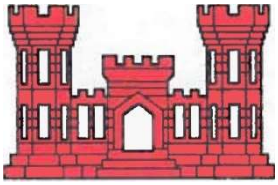
DRAFT ENVIRONMENTAL ASSESSMENT

MISSISSIPPI RIVER LEVEE CONSTRUCTION
WHITE RIVER BACKWATER
LEVEE SEEPAGE REMEDIATION
PHILLIPS COUNTY, ARKANSAS

April 2019



U.S. Army Corps of Engineers
Regional Planning and Environment Division South
Memphis District

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1.0 INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division, Regional Planning and Environmental Division South, has prepared this draft environmental assessment (EA) for the Memphis District (MVM) to evaluate the potential impacts associated with the proposed seepage control measures along the White River Backwater Levee portion of the Mississippi River and Tributaries (MRT) system, located in Phillips County, Arkansas (Figure 1).

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality's Regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation ER 200-2-2. This EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the MVM District Commander to make an informed decision on the appropriateness of an environmental impact statement (EIS) or a Finding of No Significant Impact (FONSI).

The Flood Control Act approved 15 May 1928, as amended, authorized the Mississippi Rivers and Tributaries Project (of which the current White River Backwater Levee is a part). The White River Backwater Levee, authorized by the Flood Control Act approved 15 June 1936, provides flood protection to approximately 145,500 acres of alluvial valley lands between the White and Mississippi Rivers (Figure 2). Additional authorizations of The Flood Control Act approved 15 June 1936 included the Little Island Bayou outlet structure, which evacuates impounded interior runoff to the White River when river stages permit gravity drainage. However, when White River stages do not permit gravity drainage through the Little Island Bayou outlet structure, the Graham Burke pumping station (authorized by the Flood Control Act approved 3 July 1958 and completed 1 December 1964) is utilized to dispose of surface runoff and seepage from the sump area during high backwater stages. Recent assessments and observations along the White River Backwater Levee have determined that seepage control measures are necessary along the proposed levee reach.

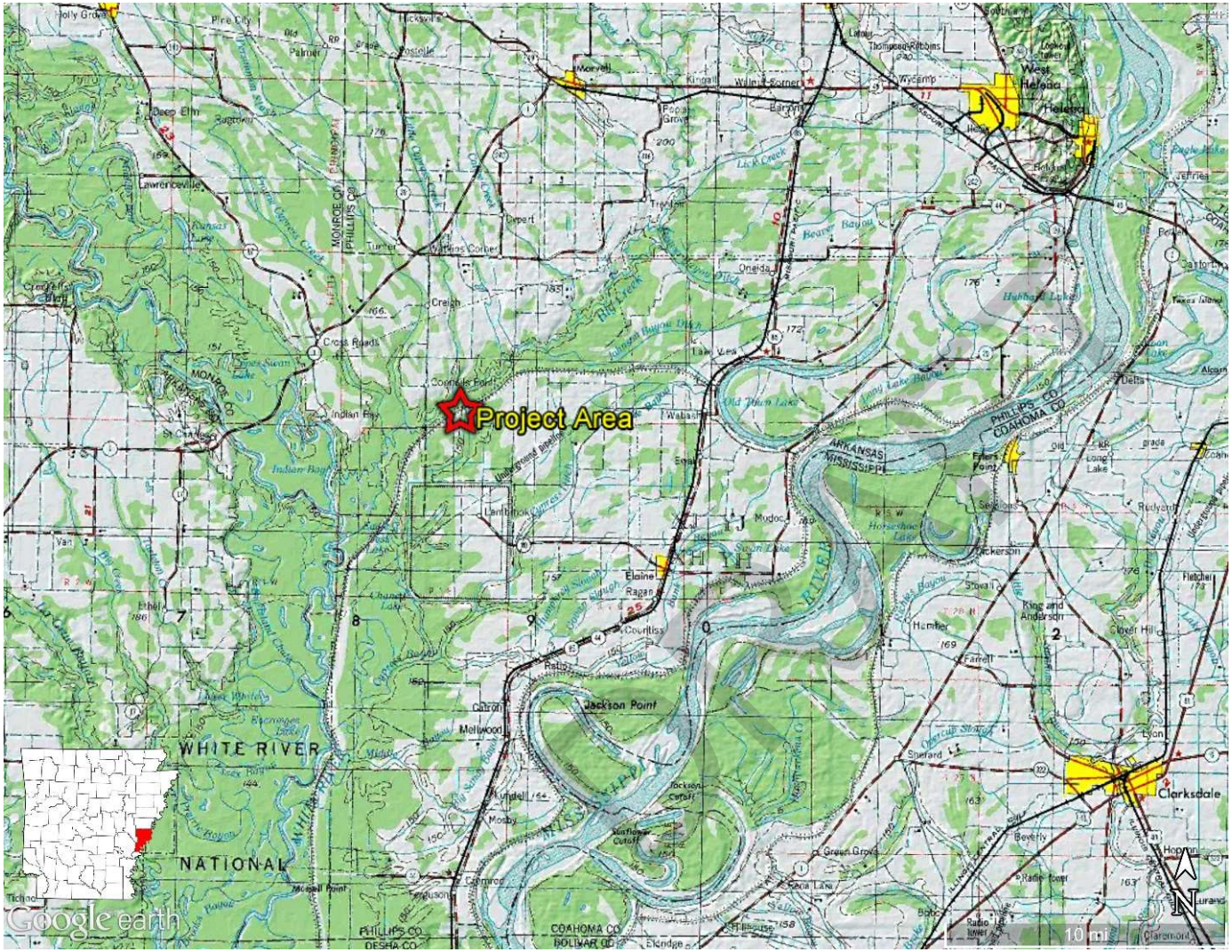

Figure 1. Location of proposed seepage control measures along the White River Backwater Levee, Phillips County, Arkansas.

