



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
MISSISSIPPI VALLEY DIVISION  
1400 WALNUT STREET  
VICKSBURG MS 39180-3262

RECORD OF DECISION

**West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Study  
St. John the Baptist, St. James, Ascension, Livingston, St. Tammany, and St. Charles  
Parishes, Louisiana - Mitigation Plan Update**

23 January 2023

The final Supplemental Environmental Impact Statement (SEIS) dated January 2023, for the West Shore Lake Pontchartrain (WSLP) Hurricane and Storm Damage Risk Reduction Study, Mitigation Plan Update, addresses compensatory mitigation opportunities and feasibility in St. John the Baptist, St. James, Ascension, Livingston, St. Tammany, and St. Charles Parishes, Louisiana. A Record of Decision (ROD) for WSLP EIS was signed by the Assistant Secretary of the Army for Civil Works on September 14, 2016. That ROD and Environmental Assessment (EA) #576, which was finalized with the signed Finding of No Significant Impact on April 13, 2020, described the compensatory mitigation for the WSLP project (No Action Alternative or BBA Alternative). The Louisiana Coastal Projection and Restoration Board (CPRAB), the Non-Federal Sponsor (NFS), during the public comment period on EA #576, requested that the U.S. Army Corp of Engineers (USACE) consider the Maurepas Swamp Diversion Project (MSP) as a mitigation alternative for impacts to swamp credits associated with WSLP (See final SEIS Section 1 for additional historical background). In doing so, the NFS agreed to be solely responsible for all costs over the No Action Alternative (EA #576). I made the decision on September 13, 2022, that MSP could be further considered as part of the WSLP Project and would be considered in this SEIS.<sup>1</sup>

The final SEIS, incorporated herein by reference, evaluated various alternatives that would meet required compensatory mitigation estimates in the study area. The recommended plan is the Maurepas Swamp Alternative-2 (MSA-2) and includes:

- MSA-2 Construction features:
  - Diversion headworks structure: multi-cell box culvert with vertical lift gates (sluice gates). The primary function is to convey flow from the intake channel underneath the Mississippi River Levee (MRL);
  - Intake channel from the Mississippi River (Table 2-4, Figure 2-2, Figure 2-4);
  - Automated gate structure in the MRL (Table 2-4, Figure 2-4); Bottom depth at elevation (EL) (-) 4 feet North American Vertical Datum of 1988 (NAVD88) excavated into the batture to route flow from the Mississippi River into the diversion headworks. This channel would be lined with riprap to prevent scour;
  - A sedimentation basin (within the conveyance channel);
  - 5.5-mile-long open conveyance channel (Figure 2-2);
  - Box culverts under River Road, Canadian National Railroad, and Airline Highway (Figure 2-2);
  - Bridge over the channel at Kansas City Southern Railroad (Table 2-4, Figure 2-2);
  - Lateral Discharge Valves (LDV): 16 points of LDV, 32 pipes (16 on each side) between Airline Highway and I-10 to allow water exchange between the conveyance channel

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<sup>1</sup> For a detailed discussion on the history of WSLP and MSP, see the final EIS, Section 1 and Addendum, Section 1.

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and areas east and west of the channel (Figure 2-6). Pipes would be 24-inch reinforced concrete, 80-feet long;

- Check valving on culverts underneath I-10 to reduce or eliminate southward backflow;
- Reshaping the geometry of the existing Hope Canal channel under I-10;
- Embankment cuts in the existing ridge of an old railroad embankment located in St. John the Baptist and Ascension Parishes (Table 2-4, Figure 2-2);
- Rock Rip Rap Weirs: Submerged rock rip-rap weirs in Bayou Secret and Bourgeois Canal located in St. James Parish (Table 2-4, Figure 2-2).

o MSA-2 Mitigation details:

