

NORTH RAIL CONNECTOR

ENVIRONMENTAL ASSESSMENT

October 2021

North Rail Connector Project

Environmental Assessment

PREPARED BY:

Federal Railroad Administration (FRA)

Pursuant to:

National Environmental Policy Act (42 U.S.C. § 4321 et seq.), and implementing regulations (40 CFR Parts 1500-1508), 23 CFR Part 771; 23 U.S.C. § 139; Section 4(f) of the United States Department of Transportation Act (49 U.S.C. § 303) and implementing regulations (23 CFR Part 774); National Historic Preservation Act (54 U.S.C. § 306101 et seq.) and implementing regulations (36 CFR Part 800); Clean Air Act as amended (42 U.S.C. § 7401 et seq.) and implementing regulations (40 CFR Parts 51 and 93); the Endangered Species Act of 1973 (16 U.S.C. § 1531-1544) and implementing regulations (50 CFR Part 402); the Clean Water Act (33 U.S.C. § 1251-1387) and implementing regulations (33 CFR Parts 320 to 324 and 40 CFR Part 230); and Magnuson-Stevens Fishery Conservation and Management Act (MSA) Public Law 94-265 as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479) and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. § 4601).

APPROVED:

10/20/2021

DATE

MARLYS A
OSTERHUES

Digitally signed by MARLYS A
OSTERHUES
Date: 2021.10.20 16:13:26 -04'00'

Marlys Osterhues
Chief
Environment and Project Engineering Division
Federal Railroad Administration

The following person may be contacted for information on the Environmental Assessment:

AMANDA MURPHY

Environmental Protection Specialist
Environment and Project Engineering Division
Office of Infrastructure Investment
Federal Railroad Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590
Amanda.murphy2@dot.gov

***North Rail Connector Project
Environmental Assessment***

ABSTRACT

The United States Department of Transportation's (USDOT) Federal Railroad Administration (FRA) in cooperation with the Jackson County Port Authority (JCPA) prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) to evaluate the potential environmental impacts for the proposed North Rail Connector Project (Project), which would construct a rail line to connect an existing rail owned by Mississippi Export Railroad (MSE) that crosses over the Escatawpa River in Moss Point, Mississippi to existing JCPA owned rail line that crosses through the Moss Point Industrial and Technology Complex (MPITC) and provides access to the Port of Pascagoula Bayou Casotte Harbor.

FRA is administering Fiscal Year 2018 funding for the Project under Consolidated Rail Infrastructure and Safety Improvement (CRISI) grant program and is the lead federal agency under NEPA. The U.S. Army Corps of Engineers (USACE) is a cooperating agency for this EA, due to their role in Project and the need for a Clean Water Act (CWA) Section 404 permit for the proposed Project. The Southern Rail Commission (SRC) is the recipient of the CRISI grant funding, JCPA is the Project Sponsor and rail owner, and MSE is the railroad operator. JCPA is conducting engineering design and acting in coordination with SRC and FRA. JCPA will be responsible for obtaining necessary permits, construction, and any mitigation requirements. MSE, as operator, will acquire right-of-way without using federal funds, and will be responsible for maintenance activities. The new rail will be granted to MSE after 1,000 rail cars are exchanged across the North Rail Connector.

The purpose of the proposed Project is to provide additional railroad capacity and connectivity between existing infrastructure to support the growing needs of the Port of Pascagoula, Bayou Casotte Harbor. The proposed Project is needed to remove operational conflicts between railroads, reduce congestion, and accommodate the proposed restoration of passenger rail service.

The proposed Project is located in Section 19, Township 7 South, and Range 5 West of Jackson County, MS. The anticipated improvements consist of construction of approximately 2,852 feet of elevated rail and 807 feet of rail constructed on fill or existing uplands for a total length of 3,659 feet. There would be approximately 39,261 square feet (0.9 acres) that will be filled at the pile abutments for the elevated rail and in an area of estuarine wetland which will require 2,649 cubic yards of fill. The elevated rail and rail on fill would be constructed in new right of way that is being acquired with private funds. In addition, to support the Project, a staging area would be established within the MPITC in an area that was recently used as a staging area. The staging area would be approximately 1 acre in size. Work site access locations would be from existing rail or from existing access points. The estimated timeframe for construction is approximately 12-24 months, once JCPA obtains necessary permits and other approvals.

This EA evaluates and assesses the environmental impacts of the proposed Project. This EA examines a Build Alternative and a No Build Alternative. FRA has selected the Build Alternative as the Preferred Alternative.

The EA is prepared pursuant to: NEPA (42 U.S.C. § 4321 et seq.), and implementing regulations (40 CFR Parts 1500-1508), 23 CFR § 771; 23 U.S.C. § 139; Section 4(f) of the United States Department of Transportation Act (49 USC §303) and implementing regulations (23 CFR Part 774); National Historic Preservation Act (54 USC §306101 et seq.) and implementing regulations (36 CFR Part 800); Clean Air Act as amended (42 USC §7401 et seq.) and implementing regulations (40 CFR Parts 51 and 93); the Endangered Species Act of 1973 (16 USC §1531- 1544) and implementing regulations (50 CFR Part 402); the Clean Water Act (33 USC §1251-1387) and implementing regulations (33 CFR Parts 320 to 324 and 40 CFR Part 230 and the Magnuson-Stevens Fishery Conservation and Management Act Public Law 94-265 as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479) and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. § 4601).

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LIST OF ACRONYMS AND ABBREVIATIONS

Notation	Definition
µg/m ³	micrograms per cubic meter
ABRT	Alabama Red-Bellied Turtle
APE	Area of Potential Effect
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CAN	Choctaw Nation of Oklahoma
CO	carbon monoxide
CRISI	Consolidated Rail Infrastructure and Safety Improvement
CWA	Clean Water Act
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
DMR	Department of Marine Resources
EA	Environmental Assessment
EFH	Essential Fish Habitat
EJ	Environmental Justice
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	geographic information system
IPaC	Information for Planning and Consultation
JCPA	Jackson County Port Authority
LOD	Limit of Disturbance
MBCI	Mississippi Band of Choctaw Indians
MDAH	Mississippi Department of Archives and History

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MDEQ	Mississippi Department of Environmental Quality
MPITC	Moss Point Industrial and Technology Complex
MSA	Magnuson – Stevens Fishery and Conservation Management Act
MSE	Mississippi Export Railroad
MSRP	Mississippi State Rail Plan
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWPR	Navigable Waters Protection Rule
O ₃	ozone
Pb	lead
PM	Particulate Matter
PRMP	Permittee Responsible Mitigation Plan
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Way
SHPO	State Historic Preservation Officer
SRC	Southern Rail Commission
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Services

1.0 PURPOSE AND NEED

1.1 INTRODUCTION

The United States Department of Transportation's (USDOT) Federal Railroad Administration (FRA) in cooperation with the Jackson County Port Authority (JCPA) prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) to evaluate the potential environmental impacts for the proposed North Rail Connector Project (Project). FRA is administering Fiscal Year 2018 funding for the Project under Consolidated Rail Infrastructure and Safety Improvement grant program and is the lead federal agency under NEPA. The U.S. Army Corps of Engineers (USACE) is a cooperating agency for this EA, because they intend to issue a Clean Water Act (CWA) Section 404 permit for the proposed Project. The Southern Rail Commission (SRC) is the recipient of the CRISI grant funding. The Jackson County Port Authority (JCPA) is the Project Sponsor and rail owner, and MSE is the railroad operator. JCPA is conducting engineering design and acting in coordination with SRC and FRA. JCPA will be responsible for obtaining necessary permits, construction, and any mitigation requirements. MSE, as operator, will acquire right-of-way without using federal funds and be responsible for maintenance activities. The new rail will be granted to MSE after 1,000 rail cars are exchanged across the North Rail Connector.

Planning efforts began in 2012 when JCPA received a TIGER grant for rail improvements from Bayou Casotte to the MPITC. Project location and design were evaluated but funding was not available at that time. JCPA continued future planning for the North Rail Connector and worked with the State legislature to obtain funding for the proposed Project. In 2017, JCPA obtained a RESTORE grant for planning assistance for the North Rail Connector. Rail design and permitting were included in the RESTORE scope of work and completed in June 2020.

The Project would construct a rail line to connect an existing rail owned by Mississippi Export Railroad (MSE) to rail that is owned by JCPA. The MSE line crosses over the Escatawpa River in Moss Point, Mississippi and the JCPA owned rail line crosses through the Moss Point Industrial and Technology Complex (MPITC) and provides access to the Port of Pascagoula, Bayou Casotte Harbor. The proposed Project would be approximately 3,659 linear feet with 2,852 feet of elevated rail and 807 feet of non-elevated rail constructed on an area of marsh wetlands that will be filled and an area of existing uplands. An existing grade crossing on Orange Grove Road would be relocated approximately 475 feet to the west to allow for the curve needed to accommodate the train lengths and speed. The existing MSE rail at the west end (just south of the Escatawpa River) would need to be adjusted to allow insertion of a turn out to join with the new elevated rail line. For construction, a staging area would be established within the MPITC in an area that was recently used for the same purpose. The staging area would be approximately 1 acre in size.

The location of the proposed Project would be in Section 19, Township 7 South, and Range 5 West of Jackson County, MS. The approximate center point of the proposed rail is at 30.415546 degrees latitude and -88.514452 degrees longitude. The new rail resulting from the Project would extend from mile post 2.89 (30.251207/-88.310005) on the north and extend to mile post 2.05 (30.413308/-88.508269) on the east where it would join existing rail that runs to the Kreole Interchange located within the MPITC.

The Project Area is located mostly within undeveloped marsh and wooded uplands. The Project Area is bordered on the north by the tidal marsh that borders the Escatawpa River; on the west by tidal marsh followed by the existing MSE rail line and the Highway 63 high-rise bridge; on the south by wooded uplands and residential properties along Orange Grove Road/Elder Street; and on the east by wooded uplands. The residential area in general was developed when the former International Paper Mill (now the MPITC) was in operation from the early 1900's until approximately 2001. There is one residence that would be approximately

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175 feet south of the new rail (there is existing rail greater than approximately 600 feet south of this property). Six other residences would be approximately 100-150 feet south of the new rail, which is further away than the existing rail. The existing rail would be abandoned and relocated to the north side of Orange Grove Road within the proposed project footprint. There are no sidewalks along the Orange Grove Road and it is not a corridor to commercial development. There is additional residential development between 200 and 1000 feet of the proposed rail on the south side. These residences consist of rental properties that are duplex apartments and single-family residences. All of the residential structures in the area were constructed in the 1950's and 1960's. There is no commercial development within 1000 feet. There is one church approximately 500 feet from the southeast end of the existing and proposed new rail. There is an electric substation located approximately 500 feet south of the proposed new rail alignment.

The North Rail Connector would move the current interchange of MSE and CSX (the Pascagoula Interchange) from the western portion of CSX's main line in Pascagoula (between Market Street and Pascagoula Street) to the north near the new interchange yard (the Kreole Interchange) located within the MPITC. The Project leverages improvements completed as part of a TIGER 2013 Project for the Port of Pascagoula to allow trains to access MSE's railroad more effectively and ease congestion on the CSX main line for both freight and future passenger rail traffic.

1.2 PURPOSE AND NEED

The purpose of the proposed Project is to provide additional railroad capacity and connectivity between existing infrastructure to support the growing needs of the Port of Pascagoula, Bayou Casotte Harbor. Currently, freight trains that travel from the north on the MSE line must pass through downtown Moss Point and Pascagoula to the Pascagoula Interchange to join CSX rail. This operation regularly blocks vehicular traffic and creates delays at four major roadway intersections. Also, the geometry of the curve between the existing MSE line that joins with the existing rail line that enters into the MPITC is too tight to allow trains that may have up to 60 cars to travel through. The proposed Project is needed to remove operational conflicts between railroads, reduce congestion, and accommodate the proposed restoration of passenger rail service.