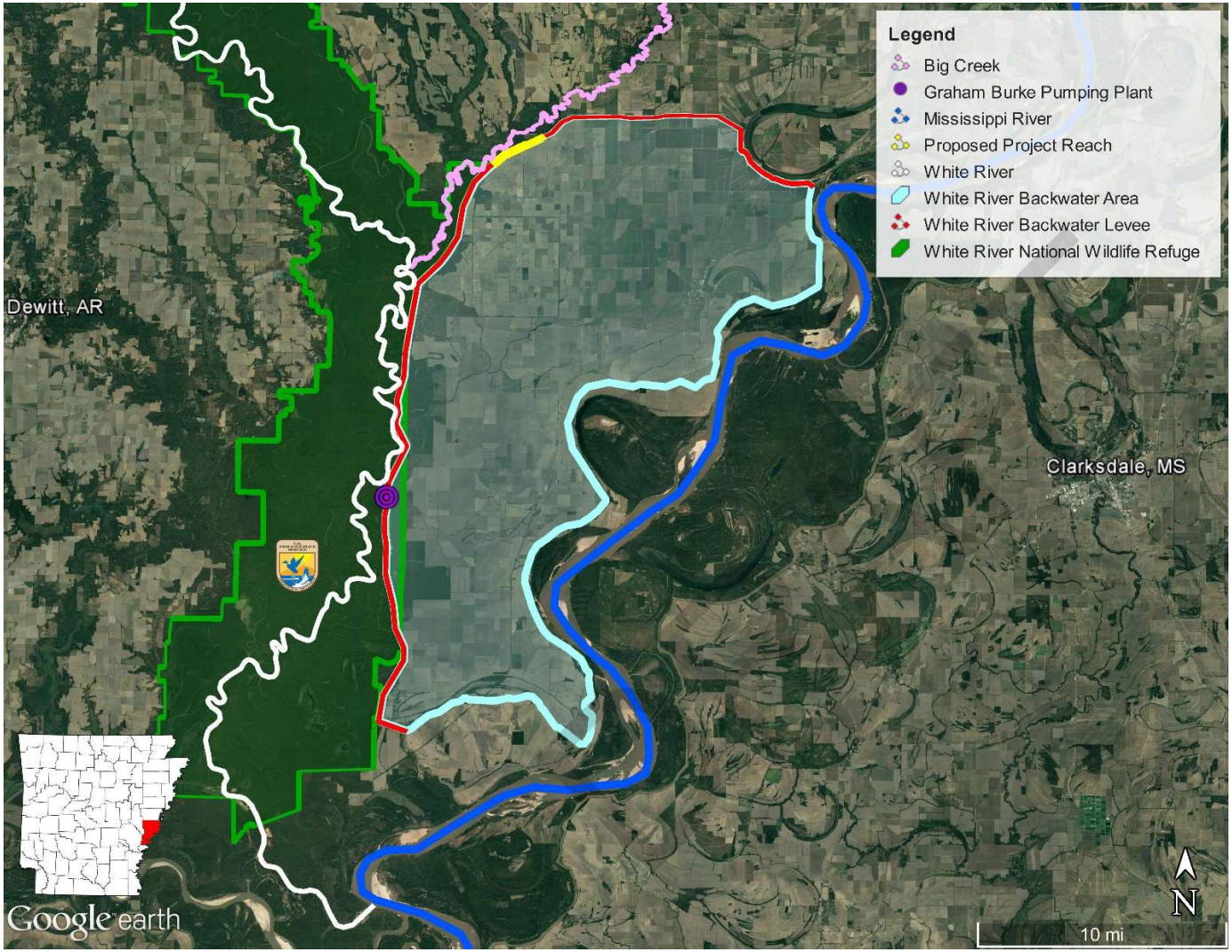

Figure 2. White River Backwater Levee and White River backwater area in Phillips County, Arkansas.

1.1 Proposed Action

The proposed project involves implementing seepage control measures along the White River Backwater Levee portion of the MRT system in Phillips County, Arkansas. Project features for the proposed seepage control action include constructing an earthen berm adjacent to the landside levee slope, installing 71 relief wells, construction of new collector ditches and modification of existing drainage systems to accommodate additional seep water, placement of rip-rap to prevent potential scour, installation of a new culvert, and clearing vegetation from existing ditches. The location of each proposed action is presented in Figure 3. Access to the project areas would be from Phillips County Roads 607, 612, and 619. Additionally, an access road from the levee would be modified to accommodate the new berm. Specialized drill rigs would be used to drill the holes along the levee, and cranes would be used to install the relief wells. A bulldozer and excavator would be used to construct the seepage berm and to modify the existing ditches. Approximately 90,000 cubic yards of excavated material would be obtained from the proposed borrow location riverside of the levee to create an earthen berm landside of the existing levee on land currently in agricultural production. As a result of these proposed actions, it is anticipated that approximately 12 acres of wetlands would be cleared and utilized as a borrow source for the proposed berm. Compensatory mitigation for unavoidable impacts associated with the proposed action would consist of restoring approximately 36 acres of cleared agricultural lands to bottomland hardwood forest as described in the Mitigation Section (6.0) below.

