burden of proving that the requested relief is appropriate, * * * Florida's claim will live or die based on whether Florida

can show that a consumption cap is justified and will afford adequate relief." *Id.* at 13.[6]

3. a. After extensive discovery, the Master held a five-week trial. Rep. 17. Florida's evidence focused primarily on demonstrating that a rise in agricultural withdrawals on the Flint River, which is unregulated by the Corps, caused injury to Florida in both the Apalachicola River and Bay. Rep. 31-34; see Fla. Exceptions Br. 14-17. Florida thus sought to cap Georgia's consumption of water on the Flint River to increase its flow, which Florida contended would result in increased flow in the Apalachicola River. Rep. 46-47. The parties sharply disputed, with conflicting expert testimony, whether additional flow in the Flint River produced by a consumption cap in fact would increase the flow of the Apalachicola River, or whether additional flow in the Flint would instead be "offset" by the Corps' operation of the federal projects on the Chattahoochee River under the criteria in the Master Manual. Rep. 47-69. The evidence at trial pertaining to the Corps' operations centered on the 2012 RIOP, which governed the Corps' releases from Woodruff Dam into the Apalachicola River at that time. Rep. 41-45.

b. Toward the end of trial, the Master requested that the United States file a post-trial brief as amicus curiae, "addressing specifically the issue of the Army Corps of Engineers' operations in the ACF River Basin." Docket entry No. 577, at 1 (Dec. 14, 2016). The United States' post-trial amicus brief described the Corps' operating procedures under the RIOP, as well as

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[6] Neither Georgia nor Florida has filed an exception to the Master's order denying Georgia's motion to dismiss, including the limitations on possible relief to Florida on which the order was premised.

the then-proposed operations under the updated Master Manual. Docket entry No. 631 (Dec. 15, 2016).

In addition, the United States provided the Master with a description of the general benefits from increased basin inflow that would result from an increase in streamflow in the Flint River caused by a cap on Georgia's consumption. Docket entry No. 631, at 12-18. In general, the amount of water stored in the Corps' reservoirs is a critical component of calculating the amount of water that will flow into the Apalachicola River. *Id.* at 14. The United States explained that when the Corps has more water available to store during normal operations, then it may be able to delay the onset of drought operations, under which the minimum flow at Woodruff Dam is reduced to 5000 cfs (or 4500 cfs in the Drought Zone). *Id.* at 14-17. And once drought operations begin, if the Corps does not have to release as much water from storage to meet the minimum flow requirement from Woodruff Dam, it may be able to extend the amount of time that it can meet the 5000 cfs minimum flow requirement rather than lowering it to 4500 cfs, as well as shorten how long drought operations persist. *Id.* at 14, 17-18.

Thus, the United States explained, although the opportunity to store more water during drought operations would not immediately increase the flow from Woodruff Dam, reducing the amount of time that the system is in drought operations would increase the amount of time that the Corps operates to provide higher flows into the Apalachicola. Docket entry No. 631, at 14, 17-18. It is therefore likely, the United States concluded, that additional flows on the Flint River resulting from a cap on Georgia's consumption would

reach Florida without any changes in the Corps' operational protocols. It was more a question of timing than whether the flows would reach Florida at all.

To illustrate the likely impact of a consumption cap, the United States provided the Master with a description of how the Corps would implement its operational protocols if there were increased inflow from the Flint River in four specific scenarios, explaining generally how the Corps' operations would treat additional basin inflow under varying conditions, not only during drought operations. Docket entry No. 631, at 16-18. As explained to the Master, those scenarios are useful to illustrate the impact of additional basin inflow as an operational matter, but they are hypotheticals at a snapshot in time to demonstrate how the Corps' protocols work, not attempts to precisely quantify any particular effect on flows in the Apalachicola River from any particular amount of additional water in the Flint River over a period of time. *Id.* at 13.

First, the United States described a scenario of high flows where drought operations had not been initiated. In that scenario, flows in the Apalachicola would likely remain the same if flows on the Flint increased, because the Corps would store more water in the reservoirs on the Chattahoochee—unless the conservation pools of the reservoirs were full, in which case any increased flows on the Flint River would result in increased flows of the same amount in the Apalachicola. Docket entry No. 631, at 16. Second, the United States described a scenario of moderate flow where drought operations had not been initiated, under which the Corps' storage protocols would result in roughly half the amount of any Flint River flow increase flowing into the Apalachicola.

