ANNEX 2: U.S. Fish and Wildlife Service Coordination Act Report



FISH AND WILDLIFE SERVICE 200 Dulles Drive Lafayette, Louisiana 70506



May 1, 2025

Colonel Cullen Jones District Commander U.S. Army Corps of Engineers New Orleans District 7400 Leake Avenue New Orleans, LA 70118-3651

Dear Colonel Jones:

Please reference our October 2024, March 2019, December 2016, February 2009, and March 1997, Fish and Wildlife Coordination Act (FWCA) Reports for the Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana. This draft report, here in, incorporates the previous FWCA Reports by reference. This draft report contains a description of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the Tentatively Selected Plan. This report does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act. This draft report has been provided to the Louisiana Department of Wildlife and Fisheries and the National Marine Fisheries Service; their comments will be incorporated into our final report.

We appreciate the cooperation of your staff on this study. Should your staff have any questions regarding the enclosed report, please have them contact Ms. Catherine Breaux (337/291-3122) of this office.

Sincerely,

Brigetto Stirmin

Brigette D. Firmin Field Supervisor Louisiana Ecological Services Office

cc: USACE, New Orleans, LA (Attn: Howard Ladner) NMFS, Baton Rouge, LA (Attn: Craig Gothreaux) EPA, Region 6 (Attn: Raul Gutierrez) LDWF, Baton Rouge, LA (Attn: Michael Perot) LDNR, Baton Rouge, LA (Attn: Kyle Balkum)

INNER HARBOR NAVIGATION CANAL LOCK REPLACEMENT PROJECT, ORLEANS PARISH, LOUISIANA

FISH AND WILDLIFE COORDINATION ACT REPORT



U.S. FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES LAFAYETTE, LOUISIANA MAY 2025

INNER HARBOR NAVIGATION CANAL LOCK REPLACEMENT PROJECT, ORLEANS PARISH, LOUISIANA

FISH AND WILDLIFE COORDINATION ACT REPORT

SUBMITTED TO

NEW ORLEANS DISTRICT

U.S. ARMY CORPS OF ENGINEERS

NEW ORLEANS, LOUISIANA

PREPARED BY

CATHERINE BREAUX, FISH AND WILDLIFE BIOLOGIST

U.S. FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES

LAFAYETTE, LOUISIANA

MAY 2025

EXECUTIVE SUMMARY

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction, including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under Federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the Mississippi River Gulf Outlet (MRGO) in 2009.

In concert with the above-mentioned efforts, the Fish and Wildlife Service (Service) prepared Fish and Wildlife Coordination Act (FWCA) Reports in March 1997, February 2009, December 2016, and March 2019, addressing the impacts on fish and wildlife resources from implementation of the Recommended Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference).

The main feature of the Recommended Plan (RP) is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (North American Vertical Datum 1988 [NAVD88]) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. Borrow will be used for a new levee that will tie into the existing Mississippi River Levee on the east side of the existing IHNC Lock. Proposed borrow sites are located within the Bonnet Carré Spillway and are approximately 45 acres and 18.5 acres, respectively. The Bonnet Carré borrow sites have previously been environmentally cleared. The USACE anticipates that the entire construction process could take up to 14 years to complete, if

adequate funding is provided (project construction would begin in year 2033 and end in year 2047, with PED being conducted in years 2029).

This draft report, which updates the previous EISs, incorporates and supplements our March 1997, February 2009, December 2016, March 2019, and October 2024 FWCA Reports. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This draft report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments will be incorporated into the final report.

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and the NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service and the NMFS strongly support using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.
- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and the NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the IHNC Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. The LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change, the USACE should reinitiate consultation with the LDWF's Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.

- 7. Coordination should continue with the Service and the NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.
- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.
- 9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, the NMFS, and the LDWF should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

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INTRODUCTION

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the Mississippi River Gulf Outlet (MRGO) in 2009.

In concert with the above-mentioned efforts, the Fish and Wildlife Service (Service) prepared Fish and Wildlife Coordination Act (FWCA) Reports in March 1997, February 2009, December 2016, and March 2019, addressing the impacts on fish and wildlife resources from implementation of the Recommended Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference).

The main feature of the RP is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (North American Vertical Datum 1988 [NAVD88]) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. The USACE anticipates that the entire construction process could take up to 14 years to complete (Figure 1), if adequate funding is provided (project

construction would begin in year 2033 and end in year 2047, with PED being conducted in years 2029).

This draft report, which updates the previous EISs, incorporates and supplements our March 1997, February 2009, December 2016, March 2019, and Oct 2024 FWCA Reports. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This draft report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments will be incorporated into the final report.

DESCRIPTION OF STUDY AREA

The study area is located in southeastern Louisiana within Orleans Parish (Figure 1). The IHNC lock, one of the busiest locks in the Nation, is located in Orleans Parish. It connects the Mississippi River with the GIWW. The area surrounding the lock is highly urbanized. Both the IHNC and adjacent residential and industrial lands have negligible value to fish and wildlife.

Figure 1. The project feature locations and construction timing for the Inner Harbor Navigation Canal, New Orleans, Louisiana Project.



Years 1-2	 Install Outer Wall of Cofferdam New Lock Site Dredge Bypass Channel
Years 3-9	3. Install Remainder of Cofferdam 4. Unwater New Lock Site 5. Construct New Lock
Years 9-14	 6. Remove Cofferdam and Backfill 7. Construct Flood Walls and Levee** 8. Construct New St. Claude Avenue Bridge* 9. Demolish Existing Lock and Bridge*

FISH AND WILDLIFE RESOURCES

Description of Habitats

The study area consists of developed lands and open water. Developed lands in the study area include residential and commercial areas, as well as roads and existing levees. Those lands do not support significant wildlife use. Some of the development is located on higher elevations of the Mississippi River's natural levees and former distributary channels; however, vast acreages of swamp and marsh have been placed under forced drainage systems and developed. Major open water areas in and around the project area include Lake Pontchartrain, the IHNC, the Mississippi River, the GIWW, and the MRGO.

