

**ENVIRONMENTAL ASSESSMENT**  
**OCEAN SPRINGS WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT**  
**Ocean Springs, Jackson County, Mississippi**



**U.S. ARMY CORPS OF ENGINEERS**  
**MOBILE DISTRICT**

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## Contents

1. INTRODUCTION .....	1
1.1 Proposed Project Location .....	1
1.2 Purpose and Need .....	2
2. NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATIONS.....	2
3. PROJECT AUTHORITY .....	2
4. DESCRIPTION OF PROPOSED ACTION .....	2
5. ALTERNATIVES.....	3
5.1 Preferred Alternative .....	3
5.2 No Action Alternative.....	3
6. ENVIRONMENTAL SETTING .....	3
6.1 Climate.....	3
6.2 Groundwater Hydrology .....	3
7. AFFECTED ENVIRONMENT .....	4
7.1 Water Quality .....	4
7.2 Soils .....	4
7.3 Biological Resources.....	5
7.3.1 Essential Fish Habitat.....	6
7.3.2 Threatened and/or Endangered Species .....	6
7.4 Cultural Resources.....	7
7.5 Noise.....	8
7.6 Aesthetics.....	8
7.7 Hazardous, Toxic, and Radioactive Waste .....	8
7.8 Air Quality.....	8
7.9 Economic Activity .....	9
7.10 Land Use .....	9
8. ENVIRONMENTAL EFFECTS.....	9
8.1 Water Quality .....	9
8.2 Soils .....	9
8.3 Biological Resources.....	10
8.3.1 Essential Fish Habitat.....	11
8.3.2 Threatened and/or Endangered Species .....	11
8.4 Cultural Resources.....	12

8.5	Noise.....	12
8.6	Aesthetics.....	12
8.7	Hazardous, Toxic, and Radioactive Waste .....	12
8.8	Air Quality.....	13
8.9	Economic Activity .....	13
8.10	Land Use.....	13
9.	ADDITIONAL CONSIDERATIONS .....	13
9.1	Coastal Zone Consistency .....	13
9.2	Protection of Children.....	14
9.3	Environmental Justice .....	14
10.	CUMULATIVE IMPACTS.....	15
11.	COORDINATION.....	15
12.	CONCLUSION.....	15
13.	LIST OF PREPARERS .....	16
14.	REFERENCES .....	17

#### **List of Tables**

<b>Table 1:</b>	Migratory Birds.....	6
<b>Table 2:</b>	USFWS List of Threatened/Endangered Species .....	7

#### **List of Figures**

<b>Figure 1:</b>	Ocean Springs Map with Water Systems Improvement Project Route.....	<b>Error!</b>
	<b>Bookmark not defined.</b>	
<b>Figure 2</b>	Simmons and Davis Bayous.....	11

### Acronyms and Abbreviations

APE	Area of Potential Effect
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EFH	Essential Fish Habitat
EDR	Environmental Data Resources
HTRW	Hazardous, Toxic, and Radioactive Waste
JCUA	Jackson County Utility Authority
MSCNWR	Mississippi Sandhill Crane National Wildlife Refuge
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
RCRA	Resource Conservation and Recovery Act of 1976
ROW	Rights-of-way
SAV	Submerged Aquatic Vegetation
SHPO	State Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WRDA	Water Resources Development Act

# ENVIRONMENTAL ASSESSMENT

## OCEAN SPRINGS WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT

### Ocean Springs, Jackson County, Mississippi

#### 1. INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mobile District proposes to design and construct an expansion to the available water supply and transmission infrastructure in Ocean Springs, Mississippi. This proposed action is a component of an overall plan to improve the Jackson County Utility Authority's (JCUA) water system in Jackson County, Mississippi. This Environmental Assessment (EA) has evaluated the potential impacts that could result from the expansion undertaken by USACE, Mobile District. When fully constructed, the proposed plan will include construction of approximately five miles of a 12-inch water transmission line. Implementation of the proposed project will provide public water service to the area's existing and future residents and businesses.

#### 1.1 Proposed Project Location

The proposed project area is comprised of existing, maintained, roadway rights-of-way (ROW). These ROW are adjacent to primarily residential properties, which sit among large tracts of undeveloped wooded land, including portions of the Mississippi Sandhill Crane National Wildlife Refuge (MSCNWR).



**Figure 1:** Ocean Springs Water Systems Improvement Project

## 1.2 Purpose and Need

In 2006, following the devastation caused by Hurricane Katrina, the Mississippi Gulf Region Water and Wastewater Plan was created to identify critical water, wastewater, and stormwater infrastructure needs within the region and to allocate funds for the development of that infrastructure. The plan focused on providing infrastructure in areas of current and projected developments and encouraging development in areas that are less vulnerable to hurricane impacts.