Id. at 16-17. Third, the United States described a scenario where flows were lower but reservoir levels had not yet triggered drought operations, under which flows in the Apalachicola would increase by the amount of increased Flint River flows during spawning and non-spawning season. *Id.* at 18.

Fourth, on the particular question of the Corps' operations during drought, the United States apprised the Master that the operational protocols in existence at the time, as well as those under the then-proposed revised Master Manual, would generally result in the Corps offsetting increased Flint River flows when basin inflows were less than 5000 cfs, including when drought operations have been triggered, by storing more water in reservoirs on the Chattahoochee. Docket entry No. 631, at 17. That increased storage is intended to provide for sufficient water in the system "to ensure that project purposes can at least be minimally satisfied" if the drought conditions persist. *Final EIS* 5-51.

The United States concluded by observing again that storing increased basin inflow during other than drought conditions could provide an additional "cushion," delaying the onset of or hastening the recovery from drought operations. Docket entry No. 631, at 18-19. The United States also reiterated its belief "that a cap on Georgia's consumption would not be likely to adversely affect the Corps' operations." *Id.* at 3 n.1.

Although the United States' post-trial amicus brief was necessarily a general description of how the Corps' operational protocols work in various flow conditions, at trial the Master received expert testimony from both States attempting to model and quantify the timing and

effects on the Apalachicola River of additional basin inflow in particular conditions. In the Report, the Master extensively analyzed that expert testimony. Rep. 46-69.

4. After considering the parties' evidence and the United States' submission, the Master recommended that the Court deny Florida's request for an equitable apportionment. Rep. 1-70. The Master explained that Florida, "as the aggrieved State, must prove 'real and substantial' injury from Georgia's conduct by 'clear and convincing evidence.'" Rep. 29 (quoting *Idaho* v. *Oregon*, 462 U.S. 1017, 1027 (1983)). The Master further concluded that, in addition to bearing the burden to prove injury, "Florida bears the burden to prove [by clear and convincing evidence] that the proposed remedy will provide redress for Florida's injury." Rep. 30; see Rep. 51, 61, 63. That burden required Florida to prove that "any water not consumed by Georgia as the result of a decree imposing a consumption cap will reach Florida and alleviate Florida's injury." Rep. 30.

The Master stated that Florida had identified "real harm and, at the very least, likely misuse of resources by Georgia." Rep. 31. In particular, the Master stated that Florida had suffered harm to the oyster fishery in Apalachicola Bay as a result of increased salinity in the Bay caused by low flows in the Apalachicola River. Rep. 31-32. The Master also observed that Georgia's agricultural water use on the Flint River appears to be "largely unrestrained." Rep. 32.

The Master then observed that "[m]uch more could be said and would need to be said on these issues (as well as other issues, such as causation)" if Florida and Georgia were the only parties whose activities were implicated. Rep. 34. But the Master did not address those issues in any more depth because, even assuming that

Florida had made the requisite showing on those other issues, he concluded that Florida had not carried its burden to show that a consumption cap would redress its injuries. Rep. 32, 34. He determined that Florida had not shown by clear and convincing evidence that "any additional streamflow in the Flint River or in the Chattahoochee River would be released from Jim Woodruff Dam into the Apalachicola River at a time that would provide a material benefit to Florida" (*i.e.*, during dry periods). Rep. 47. Instead, he found that "[t]he evidence instead tends to show that the Corps' operation of federal reservoirs along the Chattahoochee River creates a 'highly regulated system over much of the [B]asin, rendering any potential benefit to Florida from increased streamflow in the Flint River uncertain and speculative." Rep. 47-48 (citation omitted; second set of brackets in original).

The Master considered in particular whether Florida had shown that increased flow would benefit Florida during the Corps' drought operations or periods of low basin inflow. Rep. 48-62. The Master concluded that the analysis by Florida's expert, Dr. Peter Shanahan, who had testified that additional water on the Flint River would reach Florida because it would be physically impossible for the Corps to store enough water on the Chattahoochee River to offset the additional flow on the Flint given the location and size of its reservoirs, contained flaws in its statistical analysis and was outweighed by other evidence. Rep. 49-53.

