

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

NATIONAL WILDLIFE FEDERATION
11100 Wildlife Center Drive
Reston, VA 20190;

FLORIDA WILDLIFE FEDERATION
2545 Blairstone Pines Drive
Tallahassee, FL 32301; and

APALACHICOLA BAY AND RIVER
KEEPER, INC.
232 Water Street
Apalachicola, FL 32320,

Plaintiffs,

v.

CASE NO. 1:17-CV-00772

U.S. ARMY CORPS OF ENGINEERS
441 G Street NW
Washington, DC 20314-1000;

DOUGLAS W. LAMONT, P.E., in his
official capacity as senior official performing
the duties of the Assistant Secretary of the
Army (Civil Works),
U.S. Army Corps of Engineers
108 Army Pentagon
Washington, DC 20310-0108;

TODD T. SEMONITE, in his official capacity
as Commanding General and Chief of
Engineers for the U.S. Army Corps of
Engineers,
U.S. Army Corps of Engineers
441 G Street NW
Washington, DC 20314-1000; and

C. DAVID TURNER, in his official capacity
as Division Commander for the South Atlantic
Division of the U.S. Army Corps of
Engineers,
U.S. Army Corps of Engineers
60 Forsyth Street SW, Room 10M15
Atlanta, GA 30303-8801,

Defendants.

**COMPLAINT FOR
DECLARATORY AND INJUNCTIVE RELIEF**

1. This action challenges the inadequacy of an Environmental Impact Statement prepared by the U.S. Army Corps of Engineers (“the Corps”) in connection with its update of a 1958 Master Water Control Manual (“Master WCM”) governing the operation of federal dams and reservoirs in the Apalachicola-Chattahoochee-Flint River Basin (“ACF Basin”). Plaintiffs seek to enforce federal law to prevent the collapse of the Apalachicola ecosystem in Florida, a national treasure of exceptional ecological importance, and to prevent significant harm to the Chattahoochee River in Georgia and Alabama.

2. The Corps’ failure to prepare an adequate Environmental Impact Statement violates the National Environmental Policy Act of 1969 (“NEPA”), 42 U.S.C. §§ 4321-4347; the Water Resources Development Act (“WRDA”), 33 U.S.C. § 2283(d); and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701-706.

3. This action also challenges the Corps’ March 30, 2017 Record of Decision authorizing approval of the Update of the Water Control Manual (“Updated

WCM”), on the grounds that the Updated WCM relied on an inadequate EIS in violation of NEPA, WRDA and the APA; failed to provide a mitigation plan for adverse impacts, in violation of NEPA, WRDA and the APA; and failed to serve the Congressionally-mandated project purpose of promoting fish and wildlife conservation, in violation of the Fish and Wildlife Coordination Act (“FWCA”), 16 U.S.C. §§ 661-667e, and the APA.

4. The Corps’ failure to comply with federal law has resulted in an Updated WCM that withholds the freshwater flows needed to nourish and sustain the Apalachicola ecosystem and the local economies it supports. As the Executive Director of the Northwest Florida Water Management District testified before a United States Senate Committee in 2013, if adequate freshwater flow patterns are not restored to the Apalachicola River, “the ecosystem and, indeed, the very way of life for generations of Floridians, will be devastated.”

INTRODUCTION

5. The Apalachicola ecosystem is a national treasure of exceptional ecological importance on which fish, wildlife and the regional economy rely. It has been described as one of six “biodiversity hotspots” in the United States.

6. Florida has designated the Apalachicola Bay as a Florida Aquatic Preserve, identifying it as among the most ecologically important and sensitive natural areas in the State. The United States Congress, in conjunction with the State of Florida, established the Apalachicola National Estuarine Research Reserve there. The

United Nations Environmental, Scientific and Cultural Organization (“UNESCO”) recognizes the Apalachicola ecosystem as an International Biosphere Reserve.

7. The vitality of this ecosystem depends on the Corps’ provision of sufficient, properly timed freshwater flows from upstream sources in Georgia and Alabama downstream to the Apalachicola River, Floodplain and Bay in Florida.

8. Since the late 1950s, however, the Corps’ construction and operation of dams and reservoirs upstream of the Apalachicola River have had significant, and sometimes devastating, impacts on the Apalachicola ecology.

9. Although the Master WCM has not been updated since 1958, over the decades the Corps has made a number of changes to its operations of the dams and reservoirs in the ACF Basin.

10. The Corps’ operations have altered the amount and timing of freshwater flows reaching the Apalachicola ecosystem and Chattahoochee River; significantly restricted flows during periods of drought when water needs are most critical; and increased water withdrawals and depletions to meet growing demands upstream at the expense of longstanding needs downstream.

11. The Corps’ operations have adversely affected the downstream Apalachicola ecosystem. They have: damaged the Apalachicola River and Floodplain by dredging and snagging, burying many miles of Apalachicola River and Floodplain habitats under dredged spoils; dried out Apalachicola Floodplain wetlands, leading to the loss of more than 4.3 million floodplain trees; degraded and cut off extensive fish

habitats in sloughs and tributaries; damaged biological, geochemical and physical components that make up the ecosystem; caused losses of vital ecological processes and habitats; and impaired fisheries in the Eastern Gulf of Mexico.

12. In 2012, Apalachicola Bay's rich oyster population collapsed, due in large part to the lack of sufficient freshwater flows from the Apalachicola River, resulting in devastating economic impacts for the region.

13. In 2013, the U.S. Secretary of Commerce declared a commercial fishery failure in Apalachicola Bay to help alleviate the hardship on local oystermen and the seafood industry overall.

14. As a result of the Corps' actions, the Apalachicola ecosystem is approaching a breaking point.

15. In 2015, the Corps prepared a Draft Environmental Impact Statement ("DEIS") under NEPA in connection with its proposed update of the 1958 Master WCM for the ACF Basin.

16. Among other things, NEPA required the Corps to analyze the direct, indirect and cumulative impacts of its actions on the environment, 40 C.F.R. §§ 1502.16(a), (b), 1508.25(c), including the incremental impact of its actions when added to other past, present and reasonably foreseeable future actions, *id.* § 1508.8; identify all reasonable alternatives, *id.* §§ 1502.14(a), 1502.16(d); and address mitigation of any unavoidable environmental harms, *id.* §§ 1502.14(f), 1502.16(h).

17. Despite the fact that the Master WCM had not been updated since 1958, and that many changes have occurred in the intervening decades, the Corps' analysis failed to consider the direct, indirect and cumulative impacts of its actions over time on the environment.

18. Instead of analyzing the direct, indirect and cumulative impacts of the Updated WCM on the environment over time, the Corps summarily concluded that the Updated WCM would make only minimal changes to the Corps' "current operations."

19. The Corps then relied on a fundamentally flawed model to simulate flows, and wrongly and unreasonably presented the simulated flows as predictive of future flows. Based on this deficient process, the Corps unreasonably determined that its proposed operations would not "appreciably alter flows" to the Apalachicola ecosystem.

20. The Corps compounded these errors by summarily concluding that because changes in its proposed operations were purportedly "minimal" in comparison to "current operations," the Corps' proposed operations would have little to no adverse effect on the Apalachicola ecosystem.

21. Where the Corps found that the Updated WCM would harm fish, wildlife and water quality in the Chattahoochee River and upstream reservoirs, the Corps did not provide for mitigation of those harms.

22. In 2016, the Corps issued a Final Environmental Impact Statement for the Updated WCM. U.S. Army Corps of Engineers, Final Environmental Impact Statement, Master Water Control Manual, Apalachicola-Chattahoochee-Flint River (ACF) Basin, Alabama, Florida, Georgia (December 2016), http://www.sam.usace.army.mil/Portals/46/docs/planning_environmental/acf/docs/01_ACF_FEIS_Dec%202016_Volume%201.pdf?ver=2016-12-07-164912-723 (“FEIS”). The FEIS did not remedy the above deficiencies.

23. On March 30, 2017, the Corps issued a Record of Decision (“ROD”) adopting the FEIS and the Updated WCM as final.

24. The Corps’ FEIS and ROD violate NEPA and WRDA, are arbitrary, capricious and contrary to law, in violation of the APA, and must be set aside as a matter of law.

25. The Corps’ ROD is arbitrary, capricious and contrary to law for failing to serve the purpose of fish and wildlife conservation as mandated by Congress, in violation of the APA and the FWCA, and therefore cannot stand.

26. The Corps’ failure to provide a mitigation plan where the FEIS acknowledged adverse impacts on fish, wildlife and water quality in the Chattahoochee River and upstream reservoirs violates WRDA and must be rectified.