Under the Mississippi Gulf Region Water and Wastewater Plan, water and wastewater infrastructure throughout Jackson County was designed and constructed in critical areas that were not served by centralized water and wastewater utilities. The infrastructure constructed under that plan provides the backbone for the Mobile District's proposed project, which is designed to extend the county's infrastructure into retail and wholesale areas where the services are needed to meet future demands. The proposed project will provide households that currently maintain private water wells with a cost-effective supply of potable water. Additionally, the proposed project will tie-in the existing JCUA infrastructure, improving redundancy and water quality.

## **2. NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATIONS**

This EA has been prepared to address the potential impacts associated with the construction of approximately 5 miles of a 12-inch water transmission main, with appurtenances (isolation valves, air release valves, fire hydrants, etc.), in Ocean Springs, Mississippi. This EA will be used to support the National Environmental Policy Act (NEPA) compliance requirements for USACE, Mobile District. The Council on Environmental Quality (CEQ) updated the 1978 regulations for implementing NEPA (Title 40 of the Code of Federal Regulations Parts [CFR] 1500 – 1508) in July 2020 (85 FR 43304) and amended 40 CFR Parts 1502, 1507, and 1508 in April 2022 (87 FR 23453). USACE, Mobile District has developed this EA in compliance with NEPA and the 2020 40 CFR 1500 – 1508 regulations, as amended.

## **3. PROJECT AUTHORITY**

The project is authorized by Section 219(c)(5) of the Water Resources Development Act (WRDA) of 1992, as amended (106 Stat. 4835; 110 Stat. 3757; 113 Stat. 334; 113 Stat. 1494; 114 Stat. 2763A–219; 119 Stat. 2255; 121 Stat. 1258).

## **4. DESCRIPTION OF PROPOSED ACTION**

The proposed action consists of the complete design and construction of a segment of 12-inch diameter potable water distribution line to interconnect to a portion of the existing JCUA water supply and distribution system located within Jackson County and the City of Ocean Springs, Mississippi. This work will support an increased distribution of the existing Jackson County Regional Water Supply System. In addition, this proposed action is designed to expand and connect infrastructure recently installed in the area to supply a

greater portion of the community with reliable and sufficient quantities of potable water and wastewater collection and transportation.

Under the proposed action, installation of approximately 5 miles of 12-inch water transmission main, with appurtenances (isolation valves, air release valves, fire hydrants, etc.) would occur (Figure 3). The proposed action's main water line will run from Hanshaw Road on Highway 90, going east and west, then south to Jean Lane and Biddix Evans Road Central. From there, it will continue south along Hanshaw Road, then east along Old Spanish Trail, and further south and east along Fountainbleu Road, crossing Davis Bayou at Point Aux Chenes Road. It will follow Point Aux Chenes Road south and extend along Peabody Road until it reaches JCUA's connection at the corner of Jean Lane and Biddix Evans Road Central. All work will occur in existing roadway ROW.

## **5. ALTERNATIVES**

### **5.1 Preferred Alternative**

The preferred alternative is the proposed action as described above.

### **5.2 No Action Alternative**

The NEPA defines a "no action" alternative as the continuation of existing conditions in the affected environment without the implementation, or in the absence of the proposed action. Inclusion of the "no action" alternative is prescribed by the CEQ regulations as the benchmark against which Federal actions are to be evaluated.

The "no action" alternative would result in maintenance of the status quo capacity and availability of potable water. Without the implementation of new water transmission lines, JCUA's capacity to extend services to potential new customers would be significantly limited.

## **6. ENVIRONMENTAL SETTING**

### **6.1 Climate**

The climate in the coastal Mississippi is classified as humid subtropical and mild with no dry season (National Weather Service, 2021). Summer temperatures can be as high as 90°F, while winter lows can fall as low as 30°F (National Weather Service Forecast Office, 2021). The region also experiences hurricanes, with one-third of United States hurricanes impacting the area during the period from 1851 to 2004 (Blake, 2005).

### **6.2 Groundwater Hydrology**

Major groundwater extraction in Jackson County is from wells that produce from the Pascagoula and Citronelle aquifers, with some locations capable of producing from multiple aquifers within the same well. These aquifers consist of thick beds of sand and/or gravel

separated by clay layers. The sands are generally lenticular and are not continuous over large areas but can supply large volumes of water.