The Master next considered whether the Corps' operations would actually offset additional flows produced on the Flint River during drought operations or low-flow periods by storing more water in its reservoirs on

the Chattahoochee River. Rep. 53-61. The Master concluded that "[w]hile the evidence presented at trial shows that the Corps retains discretion in its operations, how the Corps will exercise that discretion remains unknown." Rep. 53. The Master found that Florida's "Lake Seminole model," upon which Florida relied to show that the Corps would allow water produced on the Flint River to pass through Woodruff Dam into the Apalachicola without reducing releases from dams on the Chattahoochee, had "programmatic shortcomings and predictive anomalies." Rep. 58. Instead, the Master concluded, the weight of evidence at trial showed that it was uncertain how the Corps would operate the projects during times of drought and low flow. Rep. 58-61.

For example, the Master noted that when flows on the Flint River increased by as much as 2000 cfs at times during a 2012 drought, no corresponding increase in flow in the Apalachicola River was observed, showing that the Corps' operations had in fact offset increased flows in the past. Rep. 59. Because the Corps' operational protocols contemplated storing increased basin inflows during drought operations, the Master determined that there was "no way to predict how the Corps will exercise its discretion" to vary from those protocols. Rep. 61. Thus, the Master concluded that Florida had not established that a decree "will provide relief at the most critical dry periods." *Ibid.* Instead, effective relief for Florida's claimed injury would "likely * * * require modification" of the Corps' operating protocols "and, hence, active participation by the Corps in this proceeding." Rep. 61-62.

Finally, the Master considered whether a consumption cap might have beneficial effects outside of the

Corps' drought operations or periods of low basin inflow sufficient to remedy Florida's injury. Rep. 62-69. The Master noted that Florida had focused at trial on drought years and had not introduced substantial evidence of the benefits from increased annual flows, and had failed to quantify the benefits from shortened drought operations or increased flows outside of drought operations. Rep. 63-65. Georgia, on the other hand, had introduced evidence to show that any such beneficial effects would be minimal. Rep. 65-69.

Ultimately, then, the Master concluded that Florida had failed to prove by clear and convincing evidence that a consumption cap would "provide a material benefit to Florida," and he thus recommended that Florida's request for relief be denied. Rep. 70.

SUMMARY OF ARGUMENT

The Master determined that the Corps' operational protocols permit the Corps to store up to 100% of basin inflow over 5000 cfs during drought operations; that it would be physically possible during drought operations for the Corps to increase storage in its reservoirs on the Chattahoochee River in a manner that would offset any increased flows on the Flint River that might result from a cap on Georgia's consumption; and that the Corps may make releases to achieve flows above the minimum of 5000 cfs from Woodruff Dam during drought operations to serve authorized project purposes. Florida does not object to any of those determinations, and the United States believes that each is sound.

Florida contends, however, that the Master erred in concluding that uncertainty about whether the Corps would operate the projects in a way that would result in

additional releases above 5000 cfs during drought operations precluded a finding of redressability. Florida contends that the Corps is likely to exercise its authority within existing operational protocols to provide Florida with additional flows produced by a cap on Georgia's consumption. But the Corps' release of more than the minimum flows required from Woodruff Dam under various conditions has historically been based primarily on serving authorized project purposes, to comply with the maximum fall rate, or to release water in an emergency, not by basin inflow, and the Corps would not expect releases above the 5000 cfs minimum flow requirement to increase along with basin inflow during drought operations.

Florida further contends that the Corps has indicated that it would alter its operational protocols to provide Florida with additional flows in response to an equitable apportionment decree issued by this Court. The Corps, however, would not be formally bound by the Court's decree, which would impose a cap on Georgia's consumption without directing a change in the Corps' operations. The Corps' decision about how to proceed thus would arise in an unusual posture and raise several questions that the Corps has not yet formally considered. For example, the only specific harm identified by the Master is to Florida's oyster fishery in Apalachicola Bay. Whether the Corps could make routine releases from federal projects that are specifically designed to remedy harm to the oyster fishery is a difficult question that would turn on a careful assessment of the congressional authorizations for the ACF system and statutory limitations on the Corps' flexibility, in light of the Court's decree and basin conditions. To address those issues through possible revisions in the Master Manual

and manuals for individual projects, the Corps would be required to invoke public processes and environmental reviews governing its establishment and amendment of operating procedures governing its projects.