27. Plaintiffs seek a declaration that the Corps’ actions violate NEPA, WRDA, the FWCA and the APA. Plaintiffs also seek an injunction against implementation of the Updated WCM until the Corps properly evaluates the impacts

on the Apalachicola ecosystem and the Chattahoochee River; considers all reasonable alternatives; provides for mitigation of harms throughout the ACF Basin; and adopts a proposal that advances fish and wildlife conservation as directed by Congress.

JURISDICTION AND VENUE

28. This action arises under NEPA, 42 U.S.C. § 4321-4347; WRDA, 33 U.S.C. §§ 2283-2283c; the FWCA, 16 U.S.C. §§ 661-667e; and the APA, 5 U.S.C. §§ 701-706.

29. This Court has jurisdiction under 28 U.S.C. §§ 1331, 1361, and may issue a declaratory judgment and further relief under 28 U.S.C. §§ 2201, 2202.

30. Venue is appropriate in this district pursuant to 28 U.S.C. § 1391(e) as the defendants include an agency of the United States and officers and employees of the United States acting in their official capacities who reside in this district and a substantial part of the events or omissions giving rise to the claim occurred in this district. Id. § 1391(e)(1).

PARTIES

Plaintiffs

31. NATIONAL WILDLIFE FEDERATION (“NWF”) is the nation’s largest conservation education and advocacy organization. It is a non-profit organized under the laws of the District of Columbia with its principal place of business in Reston, Virginia. NWF has almost six million members and supporters and conservation affiliate organizations in fifty states and territories. This includes more

than 400,000 members and supporters in Florida, Alabama and Georgia, many of whom fish, hunt, canoe, kayak, view wildlife or otherwise recreate on the Apalachicola, Flint and Chattahoochee Rivers and environs, and intend to continue to do so.

32. NWF has a long history of advocating for the protection and restoration of the Apalachicola River, Floodplain and Bay and the entire Gulf of Mexico. NWF also has a long history of working to modernize federal water resources planning to protect the nation's coasts, rivers, wetlands and floodplains, and the fish and wildlife that depend on those vital resources.

33. FLORIDA WILDLIFE FEDERATION ("FWF") is a non-profit corporation established in 1936. It is organized under the laws of the State of Florida with its principal place of business in Tallahassee. FWF has approximately 13,000 members and 60,000 supporters throughout Florida. FWF is affiliated with the NWF. FWF has long supported environmental sustainability and conservation in Florida by education, advocacy and litigation.

34. FWF has focused on efforts to protect the Apalachicola River and Bay system over the course of many years, as this region of the State is one of the most biologically rich in the entire nation. Moreover, the River and Bay play a critical role in the overall health of the Gulf of Mexico. Many of FWF's members fish, hunt, canoe, kayak, view wildlife or otherwise recreate on the Apalachicola River and environs, and intend to continue to do so.

35. APALACHICOLA BAY AND RIVER KEEPER, INC., (“APALACHICOLA RIVERKEEPER”), is a membership-supported non-profit corporation established in 1998 and licensed by the Waterkeeper Alliance in 1999. It is organized under the laws of the State of Florida with its principal place of business in Apalachicola. Headquartered on the Bay at the mouth of the Apalachicola River, the mission of Apalachicola Riverkeeper is to provide stewardship and advocacy for the protection of the Apalachicola River and Bay, its tributaries and watersheds, in order to improve and maintain its environmental integrity and to preserve the natural, scenic, recreational and commercial fishing character of these waterways.

36. Apalachicola Riverkeeper’s 1,500 supporting members and their families include those who live within the Apalachicola River Basin and visitors from across the country and the world who visit this premiere natural resource regularly. Many of the Apalachicola Riverkeeper’s members fish, hunt, canoe, kayak, view wildlife or otherwise recreate on the Apalachicola River, and intend to continue to do so.

37. Plaintiffs NWF, FWF, Apalachicola Riverkeeper and their members (collectively “Plaintiffs”) are adversely affected and injured by the action of the federal defendants in failing to perform an adequate environmental impact analysis, failing to promote fish and wildlife conservation, failing to ensure mitigation of harms, and adopting an Updated WCM that is fundamentally flawed.

38. Plaintiffs’ interests fall within the zone of interests protected by the laws sought to be enforced in this action.

Defendants

39. U.S. ARMY CORPS OF ENGINEERS (“the Corps”) is an agency of the federal government which may be named as a defendant and against which a writ in the nature of mandamus, a declaratory judgment and injunctive relief may be entered, pursuant to 28 U.S.C. §§ 1361, 2201, 2202, and Fed. R. Civ. P. 57, 65(a). The Corps is the action agency with respect to the WCM for purposes of environmental review under the NEPA. The Corps’ March 30, 2017 ROD authorizing the Updated WCM based on the Final EIS is final agency action for purposes of APA review.

40. DOUGLAS W. LAMONT, P.E., is Senior Official Performing the Duties of the Assistant Secretary of the Army (Civil Works), for the U.S. Army Corps of Engineers, and an officer and employee of the United States and its agency, the Department of the Army. In his official capacity, Mr. Lamont may be named as a defendant against whom mandamus, a declaratory judgment and injunctive relief may be entered pursuant to 28 U.S.C. §§1361, 2201, 2202, and Fed. R. Civ. P. 57, 65(a).

41. LIEUTENANT GENERAL TODD T. SEMONITE, is Commanding General and Chief of Engineers for the U.S. Army Corps of Engineers, and an officer and employee of the United States and its agency, the Department of the Army. In his official capacity, Lt. Gen. Semonite may be named as a defendant against whom mandamus, a declaratory judgment and injunctive relief may be entered pursuant to 28 U.S.C. §§ 1361, 2201, 2202, and Fed. R. Civ. P. 57, 65(a).

42. BRIGADIER GENERAL C. DAVID TURNER, is Commander of the U.S. Army Corps of Engineers, South Atlantic Division, and an officer and employee of the United States and its agency, the Department of the Army. In his official capacity, Brig. Gen. Turner may be named as a defendant against whom mandamus, a declaratory judgment and injunctive relief may be entered pursuant to 28 U.S.C. §§ 1361, 2201, 2202, and Fed. R. Civ. P. 57, 65(a).

43. An order from this Court enjoining the Defendants (referred to collectively herein as “the Corps”) from implementing the Updated WCM until the Corps has complied with NEPA and other federal laws would redress the legal injuries inflicted by the Corps on Plaintiffs NWF, FWF and the Apalachicola Riverkeeper.

BACKGROUND

The Apalachicola River System

44. The Apalachicola is the largest river in Florida. It is formed by the merger of the Chattahoochee and Flint Rivers at the Florida border with Georgia and Alabama.

45. More than 80% of the Apalachicola’s water flow originates from the upstream Chattahoochee and Flint Rivers.

46. The Apalachicola River System is a national treasure. Its river, floodplain, estuary and bay comprise a rich and diverse system of exceptional ecological importance. It has been described as one of the country’s six “biodiversity

hotspots,” and has received state, federal and international recognition for its unique ecological value.

47. The Apalachicola River System forms a complex system of upland, floodplain, riverine, estuarine and barrier island environments, sustaining a lush variety of habitats and the marine waters of the downstream Bay.

48. The Apalachicola River nourishes a 144,000-acre floodplain as it flows more than 100 miles down the Florida panhandle into the Apalachicola Bay and Eastern Gulf of Mexico.

49. The Apalachicola Floodplain supports one of the last unbroken bottomland hardwood communities in the United States.

50. The Apalachicola River is the lifeblood of the Apalachicola Bay, an estuary of major ecological and economic importance to the eastern Gulf of Mexico. The Bay, a wide, shallow estuary along the Gulf Coast, is one of the largest estuaries in the southeastern United States and has historically been one of the most productive estuaries in the northern hemisphere.

51. More than 131 species of fresh and estuarine fish live in the Apalachicola River, more varieties than in any other river in Florida. More than 140 species of fish are found in the Bay.

52. More than 50 species of mammals, including the Florida black bear and the threatened West Indian Manatee, are found in the Apalachicola drainage basin.

53. More than 40 species of amphibians and 80 species of reptiles live in the Apalachicola River basin. This rich and varied assemblage constitutes the highest diversity of amphibians and reptiles in all of the United States and Canada.

54. More than 282 avian species, including 164 migratory bird species, reside for at least part of the year in the Apalachicola Floodplain and Bay.

55. More than 1,300 species of plants, including 103 that are threatened or endangered, are also found in the Apalachicola drainage basin.

56. As of 2012, more than 30 federally threatened or endangered animal species inhabited the Apalachicola River Basin.

57. The Apalachicola River is designated as critical habitat for the threatened Gulf sturgeon, and parts of the River are designated critical habitat for three species of endangered or threatened mussels.

