

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF WATER

November 17, 2021

The Honorable Jaime A. Pinkham Acting Assistant Secretary of the Army (Civil Works) U.S. Department of the Army 108 Army Pentagon Washington, DC 20310-0108

Dear Mr. Pinkham:

On November 30, 2020, the Environmental Protection Agency sent a letter to the U.S. Army Corps of Engineers (Corps) Vicksburg District transmitting comments on the Draft Supplemental Environmental Impact Statement (2020 DSEIS) for the Yazoo Pumps Project (CEQ No. 2020205).

Three paragraphs in the November 30, 2020 letter concluded that EPA's 2008 Clean Water Act Section 404(c) Final Determination (2008 FD) for the Yazoo Pumps Project does not apply to the 2020 Plan for the Yazoo Pumps Project described in the 2020 DSEIS. Upon reconsideration, we have concluded that paragraphs two, three, and four of the November 30, 2020 letter were in error. Today's letter supersedes those paragraphs. The November 30, 2020 letter inaccurately describes the scope of EPA's 2008 FD. Based on a comprehensive evaluation of the 2008 FD and the associated record, the 2007 Final Supplemental Environmental Impact Statement (2007 FSEIS), and the 2020 Final Supplemental Environmental Impact Statement, the Agency has concluded that the 2020 Proposed Plan for the Yazoo Pumps Project is 2007 FSEIS Plan 5 and involves discharges into the geographic area covered by the FD.

Therefore, the 2020 Plan for the Yazoo Pumps Project is prohibited by the 2008 FD (See Attachment A for a detailed analysis). This analysis is based on the facts of the 2020 Proposed Plan. This letter does not address the applicability of EPA's 2008 FD to any potential future plans that the Corps may propose, and that EPA is willing to work in a collaborative manner to develop.

EPA is concerned about the serious impacts from flooding on people and the economy of the lower Mississippi Delta. EPA stands ready to work with the Corps and other stakeholders in the region to find a path forward that addresses flooding concerns in an environmentally protective manner. In furtherance of that effort, we recognize that the Corps and other parties have developed additional relevant information since 2008. We look forward to working with the Corps in an expeditious manner to identify and build upon the technical work and scientific analyses that the agencies agree are most promising. We remain committed to working with the Corps, and our other federal, state, and local partners on this important effort. If you have further questions regarding this letter, please contact me or your staff may contact John Goodin at (202) 566-1373 or goodin.john@epa.gov.

Sincerely,

Radhika Fox Assistant Administrator

Enclosure

Cc: Colonel Robert A. Hilliard, U.S. Army Corps of Engineers, Vicksburg District John Blevins, U.S. Environmental Protection Agency, Region 4

Attachment A

EPA's Reconsideration of its November 30, 2020 Letter Regarding the Applicability of its 2008 Clean Water Act Section 404(c) Final Determination for the Yazoo Pumps Project to the 2020 Yazoo Pumps Project

This document sets forth the results of EPA's reconsideration of its November 30, 2020 letter regarding the applicability of its 2008 Clean Water Act (CWA) Section 404(c) Final Determination for the Yazoo Pumps Project (2008 FD)¹ to the 2020 Yazoo Pumps Project. EPA has concluded that specific portions of the November 30, 2020 letter were in error and that EPA's 2008 FD applies to the Yazoo Pumps Project described in the U.S. Army Corps of Engineers' (Corps) 2020 Final Supplemental Environmental Impact Statement (2020 FSEIS) for the Yazoo Pumps Project.²

I. Background

A. CWA Section 404

CWA Section 404 creates a program that regulates the discharge of dredged or fill material into waters of the United States through the specification of disposal sites. The statute prescribes roles for EPA and the Corps to implement the 404 program.

- Disposal sites may be specified in various ways, including through the Regulatory Program under CWA Section 404 or the Civil Works Program of the U.S. Army Corps of Engineers. 40 C.F.R. § 230.2(a).
- Subject to CWA Section 404(c), CWA Section 404(b) directs the Secretary of the Army to apply environmental criteria developed by EPA in specifying disposal sites for the discharge of dredged or fill material. These substantive regulatory criteria are known as the CWA Section 404(b)(1) Guidelines. The CWA Section 404(b)(1) "Guidelines are applicable to the specification of disposal sites for discharges of dredged or fill material into waters of the United States." 40 C.F.R. § 230.2(a).

Section 404(c) states:

"The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult

¹ The 2008 FD is available at: <u>https://www.epa.gov/sites/production/files/2015-05/documents/yazoo-final-determination_signed_8-31-08.pdf</u>

² The 2020 FSEIS is the second supplement to the 1982 Final Environmental Impact Statement for the Yazoo Pumps Project and is available at: <u>https://www.mvk.usace.army.mil/missions/programs-and-project-management/project-management/yazoo-backwater-report/</u>

with the Secretary. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection."

Pursuant to Section 404(c), an action under this provision includes four key components: whether it is a prohibition, restriction, or withdrawal (in this case a prohibition); the "defined area" subject to the prohibition; the materials subject to the prohibition (referred to below as the "prohibited discharges"); and the basis for EPA determining that the discharge "will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas."

EPA's regulations include a multi-step process to exercise this authority, including the issuance of a Proposed Determination (PD), Recommended Determination (RD), and Final Determination (FD). 40 C.F.R. Part 231.

B. 2007 Yazoo Pumps Project

As described in a 2007 Final Supplemental Environmental Impact Statement (2007 FSEIS), ³ the 2007 Yazoo Pumps Project is a Corps Civil Works project designed to address flooding concerns in an approximately 926,000-acre area that "lies in west-central Mississippi between the mainline Mississippi River east bank levee and the hill line on the east" known as the Yazoo Backwater Project Area (2007 FSEIS Main Report, p. 20).⁴ According to the 2007 FSEIS, the primary purpose of the authorized project is "to provide reduced flood damages from the Mississippi and Yazoo Rivers to areas in the lower Mississippi Delta" (2007 FSEIS, p. SEIS-8). This area has historically been subject to flooding from backwater by the Mississippi River. Since the project was authorized by Congress in 1941, extensive investments have been made to reduce flood damages in the area including the construction of levees, flood control gates, and drainage channels (2007 FSEIS, Main Report, p 13).

The 2007 FSEIS includes a Recommended Plan⁵ for the Yazoo Pumps Project. That Recommended Plan is called "Plan 5" in the 2007 FSEIS and includes a 14,000 cubic feet per second (cfs) pumping station with a pump-on elevation of 87 feet National Geodetic Vertical Datum (NGVD). The project is designed to pump surface water out of portions of the Yazoo Backwater Project Area and into the lower Yazoo River during high water events on the

³ The 2007 FSEIS is the first supplement to the 1982 Final Environmental Impact Statement for the Yazoo Pumps Project and is available at: <u>https://www.mvk.usace.army.mil/missions/programs-and-project-management/project-management/project-management/yazoo-backwater-report/</u>

⁴ According to the 2007 FSEIS, the Yazoo Backwater Area is located in west-central Mississippi immediately north of Vicksburg, Mississippi. The Yazoo Backwater Area contains about 1,074,000 acres and is the area that has historically been subject to flooding from backwater by the Mississippi River. The area is also subject to headwater flooding from the Yazoo River, Sunflower River, and Steele Bayou. The area is divided into five subareas: (a) the Satartia Area, 28,800 acres; (b) the Satartia Extension Area, 3,200 acres; (c) the Rocky Bayou Area, 14,080 acres; (d) the Carter Area, 102,400 acres; and (e) the Yazoo Area, 926,000 acres (see 2007 FSEIS Plate 4-1). The 2007 FSEIS states that "[t]he Yazoo Area is the focus of this study and will be referred to as the Yazoo Backwater Project Area" and indicates the Yazoo Backwater Study Area is within the Yazoo Backwater Project Area and encompasses those lands within the 100-year flood frequency, approximately 630,000 acres (2007 FSEIS Main Report, p. 3). ⁵ This letter and attachment refer to the 2007 FSEIS Recommended Plan as "Recommended Plan," "2007 FSEIS Plan 5," "Plan 5," "2007 prohibited Plan," "2007 Plan," or any combination thereof.

Mississippi and Yazoo Rivers. The Recommended Plan was designed to lower the flood stage of the 100-year flood by 4.0 to 4.5 feet (2007 FSEIS Main Report, p. S-1).⁶

1. EPA's Section 404(c) review process

As discussed in the 2008 FD, the Yazoo Pumps Project has a long and complicated history spanning several decades. Throughout the development of what became the 2007 FSEIS, EPA raised significant concerns regarding the proposed project. In its January 22, 2008 letter to the Corps regarding the 2007 FSEIS, EPA Region IV concluded that the nature and extent of anticipated adverse environmental impacts continue to be significant and that EPA continued to have significant concerns with the proposed project including: (1) magnitude of anticipated impacts to wetlands and associated fish and wildlife resources; (2) compliance with the CWA's substantive environmental criteria (i.e., the Section 404(b)(1) Guidelines); (3) uncertainties with the proposed reforestation plan; (4) changes in land use; (5) environmental justice considerations; (6) uncertainty with the economic analysis; and (7) the evaluation of potential project alternatives. EPA Region IV again identified the project as a candidate for referral to the White House Council on Environmental Quality (CEQ) and for further action pursuant to our authorities under the CWA (2008 FD, pgs. 12-13).