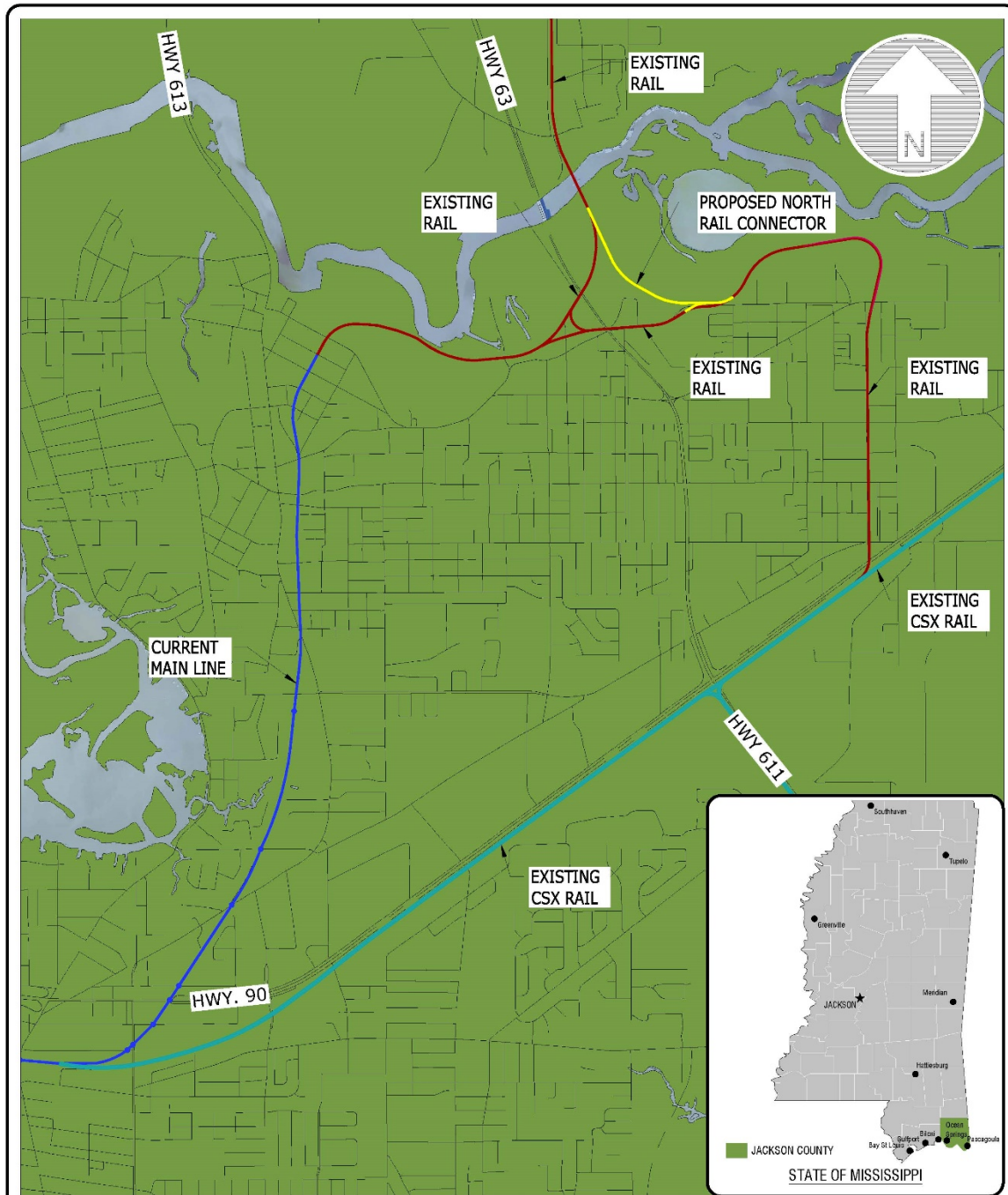
The need for the proposed Project is supported by the following goals:

1. Achieve a more streamlined and seamless interchange of operations between MSE and CSX;
2. Remove freight operations from CSX's rights-of-way (ROW) along its main line that could aid in reducing congestion and accommodating other freight operations;
3. Reduce potential conflicts with the proposed, restored intercity passenger rail service from New Orleans, LA to Mobile, AL; and,
4. Allow MSE to operate longer trains that are pulled by six-axle locomotives as the current track has a tight curve that is hard for larger trains to navigate.

The current main line and the proposed Project are shown on Figure 1.1.

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Figure 1.1



**FIGURE 1-1
NORTH RAIL CONNECTOR
CURRENT MAIN LINE & PROPOSED
NRC**

CE **COMPTON ENGINEERING, INC.**
Engineering, Surveying, and Environmental Services
1706 Convent Avenue
Pascagoula, Mississippi 39367
Phone: (228) 752-1979 Fax: (228) 759-9079
E-mail: compton@comptonengineering.com

2.0 ALTERNATIVES

2.1 INTRODUCTION

This section reviews the alternatives development process and describes both the No Action Alternative and the Build Alternative. The Build Alternative is the Preferred Alternative. Council on Environmental Quality (CEQ) regulations for NEPA define a reasonable alternative as those that are technically and economically feasible, meet the purpose and need for the proposed action, and, where applicable, meet the goals of the applicant. While the No Build Alternative does not meet the purpose and need of the Project, it is considered in this EA as a requirement of NEPA and to serve as a baseline for which to compare the impacts of the Build Alternative.

2.1.1 Alternatives Considered But Removed From Further Consideration

Several alternatives were considered and were determined to not meet the purpose and need of the proposed Project, or could not be reasonably constructed. These alternatives considered the rail location, which would determine the length of rail required and various construction methods and are shown on Figure 3 in Appendix A. All alternatives considered were located within a 100-year floodplain. These alternatives included:

- Rail on fill through 4,800 feet of marsh wetlands – This alignment was permitted by USACE), and the Mississippi Department of Marine Resources (DMR), received water quality certification from the Mississippi Department of Environmental Quality (MDEQ) and concurrence from US Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration/ National Marine Fisheries Service (NOAA/NMFS) and Mississippi Department of Archives and History (MDAH). This alignment crossed over marsh, freshwater forest and uplands and included approximately 3,576 linear feet through marsh and through 1,115 feet of forested wetlands. The rail would cross over 107 feet of uplands. This alignment was proposed to be constructed by filling the alignment from the south end working towards the north and using the previously filled area to access further along the alignment, so the areas outside of the fill area would not be impacted. Silt fence would be placed along the Project footprint to prevent fill from moving outside of the Project area. This alignment would impact 3.73 acres of marsh and 1.16 acres of freshwater forested wetlands for a total of approximately 4.89 acres. Permittee responsible mitigation was required and JCPA would be required to create a similar amount of tidal marsh to compensate for the impacts. A public hearing sponsored by DMR was held in January 2020 for this alignment. No comments were received in response to the public hearing.

This alternative construction method and alignment was permitted, however, additional geotechnical work performed on the previously permitted alignment Project footprint indicated that subsurface conditions were not suitable for construction on fill. In order to meet the geotechnical requirements, there would need to be two layers of fill on a footprint twice as wide as initially designed. Subsidence and compaction could cause unacceptable maintenance issues with the rail constructed on fill. This drove up the estimated costs to more than other construction methods and alignments. The initial estimated construction cost was approximately \$15 million, and the revised construction cost estimate was approximately \$33 million. This alignment and construction method did meet the proposed Project's purpose and need. However, due to the environmental and human risks inherent in the potential for future subsidence, and high estimated costs, this alternative was not reasonable.

- Using existing rail line – JCPA considered using the existing MSE rail line that crosses under Highway 63 and joins the main line at the MSE rail yard on the west side of Highway 63, however, this route includes a tight curve that would not be safe for unit trains (trains that are 50-60 cars long) to travel. This section of rail also is flooded on a frequent basis. Use of this section of rail has been discontinued due to

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safety considerations. Trains are not permitted to travel on a rail that is under water. The planned rail traffic will need to travel at approximately 20-25 miles per hour in order to make rail use economically advantageous. This alternative does not meet the proposed Project's purpose and need. For this reason, this alternative is not reasonable.

- Alternative alignments that avoided marsh – Two alternate alignments (2a and 2b, seen on Figure 3 in Appendix A) were considered that established an acceptable radius that would allow the trains to maintain the optimal speed. These alignments required the rail to be added south of the existing MSE rail line and impacted several single-family residential properties. In addition, these alignments would pass under a portion of the Highway 63 bridge which would not provide enough vertical clearance for the trains to pass underneath. An acceptable vertical clearance for a main line rail is 22 feet. The two alignments considered only provided 21'7" and 20'7" of clearance. This alternative does not meet the proposed Project's purpose and need and is infeasible due to the engineering constraints. For these reasons, this alternative is not reasonable.
- An alternative construction method – An alternative construction method utilizing sheet pile was considered. This would involve driving sheet pile along the layout, filling in between the sheet pile and constructing the rail line on top of the fill. This allows a narrower footprint; however, it is significantly more expensive than filling and involves additional heavy equipment to drive the sheet piles that would damage additional wetlands outside of the rail footprint and does not eliminate the potential for subsidence. The estimated permanent impact is approximately 1.6 acres with an additional 1.6 acres of temporary impact to marsh that would need to be restored after construction. This alternative would meet the proposed Project's purpose and need, but due to the high estimated costs, damage to wetlands outside of the proposed Project footprint, and the potential for subsidence, this alternative is not reasonable.
- Construction of elevated rail in permitted footprint of approximately 4,800 linear feet – Construction of a combination of elevated rail and construction on fill was considered in the permitted alignment. This alternative would reduce the amount of fill (approximately 2.75 acres) discharged into the alignment but construction costs for this length of elevated rail were estimated at approximately \$33 million (more than double the original estimate of \$15 million). In addition, the method for building an elevated railroad at this location could require construction from barges or construction of a temporary access road adjacent to the railroad alignment resulting in additional destruction of the wetland habitat. The area was previously impacted by construction of power lines that cross the area and continues to be impacted by power line maintenance activities and it does not appear that the marsh vegetation has recovered. This alternative would meet the proposed Project's purpose and need, but based on the high estimated costs, required construction methods and destruction of wetland habitat, this alternative is not reasonable.

2.2 NO BUILD ALTERNATIVE

Under the No Build Alternative, a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC would not be constructed. The connectivity and capacity of the line would remain unchanged. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula Interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area.

2.3 BUILD ALTERNATIVE

The Build Alternative layout is shown on Figure 2.1. A detailed Project overview map and Project detail sheets are included in Appendix A, Project Overview Map and Sheets 2.0-2.3. The proposed Project would begin at mile post 2.89 south of the Escatawpa River swing bridge and end at mile post 2.05 where it ties into existing rail that provides access to the MPITC. The new single-track rail would be constructed at the same elevation as the existing rail, however, it will be constructed on pilings instead of on fill. Construction would be from existing rail in order to avoid impacts to the marsh outside of the proposed footprint. The rail bed would be 15 feet wide and the elevation would be approximately 5 feet above the mean high tide. New right of way would be established for the portion of the rail that crosses over marsh. The rail would cross over some existing undeveloped private property and MSE is in the process of obtaining right of way through these parcels. MSE provided JCPA their Acquisition and Relocation Policies that are used for obtaining the right of way. These policies were adopted by the Board of MSE railroad and implement the procedures defined in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. § 4601).

The proposed Build Alternative would cross over approximately 3,265 feet of marsh wetlands and 394 feet of uplands. This distance over the wetlands would allow use of elevated rail. This alternative includes 2,852 feet of elevated rail over marsh, approximately 413 feet of rail on fill through marsh and 394 feet of new or modified rail on uplands. An existing road crossing over Orange Grove Road would be relocated approximately 475 feet to the west to provide a curve that will accommodate longer trains and faster speeds. This alternative would impact approximately 0.90 acres of wetlands from fill at the elevated rail pilings and abutments and through the 413 feet of marsh. Mitigation would be required, and a draft Permittee Responsible Mitigation Plan has been prepared and submitted to NMFS, USACE and DMR for review and approval. The plan includes creation of approximately 1.0 acres of tidal marsh. Engineers estimates to construct this alternative layout indicate that the cost would be approximately \$15 million.

Permits required for the Project include Section 404 from the USACE for impacts to marsh wetlands, Coastal Zone Consistency from the DMR, and Section 401 Water Quality Certification from the MDEQ. Project advertisement and bidding would begin once all permits are received which is anticipated to be late 2021 to early 2022. Construction is anticipated to last approximately one year.