The Pascagoula aquifer is the most important aquifer in Jackson County, consisting of thick sands and gravels in multiple zones at most locations. Yields are as high as 2,500 gallons per minute, with the groundwater level at or above the ground surface due to the overburden pressure on the aquifer. Deposits of the Citronelle formation generally cover the surface of the coastal counties and extend parallel to the coastline, with water produced from relatively shallow wells in the aquifer. The Citronelle is composed of coarse sand, silt, gravel and bright colored clays, which are typically near the contact with the underlying Miocene deposits (Newcome, 1967) (USGS, 21).

## **7. AFFECTED ENVIRONMENT**

### **7.1 Water Quality**

Drinking water provided by JCUA is sourced from groundwater wells penetrating the Pascagoula Aquifer and surface water from the Pascagoula River. JCUA conducts regular inspections of the drinking water supply, monitors for contaminants, and provides regular reports to the Mississippi Department of Health. A review of available reports indicates that JCUA's water supply was compliant with drinking water standards. There has been no presence of coliform/microbial contaminants in the water (MDOH, 2022). Non-microbial contaminants have not been present in amounts greater than their maximum contaminant level goals (JCUA, 2022).

The project is located in the Mississippi Coastal Streams Watershed, Hydrologic Unit Code 03170009 (USGS, 2022). The project route crosses two waterbodies, Davis, and Simmons Bayous. The Bayous are primarily tidally influenced with brackish water. Runoff provides some freshwater input. The state of Mississippi has designated a portion of Davis Bayou, outside of the project footprint, as a Coastal Preserve. Simmons Bayou connects to Davis Bayou in which both ultimately drain into the Mississippi Sound.

### **7.2 Soils**

The soil profile underlying the route is primarily composed of a combination of 22.5% Harlston fine sandy loam (0-2% slopes), 17.7% Escambia very fine sandy loam (0-2% slopes), and 12.9% Bayou sandy loam (0-1% slopes). Soils underlying the project route adjacent to, and through, Simmons and Davis Bayous are Handsboro mucky silt loam (frequently flooded), Croatan and Johnson soils (0-2% slopes, frequently flooded), and Ocilla loamy sand (0-2% slopes, frequently flooded) (NRCS, 2006).



### 7.3 Biological Resources

#### Terrestrial Wildlife:

Wildlife that may be found in Jackson County consists of a wide variety of birds, mammals, reptiles, and amphibians. Several species of birds and mammals inhabit the surrounding wetland and forested areas. Birds include the yellow rail, Henslow's sparrow, common ground dove, and Red-headed Woodpecker. Mammals include the long-tailed weasel, Bachman Fox Squirrel, and several bats (Mississippi Museum of Natural Science, 2015). Opportunistic species do not depend on a particular habitat and may be found in the project area. These include opossum, coyote, and the common raccoon.

#### Terrestrial Vegetation:

The project area is generally classified as a southern mixed hardwood and pine forest. Historical plant communities include pines, particularly Slash Pine (*Pinus elliottii*) (Langford, 2007), live oaks, magnolias, and marsh grasses. (USACE, 2020)

#### Wetlands:

Wetlands in the vicinity of the project are primarily freshwater forested and freshwater shrub wetlands. Estuarine tidal marshes are present and associated with Simmons and Davis Bayous. The state of Mississippi has designated a portion of Davis Bayou, outside of the project footprint, as a Coastal Preserve. Davis Bayou intersects the project footprint at Hanshaw Road. Simmons Bayou intersects the project footprint at the northern end of Port Aux Chenes Road. There are also previously disturbed drainage ditches located in the maintained roadway ROW that may be jurisdictional wetlands. The MSCNWR abuts the section of the project along Fountainbleau Road. The MSCNWR contains wet pine savannas, pine flatwoods, swamps and estuarine or tidal marshes (USFWS, 2021) (Hereford, 2010).

#### Migratory Birds:

Table 1 provides the migratory birds identified as possibly being in the vicinity of the project area.

<b>Common Name</b>	<b>Scientific Name</b>
American Kestrel	<i>Falco sparverius paulus</i>
American Oystercatcher	<i>Haematopus palliatus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Black Skimmer	<i>Rynchops niger</i>
Gull-billed Tern	<i>Gelochelidon nilotica</i>
Henlow's Sparrow	<i>Ammodramus henslowii</i>
King Rail	<i>Rallus elegans</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>
Prothonotary Warbler	<i>Protonotaria citrea</i>
Red-headed Woodpecker	<i>Larus delawarensis</i>
Ruddy Turnstone	<i>Arenaria interpres morinella</i>
Short-billed Dowitcher	<i>Limnodromus Griseus</i>
Swallow-tailed Kite	<i>Elanoides forficatus</i>
Willet	<i>Tringa semipalmata</i>
Wilson's Plover	<i>Charadrius wilsonia</i>
Yellow Rail	<i>Coturnicops noveboracensis</i>