In its January 18, 2008, comment letter to the Corps regarding the FSEIS, the U.S. Fish and Wildlife Service (FWS) shared similar concerns, particularly those associated with the proposed project's potentially unacceptable adverse effects on fish and wildlife resources. The FWS also reiterated its determination of the project as a candidate for referral to CEQ (2008 FD, p. 13).

According to the 2007 FSEIS, "[t]he lands in the lower Mississippi Delta are noted for high value fish and wildlife resources. The area serves as an integral part of the economic and social life of local residents and sportsmen from around the Nation." (2007 FSEIS Main Report Appendix 1, Mitigation, page 1- 29). Plan 5 would have directly impacted approximately 43.6 acres of wetlands and other waters of the United States through the discharge of dredged or fill material associated with construction of the pumping station at the Steele Bayou site (2007 FSEIS, Appendix 2, CWA Section 404(b)(1) Evaluation, p. 2-3) (Figure 1⁷). The secondary effects from operation of the Plan 5 pumping station would have adversely impacted approximately 67,000 acres of wetlands in the Yazoo Backwater Project Area (2007 FSEIS Main Report, Table 17, p. 1-20).

Because of concerns that the project's large-scale wetland impacts could result in extensive adverse impacts to the area's fish and wildlife resources, EPA initiated the Section 404(c) review process in February of 2008. After consulting with the Corps and the Mississippi Board of Levee Commissioners (the project sponsor) on potential opportunities to reduce project impacts, EPA Region IV published its PD in March 2008 for public comment and held a public hearing. After reviewing public input, EPA Region IV submitted its RD to EPA Headquarters in July of 2008.

⁶ Based on more current data, the 2020 FSEIS estimates that the reduction in stage for the 100-year flood event would be 3.12 feet (2020 FSEIS, Appendix G, Engineering Report, p. 135).

⁷ This is Figure 1.1 from the 2020 FSEIS, Appendix B, Figures.

2. 2008 FD findings

Unacceptable adverse effects

Based on an evaluation of the RD and the Administrative Record submitted by EPA Region IV as well as materials submitted by the project sponsor, the Corps, and the Assistant Secretary of the Army for Civil Works, the 2008 FD finds:

"Extensive information collected on the Yazoo Backwater Area demonstrates that it includes some of the richest wetland and aquatic resources in the Nation. These include a highly productive floodplain fishery, substantial tracts of highly productive bottomland hardwood forests that once dominated the [Lower Mississippi River Alluvial Valley], and important migratory bird foraging grounds. These wetlands provide important habitat for an extensive variety of wetland dependent animal and plant species, including the federally protected Louisiana black bear and pondberry plant.⁸ In addition to serving as critical fish and wildlife habitat, project area wetlands also provide a suite of other important ecological functions. These wetlands protect and improve water quality by removing and retaining pollutants, temporarily store surface waters, maintain stream flows, and support aquatic food webs by processing and exporting significant amounts of organic carbon." (2008 FD, p. 73).

The 2007 FSEIS considered additional pumping station alternatives to Plan 5. These alternatives (i.e., Plans 3, 4, 6, and 7) would have adversely impacted between approximately 28,400 and 118,400 acres of wetlands (Table 1). After EPA initiated its Section 404(c) review in February of 2008, the Corps proposed two alternatives to Plan 5 to attempt to reduce project impacts to an acceptable level. One of these alternatives was Plan 6 from the 2007 FSEIS and the second was described by the Corps as a modification of Plan 6 (i.e., Modified Plan 6) which would have resulted in adverse impacts to between approximately 28,400 and 48,000 acres of wetlands (2008 FD, p. 13).

The 2008 FD concludes that construction and operation of Plans 3 through 7 and Modified Plan 6 would dramatically alter the timing, and reduce the spatial extent, depth, frequency, and duration of time project area wetlands flood (2008 FD, pgs. 72). The 2008 FD also concludes that the large-scale hydrologic alterations caused by Plans 3 through 7 and Modified Plan 6 would significantly degrade the critical ecological functions provided by at least 28,400 acres of wetlands in the Yazoo Backwater Area, including those functions that support wildlife and fisheries resources (2008 FD, pgs. 72). Thus, the 2008 FD finds that the discharge of dredged or fill material associated with Plans 3 through 7 and Modified Plan 6 would result in unacceptable adverse effects on fishery areas and wildlife because each of these alternatives would adversely impact at least 28,400 acres of wetlands in the Yazoo Backwater Area (2008 FD, pgs. 72-73).

⁸ According to the 2020 FSEIS, the U.S. Fish and Wildlife Service identified eleven federally-listed threatened and endangered species that should be addressed as part of the proposed project. These species are Piping Plover, Red Knot, Wood Stork, Least Tern, Eastern Black Rail, Northern Long-eared Bat, Pallid Sturgeon, Fat Pocketbook Mussel, Rabbitsfoot Mussel, Sheepnose Mussel, and Pondberry Plant (Appendix L, CWA Section 404(b)(1) Evaluation, p. 21).

Table 1. Comparison of Plans prohibited in the 2008 FD."						
Feature	Plan 3	Plan 4	Plan 5	Plan 6	Modified Plan 6	Plan 7
Pump Station	14,000	14,000	14,000	14,000	14,000	14,000
Capacity (cfs)						
Pump	80.0'	85.0'	87.0'	88.5'	88.5'	91.0'
Elevation						
(NGVD)						
March –						
November						
Pump	85.0'	85.0'	87.0'	88.5'	91.0'	91.0'
Elevation						
(NGVD)						
December -						
February						
Reforestation	0	37,200	55,600°	81,400	81,400	124,400
(acres) ^b						
Compensatory	53,363	27,230	15,029 ^d	6,913 ^d	9,156 ^d	0
Mitigation						
(acres)						
Mitigation	Willing	Willing	Willing	Willing	Willing	Willing
Acquisition	sellers;	sellers;	sellers;	sellers;	sellers;	sellers;
	Easement	Easement	Easement	Easement	Fee Title or	Fee Title or
					Restrictive	Restrictive
					Easement	Easement
Water	Hold	Hold 70.0	Hold 70.0	Hold 70.0	Hold 70.0	Hold 70.0
Management	70.0 to	to 73.0'	to 73.0'	to 73.0'	to 73.0'	to 73.0'
Feature	73.0'					
Wetland	118,486	101,629	66,945	48,066	28,408 –	28,408
Impacts					48,066 ^e	
(acres)						

Table 1	Comparison	of Plane	prohibited in	n tha	2008 ED a
Table 1.	Comparison	of Plans	pronibiled in	n the	2008 FD."

^a Source 2007 FSEIS Table SEIS-12, Table SEIS-21, and pages SEIS-43 to 52 as well as materials provided by the Corps at the February 29, 2008 meeting with EPA Region IV. ^b Total includes historic and current compensatory mitigation.

^c EPA views this number to be 40,571 acres of reforestation because the 55,600-acre figure includes 10,662 acres of compensation for the proposed project as well as 4,367 acres of compensation for impacts associated with already implemented aspects of related projects. ^d These totals were provided by the Corps in the materials they shared at the February 29, 2008 meeting with EPA Region IV.

^e The Corps indicated that it had not calculated this estimate but that its value would fall between the impact estimates for FSEIS Plans 6 and 7.

Compensatory mitigation and reforestation

The 2008 FD also evaluates the proposed compensatory mitigation described in the 2007 FSEIS (Table 1) finding extensive deficiencies with the proposal. Deficiencies in the proposed

compensatory mitigation include an insufficient amount of compensation to offset impacts, failure to identify specific compensation sites, complete reliance on compensation sites not yet acquired via purchase of conservation easements from willing landowners, and lack of sufficient suitable (i.e., restorable) acreage available in the targeted area. The 2008 FD "finds that the Corps has not demonstrated that potential impacts of the Yazoo Backwater Area Project can be adequately mitigated to reduce the impacts to an acceptable level." (2008 FD, p. 73).

In addition, the 2008 FD finds extensive deficiencies in the proposed 55,600 acres of reforestation (i.e., a "nonstructural" component of the project) described in the 2007 FSEIS (Table 1). Deficiencies in the proposed reforestation include failure to identify specific restoration sites, complete reliance on restoration sites not yet acquired via purchase of conservation easements from willing landowners, and lack of sufficient suitable (i.e., restorable) acreage available in the targeted area. The 2008 FD "finds that the environmental benefits suggested by the FSEIS to accrue from the project's [reforestation] have not been substantiated." (2008 FD, p. 73).

EPA's unacceptable adverse effects determination was not impacted by the proposed, but deficient, compensatory mitigation and reforestation plans because neither reduced the impacts of the listed Plans to acceptable levels (2008 FD, p. 73).

Water management feature

The 2007 FSEIS includes a proposal to change the management of the Steele Bayou control gates to hold additional water within the Yazoo Backwater Area during certain times of the year when water levels are low in the Area's streams and other waters. The 2007 FSEIS describes this effort as a *water management feature* (see Table 1 for proposed elevations for holding water behind the Steele Bayou control gates). The 2008 FD considers the water management feature to be irrelevant for purposes of EPA's review of the Yazoo Pumps Project stating that "[o]peration of the Steele Bayou control gates to maintain water elevations and generation of the environmental benefits associated with this operation is not dependent upon construction of any pumping station." (2008 FD, p.6). As discussed below (see Sections I.D.2 and IV.B.2), this point is relevant to EPA's reconsideration of the November 30, 2020 letter.