Figure 2.1

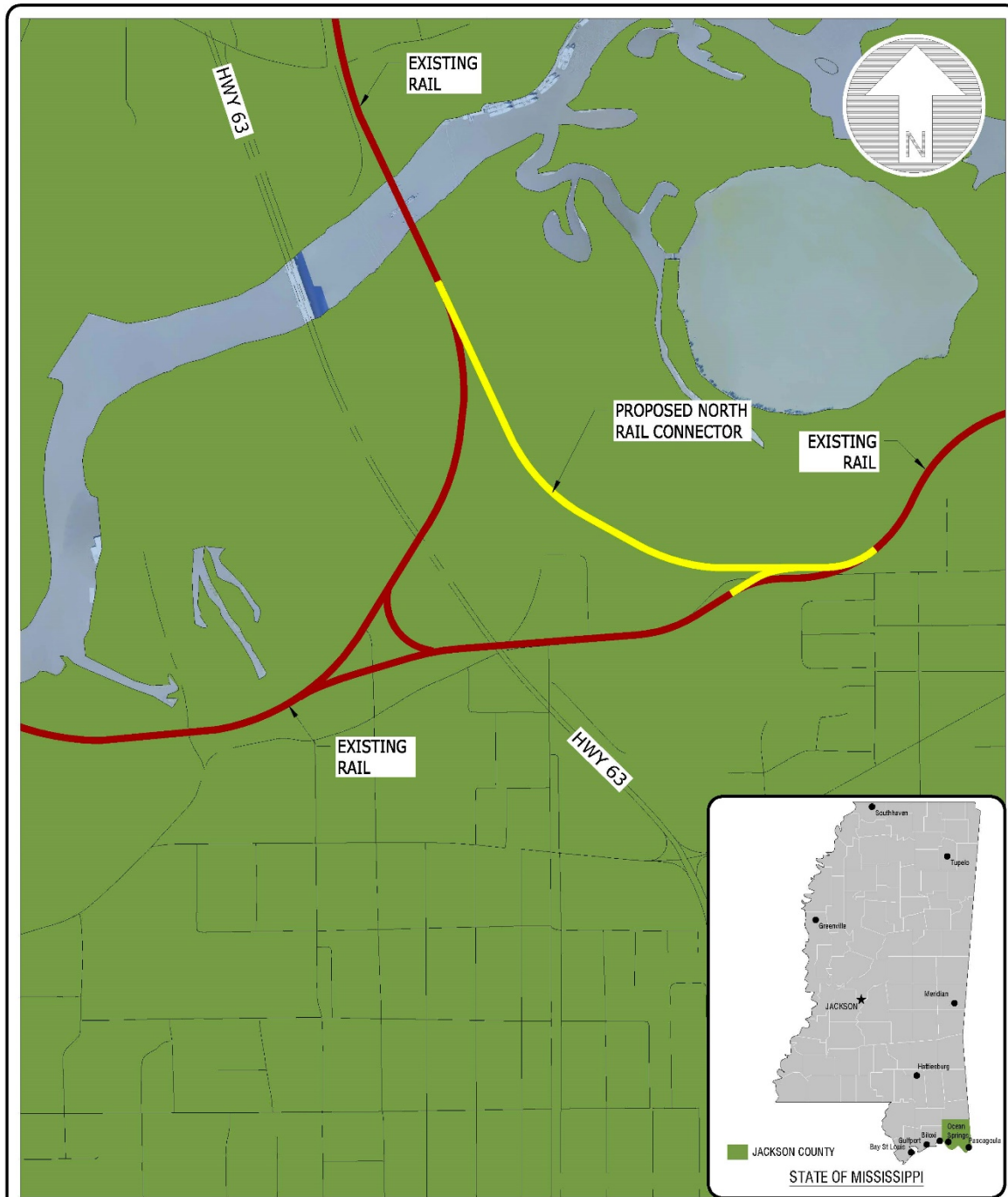


FIGURE 2-1
PROPOSED NORTH RAIL CONNECTOR



COMPTON ENGINEERING, INC.
Engineering, Surveying, and Environmental Services
1706 Convent Avenue
Pascagoula, Mississippi 39367
Phone: (228) 762-9970 Fax: (228) 769-9079
E-mail: compton@comptonengineering.com

3.0 AFFECTED ENVIRONMENT

The EA is prepared pursuant to: NEPA (42 U.S.C. § 4321 et seq.), and implementing regulations (40 CFR Parts 1500-1508), 23 CFR § 771; 23 U.S.C. § 139; Section 4(f) of the United States Department of Transportation Act (49 USC §303) and implementing regulations (23 CFR Part 774); National Historic Preservation Act (54 USC §306101 et seq.) and implementing regulations (36 CFR Part 800); Clean Air Act as amended (42 USC §7401 et seq.) and implementing regulations (40 CFR Parts 51 and 93); the Endangered Species Act of 1973 (16 USC §1531-1544) and implementing regulations (50 CFR Part 402); the Clean Water Act (33 USC §1251-1387) and implementing regulations (33 CFR Parts 320 to 324 and 40 CFR Part 230)); and the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Public Law 94-265 as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479).

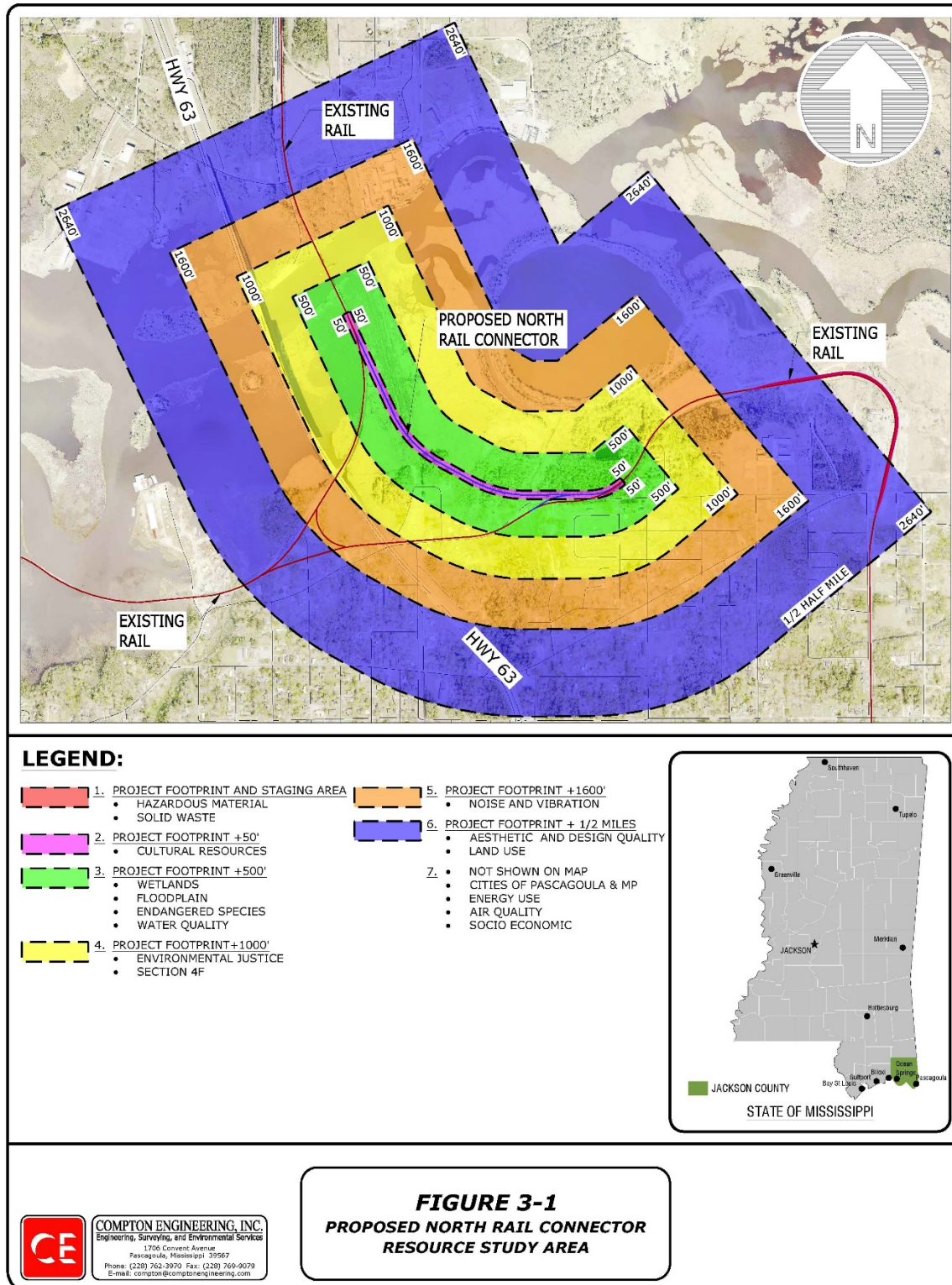
Each resource with a potential to be affected, either temporarily during construction or permanently as a result of operation of the completed Project, is discussed in the sections below. This section describes the current environment for each resource potentially affected by the Project and presents the underlying laws, Executive Orders, and methodologies for assessing Project impacts. The limits of disturbance for the proposed Project and the associated construction staging area are collectively referred to as the Project Area. Study Areas vary and were determined by resource. The Study Area for each resource is shown on Figures 3.1. Discussion of potential impacts for each resource are included in Section 4.0, Environmental Consequences.

The following resources are not present within the Study Area or would not be impacted by construction or operation of the Project: recreational opportunities. Therefore, this resource is not discussed further in this document. Effects to public health are discussed in several of the resource areas listed below. Effects to transportation are discussed in the socioeconomic environment section. The following resources were evaluated in this Environmental Assessment:

- Air Quality
- Water Quality
- Noise and Vibration
- Wetland Areas
- Floodplains
- Endangered Species
- Use of Energy Resources
- Aesthetic and Design Quality
- Socioeconomic Environment
- Environmental Justice
- Hazardous Materials
- Cultural Resources
- Section 4(f) Properties
- Solid waste disposal

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Figure 3.1 Resource Study Areas



3.1 AIR QUALITY

The Clean Air Act (CAA) is the statute regulating air quality in the United States, which requires the United States Environmental Protection Agency (EPA) to set the National Ambient Air Quality Standards (NAAQS), designate areas that are not in attainment of the NAAQS, and subsequently approve state plans for achieving those standards. The NAAQS are established for six criteria pollutants including carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), particulate matter (PM; particulate matter sized 10 microns or less [PM₁₀] and particulate matter sized 2.5 microns or less [PM_{2.5}]), and sulfur dioxide (SO₂).

The CAA Amendments of 1990 and the Final Transportation Conformity Rule (40 Code CFR Parts 51 and 93) direct the EPA to implement environmental policies and regulations that ensure acceptable levels of air quality. In addition to the CAA, other major regulations within the Project Area that apply to the potential air quality impacts of transportation Projects include:

- The General Conformity Rule, 40 CFR part 93 subpart B
- 11 Mississippi Administrative Code, Part 2, Chapter 1 Amended May 24, 2018, Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants

Pursuant to CAA requirements, the EPA establishes, enforces, and periodically reviews the NAAQS. The NAAQS are set to safeguard public health and environmental welfare against the detrimental impacts of outdoor air pollution and are defined as primary and/or secondary standards. Primary NAAQS are health-based standards geared toward protecting sensitive or at-risk portions of the population such as asthmatics, children, and the elderly. Secondary NAAQS are welfare oriented and are designed to prevent decreased visibility and damage to animals, vegetation, and physical structures. See Table 3-1, National Ambient Air Quality Standards for information on standards.

Table 3-1 National Ambient Air Quality Standards

NAAQS Table

Pollutant [links to historical tables of NAAQS reviews]	Primary/ Secondary	Averaging Time	Level	Form	
Carbon Monoxide (CO)	primary	8 hours	9 ppm	Not to be exceeded more than once per year	
		1 hour	35 ppm		
Lead (Pb)	primary and secondary	Rolling 3 month average	0.15 µg/m ³ ^(a)	Not to be exceeded	
Nitrogen Dioxide (NO₂)	primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	primary and secondary	1 year	53 ppb ^(a)	Annual Mean	
Ozone (O₃)	primary and secondary	8 hours	0.070 ppm ^(a)	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years	
Particle Pollution (PM)	PM _{2.5}	primary	1 year	12.0 µg/m ³	annual mean, averaged over 3 years
		secondary	1 year	15.0 µg/m ³	annual mean, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
		primary and secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO₂)	primary	1 hour	75 ppb ^(a)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year	

Source: EPA National Ambient Air Quality Standards, (NAAQS) 1990

<https://www.epa.gov/criteria-air-pollutants/naaqs-table>

The EPA designates areas as either meeting (attainment) or not meeting (nonattainment) the NAAQS. An area with measured pollutant concentrations which are lower than the NAAQS is designated as an attainment area, and an area with pollutant concentrations that exceed the NAAQS is designated as a nonattainment area. Once a nonattainment area meets the NAAQS and the additional re-designation requirements in the CAA, the EPA will designate the area as a maintenance area. Ozone nonattainment areas are further classified as extreme, severe, moderate, or marginal. An area is designated as unclassifiable when there is a lack of sufficient data to form the basis of an attainment status determination. The EPA’s area designations are shown in Table 3-2.

Table 3-2 Attainment Classifications and Definitions

Classification	Definition
Attainment	Area is in compliance with the NAAQS.
Unclassified	Area has insufficient data to make determination and is treated as being in attainment.
Maintenance	Area once classified as nonattainment but has since demonstrated attainment of the NAAQS.
Nonattainment	Area is not in compliance with the NAAQS.

Note: Ozone thresholds are for locations inside an Ozone Transport Region (OTR). Source: USEPA, De-Minimis Levels, <http://www.epa.gov/oar/genconform/deminimis.html>.

The CAA requires states to develop a general plan to attain and/or maintain the primary and secondary NAAQS in all areas of the country and to develop a specific plan to attain the standards for each area designated nonattainment for a NAAQS.

The Project Area is located in Jackson County, which is in attainment for all criteria pollutants, pursuant to the Clean Air Act Amendments (CAAA) of 1990 and, therefore, it is not subject to review under the EPA’s General Conformity Rule. Consequently, a development of emissions inventories of criteria pollutants of the Project was not necessary and not performed for General Conformity evaluation purposes. The MDEQ 2020 Air Quality Data Summary is included in Appendix B. Information presented for Jackson County indicates that Jackson County is in attainment.

