



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION
60 FORSYTH STREET SW, ROOM 10M15
ATLANTA, GA 30303-8801

CESAD-PDP

29 October 2019

MEMORANDUM FOR Commander, Savannah District, (CESAS-PD/Ms. Rebecca Weiss)

SUBJECT: Approval of Final Report, Savannah Harbor Expansion Project (SHEP), Georgia and South Carolina: Fish Passage at New Savannah Bluff Lock and Dam (NSBLD) Integrated Post Authorization Analysis Report and Supplemental Environmental Assessment (EA)

1. References:

a. Memorandum, CESAS-DE, 28 August 2019, subject: Savannah Harbor Expansion Project (SHEP), Georgia and South Carolina, Fish Passage at New Savannah Bluff and Dam (NSBLD), Integrated Post-Authorization Analysis Report and Supplemental Environmental Assessment, Submittal of Final Report.

b. Memorandum, CECW-SAD, 25 May 2017, subject: Implementation Guidance for Section 1319 of the Water Resources Development Act of 2016 (WRDA 2016), New Savannah Bluff Lock and Dam, Georgia and South Carolina.

2. Study Area: The NSBLD study area is located along the Savannah River, and extends approximately 19 miles downstream from the Augusta Shoals to just downstream of the NSBLD. The study area also includes the NSBLD Park and the floodplain adjacent to the river. The project area includes the NSBLD, associated park, and river just upstream of the dam. The NSBLD is the first dam on the main stem of the Savannah River encountered by anadromous fish moving upstream from the Atlantic Ocean to approximately 187 miles upstream from Savannah, Georgia.

3. Study Authorization: During development of the Savannah Harbor Expansion Project (SHEP), which was authorized by Section 101(b)(9) of the Water Resources Development Act of 1999 (Public Law 106-53) and Section 7002(1)(3) of the Water Resources Reform and Development Act of 2014 (Public Law 113-121), it was determined that the project would "likely adversely affect" the Atlantic and shortnose sturgeon. To mitigate for those impacts, the authorized project included a fish passage at the NSBLD. Since 1937, when the NSBLD was built, fish have been unable to migrate to the Augusta Shoals upstream of NSBLD. These shoals are important spawning grounds for sturgeon and other fish species, such as American shad and striped bass. Section 1319 of the WRDA 2016 deauthorizes the NSBLD; repeals the conveyance of the NSBLD notwithstanding Section 348(l)(2)(B) of WRDA 2000 (Public Law 106-541), as amended; modifies the SHEP to include one of two specified alternatives, as the Secretary may determine is necessary; directs the removal of the NSBLD on completion of construction of the selected alternative; and requires the Secretary to convey to Augusta-Richmond County, Georgia, the park and recreation area that is adjacent to the NSBLD, without consideration. This NSBLD study and resulting report are pursuant to Section 1319.

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4. Non-Federal Sponsors: The Georgia Department of Transportation (GDOT) and the Georgia Ports Authority (GPA), the Non-Federal Sponsors, entered into a Project Partnership Agreement with USACE on October 8, 2014, for construction of the SHEP.

5. Problems and Opportunities: This Integrated Post Authorization Analysis Report and Supplemental Environmental Assessment evaluated alternatives addressing the requirements of Section 1319 while ensuring the proposed fish passage modifications are technically feasible, environmentally acceptable, and cost effective, while maintaining the functionality of the pool for water supply and recreation for either of the specified alternatives and also maintaining the functionality of the pool for recreational navigation for alternative 1.

6. Plan Formulation. The final array of alternatives included the baseline alternative and four action alternatives. One action alternative, Alternative 1-1, repairs the lock wall, dam gates and piers, and allows fish to pass through the lock wall along the Georgia side while maintaining the functionality of the pool for navigation, recreation, and water supply. Three of the alternatives (Alternatives 2-3, 2-6, and 2-8) proposed a weir to create an in-channel fish passage, remove the lock and dam, and partially demolish the dam foundation. Alternative 2-3 included a fixed crest weir with a rock ramp sloping upstream from the existing dam location. Alternative 2-6 included a full-width fixed crest weir with a rock ramp sloping upstream from the existing dam location and a floodplain bench to pass flows during high stage flood conditions. Alternative 2-6 also examined four refinements to the weir height, comparing effects on water supply intakes, recreation, and high frequency flooding events. Alternative 2-8 proposed a full-width in-channel fish passage with a fixed weir and a rock ramp at the existing dam location with a gated flood bypass channel.

7. Recommended Plan. The District's report recommended Alternative 2-6d, a full-width in-channel fish passage design with a 108.2 foot NAVD88 (109.0 NGVD29) elevation fixed crest weir with a floodplain bench. The Recommended Plan provides the highest probability of achieving fish passage objectives while maintaining the functionality of the pool for water supply and recreation. The Recommended Plan complies with Section 1319 of WRDA 2016. The fish passage feature will be implemented in accordance with the SHEP biological opinion requirements, beginning construction of this mitigation feature no later than January 2021 and completing construction within three (3) years. Following construction, the adjacent park and recreation area will be conveyed to Augusta-Richard County, Georgia. The Recommended Plan also includes acquisition of 10 acres of commercial forested land for the construction of a new boat ramp and parking area located just upstream of the existing boat ramp. The EA for this report supplements the Final SHEP 2012 Environmental Impact Statement and incorporates it by reference.

8. Project Costs: The estimated total project first cost is \$87,152,000.00.

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9. Study Review: Savannah District completed District Quality Control on the final report on 16 November 2018. The agency technical review (ATR) team certified completion of the ATR process on 22 January 2019. The Independent External Peer Review (IEPR) was conducted by an external panel of experts selected and managed by Battelle Memorial Institute. The IEPR panel provided 21 comments and 44 recommendations; all IEPR comments were satisfactorily resolved. Per reference 1.b., policy compliance reviews were delegated to SAD. The SAD policy and legal compliance review team completed review of the final report and provided SAS with a Policy Guidance Memorandum (PGM) on 16 July 2019, and a Supplemental PGM on 26 August 2019. The Savannah District addressed all PGM comments and documented concurrences in its response memorandum dated 30 August 2019. SAD's policy back-check resulted in a determination that the District's responses satisfactorily addressed Civil Works policy compliance requirements.

10. Legal Certification: Savannah District Office of Counsel provided a certification of legal review on 28 August 2019, stating that the New Savannah Bluff Lock and Dam Final Integrated Post Authorization Analysis Report and Supplemental Environmental Assessment is legally sufficient.

11. I concur with the findings presented in the Savannah Harbor Expansion Project, Georgia and South Carolina: Fish Passage at New Savannah Bluff Lock and Dam (NSBLD) Integrated Post Authorization Analysis Report and Supplemental Environmental Assessment, and hereby approve the final report and implementation of the Recommended Plan described in the final report.

12. The point of contact for this action is Mr. Daniel Small at (404) 562-5224.

DIANA M. HOLLAND
Major General, USA
Commanding