58. The Apalachicola estuary sustains 21 species of birds, 5 species of mammals, 10 species of amphibians, 4 species of reptiles, 2 species of mussels and 109 species of plants recognized by the State of Florida as endangered, threatened or “of concern.”

59. The Apalachicola ecosystem has been described as “one of the least polluted, most undeveloped, resource rich systems left in the United States.” H. Lee Edmiston, Apalachicola National Estuarine Research Reserve, [A River Meets the Bay](http://www.dep.state.fl.us/coastal/downloads/management_plans/A_River_Meets_the_Bay.pdf) 2 (December 2008), http://www.dep.state.fl.us/coastal/downloads/management_plans/A_River_Meets_the_Bay.pdf.

60. The Apalachicola River System's commercial and recreational fisheries in the Gulf of Mexico generate billions of dollars in sales revenue and tens of thousands of jobs in West Florida. The harvest of shrimp, crab, fish and oysters is the driving force in the economy of Franklin County, Florida, which includes the coastal City of Apalachicola as well as many other communities.

61. Apalachicola Bay has historically provided 90 percent of Florida's oysters and more than 10 percent of the total oyster production in the United States. The Bay is also a major nursery for shrimp, blue crab and many species of fish, including striped bass, sturgeon, grouper, snapper, redfish, speckled trout and flounder.

62. The Apalachicola River System sustains these fisheries and other aspects of the local economy, including a traditional working waterfront, that have defined a way of life in the region for generations.

Freshwater Flows to the Apalachicola River

63. The vitality of this exceptional ecosystem depends on an adequate amount of freshwater flows from the upstream Chattahoochee and Flint Rivers reaching the downstream Apalachicola River at the proper times.

64. As with all river systems, freshwater flow is the "master variable" and the "driver of productivity" for the health of the Apalachicola River and ecosystem.

65. River flow largely determines the timing, depth and extent of inundation of the Apalachicola Floodplain, which in turn is the driving factor in floodplain

wetland hydrology, plant species diversity and fish and wildlife access to the floodplain, as well as fish and wildlife spawning, rearing, feeding and resting cycles.

66. As the Corps itself recognized in the FEIS, estuaries “are integrally linked to freshwater inputs” and the “[p]rincipal consequences of the management of freshwater flow to estuaries are related to both the magnitude and timing of flows.”

FEIS 6-324. Freshwater flows are integral to estuarine productivity, and to “providing the habitat conditions conducive to maintaining the diversity and abundance of the estuarine community.” FEIS 6-324.

67. River flow is also “the primary determinant of salinity concentrations in the estuary,” which in turn is “one of the major limiting factors in oyster production” (FEIS 2-216), and also affects other commercially viable fisheries.

The Chattahoochee River

68. The Chattahoochee River begins in north Georgia, flowing for more than 430 miles before merging with the Flint River at the border with Florida and forming the Apalachicola River.

69. The Chattahoochee River provides an important and renewable source of drinking water, supports many recreational uses, and sustains a variety of species.

70. Inadequate freshwater flows to the Chattahoochee River jeopardize water quality, riverine fish and aquatic resources and the Chattahoochee’s ecology.

71. Inadequate freshwater flows imperil the ability of the Chattahoochee River to continue to serve as a safe source for drinking water and recreation.

The Corps' Projects in the ACF Basin

72. While the Apalachicola River itself is “undammed and largely wild” (The Apalachicola River, Apalachicola River Blueway, <http://apalachicolablueway.com> (last visited April 26, 2017)), the Corps operates five upstream dams on the Chattahoochee River which control freshwater flow to the Apalachicola River from the Chattahoochee River and the timing of those flows.

73. The Corps is tasked by Congress with managing these dams for certain authorized purposes, namely: flood control, water supply, hydropower, navigation, recreation and fish and wildlife conservation.

74. Under federal law, wildlife conservation must “receive equal consideration” to other purposes for which the Corps operates the dams. 16 U.S.C. § 661.

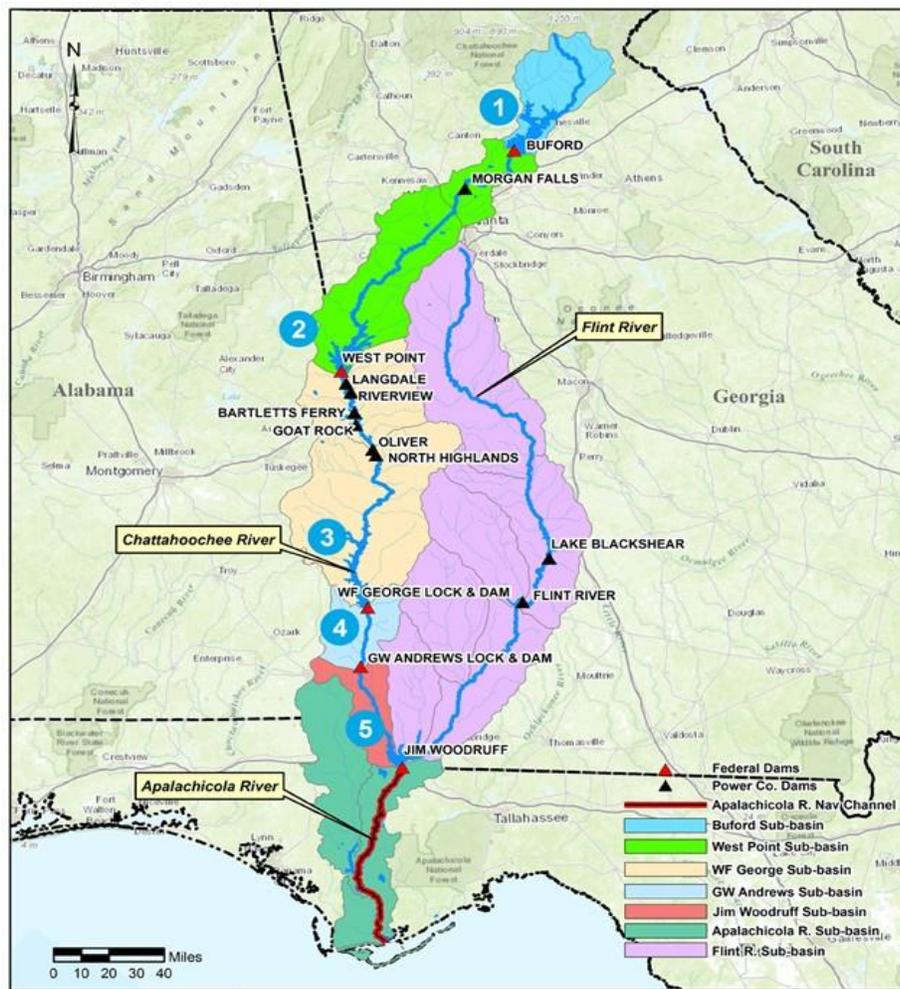
75. The Corps' Master WCM for the ACF Basin articulates how the Corps will manage the storage and flow of water in the ACF Basin under various conditions in light of Congressionally-mandated purposes.

76. When the Corps adopted the original Master WCM in 1958, there were only two federal dams in the ACF Basin: Buford Dam north of Atlanta, with the Lake Lanier reservoir behind it, and the Jim Woodruff Lock and Dam on the Georgia-Florida border, with the impounded water behind it known as Lake Seminole.

77. In 1963, construction was completed on two more federal dams in the ACF Basin: Walter F. George Lock & Dam and George W. Andrews Lock & Dam, both to the north of the Jim Woodruff Lock and Dam.

78. In 1975, construction was completed on the fifth and final federal dam in the ACF Basin: West Point Lake and Dam, south of the Buford Dam and Lake Lanier.

79. The following map illustrates the location of the Apalachicola, Chattahoochee and Flint Rivers, with the red triangles marking each of the five dams operated by the Corps today in the ACF Basin.



U.S. Army Corps of Engineers, ACF Master Water Control Manual Update Project Map, <http://www.sam.usace.army.mil/Missions/Planning-Environmental/ACF-Master-Water-Control-Manual-Update/ACF-Project-Map/> (last visited April 26, 2017).

80. Since 1975, the Corps has continued to make changes to its operations in the ACF Basin, and has adopted a variety of interim operating procedures.

81. An updated Master WCM was proposed in 1989 but never finalized. Even though the 1989 WCM was never finalized or adopted, the Corps purports to have followed it, with modifications, over the years.

82. In 1990, the State of Alabama filed suit to prevent the Corps from reallocating storage in the ACF Basin for municipal and industrial water supply in Georgia. The States of Alabama, Georgia and Florida (“the States”) subsequently engaged in negotiations over water allocation.