Restoration activities near the project area include the MRGO closure, surge barrier, wetland creation demonstration, Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) projects, and beneficial use of dredged material during USACE maintenance of Federal navigation channels.

Fisheries Resources

The IHNC has minimal fishery value. Representative freshwater fishes found in the adjacent Mississippi River include channel catfish, blue catfish, freshwater drum, yellow bass, largemouth bass, and white crappie.

The project may be located within an area identified as Essential Fish Habitat (EFH) by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA, Magnuson-Stevens Act; P.L. 104-297). The USACE should consult with the NMFS regarding EFH.

Wildlife Resources

The project area provides habitat for a number of songbirds. Neotropical migrants expected in the project area include warblers, vireos, wrens, flycatchers, and many other species. Resident species include the blue jay, cardinal, and mourning dove. Seabirds using the adjacent open water areas may include laughing gull and several species of terns. Small game mammals that may be present in the project area and adjacent wooded areas include gray squirrel, eastern cottontail, and raccoon; and common furbearers include the mink, nutria, and muskrat. Nongame mammals that occur in the area include Virginia opossum, nine-banded armadillo, and several species of bats, rodents, and insectivores. Reptiles include the common snapping turtle, red-eared turtle, various water snakes, five-lined skink, and green anole. Representative amphibians include the green treefrog, southern leopard frog, and northern spring peeper.

Threatened and Endangered Species

Federally listed threatened and endangered species and/or their designated critical habitat occurring in the study area include the threatened West Indian manatee (*Trichechus manatus*), the threatened Gulf sturgeon (also known as the Atlantic sturgeon, *Acipenser oxyrhynchus desotoi*), the endangered pallid sturgeon (*Scaphirhynchus albus*), the proposed as endangered tricolored bat (*Perimyotis subflavus*), and the proposed as threatened alligator snapping turtle (*Macrochelys temminckii*).

West Indian manatees occasionally enter Lakes Pontchartrain and Maurepas, and associated coastal waters and streams during the summer months (i.e., June through September). Manatee occurrences appear to be increasing, and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of Louisiana. They have also been occasionally observed elsewhere along the Louisiana Gulf coast. Should the proposed project involve activity in the aquatic environment in those areas during summer months, further consultation with this office will be necessary.

The Gulf sturgeon is an anadromous fish that occurs in many rivers, streams, and estuarine waters along the northern Gulf coast between the Mississippi River and the Suwannee River, Florida. In Louisiana, Gulf sturgeon have been reported at Rigolets Pass, rivers and lakes of the Lake Pontchartrain basin, and adjacent estuarine areas. On March 19, 2003, the Service and the NMFS published a final rule in the Federal Register (Volume 68, No. 53) designating critical habitat for the Gulf sturgeon in Louisiana, Mississippi, Alabama, and Florida. Portions of the Pearl and Bogue Chitto Rivers, Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, and Lake Borgne within Louisiana were included in that designation. While sturgeon have been documented in study area waterways, those waterways are not designated critical habitat.

The pallid sturgeon is found in Louisiana, in both the Mississippi (which is hydrologically connected to the IHNC and will be used for disposal of dredged material) and Atchafalaya Rivers (with known concentrations in the vicinity of the Old River Control Structure Complex). The pallid sturgeon is adapted to large, free-flowing, turbid rivers with a diverse assemblage of physical characteristics that are in a constant state of change. Many life history details and subsequent habitat requirements of this fish are not known. However, the pallid sturgeon is believed to utilize Louisiana riverine habitat during reproductive stages of its life cycle. Habitat loss through river channelization and dams has adversely affected this species throughout its range. Should the proposed project directly or indirectly affect the pallid sturgeon or its habitat, further consultation with this office will be necessary.

The tricolored bat, also known as the eastern pipistrelle, is a small bat weighing 4-8 grams with a head to tail length ranging from 77-89 millimeters (mm) and wingspan of 220-225 mm. The bat gets its name from their individual hairs being "tri-colored": brown at tip, yellow in the middle, dark at the base. Overall, the fur appears yellow brown, with

reddish forearm skin. This small bat flies slowly with an erratic pattern while foraging, causing it to sometimes be mistaken for a moth. Tricolored bats appear to inhabit landscapes that are partly open, with large trees and plentiful woodland edges. They are found in a variety of terrestrial habitats, including grasslands, old fields, suburban areas, orchards, urban areas, and woodlands, especially hardwood woodlands. Little is known about daytime summer or maternity roosts. These bats are among the first bats to emerge at dusk each night, and their appearance at tree-top level indicates that they may roost in foliage or in high tree cavities and crevices. They are not often found in buildings or in deep woods, seeming to prefer edge habitats near areas of mixed agricultural use. Hibernation sites are found deep within caves or mines in areas of relatively warm, stable temperatures. However, research is ongoing determining small bat hibernation habitats other than caves and mines. The main threat to this species is White Nose Syndrome (Pseudogymnoascus destructans), with affected hibernation sites resulting in more than 75 percent decline of bats, with some sites declining by 90 percent. Other threats include habitat modification and destruction including forest and grassland conversion to urban/suburban land use and mortality during migration from winter hibernaculum to summer roosting habitat due to wind energy development. On September 13, 2022, the Service announced a proposal to list the tricolored bat as endangered under the ESA.

