

RECORD OF DECISION

Final Supplement No. 2 to the 1982 Yazoo Area Pump Project Final Environmental Impact Statement

The Final Supplement No. 2 to the 1982 Yazoo Area Pump Project Environmental Impact Statement (FSEIS No. 2), dated December 2020, along with the associated appendices, provides a Proposed Plan to reduce flood damages to urban and agricultural areas through a combination of structural and nonstructural flood damage reduction features, minimizes adverse impacts through project design, and provides net gain in environmental value to the entire Yazoo Backwater Area. The Proposed Plan represents a balanced and implementable approach to addressing the flood damage reduction and environmental opportunities in the Yazoo Study Area.

Based on these documents, the reviews of other federal, state and local agencies, input from the public, and the review by my staff, I find that the Proposed Plan is technically feasible, environmentally justified, in accordance with environmental statutes, and in the public interest. Thus, I support the Proposed Plan as described in the FSEIS No. 2.

The FSEIS No. 2 documents the evaluation of the Proposed Plan, which is the remaining authorized, yet unconstructed flood damage reduction feature of the Yazoo Basin, Yazoo Backwater, Mississippi, Project which was authorized by the Flood Control Act of 1941 and the Water Resources Development Act of 1986 and 1996. Recent historic flooding and new environmental and hydraulic data from the Yazoo Backwater Area, and specifically the Yazoo Study Area, prompted the initiation of an updated evaluation of the recommended plan from the Yazoo Backwater Area Reformulation Main Report and Supplemental Environmental Impact Statement (FSEIS No. 1) dated October 2007. The subject has been thoroughly addressed in the FSEIS No. 1. The FSEIS No. 2 did not repeat the detailed work completed in 2007 but tiered from it. The Proposed Plan, as set out in the FSEIS No. 2 includes both structural (construction and operation of the pump station) and nonstructural (acquisition and reforestation/conservation) flood damage reduction features and an updated mitigation feature to mitigate for unavoidable environmental impacts.

A recent wetland hydrology study, which uses years of data from monitoring wells throughout the Yazoo Study Area, demonstrates that out of channel flooding plays a much smaller role in sustaining wetlands than previously understood and that precipitation is the dominant driver of wetland hydrology in much of the Yazoo Basin. As a result, the calculated impacts to wetlands in the 2007 Recommended Plan were overestimated and implementation of the Proposed Plan is anticipated to have significantly less adverse impacts to wetlands. Though decreased flood duration and depth from pumping under the Proposed Plan is estimated to cause some decreases in wetlands functions, it is not anticipated to convert any wetlands to non-wetlands, because precipitation is the driving force in sustaining wetlands in the Yazoo Study Area. The establishment of wetland mitigation would offset any estimated declines in wetlands functions from implementation of the Proposed Plan. Under the Proposed Plan approximately 135,000 acres of land would be inundated prior to the initiation of pumping.

The structural feature of the Proposed Plan is a pumping station with a 14,000 cfs capacity which would provide flood reduction benefits to approximately 40,000 acres within the 2-year flood frequency of the Yazoo Study Area. The structural feature acreage benefits increase proportionately with the increase of the flood frequency. As compared to structural alternatives previously evaluated, the Proposed Plan uses a new location along Deer Creek, which changes the location of unavoidable direct impacts to waters of the United States. These unavoidable impacts are fully accounted for in the mitigation requirements for the project.

The nonstructural feature would reforest up to 2,700 acres of agricultural lands primarily below 87.0 feet, NGVD, within the Yazoo Study Area. This would remove these lands from future damages resulting from flooding and additional flood reduction benefits would be gained as a result of the reforested lands (nonstructural feature). The mitigation plan includes compensatory mitigation for unavoidable losses to environmental resources. The losses and the compensation were calculated based on resource functional units, considering potential impacts from the entire calendar year, various flood frequencies, and variable flood depths. Compensatory mitigation will include the acquisition of 2,405 acres of frequently flooded agricultural lands in fee title and subsequent reforestation of these lands to offset unavoidable losses to wetland, terrestrial, waterfowl, and a portion of the aquatic resources. Additional compensatory mitigation would be accomplished through the installation of 34 supplemental low flow groundwater wells, which would be used during low flow periods and mitigate for the remaining unavoidable aquatic losses. Additionally, the nonstructural flood damage feature would provide substantial environmental benefits to all resources categories but is not included in the calculation of the 2,405 acre compensatory mitigation effort. Therefore, the anticipatory ecological benefits from the nonstructural feature would be in addition to compensatory mitigation features.

A long-term monitoring and adaptive management plan was prepared for the Proposed Plan to assure flexibility in achieving mitigation objectives. Monitoring and data collection will begin in advance of construction and continue through operation. This information will enable evaluation of any modifications that might be necessary to assure ecological success and long-term sustainability of the mitigation. If future conditions deem it necessary or additional analysis is needed during any phase of construction or operation, the adaptive management plan sets out a process for decision making. Any future modification or improvements to the Proposed Plan will be considered and documented by the Corps in coordination with the appropriate resource agencies.

We have engaged in consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to Section 7 of the Endangered Species Act about the Pondberry plant. In 2007, the FWS completed a Biological Opinion on the Pondberry which concluded that the flood water removal as then proposed would not jeopardize the continued existence of this species. Over the past months, USACE has prepared and revised a Biological Assessment of the Pondberry and engaged in discussions with the FWS. By letter of January 10, 2021, the FWS expressed concerns with USACE relying on the new data on wetland hydrology in the Biological Assessment, specifically that Pondberry colonies are maintained primarily through local precipitation. FWS does not concur with the USACE determination that the Proposed Plan may affect, but is not likely to adversely affect Pondberry and FWS desires more information and research to support this determination. USACE does not agree with the FWS conclusions in their letter, but will continue to work cooperatively with the FWS

during preconstruction engineering and design phase to provide the desired information in order to address concerns about the Proposed Plan and the Pondberry.

A Programmatic Agreement between the Vicksburg District, Chickasaw Nation, Choctaw Nation of Oklahoma, Mississippi Band of Choctaw Indians, Quapaw Nation, Muscogee (Creek) Nation, Mississippi State Historic Preservation Officer, and Mississippi Levee Board regarding the Proposed Plan has been completed.

Construction of the Proposed Plan is conditioned on the receipt of the certification of water quality from the State of Mississippi, as provided in Section 401 of the Clean Water Act, 33 U.S.C. 1331. The State has asked for additional information on engineering and design of the Proposed Plan to complete the Section 401 process. The information will be provided to the State during the preconstruction engineering and design phase of the project. The Proposed Plan will not proceed to construction until this requirement is satisfied.

The draft SEIS No. 2 was circulated for a 45 day public review on 16 October through 30 November 2020. A virtual public meeting was held on 10 November 2020. Comments and responses are included in the FSEIS No. 2. The FSEIS No. 2 was filed with the Environmental Protection Agency on 11 December 2020 and circulated for a final 30 day State and Federal agency review and comment period.

All practicable means to avoid or minimize adverse environmental impacts have been incorporated into the Proposed Plan. All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of impacts. The FSEIS No. 2 and supporting documentation contain sufficient information to make a reasoned and informed decision. After careful consideration of the purpose of and need for the project; the analysis contained in the FSEIS No. 2; the reviews by other Federal, State, and local agencies, and Tribes; input of the public; and based on the project's Congressional authority and continued benefit of the remaining construction; I find that the public interest will be best served by implementing the Proposed Plan. This Record of Decision completes the National Environmental Policy Act process.

January 15, 2021
Date



Diana M. Holland
Major General, U.S. Army
Commander