1.2 Purpose and Need for the Proposed Action

The purpose of the proposed action is to control seepage under the White River Backwater Levee that occurs during flood conditions on Big Creek and the White River to ensure that the levee system does not fail in a flood event. Continued seepage could eventually lead to a levee failure, which could result in property damage and cause human injuries and/or loss of life.

1.3 Authority for the Proposed Action

The proposed action is authorized as part of the 1928 Flood Control Act, as ammended.

1.4 Prior Reports

As previously noted, the Flood Control Act approved 15 May 1928, as amended, authorized the White River Backwater Levee, the Flood Control Act approved 15 June 1936 authorized the Little Island Bayou outlet structure, and the Flood Control Act approved 3 July 1958 authorized the Graham Burke pumping station. However, aside from a 1974 EIS documenting environmental impacts associated with the Graham Burke Pumping Plant, no known NEPA documentation exists for federally funded flood control projects along the White River Backwater Levee, as construction was completed prior to NEPA implementation in 1970.

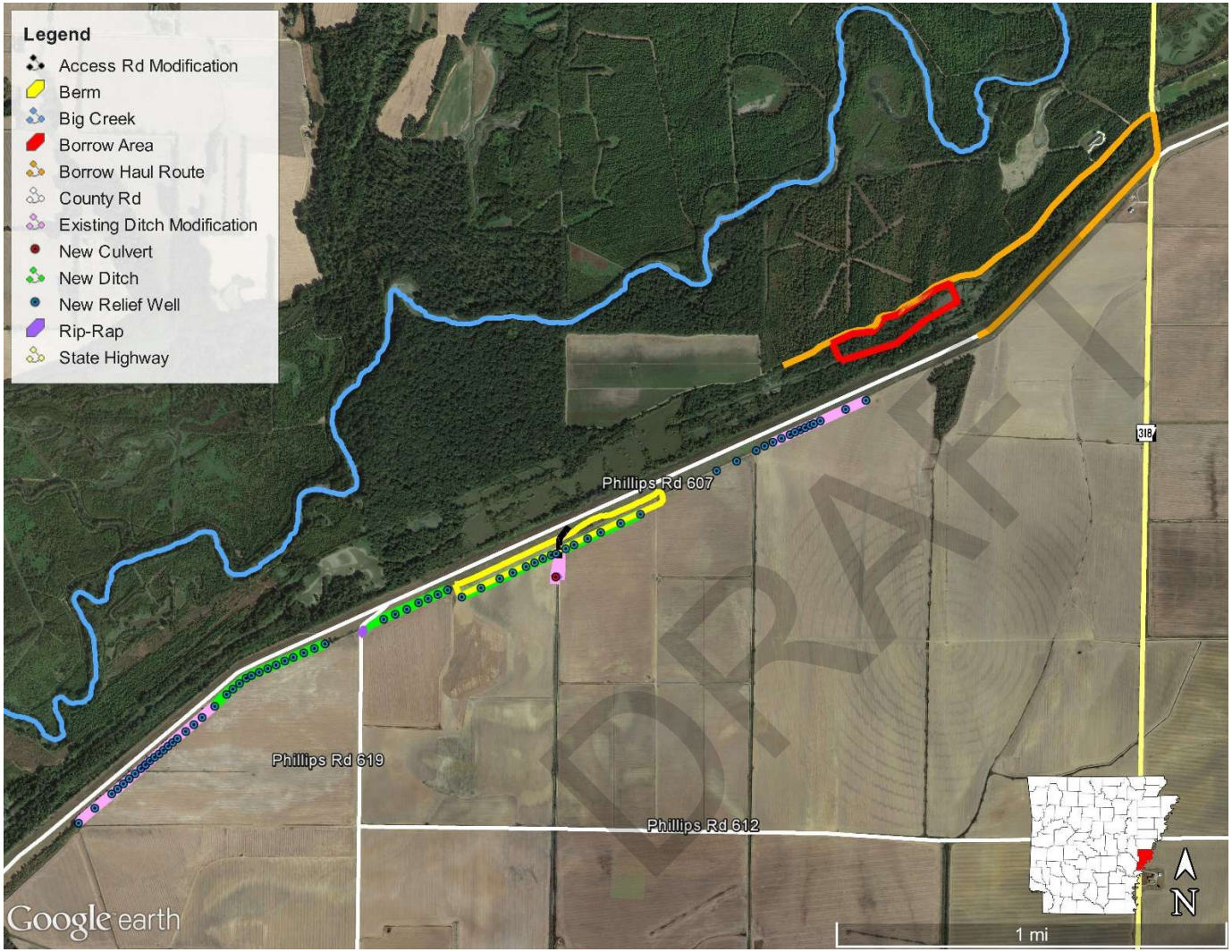

Figure 3. Proposed seepage control measures along the White River Backwater Levee, Phillips County, Arkansas.