Diesel combustion also releases air toxins and greenhouse gases (GHGs), pollutants for which many states have established reduction programs. GHG emissions are a result of fossil fuel combustion in vehicles and diesel trains. Greenhouse gases contribute to climate change which is described by the United States Environmental Protection Agency (EPA) as any significant change in the measures of climate lasting for an extended period of time (several decades or longer). The State of Mississippi has not established a GHG reduction program.

The methodology for considering the impact of the Project to air quality uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related emission sources and identify potential impacts from operation of the build alternative. The Study Area for evaluation of air quality impacts includes the Project Build Alternative footprint and a local evaluation to include the nearby residential neighborhood and a regional evaluation to include the cities of Moss Point and Pascagoula in an approximately five mile radius.

No sensitive air quality receptors, such as residences, schools, or parks are located within the proposed Project footprint. Seven residential properties are located within the local Study Area, approximately 200 feet south of the proposed Project. Industrial and commercial developments are located between approximately 1500 and 3000 feet from the Project.

3.2 WATER QUALITY

The Project crosses brackish marsh wetlands south of the Escatawpa River. Waters of the United States are protected from water pollution by the Federal Water Pollution Control Act (as amended by the Clean Water Act of 1972) and/or by state-specific water quality regulations as managed by the Mississippi Department of

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Environmental Quality. Any discharge of stormwater must comply with the states' National Pollutant Discharge Elimination System (NPDES) permit conditions for stormwater discharges from construction activities.

The methodology for considering the impact of the Project to water quality uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related discharges to the Project Area and identify potential impacts from operation of the Build Alternative. This includes evaluation of the waters within the Project footprint and the adjacent estuary within 500 feet that is subject to tidal flow for any limitations on discharges associated with Total Maximum Daily Loads (TMDL) for the water body. The evaluation also identifies any sensitive areas such as wetlands or fish habitat. The MDEQ report "Escatawpa River Phase One Total Maximum Daily Load For Mercury", dated 2000, was reviewed for information on the water quality status for the proposed Project area. A copy of the MDEQ report is included in Appendix C. The Study Area for evaluation of water quality impacts includes the Project footprint and surrounding estuary.

3.3 NOISE AND VIBRATION

Guidance has been developed by the Federal Transit Administration (FTA) for conventional rail noise and vibration impact assessments, and FRA has developed complementary guidance for high-speed rail. FTA transit noise and vibration impact assessment procedures (FTA Manual) are relied on by FRA in evaluating improvements to conventional passenger rail lines and stationary rail facilities and for assessments of horn noise and vibration.

A noise and vibration assessment was conducted in order to assess potential noise and vibration impacts as a result of construction and operation of the Project. The assessment report is attached as Appendix D and presents a Traffic Noise and Vibration Assessment that includes a screening and a general assessment. The methodology for the noise and vibration assessment is included in the attached report and uses a qualitative and quantitative approach to evaluate existing conditions and the changes to the area as a result of implementation of the Build Alternative.

The identification of the Study Area was conducted using the Screening Procedure defined in the FTA Manual. The Study Area for the noise and vibration evaluation was determined to be 1600 feet radius around the rail footprint. The land use surrounding the Project location is classified as Class 2 (i.e., Residential) as per the FTA Manual. In the FTA manual, the Residential Category also encompasses "buildings where people normally sleep", including hotels. As per this definition, the Project Area is classified as residential for the purposes of the noise and vibration analysis. The surrounding land uses were identified based on physical observation of the Project Area as well as information available from the tax assessor geoportal of Jackson County. Based on the results of the screening procedure a General Assessment was conducted to determine direct impacts from the Project. The General Assessment is used to evaluate potentially impacted areas identified in the Study Area by examining the location and estimated severity of noise and vibration direct impacts.

In addition to the Traffic Noise and Vibration Assessment, the CREATE Railroad Noise Model (Harris, Miller, Miller & Hanson Inc, 2006) was used to evaluate the noise impact from the resumption of rail traffic in the residential area south of Orange Grove Road. The model considers inputs such as rail type (passenger vs. freight), speeds, type of track, hours of operation, shielding and distance to a sensitive receptor.

3.4 WETLAND AREAS

Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged and fill material into waters and wetlands of the United States. Activities within waters of each state are also regulated by each state's regulatory body. In Mississippi, the DMR has regulatory authority to permit Projects that impact wetlands and administers the Mississippi Coastal Program (Title 22, Part 23) and the Coastal Wetlands Protection Law (49-21-1).

The methodology for considering the impact of the Project to wetlands uses a quantitative approach to evaluate existing conditions using available data sources for the area, identify construction related discharges to the Project Area and identify potential impacts from operation of the Build Alternative. A project-specific Wetland Delineation Report was used to quantify wetlands in the Project Area (included in Appendix E). By comparing the Project footprint and construction methods with the location of wetlands, the impact on the wetlands was determined.

The Study Area for evaluation of wetland impacts includes the proposed Project footprint and adjacent upland areas within approximately 500 feet that would be used for mitigation purposes.

A wetland delineation was conducted for the Project area in January 2020. Results of the investigation are included in the Wetland Delineation Report attached as Appendix E. Tidal wetlands were identified in the Project footprint. A Section 404 wetland permit is required to construct Project the Build Alternative. Additional coordination with USACE Mobile District, the Mississippi DMR, and the MDEQ is necessary for Project approval. This coordination is ongoing as part of the environmental permitting process prior to construction.

3.5 FLOODPLAINS AND COASTAL ZONE

Executive Order 11988 "Floodplain Management" requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

In accordance with Executive Order 11988 "Floodplain Management" as amended by Executive Order 12148, USDOT Order 5650.2, Title 23, Code of Federal Regulations (23 CFR) Part 635A, and US DOT Order 5650.2 (Floodplain Management and Protection), the Project Area was evaluated for possible impacts to floodplains. Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for Moss Point, Mississippi, portions of the ROW are within mapped 100-year floodplains (see Appendix F).

The methodology for considering the impact of the Project to the floodplain uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related discharges to the Project Area and identify potential impacts from operation of the build alternative. A significant impact to floodplains from a project would be one that meets the definition of a significant encroachment in USDOT Order 5650.2. The evaluation also considers the impacts on natural and beneficial floodplain values, the degree to which the action provides direct or indirect support for development in the floodplain and measures to minimize harm or to restore or preserve the natural and beneficial floodplain values affected by the Project.

The Study Area for evaluation of floodplain impacts includes the Project footprint, the surrounding estuary and nearby upland areas that are adjacent to and within approximately 500 feet of the project footprint. The Project involves construction in areas already impacted from existing railroad tracks and construction of new rail line over undeveloped tidal marsh. The elevation of the rail on pilings would be similar to that on fill which is approximately five feet above mean high tide. Stormwater drainage features on the existing rail will

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be modified to incorporate drainage from the proposed new rail line. The Federal Coastal Zone Management Act (CZMA) of 1972 encourages coastal states to manage development within the states' designated coastal areas, reduce conflicts between coastal developments, and protect resources within the coastal zone. Requirements for federal approval of Coastal Zone Management (CZM) Programs and grant application procedures for development of the state programs are included in 15 CFR Part 923, CZM Program Development and Approval Regulations. The CZMA requires that federal activities within a state's coastal zone be consistent with that state's coastal zone management plan.

The Office of Coastal Resources Management is responsible for implementing the Mississippi Coastal Program, which was mandated by the Legislature in Section 57-15-6 of the Mississippi Code of 1972 and approved by NOAA. Coastal Zone Management is provided by the Mississippi Department of Marine Resources. Programs administered by DMR include Coastal Preserves, Invasive Species, Wetlands Permitting and Beneficial Use.

The methodology for considering the impact of the Project to the coastal zone uses a qualitative and quantitative approach to evaluate existing conditions using available data sources for the area, identify construction related discharges to the Project Area and identify potential impacts from operation of the Build Alternative. The Study Area for evaluation of coastal zone impacts includes the Project footprint and the surrounding estuary. The Project involves construction in areas already impacted from existing railroad tracks and construction of new rail line over undeveloped tidal marsh. A Coastal Use Consistency determination would be required for the proposed Project. Jackson County Port Authority received a permit (DMR 000346) from DMR on September 16, 2021 to construct the project as presented.

3.6 ENDANGERED SPECIES

The methodology for considering the impact of the Project to endangered species and essential fish habitat uses a qualitative and quantitative approach to evaluate existing conditions using available data sources for the area, identify construction related discharges to the Project Area and identify potential impacts from operation of the Build Alternative. Desktop analysis and consultation with federal and state agencies were conducted in order to determine potential suitable habitat and presence of threatened and endangered species and critical habitat within the Project Area. Temporary and permanent impacts were considered. The Study Area for evaluation of impacts to endangered species includes the proposed Project footprint, the surrounding estuary, the proposed mitigation area and nearby upland areas that are within approximately 100 feet of marsh vegetation.

3.6.1 Federally Listed Species

Threatened and endangered species are legally protected by the Endangered Species Act of 1973, as amended (ESA). In accordance with Section 7 of the ESA, the Project Study Area was evaluated for potential occurrences of federally threatened and endangered species. The ESA requires any Federal agency that funds, authorizes, or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species (including plant species) or result in the destruction or adverse modification of designated critical habitats (FEMA 1996).

Desktop analysis via the USFWS Information for Planning and Consultation (IPaC) System lists thirteen federally listed endangered, threatened or candidate species that could potentially be located within the Project Area. These threatened, endangered or candidate species are:

Table 3-3 List of Endangered, Threatened and Candidate Species

Group	Scientific Name	Common Name	Federal Status
Amphibians	Rana sevosa	Dusky gopher frog	Endangered
Birds	Laterallus jamaicensis jamaicensis	Eastern Black Rail	Threatened
Birds	Grus canadensis pulla	Mississippi sandhill crane	Endangered
Birds	Picoides borealis	Red-cockaded woodpecker	Endangered
Ferns and Allies	Isoetes louisianensis	Louisiana quill wort	Endangered
Fishes	Acipenser oxyrinchus desotoi	Gulf sturgeon	Threatened
Fishes	Percina aurora	Pearl darter	Candidate
Mammals	Trichechus manatus	West Indian manatee	Endangered
Mammals	Ursus americanus luteolus	Louisiana black bear	Threatened
Reptiles	Chelonia mydas	Green sea turtle	Endangered
Reptiles	Dermochelys coriacea	Leatherback sea turtle	Endangered
Reptiles	Eretmochelys imbricata	Hawksbill sea turtle	Endangered
Reptiles	Caretta caretta	Loggerhead sea turtle	Threatened
Reptiles	Gopherus polyphemus	Gopher tortoise	Threatened
Reptiles	Graptemys flavimaculata	Yellow-blotched map turtle	Threatened
Reptiles	Lepidochelys kempii	Kemp's Ridley sea turtle	Endangered
Reptiles	Pseudemys alabamensis	Alabama red-bellied turtle	Endangered

Source: United States Department of the Interior, Fish and Wildlife Service, Official Species List, February 15, 2021

Review of the habitat requirements for the above referenced species indicates that with the exception of the Alabama red-bellied turtle, the Project area is not suitable habitat for these threatened and endangered species. The IPaC report is included in Appendix G.

3.6.2 State Listed Species

In Mississippi, protection for state-listed threatened and endangered species is required via the Nongame and Endangered Species Conservation Act (Miss. Code Ann. § 49-5-101 to 49-5-119). The Mississippi Department of Wildlife Fisheries and Parks provides a list of threatened and endangered species that may be present in the state. The State list was compared with the Federal list and no additional state species of concern were identified.

3.6.3 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) Public Law 94-265 as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479) mandates that federal agencies conduct an essential fish habitat (EFH) consultation with National Oceanic and Atmospheric Administration (NOAA) Fisheries on any actions they authorize, fund, or undertake that may adversely affect EFH. An adverse effect is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

The estuarine waters near the Escatawpa Rivers and in the Project Area provide EFH for three species or groups of species. Through consultation with the National Marine Fisheries Service (NMFS)¹, it was determined that EFH surrounding the Project Area is present for coastal red drum (*Sciaenops ocellatus*), brown shrimp (*Farfantepenaeus aztecus*), and white shrimp (*Litopenaeus setiferus*).

3.7 ENERGY USE

Relevant regulations and executive orders include 23 CFR Part 771 Environmental Impact and Related Procedures, Executive Order 12815, Conservation of Petroleum and Natural Gas (44 F.R. 75093), and Executive Order 13990 Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. The proposed Project would be approximately 3,659 linear feet of new rail line that will potentially eliminate the need for approximately 19,600 linear feet (3.7 miles) of existing rail through downtown Moss Point and Pascagoula.

The methodology for considering the impact of the Project to energy use uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related energy resources/uses in the Study Area and identify potential impacts from operation of the build alternative. Temporary and permanent impacts were considered. Data from the USDOT Bureau of Transportation Statistics was used to evaluate potential changes in energy use associated with the Project.

The Study Area for evaluation of impacts to energy use includes the transportation system in the Project Area and throughout Moss Point and Pascagoula. This Study Area was chosen because the Project involves potential reduction of freight traffic and reduction of idling at road crossings by closure of these road crossings.