<u>C. Corps efforts to advance Plan 5 prior to 2020 supplemental environmental impact</u> <u>statement process</u>

Since 2008, the Corps and others have asked EPA to reconsider its 2008 FD prohibiting Plan 5. EPA has consistently maintained that its 2008 FD applies to this Plan. For example, in 2014 when the Corps and Mississippi Senator Thad Cochran asked EPA to reconsider Plan 5 and potentially modify or withdraw the 2008 FD,⁹ EPA responded by noting that it had "considered this request based on the Clean Water Act and agency regulations and determined that there was

⁹ August 28, 2014 letter from Brigadier General Peter Deluca, Commander, Corps Mississippi Valley Division to Heather Toney, Regional Administrator, EPA Region 4 and October 27, 2014 letter from Senator Thad Cochran, Mississippi to Regina McCarthy, Administrator, EPA.

insufficient new information on which to support taking steps to modify the section 404(c) decision."¹⁰

Similarly, in 2019, when the Corps initiated its most recent efforts to advance Plan 5, EPA continued to maintain that its 2008 FD applies to Plan 5 and, as such, the 2008 FD would have to be modified or withdrawn for Plan 5 to proceed. In a January 25, 2019 letter to EPA, the Corps indicated "[a]dditional wetlands data and analyses have been developed since the 404(c) veto" that it believed was relevant to reconsideration of the 2008 FD.¹¹

On August 22, 2019, after reviewing the preliminary information provided by the Corps, EPA responded with a letter stating that it had "worked with programmatic and legal experts within the Agency to gain a detailed understanding of the nature and scope of information needed to reconsider the 2008 Clean Water Act Section 404(c) Final Determination" and that its August 2019 letter aims to provide a "thorough summary of the information needed to reconsider the 2008 FD."

The letter states that the information the Corps had provided thus far was "not sufficiently comprehensive" "to provide the record that would be required to evaluate a potential modification or withdrawal." The letter states that the information and analysis in the following appendices from the 2007 FSEIS would need to be updated in order for EPA to be in a position to reconsider its 2008 FD: Appendix 1 (Mitigation), Appendix 6 (Engineering Summary), Appendix 7 (Economic Analysis), Appendix 10 (Wetlands), Appendix 11 (Aquatics) and Appendix 16 (Water Quality). The letter closes by indicating that if "the Corps would like to request the EPA consider a modification to or withdrawal of EPA's 2008 FD, the Corps should submit that request along with the additional information described herein."¹²

D. 2020 Yazoo Pumps Project

In April 2020, the Corps announced its intention to prepare a second supplement to the 1982 Final Environmental Impact Statement for the Yazoo Pumps Project. The Corps' April 16, 2020 Notice of Intent (NOI) to prepare the supplement states that in 9 out of the last 10 years, the Yazoo Backwater Area has experienced flooding with historically high levels occurring in 2019. The NOI also indicates that in August 2008 the Yazoo Pumps Project "was vetoed by the EPA under 404(c) of the Clean Water Act due to adverse environmental effects" (74 FR 21219) and states that "[w]etlands impacts were a substantial source of concern" and "the primary reason for the EPA 404(c) veto in 2008." (74 FR 21220). According to the NOI, "[n]ew, previously unavailable data indicates that the environmental impacts to wetlands and other resources from a pumping plant would be far less than calculated in the 2007 FSEIS." (74 FR 21219). The NOI also indicates the proposed pumping station would have the same pump capacity and pump-on

¹⁰ February 5, 2015 letter from Kenneth Kopocis, Deputy Assistant Administrator for Water, EPA to Senator Thad Cochran, Mississippi.

¹¹ January 25, 2019 letter from Major General Richard Kaiser, Commander, Corps Mississippi Valley Division to Mary Walker, Acting Regional Administrator, EPA Region IV.

¹² August 22, 2019 letter from Mary Walker, Regional Administrator, EPA Region IV to Major General R. Mark Toy, Commander, Corps Mississippi Valley Division.

elevation as 2007 Plan 5 but would be moved to a location "near Deer Creek in Warren County, MS." (74 FR 21219).

On June 15, 2020, in its capacity as a cooperating agency on the new supplement, EPA provided scoping comments to the Corps.¹³ EPA's scoping recommendations regarding the type of updated information and analysis that should be included in the new supplement are consistent with those EPA provided in its August 22, 2019 letter to the Corps. The change in the pump location did not alter EPA's recommendation for updated information and analysis.

On October 16, 2020, the Corps issued a Draft Supplemental Environmental Impact Statement (2020 DSEIS) for the Yazoo Pumps Project for public comment with a comment deadline of November 30, 2020. EPA sent a DSEIS comment letter on November 30, 2020, which included a three-paragraph determination that the 2008 FD does not apply to the Yazoo Pumps Project described in the 2020 DSEIS.

On December 11, 2020, the notice of availability for the Corps' 2020 FSEIS for the Yazoo Pumps Project was issued with a comment period ending on January 11, 2021. On January 15, 2021, the Corps signed the three-page Record of Decision adopting the Proposed Plan in the 2020 FSEIS.¹⁴

Like the 2007 Recommended Plan 5, the Proposed Plan described in the 2020 FSEIS includes a 14,000 cfs pumping station with a pump-on elevation of 87 feet NGVD. Also, like 2007 Plan 5, the 2020 Proposed Plan is designed to pump surface water out of portions of the Yazoo Backwater Project Area¹⁵ and into the Yazoo River during high water events on the Mississippi and Yazoo Rivers. Under the 2020 Plan, the pumping station would be moved from the Steele Bayou site 7.5 miles northeast to the Deer Creek site (Figure 1). According to the 2020 FSEIS, direct impacts to wetlands and other waters are more than four times larger at the new site at Deer Creek compared to the Steele Bayou site and secondary (i.e., indirect) impacts to wetlands are expected to be similar at both sites (2020 DSEIS, Appendix L, CWA Section 404(b)(1) Evaluation).

Construction of the 2020 Plan would directly impact approximately 193.52 acres of wetlands or open waters at the Deer Creek site and its associated borrow area (2020 FSEIS, Appendix L, CWA Section 404(b)(1) Evaluation, p. 6). The impacts include permanent impacts to: (1) approximately 72.65 acres of waters of the United States by the discharge of dredged or fill material associated with construction of the pumping station and its access road (2020 FSEIS, Appendix L, pgs. 6-7 and Figures 7-9); and (2) approximately 23.56 acres of waters of the United States by the discharge of dredged or fill material at the borrow area site from

¹³ June 15, 2020 letter from Mark Fite, Director, Strategic Programs Office, EPA Region IV to Colonel Robert Hillard, District Engineer, Vicksburg District.

¹⁴ This letter and attachment refer to the 2020 FSEIS Proposed Plan as "Proposed Plan," "2020 Proposed Plan," "2020 Project."

¹⁵ The 2007 FSEIS identifies the 926,000-acre Yazoo Area as the Yazoo Backwater Project Area (2007 FSEIS Main Report, p. 3). The 2020 FSEIS appears to rename the same 926,000-acre Yazoo Area the Yazoo Study Area (2020 FSEIS, p. 8) without explanation or acknowledgment that it is no longer using the term "Yazoo Backwater Project Area", or the "Yazoo Backwater Project Area" description associated with 2007 FSEIS Plate 4-1 in the 2020 EIS process.

construction of the borrow area and its two access roads (2020 FSEIS, Appendix L, p. 7 and Figure 10). The borrow area is located at the 2007 proposed location for the pumps, the Steele Bayou site. According to the 2020 FSEIS, the secondary effects from operation of the 2020 Plan would adversely impact approximately 38,774 acres of wetlands in the Yazoo Backwater Project Area (now re-named the Yazoo Study Area) by changing the frequency and duration of flood events experienced by these wetlands (2020 FSEIS, Appendix F-5, Wetlands, p.106).

1. Compensatory mitigation and reforestation

The compensatory mitigation plan proposed in the 2020 FSEIS includes two components:

- Reforestation/restoration of 2,405 acres of agricultural lands to wetlands to offset approximately 38,774 acres of wetland impacts as well as impacts to terrestrial resources, wildlife, waterfowl, and a portion of the impacts to fish and other aquatic organisms; and
- Installation of up to 34 wells to irrigate streams during low-flow periods to offset the remaining impacts to fish and other aquatic organisms.

The nonstructural reforestation proposed in the 2020 FSEIS is "up to" 2,700 acres. The 2007 FSEIS, by comparison, proposed 55,600 acres (Table 1).

2. Water management feature

The 2020 FSEIS eliminates the water management feature proposed in the 2007 FSEIS. It finds that maintaining higher ponding levels would be detrimental to fish and other aquatic organisms because of concerns regarding low dissolved oxygen. According to the 2020 FSEIS, if the water management feature had been implemented consistent with the 2007 FSEIS, it would have increased adverse effects in this case rather than mitigated them.

II. EPA's November 30, 2020 letter

As previously noted, EPA sent a DSEIS comment letter to the Corps on November 30, 2020. That letter included three paragraphs that stated that the 2008 FD did not apply to the Yazoo Pumps Project described in the 2020 DSEIS. Typically, such a decision would have been reached after extensive engagement with career technical staff and thorough evaluation of the relevant administrative documents. That did not occur with regard to the subject three paragraphs added to the November 2020 letter.

This three-paragraph determination relied on two rationales: (1) five features "distinguish" the 2020 Plan from the Plans prohibited by EPA's 2008 FD; and (2) the prohibition in the 2008 FD is limited "to those wetland and waters that were specifically described as the disposal site for the identified plans" (i.e., the 43.6-acre site at the Steele Bayou location).