1.5 Public Concerns

Public concerns exist regarding the ability of the White River Backwater Levee to contain floodwaters during a flood event. Seepage could undermine the levee causing it to breach if unabated, thus posing a threat of flooding. A levee breach could flood the surrounding lands and residential areas, and threaten the lives and property of residents within the flooded areas.

2.0 ALTERNATIVES

Two alternatives were considered: Alternative 1 (No-Action); and Alternative 2 (Construct a Landside Berm and Install Relief Wells with Associated Drainage Work).

2.1 Alternative 1 – Future without Project Condition (No-Action)

In the future without project condition (no-action), the proposed action would not be constructed. The no-action alternative would result in continued seepage during flood conditions. Sands and silts would be carried under the levee, potentially causing sand boils. This could eventually lead to a levee failure during a major flood event. Failure of the levee could result in property damage, human injuries and/or loss of life.

2.2 Alternative 2 – Construct a Landside Berm and Install Relief Wells with Associated Drainage Work

The proposed project action for alternative 2 involves implementing seepage control measures along the White River Backwater Levee. Project features would include constructing a berm along the landside toe of the White River Backwater Levee, installing 71 relief wells, modifying existing drainage systems and construction of new collector ditches, placement of rip-rap to prevent potential scour, installation of a new culvert, and vegetation removal from existing ditches. However, it is anticipated that these actions would result in approximately 12 acres of bottomland hardwoods being cleared and utilized as a borrow source for the proposed berm. Therefore, compensatory mitigation for unavoidable impacts associated with the proposed action would be required and would consist of restoring approximately 36 acres of cleared agricultural lands to bottomland hardwood forest as described in the Mitigation Section (6.0) below.

2.3 Preferred Alternative for the Proposed Project

After careful consideration of the alternatives, it was determined that alternative 1 (no-action) was unacceptable because of risks to human life and property. If seepage problems are not addressed, levee failure resulting in catastrophic impacts could ultimately result. All factors considered, alternative 2 is the most practical solution for seepage control and is the preferred alternative assessed in this EA.

3.0 AFFECTED ENVIRONMENT

3.0.1 Environmental Setting

The proposed seepage control items are located in Phillips County, Arkansas. In January 2019, USACE personnel performed a site assessment of the proposed project area. Throughout the proposed project reach, property on the landside of the levee is dominated by large, row crop agricultural production. However, riverside of the levee, land is primarily occupied by bottomland hardwood forest and borrow pits previously used in levee construction. Tree species in the batture adjacent to the project area generally consists of cottonwood, sugarberry, and silver maple.

The existing ditches proposed to be modified and receive rip-rap to prevent potential scour are dry throughout most of the year, covered in various grasses, subjected to routine mowing and/or cattle grazing, and bound by the levee on one side and agricultural land on the other (Figure 4). The proposed seepage berm would be located on land planted in pasture grass, which is subjected to routine mowing and/or cattle grazing, and agricultural land currently in row crop production (Figure 5). As the case with the existing ditch modifications and berm, the proposed new collector ditches would be located along the levee and berm toe on land that is currently planted in pasture grass, which is subjected to routine mowing and/or cattle grazing, and agricultural land currently in row crop production. The proposed borrow area is located adjacent to the project area, riverside of the White River Backwater Levee, and is bound to the north by the existing private access road and to the south by the White River Backwater Levee (Figure 6). The area was previously used as a borrow source for levee repairs and add a slope dressing in the late 1950s and early 1960s and is now dominated by vegetative species such as sugarberry, cottonwood, and scattered honey locust.

Figure 4. Existing condition of ditch proposed to be modified within the project area, Phillips County, Arkansas.

Figure 5. Existing condition landside of the White River Backwater Levee at the proposed location for berm placement, Phillips County, Arkansas.

Figure 6. Existing condition of proposed borrow area during spring inundation, Phillips County, Arkansas.

3.0.2 Climate

Climate in the project area is humid subtropical with average winter low temperatures of 38 degrees (°) Fahrenheit (F) and winter highs averaging 59 °F. Summer temperatures average a low of 72 °F with highs averaging around 92 °F. Total annual precipitation averages approximately 56 inches, generally spread out over the year.

3.0.3 Geology

The proposed project area is located in the Mississippi River alluvial plain. Soils in the project area are predominately Sharkey silty clay, Dundee silt loam, and Foley silt loam. Sharkey soils consist of very deep, poorly drained, very low permeable soils. Dundee soils consist of deep, somewhat poorly drained, moderately high permeable soils. Foley soils consist of moderately deep, poorly drained, very low to moderately low permeable soils.

3.1 Relevant Resources

This section contains a description of relevant resources that could be impacted by the project. The relevant resources (Table 1) described in this section are those recognized by laws; executive orders; regulations; and other standards of National, state, or regional agencies and organizations; technical or scientific agencies, groups, or individuals; and the general public. The following resources have been considered and found to not be affected by the alternative under consideration: aesthetics, environmental justice, fisheries, freshwater marshes, freshwater lakes, state-designated scenic streams, municipal facilities, municipal utilities, noise, roadways/transportation, and recreation.

Table 1. Relevant Resources.