**Table 1:** Migratory Birds

### 7.3.1 Essential Fish Habitat

Essential Fish Habitat (EFH) is defined in the Magnuson-Stevens Fishery Conservation and Management Act as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The National Marine Fisheries Service Habitat Conservation Division has identified EFH habitats for the area in the Gulf of Mexico Fishery Management Plan. Within the project area EFH is identified as intertidal wetlands, non-vegetated bottoms, shell reefs, submerged aquatic vegetation (SAV), and the estuarine water column. Emergent intertidal wetlands and estuarine marshes are present along the borders of Davis and Simmons Bayous, which intersects the project footprint at Hanshaw Road and Port Aux Chenes Road.

### 7.3.2 Threatened and/or Endangered Species

Table 2 provides the species listed by the U.S. Fish and Wildlife Service (USFWS) as either threatened, endangered, or protected, and also lists any designated critical habitat. The species that are not likely to be found within the footprint of the project include the Eastern Black Rail, Piping Plover, Red Knot, Alabama Red-Bellied Turtle, Gopher Tortoise, Dusky Gopher Frog, and Louisiana Quillwort (Table 2). These species are unlikely to be found within managed roadway ROW.

Common Name	Scientific Name	Status
Eastern Black Rail	<i>Laterallus Jamaicensis</i>	Threatened
Mississippi Sandhill Crane	<i>Grus canadensis pulla</i>	Endangered; CH
Piping Plover	<i>Charadrius melodus</i>	Threatened
Red Knot	<i>Calidris canutus rufa</i>	Threatened
Wood Stork	<i>Mycteria americana</i>	Threatened
Alabama Red-bellied Turtle	<i>Pseudemys alabamensis</i>	Endangered
Gopher Tortoise	<i>Gopherus polyphemus</i>	Threatened
Dusky Gopher Frog	<i>Rana sevosa</i>	Endangered
Louisiana Quillwort	<i>Isoetes louisianensis</i>	Endangered

**Table 2:** USFWS List of Threatened/Endangered Species

#### 7.3.2.1 Wood Stork

Wood storks are large, long-legged wading birds, about 50 inches tall, with a wingspan of 60 to 65 inches. The plumage is white except for black primaries and secondaries and a short black tail. The head and neck are largely un-feathered and dark gray in color. The bill is black, thick at the base, and slightly decurved. Immature birds are dingy gray and have a yellowish bill. The wood stork is primarily associated with freshwater habitats for nesting, roosting, foraging, and rearing. It may, but is unlikely to be, found within the project footprint of managed roadway ROW located outside of the Refuge’s boundaries. USACE, Mobile District is not aware of any nesting by the species in the project area.

#### 7.3.2.2 Mississippi Sandhill Crane

The Mississippi sandhill crane stands at about four feet tall, with long legs and neck. Its plumage is mostly grayish-white, but during breeding season, it has a prominent crimson crown on its head. It's distinguished by a red patch of bare skin on its forehead. The known populations of these birds are found entirely within the boundaries of the MSCNWR. It may but is unlikely to be found within the project footprint of managed roadway ROW located outside of the Refuge’s boundaries. USACE, Mobile District is not aware of any nesting by the species in the project area.

### 7.4 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended and regulation 36 Code of Federal Regulation Part 800 requires USACE, Mobile District to consider the effects of its undertakings upon historic properties. This includes but is not limited to, historical, architectural, archaeological, and cultural resources and to consult with other agencies and Tribal Nations to avoid, minimize or mitigate adverse effects upon those resources. Consultation with the Mississippi State Historic Preservation Officer (MS SHPO) and federally recognized Tribes was initiated in July 2022. On August 16, 2022, the MS SHPO requested a Phase I cultural resources survey in the proposed area of potential effect (APE) (MDAH Project Log #07-142-22). A Phase I cultural resources survey was conducted in 2023 and resulted in the report, *Phase I Cultural Resources Survey for the JCUA Waterline Installation in Ocean Springs, Jackson County, Mississippi* (New South Associates, Inc). One cultural resource, the Louisville and Nashville Railroad (Resource 9),

eligible for listing in the National Register of Historic Places (NRHP), was located within the project APE. No other cultural resources or historic properties were discovered in the project's APE. USACE, Mobile District determined that this resource would not be adversely affected by the project and the MS SHPO concurred.