Below is the relevant language from the second, ¹⁶ third, and fourth paragraphs of the November 30, 2020 letter:

"The purpose of the Yazoo Pumps Project is to alleviate flooding in the Yazoo

¹⁶ EPA notes that the size of the Yazoo Backwater Area referenced in this paragraph is not correct (See footnote 4).

Backwater Area, an approximately 630,000-acre area situated between the Mississippi and Yazoo Rivers in west-central Mississippi. The EPA fully supports the purpose of the project to reduce flood damages in the Yazoo Backwater Area. The DSEIS provides information and analysis regarding a similar but different Yazoo Pumps Project than was previously analyzed. It also provides new information on the project's potential environmental impacts to wetlands, endangered species, fish and wildlife, water quality, downstream areas, and environmental justice populations. The proposed project involves a pumping station with a capacity of 14,000 cfs and a pump-on elevation of 87 feet NGVD. It will be newly located at Deer Creek.

EPA has determined that the proposed project is not subject to EPA's 2008 Final Determination. Importantly, the plan described in the 2020 DSEIS includes a number of key features that distinguish it from the Plans prohibited by EPA's 2008 Final Determination: (1) the 14,000 cfs pump will now be located near Deer Creek, approximately eight miles east of the Steele Bayou site at issue in the 2007 FSEIS; (2) the Steele Bayou flood control gate operations will maintain water levels between 68.5 and 70 feet; (3) the pump facility will use natural gas instead of diesel power and add a pump station and appurtenances; (4) the plan will involve the installation of thirty-four low flow wells adding 0.1-0.2 cfs to augment stream flows in multiple stream systems within the Big Sunflower-Steele Bayou watershed; and (5) a new adaptive management plan is included.

Also, EPA's 2008 Final Determination 'prohibits, pursuant to section 404(c) of the CWA, the specification of the subject wetlands and other waters of the United States as described in the FSEIS as a disposal site for the discharge of dredged or fill material for the purpose of construction of FSEIS Plans 3 through 7, and Modified Plan 6.¹ The text therefore limits the prohibition to those wetland and waters that were specifically described as the disposal site for the identified plans. Notably, Region 4's 2008 Recommendation Determination had recommended including 'a prohibition encompassing a six county area and '...any similar pump project...').² EPA, however, explicitly rejected this geographic approach in the Final Determination by tying the scope of the veto to the identified FEIS plans themselves, explaining this change as a 'modifi[cation]' and a 'narrowing' of the scope of the RD to 'underscore[] our sincere interest to work collaboratively with interested parties to consider alternative forms of flood protection.' ³ The Agency concluded that the 2008 Final Determination 'only prohibits the construction of FSEIS Plans 3 through 7 and Modified Plan 6.'4 Given the express decision of the Agency to narrowly tailor the Final Determination to the specific enumerated projects and the differences between those projects and the proposed project described by the Corps in the 2020 DSEIS, the proposed project is not prohibited by the Final Determination." (footnotes omitted).

III. Litigation and EPA's review of the record of the 2008 FD, 2007 FSEIS, and 2020 FSEIS

On January 12, 2021, four conservation groups challenged EPA's November 30, 2020 letter. *American Rivers, et al. v. EPA*, No.1:21-cv-00097 (D.D.C.). As part of this litigation, EPA reviewed the November 2020 letter consistent with an Executive Order signed by President Biden on January 20, 2021. "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," 86 FR 7037. This involved a comprehensive review of the record of the 2008 FD, 2007 FSEIS, and 2020 FSEIS. Based on this review, the Agency determined that it needed to reconsider the three-paragraph applicability determination in the November 30, 2020 cover letter and filed a motion for remand without vacatur of the cover letter. On October 4, 2021, the court granted EPA's motion.

IV. EPA's reconsideration of portions of the November 30, 2020 letter

In its reconsideration of portions of the November 2020 letter, EPA has carefully evaluated the text of the 2008 FD, its administrative record, the administrative records for the 2007 FSEIS and 2020 FSEIS. The Agency has also consulted the relevant text of Section 404(c) to inform our understanding of the scope of the FD. For the reasons below, EPA has concluded that, contrary to the conclusion in the November 2020 letter, the 2020 Project is subject to the prohibition contained in the 2008 FD.

As described above, an action under this provision includes four key components: whether it is a prohibition, restriction, or withdrawal (in this case a prohibition); the "defined area" subject to the prohibition; the materials subject to the prohibition (referred to below as the "prohibited discharges"); and the basis for EPA determining that the discharge "will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas".

The applicability of the 2008 FD to the 2020 Plan for the Yazoo Pumps Project turns on the second and third of these statutory components: i.e., does the project lie within the "defined area" and involve "prohibited discharges" identified by the 2008 FD. After reconsideration, the Agency concludes the answer to both questions is yes.

EPA's reconsideration identified several key errors in the November 2020 letter that led to its erroneous conclusion. The letter: (1) misread the text of the 2008 FD as identifying the "defined area" covered by the prohibition as solely the 43.6 acres that would be directly impacted by the construction of specified projects listed in the 2008 FD; (2) failed to fully consider the administrative record for the 2008 FD and the 2007 FSEIS, which undercut the letter's narrow view of the defined area covered by the 2008 FD; and (3) incorrectly found that the 2020 Plan was distinguishable from the Plans covered by the 2008 FD.

Notably, the entirety of the Agency's analysis in 2020 was contained in three paragraphs of the November 2020 letter. The Agency did not prepare any supporting documentation or analysis. And, unlike this reconsideration decision, the November 2020 letter does not reflect a thorough review of EPA's administrative record for the 2008 FD, or the administrative records for the 2007 FSEIS and the Corps' 2020 Plan. EPA's basis for its conclusions is explained below.

A. The 2020 Project is located within the "defined area" subject to the prohibition in the 2008 FD

1. The text of the 2008 FD and Section 404(c) support the conclusion that the "defined area" in the FD is the 926,000-acre Yazoo Backwater Project Area and not the 43.6-acre area identified in the November 2020 letter.

a. The 2008 FD phrase "the subject wetlands and other waters of the United States as described in the FSEIS" identifies the "defined area" subject to EPA's prohibition, consistent with the statutory text.

The 2020 letter concludes that the text of the 2008 FD "limits the prohibition to those wetland and waters that were specifically described as the disposal site for" 2007 FSEIS Plans 3 through 7 and Modified Plan 6 – a total area of 43.6 acres. This conclusion was in error. The text of the FD indicates that, in fact, the FD identified a larger geographic area as the "defined area" under Section 404(c) that is subject to the prohibition.¹⁷

Importantly, the 2020 letter did not discuss the statutory provision authorizing EPA's action, but EPA's reconsideration analysis begins with the text of Section 404(c) itself.

As noted above, the text of Section 404(c) provides that a prohibition includes two distinct components – the "defined area" covered by a prohibition and the "prohibited discharges," as illustrated below:

"The Administrator is authorized to *prohibit the specification . . . of any defined area as a disposal site* [i.e., the "defined area"] . . . whenever he determines . . . that *the discharge of such materials into such area* [i.e., the "prohibited discharges"] will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas." (emphasis and bracketed phrases added).

The first emphasized phrase above authorizes EPA to identify the "defined area" subject to a prohibition, and the second phrase relates to identification of the "prohibited discharges" which will have unacceptable adverse effects. The statutory text addresses them distinctly and they are fundamentally different components of a prohibition. The defined "area" is just that – a geographic area delineated in spatial terms.¹⁸ The "prohibited discharges" are not a geographic concept but a physical one – i.e., those dredged and fill materials that cannot be discharged into the defined area. These are distinct components of a 404(c) action and the scope of "prohibited discharges" does not define, nor can it limit, the scope of the "defined area" identified in the prohibition.

¹⁷ As explained in Section IV.A.1.c below, that area includes the 2020 Project.

¹⁸ See definition of "area" by Miriam-Webster as "a particular extent of space or surface or one serving a special function: such as . . . a geographic region." https://www.merriam-webster.com/dictionary/area.

The text of the 2008 FD faithfully implements the statutory framework by distinctly describing the "defined area" and "prohibited discharges."

Consistent with the Agency's statutory authority, the FD identifies the "defined area" and the "prohibited discharges" as follows:

[T]he Final Determination prohibits, pursuant to section 404(c) of the CWA, *the specification of the subject wetlands and other waters of the United States as described in the FSEIS*¹⁹ *as a disposal site* [the "defined area"] *for the discharge of dredged or fill material for the purpose of construction of FSEIS Plans 3 through 7, and Modified Plan 6.* [the "prohibited discharges]" (2008 FD, p. 73). (emphasis and brackets added).