Resource	Institutionally Important	Technically Important	Publicly Important
Agricultural Lands	Food Security Act of 1985, as amended; the Farmland Protection Policy Act of 1981	The habitat provided for the provision or potential provision of human and livestock food products.	The present economic value or potential for future economic value.
Wetlands	Clean Water Act of 1977, as amended; Executive Order 11990 of 1977, Protection of Wetlands; Coastal Zone Management Act of 1972, as amended; and the Estuary Protection Act of 1968., EO 11988, and Fish and Wildlife Coordination Act.	They provide necessary habitat for various species of plants, fish, and wildlife; they serve as ground water recharge areas; they provide storage areas for storm and flood waters; they serve as natural water filtration areas; they provide protection from wave action, erosion, and storm damage; and they provide various consumptive and non-consumptive recreational opportunities.	The high value the public places on the functions and values that wetlands provide. Environmental organizations and the public support the preservation of marshes.
Wildlife	Fish and Wildlife Coordination Act of 1958, as amended and the Migratory Bird Treaty Act of 1918.	They are a critical element of many valuable aquatic and terrestrial habitats; they are an indicator of the health of various aquatic and terrestrial habitats; and many species are important commercial resources.	The high priority that the public places on their esthetic, recreational, and commercial value.
Threatened and Endangered Species	The Endangered Species Act of 1973, as amended; the Marine Mammal Protection Act of 1972; and the Bald Eagle Protection Act of 1940.	USACE, U.S. Fish and Wildlife Service, NRCS, U.S. Environmental Protection Agency, and state agencies cooperate to protect these species. The status of such species provides an indication of the overall health of an ecosystem.	The public supports the preservation of rare or declining species and their habitats.
Cultural Resources	National Historic Preservation Act of 1966, as amended; the Native American Graves Protection and Repatriation Act of 1990; and the Archeological Resources Protection Act of 1979	State and Federal agencies document and protect sites. Their association or linkage to past events, to historically important persons, and to design and construction values; and for their ability to yield important information about prehistory and history.	Preservation groups and private individuals support protection and enhancement of historical resources.
Air Quality	Clean Air Act of 1963.	State and Federal agencies recognize the status of ambient air quality in relation to the National Ambient Air Quality Standards.	Virtually all citizens express a desire for clean air.
Hydrology and Water Quality	Clean Water Act of 1977, Fish and Wildlife Coordination Act.	State and federal agencies recognize value of fisheries and good water quality. The National and state standards are established to assess water quality.	Environmental organizations and the public support the preservation of water quality and fishery resources and the desire for clean drinking water.

3.1.1 Agricultural Lands

Existing Conditions

The proposed relief wells, new ditches, as well as existing ditches proposed for modification, are located adjacent to, and/or transect, agricultural fields currently in production. Additionally, the area where a portion of the proposed berm would be located occupies agricultural fields currently in row crop production. Therefore, a Farmland Conversion Impact Rating Form (AD-1006) was submitted to the Natural Resources Conservation Service (NRCS) to determine if agricultural land within the construction footprint is considered prime farmland or can be classified as prime farmland when specific conditions are present. The NRCS reported that portions of the agricultural land in the immediate project area are considered prime farmland or can be classified as prime farmland when specific conditions are present.

3.1.2 Wetlands

Existing Conditions

Within the proposed construction footprint, the area landside of the White River Backwater Levee consists predominantly of land in row crop agricultural production or existing levee which is planted in grass and utilized for cattle grazing and does not exhibit wetland characteristics. However, riverside of the White River Backwater Levee, the proposed borrow location occupies approximately 12 acres of wetlands, as noted by the combination of hydrologic, vegetative, and soil characteristics at the site.

3.1.3 Wildlife

Existing Conditions

Wildlife species that could be expected to be found within the proposed project area includes coyotes, deer, raccoons, opossums, rabbits, gray and fox squirrels, muskrats, mice, rats, shrews, songbirds, turtles, snakes, amphibians, and other small animals typically found within the Mississippi River delta floodplain system.

3.1.4 Threatened and Endangered Species

Existing Conditions

According to results obtained from the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) conservation planning tool, there are a total of seven threatened, endangered, or candidate species that could potentially inhabit the immediate project area. These species are the ivory-billed woodpecker (*Campephilus principalis*), piping plover (*Charandrius melodus*), pallid sturgeon (*Scaphirhynchus albus*), fat pocketbook (*Potamilus capax*), pink mucket (*Lampsilis abrupta*), rabbitsfoot (*Quadrula cylindrica cylindrica*), and scaleshell mussel (*Leptodea leptodon*). Of these seven species, only the ivory-billed woodpecker and piping plover could potentially utilize the habitat within the project area.

However, the piping plover typically nests and feeds along coastal and sand and gravel beaches on the Atlantic coast, the shores of the Great Lakes, and in the mid-west of Canada and the United States, and would only potentially use habitat in the lower Mississippi River delta during migratory periods. Additionally, 2012 USFWS consultation recommendations for the ivory-billed woodpecker no longer recommend surveys as part of informal consultation as intensive state-wide and regional surveys have been unsuccessful in documenting species persistence in the region. Furthermore, as land within the project area is typically not inundated year-round, the fatpocketbook, pink mucket, rabbitsfoot, and scaleshell mussel are not found within the project area and sturgeon are limited to the nearby Mississippi and White Rivers.

In January 2019, USACE biologists conducted a site assessment of the proposed project area. Proposed impact areas were examined for the presence of, as well as suitable/potential habitat for, the piping plover. No evidence of the species was observed at the proposed project area. Furthermore, no evidence of bald eagles, or their nests, were observed at any project location. Additionally, habitat within the project areas is not considered critical habitat for any potential threatened or endangered species.