ARGUMENT

THE CORPS WOULD NOT EXPECT RELEASES IN EXCESS OF THE MINIMUM FLOW AT WOODRUFF DAM TO INCREASE ALONG WITH INCREASED FLOW ON THE FLINT RIVER DURING DROUGHT OPERATIONS AND CONSIDERATION OF ANY CHANGES TO THE MASTER MANUAL TO PROVIDE ADDITIONAL RELEASES WOULD REQUIRE FURTHER ADMINISTRATIVE PROCESSES

A. The Master focused squarely on the Corps' operational protocols in the ACF Basin and concluded that Florida failed to prove by clear and convincing evidence that a cap on Georgia's consumption would provide Florida with a material benefit during drought periods because those protocols call for the Corps to store additional basin inflow during drought operations. Rep. 47-62. The Master described both the Corps' operational protocols in effect at the time of trial and the revised protocols under the then-proposed Master Manual. Rep. 35-46. Florida does not take exception to any part of that description, including the Master's conclusion that the Corps' operational protocols in effect at the time of trial and under the new Master Manual allow the Corps to store up to 100% of basin inflow over 5000 cfs during drought operations. Rep. 39-41, 44-45. Similarly, Florida does not take exception to the Master's finding that during drought operations, it would be physically possible for the Corps to increase storage in its reservoirs on the Chattahoochee River to do so—such that any increased flows on the Flint River result-

ing from a cap on Georgia's consumption would be offset, and that a cap on Georgia's consumption would not necessarily result in increased flows in the Apalachicola River during drought operations. Rep. 49-53.

The Corps does have the ability to make additional releases during drought operations, as reflected in the Master Manual in two ways. First, the 5000 cfs flow from Woodruff Dam during drought operations is a *minimum* flow designed to ensure compliance with the ESA. Rep. 41-42; *Final EIS* 6-45. Second, the Master Manual provides that during drought operations, the Corps may store *up to* 100% of basin inflow above 5000 cfs. Rep. 44-45; *Final EIS* 2-76. But Florida does not take exception to the Master's determination that during drought operations, any release that would result in flows above the minimum of 5000 cfs from Woodruff Dam are within the Corps' discretion to serve other project purposes, such as flood risk management or to maintain the fall rate. Rep. 53-54.

In the view of the United States, each of the Master's unchallenged determinations is sound and grounded in the record.

B. Florida does take exception (Exceptions Br. 40-46), however, to the Master's determination that even if basin inflow increased due to a cap on Georgia's consumption on the Flint River, it is uncertain how the Corps would choose whether or not to make additional releases above 5000 cfs during drought operations. See Rep. 53-62. The Master concluded that "[w]hile the evidence presented at trial shows that the Corps retains discretion in its operations, how the Corps will exercise that discretion remains unknown." Rep. 53. Because of the inherent uncertainty in whether the Corps' would exercise its authority in a manner that would result in

flow rates from Woodruff Dam in excess of the minimum under the governing protocols, the Master concluded that "it appears likely that ensuring relief for Florida during [drought operations] would require modification of the rules governing the Corps' reservoir operations." Rep. 61-62. Thus, there are two issues related to Florida's exception—the Corps' ability to release additional water under the current Master Manual and individual reservoir regulation manuals, and the possibility that the Corps would change those manuals in response to a decision of this Court.

1. Florida contends (Exceptions Br. 40-41) that "the evidence at trial and the Corps' statements after trial overwhelmingly establish that the Corps is likely to facilitate, rather than frustrate, a decree entered by this Court." Florida contends (*ibid.*) that the evidence established that the Corps has released more than 5000 cfs in the past, and thus the Corps is likely to do so in the future. The Master found that "Florida is likely correct that the Corps has historically exercised its discretion to release more than the required minimum" during drought operations, Rep. 55, but concluded that the Corps might choose not to do so in the future, Rep. 55-56. The Master explained that the Corps' policies seek to "balance various project purposes while replenishing storage," and he noted that during a 2012 drought, "Flint River flow varied by up to 2,000 cfs without corresponding spikes in releases by the Corps from Jim Woodruff Dam," demonstrating that the Corps had released less water from its storage reservoirs on the Chattahoochee River as Flint River flows increased. Rep. 59.