83. In 1992, the States entered into a Memorandum of Agreement to try to address these issues. In 1997, the States and the United States entered into a Compact in an effort to reach agreement on allocation of water in the basin.

84. None of these efforts, however, resolved the disputes.

85. In 2003, the States allowed the Compact to expire.

86. In 2007, the Corps adopted an interim operating procedure (“IOP”) that further altered the flows to the Apalachicola River.

87. In 2008, the Corps again initiated the process to update the WCM.

88. In 2011, the U.S. Court of Appeals for the Eleventh Circuit ruled that the Corps had the authority to allocate water storage in Lake Lanier for water supply to the metropolitan Atlanta area as requested by the State of Georgia. In re MDL-1824 Tri-State Water Rights Litig., 644 F.3d 1160, 1192 (11th Cir. 2011).

89. In 2012, the Corps issued a legal opinion regarding its “Authority to Provide for Municipal and Industrial Water Supply from the Buford Dam/Lake Lanier Project, Georgia.” The Corps subsequently added consideration of Georgia’s request for additional water supply for the Atlanta metropolitan area to its development of the Updated WCM.

90. In 2012, the Corps also adopted a revised IOP (“RIOP”) for flows to the Apalachicola River. The RIOP set the minimum flows the Corps deemed appropriate to minimize harms only to endangered and threatened species and their critical habitat. The RIOP did not purport to address fish and wildlife conservation.

Supreme Court Litigation Regarding Water Allocation in ACF Basin

91. In 2014, while the Corps’ Updated WCM was still in process, the State of Florida sued the State of Georgia in an original action in the Supreme Court of the United States, seeking an equitable apportionment of water resources in the ACF Basin. Florida v. Georgia, 135 S. Ct. 701 (Nov. 19, 2014) (No. 124).

92. In this original action, Florida alleged serious harm to its ecology and economy from reduced flows in the Apalachicola River as a result of Georgia’s excessive and unrestrained upstream consumption.

93. The Supreme Court appointed a Special Master who subsequently oversaw discovery, ruled on pretrial matters, conducted a lengthy trial and issued a report with his evidentiary findings and legal conclusions.

94. The Corps was not a party to the case. The United States participated in the proceeding as Amicus Curiae.

95. The Corps' 2015 DEIS and 2016 FEIS, however, were brought to the Special Master's attention during the course of proceedings.

96. On February 14, 2017, the Special Master issued his Report. The Special Master found that Florida had presented evidence demonstrating "real harm" to the area's ecology and economy from decreased flows in the Apalachicola River. Florida v. Georgia, 2017 WL 656655, at *31 (U.S. Feb. 16, 2017).

97. The Special Master further found that Georgia's upstream agricultural water use was "largely unrestrained," and that the State was essentially advocating that its agricultural water use "should be subject to no limitations, regardless of the long-term consequences for the Basin." Id. at 32-34.

98. The Special Master recommended, however, that Florida's request be denied. He based this recommendation on his conclusion that the Court would not be able to provide an effective remedy to Florida solely by ordering a consumptive cap on Georgia's water use, because the Corps maintains significant control over water flows in the basin and could manage the system in a way that would negate any additional flows Florida would otherwise derive from a cap. Id. at 69-70.

99. The Special Master opined that an effective remedy for the Apalachicola area's ecology and economy would require a decree binding the Corps, and likely a change in the Corps' operating rules in the ACF Basin, but that the Court would not be able to issue such a decree in this original action because the Corps was not a party to the suit. Id. at 35, 61-62, 69.

100. As of the filing of this complaint, the Special Master's Report has been filed with the Supreme Court. The matter is still pending before the Supreme Court.

The Corps' Updated WCM Damages Vital Natural Resources

101. Over the years, the Corps' management of water in the ACF Basin has increasingly restricted, and failed to provide, adequate and appropriately-timed freshwater flows downstream to the Apalachicola River, starving this rich ecosystem of the water it needs to thrive.

102. The Corps' mismanagement has severely degraded the Apalachicola River, Floodplain and Bay. Progressively restrictive flows have dried out the Apalachicola Floodplain, damaging the floodplain forests, wetlands and sloughs.

103. Inundated floodplain forests provide essential spawning and nursery habitat for fishes, and connect those habitats to the main channel. Sloughs that flow through the floodplain provide important spawning and nursery habitats for a variety of aquatic species, including mussels, but require adequate flows to maintain sufficient dissolved oxygen and pH to support these species. Isolated pools of

stagnant water in the floodplains quickly turn lethal to many species and become anoxic algae blooms.

104. By 2004, inadequate flows had also resulted in the loss of more than 4.3 million floodplain trees, a reduction of about 17% in tree density. Bald cypress declined by 25%. Ogeechee tupelo, the source of tupelo honey, declined by 44%, with serious economic ramifications for commercial honey production. The resulting reduction in canopy cover also means less shade, further interfering with the ability of seedlings to become established and altering forest and soil composition.

105. In 2012, the Corps' actions culminated in the collapse of the oyster population in the Apalachicola Bay, with disastrous economic consequences for the area.

106. The Corps' mismanagement has harmed the local industries that rely on the Apalachicola River, Floodplain and Bay. The Corps' actions unreasonably endanger these vital resources and the way of life for generations of Floridians.

107. Inadequate freshwater flows to the Chattahoochee River have also harmed water quality in the Chattahoochee River, with adverse impacts on its ecology.

108. Making matters worse, the Corps' Updated WCM will dramatically increase the amount of water withdrawn from Lake Lanier at the top of the ACF Basin, and from the Chattahoochee River downstream of Buford Dam, and divert that water to the Atlanta metropolitan area, thereby removing it from flowing through the

remainder of the ACF Basin and ultimately to the Apalachicola River. The Corps' reliance on unrealistic and unenforceable assumptions about water "return rates" distorts and minimizes the impact of these withdrawals.

109. The volume of the increased withdrawals that are to be undertaken pursuant to the Updated WCM is staggering. Under the Updated WCM, the Corps will increase its withdrawals from Lake Lanier by nearly 190% (from the current 128 million gallons of water per day ("mgd") to 242 mgd). The Corps will increase its withdrawals from the Chattahoochee River downstream of Buford Dam by nearly 140% (from the current 277 mgd to 379 mgd).

110. The Apalachicola ecosystem is especially vulnerable during periods of low flows. Recurring or sustained low flows are the most devastating to the area's ecology and economy.

111. The Updated WCM, however, calls for dramatic increases to already draconian and harmful "drought operations." Under "drought operations" (circumstances defined by the Corps as requiring more restrictions on water releases), the Corps keeps even more water in the upstream reservoirs and severely restricts flows to the Apalachicola River downstream.

112. The Updated WCM increases the number of times the Corps will impose "drought operations" by 600%; triples the amount of time that drought operations will remain in effect; and initiates drought operations earlier in the year, when flows are most critical for fish and wildlife breeding and reproduction downstream.

113. In addition, the Updated WCM improperly prioritizes accommodating almost non-existent navigation in the Apalachicola River while ignoring the very real needs for fish and wildlife conservation.

114. The Corps has designated the Apalachicola River as a low use segment of the Inland Waterway System. The Apalachicola River falls far below even the “low use” threshold as there is virtually no commercial navigation on the river. This designation limits federal spending to addressing only public safety issues and conducting minimal maintenance activities.

115. The Updated WCM would allow freshwater releases to the Apalachicola River to support this non-existent navigation from January to April and potentially into May, during periods of normal rainfall. While some of these releases could come during a short period that would be beneficial to some species, the releases would not occur during any portion of the critical breeding, spawning and flowering seasons for many species. Importantly, no navigation releases would occur during most dry periods or during drought operations, which are both times when flows are most vital for supporting ecological functions and healthy fish and wildlife populations.

116. The Corps’ duty to complete an environmental impact statement for the Updated WCM provided the opportunity to properly consider the impacts of its action, consider alternatives and avoid harms or ensure mitigation of harms.

117. The Corps’ FEIS, however, grossly failed to adequately consider these impacts, including by: (1) failing to consider the direct, indirect and cumulative

impacts of the Corps' actions, including harms to the Apalachicola ecosystem over time; (2) failing to give equal consideration to its duty to promote fish and wildlife conservation; (3) failing to consider all reasonable alternatives; (4) failing to provide for mitigation of adverse effects that cannot be avoided; and (5) relying on an arbitrary, unreasonable and insupportable summary conclusion regarding the extent of operational changes in the Updated WCM to draw an equally arbitrary, unreasonable and insupportable summary conclusion that the Updated WCM will cause little to no environmental harm.

118. The Corps' Updated WCM fails to provide a mitigation plan even for those environmental harms it has identified elsewhere in the ACF Basin.