3.8 AESTHETIC AND DESIGN QUALITY

The Project is located in an area that is characterized partially as undeveloped marsh and partially prior developed rail providing access to an industrial facility. The marsh is already crossed by existing rail and high-power electrical transmission lines. The existing rail is constructed on fill and has been part of the viewshed since the early 1900s. The surrounding area is generally developed with industrial facilities along the Escatawpa River to the north and with residential development to the south. The residential are developed around the location of the former International Paper Company paper mill during the early 1900s. The

¹ National Marine Fisheries Service, March 23, 2021.

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proposed new rail line would be similar in characteristics to the existing rail although a portion would be built on pilings instead of fill. The elevation of the rail on pilings would be similar to that on fill which is approximately five feet above mean high tide.

The methodology for considering the impact of the Project to aesthetics and design quality uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify the affected population, identify construction related impacts in the Study Area and identify potential impacts from operation of the Build Alternative. Temporary and permanent impacts were considered.

The Study Area for evaluation of impacts to aesthetics and design includes the Project footprint and surrounding areas within approximately ½ mile radius that can be observed from the nearby residential properties, businesses that are along the Escatawpa River, and from boats or roadways. Photographs of the Study Area are included in Appendix H.

3.9 LAND USE AND COMMUNITY FACILITIES

The proposed Project is located within undeveloped brackish marsh and on uplands and is surrounded by similar land uses. There is existing rail line, power lines and elevated highway in the Project Area. An existing single family residential neighborhood is approximately 175 feet south of the eastern portion of the Project. Seven homes are separated from the Project footprint by Orange Grove Road and wooded vegetation. The Project is located within the city limits of Moss Point, Mississippi and is zoned Heavy Industrial within the Project Area.

The methodology for considering the impact of the Project to land use and community facilities uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related impacts in the Study Area and identify potential impacts from operation of the Build Alternative. Temporary and permanent impacts were considered.

The Study Area for evaluation of impacts to land use and community facilities includes the Project footprint and surrounding areas within a ½ mile radius that can be observed from the nearby residential properties, businesses, or roadways. A drawing showing the proximity of the single family home to the Project Area is shown on Figure 4 in Appendix H. Photographs of the Study Area are included in Appendix H.

3.10 SOCIOECONOMIC ENVIRONMENT

This EA considers the Project's Projects potential to impact the socioeconomic environment—including available jobs, community disruption or cohesion, demographic shifts, and the need for and availability of relocation housing, as well as impacts on existing businesses and local government services and revenues.

The Study Area for socioeconomics includes Jackson County and the city of Moss Point, Mississippi. According to Census.gov Quickfacts for the Study Area, the municipalities have a total population of approximately 143,617 residents. The predominant racial groups in the Study Area's municipalities are black/African American and Caucasian, which together comprise approximately 85 percent of the population. The majority of the residents in the Study Area are non-Hispanic in ethnicity (93.2 percent to 97.7 percent non-Hispanic by geographic area). Within Moss Point, the area that would be directly affected by the proposed Project, the race is predominately black/African American (69.8 %) while Caucasians are 25.3% of the population. The percentage of the population in poverty within Moss Point is 22.2% and within Jackson County is 15.1 %. Census data reports from the Census.gov Quickfacts website are included in Appendix I.

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According to the Mississippi State Rail Plan (MSRP) dated 2011, freight rail plays a prominent role in the livability and sustainability of a community. The ability to efficiently transport goods and create access to economic centers is critical to the overall success of a region's economy. Time wasted due to transportation inefficiency and congestion has significant impacts on profitability and the ability to attract new business to a region.

The efficiency of rail freight is especially important in rural areas where agriculture, local industries and communities rely on freight shipping. Many communities have seen a loss or reduction in rail freight services in recent years. Improving, expanding and preserving the rail network can improve the competitive stature of local industries, agriculture and communities. A revitalized rail line can lower shipping costs, provide pricing power for local industries and agriculture vis-à-vis trucking, provide redundancy in the transportation network, and shield local industries and agriculture from predicted increases in the cost of fossil fuel.

The methodology for considering the impact of the Project to the socioeconomic environment uses a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related impacts in the Study Area and identify potential impacts from operation of the Build Alternative. Evaluation of impacts to employment, to freight transportation and other transportation types were considered. Temporary and permanent impacts were also considered.

The Study Area for evaluation of impacts to socioeconomics includes the Project footprint and surrounding residential and commercial areas as well as the cities of Moss Point and Pascagoula.

3.11 ENVIRONMENTAL JUSTICE

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority and Low-Income Populations) requires agencies to analyze the environmental effects of a project on minority and low-income communities and to avoid the disproportionate placement of high and adverse environmental, economic, social, or health impacts from federal actions and policies on minority and low-income populations.

An Environmental Justice (EJ) analysis was completed for the Project and conducted in accordance with Executive Order 12898 and included several steps: defining the Study Area, identifying minority and low-income populations, identifying any high and adverse human health or environmental impacts, and determining whether any high and adverse impacts would disproportionately affect minority or low-income populations.

The Study Area for the EJ analysis includes a 1,000-foot buffer around the Project. Census data was evaluated for all tracts that overlap with the Study Area. Census tracts within the Study Area were examined to determine the presence of minority and low-income populations. A potential EJ area is one that has a minority (non-white and/or Hispanic) population that exceeds 50 percent and/or a low-income (below poverty level) population that exceeds 20 percent of the tract's total population. The City of Moss Point is considered an Environmental Justice Area and the census tract within the Study Area is also considered an EJ area. Census data was obtained from the U.S. Census Bureau Quick Facts website and is included in Appendix I.

The residential area near the proposed new rail line in general was developed when the former International Paper Mill (now the MPITC) was in operation from the early 1900's until approximately 2001. There is one residence that would be approximately 175 feet south of the new rail (no existing rail is within approximately 600 feet of this property) and six residences that would be approximately 100-150 feet south of the new rail. These six residences are approximately 75-125 feet south of existing rail; therefore, the new rail would be further away than existing conditions. The existing rail would be relocated to the north side of Orange Grove Road. There is additional residential development between 200 and 1000 feet of the proposed rail on the south

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side of the rail. These residences consist of rental properties that are duplex apartments and single-family residences. All of the residential structures in the area were constructed in the 1950's and 1960's. There is no commercial development within 1000 feet. There is one church approximately 500 feet from the southeast end of the existing and proposed new rail.

The proposed Project alignment would require obtaining new ROW within seven undeveloped privately owned parcels. These parcels are located within the Study Area for the EJ analysis.² There are no structures located within the areas to be obtained for ROW. There would be no relocations of residential or commercial properties. Drawings showing the parcel and ROW location are included in Appendix I.

3.12 HAZARDOUS MATERIALS

Hazardous materials are substances in quantities or forms that may pose a reasonable risk to health, property, or the environment. Hazardous waste, as defined by the EPA is any waste material “solid, liquid, or gaseous” that because of its quantity, concentration, or physical, chemical or infectious characteristic may cause or significantly contribute to an increase in mortality, serious irreversible illness, or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed. Hazardous wastes can be liquids, solids, gases, or sludges. They can be discarded commercial products, like cleaning fluids or pesticides, or the by-products of manufacturing processes. A 2019 Phase I Environmental Site Assessment (see Appendix J) prepared for the previously permitted alignment (see 2.1.1), included the Project Area in the search radius. No facilities that would potentially use, store, or dispose of hazardous materials in a way that would create a recognized environmental condition were identified within, adjacent to, or within a ½-mile radius of the Project Area. According to ASTM 1527-13, Environmental Site Assessments should only be relied on for six months from the date of preparation. A site-specific Phase I Environmental Site Assessment will be prepared for the Project within 6 months of construction.

The methodology for considering the impact of the Project associated with hazardous materials includes a qualitative approach to evaluate existing conditions using available data sources for the area, identify construction related impacts in the Study Area and identify potential impacts from operation of the Build Alternative. Temporary and permanent impacts were considered.

The Study Area for evaluation of hazardous materials impacts includes the proposed Project footprint and construction staging area.

3.13 CULTURAL RESOURCES

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108) and its implementing regulations (36 CFR Part 800), FRA is required to take into account the effects of the Project on historic properties. USACE designated FRA as lead federal agency for Section 106 purposes, and to streamline and fulfill collective Federal responsibilities under 36 CFR 800.2(a)(2), in a letter dated January 28, 2021 (Appendix K).

A historic property, as defined in the NHPA, is any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP). Eligibility

² The Project Sponsor plans to purchase new right-of-way (ROW) on undeveloped land to support the Project. The ROW purchase will not involve Project funds and is mentioned in this document to provide additional context for the analysis.

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criteria for listing a property in the NRHP are found at 36 CFR Part 60. National Register criteria for evaluation are: The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. have yielded or may be likely to yield information important in prehistory or history.

3.13.1 Section 106 Consultation

FRA initiated Section 106 consultation with the State Historic Preservation Officer (SHPO)³ and Federally recognized tribes (the Mississippi Band of Choctaw Indians [MBCI] and the Choctaw Nation of Oklahoma [CNO]) on April 13, 2021 and provided them a Phase I Cultural Resources Survey. The survey was prepared to identify archaeological or architectural historic properties within the area of potential effect (APE).

The Study Area for cultural resources is known as the APE, which is defined as the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist” (36 CFR Part 800.16). The APE was established based on the nature, size, and scale of the Project. The APE includes consideration for both direct and indirect effects. The archaeological APE is defined at the Project limit of disturbance (LOD) and encompasses one continuous survey area identified as the footprint for the proposed rail layout. In consultation with SHPO, the architectural APE was defined as encompassing a 50-foot buffer around the archaeological APE (See the CRS report, Figure 3.13.1 in Appendix K).

No historic properties were identified in the APE. Copies of consultation letters and the Phase I Cultural Resource Survey are provided in Appendix K.

3.14 SECTION 4(F) PROPERTIES

Section 4(f) of the Department of Transportation Act of 1966 specifies that a transportation Project requiring the use of publicly owned parks, recreation areas, historic sites (publicly or privately owned), wildlife and waterfowl refuges, and many other types of resources can be approved only if there is no feasible and prudent alternate to using that land and if the Project is planned to minimize harm to the property. These types of properties are often referred to as Section 4(f) resources.

The methodology for considering the impact of the Project associated with Section 4(f) properties was to evaluate existing conditions using available data sources for the area (including the results of Section 106 consultation with SHPO), identify construction related impacts in the Study Area and identify potential

³ Mississippi Department of Archives and History (MDAH)

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impacts from operation of the Build Alternative. The Study Area for evaluation of Section 4(f) properties included the proposed Project footprint and properties within a 1000-foot radius of the Project footprint.

There are no publicly owned parks, recreation areas, historic sites (publicly or privately owned), wildlife and waterfowl refuges or other types of publicly owned lands within the Study Area.

3.15 SOLID WASTE DISPOSAL

Solid waste disposal includes the management of solid waste created by the Project and potential impact to solid waste disposal sites. Non-hazardous solid waste is defined in the Resource and Recovery Act (RCRA) Section 4001 of Subtitle D as any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant or air pollution control facility and other discarded materials including solid, liquid, semi-solid, or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations. The State of Mississippi regulates solid waste disposal in 11 Mississippi Administrative Code Part 4, Chapter 1 – Non-hazardous Solid Waste Management Regulations.

The methodology for considering the impact of the Project associated with solid waste disposal was to evaluate existing conditions using available data sources for the area, identify construction related impacts in the Study Area and identify potential impacts from operation of the Build Alternative. The Study Area for evaluation of solid waste impacts associated with the Project included the proposed Project footprint and local and county solid waste disposal facilities.

4.0 ENVIRONMENTAL CONSEQUENCES

This section discusses the impacts from the No Build Alternative and from construction and operation of the Build Alternative for each resource described in Section 3.0, Affected Environment. This chapter also identifies mitigation for the Project’s environmental effects, where appropriate. As Project Sponsor, JCPA is responsible for all mitigation. Sections 4.1 through 4.14 discuss the anticipated impacts for the Build and No Build alternatives.

As defined in CEQ regulations 1508.1(g), effects or impacts means changes to the human environment from the proposed Project that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives. Effects can occur at the same time and place as the proposed Project or may occur later in time or farther removed in distance. Table 4-1 summarizes the anticipated impacts to the affected environment for the Build Alternative.