In the Corps' view, as reflected in both the RIOP and the current Master Manual, the Corps' release of more

than the minimum flows required from Woodruff Dam at various times has historically been driven primarily by the need to serve authorized project purposes and to comply with the maximum fall rate, to release water in an emergency (such as a chemical spill or a grounded barge), or to maintain the structural integrity of the projects. See *Final EIS* 2-60 to 2-61, 2-75, 5-56; U.S. Army Corps of Eng'rs, *Master Water Control Manual, Apalachicola-Chattahoochee-Flint (ACF) River Basin, Alabama, Florida, Georgia* ch. 7, at 7-1, 7-16, App. A, at E-D-22 (rev. Mar. 2017) (*Master Manual*). During drought operations, the need to comply with the ESA while avoiding catastrophic depletion of storage and refilling the reservoirs as rapidly as possible are overriding considerations. *Master Manual* 7-10 to 7-12, 7-21, 8-4 to 8-5. Increased basin inflow is thus stored during drought operations as a matter of course, with deviations from the protocols described in the manuals in the form of releases that are made as needed to serve congressionally authorized project purposes or in emergency circumstances. *Id.* at 7-21 to 7-24. More generally, as the Master Manual explains, the "[a]uthorized purposes for operation of the Federal ACF System of projects include flood risk management, hydropower, navigation, fish and wildlife conservation, recreation, water supply, and water quality, pursuant to the specific ACF project authorizing legislation and other, more generally applicable statutory authorities (e.g., the Flood Control Act of 1944, P.L. 89-72, and P.L. 85-624)." *Id.* at 7-2. Each of "the legally authorized project purposes is considered when making water control regulation decisions, and the decisions affect how water is stored and released from the projects." *Ibid.*

In short, while basin inflow is a relevant consideration, it has historically not been the primary factor in the Corps' decisionmaking process for making additional releases above 5000 cfs from Woodruff Dam during drought operations. Accordingly, under both the RIOP and the current operating protocols, the Corps would not generally expect those releases during drought operations to increase in parallel with increased flows produced by a cap on Georgia's consumption. Thus, as the United States explained to the Master, in drought operations, "Apalachicola River flows would be very similar with or without a consumption cap until enough water is stored to return the system to normal operations." Docket entry No. 631, at 17-18.

The United States does not mean to suggest that a consumption cap would provide no benefit to the Corps' operations in the ACF Basin or to Florida. As explained to the Master, increased basin inflows would generally benefit the ACF system by delaying the onset of drought operations, by allowing the Corps to meet the 5000 cfs minimum flow longer during extended drought, and by quickening the resumption of normal operations after drought. Docket entry No. 631, at 17-19. The United States takes no position on whether Florida proved that those benefits are of sufficient quantity to justify relief in this case. And of course, if, as Florida has argued and as the United States has agreed in principle, a decree capping Georgia's consumption could result in more water flowing to Florida in some circumstances under existing Corps protocols, then the Corps would likely not need to change its operations in response to such a decree. *Id.* at 3 n.1, 18-19.

If, however, additional releases by the Corps would be necessary in some circumstances to further Florida's

interests, it is impossible to define the limits of the Corps' ability to make those releases consistent with the congressionally authorized purposes without knowing the precise contours of the decree and the implications for other project purposes and storage regimens. And even if releases from storage that do not adversely impact the congressionally authorized purposes could be made as a practical matter to satisfy the result sought to be accomplished by a consumption cap, there would remain a significant and difficult question as to whether the *existing* Master Manual would permit the Corps to formally and routinely release water from storage to serve a purpose that is not specifically provided for in the Master Manual, not specifically authorized by Congress or mandated by general statute, or required by a court order directed to the Corps. The Corps would need to explore those questions through appropriate administrative processes before formally committing to operate the projects in any particular way as a matter of course.

2. Similar considerations are also relevant to Florida's contention (Exceptions Br. 42-46) that the Corps might revise its Master Manual and individual reservoir regulation manuals in response to a decision by this Court. The Master did not assess that possibility, but did note that a mandated modification of the rules governing the Corps' operations would require active participation by the Corps in the case. Rep. 61-62.