#### 7.5 Noise

Noises in the project area consist of natural background sounds (e.g., winds, river, and fauna) and anthropogenic noise sources (e.g., street traffic, pleasure craft, and air traffic).

#### 7.6 Aesthetics

Aesthetic resources in the project area consist of the Davis Bayou Coastal Preserve, and the MSCNWR. The bayou and adjacent lands are utilized for recreational boating, fishing, and hunting (Mississippi, 2019). The MSCNWR is utilized for birding, hiking, and wildlife watching (USFWS, 2022).

#### 7.7 Hazardous, Toxic, and Radioactive Waste

A records search was conducted of available and pertinent listings of potential environmental concerns on or within a 1.0-mile radius distance of the site. A search on the Environmental Data Resources (EDR) database provided the listing of potential Hazardous, Toxic, and Radioactive Waste (HTRW) sites from a review of standard environmental records including: The National Priority List, Comprehensive Environmental Response Compensation and Liability Information, and the Resource Conservation and Recovery Act of 1976 (RCRA). The records search indicated 18 sites within a mile radius of the project. These include 6 RCRA Very Small Quantity Generator sites, 2 state and Tribal equivalent Comprehensive Environmental Response, Compensation, and Liability Act sites, 2 leaking underground storage tanks, 7 underground storage tanks, 1 drycleaner, 4 historical auto sites, and 2 historical cleaners.

Soil and drainage features located along roadways may also contain high levels of polycyclic aromatic hydrocarbons that result from tar-based sealants, wearing of tires, asphalt and used motor oil.

#### 7.8 Air Quality

The Clean Air Act requires the U.S. Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS include two types of air quality standards. Primary standards protect public health, including the health of sensitive populations, such as asthmatics, children, and the elderly. Secondary standards protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The U.S. Environmental Protection Agency has established NAAQS for six principal pollutants, which are called "criteria pollutants." Criteria pollutants include carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide. Areas that meet the air quality standard for the criteria pollutants are designated as being "in attainment." Areas that do not meet the air quality standard for one of the criteria pollutants may be subject to

the formal rule-making process and designated as being “in non-attainment” for that standard.

Sources of air pollution in the project area are minor and mainly due to non-point sources, such as boat motors and vehicular traffic emissions. According to the monitored ambient air quality measurements, Jackson County is considered in attainment for all monitored pollutants including Carbon Monoxide, Ozone, Particulate Matter, Sulfur Dioxide, and Lead.

### 7.9 Economic Activity

According to U.S. Census Bureau information for the year 2012, the total population of Jackson County was 140,298. The median household income (in 2011 adjusted dollars) for the area is \$49,620.00 and 15% of all families are below the poverty level. Primary employers include companies providing health care and social assistance, accommodation and food services, and retail trade (Deloitte, 2022).

### 7.10 Land Use

The proposed project location is situated within areas currently zoned as residential and conservation areas. A review of future land use plans for Jackson County indicated that the area will be designated as residential, community commercial, highway commercial, and conservation.

## 8. ENVIRONMENTAL EFFECTS

### 8.1 Water Quality

No impacts to water resources are anticipated under the proposed action. USACE will utilize Best Management Practices (BMPs), such as silt fences and baled hay, throughout the project to provide for soil retention. Stormwater BMPs, such as erosion control plans, silt fences and soil stabilization, will be utilized as necessary to limit runoff from the site into storm drainage. All disturbed areas will be restored to their original condition.

Project activities near these sites include trenching in the roadside ditches, water line placement, and replacement of the original fill material that has been stored on site. These activities will not involve interaction with any of these HTRW sites. None of these activities appear to be in the footprint of any of the sites identified in the EDR. Nor will they permanently remove any material adjacent to them.

### 8.2 Soils

No adverse impacts to soil quality are likely to occur because of the project. Soil displaced during project activities will be stored on site and utilized as fill to recover the water line trenches. All disturbed areas will be restored to their original condition.

### 8.3 Biological Resources

#### Terrestrial Wildlife

The proposed action will have no long-term adverse impacts to the terrestrial wildlife. BMPs will be utilized so that there will be minimal impacts to the adjacent terrestrial environment. Species inhabiting the adjacent uplands and wetlands are unlikely to be present in the project footprint as the activity will occur in maintained roadway ROW. Soil removal during trenching at Simmons and Davis Bayous may result in temporary, discountable, adverse impacts to terrestrial wildlife. Wildlife species would likely, temporarily, avoid the trenching areas and temporary soil stockpiles due to noise and construction activities.