The alligator snapping turtle may be found in large rivers, canals, lakes, oxbows, and swamps adjacent to large rivers. It is most common in freshwater lakes and bayous, but also found in coastal marshes and sometimes in brackish waters near river mouths. Typical habitat is mud-bottomed waterbodies having some aquatic vegetation. The alligator snapping turtle is slow growing and long lived. Sexual maturity is reached at 11 to 13 years of age (Ernst et al. 1994). Because of this and its low fecundity, loss of breeding females is thought to be the primary threat to the species. On November 9, 2021, the Service announced a proposal to list the alligator snapping turtle as threatened under the ESA.

DESCRIPTION OF RECOMMENDED PLAN

The main feature of the Recommended Plan (RP) is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (NAVD88) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. Borrow will be used for a new levee that will tie into the existing Mississippi River Levee on the east side of the existing IHNC Lock. Proposed borrow sites are located within the Bonnet Carré Spillway and are approximately 45 acres and 18.5 acres, respectively. The Bonnet Carré borrow sites have previously been environmentally cleared. It is anticipated that the entire construction process could take up to 14 years to complete (Figure 1), if adequate funding is provided (project construction would begin in year 2033 and end in year 2047, with PED being conducted in years 2029).

Under the No-action alternative, the proposed construction of a replacement lock or an additional lock would not occur. The federal government would continue to operate and maintain the existing lock. Delay times would be similar to existing conditions due to the inadequate dimensions of the existing lock. Lock repairs and maintenance would be a continuous concern due to the age and condition of the lock.

Dredged Material Disposal Plans

Soils and sediments that require excavation for project construction have been thoroughly evaluated under regulations and procedures developed under requirements of the Clean Water Act (CWA). Approximately 614,000 cubic yards of dredged material that would be excavated from Dredged Material Management Units (DMMUs) 3, 4, 6, 9, and 10 is "suitable for open water discharge" (see Figure 2 for DMMU Map). This material is non-toxic to sensitive benthic organisms, does not contain contaminants at concentrations that would adversely bioaccumulate or bio-magnify in aquatic food webs, and would not violate or exceed regulatory water quality criteria or drinking water standards upon discharge into the proposed Mississippi River open-water disposal site. The dredged material would mix with the river's normal suspended and bedload sediments and be carried downstream. Approximately 105,000 cubic yards of dredged material that would be excavated from DMMUs 5 and 7 is "unsuitable for open water discharge" because it is toxic to sensitive benthic organisms. This material would be excavated with an environmental bucket dredge to minimize on-site loss of material and turbidity; it would be hauled to and permanently disposed in a permitted solid waste landfill.

PROJECT IMPACTS

The President's Council on Environmental Quality defined the term "mitigation" in the National Environmental Policy Act regulations to include:

- a) avoiding the impact altogether by not taking a certain action or parts of an action;
- b) minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; and,
- d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.

Figure 2. Layout of 11 Dredged Material Management Units (DMMU) used for the assessment of sediments and soils for the IHNC Lock Replacement Project.



The Service supports and adopts this definition of mitigation and considers its specific elements to represent the desirable sequence of steps in the mitigation planning process. Based on current and expected future without-project conditions, the planning goal of the Service is to develop a balanced project (i.e., one that is responsive to the IHNC New Lock project needs while addressing the co-equal need for fish and wildlife resource conservation).

The Service's Mitigation Policy (*Federal Register*, Volume 46, No. 15, January 23, 1981) identifies four resource categories that are used to ensure that the level of mitigation recommended by Service biologists will be consistent with the fish and wildlife resource values involved. Considering the high value of bottomland hardwood for fish and wildlife and the relative scarcity of that habitat type, those wetlands are

designated as Resource Category 2 habitats, the mitigation goal for which is no net loss of in-kind habitat value.

The combination of Mississippi River open water discharge (for suitable material) and landfill (for contaminated material) disposal material eliminates all project-related environmental impacts to wetlands and fish and wildlife habitats and the need for mitigating any environmental impacts.

The Service commends the USACE for avoiding wetland impacts for the IHNC Lock Replacement Project. The contaminant levels documented in the IHNC sediments and soils could have posed a significant threat to those species using areas affected by contaminated spoil disposal. If the landfill option is not used or any other changes occur in the handling of contaminated dredged material, the USACE should consult with the Service to find an appropriate solution. Based upon the information provided, the Service has no objections to the USACE dredged sediment disposal plans as they are proposed.

Wildlife Resources

During implementation of the RP, construction activities at the lock location may disrupt or displace wildlife resources. However, this temporary impact (11 years) would be localized to an area that has little wildlife value and most wildlife species would move to an area with more favorable conditions and return after construction is completed. After completion of the new lock wildlife conditions would be similar to current conditions.

Fisheries Resources

Impacts to fisheries at the new lock site would generally be associated with construction activities and would be temporary (11 years) and include injury or mortality to sessile and slow-moving aquatic organisms due to burial or increased turbidity. More mobile fisheries would be temporarily displaced to other suitable locations. After construction activities cease, displaced fishery species would return to the proposed action area.

Essential Fish Habitat

The impacts to EFH should be discussed with the NMFS to determine if the project complies with the Magnuson-Stevens Fishery Conservation and Management Act, Magnuson-Stevens Act; P.L. 104-297, as amended) and its implementing regulations.