119. The Corps' Updated WCM also fails to serve the Congressionally-mandated project purpose of promoting fish and wildlife conservation.

STATUTORY AND REGULATORY FRAMEWORK

Administrative Procedure Act

120. The APA requires a reviewing court to hold unlawful and set aside final agency action, findings and conclusions that are arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law. 5 U.S.C. § 706(2)(A).

121. Environmental impact statements prepared pursuant to NEPA, and compliance with the substantive requirements of other applicable statutes, are reviewed under the APA.

122. To survive an APA challenge, an agency must have ““examine[d] the relevant data and articulate[d] a satisfactory explanation for its action, including a rational connection between the facts found and the choice made.”” PPL Wallingford Energy LLC v. FERC, 419 F.3d 1194, 1198 (D.C. Cir. 2005) (quoting Motor Vehicle Mfrs. Ass’n, 463 U.S. 29, at 43). Merely articulating the facts found and the choice made is insufficient without also providing an adequate rationale connecting the two.

Congressionally Authorized Project Purpose

123. The Corps’ authority to manage dams in the ACF Basin arises from, and is governed by, Congressionally-mandated project purposes and directives.

124. The authorized project purposes that govern the Corps’ activities in the ACF Basin include: flood control, hydropower, water supply, navigation, recreation and fish and wildlife conservation.

125. The fish and wildlife conservation project purpose is derived from the FWCA, 16 U.S.C. §§ 661-667e.

126. The FWCA applies to all species of wildlife. The Act recognizes “the vital contribution of our wildlife resources to the Nation,” requires the determination of “means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources,” and explicitly states that “wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs[.]” Id. § 661.

127. Accordingly, the fish and wildlife conservation project purpose likewise applies to all species of wildlife and requires the Corps to manage the ACF projects in a manner that will both avoid damage to, and improve the health of, all fish and wildlife affected by the projects.

National Environmental Policy Act

128. NEPA is “our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a).

129. NEPA recognizes “the critical importance of restoring and maintaining environmental quality” and declares the national policy that the federal government must “use all practicable means . . . to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.” 42 U.S.C. § 4331(a), (b)(1).

130. NEPA serves two purposes: (1) “it ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts,” and (2) it “guarantees that the relevant information will be made available” to the public so it may play a role in the decision-making process. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989). The NEPA process is intended to help public officials “take actions that protect, restore, and enhance the environment.” 40 C.F.R. § 1500.1.

131. Under NEPA, agencies are required to prepare a detailed environmental impact statement (“EIS”) for any major federal action significantly affecting the quality of the human environment. 42 U.S.C. § 4332(C).

132. This requirement is designed to ensure that NEPA's environmental protection policies are integrated into environmental decision-making, and provide a means by which decision-makers and the public can evaluate the environmental impacts of government proposals. 40 C.F.R. §§ 1501.1(a), 1502.1.

NEPA Statement of Project Purpose and Need

133. To establish a proper statement of project purpose for a NEPA analysis, the Corps must consider "the views of Congress, expressed, to the extent that an agency can determine them, in the agency's statutory authorization to act, as well as in other Congressional directives." Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

134. An adequate statement of project purpose and need is essential because this statement frames the agency's analysis of the proposed project and the range of alternatives the agency will consider.

135. In addition to the authorized project purpose of fish and wildlife conservation, numerous Congressional directives regarding environmental protection govern the Corps' actions in the ACF Basin, including the Endangered Species Act ("ESA"), 16 U.S.C. § 1531(c)(1), and the National Water Resources Planning Policy, which provides that "all water resources projects should," among other things, "protect[] and restor[e] the functions of natural systems and mitigat[e] any unavoidable damage to natural systems," 42 U.S.C. § 1962-3(a)(3).

136. The Corps' statement of project purpose and need for the Updated WCM manual was required to encompass the co-equal authorized project purpose of fish and wildlife conservation, as well as other Congressional directives to advance environmental protection.

NEPA Requires That Agencies Take A “Hard Look” At Impacts

137. NEPA requires federal agencies to take a “hard look” at the potential direct and indirect impacts of its proposed actions, as well as the cumulative impacts of those actions. TOMAC, Taxpayers of Michigan Against Casinos v. Norton, 433 F.3d 852, 863–64 (D.C. Cir. 2006); Pub. Emp’s for Env’tl. Responsibility v. Hopper, 827 F.3d 1077, 1083 (D.C. Cir. 2016).

138. “The hallmarks of a ‘hard look’ are thorough investigation into environmental impacts and forthright acknowledgement of potential environmental harms.” Nat’l Audubon Soc’y v. Dep’t of Navy, 422 F.3d 174, 187 (4th Cir. 2005) (citing Robertson, 490 U.S. at 350). See also Nat. Res. Def. Council, Inc. v. Hodel, 865 F.2d 288, 296 (D.C. Cir. 1988) (purpose of a “hard look” is to ensure agency, Congress and the public are properly informed about the environmental consequences of proposed action).

139. The “hard look” doctrine bars “[g]eneral statements about ‘possible effects’ and ‘some risk’ . . . absent a justification regarding why more definitive information could not be provided.” Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1380 (9th Cir. 1998).

140. To satisfy the requirement that it take a “hard look” at the environmental consequences of its actions, and of the alternatives considered, the agency must have reasonably and specifically defined the different levels of impact. “An unbounded term cannot suffice to support an agency’s decision because it provides no objective standard for determining what kind of differential makes one impact more or less significant than another[.]” Sierra Club v. Mainella, 459 F. Supp. 2d 76, 101 (D.D.C. 2006) (citing Tripoli Rocketry Ass’n, Inc. v. Bureau of Alcohol, Tobacco, Firearms, and Explosives, 437 F.3d 75, 81 (D.C. Cir. 2006)).

NEPA’s Alternatives Analysis

141. In addition to detailing the environmental impacts of a proposed action, an agency’s EIS must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14(a); 42 U.S.C. § 4332(2)(C)(i), (iii).

142. The rigorous and objective evaluation of all reasonable alternatives is “the heart” of the NEPA process, and is intended to provide a “clear basis for choice among options by the decision-maker and the public.” 40 C.F.R. § 1502.14.

143. An alternative need not be within an agency’s existing legal authority or a complete solution to the agency’s goals to warrant consideration and analysis. Id. §§ 1502.14(c), 1506.2(d); Nat. Res. Def. Council, Inc. v. Morton, 458 F.2d 827, 836 (D.C. Cir. 1972); American Oceans Campaign v. Daley, 183 F. Supp. 2d 1, 19-20 (D.D.C. 2000); Council on Environmental Quality, Forty Most Asked Questions

Concerning CEQ's NEPA Regulations, 46 Fed. Reg. 18026, at 2a, 2b (March 23, 1981), <https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>.

144. An agency's failure to consider a reasonable alternative is fatal to the sufficiency of an EIS. Union Neighbors United, Inc. v. Jewell, 831 F.3d 564, 576 (D.C. Cir. 2016).

145. In analyzing alternatives, NEPA requires an "intense consideration of other more ecologically sound courses of action." Env'tl. Def. Fund, Inc. v. U.S. Army Corps of Eng'rs, 492 F.2d 1123, 1135 (5th Cir. 1974); see also 40 C.F.R. § 1502.16.

146. To that end, NEPA provides that agencies must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E).

NEPA Requires Scientific Integrity

147. Additionally, under NEPA agencies are required to "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." 40 C.F.R. § 1502.24. An agency's failure to include and analyze information that is important, significant, up-to-date, available, or essential renders an EIS inadequate. Id. § 1500.1 ("The information must be of high quality.").

148. These principles apply to the economic as well as environmental analyses included in an EIS. While the purpose of NEPA is to evaluate the environmental consequences of a proposed federal action, “[w]hen an [EIS] is prepared and economic or social and natural or physical environmental effects are interrelated, then the [EIS] will discuss all of these effects on the human environment.” Id. § 1508.14; see also id. § 1508.8.

149. Rigorous compliance with NEPA is required as a prerequisite for the Corps’ implementation of the Updated WCM. Absent an adequate analysis under NEPA, the Corps cannot lawfully proceed with operations under the Updated WCM.

The Water Resources Development Act

150. WRDA requires the Corps to include a specific mitigation plan to address fish and wildlife losses and other ecological harms in any report that selects a project alternative. 33 U.S.C. § 2283(d)(1).

151. A mitigation plan is required unless the agency determines that the project will have only “negligible adverse impacts on ecological resources and fish and wildlife.” Id.

152. The mitigation plan must include, among other things, a plan for monitoring the implementation and success of each mitigation measure, the criteria for ecological success by which the mitigation will be evaluated, a description of the types and amount of restoration activities to be conducted, and a contingency plan for

taking corrective actions where mitigation measures are not achieving ecological success. Id. § 2283(d)(1)-(4).