Table 4-1 Anticipated Impacts to Affected Environment Resources for the Build Alternative

Affected Environment Resources	Anticipated Impacts – Build Alternative
Air Quality	<p>Construction: Minor and temporary impacts due to construction activities.</p> <p>Operational: Long term net benefit due to decrease of vehicle emissions from freight volume transferring from highways to rail system.</p>
Water Quality	<p>Construction: Minor and temporary impacts due to construction activities. Construction discharges are controlled by implementation of a Storm Water Pollution Prevention Plan.</p> <p>Operational: No long term impacts associated with operation of the Project.</p>
Noise and Vibration	<p>Construction: minor and temporary impacts due to construction activities (trucks and heavy equipment operation) may occur. Temporary vibration impacts from pile driving.</p> <p>Operational: Two properties are within the Moderate Impact zone for noise. These properties are in an area where the railroad already exists, so there are no new impacts from the Build Alternative. No properties would be significantly negatively impacted by vibration associated with operation of the Project. No long term impacts to adjacent properties.</p>

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Wetland Areas	<p>Construction: Permanent impact due to approximately 0.90 acres of wetland from filling. Impact is mitigated by creation of 1.0 acres of tidal wetlands.</p> <p>Operational: None</p>
Floodplains	<p>Construction: Fill of 413 linear feet of marsh and would reduce the floodplain function at this location. Filling of approximately 0.90 acres of wetlands would be offset by creation of approximately 1.0 acre of tidal wetlands. This is “in kind” wetland creation and would allow the floodplain function of flood protection to continue.</p> <p>Operational: No reduction in the function of the floodplain due to operation of the Project. With implementation of the Project’s in-kind tidal wetland creation, there would be no significant encroachment on floodplains as defined in US DOT Order 5650.2.</p>
Endangered Species or Wildlife	<p>Construction: Temporary disturbance of the area during construction.</p> <p>Operational: No long term adverse impact. USFWS concurs that filling of wetlands “may effect but is not likely to adversely affect” the Alabama Red-bellied Turtle. With implementation of the PRMP, NMFS concurs the proposed Project would not have an adverse effect on EFH in the area. Project</p>
Use of Energy Resources	<p>Construction: Minor impacts due to construction activities.</p> <p>Operational: Long term beneficial impacts.</p>
Aesthetic and Design Quality Impacts	<p>Construction: Minor and temporary due to the presence of construction equipment.</p> <p>Operational: None</p>
Land Use and Community Facilities	<p>Construction: None</p> <p>Operational: None</p>
Socioeconomic Environment	<p>Construction: Temporary positive impacts to employment and income from construction activity.</p>

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	Operational: Fuel and cost savings related to freight shipping. Long term positive impacts to employment at the Port of Pascagoula and potential tenants.
Environmental Justice	Construction: None Operational: None
Public Safety and Hazardous Materials	Construction: None Operational: None
Cultural Resources	Construction: None Operational: None
Section 4(f) Properties	Construction: None Operational: None
Solid Waste Disposal	Construction: Minor and temporary due to construction waste Operational: None

4.1 AIR QUALITY

4.1.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula Interchange. Disruption to vehicular traffic increases idling time, and therefore associated GHG emissions would remain unchanged. Continued use of the MSE mainline would continue to result in emissions from freight engines. Rail would not be freed up for use for the potential passenger rail operations planned for the area. Increased emissions of criteria pollutants and air toxins would result from the predicted increase in truck traffic related to the transport of freight. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to air quality from construction would occur.

4.1.2 Build Alternative

The Project is located within an attainment area for all air pollutants. The Build Alternative would result in minor and temporary effects to local air quality and GHG emissions due to the various emission sources associated with construction. These construction activities are not anticipated to exceed attainment area thresholds because of the type of equipment and construction methods that would likely be used; therefore, the Project would not have a significant impact on climate change as it is not anticipated to exceed air pollution thresholds.

Pollutant emissions during construction would occur from emissions from on-site diesel equipment, increased truck traffic to and from the construction site, and fugitive dust as a result of vehicle travel on paved/unpaved

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roadways. Most of the work is being constructed within the marsh environment over water and dust emissions will not occur for this portion of the rail construction. The only unpaved area is within the MPITC which is separated from the nearby paved roads and residential properties by a forested strip of land. Therefore, increases in dust emissions during construction would not impact the nearby residential properties and best management practices would be implemented for dust management if needed.

Although the Build Alternative would not cause any major adverse impacts during construction, minor emissions impacts are anticipated from operation of construction equipment, however, compliance with all applicable laws and regulations would reduce pollutant emissions from construction activity. In order to mitigate emissions, construction activities would be performed in accordance with construction level BMPs. Strategies that would be considered during construction include:

- use of dust suppression measures such as a water truck on unpaved areas;
- apply water suppression at least twice a day to all active construction areas to minimize dust;
- tarp all trucks hauling soil, sand, and other loose materials or require that all trucks maintain at least two feet of freeboard;
- use water sweepers to sweep all paved access roads, parking areas and staging areas at construction sites daily, use water sweepers to sweep all streets daily if visible soil material is carried onto adjacent public streets;
- hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more);
- enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.);
- limit traffic speeds on unpaved roads to 15 miles per hour;
- introduce appropriate erosion control measures to reduce sediment runoff to public roadways;
- replant vegetation as quickly as possible to minimize erosion in disturbed areas;
- use alternative fuels for construction equipment;
- when feasible, minimize equipment idling time, and maintain properly tuned equipment

The Build Alternative would generally result in a long-term net benefit to regional air quality by reducing emissions of criteria pollutants and air toxins from truck traffic and idling. The Project would result in improvements to air quality in and around Moss Point and Pascagoula due to removing the existing main line through these cities. Various data sources indicate that freight transport by rail and water vessels generate significantly less environmental impacts and costs than truck transport. Based on the ton-mile, rail and water transportation are significantly more efficient than truck transportation. As reported in the Mississippi State Rail Plan⁴ produced by the Mississippi Department of Transportation (2011), the fine particle matter (PM_{2.5}) impact per million ton-miles of rail and water transport is approximately one-tenth of truck transport (0.0158 and 0.0128 versus 0.1126, respectively). Similarly, the nitrogen oxide (NO₂) emission tons per ton-mile

⁴ Mississippi Department of Transportation, Mississippi State Rail Plan – 2011.

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traveled for rail and water transport are approximately one fifth of truck transport (0.5954 and 0.5171 versus 2.8549, respectively).

Rail traffic through areas of vehicular traffic congestion increases vehicle idling time. An hour of automobile idling burns approximately one-fifth of a gallon of gas and releases nearly 4 pounds of CO₂ into the air⁵. Excessive amounts of CO₂ in the atmosphere can contribute to diminished air quality. Relocation of the main line to a less populated and congested location will reduce congestion and idling time and thereby reduce emissions of CO₂ and NO₂ into the atmosphere. This reduction would also result in reduction of potential impacts to climate change.

Overall, the operation of the proposed Project would not adversely affect air quality at the local or regional level; therefore, the Project would not result in any long-term impacts to climate change. When considered with other improvements, the proposed Project would result in benefits to air quality.

4.2 WATER QUALITY

4.2.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to water quality would occur.

4.2.2 Build Alternative

According to the MDEQ report “Escatawpa River Phase One Total Maximum Daily Load For Mercury”, dated 2000, the Project is located within the Escatawpa River watershed (Hydrologic Unit Code 0317008)⁶. The Escatawpa River is divided into three sub-watersheds with the Project Area located within area 3, the downstream segment. No advisories have been issued for this segment of the Escatawpa River.

Potential impacts to water quality associated with the Project would be related to stormwater runoff. The Build Alternative is not expected to cause an increase in stormwater runoff, generate wastewater, or significantly alter surface or subsurface drainage to the waterbody. No impacts to water quality resulting from stormwater runoff from operation of the Project are anticipated.

The Build Alternative would involve construction over water and construction on uplands. As part of the Section 404 wetland permit for the Project, JCPA applied for a 401 Water Quality Certification. On June 1, 2020, EPA finalized the “Clean Water Act Section 401 Certification Rule” to implement the water quality certification process consistent with the text and structure of the CWA. The final rule establishes procedures that promote consistent implementation of CWA Section 401 and regulatory certainty in the federal licensing and permitting process. In accordance with the 401 Certification Rule, JCPA submitted a pre-filing meeting request to the MDEQ, the Certifying Authority, on November 24, 2020. The pre-filing meeting was held on December 4, 2020. MDEQ requested an updated Stormwater Pollution Prevention Plan (SWPPP) and a Construction Notice of Intent, which JCPA provided to MDEQ on December 14, 2020. The SWPPP includes

⁵ Mississippi Department of Transportation, Mississippi State Rail Plan – 2011.

⁶ MDEQ TMDL Report for Escatawpa River.

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measures to prevent discharge of sediment to the environment. MDEQ provided final Water Quality Certification on March 12, 2021. A copy of the correspondence associated with water quality certification is included in Appendix L.

Stormwater runoff during construction would be managed by using best management practices including silt fence or turbidity curtains. Stormwater management from the upland portion of the Project would be tied into the stormwater management features of the existing rail.

4.3 NOISE AND VIBRATION

4.3.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to noise and vibration would occur.

4.3.2 Build Alternative

A noise and vibration assessment was conducted in order to assess potential noise and vibration impacts as a result of construction and operation of the Project. Construction activities would include pile driving for the elevated rail portion of the Project, and operation of heavy equipment for the entire Project footprint. Operation of the Project would include two trips per day with horn blows required at one crossing. The assessment report, attached as Appendix D, presents a Traffic Noise and Vibration Assessment for the Project. Calculations to evaluate the impacts from pile driving are also included in Appendix D.

Construction Phase

The Project would have moderate, temporary impacts to noise and vibration issues during the construction phase. Pile driving would be required during the construction phase for the elevated portion of the new rail line. Pile driving would take approximately 3 months to complete and would occur during daytime hours on weekdays only. The nearest sensitive noise receptor to the new rail line where pile driving would occur is a residence (4950 Crane Street), approximately 437 feet to the southeast. Using the FTA Manual and referenced in the Manual computer software Roadway Construction Noise Model (RCNM) by the Federal Highway Administration (FHWA), no impacts from pile driving were determined for both noise and vibration calculated at 437 feet from pile driving location. The equivalent sound level (Leq) was calculated at 75 dBA and peak ground vibration (PPV) below 0.05 inches per second (ips). The FTA Manual provides construction noise criteria in Table 7-3 for residential use Leq at 80 dBA (daytime). The FTA Manual Table 7-5 provides the vibration damage criteria with the lowest PPV at 0.12 ips for buildings extremely susceptible to vibration damage. The category of non-engineered timber and masonry buildings are listed at PPV 0.2 ips. The calculated ground motion generated by pile driving at 437 feet are significantly lower than these included in Table 7-5.

Other noise and vibration impacts would result from the operation of heavy equipment and trucks accessing the project area. Construction would occur only in daylight hours and most trucks and heavy equipment would enter the construction area from the east, through the existing MPITC. These construction impacts would be

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temporary. Construction noise would be limited to daytime hours at various locations along the Project corridor. The construction noise impacts would be mitigated as necessary by implementing the following:

- Avoid nighttime construction in residential neighborhoods.
- Locate stationary construction equipment as far as possible from noise sensitive sites. Re-route construction-related truck traffic along roadways that will cause the least disturbance to residents.
- Monitor and maintain equipment to meet noise limits.
- Minimize the use of generators to power equipment.
- Limit use of public address systems.

Operation Phase

There would be no significant long-term noise and vibration impacts from operation of the Project. Operation phase of the Project would allow relocating the MSE rail line out of downtown Pascagoula and Moss Point reduce long-term noise impacts in these areas. Operational noise and vibration would be associated with the transit of one freight train two times per day. The train would generally be travelling from north to south in the morning and from south to north in the afternoon. No night time operation would occur. A portion of the rail would be relocated further away from existing residential structures from approximately 66 feet to approximately 90 feet from the nearest residence (6101 Elder Street). The rail would be moved from approximately 70 feet to approximately 108 feet for a second residence that is close to the project footprint. This would reduce the operational noise and vibration impacts to these residences in the area.

The noise screening procedure described in the FTA manual evaluates impacts associated with operation of the rail line. The procedure identified the screening distance as 1600 feet from the center line of the rail and identified the land use category as Residential. Numerous noise receptors were identified within this screening distance; therefore, a General Assessment was conducted. Using FTA methodology most residential structures were within the No Impact category and two residential structures were identified within the Moderate Impact category with a 2 dB increase above the generic existing noise level. The total noise exposure to these two residences from operation of the North Rail Connector was calculated as 62 dB which is in the range of conversational speech or a household air conditioner. Potential mitigation measures such as construction of a wall were considered. However, since the residential structures have been subject to operation of the existing railroad since they were constructed, and the decibel level is similar to conversational speech or a household air conditioner noise impacts from operation of the Build Alternative is not a significant increase and does not warrant mitigation.

The Screening Procedure for vibration impacts was conducted according to the FTA Manual. The screening distance was determined according to Table 6-8 of the manual which established a screening distance of 200 feet for residential use. Seven receptors were identified within this distance therefore, a general vibration assessment was conducted. The vibration level was determined using the base curves in the FTA manual and application of the relevant adjustments to the estimated level. This resulted in a calculated vibration level (VdB) for the nearby receptors that ranged from 73 to 79.5. The acceptable indoor ground borne vibration levels presented in Table 6-3 of the FTA manual for Category 2 land use is 80 VdB. Therefore, there are no receptors where the acceptable indoor ground-borne vibration levels are exceeded.