Threatened and Endangered species

The USACE is responsible for determining whether the selected alternative is likely (or not likely) to adversely affect any listed species and/or critical habitat, and for requesting the Service's concurrence with that determination. If the USACE determines, and the

Service concurs, that the selected alternative is likely to adversely affect listed species and/or critical habitat, a request for formal consultation in accordance with Section 7 of the Endangered Species Act should be submitted to the Service. That request should also include the USACE's rationale supporting their determination.

FISH AND WILDLIFE CONSERVATION MEASURES

The potential of additional marsh creation and enhancement should be considered with beneficial use of non-contaminated dredged material or by diverting water and/or sediment to the head of Bayou Bienvenue. Coastal marshes are considered by the Service to be aquatic resources of national importance due to their increasing scarcity and high habitat value for fish and wildlife within Federal trusteeship (i.e., migratory waterfowl, wading birds, other migratory birds, threatened and endangered species, and interjurisdictional fisheries). Thus, the Service offers the following conservation measures:

- 1. The Service encourages the use of all suitable dredged material for marsh creation.
- 2. The Service also encourages the USACE to consider the feasibility of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 3. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, the NMFS, and the LDWF should be consulted regarding the adequacy of any proposed alternative.

SERVICE POSITION AND RECOMMENDATIONS

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and the NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service strongly supports using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.

- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and the NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the IHNC Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. The LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change, the USACE should reinitiate consultation with the LDWF Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.
- 7. Coordination should continue with the Service and the NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.
- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.
- 9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, the NMFS, and the LDWF should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

LITERATURE CITED

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- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 1997. Mississippi River-Gulf Outlet New Lock and Connecting Channels, Louisiana, Re-evaluation Study Fish and Wildlife Coordination Act Report.
- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 2009. Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana, Fish and Wildlife Coordination Act Report. 52 pages.

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U.S. FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES LAFAYETTE, LOUISIANA OCTOBER 2024

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U.S. FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES

LAFAYETTE, LOUISIANA

OCTOBER 2024

EXECUTIVE SUMMARY

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction, including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under Federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the MRGO in 2009.

In concert with the above-mentioned efforts, the Service prepared Fish and Wildlife Coordination Act Reports (FWCAR) in March 1997, February 2009, December 2016, and March 2019, addressing the impacts on fish and wildlife resources from implementation of the Recommended Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference).

The main feature of the Recommended Plan (RP) is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (North American Vertical Datum 1988 [NAVD88]) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. Borrow will be used for a new levee that will tie into the existing Mississippi River Levee on the east side of the existing IHNC Lock. Proposed borrow sites are located within the Bonnet Carré Spillway and are approximately 45 acres and 18.5 acres, respectively. The Bonnet Carré borrow sites have previously been environmentally cleared. It is anticipated that the entire construction process could take up to 10 years to complete, if adequate funding is provided (project construction would begin in year 2029 and end in year 2039, with PED being conducted in years 2025 through 2029).

This draft report, which updates the previous EISs, incorporates and supplements our March 1997, February 2009, December 2016, and March 2019 FWCARs. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future withand without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments are incorporated into the final report (see appendix).

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service and NMFS strongly support using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.
- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the Inner Harbor Navigation Canal Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change the USACE should reinitiate consultation with the LDWF, Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.
- 7. Coordination should continue with the Service and NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and

pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.

- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.
- 9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, National Marine Fisheries Service (NMFS), and Louisiana Department of Wildlife and Fisheries (LDWF) should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

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INTRODUCTION

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under Federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the MRGO in 2009.

In concert with the above-mentioned efforts, the Service prepared Fish and Wildlife Coordination Act Reports (FWCAR) in March 1997, February 2009, December 2016, and March 2019, addressing the impacts on fish and wildlife resources from implementation of the Recommended Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference).

The main feature of the Recommended Plan (RP) is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (North American Vertical Datum 1988 [NAVD88]) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. It is anticipated that the entire construction process could take up to 10 years to complete, if adequate funding is provided (project

construction would begin in year 2029 and end in year 2039, with PED being conducted in years 2025 through 2029).

This draft report, which updates the previous EISs, incorporates and supplements our March 1997, February 2009, December 2016, and March 2019 FWCARs. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments are incorporated into the final report (see appendix).

DESCRIPTION OF STUDY AREA

The study area is located in southeastern Louisiana within Orleans Parish (Figure 1). The IHNC lock, one of the busiest locks in the Nation, is located in Orleans Parish. It connects the Mississippi River with the GIWW. The area surrounding the lock is highly urbanized. Both the IHNC and adjacent residential and industrial lands have negligible value to fish and wildlife.

Figure 1. The project feature locations and construction timing for the Inner Harbor Navigation Canal, New Orleans, Louisiana Project.



FISH AND WILDLIFE RESOURCES

Description of Habitats

Fish and wildlife habitats found in the study area include developed lands and open water. Developed habitats in the study area include residential and commercial areas, as well as roads and existing levees. Those habitats do not support significant wildlife use. Some of the development is located on higher elevations of the Mississippi River natural levees and former distributary channels; however, vast acreages of swamp and marsh have been placed under forced drainage systems and developed.

Major open water areas in and around the project area include Lake Pontchartrain, the IHNC, the Mississippi River, the Gulf Intercoastal Waterway (GIWW), and the Mississippi River Gulf Outlet (MRGO).

Restoration activities near the project area include MRGO closure, surge barrier, wetland creation demonstration, Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) projects, and beneficial use of dredged material during USACE maintenance of Federal navigation channels.

Fisheries Resources

The IHNC has minimal fishery value. Representative freshwater fishes found in the adjacent Mississippi River include channel catfish, blue catfish, freshwater drum, yellow bass, largemouth bass, and white crappie.