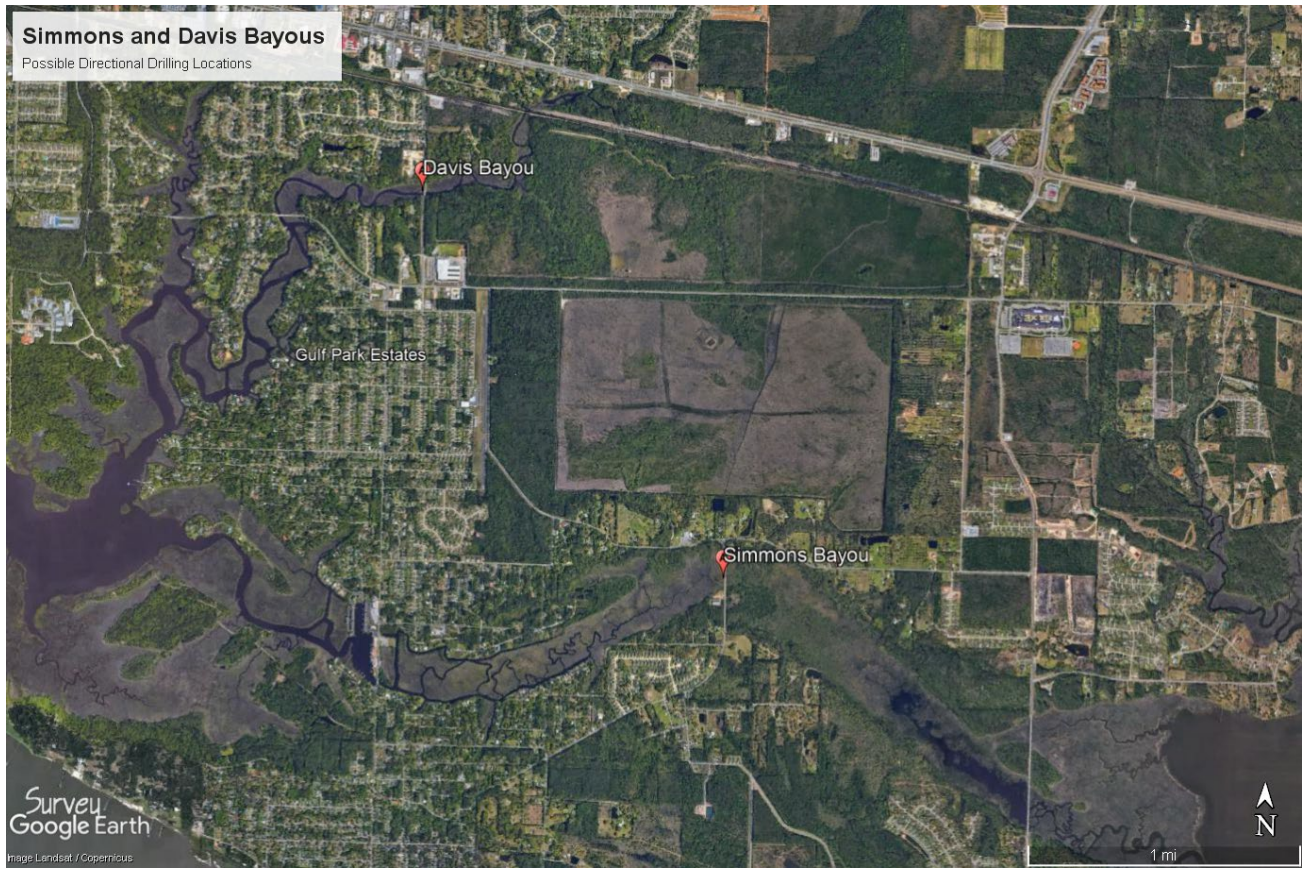
#### Terrestrial Vegetation

The proposed action will have no long-term adverse impacts to the terrestrial vegetation. BMPs will be utilized so that there will be minimal impacts to the adjacent terrestrial environment. Temporary, discountable, impacts to plant communities may occur as a result of soil removal during trenching and drilling activities. The disturbed material would be stored on site and replaced once water line instillation is complete. This material would be rapidly recolonized by surrounding vegetation with no long-term impacts expected.

#### Wetlands

Project activities will avoid Simmons and Davis Bayous (Figure 2) through passage of water line through existing utility bundles and/or the use of horizontal directional drilling. Drilling will be used to transit the Bayous by placing the water line at a depth with minimal disturbance of the wetland soil and vegetation. Project activities will avoid the MSCNWR altogether.