- o Based on the most recent designs, WSLP would impact approximately ~ 947 coastal zone (CZ) swamp and ~293 CZ bottomland hardwoods (BLH) average annual habitat units (AAHUs).<sup>2</sup> While MSA-2 would operate as a project feature of WSLP Project to compensate for all swamp impacts from WSLP, construction and operation of MSA-2 would result in the following impacts requiring compensatory mitigation: approximately ~ 206.5 CZ swamp, ~35.8 CZ bottomland hardwood forest (BLH), and ~19.5 CZ marsh AAHUs.
- Swamp impacts resulting from both the WSLP Project and MSA-2 will be mitigated through construction and operation of MSA-2.
- BLH impacts resulting from both projects will be mitigated with the purchase of mitigation bank credits and/or Corps-constructed projects following the federally approved plan in EA/FONSI #576 (See final SEIS Section 5).
- Marsh impacts from MSA-2 will be mitigated through the purchase of mitigation bank credits, construction of the Guste Island marsh creation project, or a combination of the two (See final SEIS Section 5).
- Implementation of the environmental compensatory mitigation and associated monitoring and mitigation area adaptive management plan. Monitoring will continue until the mitigation is determined to be successful based on the identified criteria within the MSA-2 Fifty-year Mitigation Monitoring Plan and MSA-2 Adaptive Management Plan included in the final SEIS Appendix H. Initial success must be demonstrated within 10 years after diversion operations begin, with the earliest possible achievement of meeting initial success criteria at target year 6.

In addition to a “no action plan”, the final SEIS considered the MSP alternative, which was divided into two alternatives: Maurepas Swamp Alternative-1 (MSA-1), which includes benefits captured on both public and non-public lands; and Maurepas Swamp Alternative-2 (MSA-2), which includes benefits captured only on public lands (See final SEI Section 2). This analysis confirmed the BBA Alternative is the environmentally preferable alternative; however, the NFS requested approval for MSA-2 because it could be integrated with the implementation of the WSLP Project providing mitigation immediately adjacent to the impacts and would increase system resiliency around the WSLP Project. The NFS agreed to be solely responsible for all costs over the BBA Alternative. MSA-1 was removed from further consideration.. The recommended plan is MSA-2.

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<sup>2</sup> Approximately 10 percent of the WSLP Project features have been constructed to date, impacting ~136 CZ-swamp and ~36 CZ-BLH AAHUs.

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SUMMARY OF POTENTIAL EFFECTS:

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1.

Table 1: Summary of Potential Effects of Recommend Plan

	Significant Adverse Impacts	Insignificant Adverse Impacts	Beneficial Impacts	Resource Unaffected by Action
Wetlands			X	
Wildlife		X		
Threatened/Endangered & protected species	X			
Fisheries and Aquatic Resources			X	
Essential Fish Habitat				X
Cultural Resources		X		
Recreational Resources		X		
Aesthetic (Visual) Resources			X	
Natural and Scenic Rivers				X
Air Quality		X		
Water Quality			X	
Noise		X		
HTRW		X		
Socioeconomics/Land Use, Transportation, and Commercial Fisheries			X	
Socioeconomics/Navigation				X
Environmental justice		X		
Prime and Unique Farmlands		X		
Hydrology			X	

The final SEIS identified potential significant adverse effects to pallid sturgeon from both construction (noise, vibration, and presence of personnel and equipment) and operation (entrainment) of MSA-2. Methods to reduce impacts to pallid sturgeon are contained in the documents found in Appendix K of the final SEIS. The Biological Opinion (BO) (final SEIS Appendix J) received from USFWS includes reasonable and prudent measures that will be implemented to reduce impacts to pallid sturgeon. Reasonable and prudent measures are also found in Section 8.4 of the final SEIS.

COMPENSATORY MITIGATION IS REQUIRED:

The recommended plan will result in unavoidable impacts to ~206.5 CZ swamp, ~35.8 CZ BLH, and ~19.5 CZ marsh AAHUs, in addition to WSLP's impacts. Mitigation for unavoidable, adverse impacts is as follows: Swamp impacts from WSLP and MSA-2 will be mitigated by MSA-2. BLH

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impacts from MSA-2 will be mitigated per the plan in EA #576. Marsh impacts from MSA-2 will be mitigated through the purchase of mitigation bank credits, construction of the Guste Island marsh creation project, or a combination of the two (final SEIS Section 4.1.1.). The mitigation plan for MSA-2 is discussed in detail in Section 5 of the final SEIS.