The project may be located within an area identified as Essential Fish Habitat (EFH) by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA, Magnuson-Stevens Act; P.L. 104-297). The USACE should consult with the NMFS regarding EFH.

Wildlife Resources

The project area provides habitat for a number of songbirds. Neotropical migrants expected in the project area include warblers, vireos, wrens, flycatchers, and many other species. Resident species include the blue jay, cardinal, and mourning dove. Seabirds using the adjacent open water areas may include laughing gull and several species of terns. Small game mammals that may be present in the project area and adjacent wooded areas include gray squirrel, eastern cottontail, and raccoon; and common furbearers include the mink, nutria, and muskrat. Nongame mammals that occur in the area include Virginia opossum, nine-banded armadillo, and several species of bats, rodents, and insectivores. Reptiles include the common snapping turtle, red-eared turtle, various water snakes, five-lined skink, and green anole. Representative amphibians include the green treefrog, southern leopard frog, and northern spring peeper.

Threatened and Endangered Species

Federally listed threatened and endangered species and/or their designated critical habitat occurring in the study area include the threatened West Indian manatees (*Trichechus manatus*), the threatened Gulf sturgeon (also known as the Atlantic sturgeon, *Acipenser oxyrhynchus desotoi*), the endangered pallid sturgeon (*Scaphirhynchus albus*), the proposed endangered tricolored bat (*Perimyotis subflavus*), and the proposed threatened alligator snapping turtle (*Macrochelys temminckii*).

West Indian manatees (Trichechus manatus) occasionally enter Lakes Pontchartrain and Maurepas, and associated coastal waters and streams during the summer months (i.e., June through September). Manatee occurrences appear to be increasing, and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of Louisiana. They have also been occasionally observed elsewhere along the Louisiana Gulf coast. Should the proposed project involve activity in the aquatic environment in those areas during summer months, further consultation with this office will be necessary.

The Gulf sturgeon is an anadromous fish that occurs in many rivers, streams, and estuarine waters along the northern Gulf coast between the Mississippi River and the Suwannee River, Florida. In Louisiana, Gulf sturgeon have been reported at Rigolets Pass, rivers and lakes of the Lake Pontchartrain basin, and adjacent estuarine areas. On March 19, 2003, the Service and NMFS published a final rule in the Federal Register (Volume 68, No. 53) designating critical habitat for the Gulf sturgeon in Louisiana, Mississippi, Alabama, and Florida. Portions of the Pearl and Bogue Chitto Rivers, Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, and Lake Borgne within Louisiana were included in that designation. While sturgeon have been documented in study area waterways, those waterways are not designated critical habitat.

The pallid sturgeon is found in Louisiana, in both the Mississippi (which is hydrologically connected to the IHNC and will be used for disposal of dredged material) and Atchafalaya Rivers (with known concentrations in the vicinity of the Old River Control Structure Complex). The pallid sturgeon is adapted to large, free-flowing, turbid rivers with a diverse assemblage of physical characteristics that are in a constant state of change. Many life history details and subsequent habitat requirements of this fish are not known. However, the pallid sturgeon is believed to utilize Louisiana riverine habitat during reproductive stages of its life cycle. Habitat loss through river channelization and dams has adversely affected this species throughout its range. Should the proposed project directly or indirectly affect the pallid sturgeon or its habitat, further consultation with this office will be necessary.

The tricolored bat, also known as the eastern pipistrelle, is a small bat weighing 4-8 grams with a head to tail length ranging from 77-89 millimeters (mm) and wingspan of 220-225 mm. The bat gets its name from their individual hairs being 'tri-colored': brown at tip, yellow in the middle, dark at the base. Overall, the fur appears yellow brown, with

reddish forearm skin. This small bat flies slowly with an erratic pattern while foraging, causing it to sometimes be mistaken for a moth. Tricolored bats appear to inhabit landscapes that are partly open, with large trees and plentiful woodland edges. They are found in a variety of terrestrial habitats, including grasslands, old fields, suburban areas, orchards, urban areas, and woodlands, especially hardwood woodlands. Little is known about daytime summer or maternity roosts. These bats are among the first bats to emerge at dusk each night, and their appearance at tree-top level indicates that they may roost in foliage or in high tree cavities and crevices. They are not often found in buildings or in deep woods, seeming to prefer edge habitats near areas of mixed agricultural use. Hibernation sites are found deep within caves or mines in areas of relatively warm, stable temperatures. However, research is ongoing determining small bat hibernation habitats other than caves and mines. The main threat to this species is White Nose Syndrome (Pseudogymnoascus destructans), with affected hibernation sites resulting in more than 75 percent decline of bats, with some sites declining by 90 percent. Other threats include habitat modification and destruction including forest and grassland conversion to urban/suburban land use and mortality during migration from winter hibernaculum to summer roosting habitat due to wind energy development. On September 13, 2022, the Service announced a proposal to list the tricolored bat as endangered under the ESA.

The alligator snapping turtle may be found in large rivers, canals, lakes, oxbows, and swamps adjacent to large rivers. It is most common in freshwater lakes and bayous, but also found in coastal marshes and sometimes in brackish waters near river mouths. Typical habitat is mud-bottomed waterbodies having some aquatic vegetation. The alligator snapping turtle is slow growing and long lived. Sexual maturity is reached at 11 to 13 years of age (Ernst et al. 1994). Because of this and its low fecundity, loss of breeding females is thought to be the primary threat to the species. On November 9, 2021, the Service announced a proposal to list the alligator snapping turtle as threatened under the ESA.