153. Monitoring is required to continue until the measures have been shown to achieve ecological success. Id. § 2283(d)(5).

THE CORPS' FEIS WAS GROSSLY DEFICIENT UNDER NEPA

154. The Corps' FEIS for the Updated WCM grossly failed to comply with NEPA, including by: (1) failing to consider the direct, indirect and cumulative impacts of the Corps' actions, including harms to the Apalachicola ecosystem over time; (2) failing to accord equal consideration to its duty to promote fish and wildlife conservation; (3) failing to consider all reasonable alternatives; (4) failing to provide for mitigation of adverse effects that cannot be avoided; and (5) relying on an arbitrary, unreasonable and insupportable summary conclusion regarding the extent of operational changes in the Updated WCM to draw an equally arbitrary, unreasonable and insupportable summary conclusion that the Updated WCM will cause little to no environmental harm.

The Corps' Failure to Consider Direct, Indirect and Cumulative Impacts

155. NEPA requires the Corps to analyze the direct, indirect and cumulative impacts of its actions on the environment.

156. Direct impacts are caused by the action and occur at the same time and place as the action. Indirect impacts are also caused by the action, but are later in time or farther removed from the location of the action. 40 C.F.R. § 1508.8.

157. Cumulative impacts are “the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” Id. §§ 1508.7, 1508.25; Grand Canyon Trust v. FAA, 290 F.3d 339, 341-43 (D.C. Cir. 2002). “Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7.

158. A robust analysis of all project impacts is essential for determining whether less environmentally damaging alternatives are available.

159. The cumulative impact analysis ensures that the agency will not “treat the identified environmental concern in a vacuum.” Grand Canyon Trust, 290 F.3d at 346; Coalition on Sensible Transp., Inc. v. Dole, 826 F.2d 60, 70-71 (D.C. Cir. 1987) (background “data base” of proposed project must be basis from which incremental impact, and possible cumulative effects, of a project are measured); Theodore Roosevelt Conserv. P’ship v. Salazar, 605 F. Supp. 2d 263 (D.D.C. 2009).

160. In conducting the cumulative impacts analysis, it is not enough simply to catalog past events. The cumulative impacts analysis must identify the areas where the effects of a proposed project will be felt; the impacts expected from the proposed project on that area, and the magnifying and additive effects of the proposed action on the full suite of cumulative impacts; the impacts of other actions—past, present and reasonably foreseeable future actions—that have had or are expected to have impacts

in the same area; and the overall impact that can be expected if the individual impacts are allowed to accumulate. Cabinet Mountains Wilderness/Scotchman’s Peak Grizzly Bears v. Peterson, 685 F.2d 678, 683–84 (D.C. Cir. 1982).

161. The cumulative impacts analysis is a critically important component of the environmental review as “even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more [action]... may represent the straw that breaks the back of the environmental camel.” Grand Canyon Trust, 290 F.3d at 342 (citing Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir.1972)).

162. The assessment of direct, indirect and cumulative impacts must utilize “quantified or detailed information” so that the courts and the public can be assured that the Corps has taken the mandated hard look at the environmental consequences of the project. Neighbors of Cuddy Mountain v. U. S. Forest Service, 137 F.3d 1372, 1379 (9th Cir. 1998); Ecology Center v. Castaneda, 574 F.3d 652, 666 (9th Cir. 2009) (requiring “quantified or detailed data”); Nat. Resources Def. Council v. Callaway, 524 F.2d 79, 87 (2d Cir. 1975).

163. “Simple, conclusory statements of ‘no impact’ are not enough to fulfill an agency’s duty under NEPA.” Delaware Riverkeeper Network v. F.E.R.C., 753 F.3d 1304, 1313 (D.C. Cir. 2014) (quoting Found. on Econ. Trends v. Heckler, 756 F.2d 143, 154 (D.C. Cir. 1985)); Nat. Resources Def. Council, Inc. v. Hodel, 865 F.2d 288, 298 (D.C. Cir. 1988) (conclusory statements in FEIS do not allow for informed

decisionmaking or for review of the agency's reasoning); Sierra Club v. Mainella, 459 F. Supp. 2d 76, 103 (D.D.C. 2006); Friends of the Earth, Inc. v. U.S. Army Corps of Eng'rs, 109 F. Supp. 2d 30, 38 (D.D.C. 2000) (Corps' failure to articulate basis for its assertions violated NEPA).

164. If information that is essential for making a reasoned choice among alternatives is not available, the Corps must obtain that information unless the costs of doing so would be "exorbitant." 40 C.F.R. § 1502.22.

165. A legally adequate impact analysis also requires the establishment of accurate baseline conditions for comparison purposes. "Without establishing the baseline conditions ... there is simply no way to determine what effect the [action] will have on the environment, and consequently, no way to comply with NEPA." Half Moon Bay Fisherman's Marketing Ass'n. v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988).

166. Where, as here, the environment has already been greatly modified by human activities, the baseline must include a clear description of "how conditions have changed over time and how they are likely to change in the future without the proposed action." Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act*, 41 (January 1997), https://ceq.doe.gov/publications/cumulative_effects.html.

167. Establishing an accurate baseline, and fully assessing cumulative impacts, is critically important, as it "is often the case that when a large proportion of

a resource is lost, the system nears collapse as the surviving portion is pressed into service to perform more functions.” Id.

168. Although the FEIS is lengthy, it fails to meet these fundamental NEPA requirements. The FEIS instead relies on summary conclusions that lack any environmental impact analysis, supporting data or evidence, and that contradict information contained elsewhere in the FEIS itself.

169. For example, despite the critical importance of adequate and appropriately-timed freshwater flows to the health of the Apalachicola River Floodplain and its wetlands, the FEIS provides no data or substantive analysis of the impacts of the Updated WCM on those resources, or the fish and wildlife that rely on them. Instead, the FEIS summarily concludes that there will be no impacts as compared to the “no action” alternative or “NAA.”

170. Despite the critical importance of adequate and appropriately-timed freshwater flows to the health of birds, wildlife, riverine and estuarine fishes, amphibians, reptiles and other species that rely on the Apalachicola River, the FEIS provides no data or substantive analysis of the impacts of the Updated WCM on any of these species. Instead, the FEIS summarily concludes that there will be no impacts as compared to the “no action” alternative.

171. The only exception to this analysis-free assessment of impacts on wildlife in the Apalachicola ecosystem is the Corps’ discussion of threatened and endangered species. While protection of threatened and endangered species, and

compliance with the ESA, are critically important, NEPA requires an analysis that addresses the entirety of the affected environment, including impacts on fish and wildlife and their habitats. The FEIS fails to provide such an analysis.

172. The FEIS' brief section on "cumulative impacts" consists of a catalog of some past environmental harms, but contains no actual analysis of cumulative impacts—including the additive impact of the Updated WCM—on the Apalachicola ecosystem and the fish and wildlife that rely on it. Instead, the FEIS summarily concludes that the Updated WCM "would be expected to have a negligible incremental effect" on the Apalachicola Bay. FEIS 6-388.

173. Notably, this summary conclusion of no cumulative impacts is contradicted by information on significant stressors to the Apalachicola ecosystem contained in the same cumulative impacts section. See, e.g., FEIS 6-385 ("Constructing dams in riverine ecosystems abruptly, severely and permanently alters many important physical and biological processes involving the movement of water, energy, sediments, nutrients, and biota."); FEIS 6-387 ("One effect of converting flowing water habitat to still water by dam construction along ACF Basin mainstem rivers and tributaries has been the decline or loss of river-dependent species . . ."); FEIS at 6-388 ("Appreciable flow alteration (in terms of quantity, quality, timing and distribution) would be likely to have potential effects on the Apalachicola Bay estuary, including its commercial fisheries."); FEIS at 6-388 ("The Apalachicola Bay estuary faces a variety of anthropogenic pressures, including upland development and

associated pollution, groundwater pumping, recurring droughts, fishery pressures, sea level rise, wetland destruction, and flow modification from upstream reservoirs.”).

174. The Corps offers no rational connection between the existence of these many acknowledged stressors and its conclusion of no cumulative impacts.

175. The failure to conduct a legally adequate cumulative impacts analysis is particularly problematic as the Updated WCM will likely guide freshwater flows through the Apalachicola ecosystem—causing direct, indirect and cumulative impacts—every day of the year for decades. It is well established that over time, even small hydrological changes in aquatic resources such as wetlands can cause massive changes in species composition, species richness and ecological health.