3.1.5 Cultural Resources

Existing Conditions

A literature review and cultural resources survey within the project's Area-of-Potential-Effect (APE) were completed by the MVM archaeologist in the spring of 2019. The investigation revealed a previously identified site within the APE, site 3PH0017. Although Site 3PH0017 is within the APE, it is not believed to fall within the proposed construction footprint. However, the site boundaries have not been delineated. Therefore, USACE is currently conducting ground penetrating radar (GPR) and magnetometer analyses to ensure the boundary of Site 3PH0017 does not overlap with the proposed construction footprint. No additional sites were noted within or in the vicinity of the proposed project's right-of-way.

3.1.6 Air Quality

Existing Conditions

The proposed project area is in attainment for all air quality standards. As equipment to be used during construction is a mobile source, the project is exempt from air quality permitting requirements. Although air emissions would not require a permit, best management practices shall be used throughout the construction to minimize air pollution.

3.1.7 Hydrology and Water Quality

Existing Conditions

Water flow within the existing ditches and waterways within the proposed project area is dependent on heavy rainfall and seepage under the White River Backwater Levee from the

adjacent Big Creek and White River. Therefore, the existing drainage ditches are normally dry and only have flowing water during periods of heavy rain and high river stages.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Agricultural Lands

Future Conditions with No Action

Without implementation of the proposed action, agricultural lands (prime and unique farmland) within the project area are expected to remain as noted in Existing Conditions, provided that the adjacent levee remains stable. However, continued seepage could lead to a levee failure during a major flood event. Floodwaters could negatively impact existing agricultural lands through erosion and excess deposition of sand and gravel.

Future Conditions with the Proposed Action

As the project would result in agricultural land being converted to another use (*i.e.*, the seepage berm), in accordance with the Farmland Protection Policy Act (FPPA), 7 U.S.C. 4202(a), Form AD–1006, the Farmland Conversion Impact Rating Form, was completed and submitted to the NRCS. The completed Form AD-1006 overall Total Point score was lower than the 160 point threshold indicating significant resource impacts. Therefore, according to §658.5(c)(2), sites receiving a total score of less than 160 need not be given further consideration for protection and no additional sites need to be evaluated.

4.2 Wetlands

Future Conditions with No Action

Without implementation of the proposed action, wetland habitats within the project area are expected to remain as noted in Existing Conditions.

Future Conditions with the Proposed Action

With implementation of the proposed action, approximately 12 acres of wetlands would be temporarily impacted through the obtainment of borrow material. Existing vegetation would be cleared and the area would be excavated to a varying depth of approximately 4 to 12 feet below existing grade. However, as no fill material would be placed into wetlands, a Section 404(b)(1) Evaluation and state water quality certification would not be required. Although, similar to adjacent areas previously used for borrow material, it is anticipated that wetland characteristics and function would return to the site post construction.

4.3 Wildlife

Future Conditions with No Action

Without implementation of the proposed action, the wildlife resources within the project area are expected to remain as noted in Existing Conditions.

Future Conditions with the Proposed Action

With implementation of the proposed action, impacts to wildlife resources would include the loss of approximately 12 acres of bottomland hardwood forest. Additionally, disturbance and noise from the construction equipment would temporarily disperse wildlife species from the project area. However, once the project is completed, wildlife species would be expected to return to the project area. The loss of habitat and temporary disturbance would not adversely impact the general populations of wildlife species within the region, as extensive forested areas and suitable habitat is readily available within the vicinity of the project area, specifically riverside of the levee. To mitigate for the loss of 12 acres of bottomland hardwood forest, approximately 36 acres of agricultural land would be restored to bottomland hardwoods as described in the Mitigation Section (6.0) below.

4.4 Threatened and Endangered Species

Future Conditions with No Action

Without implementation of the proposed action, threatened and endangered species within the project area are expected to remain as noted in existing conditions.

Future Conditions with the Proposed Action

Pursuant to Section 7 of the Endangered Species Act, as amended, USACE has determined that proposed project may affect, but is not likely to affect the ivory-billed woodpecker and piping plover. Furthermore, based on location of the project and surveys of the project area, USACE has determined that the proposed project would have no effect on the fatpocketbook, pink mucket, rabbitsfoot, scaleshell mussel, and pallid sturgeon. Additionally, no evidence of bald eagles, or their nests, were observed at any project location. The bald eagle is no longer listed as a threatened species, but is still protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. On 01 April 2019, the USFWS concurred with the USACE determination.

4.5 Cultural Resources

Future Conditions with No Action

Without implementation of the proposed action, cultural resources are expected to remain as noted in Existing Conditions. However, continued seepage could lead to a levee failure during a major flood event, potentially impacting cultural resources.

Future Conditions with the Proposed Action

With implementation of the proposed action, site 3PH0017 is not anticipated to be impacted. However, as previously noted, the site has not been previously delineated. Therefore, USACE is conducting GPR analysis to delineate the site and to confirm that it does not fall within the construction footprint. Results of the GPR will be coordinated with the Arkansas State Historic Preservation Office (SHPO) and an effect determination regarding cultural resources would be made. Should results indicate the site is within the construction footprint, coordination would occur the Arkansas SHPO and potentially affected federally recognized tribes to determine the most appropriate path forward. Additionally, throughout the remainder of the project area, there are no other historic properties listed in or determined potentially eligible for inclusion in the National Register of Historic Places in the project's APE. Furthermore, should an inadvertent discovery be made during construction, the resource would be evaluated, assessed for effects, avoided if possible, and mitigated in accordance with Federal statutes and regulations (36 CFR, Part 800).