Florida relies heavily on a statement by the Corps in the record of decision adopting the current Master Manual that reiterated the Corps' longstanding position that it will take into account a resolution of the dispute among Florida, Georgia, and Alabama over the ACF Basin. That statement reads as follows:

> With respect to the *Florida v. Georgia* case, [the Corps] will review any final decision from the U.S. Supreme Court and consider any operational adjustments that are appropriate in light of that decision, including modifications to the then-existing [Master Manual], if applicable. However, [the Corps] is not a party to the case, and [Corps] operations are not at issue in the litigation. Rather, the case involves the State of Florida's request for an equitable apportionment of the waters of the ACF Basin, specifically through a cap on consumption of water by the State of Georgia. *Florida v. Georgia*, No. 142 Orig., Report of the Special Master 18 (February 14, 2017). The United States has participated in the case as *amicus curiae*, but has taken no position as to whether the State of Florida's requested relief should or will be granted. Should the Supreme Court issue a decree apportioning the waters of the ACF Basin, should the States reach agreement endorsed by Congress on an allocation of basin waters, or should Congress enact other legislation affecting the purposes or operation of the federal ACF system, [the Corps] would take those developments into account and adjust its operations accordingly, including new or revised [Master Manuals], new or supplemental [42 U.S.C. 4332 (National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 *et seq.*)] or ESA documentation, or any other actions as may be appropriate under applicable law.

Record of Decision 18. The Corps stands by that statement and would consider formalizing the exercise of its operational latitude in light of a decree of this Court to the extent its authorities allow. But consideration of adjusting operations through a new or revised Master

Manual and individual reservoir regulation manuals would require participation by other Basin interests and a process of public notice and involvement. See, *e.g.*, Eng'r Reg. 1110-2-240, at 1-2 (May 30, 2016) ("[W]ater control plans for projects owned and operated by [the Corps] shall be developed in concert with all basin interests which may be impacted by or influence project regulation, and public involvement in the development or significant revision of water control plans shall be provided for as required under this regulation.")[7]; *id.* at 5-2 ("Public involvement in the development or significant revision of water control plans, as well as certain deviations from those water control plans, is required under this regulation."); see also 42 U.S.C. 4332 (NEPA). That process, in turn, would require, at a minimum, an examination of the congressionally authorized purposes, a determination of how providing additional flows would impact those purposes, limitations imposed by the ESA or other laws, and supplemental documentation of environmental impacts as required by NEPA. The Corps cannot prejudge those required processes.

For example, the only specific harm to Florida identified by the Master in the Report is harm to the oyster fishery in Apalachicola Bay. Rep. 31-32. The Corps does not currently make specific releases for the oyster fishery. If the Court's decision contemplated that the oyster fishery needs more water, then to accomplish that result the Corps would have to consider whether under its existing authorities it could incorporate the furnishing of water specifically for that fishery into a

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[7] Available at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-2-240.pdf?ver=2016-05-19-103739-330.

revised Master Manual as an additional purpose of its projects in the ACF Basin—or at least whether it could release additional water to do so consistent with existing authorities and without harming other purposes.

Of course, a decision by this Court apportioning the waters of the ACF Basin, whether in the form of a consumption cap or something else, would necessarily form part of the constellation of laws to be considered by the Corps when deciding how best to operate the federal projects in the ACF Basin for their congressionally authorized purposes. But unlike a compact among the States that is approved by Congress or legislation altering the purposes of the ACF system, an apportionment by this Court in the form of a consumption cap would not formally bind the Corps to take any particular action because the United States is not a party to this suit, which has proceeded on the understanding that any relief must be shaped without mandating a change in the Corps' operations. Indeed, the United States did not intervene in this action in large part to avoid being bound by a decree that could directly affect Corps operations before the Corps had a chance to finally complete its process of updating the Master Manual and individual reservoir regulation manuals for the ACF Basin based on its consideration of the congressionally authorized purposes of the projects and Basin conditions. See U.S. Amicus Br. 17-23.

Similarly, Florida requested an apportionment taking the form of a consumption cap precisely to avoid requiring any change in the Corps' operations so that the case would not be dismissed for failure to join the United States. Docket entry No. 128, at 12-13. At the motion-to-dismiss stage, the United States opined that

the case could proceed so long as relief would not require the Corps to alter its operations. Docket entry No. 66, at 10-18. As the United States has explained, it is likely that additional flows resulting from a cap on Georgia's consumption would reach Florida without any changes in the Corps' operational protocols, and is more a question of timing than whether the flows would reach Florida at all. *Id.* at 18-19; Docket entry No. 631, at 18-19. The United States has suggested that it is possible that the Court could fashion relief given the beneficial effect additional water would have on the ACF system as a whole. *Ibid.* It thus may remain possible to design a consumption cap that would provide Florida with additional water at some points without any alteration of the Corps' operations, as Florida contends (Exceptions Br. 46). But if truly effective relief for the oyster fishery cannot be accomplished without the Corps changing its operations, then such a determination by this Court would likely require that the Corps engage in the required public processes and environmental reviews (see pp. 30-31, *supra*) for revising the Master Manual, and adjust its operations to the extent permissible under law and consistent with the Corps' mission of operating the ACF system for its congressionally authorized purposes.