176. The FEIS also fails to obtain information that is critical to assessing the potential impacts of the Updated WCM. For example, the FEIS fails to conduct a fact-based assessment of the freshwater flows needed to maintain and/or restore the ecological health of the Apalachicola ecosystem. The FEIS similarly fails to obtain, utilize and consider modeling data on needed freshwater flows developed by other entities and referred to in public comments on the Draft EIS and the FEIS.

177. The FEIS impacts analysis is further invalidated by the Corps’ failure to properly establish baseline conditions for comparison purposes. The FEIS purports to use a legally and factually flawed single year baseline, 2007, as the “baseline for determining the severity of effects.” FEIS at ES-11; see also, FEIS at ES-28 to ES-37.

178. Among other problems, this single year baseline fails to reflect current conditions, fails to account for cumulative impacts, and disregards the more than fifty years of developments and environmental impacts that have affected the Apalachicola region since the Original WCM was adopted in 1958.

179. The Corps also appears to have relied on the fact that it had subjected the Apalachicola River to very low flows throughout much of 2007 to conclude that drought operations in the Updated WCM would not change the “status quo.”

180. Elsewhere, the Corps refers to its descriptions of the “affected environment” as the “baseline” from which impacts from the changes in the Updated WCM will be “identified and evaluated.” FEIS 2-1. Although this section of the FEIS contains a *recitation* of harms on the environment over time, nowhere does an *analysis* of the impacts of the Updated WCM on the environment take place.

181. Rather than conduct a legally adequate impacts analysis, the Corps bases each of its summary conclusions of no adverse impacts to the Apalachicola ecosystem on the factually insupportable and legally untenable claim that the Updated WCM will not meaningfully change “current operations.” The Corps then relies on that claim to summarily conclude that the Updated WCM would cause no impacts to the Apalachicola ecosystem.

182. Each of these summary conclusions is contradicted by an extensive body of factual and scientific evidence presented to the Corps during the public comment periods on the draft EIS and FEIS, and by statements found elsewhere in the FEIS.

183. The claim that the Updated WCM will not meaningfully change “current operations” is directly contradicted by information in the FEIS. For example, the FEIS makes it clear that the Updated WCM will significantly increase the triggering of drought operations over “current operations” for decades to come. The Updated WCM will increase the number of times the Corps imposes “drought operations” by 600%; triple the amount of time that drought operations are in effect; and initiate drought operations earlier in the year, when flows are most critical for breeding and reproduction downstream. Despite the fact that provision of adequate and appropriately-timed freshwater flows is critical for protecting the Apalachicola ecosystem during periods of drought, the FEIS does not analyze the impacts of increased drought operations on the Apalachicola ecosystem, including the fish and wildlife that rely on it.

184. The claim that the Updated WCM will not meaningfully change “current operations” is also directly contradicted by its dramatic increases in upstream water withdrawals. Withdrawals from Lake Lanier will increase by nearly 190% (from the current 128 million gallons of water per day (“mgd”) to 242 mgd), and withdrawals from the Chattahoochee River downstream of Buford Dam will increase by nearly 140% (from the current 277 mgd to 379 mgd). The FEIS does not examine the impacts of the increased upstream water withdrawals on the Apalachicola ecosystem.

185. The Corps based its conclusion that there would be no meaningful change in freshwater flows on fundamentally flawed simulations of flows that the

Corps wrongly and unreasonably presented as predictive of future flows. The model used to run these simulations utilizes a synthetic data set that is incomplete and unreliable, and masks variations in the amount, timing and duration of flows that actually determine the extent and severity of environmental impacts.

186. The model's compounded errors are proportionately greater at low flows, and particularly during periods of drought, when adverse environmental impacts are most felt. As a result of these built-in structural flaws, the Corps' model fails to provide reliable assessments of future flows.

187. Even without these errors, the model's exclusive reliance on historical hydrologic data is inadequate in light of known, foreseeable and anticipated changes in climate, including related increases in the frequency, duration and severity of droughts.

188. The model and its simulations are also wholly incapable of evaluating environmental impacts. They are no substitute for an environmental impacts analysis.

189. Moreover, the "current operations" to date have been so damaging that they have pushed the Apalachicola ecosystem to the brink. As a result, even if the Updated WCM simply retained "current operations" (which it does not), it would cause significant harm to the Apalachicola ecosystem over the many decades it remains in place. By further restricting freshwater flows to the Apalachicola ecosystem, the Updated WCM will cause increased harm for decades to come and could push the system into collapse.

190. The Corps has also failed to offer a rational connection between its acknowledgement that the Apalachicola ecosystem has been subjected to a variety of stressors and alterations—many in the Corps’ control—and the Corps’ conclusion that its actions will have little to no environmental impact on the ecology there.

191. For these reasons, the FEIS impacts analysis fails as a matter of law.

The Corps’ Failure to Consider All Reasonable Alternatives

192. From the outset, the Corps improperly limited the range of alternatives it considered by adopting a legally inadequate statement of project purpose and need to guide its alternatives analysis. The Corps’ statement of purpose and need for the Updated WCM begins with the statement that it is “to determine how the USACE projects in the ACF Basin should be operated for their authorized purposes, in light of current conditions and applicable law, and to implement those operations through updated water control plans and manuals.” FEIS 1-3.

193. However, the Corps failed to properly and adequately address the authorized purpose of fish and wildlife conservation in the purpose and need statement. FEIS Section 1.2. In terms of environmental objectives, the Corps mentions only “water quality, federally listed threatened and endangered species, and fish management.” FEIS 1-4.

194. While the Corps acknowledges that fish and wildlife conservation is an authorized project purpose in the introduction and public comments section, this

acknowledgement is notably missing from the purpose and need statement itself, as is any discussion of fish and wildlife conservation.

195. Also missing from the purpose and need statement is incorporation of other critical Congressional directives, including the National Water Resources Planning Policy, which provides that “all water resources projects should,” among other things, “protect[] and restor[e] the functions of natural systems and mitigate[e] any unavoidable damage to natural systems.” 42 U.S.C. § 1962-3(a)(3).

196. These omissions are significant because the purpose and need statement frames the Corps’ analysis of the proposed project and the range of alternatives considered.

197. The Corps also improperly limited the range of alternatives it considered by utilizing inappropriate criteria which screened out reasonable alternatives. The Corps compounded these errors by using flawed metrics for comparing and assessing the alternatives it did evaluate. Among many other problems, the Corps’ metrics relied heavily on crass averages of flows that mask important impacts and fail to provide meaningful information. Relying on “average” flows is particularly problematic in the complex Apalachicola ecosystem.

198. None of the alternatives the Corps considered would advance fish and wildlife conservation in the Apalachicola ecosystem.

199. None of the alternatives considered would improve the health and resiliency of the Apalachicola River system by ensuring appropriately-timed and sufficient freshwater flows.

200. None of the alternatives considered would mimic natural river flows in the Apalachicola and Chattahoochee rivers.

201. None of the alternatives considered reflected intense consideration of other, more ecologically sound courses of action.

202. The Corps refused to consider alternatives recommended in public comments that would have promoted these goals, including recommendations from other federal agencies.

203. In direct violation of NEPA's mandates, the Corps also categorically refused to consider any alternative that would require additional Congressional action or that the Corps deemed outside the scope of its own authority.

204. All the alternatives the Corps considered had the same end result: prioritizing upstream uses at the expense of the Apalachicola River, Floodplain and Bay, and continuing to deprive that ecosystem of the freshwater flows it needs.

205. The range of alternatives considered is not adequate under NEPA, however, if each alternative has the same end result. California v. Block, 690 F.2d 753, 767-68 (9th Cir. 1982).

206. As with the Corps' inadequate analysis of impacts, the Corps' deficient alternatives analysis is fatal to its FEIS. Simmons v. U.S. Army Corps of Eng'rs, 120 F.3d 664, 666 (7th Cir. 1997) (citing 42 U.S.C. § 4332(2)(E)).

The Corps' Failure to Fully Evaluate and Adopt Mitigation Measures

207. Under NEPA, mitigation is defined to include: (a) avoiding adverse impacts by not taking a certain action or part of an action; (b) minimizing impacts by limiting the action; (c) rectifying the impact by repairing, rehabilitating or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments. 40 C.F.R. § 1508.20.

208. Here, having failed to properly analyze direct, indirect and cumulative impacts, and having failed to consider all reasonable alternatives, the Corps failed to identify adverse impacts to the Apalachicola River ecosystem that would require mitigation.

209. The Corps also failed to analyze or provide for mitigation of harms that it did identify.

210. The FEIS acknowledges that the Updated WCM will have "substantially adverse" effects on riverine fish and aquatic resources in reaches of the Chattahoochee River. The FEIS also acknowledges that there will be impacts from "slightly adverse"

to “substantially adverse” on the phosphorous, nitrogen and dissolved oxygen content in the Chattahoochee River, all of which affect water quality and species health.