4.6 Air Quality

Future Conditions with No Action

Without implementation of the proposed action, no change in air quality would occur.

Future Conditions with the Proposed Action

With implementation of the proposed action, project-related equipment would produce small amounts of engine exhaust during construction activities. The temporary, minor impacts to air quality would be localized to the project area, and would not affect area residents. The project area would still be in attainment for all air quality standards. Since the equipment to be used is a mobile source, the project is exempt from air quality permitting requirements. Although air emissions would not require a permit, best management practices would be used throughout the construction to minimize air pollution.

4.7 Hydrology and Water Quality

Future Conditions with No-Action

Without implementation of the proposed action, hydrology and water quality within the project area would be as noted in Existing Conditions. However, in the event of a levee failure, due to seepage or overtopping, the impacts to water quality could be significant.

Future Conditions with the Proposed Action

With implementation of the proposed action, hydrology riverside of the levee would be as noted in Existing Conditions. Impacts to water quality within the adjacent Big Creek and White River would be minimal or have no effect because these streams normally carry a heavy sediment load and the project action would be conducted during dry or low water periods. Installation of

the relief wells would affect the existing hydrology landside of the levees by transporting seepage waters from the wells to the existing drainage ditches. In addition, modifying existing drainage ditches would facilitate water flow through the existing ditches, which connect to other drainage ditches. However, water provided through seepage occurs only during high water periods and a majority of the area landside of the levee is in active agricultural production during dry conditions. Furthermore, best management practices (*e.g.*, silt fences, seeding) would be employed throughout construction to minimize impacts. Any temporary impacts to water quality would be anticipated to return to normal shortly after construction ceases. Thus, no significant impacts to water quality would occur as a result of the proposed project.

4.8 Hazardous, Toxic, and Radioactive Waste

USACE is obligated under Engineer Regulation (ER) 1165-2-132 to assume responsibility for the reasonable identification and evaluation of all Hazardous, Toxic, and Radioactive Waste (HTRW) contamination within the vicinity of proposed actions. ER 1165-2-132 identifies that HTRW policy is to avoid the use of project funds for HTRW removal and remediation activities. A record search has been conducted of the Environmental Protection Agency's (EPA) EnviroMapper for Envirofacts web site (https://www.epa.gov/emefdata/em4ef.home). The web site was checked for any superfund sites, toxic releases, or hazardous waste sites within the vicinity of the proposed project area. Additionally, a site inspection of the proposed project was conducted by USACE personnel during the spring of 2019. The environmental record search and site survey conducted did not identify the presence of any hazardous or suspected hazardous wastes in the project area. As a result of these assessments, it was concluded that the probability of encountering HTRW is low. If any hazardous waste/substance is encountered during construction activities, the proper handling and disposal of these materials would be coordinated with the EPA and applicable state agencies.

4.9 Cumulative Impacts

The Council on Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.) define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7)". Cumulative Effects can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative impacts of the MR&T projects were discussed in the July 1998 supplemental EIS, *Mississippi River Mainline Levees Enlargement and Seepage Control*. Impacts of the proposed project action were evaluated during the preparation of this draft EA on the natural and human environment. A total of approximately 12 acres of bottomland hardwood forest habitat would be impacted by the proposed project action. The proposed mitigation would include restoring approximately 36 acres of agricultural land to bottomland hardwood forest. Future conditions are expected to be consistent with previous conditions. Besides USACE authorized projects, other activities in the vicinity, including agriculture and recreation, have not increased and are not projected to increase in the future. Therefore, the impacts associated

with the proposed project activities should not have any significant adverse cumulative effects on the environment in addition to those reported in the 1998 supplemental EIS.

5.0 COORDINATION

The proposed action, draft EA, and Finding of No Significant Impact (FONSI) have been coordinated with members of the project interagency environmental team (IAT) through distribution of the draft EA. The IAT is comprised of representatives from USACE, USFWS, EPA, and the Arkansas Game and Fish Commission. In addition, this EA is being coordinated with these agencies: Arkansas Natural Resources Commission, Arkansas Department of Environmental Quality, federally recognized tribes, and other interested parties.

6.0 MITIGATION

With implementation of the alternative 2, approximately 12 acres of bottomland hardwood forest habitat would be impacted by the proposed project. Mitigation requirements would consist of planting bottomland hardwood species and restoring hydrology, if applicable, within tracts of cleared agricultural land. Mitigation land is anticipated to be located along Big Creek, approximately four miles northeast of the project area, in Phillips County, Arkansas. Acquisition would occur prior to construction and mitigation measures would be implemented concurrent with construction, if not prior to. In lieu of a more rigorous functional analyses, the IAT was consulted and it was concluded that a mitigation ratio of 3:1 will sufficiently offset project impacts. This ratio is relatively consistent with other detailed habitat suitability assessments along the Mississippi River near the project area and accounts for temporal functional loss, although slight increases were made to reduce potential risk and account for any uncertainty regarding the proposed mitigation strategy. In coordination with the IAT, a mitigation plan for the tract would be developed and followed. Furthermore, mitigation success would not be declared until conditions specified in the mitigation plan are achieved.