CONCLUSION

The Court should enter an order consistent with the position expressed in this brief.

Respectfully submitted.

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APPENDIX

Table 2.1-5.
May 2012 RIOP for Jim Woodruff Lock and Dam, Apalachicola River Minimum Discharge from Woodruff Lock and Dam by Month and by Basin Inflow Rates

Months	Composite Conservation Storage Zone	Basin Inflow (cfs)	Releases from Jim Woodruff Lock and Dam (cfs)	Basin Inflow Available for Storage[a]
Mar–May	Zones 1 and 2	≥ 34,000 ≥ 16,000 and < 34,000 ≥ 5,000 and < 16,000 < 5,000	≥ 25,000 ≥ 16,000+50% BI > 16,000 ≥ BI ≥ 5,000	Up to 100% BI>25,000 Up to 50% BI>16,000
	Zone 3	≥ 39,000 ≥ 11,000 and < 39,000 ≥ 5,000 and < 11,000 < 5,000	≥ 25,000 ≥ 11,000+50% BI > 11,000 ≥ BI ≥ 5,000	Up to 100% BI>25,000 Up to 50% BI>11,000
Jun–Nov	Zones 1, 2, and 3	≥ 22,000 ≥ 10,000 and < 22,000 ≥ 5,000 and < 10,000 < 5,000	≥ 16,000 ≥ 10,000+50% BI > 10,000 ≥ BI ≥ 5,000	Up to 100% BI>16,000 Up to 50% BI>10,000
Dec–Feb	Zones 1, 2, and 3	≥ 5,000 < 5,000	≥ 5,000 (Store all BI> 5,000) ≥ 5,000	Up to 100% BI > 5,000
At all times	Zone 4	NA	≥ 5,000	Up to 100% BI > 5,000
At all times	Drought Zone	NA	≥ 4,500[b]	Up to 100% BI > 4,500

Sources: USACE, Mobile District 2012; USFWS 2012

Notes:

[a] Consistent with safety requirements, flood risk management purposes, and equipment capabilities.

[b] Once composite conservation storage falls below top of Drought Zone, ramp-down to 4,500 cfs will occur at a rate of 0.25 ft/day.

Table 5.4-3.
Jim Woodruff Lock and Dam, Apalachicola River Minimum Discharge for Federally Listed Species by Month and by Basin Inflow Rates

Months	Composite Conservation Storage Zone	Basin Inflow (cfs)	Min. Releases from Jim Woodruff Lock and Dam (cfs)	Basin Inflow Available for Storage[a]
March–May	Zones 1 and 2	≥ 34,000 ≥ 16,000 and < 34,000 ≥ 5,000 and < 16,000 < 5,000	= 25,000 = 16,000+50% BI > 16,000 = BI = 5,000	Up to 100% BI>25,000 Up to 50% BI>16,000
	Zone 3	≥ 39,000 ≥ 11,000 and < 39,000 ≥ 5,000 and < 11,000 < 5,000	= 25,000 = 11,000+50% BI > 11,000 = BI = 5,000	Up to 100% BI>25,000 Up to 50% BI>11,000
June–November	Zones 1, 2, and 3	≥ 22,000 ≥ 10,000 and < 22,000 ≥ 5,000 and < 10,000 < 5,000	= 16,000 = 10,000+50% BI > 10,000 = BI = 5,000	Up to 100% BI>16,000 Up to 50% BI>10,000
December–February	Zones 1, 2, and 3	≥ 5,000 < 5,000	= 5,000 = 5,000	Up to 100% BI > 5,000
If Drought Triggered	Zone 3	NA	= 5,000	Up to 100% BI > 5,000
At all times	Zone 4	NA	= 5,000	Up to 100% BI > 5,000
At all times	Drought Zone	NA	= 4,500[b]	Up to 100% BI > 4,500

Notes:

[a.] Consistent with safety requirements, flood risk management purposes, and equipment capabilities.

[b.] Once composite conservation storage falls below the top of the Drought Zone, ramp down to a minimum release of 4,500 cfs at rate of 0.25 ft/day based on the USGS gage at Chattahoochee, Florida (02358000).