211. The Corps’ failure to properly evaluate the need for mitigation, and to provide for mitigation of harms that were identified, violate NEPA.

THE CORPS’ VIOLATIONS OF WRDA

212. The Corps’ failure to provide a mitigation plan for those impacts it acknowledged as adverse in the Chattahoochee River also violates WRDA, 33 U.S.C. § 2283(d).

213. WRDA requires that the Corps mitigate all losses to fish and wildlife created by a project unless the Secretary determines that the adverse impacts to fish and wildlife would be “negligible.” *Id.* § 2283(d)(1). To ensure that this happens, the Corps is prohibited from selecting a “project alternative in any report” unless that report includes a “specific plan to mitigate fish and wildlife losses.” *Id.*

214. Accordingly, once the Corps identified adverse effects to fish and wildlife, it was required to include a specific mitigation plan in the FEIS and the Updated WCM.

215. Mitigation plans must include, at a minimum: (1) the type of habitat being restored and the actions to achieve that restoration; (2) ecological success criteria, based on replacement of lost functions and values, that will be evaluated and used to determine mitigation success; (3) a description of the lands and interest in lands to be acquired for mitigation, and the basis for determining that those lands will

be available; and (4) a mitigation monitoring plan. Id. § 2283(d). The mitigation plan must also include a contingency plan for taking corrective action in cases where monitoring shows that mitigation is not achieving ecological success as defined in the plan. Id.

216. Mitigation must be monitored until the ecological success criteria established in the mitigation plan have been met. Id.

217. The Corps' failure to provide a mitigation plan for the identified adverse impacts on riverine fish and water quality that would affect aquatic species in the Chattahoochee River violates WRDA.

**THE CORPS' VIOLATIONS OF THE FISH AND WILDLIFE
CONSERVATION PROJECT PURPOSE**

218. At the most fundamental level, the Corps' FEIS and Updated WCM fail because the Corps misinterpreted and failed to account for the authorized project purpose of fish and wildlife conservation.

219. The Corps' FEIS properly acknowledges that fish and wildlife conservation is an authorized project purpose established through the FWCA.

220. The FWCA explicitly applies to "all species of wildlife" and their habitat. Among other things, the FWCA requires that the conservation of all species of wildlife "*shall receive equal consideration* and be coordinated with other features of water-resource development programs." 16 U.S.C. § 661 (emphasis added). The FWCA also requires analysis of "the possible damage to wildlife resources and for the

purpose of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources.” Id. §§ 661, 662.

221. Because the FWCA is the basis for the fish and wildlife conservation project purpose, this project purpose applies to all species of wildlife and requires the Corps to manage the ACF to avoid damage to, and improve the health of, all fish and wildlife affected by the project.

222. However, with respect to the Apalachicola ecosystem, the only consideration of wildlife conservation in the FEIS is in connection with species listed as threatened and endangered under the ESA. No measures are taken to prevent the loss of, or damage to, the extensive array of other fish and wildlife species that rely on the Apalachicola ecosystem and no measures are taken to improve the health and resiliency of those species.

223. The Corps’ FEIS and Updated WCM also fail to accord fish and wildlife conservation equal consideration to other project purposes. Instead, the Corps improperly prioritizes certain project purposes (navigation, hydropower, water supply) at the expense of fish and wildlife conservation.

224. This failure to properly interpret and account for the fish and wildlife conservation purpose is reflected in the abject failure to adequately provide for fish and wildlife conservation in the Apalachicola River, Floodplain and Bay, and in the Chattahoochee River.

COUNT I

Violations of the National Environmental Policy Act

225. Plaintiffs adopt and incorporate by reference paragraphs 1-224 of this Complaint.

226. The Corps has violated NEPA and its implementing regulations in at least the following ways: (a) failing to adequately analyze the direct, indirect and cumulative impacts of the Updated WCM on the Apalachicola River, Floodplain and Bay; (b) failing to consider all reasonable alternatives; (c) failing to evaluate mitigation; (d) relying on factually insupportable and legally untenable summary conclusions; and (e) failing to properly define the project purpose and need.

227. The Corps' FEIS fails to: provide an adequate assessment of the Apalachicola ecosystem; provide a detailed description of past, present and future impacts on the Apalachicola ecology; take a hard look at environmental impacts; forthrightly acknowledge potential environmental harms; consider the cumulative effects of the Corps' actions; conduct an assessment based on high quality science on the current state of and impacts to the fish and wildlife that rely on the Apalachicola River, Floodplain and Bay; consider all reasonable alternatives; provide for mitigation of adverse effects; accord the project purpose of fish and wildlife conservation equal consideration to other project purposes; and articulate rational connections between the facts and its conclusions, all in violation of NEPA.

228. The Corps' actions and failures are arbitrary, capricious, an abuse of discretion and not in accordance with law, in violation of NEPA and the APA, 5 U.S.C. § 706(2)(A).

229. The Corps' actions and failures have harmed the Plaintiffs and leave them without any adequate remedy at law.

COUNT II

Violations of the Water Resources Development Act

230. Plaintiffs adopt and incorporate by reference paragraphs 1-229 of this Complaint.

231. The Corps has violated WRDA by failing to include a mitigation plan in the FEIS and Updated WCM for those adverse impacts on fish and wildlife and their habitats which the Corps identified as more than "negligible" impacts. 33 U.S.C. § 2283(d)(1).

232. The Corps' failures are arbitrary, capricious, an abuse of discretion and not in accordance with law, in violation of WRDA and the APA, 5 U.S.C. § 706(2)(A).

233. The Corps' failures have harmed the Plaintiffs and leave them without any adequate remedy at law.

COUNT III

Violations of the Fish and Wildlife Coordination Act

234. Plaintiffs adopt and incorporate by reference paragraphs 1-233 of this Complaint.

235. The fish and wildlife conservation project purpose for water resources development projects (including the Corps' projects in the ACF Basin) is derived from the FWCA. The FWCA applies to all species of wildlife, requires equal consideration of fish and wildlife conservation to other project purposes, and requires efforts to protect and improve the health of all species of fish and wildlife in water resources development projects.

236. The Corps has violated the FWCA by interpreting its obligations pursuant to the fish and wildlife conservation purpose as relating only to species listed under the federal Endangered Species Act.

237. The Corps has violated the FWCA by failing to give fish and wildlife conservation equal consideration to other project purposes, prioritizing other project purposes over fish and wildlife conservation, and failing to adopt a proposal that advances conservation of all affected fish and wildlife species.

238. The Corps' failure to properly interpret and account for the fish and wildlife conservation purpose is reflected in the Updated WCM's abject failure to adequately provide for fish and wildlife conservation in the Apalachicola ecosystem and the Chattahoochee River.

239. The Corps' acts and omissions are arbitrary, capricious, an abuse of discretion and not in accordance with law, in violation of the FWCA and the APA, 5 U.S.C. § 706(2)(A).

240. The Corps' failures have harmed the Plaintiffs and leave them without any adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray that this Court:

(a) Issue a declaratory judgment declaring that the federal defendants have violated NEPA by failing to complete an adequate environmental impact statement in connection with their update of the 1958 Master WCM governing the operation of federal dams and reservoirs in the ACF Basin;

(b) Issue a declaratory judgment declaring that the federal defendants have violated WRDA by failing to provide a mitigation plan in the Updated WCM to address adverse impacts to fish and wildlife resulting from their operations in the ACF Basin;

(c) Issue a declaratory judgment declaring that the federal defendants have violated the FWCA by failing to serve the fish and wildlife conservation purpose in preparing the Updated WCM;

(d) Issue a declaratory judgment declaring that the federal defendants have violated the APA by taking agency action and making findings and conclusions that

are arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law, in preparing the environmental impact statement and the Updated WCM;

(e) Issue a mandatory injunction requiring the federal defendants to comply with the provisions of NEPA and preventing them from proceeding with operations under the Updated WCM until NEPA's requirements have been satisfied;

(f) Issue an injunction requiring the federal defendants to withdraw, revise or supplement the FEIS for the updated WCM in compliance with NEPA;

(g) Issue an injunction against implementation of the Updated WCM until the Corps properly evaluates the impacts of its actions on the Apalachicola ecosystem, considers all reasonable alternatives, provides for mitigation of harms to fish and wildlife throughout the ACF Basin, and adopts a proposal that advances fish and wildlife conservation as directed by Congress;

(h) Allow the plaintiffs to recover the costs of this action, including attorneys' fees; and

(i) Grant such other and further relief as the Court deems just and proper.

Respectfully submitted,

/s/ Tania Galloni (appearing under LCvR 83.2(c)(1))
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