Notably, the text and syntax of the 2008 FD's prohibition of the specification of the "defined area" tracks verbatim with the statutory text. *Compare* Section 404(c) ("The Administrator is authorized to prohibit the specification . . . *of any defined area* as a disposal site") with the FD ("[t]he Final Determination prohibits . . . the specification of the subject wetlands and other waters of the United States as described in the FSEIS as a disposal site. . . .). The only difference between the statute and the FD is the latter substitutes the phrase "the subject wetlands and other waters of the United States as described in the FSEIS" for the statutory phrase "any defined area." This makes clear that, under the FD, the "defined area" subject to the prohibition is "the wetlands and other waters of the United States as described in the FSEIS."²⁰

The 2020 letter, however, improperly reads the subsequent phrase "for the discharge of dredged or fill material for purposes of construction of FSEIS Plans 3 through 7, and Modified Plan 6" as limiting the defined area to the 43.6 acres that would be directly impacted by the listed plans (November 2020 letter, p. 2). That reading of the 2008 FD improperly collapses into one component the "defined area" and "prohibited discharges," and reads the latter as limiting the scope of the former. That result is contrary to the FD's identification of the "defined area" as "wetlands and other waters of the United States" that are "described in the [2007] FSEIS," which tracks the statutory text. For these reasons, EPA rejects the conclusion in the 2020 letter that the prohibition in the FD is limited to the 43.6 acres directly impacted by the Plans listed in the FD.²¹

b. The language and structure of the 2007 FSEIS demonstrate that the phrase "the subject wetlands and other waters of the United States as described in the FSEIS" in EPA's 2008 FD refers to the "Yazoo Backwater Project Area"

As discussed above, EPA's 2008 FD identifies the defined area as the "wetlands and other waters of the United States" that are "described in the [2007] FSEIS." While the 2020 letter did not

¹⁹ The FSEIS referred to in the 2008 FD is the 2007 FSEIS.

²⁰ The Agency discusses the meaning of the phrase "as described in the FSEIS" below.

²¹ Moreover, as explained in Sections IV.A.2 and IV.A.3 below, the letter's interpretive error leads to a truly extreme reduction in the scope of protection for the Yazoo Backwater Area provided by the 2008 FD as compared with the PD and RD that is irreconcilable with the administrative record and EPA's goal of protecting the area's extraordinary fishery and wildlife resources.

evaluate the 2007 FSEIS, as EPA reconsidered its 2020 determination, the agency reviewed the 2007 FSEIS because the 2008 FD makes key references to it.

The 2007 FSEIS is a voluminous document consisting of the following components: Final SEIS document, Main Report, and 17 Appendices containing detailed analyses of various aspects of the project. The Final SEIS document provides an overview of the other documents and directs the reader to the Main Report and other appendices "for specific methodologies and detailed information." (2007 FSEIS, p. SEIS-1).

The Main Report of the 2007 FSEIS makes clear that the area addressed by the FSEIS is the "Yazoo Backwater Project Area." The Main Report states that "[t]he Yazoo Area is the focus of this study and will be referred to as the Yazoo Backwater Project Area." (Main Report, p. 3). In a section of the Main Report entitled "Project Area" and in a paragraph entitled "Location," the Main Report describes the boundary of the Yazoo Backwater Project Area (Main Report, p. 20).²²

This conclusion is confirmed by other statements in the 2007 FSEIS. For example, the first paragraph of the FSEIS describes the action being addressed by the document as follows:

"The action addressed in this Final Supplemental Environmental Impact Statement (FSEIS) is the remaining flood damage reduction, including construction and operation of the pump station and nonstructural flood damage reduction features (*Yazoo Backwater Project Area*)." (2007 FSEIS, p. SEIS-1). (emphasis added).

Moreover, the 2007 FSEIS' "General Description" of the "Affected Environment" refers to the "Yazoo Backwater Project Area [which] is approximately 926,000 acres in the lower portion of the Delta known as the Yazoo Area (Plate 4-1)." (2007 FSEIS, p. SEIS 79).

Thus, informed by the 2007 FSEIS, the FD's identification of the defined area of the prohibition as "wetlands and other waters of the United States described in the FSEIS" means the 926,000 acres constituting the Yazoo Backwater Project Area, not the 43.6 acres identified by the 2020 letter.

The Corps' 2007 FSEIS identified the boundaries of the Yazoo Backwater Project Area with precision, both narratively and visually. As previously noted, in the section of the Main Report entitled "Project Area" and in a paragraph entitled "Location," the Main Report describes the boundary of the Yazoo Backwater Project Area. This description is as follows: the "Yazoo Backwater Project Area, as depicted on Plate 4-1, lies in west-central Mississippi between the mainline Mississippi River east bank levee and the hill line on the east. The triangular shaped

²² As discussed in footnote 4, EPA acknowledges that the 2007 FSEIS includes descriptions of other areas. EPA did not refer to the boundary of the Yazoo Backwater Study Area (i.e., 630,000-acre area representing those lands within the 100-year flood frequency) to establish the defined area. The Yazoo Backwater Study Area was not the defined area for several reasons: (a) portions of the footprint of the Steele Bayou pumping station site would not have been within this boundary (see Figure 1, below); (b) this boundary was generated by modeling and subject to change based on model inputs and changed a number of times during the leadup to the 2007 FSEIS (it also changed again in the 2020 FSEIS based on new model inputs); and (c) the boundary would have been difficult to implement on the ground as it is irregular and lacks readily identifiable landmarks.

area extends northward about 65 miles to the latitude of Hollandale and Belzoni, Mississippi, and comprises about 1,446 square miles (926,000 acres)." (Main Report, p. 20). Plate 4-1 is found in 2007 FSEIS Appendix 4 (Glossary of Terms and Report Plates) and is reprinted as Figure 2, below.

c. The discharges associated with the 2020 Yazoo Pumps Project fall within the Yazoo Backwater Project Area and are therefore within the defined area of the prohibition in the 2008 FD.

Finally, EPA assessed whether the discharges of dredged and fill material from the 2020 Project fall within the boundaries of the Yazoo Backwater Project Area delineated by the Corps in the 2007 FSEIS. The answer is clearly yes.

As noted above, Figure 2 below is a reprint of 2007 FSEIS Plate 4-1, which the Corps identified as the Yazoo Backwater Project Area in the 2007 FSEIS. Figure 3, below, is Plate 4-1 annotated by EPA to identify the proposed locations of the Steele Bayou and Deer Creek pumping stations as well as features identified in the description of the boundary of the Yazoo Backwater Project Area that are relevant for determining whether the Deer Creek pump location is within the boundary of the Yazoo Backwater Project Area. As demonstrated by Figure 3, the proposed Deer Creek pumping station location falls within the triangular shaped Yazoo Backwater Project Area that has an eastern boundary demarcated by the hill line, a western boundary demarcated by the Mainline MS River east bank levee, and a northern boundary demarcated by the latitude of Hollandale and Belzoni, MS.

Furthermore, Figures 4a-d, below, which are reprints of Figures 7-10 from Appendix L (CWA Section 404(b)(1) Evaluation) of the 2020 FSEIS provide further confirmation that all the discharges associated with constructing the 2020 Plan fall within the Yazoo Backwater Project Area. Figure 4a shows the proposed Deer Creek pumping station location. The footprint of the pump station is situated between the connecting channel and the Yazoo River, an area that clearly falls within the larger triangular shaped Yazoo Backwater Project Area described above. Figure 4b shows a close-up of the pump station footprint with discharges identified by blue shading in the connecting channel on the west and the Yazoo River on the east. Figure 4c identifies the footprint of the access road to the proposed Deer Creek pumping station location. The access road footprint is also situated between the connecting channel and the Yazoo River, which is also within the larger triangular shaped Yazoo Backwater Project Area. Figure 4d shows the footprint for the proposed borrow area and the proposed access road to the borrow area. These are adjacent to the proposed Steele Bayou pump site location, an area that also clearly falls within the larger triangular shaped Yazoo Backwater Project Area.²³

²³ The 2007 FSEIS also contains a second description of the Yazoo Backwater Project Area. However, the entirety of the 2020 Plan is within the boundary of this area as well. This second description reads: "The Yazoo Backwater Project Area is bounded on the west by the left descending bank of the mainline Mississippi River levee, on the east by the west bank levees of the Will M. Whittington Auxiliary channel and the connecting channel, and the Yazoo River on the south (926,000 acres)." (2007 FSEIS, p. SEIS-1). Figures 4a-d demonstrate that the entirety of the 2020 Plan is within the area delineated in the second description since the Deer Creek pumping station and access road sites are located north of "the Yazoo River on the south." (Figures 4a and 4c). As discussed above, the pumping station itself entails discharges into the connecting channel (Figure 4b). The borrow site and borrow site access road are also located north of "the Yazoo River on the south." (Figure 4d).

2. The regulatory history and evolution of the scope of the PD, RD and FD support the conclusion that the "defined area" in the FD is the 926,000-acre Yazoo Backwater Project Area and not the 43.6-acre area identified in the November 2020 letter.

While EPA concludes that the meaning of the FD text is clear, particularly read in light of the statutory text, that meaning is confirmed by the regulatory history preceding the issuance of the FD.

The scope of the defined area evolved throughout the regulatory process. The PD identified the defined area as waters of the United States within Issaquena County, an area of 264,320 acres.²⁴ The RD broadened the defined area to the waters of the United States within the entireties of six counties: Humphreys, Issaquena, Sharkey, Warren, Washington, and Yazoo Counties--an area comprising 2,239,648 acres.²⁵ As discussed above, the FD narrowed the scope of the defined area to the 926,000 acres comprising the Yazoo Backwater Project Area. This area includes just the portions of those six counties that lie within the Yazoo Backwater Project Area, which reduced the defined area of the prohibition by over half as compared with the RD.

404(c) Step	Description of Prohibited Area	Size of Prohibited Area (acres)
PD	Waters of the United States within Issaquena County	264,320
RD	Waters of the United States within Humphreys, Issaquena, Sharkey, Warren, Washington, and Yazoo Counties	2,239,648
FD	Waters of the United States within the Yazoo Backwater Project Area	926,000

Table 2. Evolution of size of prohibited area from PD to RD to RD.