**PUBLIC REVIEW:**

Public review of the draft SEIS was completed on May 31, 2022. All comments submitted during the public comment period were responded to in the final SEIS (see Appendix O of the final SEIS). A 30-day waiting period and public notice of availability for the final SEIS was completed on January 3, 2023.

**OTHER ENVIRONMENTAL AND CULTURAL COMPLIANCE REQUIREMENTS:**

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the United States Fish and Wildlife Service (USFWS) issued a BO, dated June 23, 2022, that determined the recommended plan will not adversely affect the West Indian manatee and would have no effect on the gulf sturgeon. The BO stated the recommended plan is not likely to jeopardize the continued existence of the pallid sturgeon. All recommendations from the USFWS will be implemented to minimize impacts to endangered species. (see Appendix J of the final SEIS).

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, a multi-project Programmatic Agreement was executed on March 4, 2020, for the Bipartisan Budget Act Of 2018 Compensatory Habitat Mitigation Program, which includes WSLP. Cultural resources surveys, under the PA, will be required due to low survey coverage and presence of known significant archaeological sites. Impacts associated from the moderate rise in water surface elevation in the vicinity of known sites suggests potential adverse impacts (final SEIS Appendix J).

Pursuant to the Clean Water Act of 1972, as amended, all discharges of dredged or fill material associated with the recommended plan have been found to be compliant with the section 404(b)(1) Guidelines (40 CFR 230). This analysis is in Appendix L of the final SEIS.

A water quality certification pursuant to section 401 of the Clean Water Act was obtained from the Louisiana Department of Environmental Quality. All conditions in the certification will be implemented to minimize adverse impacts to water quality (See final SEIS Appendix J).

A determination of consistency with the Coastal Zone Management program pursuant to the Coastal Zone Management Act of 1972 was obtained from the Louisiana Department of Natural Resources (LDNR), and all conditions will be implemented to minimize adverse impacts to the coastal zone (See final SEIS Appendix J).

Pursuant to Section 2(b) of the Fish and Wildlife Coordination Act (FWCA), the USFWS provided a final Coordination Act Report (CAR) on June 8, 2022. The USFWS final CAR recommendations and USACE responses are in Section 8.7.1 and Appendix J of the final SEIS.

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OTHER SIGNIFICANT ENVIRONMENTAL COMPLIANCE:

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed. A detailed discussion of environmental compliance is located in the final SEIS Section 8.

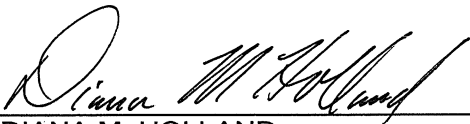
Executive Order 12898 Environmental Justice: Impacts to areas of environmental justice concern are expected to be minimal and short-term, occurring during construction activities. There are no permanent disproportionately high and adverse human health or environmental effects from implementation of the recommended plan.

Executive Order 13175: There are currently no Tribal rights or Indian lands that have the potential to be significantly affected by the proposed actions within in the planning area. Because protected Tribal resources are within the diversion influence area, nine federally recognized Tribes were offered the opportunity to review and comment on the proposed action, and two Tribes requested cooperating agency status for the development of the final SEIS.

Migratory Bird Treaty Act: No nesting birds were found in the project area during surveys. Additional surveys for bald eagle nests and colonial nesting waterbirds will be conducted prior to construction. Coordination with the USFWS and the Louisiana Department of Wildlife and Fisheries is to continue throughout the project planning and implementation phase.

FINDING:

With respect to the WSLP Project swamp and BLH impacts, the federally approved plan in EA/FONSI #576 is amended and supplemented by MSA-2 as evaluated in the final SEIS and this decision. The MSA-2 Alternative is adopted as a feature of the WSLP Project to compensate for WSLP swamp impacts. Technical and environmental criteria used in the alternative evaluation process were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on the review of these evaluations, I find that benefits of the recommended plan outweigh the costs and any adverse effects. I certify that USACE considered all alternatives, information, analyses, and objections submitted by State, Tribal, and local governments and other public commenters for consideration in developing the final SEIS. This Record of Decision completes the National Environmental Policy Act process.

  
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DIANA M. HOLLAND  
Major General, USA  
Commanding