The CREATE Railroad Noise Model (Harris Miller Miller & Hanson Inc, 2006) was used to evaluate the horn noise impact from the resumption of rail traffic in the residential area south of Orange Grove Road. The

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model considers inputs such as rail type (passenger vs. freight), speeds, type of track, hours of operation, shielding and distance to a sensitive receptor. Using an average of 2 trains per 8 hour permit (0,25 trains/hour, the, the noise level was estimated at Ldn from all sources being 57 dB, the Leq daytime being 58 dB, and the Leq nighttime being 44 dB. Since these estimated noise levels are less than 65 dB, the noise impact is not significant. A printout of the noise model results is included in Appendix D.

4.4 WETLAND AREAS

4.4.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to wetlands would occur.

4.4.2 Build Alternative

The Build Alternative would cross over 3,265 linear feet of tidal marsh. Elevated rail would cross over approximately 2,852 linear feet of marsh and approximately 413 feet of marsh would be filled for construction. There would be fill at the abutments to the elevated area and sheet pile would be driven at the turnout location at the north end of the proposed Project. This would result in approximately 0.90 acres of permanent fill in the tidal marsh and result in impacts to EFH for various life stages of federally managed species, including red drum, brown shrimp, and white shrimp. The primary categories of EFH affected by Project implementation, are estuarine emergent wetlands, estuarine water column, and estuarine water bottoms.

Construction of the proposed Project would require a permit from the US Army Corps of Engineers (USACE). JCPA prepared and submitted a Joint Notification and Permit Application to the Mississippi DMR and USACE. Project information was submitted to USACE and a permit is anticipated to be issued as soon as this EA is published and a Finding of No Significant Impact (FONSI) is issued (if appropriate). The permit application describes the construction details and environmental impacts which include filling 0.90 acres of wetlands and describes the need for and method of required mitigation.

Mitigation to compensate for the impact by filling 0.90 acres of tidal wetland, would be implemented. There are currently no resources available to allow purchase of mitigation credits for tidal marsh impacts. Therefore, JCPA prepared a Permittee Responsible Mitigation Plan (PRMP) in accordance with USACE guidelines. The mitigation plan involves JCPA creating an appropriate amount of tidal wetlands that will be in-kind to those impacted by fill. A copy of the PRMP was provided to the National Marine Fisheries Service (NMFS) who provided correspondence that they agreed that implementation of the plan would adequately address the impacts to the marsh habitat. NMFS correspondence stated “The NMFS finds the EFH assessment, alternatives analysis, and draft PRMP dated March 2021, provided by FRA includes sufficient information to ensure adverse impacts to EFH would be adequately offset through a PRMP to create approximately 1.0 acre of tidal marsh habitat. With implementation of the PRMP, NMFS concurs the proposed Project would not have an adverse effect on EFH in the area.” Correspondence with NMFS is included in Appendix L.

4.5 FLOODPLAINS AND COASTAL ZONE

4.5.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to the floodplain or the coastal zone would occur.

4.5.2 Build Alternative

Under the Build Alternative, the proposed new rail would be constructed within the 100-year floodplain. A portion of the Project is within the floodway of the Escatawpa River and in Zones AE and Zone X. A copy of the FIRM map is included in Appendix F. Zone AE areas are areas that are within the 100-year flood plain and have a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Zone X areas are outside of the 100-year floodplain.

The Project would not directly affect the natural and beneficial floodplain values, nor would it provide indirect support for additional development in the floodplain. Further, there is no significant encroachment as defined in USDOT Order 56505.2 because there is not a considerable probability of loss of human life, and likely future damage would not be substantial in cost or extent. The conceptual design minimizes impacts to floodplains by placing proposed structures in upland areas and within the existing rights-of-way to the maximum extent possible. All new rail tracks would be on elevated structures. Therefore, adverse impacts to the floodplain for these areas are not anticipated. An area approximately 413 linear feet long would be constructed on fill which would reduce the floodplain functions at this location. However, mitigation by creation of in-kind tidal wetlands replaces the floodplain that would be filled resulting in no loss of function of the floodplain. The rest of the rail would be elevated which would avoid impacts to the floodplain. While any support structures within the wetland area would displace some water, they would not have a substantial effect on flooding. The total amount of impact by fill is approximately 0.90 acres. This impact would be mitigated for by creation of tidal marsh which would replace the function of the floodplain.

JCPA would avoid or minimize adverse impacts to floodplains and riparian zones during construction using best management practices that would be developed in consultation with MDEQ during the permitting phase. Construction activities would not displace water and would therefore not increase flooding. JCPA would coordinate with DMR during the permitting phase to ensure compliance with Mississippi regulations. Correspondence associated with the Coastal Zone is included in Appendix L

4.6 ENDANGERED SPECIES

4.6.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the

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potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to endangered species would occur.

4.6.2 Build Alternative

Threatened and endangered species are federally protected by the Endangered Species Act of 1973, as amended. In Mississippi, protection for state-listed threatened and endangered species is required via the Nongame and Endangered Species Conservation Act (Miss. Code Ann. § 49-5-101 to 49-5-119). The State protected species are the same as the Federally protected species. The Build Alternative would impact approximately 0.90 acres of estuarine wetlands by filling. The fill would be at the abutments to the elevated sections of rail and in an area of marsh located between two uplands. The Project area was identified as potential habitat for the Alabama red-bellied Turtle (ABRT), a federally-listed endangered species. FRA initiated formal consultation with USFWS for the Project on February 23, 2021. The USFWS provided comments in letter dated March 2, 2021 and determined, “the Service concurs with your determination that the proposed Project ‘may affect but is not likely to adversely affect’ the Alabama Red-bellied Turtle. Although there would be minor impacts to foraging habitat associated with bridge pilings and abutments, the effects of the action on this species are expected to be insignificant.” A copy of the correspondence with the USFWS is included in Appendix G and Appendix L.

A portion of the proposed Project would be located within brackish tidal marsh and the area has been designated as Essential Fish Habitat for the migratory pelagic species including the red drum, white shrimp and brown shrimp. During the scoping process, NMFS asked for information concerning the alternatives considered for the Project, an EFH assessment, and a Draft PRMP to offset impacts to the marsh habitat. FRA sent a letter to NMFS on March 10, 2021 providing the alternative analysis, the EFH assessment and the Draft PRMP and requested formal consultation on the potential impacts of the Project on Essential Fish Habitat. NMFS replied in a letter dated March 23, 2021 that “NMFS finds the EFH assessment, alternatives analysis, and draft PRMP dated March 2021, provided by FRA includes sufficient information to ensure adverse impacts to EFH would be adequately offset through a PRMP to create approximately 1.0 acre of tidal marsh habitat. With implementation of the PRMP, NMFS concurs the proposed Project would not have an adverse effect on EFH in the area. At this time, the NMFS is prepared to remove our conservation recommendations for the North Rail Connector Project, unless future modifications are proposed which may result in adverse impacts to EFH.” A copy of the correspondence with the NMFS is provided in Appendix L.

4.7 ENERGY USE

4.7.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no construction or operation-related changes in energy use would occur.

4.7.2 Build Alternative

Energy consumption associated with construction of the Build Alternative would be associated with the use of petroleum and natural gas resources and use of manpower expenditures. These resources are generally non-renewable. Construction materials would consist largely of steel, concrete, ballast rock, and wood. These

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resources are generally readily available and not in short supply; therefore, impacts to energy resources as a result of the construction of Build Alternative would be considered minor.

The Project would allow MSE freight trains to avoid an extra 3.7 miles of transport to reach the Port of Pascagoula Bayou Casotte Harbor, thereby reducing transport-related energy consumption (fuel). This would reduce the energy consumption in the Study Area. In addition, the Project would reduce the need for transportation by truck from northern Jackson County to the Bayou Casotte Harbor in Pascagoula. According to the 2016 Mississippi State Rail Plan Update, freight rail is 11.5 times more energy efficient (on a BTU per ton-mile basis) than trucks. Therefore, there will be beneficial impacts in the form of reductions to energy consumption from the operation of the Project.

4.8 AESTHETIC AND DESIGN QUALITY

4.8.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational, and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to aesthetics or design quality would occur.

4.8.2 Build Alternative

Since the new rail corridor would join with existing rail on both ends of the proposed Project, the proposed Project would result in no aesthetic and design impacts to the upland areas associated with rail line construction. The marsh is already crossed by existing rail and high-power electrical transmission lines. The existing rail has been part of the viewshed since the early 1900s. The surrounding area is generally developed with industrial facilities along the Escatawpa River to the north and with residential development to the south. The proposed new rail line would be similar in characteristics to the existing rail although a portion would be built on pilings instead of fill. The elevation of the rail on pilings would be similar to that on fill. Therefore, the proposed work associated with the Build Alternative would maintain viewsheds consistent with the current aesthetic. It does not appear that construction or operation of the Build Alternative would have an adverse effect on the aesthetics or design quality of the surrounding area.

4.9 LAND USE AND COMMUNITY FACILITIES

4.9.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to land use or community facilities would occur.

4.9.2 Build Alternative

The Build Alternative is compatible with the existing land uses because the proposed Project is in an area of existing rail line and linear utility features (power lines). No major or permanent impacts to land uses or land use patterns would occur. Impacts to the undeveloped marsh estuary are mitigated for by creation of tidal marsh wetlands. The Project would change a portion of the undeveloped marsh to that of a 0.69-mile railroad transportation corridor, however this use would be consistent with existing land use and zoning plans. As previously noted, undeveloped private property would be obtained by MSE for rail use. The new use is compatible with existing land use and zoning plans (heavy industrial). By elevating the rail to avoid filling, the impact to the estuarine environment is limited. Since the new rail corridor would join with existing rail on both ends of the proposed Project, the Project would result in no direct or indirect land use impacts to the upland areas associated with rail line construction.

No permanent impacts would occur to community facilities as a result of the Build Alternative, which would be constructed within the existing railroad ROW or within new right of way established in previously undeveloped land. MSE provided JCPA their Acquisition and Relocation Policies used for obtaining the right of way. These policies were adopted by the Board of MSE railroad and implement the procedures defined in the and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 et seq.) Right of way would be obtained within eight individual parcels. No residential or commercial structures would be impacted by the Project. The Project is compatible with local plans, land use, and zoning. Since a portion of the Project area is in an area of marsh vegetation, the City of Moss Point does not anticipate any growth in these areas. A portion of the Project is within the existing MPITC and additional industrial development could occur. The Project would be within the existing rail footprint within the MPITC and no changes to the land use within the MPITC would result from construction of the proposed Project. There would no major or permanent impacts to community facilities, including parks, as a result of the Build Alternative because they are not present in the Study Area.

4.10 SOCIOECONOMIC ENVIRONMENT

4.10.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to the socioeconomic environment would occur.

4.10.2 Build Alternative

Operation of the Project will not encroach upon residential property nor disrupt access to education and childcare facilities, community centers or places of worship, or other public facilities in the area.

4.10.2.1 Employment Impacts

The proposed Project would result in temporary beneficial impacts from job creation during construction. The proposed Project would result in beneficial economic impacts, locally and regionally due to job creation from Project-related development opportunities. The proposed Project would result in additional jobs at the East Bank Port facility because it supports increased export of a product that will be shipped from the East

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Bank facility. In addition, with the rail line available again at the MPITC, it is anticipated that new industry would be attracted to the site and provide overall long-term economic benefits to the region.

4.10.2.2 Freight Transportation Impacts

The proposed Project would not increase freight traffic in the short term but would remove MSE freight traffic from passing through downtown Moss Point and Pascagoula.

The Project would result in reduced operational and maintenance costs associated with rail crossings for the local community. It may also provide the community with the ability to increase jobs by providing incentives for manufacturers to locate within the MPITC and efficiently transport goods for shipment.

4.10.2.3 Traffic Impacts

The Project is designed to improve rail and traffic conditions in and around Pascagoula and Moss Point. Temporary disruptions would occur along Orange Grove Road when the rail crossing is moved to accommodate the adjustment of the rail to the north side of the road. Temporary impacts may be associated with construction with trucks and machinery in the area. A temporary detour, for approximately three weeks to a month, may be required during the relocation of the rail crossing. At least 7 days prior to establishing a detour on Orange Grove Road, the adjacent residents, the City of Moss Point and emergency response providers would be notified of the road closure. Most of the Project is over marsh, and no long term traffic impacts would result for this portion of the Project. Removal of rail crossings along the existing main line and the associated reduction of traffic being blocked at these rail crossings would be a long term positive effect from the proposed Project.

4.11 ENVIRONMENTAL JUSTICE

4.11.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to environmental justice would occur.

4.11.2 Build Alternative

The Build Alternative is anticipated to generate both jobs and local spending, which are expected to improve the economic condition of the EJ areas. The proposed track construction would cause beneficial temporary impacts to employment and income during the construction period. Construction would impact traffic only during the relocation of the rail crossing. A temporary detour limiting access from the east would be required for traffic along Orange Grove Road for approximately three weeks to one month. This would only affect two residential properties if they are approaching from the east, however, they may already access their homes approaching from the west, which would result in no impacts associated with the detour. Options for access to these two homes may be reduced for approximately three weeks to a month, however, they will still have access to their homes. At least 7 days prior to establishing a detour, local residents, the City of Moss Point and emergency responders would be notified of the detour. Other construction activities are limited to the marsh wetlands and the wooded uplands and would have no impacts on traffic, walkability or community cohesion in the residential area.