DESCRIPTION OF RECOMMENDED PLAN

The main feature of the Recommended Plan (RP) is replacement of the existing lock with a new lock having dimensions of 900 feet long by 110 feet wide by 22 feet deep (NAVD88) and associated support structures and facilities. The lock is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. The RP also calls for demolition and replacement of the existing St. Claude Avenue Bridge. Prior activities and work that have been completed for the previously recommended plan for a deep-draft lock replacement project that was under construction prior to Hurricane Katrina include: Acquisition of real estate required for deep draft project construction, except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan. Construction of the new lock north of Claiborne Avenue would require a complex sequence of tasks. Borrow will be used for a new levee that will tie into the existing Mississippi River Levee on the east side of the existing IHNC Lock. Proposed borrow sites are located within the Bonnet Carré Spillway and are approximately 45 acres and 18.5 acres, respectively. The Bonnet Carré borrow sites have previously been environmentally cleared. It is anticipated that the entire construction process could take up to 10 years to complete, if adequate funding is provided (project construction would begin in year 2029 and end in year 2039, with PED being conducted in years 2025 through 2029).

Under the No-action alternative, the proposed construction of a replacement lock or an additional lock would not occur. The Federal government would continue to operate and maintain the existing lock. Delay times would be similar to existing conditions due to the inadequate dimensions of the existing lock. Lock repairs and maintenance would be a continuous concern due to the age and condition of the lock.

Dredged Material Disposal Plans

Soils and sediments that require excavation for project construction have been thoroughly evaluated under regulations and procedures developed under requirements of the Clean Water Act (CWA). Approximately 614,000 cubic yards of dredged material that would be excavated from Dredged Material Management Units (DMMUs) 3, 4, 6, 9, and 10 is "suitable for open water discharge" (see Figure for DMMU Map). This material is non-toxic to sensitive benthic organisms, does not contain contaminants at concentrations that would adversely bioaccumulate or bio-magnify in aquatic food webs, and would not violate or exceed regulatory water quality criteria or drinking water standards upon discharge into the proposed Mississippi River open-water disposal site. The dredged material would mix with the river's normal suspended and bedload sediments and be carried downstream. Approximately 105,000 cubic yards of dredged material that would be excavated from DMMUs 5 and 7 is "unsuitable for open water discharge" because it is toxic to sensitive benthic organisms. This material would be excavated with an environmental bucket dredge to minimize on-site loss of material and turbidity; it would be hauled to and permanently disposed in a permitted solid waste landfill.

Figure 2. Layout of 11 Dredged Material Management Units (DMMU) used for the assessment of sediments and soils for the IHNC Lock Replacement Project.



PROJECT IMPACTS

The President's Council on Environmental Quality defined the term "mitigation" in the National Environmental Policy Act regulations to include:

- a) avoiding the impact altogether by not taking a certain action or parts of an action;
- b) minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; and,

d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.

The Service supports and adopts this definition of mitigation and considers its specific elements to represent the desirable sequence of steps in the mitigation planning process. Based on current and expected future without-project conditions, the planning goal of the Service is to develop a balanced project (i.e., one that is responsive to the IHNC New Lock project needs while addressing the co-equal need for fish and wildlife resource conservation).

The Service's Mitigation Policy (Federal Register, Volume 46, No. 15, January 23, 1981) identifies four resource categories that are used to ensure that the level of mitigation recommended by Service biologists will be consistent with the fish and wildlife resource values involved. Considering the high value of bottomland hardwood for fish and wildlife and the relative scarcity of that habitat type, those wetlands are designated as Resource Category 2 habitats, the mitigation goal for which is no net loss of in-kind habitat value.

The combination of Mississippi River open water discharge (for suitable material) and landfill (for contaminated material) disposal material eliminates all project-related environmental impacts to wetlands and fish and wildlife habitats and the need for mitigating any environmental impacts.

The Service commends the USACE for avoiding wetland impacts for the IHNC Lock Replacement Project. The contaminant levels documented in the IHNC sediments and soils could have posed a significant threat to those species using areas affected by contaminated spoil disposal. If the landfill option is not used or any other changes occur in the handling of contaminated dredged material, the USACE should consult with the Service to find an appropriate solution. Based upon the information provided, the Service has no objections to the USACE dredged sediment disposal plans as they are proposed.

Wildlife Resources

During implementation of the RP, construction activities at the lock location may disrupt or displace wildlife resources. However, this temporary impact (11 years) would be localized to an area that has little wildlife value and most wildlife species would move to an area with more favorable conditions and return after construction is completed. After completion of the new lock wildlife conditions would be similar to current conditions.

Fisheries Resources

Impacts to fisheries at the new lock site would generally be associated with construction activities and would be temporary (11 years) and include injury or mortality to sessile and slow-moving aquatic organisms due to burial or increased turbidity. More mobile fisheries would be temporarily displaced to other suitable locations. After construction activities cease, displaced fishery species would return to the proposed action area.

Essential Fish Habitat

The impacts to EFH should be discussed with the NMFS to determine if the project complies with the Magnuson-Stevens Fishery Conservation and Management Act, Magnuson-Stevens Act; P.L. 104-297, as amended) and its implementing regulations.

Threatened and Endangered species

The USACE is responsible for determining whether the selected alternative is likely (or not likely) to adversely affect any listed species and/or critical habitat, and for requesting the Service's concurrence with that determination. If the USACE determines, and the Service concurs, that the selected alternative is likely to adversely affect listed species and/or critical habitat, a request for formal consultation in accordance with Section 7 of the Endangered Species Act should be submitted to the Service. That request should also include the USACE rationale supporting their determination.