The November 2020 letter's conclusion that the defined area in the FD comprised only 43.6 acres cannot be reconciled with the regulatory history. Nothing in EPA's 2008 FD record indicates that EPA intended to narrow the scope of the defined area from 2,239,648 acres in the RD to just 43.6 acres. Such a narrowing would constitute a more than 6,000-fold reduction in geographic scope as compared to the PD stage (the narrowest prohibited area identified during EPA's regulatory process) and a more than 51,000-fold reduction in geographic scope as compared to the immediately preceding RD stage. EPA would not have undertaken such an extreme reduction in the scope of the defined area subject to the prohibition without any mention of an intent to do so in the record for the FD, especially in light of EPA's underlying goal to broadly protect the area's vital wetland, fish, and wildlife resources. This goal is discussed further in Section IV.A.3 below.

²⁴ U.S. Census Bureau, See <u>https://www.census.gov/quickfacts/issaquenacountymississippi</u>
 ²⁵ U.S. Census Bureau, See

https://www.census.gov/quickfacts/fact/table/yazoocountymississippi,washingtoncountymississippi,warrencountymississippi,sharkeycountymississippi,humphreyscountymississippi,issaquenacountymississippi/PST045219

The administrative record for the 404(c) action includes a response to comments explaining EPA's reasoning for its decision to narrow both the defined area and the prohibited discharges from the RD to the FD. The 2008 FD's Response to Comment 10 in its entirety states as follows (Response to Comments, pgs. 19-20):

"Comment: The RD overreaches EPA's authorities under CWA section 404(c) and would preclude the project sponsor and Corps from implementing flood damage reduction features for the South Delta.

<u>Response</u>: The prohibition included in the FD would not apply to all future flood control activities affecting waters within the counties identified. This prohibition extends to the discharge of dredged or fill material associated with the construction of the proposed Yazoo Backwater Area Pumps Project (i.e., FSEIS Plan 5), as well as FSEIS Plans 3, 4, 6, and 7, and Modified Plan 6, based on unacceptable adverse effects on fishery areas and wildlife.

While EPA has the authority to take action under 404(c) as recommended by EPA Region IV (i.e., a prohibition encompassing a six county area and "...any similar pump project...")³ we have modified the scope of the RD because we recognize that the prohibited projects are feasible only *within the geographic area identified by the FSEIS*. The adverse effects associated with the prohibited projects are the result of a combination of operational factors including the capacity of the pumping station and its associated pump-on elevations. While this FD only prohibits the construction of FSEIS Plans 3 through 7 and Modified Plan 6, the data supporting this FD indicates that derivatives of the prohibited projects that involve modifications to the operational features or location of these proposals would likely result in unacceptable adverse effects and would generate a similar level of concern and review by EPA. Further, narrowing of the scope of the prohibition underscores our sincere interest to work collaboratively with interested parties to consider alternative forms of flood protection for the Yazoo Backwaters Area while ensuring effective protection for the area's valuable natural resource. (emphasis added).

EPA's final action does not preclude the opportunity for discussions and coordination with state and federal interests to evaluate flood protection alternatives. We believe the section 404(c) process has helped to focus such discussions on those options that provide flood protection to Delta residents while protecting the area's valuable natural resources."

Footnote 3: "Past section 404(c) actions completed by EPA have included waters within the entire project area that would be affected by the project and were not simply restricted to the waters that would be directly impacted by the proposed discharge of dredged or fill material or the specific activity proposed (see, for example, Bayou Aux Carpes; Lake Alma; Henry Rem, Marion Becker, et. al. and Senior Corporation; Russo Development; and M.A. Norden Company). (2008 FD, RTC, Page 20).

The November 2020 letter's discussion of the Agency's response to this comment makes three assertions: (1) In the FD, EPA rejected the geographic approach of the RD encompassing a six-county area and any similar project by "tying the scope of the veto to the identified FEIS plans themselves"; (2) the FD 'only prohibits the construction of FSEIS Plans 3 through 7 and Modified Plan 6'; and (3) the Agency explained the "modification" and "narrowing" of the FD as underscoring the Agency's "interest to work collaboratively with interested parties to consider alternative forms of flood protection."(November 2020 letter, p.2).

The letter's discussion of the response to the public comment reflects its erroneous interpretation of the FD. EPA did not, as the letter asserts, reject the "geographic approach" in the FD. As demonstrated above, the text of the FD, the 2007 FSEIS, and regulatory history of the 404(c) action, all make clear that the FD identified the defined area as the 926,000-acre Yazoo Backwater Project Area. The response to comment aligns with this scope because, like the FD, it refers to the scope as "the geographic area identified by the [2007] FSEIS."

Regarding the second assertion above, the November 2020 letter conflates the FD's description of the "defined area" and the "prohibited discharges." The letter assumes that the description of the prohibited discharges in the response to comment (those associated with construction of 2007 FSEIS Plans 3 through 7 and Modified Plan 6) limits the scope of the "defined area." But it does not, because as explained above, under the FD, the "defined area" and the "prohibited discharges" are two distinct components of a 404(c) action and the latter does not limit the former.

As to the third assertion above, the letter accurately recognizes that the FD narrowed the geographic scope from the RD, which would have covered the entirety of six counties, or over 2 million acres. The FD narrowed the defined area to include only the portions of those counties within the Yazoo Backwater Project Area (i.e., the waters "described in the FSEIS"), reducing the scope of the prohibition by over half. There is no suggestion in the response to comments or anywhere else in the record that the Agency intended to reduce the geographic scope of the prohibition from 2,239,648 acres in the RD to just 43.6 acres in the FD (i.e., to a geographic scope in the FD that is less than 0.002% of the RD). If the Agency had intended such a dramatic change in scope, it would have said so in its response.

Notably, in support of this third assertion, the November 2020 letter quotes the Agency's response to comment but stops mid-sentence. The entire sentence from the document (with the omitted text emphasized) states:

"Further, narrowing of the scope of the prohibition underscores our sincere interest to work collaboratively with interested parties to consider alternative forms of flood protection *for the Yazoo Backwaters Area while ensuring effective protection for the area's valuable natural resource.*"

The omitted text is central to understanding the Agency's statement. The November 2020 letter's position that the 2008 FD applies only to 43.6 acres and does not apply to the same project that was moved 7.5 miles cannot be reconciled with EPA's stated purpose for the narrowing, which was to allow for *alternative* forms of flood protection and also to ensure *effective* protection for

the larger area. As discussed above, the 2020 Proposed Project involves the same prohibited project to address flooding with more direct impacts and similar levels of indirect impacts as the prohibited Plans.

Finally, the November 2020 letter ignored other aspects of the response to comments that support that the 2008 FD defined area is the Yazoo Backwater Project Area. As discussed above, EPA narrowed the defined area from the entireties of six counties in the RD to just the portions of those counties that lie within the project area in the FD (i.e., Yazoo Backwater Project Area). EPA explained that "we have modified the scope of the RD because we recognize that the *prohibited projects are feasible only within the geographic area identified by the FSEIS.*" (emphasis added).²⁶ There is no record evidence suggesting that the prohibited projects were *only* feasible at the discharge sites at Steele Bayou. In fact, the Corps had historically considered other locations throughout the Yazoo Backwater Project Area for the pumping station, including the Deer Creek site which was ultimately selected for the pumping station in the 2020 FSEIS.²⁷

For these reasons, the regulatory history for the 2008 FD supports EPA's reading that the defined area is the Yazoo Backwater Project Area and not the 43.6-acre discharge sites identified in the November 2020 letter.

3. The goals of the 2008 FD support the conclusion that the "defined area" in the FD is the 926,000-acre Yazoo Backwater Project Area and not the 43.6-acre area identified in the November 2020 letter.

²⁶ This sentence from the response to comments also included footnote 3 on this sentence. This footnote stated that "[p]ast section 404(c) actions completed by EPA have included waters *within the entire project area that would be affected by the project* and were not simply restricted to the waters that would be directly impacted by the proposed discharge of dredged or fill material or the specific activity proposed." (emphasis added). EPA included this footnote to highlight prior 404(c) actions where EPA took the same approach as the 2008 FD (i.e., narrowed to just the affected project area within the six counties instead of the entire counties included in the RD). Thus, this footnote is directly contrary to the conclusion in the November 2020 letter that interpreted the 2008 FD as limited to the directly impacted waters only.

²⁷ EPA's record includes numerous historic records for the Yazoo Pumps Project (many of which are cited in the 2008 FD) that indicate the Corps had historically considered other locations throughout the project area for the pumps, including the Chief's report referenced in the 1941 Congressional authorization which contains a map showing a proposed pump at Deer Creek. Further, additional documents in EPA's record generated by the Corps over the decades contain numerous statements indicating that pumps could be located at sites other than Steele Bayou. For example, in a 1962 review of the project, the Corps describes the flexibility it has under the 1941 authorization for the Yazoo Backwater Area stating that this authorization is "sufficiently broad to permit selection of *locations* and capacities of pumping plants, or a combination of gravity and pumped drainage, as future developments dictate." (emphasis added). And over the decades, documents generated by the Corps show it considered different plans for the number, location, and capacity of pumping plants in the Yazoo Backwater Area. The Corps' 1982 Post Authorization Change (PAC) report describes the conclusions of a 1959 project review by the Corps that include "the deferral of construction of pumping plants until some future time, with the number, *location*, and size of the pumps to be determined if and when future conditions and economic justification warranted installation" (emphasis added) and the initiation of a "reevaluation of the proposed pumping plant" in 1978 "to determine the best plan for reducing flood damages in the Yazoo Area caused by ponding of runoff." According to the 1982 PAC report, this reevaluation effort considered "three separate pumping plants at Big Sunflower River, Deer Creek, and Steele Bayou as proposed in the authorized plan."