The previously disturbed drainage ditches located in the maintained roadway ROW will experience temporary, discountable impacts. Temporary, discountable, impacts to Simmons and Davis Bayous may occur as a result of soil removal during trenching and drilling activities. The disturbed material would be stored on site and replaced once water line instillation is complete, and the site would be returned to its original contours and conditions. The material would be rapidly recolonized by surrounding opportunistic vegetation, with no long-term impacts expected.



**Figure 2** Simmons and Davis Bayous

### Migratory Birds

The project footprint is contained within previously disturbed, regularly maintained roadway ROW. Migratory birds are unlikely to nest in these ROW due to the regular maintenance activities and disturbances created by passing traffic. Appropriate measures, to include buffers around nests, will be taken if migratory bird nesting activity is observed. No adverse impacts to migratory birds are anticipated.

#### 8.3.1 Essential Fish Habitat

The proposed action is not likely to impact coastal habitat identified as EFH in the project area. Horizontal directional drilling will be used to place the water transmission line with no disturbance of the wetland soil and vegetation. This will have no effect on the emergent estuarine marshes ability to function as EFH.

#### 8.3.2 Threatened and/or Endangered Species

USACE, Mobile District anticipates that most of the threatened and endangered species listed are not likely to be in the project area. The action may affect, but is not likely to adversely affect, the wood stork and Mississippi Sandhill Crane. These opportunistic feeders may enter the project footprint but are likely to avoid the construction areas due to

noise and activities. These determinations regarding threatened and/or endangered species will be coordinated with USFWS.

The project does border the MSCNWR, but the project footprint falls outside the boundaries of the refuge. Coordination with USFWS regarding the need for a consistency determination for work near the MSCNWR is ongoing.

#### 8.4 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended and regulation 36 Code of Federal Regulation Part 800 requires USACE, Mobile District to consider the effects of its undertakings upon historic properties. This includes but is not limited to, historical, architectural, archaeological, and cultural resources and to consult with other agencies and Tribal Nations to avoid, minimize or mitigate adverse effects upon those resources. Consultation with the MS SHPO and federally recognized Tribes was initiated in July 2022. On August 16, 2022, the MS SHPO requested a Phase I cultural resources survey in the proposed area of potential effect (APE) (MDAH Project Log #07-142-22). A Phase I cultural resources survey was conducted in 2023 and resulted in the report, *Phase I Cultural Resources Survey for the JCUA Waterline Installation in Ocean Springs, Jackson County, Mississippi* (New South Associates, Inc). One cultural resource, the Louisville and Nashville Railroad (Resource 9), eligible for listing in the NRHP, was located within the project APE. No other cultural resources or historic properties were discovered in the project's APE. USACE, Mobile District determined that this resource would not be adversely affected by the project and the MS SHPO concurred.

#### 8.5 Noise

Operation of construction equipment is expected to result in a temporary increase of noise in the project vicinity during construction of the proposed project. Local people, businesses, and fauna in the vicinity of the project area will also be temporarily impacted due to construction noise. Impacts would be limited to the periods of active construction. Noise levels will return to pre-project levels once activities are completed. No long-term increase in noise is likely to occur in or around the project area.

#### 8.6 Aesthetics

During construction of the proposed action access to areas inside the road ROW may be temporarily restricted. However, access to the Davis Bayou Coastal Preserve and MSCNWR is not expected to be restricted. No impacts to recreational activities are likely to occur as a result of the proposed action.

#### 8.7 Hazardous, Toxic, and Radioactive Waste

The proposed action includes trenching in roadside ditches, water line placement, and replacement of the original fill material that has been stored on site. These activities will not involve interaction with any of HTRW sites. The proposed action does not appear to be in



the footprint of any of the sites identified in the EDR, nor will material be permanently removed adjacent to them. No impacts related to hazardous waste are likely to occur.

The presence of leaking underground storage tanks, and state solid waste disposal sites that have petroleum contamination, indicates the potential for contaminated groundwater. Contaminated groundwater within 500 feet of construction has the potential to result in contamination of the groundwater and dewatering effluent. This may lead to contamination of the construction works. The permitting, storage, characterization, proper handling, treatment and disposal of groundwater and dewatering effluent are addressed in the design.

## 8.8 Air Quality

There would be minor, short-term effects on air quality near the construction equipment due to fuel combustion and the resulting engine exhausts. These exhaust emissions are insignificant considering prevailing breezes and when compared to existing fumes generated from other vehicles using the project area. Conditions would return to normal once project activities have ceased. Furthermore, Jackson County is in attainment with the NAAQS parameters and the proposed action would not affect the attainment status of the project area or region.

The project area is in attainment with the NAAQS parameters. The proposed action would not affect the attainment status of the project area or region. A State Implementation Plan conformity determination (42 U.S. Code 70569(c)) is not required since the project area is in attainment for all criteria pollutants.