FISH AND WILDLIFE CONSERVATION MEASURES

The potential of additional marsh creation and enhancement should be considered with beneficial use of non-contaminated dredged material or by diverting water and/or sediment to the head of Bayou Bienvenue. Coastal marshes are considered by the Service to be aquatic resources of national importance due to their increasing scarcity and high habitat value for fish and wildlife within Federal trusteeship (i.e., migratory waterfowl, wading birds, other migratory birds, threatened and endangered species, and inter-jurisdictional fisheries). Thus, the Service offers the following conservation measures:

- 1. The Service encourages the use of all suitable dredged material for marsh creation.
- 2. The Service also encourages the USACE to consider the feasibility of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 3. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, NMFS, and LDWF should be consulted regarding the adequacy of any proposed alternative.

SERVICE POSITION AND RECOMMENDATIONS

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service strongly supports using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.
- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the Inner Harbor Navigation Canal Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change, the USACE should reinitiate consultation with the LDWF Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.
- 7. Coordination should continue with the Service and NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.
- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed

or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.

9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, NMFS, and LDWF should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

LITERATURE CITED

- Ernst, C.H., J.E. Lovich, and R.W. Barbour. 1994. Turtles of the United States and Canada. Smithsonian Institution Press, Washington, DC. 313 pp.
- U.S. Army Corps of Engineers, New Orleans District. 1997. Mississippi River Gulf Outlet New Lock and Connecting Channels Environmental Impact Statement. 118 pages.
- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 1997. Mississippi River-Gulf Outlet New Lock and Connecting Channels, Louisiana, Re-evaluation Study Fish and Wildlife Coordination Act Report.
- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 2009. Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana, Fish and Wildlife Coordination Act Report. 52 pages.

APPENDIXES



JOHN BEL EDWARDS GOVERNOR State of Louisiana Department of Wildlife and Fisheries

CHARLES J. MELANCON SECRETARY

December 7, 2016

Mr. Joe Ransom, Supervisor U.S. Fish and Wildlife Service 646 Cajundome Blvd. Suite 400 Lafayette, LA 70506

RE: Notice Number: Inner Harbor Navigation Canal Lock Replacement Project Applicant: U.S. Fish and Wildlife Service Notice Date: December 1, 2016

Dear Mr. Ransom:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the above referenced Fish and Wildlife Coordination Act Report concerning the proposed Inner Harbor Navigation Canal Lock Replacement Project (IHNC), in Orleans Parish, Louisiana. Based upon this review, the following has been determined:

Scenic Rivers:

The U.S. Fish and Wildlife Service noted the presence of Bayou Bienvenue, a Louisiana Scenic Stream, within the vicinity of the proposed IHNC. LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by project related activates and, therefore, no Scenic River Permit will be required. Scenic Rivers Coordinator Chris Davis can be contacted at 225-765-2642 should additional questions remain regarding this issue.

Additional comments:

Given the project's location within a previously developed site and a lack of associated wetland impacts, LDWF has no objection to the implementation of the IHNC as proposed. However, with the exception of any Scenic Rivers concerns (addressed above), LDWF does concur with implementation of the fish and wildlife conservation recommendations made by the U.S. Fish and Wildlife Service in their report.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. Please do not hesitate to contact Habitat Section biologist Zachary Chain at 225-763-3587 should you need further assistance.

Sincerely,

Kyle F. Balkum

Biologist Director

zc/cm



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13th Avenue South St. Petersburg, Florida 33701-5505 http://sero.nmfs.noaa.gov

February 1, 2017

F/SER46/RH:jk 225/389-0508

Colonel Michael N. Clancy District Commander, New Orleans District U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, Louisiana 70118

Dear Colonel Clancy:

NOAA's National Marine Fisheries Service, Habitat Conservation Division (NMFS HCD) has received the Integrated Draft General Reevaluation Report and draft Supplemental Environmental Impact Statement (SEIS) for the Mississippi River, Baton Rouge to the Gulf of Mexico, Mississippi River-Gulf Outlet, Louisiana, New Industrial Canal Lock and Connecting Channels project. The draft SEIS was transmitted for our review by a January 4, 2017, letter from Edward Lambert of your staff. The U.S. Army Corps of Engineers (USACE) proposes to replace the existing lock on the Inner Harbor Navigation Canal (IHNC) with a new lock designed to accommodate shallow draft vessels plying the Gulf Intracoastal Waterway.

Based on our review of the draft SEIS, we believe resources in the project area have been adequately described. However, NMFS disagrees with conclusions provided in the document regarding impacts to essential fish habitat (EFH). Specifically, the USACE has estimated the acreage of aquatic habitat to be permanently lost due to project implementation to be 30 acres. Using Google Earth, the NMFS estimates approximately 45 acres of tidally influenced aquatic habitat would be rendered non-tidal due to project implementation. Additionally, NMFS disagrees with the statement that impacts to EFH would eventually be offset through the demolition of the existing lock structure and the conversion of that site to open water (Section 6.2.2, page 6-22). The disagreement is because the post-construction aquatic habitats between the new lock and the river, including the existing lock area, would not be tidally influenced and would not be considered EFH supportive of federally managed marine fishery species. In summary, NMFS believes project implementation would result in the unmitigated permanent loss of approximately 45 acres of EFH.

The NMFS HCD also is concerned opportunities to maximize the environmental benefits of project implementation have not be incorporated into the project. Specifically, more than 600,000 cubic yards of dredged material suitable for open water disposal is proposed to be deposited into the Mississippi River, rather than used beneficially to create tidally influenced marsh. The NMFS believes beneficial use options appropriate for tidal marsh creation purposes are available in close proximity to the dredging area (see attached figure). According to the draft SEIS, the beneficial use of dredged material was not considered for any of the lock replacement alternatives because impacts to fish and wildlife habitats requiring compensatory mitigation were not identified (page 2-23, paragraph 1). While NMFS understands the project was designed to benefit economic development, not the environment, the USACE's Environmental Operating Principles suggest civil works projects should be designed to benefit the environment, if such actions are possible and do not result in project cost increases.