EPA's conclusion that the Yazoo Backwater Project Area is the defined area is consistent with the stated goals of the 2008 FD to broadly protect the area's vital wetland, fish, and wildlife resources in conjunction with flood risk management.

"Improving flood protection and conserving vital wetland, fish and wildlife resources are mutually achievable goals for a project in the Yazoo Backwater Area. EPA strongly believes that our section 404(c) review is consistent with both of these important goals because it provided for greater public involvement, greater transparency, and more complete information on which to make decisions. We also believe that the information and decisions resulting from this section 404(c) review will help to inform discussions and facilitate the preparation of timely recommendations for alternative flood control proposals." (2008 FD, p. 72).

Similarly, the 2008 FD describes the action that it is taking in this case as "EPA's utilization of section 404(c) to preserve the fish and wildlife resources of the Yazoo Backwater Area by protecting important habitat." (2008 FD, p. 68).

That the Yazoo Backwater Project Area is the defined area is also supported by the scope of EPA's unacceptable adverse effects finding contained in the 2008 FD. Specifically, EPA outlined the nature and magnitude of adverse impacts to between 28,400 and 118,400 acres of "project area wetlands" across the "Yazoo Backwater Area." It was "based on these findings" that EPA decided to prohibit discharges throughout the Yazoo Backwater Project Area.

"The administrative record developed in this case fully supports the conclusion that the construction and operation of the proposed project (i.e., Plan 5 of the FSEIS) and the two alternative proposals offered by the Corps in February 2008 (i.e., Plan 6 and Modified Plan 6), would dramatically alter the timing, and reduce the spatial extent, depth, frequency, and duration of time project area wetlands flood. These large-scale hydrologic alterations would significantly degrade the critical ecological functions provided by at least 28,400 to 67,000 acres of wetlands in the Yazoo Backwater Area, including those functions that support wildlife and fisheries resources. Although not proposed to go forward, FSEIS Plans 3, 4, and 7, would also result in a dramatic alteration of the hydrologic regime in the Yazoo Backwater Area, significantly degrading the critical ecological functions provided by between approximately 28,400 and 118,400 acres of wetlands (see FSEIS Main Report, Table 17, page 1-20)." (2008 FD, p. 72).

In sum, the position taken in the November 2020 letter to apply the 2008 FD to only a 43.6-acre area is inconsistent with the text of the 2008 FD, as informed by the regulatory history of the 404(c) proceeding and the administrative record, as well as EPA's goal of protecting the extensive fishery and wildlife resources in the Yazoo Backwater Project Area.

B. Discharges from the 2020 Yazoo Pumps Project are prohibited by the 2008 FD

The 2008 FD does not prohibit all Section 404 discharges in the defined area; rather it prohibits "the discharge of dredged or fill material for the purpose of construction of [2007] FSEIS Plans 3

through 7, and Modified Plan 6." The record, as described below, supports the conclusion that the 2020 Plan for the Yazoo Pumps Project is prohibited 2007 Plan 5.

1. The record shows that the 2020 Plan is prohibited 2007 Plan 5

EPA's November 30, 2020 comment letter on the 2020 DSEIS included a statement that "[t]he [2020] DSEIS provides information and analysis regarding a similar but different Yazoo Pumps Project than was previously analyzed." But, as discussed below, the 2020 Plan for the Yazoo Pumps Project is, in fact, not distinguishable from prohibited 2007 Plan 5.

The 2020 DSEIS and FSEIS expressly refer to the 2020 Plan as Plan 5. The 2020 DSEIS states in Appendix G (Engineering Report) that "the [2020] proposed plan is Plan 5 from the 2007 FEIS." (p. 123). Similarly, Table 2-28 of Appendix G of the 2020 FSEIS, which describes the 2020 Plan, is titled "Base condition cumulative land-use by frequency and Plan 5 Pump Frequency land-use." (p. 142). These statements are consistent with the fact that the 2020 Plan includes the same operational features as 2007 Plan 5, such as the same pump capacity (i.e., 14,000 cfs) and same pump-on elevation (i.e., 87 feet NGVD).

The 2020 FSEIS also states in various places that the 2020 Plan remains Plan 5 and that only the environmental data would be updated. For example, the 2020 FSEIS states it "*does not reformulate any new alternatives* but will update and reevaluate the recommended plan from the 2007 Main Report based on the concerns and comments indicated in 2008, new environmental and hydraulic data, an updated hydraulic period of record, an improved digital elevation model, and the use of 2018 National Agricultural Statistics Service (NASS) landuse data." (2020 FSEIS, p. 18) (emphasis added).²⁸ Thus, the 2020 FSEIS evaluated Plan 5 based on newly available environmental data, not changes to the key features of the Plan itself.

Furthermore, the 2020 FSEIS demonstrates that the 2020 Plan and 2007 Plan 5 are the same for purposes of CWA Section 404. Section 404 only allows the authorization of discharges of dredged or fill material into waters of the United States for the Least Environmentally Damaging Practicable Alternative (LEDPA). 40 C.F.R § 230.10(a). The LEDPA is identified by conducting an alternatives analysis. The alternatives analysis in the 2007 FSEIS identified Plan 5 as the LEDPA. The 2020 FSEIS does not conduct a new alternatives analysis, instead relying on the 2007 LEDPA determination, which supports the fact that that the 2020 Plan and the 2007 Plan are not distinguishable for purposes of Section 404. The 2020 FSEIS states that the LEDPA analysis is based on key features that are identical to Plan 5, specifically stating the LEDPA "analysis resulted in a pumping station situated at the lower end of the Yazoo Backwater Area capable of discharging 14,000 cfs during flood events when interior stages exceed 87.0' NGVD." (2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation, p. 5). The discussion of the LEDPA also makes it clear that the Corps considers the changed location to be insignificant for the purposes of CWA Section 404.²⁹

²⁸ Similarly, the 2020 FSEIS also states "[t]he recommended plan from the 2007 Main Report is now the plan currently being updated and reevaluated under this study effort." (2020 FSEIS, p.19).

²⁹ This is consistent with the Corps' finding in its Record of Decision for the 1982 Final Environmental Impact Statement that a prior "change in project location" involving both the Deer Creek site and the Steele Bayou site was

In addition, the 2020 FSEIS contains statements indicating that the Corps considers the 2020 Plan to be 2007 Plan 5 for purposes of the National Environmental Policy Act (NEPA). The FSEIS states "[t]he proposed pumping plan at the Deer Creek site comes as a result of over 20 years of extensive analysis of 87 structural and nonstructural alternatives *leading up to the 2007 SEIS report*" – which identified Plan 5 as its Recommended Plan (2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation, p. 5) (emphasis added). Similar to the LEDPA, the 2020 FSEIS does not conduct a new alternatives analysis to identify the Recommended Plan for purposes of NEPA. Instead, it relies on the alternatives analysis in the 2007 FSEIS which identifies 2007 Plan 5 as the Recommended Plan for purposes of NEPA.

2. The November 30, 2020 letter does not identify features that distinguish the 2020 Plan from the Plans prohibited by the 2008 FD

The November 2020 letter says that the following five features of the 2020 Plan distinguish it from the Plans prohibited by EPA's 2008 FD. But the November 2020 letter does not provide support for why these five features distinguish the 2020 Plan from the prohibited Plans. The Agency has reconsidered these features and found that they do not provide a basis for distinguishing the 2020 Plan from the Plans prohibited by the 2008 FD.

"(1) the 14,000 cfs pump will now be located near Deer Creek, approximately eight miles east of the Steele Bayou site at issue in the 2007 FSEIS;

(2) the Steele Bayou flood control gate operations will maintain water levels between 68.5 and 70 feet;

(3) the pump facility will use natural gas instead of diesel power and add a pump station and appurtenances;

(4) the plan will involve the installation of thirty-four low flow wells adding 0.1-0.2 cfs to augment stream flows in multiple stream systems within the Big Sunflower-Steele Bayou watershed; and

(5) a new adaptive management plan is included."

Regarding item 1, the new location of the pump site, the Deer Creek site, would still require discharges within the defined area subject to the prohibition in the FD. (see Section IV.A for detailed discussion).

Item 2 is the water management feature. As discussed in Section I.B.2, the 2007 FSEIS includes a proposal to change the management of the Steele Bayou control gates to hold additional water within the Yazoo Backwater Area during certain times of the year when water levels are low in the Area's streams and other waters. The 2007 FSEIS describes this effort as the "water management feature." As discussed in Section I.B.2, the 2008 FD made clear that the Agency did not consider this feature to be an integral component of the project for purposes of its 404(c) evaluation. Therefore, the water management feature itself does not provide a basis to distinguish the 2020 Plan from the Plans prohibited by the 2008 FD. Moreover, as discussed in Section I.D.2, the 2020 Plan proposes to eliminate the water management feature.

[&]quot;insignificant." (February 3, 1983 memo from the Corps' Director of Civil Works to the President of the Mississippi River Commission).

Regarding item 3, the fuel used by the pump facility and the addition of "a pump station and appurtenances," these were not relevant to EPA's 2008 FD and therefore do not provide a basis to distinguish the 2020 Plan from the Plans prohibited by the 2008 FD.