## 8.9 Economic Activity

There would be minor, short-term effects on traffic during construction of the proposed action. Traffic congestion due to intermittent lane closures during construction is expected; however, no impacts to economic activity are likely to occur.

## 8.10 Land Use

The proposed action would increase water capacity and may attract additional customers, including ones that would require community commercial zoning. Future land use plans reflect this potential rezoning. No impacts to land use are likely to occur.

# 9. **ADDITIONAL CONSIDERATIONS**

## 9.1 Coastal Zone Consistency

Coastal Zone Consistency under Section 307 of the Coastal Zone Management Act has been requested from the Mississippi Department of Marine Resources for the proposed action. USACE, Mobile District determined the proposed action to be consistent with the Mississippi Coastal Program to the maximum extent practicable.

## 9.2 Protection of Children

Executive Order 13045, The Protection of Children from Environmental Health Risks and Safety Risks, was issued April 23, 1997. Executive Order 13045 applies to significant regulatory actions that concern an environmental health or safety risk that could disproportionately adversely affect children.

Environmental health or safety risks refer to risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest. The proposed action would not impact the health and safety of children. Barriers, site workman, and other measures would be implemented to provide protection to non-project workers.

## 9.3 Environmental Justice

The Executive Order 12898, Federal Actions to Address environmental Justice in Minority and Low-Income Populations (February 11, 1994), requires that Federal agencies conduct their programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin. The proposed project is not designed to create a benefit for any group or individuals.

The project increases available water supply in Ocean Springs and Gulf Park Estates, Mississippi. Ocean Springs has a population that is approximately 78% White non-Hispanic, 6% Hispanic, 7% Black, 3% Asian, Hawaiian or Pacific Islander, with the remainder identifying as other or two or more races. Gulf Park Estates has a population that is approximately 74% White non-Hispanic, 7% Hispanic, 10% Black, 3% Asian, Hawaiian or Pacific Islander, with the remainder identifying as other or two or more races. Median household income in Ocean Springs is approximately \$63,653. In Gulf Park Estates it is approximately \$53,879. This compares to a median household income of approximately \$48,716 in Mississippi as a whole (U.S. Census Bureau, 2021; U.S. Census Bureau, 2021). The proposed action does not create disproportionately high or adverse human health or environmental impacts on any low-income populations of the surrounding area. Review and evaluation of the proposed project have not disclosed the existence of identifiable minority or low-income communities that will be adversely affected by the proposed project.

## 9.4 Rivers and Harbors Act of 1899

The Section 10 Rivers and Harbors Act of 1899 states that any work in, over or under navigable waters of the United States, or which affects the course, location, condition, or capacity of such waters must be considered to proceed.

The project will place the water line through existing utility bundles and/or the use of horizontal directional drilling. Drilling will be used to transit the Bayous by placing the water

line at a depth with no impediment to navigable waters of the maintenance thereof. Therefore, the proposed work will have no impacts to navigation of the channel.

## **10. CUMULATIVE IMPACTS**

The proposed action covers a negligible portion of Jackson County and will result in approximately one and a half years of construction activities. The proposed action will have an interval of approximately fifty years based on the estimated project lifespan. The proposed action will likely result in temporary impacts during construction. Environmental laws and commitments would be adhered to during operations and no long-term impacts are likely.

This action would be the final phase in JCUA's facilities update. No future expansions are expected at this time. Routine maintenance including trash removal and grass mowing is expected to be ongoing. The only other projects likely to occur in the footprint of the proposed action are similar utility projects. These include the maintenance, decommissioning, and installation of utility pipelines. The impacts from these projects would be similar to those of the proposed action. These projects would not occur coincidentally with the proposed action. It is highly unlikely that they would occur immediately consecutively. If they did, it would simply extend the proposed actions temporary impacts by the length of additional construction.

Therefore, the effects from the proposed action are not expected to result in significant cumulative adverse impacts on biological resources, when considered with past, present, or reasonably foreseeable future actions.

## **11. COORDINATION**

This EA will be made available to Federal, state, local agencies, and interested persons for a 30-day public and agency review period. Any comments on the action will be addressed in the final EA.

## **12. CONCLUSION**

The proposed action is expected to result in short term, minor adverse impacts to the environment that will be managed through the implementation of best management practices. Mitigation actions are not required for this proposed action. Based upon these disclosed impacts, an Environmental Impact Statement is not required as the project would not have any significant adverse impact on the quality of the environment. Following the comment period, a Finding of No Significant Impacts will be signed.

### **13. LIST OF PREPARERS**

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