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The residents in the EJ areas would benefit from the job opportunities generated by the Project's construction and operation. The economic activity created by the Project is expected to provide a short-term increase in incomes in the local EJ communities and have a positive effect on poverty rates. Minority business owners in the EJ areas would benefit as the result of secondary economic activity generated as construction workers and local suppliers spend income and revenues at local business, which in turn, could hire additional workers.

After the Project's completion, community cohesion in the EJ areas is not anticipated to be negatively impacted by the Project, as the proposed operations of the Project improvements would not geographically divide or isolate the residents or businesses within the Study Area. The proposed Project alignment would require obtaining new ROW. The areas where ROW would be obtained are shown on drawings X1-X8 included in Appendix I. The ROW to be obtained is within seven privately owned parcels which consists of undeveloped land. There are no structures located within the areas to be obtained for ROW. There would be no relocations of residential or commercial properties. Because there would be no relocation of residential or commercial properties associated with the Project, there is no adverse effect from the Project or the new ROW associated with the Project footprint. The Project's operation would not encroach upon residential property or disrupt access to education and childcare facilities, community centers, or places of worship within the EJ areas surrounding the Project Area. The Project is not anticipated to have a substantial impact on public facilities in the Study Area. As discussed in other sections of the EA, no major adverse impacts are anticipated to air quality, water quality, wetlands, floodplains, or other environmental resources. Therefore, no adverse impacts associated with the operation of the Project are anticipated. The long-term impacts of the actions in the Build Alternative include benefits to employment and income and would be neither adverse nor disproportionate in relation to the overall social, economic, health, and environmental characteristics of minority and low-income populations in the Study Area.

Short-term construction impacts to EJ areas would include minor, temporary traffic disruptions of approximately one month (See section 4.10.2.3), temporary noise and vibration impacts of approximately three months during daylight hours on weekdays only (See section 4.3.2), and positive impacts on employment and income. There would be no additional mitigation other than limiting working hours and days associated with temporary noise and vibration impacts.

Input from the public is an important consideration in the EJ process. Section 5.0, Public and Agency Coordination provides detail about the public outreach and coordination associated with the Build Alternative. No groups or individuals have been or will be excluded from participation in public involvement activities, denied the benefit of the Project, or subjected to discrimination in any way on the basis of ethnicity, race, color, age, sex, national origin, or religion.

4.12 HAZARDOUS MATERIALS

4.12.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts associated with hazardous materials would occur.

4.12.2 Build Alternative

It is not anticipated that the construction of the Build Alternative would generate hazardous waste. Based on the location of the Project within undeveloped marsh and uplands and within existing right of way, it is not anticipated that the Project would encounter materials with levels of impacts exhibiting characteristics which EPA would classify as hazardous waste.

JCPA will have an environmental screening process in place during construction for the management of any impacted materials that are unexpectedly encountered. For excess materials generated during construction (e.g., soils, construction demolition debris) of the Build Alternative, JCPA will follow established protocols to comply with applicable state, local, and federal laws and regulations for waste handling, staging, characterization, and transportation for off-site disposal

A Phase I Environmental Site Assessment was previously prepared for a nearby alternative location with the proposed Project area within the search radius. In order to identify potential hazardous materials that may be encountered during construction, JCPA will ensure that a Phase I Environmental Site Assessment is prepared for the proposed Project area within 6 months prior to construction. Any recognized environmental condition identified that has the potential to impact the Project Area would be addressed by JCPA to ensure the appropriate responsible party maintains responsibility for any regulatory requirements for remedial actions or environmental closure.

4.13 CULTURAL RESOURCES

4.13.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to cultural resources would occur.

4.13.2 Build Alternative

Based on the results of the Phase I Cultural Resources Survey, FRA determined there were no archaeological or architectural historic properties affected by the Project. SHPO concurred with FRA's no historic properties affected determination in a letter dated May 2021. The CNO and MCBI concurred with FRA's no historic properties affected determination in email correspondence from May and June 2021, respectively.

In the event that Native American artifacts or human remains are inadvertently encountered during construction, JCPA will immediately stop work and contact the FRA, SHPO, MCBI, and CNO. JCPA will ensure that fill is obtained from a MDEQ permitted dirt pit. JCPA will provide SHPO with more information regarding the source of the fill material prior to start of construction.

The Section 106 Cultural Resources Survey Report is attached as Appendix K. All Section 106 correspondence is included in Appendix K.

4.14 SECTION 4(F) PROPERTIES

4.14.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to Section 4(f) properties would occur.

4.14.2 Build Alternative

FRA determined that no additional 4(f) analysis is required, because there are no Section 4(f) properties located within the Study Area. The Build Alternative would have no impacts on these types of properties.

4.15 SOLID WASTE DISPOSAL

4.15.1 No Build Alternative

The No Build Alternative would involve no action to construct a new rail layout to connect MSE and the JCPA line at the interchange located within the MPITC. The existing rail line that passes through downtown Moss Point and Pascagoula would remain operational and conflicts with MSE and CSX freight operations would continue to occur at the downtown Pascagoula interchange. Rail would not be freed up for use for the potential passenger rail operations planned for the area. No construction activities are associated with the No Build Alternative; therefore, no temporary or permanent impacts to solid waste would occur.

4.15.2 Build Alternative

Waste materials from construction of the rail would be managed by JCPA and the chosen contractor to avoid discharge to the environment. All structural components of the rail would be precast or prefabricated and cut to length. Concrete piles would be poured in place. Waste concrete would be discharged on site in a designated location and later removed to a landfill. Some wood components may be cut to length on site and the waste wood would be removed to a landfill. All waste material would be collected in dumpsters or roll off containers and disposed of or recycled as appropriate. Jackson County operates a solid waste landfill and several private landfills accept construction waste. Given these measures, no temporary or permanent impacts to solid waste management are anticipated from the Project.

5.0 PUBLIC AND AGENCY COORDINATION

5.1 PUBLIC COORDINATION

Public outreach efforts were coordinated with local committees, community groups, elected officials and local government entities to provide details on the Project and to discuss impacts to the community. Prior to publication of this EA, public outreach associated with the proposed Project included issue of a Public Notice by the USACE which was provided by email to their standard list of contacts for Section 404 permits. In addition, the adjacent property owners were notified by mail of the Project. The Mississippi DMR held a public hearing regarding the Project on July 14, 2021 to provide the public and any interested agencies an opportunity to comment at a public venue. No attendees other than DMR and JCPA were present at the hearing and no public comments were received in response to this hearing.

The public will be informed of the release of the EA through a notice in the *Press Register*. Further, the City of Moss Point, City of Pascagoula, the Jackson County Economic Development Foundation and community groups including the Moss Point Rotary Club, Jackson County Civic Action Club, Riverfront Community Center and the Moss Point Garden Club will be contacted to comment on this EA. This EA will be posted to FRA's webpage for 30-day public and agency review. Notice of the Draft EA comment period will also be posted to the Federal Infrastructure Permitting Dashboard. Questions and comments on the Project or EA can be made through the contact information provided on the webpage, or by contacting:

Amanda Murphy
Environmental Protection Specialist
Office of Infrastructure Investment
Federal Railroad Administration
U.S. Department of Transportation
Amanda.murphy2@dot.gov
202-339-7231

5.2 AGENCY COORDINATION

Coordination for the Project was initiated with numerous resource agencies. In accordance with 40 CFR § 1501.8, in a letter dated January 15, 2021 FRA invited USACE to be a cooperating agency for this EA, and to designate FRA as lead federal agency for NHPA Section 106 consultation. USACE accepted the cooperating agency invitation and designated FRA as lead federal agency for NHPA Section 106 consultation purposes in a letter dated January 28, 2021. FRA sought and received USACE's comments on the draft purpose and need, Project schedule, anticipated effects of the Project, and the administrative draft of this EA. See Appendix L for correspondence.

FRA and JCPA held a pre-NEPA meeting with interested agencies and Federally-recognized Tribes on February 1, 2021. Prior to the meeting a Project description, draft purpose and need statement, and Project drawings were provided for review and to familiarize participants with the Project. Agencies and Tribes were given three weeks to respond to the information and materials.. A list of all the agencies who were invited to attend is included in Appendix M.

FRA conducted Section 106 consultation as described in Section 3.2.13 with the MDAH and Federally-recognized Tribes. As summarized in Section 3.2.6, FRA conducted consultation for endangered species and wildlife including EFH with USFWS and NMFS. Agency correspondence is included in Appendix L. The permits required for the Project include CWA Section 404 from USACE, Coastal Zone Consistency from the DMR and 401 Water Quality Certification from MDEQ.

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The USACE conducts public and agency outreach as part of the permitting process. Interested agencies and adjoining property owners were contacted for comment. A Joint Public Notice from USACE, MDEQ and DMR was published on January 20, 2021. The information provided included a brief description of the Project and the procedure to obtain more information. The agencies and property owners were asked to respond within 30 days. Comments that required a response with additional information were received from MDAH, NMFS and MDEQ. MDAH requested that a Cultural Resource Survey be completed for the proposed Project. This was completed and provided to MDAH for review and concurrence. MDAH provided concurrence on May 11, 2021. NMFS requested that an EFH Assessment be conducted for the proposed Project area. This was completed and provided to NMFS with a request for formal consultation. The EFH assessment was provided to NMFS and they provided concurrence on March 23, 2021. MDEQ requested that JCPA submit a pre-filing meeting request for 401 water quality certification and follow the submittal and waiting periods for obtaining water quality certification. The procedure was completed and the Project obtained 401 water quality certification on March 12, 2021. No comments were received from the adjacent property owners. The complete list of individuals and agencies notified by USACE about the proposed Project is included in Appendix N.

Any additional permits will be identified and obtained by JCPA as engineering progresses. All agency coordination required for federal, state and local permitting will be completed prior to construction.

Agencies consulted on this Project will receive notice from FRA regarding the 30-day review period for this EA, and they can send their comments to: Amanda Murphy, FRA Environmental Protection Specialist (Amanda.murphy2@dot.gov).

List of Sources, Agencies and Persons Consulted:

Sources

2019 Census data for Jackson County; City of Pascagoula, City of Moss Point, Quickfacts at Census.gov

Aerial mapping and photography accessed through Google™ Earth

Escatawpa River Phase One Total Maximum Daily Load for Mercury, prepared by Mississippi Department of Environmental Quality Office of Pollution Control TMDL/WLA Section/Water Quality Assessment Branch, June 6, 2000

Executive Order 11990, Protection of Wetlands, May 24, 1977, 42 FR 26961

FEMA DFIRM panel 28059C0432G, released March 16, 2009 (Appendix F)

IPaC report, USFWS, <http://www.fws.gov/mississippiES/endsp.html>

Mississippi Department of Archives and History (MDAH), letter from Hal Bell on behalf of State Historic Preservation Officer, [May 11, 2021] (Appendix K)

Mississippi Department of Environmental Quality, Office of Pollution Control, Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, Volumes 1-3.

Mississippi Department of Environmental Quality, 2020 Air Quality Data Summary

Mississippi Department of Marine Resources, Permit from Mississippi Department of Marine Resources , DMR20-000346; [September 16, 2021] (Appendix L)

Mississippi State Rail Plan Update, March 2016, Mississippi Department of Transportation

National Park Service, National Registry of Natural Landmarks, www.nature.nps.gov/nnl/

National Wetlands Inventory Map, United States Fish & Wildlife Service (USFWS) Wetlands Online Mapper, <http://wetlandsfws.er.usgs.gov/NWI/index.html> (Appendix E)

Phase I Cultural Resources Survey of the Proposed North Rail Connector Project, Section 20 and 29, T7S, R5W, Jackson County Mississippi, MDAH Project Log #'s 11-119-20 and 01-084-21, Cobb Institute of Archaeology, April 8, 2021

US Fish and Wildlife Services, letter concerning impacts to threatened and endangered species [March 2, 2021] (Appendix G)

Wildlife Solutions, Inc., 2021, Wetland Delineation of Rail Line Corridor in Moss Point, MS

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Agencies and Persons Consulted

City of Moss Point

City of Pascagoula

CSX Railroad

Jackson County Board of Supervisors

Mississippi Band of Choctaw Indians

Mississippi Department of Archives and History

Mississippi Department of Environmental Quality – Air Quality

Mississippi Department of Environmental Quality – Office of Pollution Control

Mississippi Department of Environmental Quality – Water Quality

Mississippi Department of Marine Resources – Regulatory Division

Mississippi Department of Transportation

Mississippi Department of Wildlife Fisheries and Parks

Mississippi Development Authority

Mississippi Export Railroad

National Marine Fisheries Service

Oklahoma Band of Choctaw Indians

U.S. Army Corps of Engineers, Mobile District (Cooperating Agency)

U.S. Fish and Wildlife Service