Regarding item 4, the installation of wells for purposes of compensatory mitigation,³⁰ EPA's November 30, 2020 comment letter on the 2020 DSEIS identified extensive deficiencies regarding the installation of such wells (EPA November 30, 2020 comment letter on 2020 DSEIS, Enclosure, pages 5-6). Because the November letter itself identified extensive deficiencies about the wells, the Agency does not believe this serves as a reasonable basis for distinguishing the 2020 Plan from the Plans prohibited by the 2008 FD. EPA does not believe that these deficiencies were addressed in the 2020 FSEIS.

Regarding item 5, EPA's November 30, 2020 DSEIS comment letter refers to a new adaptive management plan as a distinguishing feature. Like item 4, EPA's November 2020 letter also raised significant concerns about the new adaptative management plan (EPA November 30, 2020 comment letter on 2020 DSEIS, Enclosure, p. 8). Again, the Agency does not believe this serves as a reasonable basis for distinguishing the 2020 Plan from the Plans prohibited by the 2008 FD.

For these reasons, the five features that EPA relied on in the November 2020 letter do not "distinguish" the 2020 Plan "from the Plans prohibited by EPA's 2008 Final Determination." The discharges associated with the 2020 Plan are prohibited because they involve discharges associated with prohibited 2007 Plan 5.³¹

V. Conclusions

Based on a comprehensive evaluation of the record of the 2008 FD, 2007 FSEIS, and 2020 FSEIS, the Agency has concluded that the 2020 Proposed Plan for the Yazoo Pumps Project is 2007 FSEIS Plan 5 and involves discharges into the geographic area covered by the FD.

 $^{^{30}}$ As previously noted, the compensatory mitigation plan proposed in the 2020 FSEIS includes two components: (1) Reforestation/restoration of 2,405 acres of agricultural lands to wetlands and (2) Installation of up to 34 wells to irrigate streams during low-flow periods to offset the remaining impacts to fish and other aquatic organisms. ³¹ The 2008 FD includes the following language: "[t]he adverse effects associated with the prohibited projects are the result of a combination of operational factors including the capacity of the pumping station and its associated pump-on elevations. While this Final Determination prohibits the construction of FSEIS Plans 3 through 7, and Modified Plan 6, the data supporting this Final Determination indicates that derivatives of the prohibited projects that involve only small modifications to the operational features or location of these proposals would also likely result in unacceptable adverse effects and would generate a similar level of concern and review by EPA." (2008 FD, p.73). This text was included to provide advance notice to the Corps regarding what to expect if it asks EPA for a modification of the 2008 FD based on "only small modifications to the operational features or location" of the pumping station. Namely that small modifications to the pumping station that do not result in significant reductions in the environmental impacts of the project "would generate a similar level of concern and review by EPA" and any requests to modify the 2008 FD based on such inconsequential project changes "would also likely result in unacceptable adverse effects" and thus, would likely not support such FD modification requests. As previously discussed, the 2020 Plan involves prohibited discharges in the defined area. If the Corps were to ask EPA to modify its 2008 FD to allow the 2020 Plan to move forward, EPA would consider whether the new location and/or new data and information demonstrate the kind of reduction in adverse impacts that would support such a change. As evidenced by EPA's comments developed during the 2020 SEIS process, EPA has serious concerns regarding whether the information included in the 2020 FSEIS would support such a change.

Therefore, the 2020 Plan for the Yazoo Pumps Project is prohibited by the 2008 FD. This analysis is based on the facts of the 2020 Proposed Plan. This letter does not address the applicability of EPA's 2008 FD to any potential future plans that the Corps may propose, and that EPA is willing to work in a collaborative manner to develop.

EPA stands ready to work with the Corps and other stakeholders in the region to find a path forward that addresses flooding concerns in an environmentally protective manner. In furtherance of that effort, we recognize that the Corps and other parties have developed additional relevant information since 2008. We look forward to working with the Corps in an expeditious manner to identify and build upon the technical work and scientific analyses that the agencies agree are most promising. We remain committed to working with the Corps, and our other federal, state, and local partners on this important effort.

To inform ongoing discussions the Agency is having with the Corps, EPA outlines below its environmental concerns regarding the 2020 Plan. Based on our review of the 2020 FSEIS, these issues include:

- The magnitude of the 2020 Plan's estimated adverse impacts to wetlands (i.e., 38,774 acres of wetland impacts, a level of impact EPA determined was unacceptable in the 2008 FD) and that these impacts appear to be underestimated,³²
- Impacts to fish and other aquatic organisms appear to be underestimated,
- Lack of a compensatory mitigation plan that demonstrates that impacts to wetlands, fish, and wildlife can be mitigated to an acceptable level,
- Lack of an adequate analysis of alternatives,
- Insufficient data to support the attribution of project benefits to environmental justice communities within the Yazoo Backwater Area and an underestimate of potential impacts to subsistence hunting and fishing within the Yazoo Backwater Area; and
- Lack of an adequate evaluation of potential impacts to environmental justice and other communities located outside the Yazoo Backwater Area who will be receiving floodwater discharged from the Yazoo Pumps Project.

EPA looks forward to continuing to engage with the Corps to address our concerns and identify sustainable solutions to address the serious impacts from flooding in the lower Mississippi Delta.

³² The 2020 FSEIS appears to underestimate the 2020 Plan's indirect/secondary impacts to wetlands. The potentially affected area includes approximately 216,000 acres of wetlands (2007 FSEIS, p. SEIS 41) but the Corps only evaluated impacts to 38 percent of these wetlands to support its finding that 38,774 acres are impacted. The 2020 FSEIS asserts without scientific support that the wetlands it did not assess would not be impacted by the project. Information in the Corps' record suggests that the actual extent of impacts for the 2020 Plan could exceed 60,000 acres of wetlands.

Figure 1 shows the location of the pumping station proposed in the 2007 FSEIS (Steele Bayou Site) and the location proposed in the 2020 DSEIS (Deer Creek Site). This is Figure 1.1 from the 2020 FSEIS, Appendix B, Figures.





Figure 2. Plate 4-1 from the 2007 FSEIS, Project Location and Vicinity Map.

Figure 3 identifies relevant features in the description of the Yazoo Backwater Project Area on Plate 4-1 from the 2007 FSEIS (as annotated by EPA).



Figure 4a shows the jurisdictional wetland determination of the pump station which includes pump station footprint, pump station right-of-way (ROW), access road ROW, and utility ROW. This is a reprint of Figure 7 from 2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation.



Project Boundary (247-37 Acres)

- Jurisdictional Lake Permanently Impacted (1.68 Acres) Jurisdictional Emergent Wetland Permanently Impacted (2.01 Acres) Excluded Emergent Wetland Permanently Impacted (2.05 Acres)
- Excluded Emergent Wetland Temporarily Impacted (65,68 Acres) Forested Wetland Permanently Impacted (58,71 Acres)

Excluded Scrub-Shrub CRP Wetland Permanently Impacted (19.29 Acres) Excluded Scrub-Shrub CRP Watland Temporarily impacted (5:35-36 Acres) Jurisdictional Rivers (Diversion Canal and Yazoo River) Permanently Impacted (10.25 Acres) U pland Permanently Impacted (60.15 Acres) Upland Temporarily Impacted (17.2 Acres) Scale: 1:24,000



Figure 4b shows the jurisdictional wetland determination of the pump station which includes pump station footprint and pump station ROW. This is a reprint of Figure 8 from 2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation.



] Jurisdictional Emergent Wetland Permanently Impacted (2.on Acres)] Excluded Emergent Wetland Permanently Impacted (2.os Acres)
 Excluded Emergent Wetland Temporarily Impacted (65,68 Acres)

 Forested Wetland Permanently Impacted (58,71 Acres)

Jurisdictional Rivers (Diversion Canal and Yazoo River) Permanently Impacted (10.25 Acres) Upland Permanently Impacted (50.15 Acres) Upland Temporarily Impacted (a7.2 Acres)

Scale: 1:7,500

Figure 4c shows the jurisdictional wetland determination of the pump station which includes access road ROW and utility ROW. This is a reprint of Figure 9 from 2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation.



	Project Boundary (247.37 Acres)
	Jurisdictional Lake Permanently Impacted (1.68 Acres)
17/1	Jurisdictional Emergent Wetland Permanently Impacted (2.01 Acres)
11	Excluded Emergent Wetland Permanently Impacted (7.05 Acres)
11	Excluded Emergent Wetland Temporarily Impacted (65.68 Acres)
1	Forested Wetland Permanently Impacted (58.71 Acres)

Excluded Scrub-Shrub CRP Wetland Permanently Impacted (19.29 Acres) Excluded Serves Shrub CRF Wethand Temperativ (gas gaves)
Unifold tonal Rivers (Diversion Cana) and Yazoo River) Permanently impacted (tonas Acres)
Unifold Permanently impacted (gas Acres)
Upland Temperatry Impacted (gas Acres)

Scale: 1:16,500

1,000

F

2,000

Feet

Figure 4d shows the jurisdictional wetland determination of the borrow area which includes borrow area ROW and access road ROW. This is a reprint of Figure 10 from 2020 FSEIS Appendix L, CWA Section 404(b)(1) Evaluation.



Froject Boundary (45:66 Acres)
 Jurisdictional Emergent Wetland Permanently Impacted (23:14 Acres)
 Jurisdictional Tributary Permanently Impacted (0:42 Acre)
 Upland Permanently Impacted (20:69 Acres)

Upland Temporarily Impacted (1.04 Acres)

Scale: 1:7,500

480

0

960

Feet