7.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Environmental compliance for the proposed action would be achieved upon: coordination of this draft EA and draft FONSI with appropriate agencies, organizations, and individuals for their review and comments; and Arkansas SHPO cultural resources effect determination concurrence. By letter dated 01 April 2019, the USFWS concurred with the USACE threatened and endangered species effect determination. The draft FONSI would not be signed until the proposed action achieves environmental compliance with applicable laws and regulations, as described above.

8.0 CONCLUSION

The proposed action involves implementing seepage control measures along the MRL. A total of approximately 12 acres of bottomland hardwood forest would be impacted by the proposed project. To mitigate for the impact, approximately 36 acres of cleared agricultural land would be restored to bottomland hardwoods.

This office has assessed the environmental impacts of the proposed action and has determined that the proposed work is expected to have only minor impacts on agricultural lands, wildlife, air quality, and hydrology. Impacts to wildlife and air quality would be temporary, and would expected to return to existing conditions after completion of the project action. The proposed project would have no impacts upon freshwater marshes, freshwater lakes, state designated scenic streams, cultural resources, municipal facilities, municipal utilities, roadways, recreation, aesthetics, socio-economic, or environmental justice. Also, no significant adverse impacts would occur to wetlands, aquatic resources/fisheries, wildlife, threatened and endangered species, hydrology/water quality, air quality, or the human environment. Therefore, a supplemental EIS is not required.

9.0 PREPARED BY

This draft EA and draft FONSI were prepared by Mr. Joshua M. Koontz, USACE biologist, with cultural resources information provided by Ms. Pam Lieb, USACE archeologist. For additional information, contact Mr. Joshua M. Koontz at (901) 544-3975, or by email at joshua.m.koontz@usace.army.mil, or by mail at USACE Memphis District, Attn: Joshua M. Koontz, 167 North Main St., RM-B202, Memphis, TN 38103-1894.

ATTACHMENTS

Attachment A – U.S. Fish and Wildlife Service Coordination

Attachment A

U.S. Fish and Wildlife Service Coordination

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Arkansas Ecological Service Field Office
110 South Amity Road, Suite 300
Conway, Arkansas 72032

IN REPLY REFER TO:

April 1, 2019

Mr. Joshua Koontz
U.S. Army Corps of Engineers
Memphis District
167 North Main Street, Room B-202
Memphis, Tennessee 38103-1894

Dear Mr. Koontz:

Thank you for your March 28, 2019, email transmitting your effects determinations for federally listed species in regards to construction of the White River Backwater Levee Seepage Remediation. Our comments are submitted in accordance with the Endangered Species Act (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.).

The U.S. Army Corps of Engineers (Corps) is proposing to implement seepage control measures along the White River Backwater Levee portion of the Mississippi River and tributaries (MRT) system located in Phillips County, Arkansas. Features include the construction of a berm along the landside toe of the White River Backwater Levee, installation of 71 relief wells, modification of existing drainage systems and construction of new collector ditches, placement of rip-rap to prevent scour, installation of new culverts, and vegetation removal from existing ditches. The Corps anticipates clearing approximately 12 acres of wetlands and using it as a borrow source for the proposed berm. Compensatory mitigation for unavoidable impacts associated with this action will consist of restoration of approximately 36 acres of cleared agricultural lands to bottomland hardwood forests.

The Corps determined there will be no effect on Pallid Sturgeon (*Scaphirhynchus albus*), Fat Pocketbook (*Potamilus capax*), Pink Mucket (*Lampsilis abrupta*), Rabbitsfoot (*Theliderma cylindrica*), and Scaleshell (*Leptodea leptodon*). For Ivory-billed Woodpecker (*Campephilus principalis*) and Piping Plover (*Charandrius melodus*), the Corps reached an effects determination of "may affect, not likely to adversely affect".

The habitats potentially affected by the proposed action consists of seasonally flooded bottomland hardwood forests, levee slopes and adjacent lands vegetated by grasses or other herbaceous vegetation, and existing ditches. Piping plover nests and feeds along coastal sand and gravel bars on the Atlantic coast, the shores of the Great Lakes, and in the mid-west of Canada and the United States. It is very unlikely that they use habitats present in the project area since they are usually dry or inundated by floodwater. Additionally, Piping Plover is only present for a very short period during spring or fall migration. Although it is possible that Ivory-billed Woodpecker could use the seasonally-flooded forests within the project area, several

years of intensive survey efforts failed to re-document this species within the Cache River or White River National Wildlife Refuges or any other locations following the initial re-discovery in 2004. The U.S. Fish and Wildlife Service (Service) Arkansas Field Office (AFO) began in 2012 recommending that no surveys be done prior to projects within potential habitat. Given the extensive previous survey efforts, it is unlikely that additional small-scale surveys would successfully document this species. In the event that evidence (sighting or nest) emerges during the planning or implementation phase, the Corps should contact the Service immediately.

For the reasons described above, the Service concurs with the Corps' determinations of "may affect, not likely to adversely affect" for the Piping Plover and Ivory-billed Woodpecker. If you have any questions please contact Jason Phillips at jason_phillips@fws.gov or 870-503-1101.

Sincerely,

Melvin Tobin
Field Supervisor

Project File
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