The NMFS has a "findings" with the New Orleans District that states fulfillment of EFH coordination requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) for civil works projects will be completed through our review and comment on documents prepared under the requirements of the National Environmental Policy Act. Therefore, in view of the above and in compliance with provisions of the Magnuson-Stevens Act, NMFS recommends the following to ensure the conservation of EFH and associated marine fishery resources:

EFH Conservation Recommendation

The NMFS recommends the USACE develop a mitigation plan designed to offset the loss of approximately 45 acres of EFH. Such a plan should be developed in coordination with NMFS and incorporated into the final EIS.

Regarding mitigation to offset project impacts to EFH, the NMFS believes it is technically feasible to pump the 600,000 cubic yards of sediment identified as appropriate for open water disposal into an adjacent open water area. The pumping distance to the potential marsh creation site is similar to, or closer than, the Mississippi River disposal site identified in the draft EIS (see enclosed figure). As such, the beneficial use of sediment should not result in a significant cost increase in the project. While NMFS is aware there are some land rights issues associated with disposal in the recommended area, the NMFS believes those problems could be circumvented. Additionally, it should be noted that a number of local community groups have previously supported marsh creation in the recommended placement area.

Consistent with Section 305(b)(4)(B) of the Magnuson-Stevens Act and NMFS' implementing regulation at 50 CFR 600.920(k), your office is required to provide a written response to our EFH conservation recommendation within 30 days of receipt. Your response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the proposed activity. If your response is inconsistent with our EFH conservation recommendation, you must provide a substantive discussion justifying the reasons for not implementing the recommendation. If it is not possible to provide a substantive response within 30 days, the USACE should provide an interim response to NMFS, to be followed by the detailed response. The detailed response should be provided in a manner to ensure that it is received by NMFS at least 10 days prior to the final approval of the action, i.e., the signing of the Record of Decision.

We appreciate your consideration of our comments. If you wish to discuss this project further or have questions concerning our recommendation, please contact Richard Hartman at (225) 389-0508, extension 203.

Sincerely,

Virgue m. Lay

Virginia M. Fay Assistant Regional Administrator Habitat Conservation Division

Enclosure

c: FWS, C Breaux, D. Walther NOD, M. Lahare F/SER46, Swafford F/SER4, Dale, Silverman LDNR Consistency, Haydel Files Figure 1: New lock site, location of NMFS recommended disposal site, and the location of the draft EIS recommended disposal site.





FISH AND WILDLIFE SERVICE

Louisiana Ecological Services 200 Dulles Drive Lafayette, Louisiana 70506 March 7, 2019

Colonel Michael N. Clancy District Engineer U.S. Army Corps of Engineers Post Office Box 60267 New Orleans, Louisiana 70160-0267

Dear Colonel Clancy:

Please reference our December 2016, February 2009, and March 1997, Fish and Wildlife Coordination Act Reports for the Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana. This report finalizes the December 2016 report and supplements our March 1997 and February 2009 FWCA Reports. This report contains a description of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the Tentatively Selected Plan. This report constitutes the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act. This report has been provided to the Louisiana Department of Wildlife and Fisheries and the National Marine Fisheries Service; their comments are incorporated into our final report.

We appreciate the cooperation of your staff on this study. Should your staff have any questions regarding the enclosed report, please have them contact Ms. Catherine Breaux (504/862-2689) of this office.

Sincerely,

Joseph A. Ranson Field Supervisor Louisiana Ecological Services

Attachment

cc: EPA, Dallas, TX NMFS, Baton Rouge, LA CPRA, Baton Rouge, LA LDWF, Baton Rouge, LA



FISH AND WILDLIFE SERVICE

Louisiana Ecological Services 200 Dulles Drive Lafayette, Louisiana 70506 March 7, 2019

Mr. Craig Gothreaux NOAA Fisheries Habitat Conservation Division Suite 375 5757 Corporate Blvd. Baton Rouge, Louisiana 70808-2571

Dear Mr. Gothreaux:

Attached is the Final Fish and Wildlife Coordination Act Report on the "the Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana" for your review. This report constitutes the final report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). Please review and provide comments to our office within two weeks of receiving. The Fish and Wildlife Service will incorporate your agency's comments into the final report prior to its submission to the U.S. Army Corps of Engineers. Should your staff have any questions regarding this report, please have them contact Catherine Breaux (504/862-2689) of this office.

Sincerely,

Joseph A. Ranson Field Supervisor Louisiana Ecological Services

Attachment



FISH AND WILDLIFE SERVICE

Louisiana Ecological Services 200 Dulles Drive Lafayette, Louisiana 70506 March 7, 2019

Jack Montoucet Secretary Louisiana Department of Wildlife and Fisheries Post Office Box 98000 Baton Rouge, Louisiana 70898-9000

Dear Mr. Montoucet:

Attached is the Final Fish and Wildlife Coordination Act Report on the "the Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana" for your review. This report constitutes the final report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). Please review and provide comments to our office within two weeks of receiving. The Fish and Wildlife Service will incorporate your agency's comments into the final report prior to its submission to the U.S. Army Corps of Engineers. Should your staff have any questions regarding this report, please have them contact Catherine Breaux (504/862-2689) of this office.

Sincerely,

Joseph A. Ranson Field Supervisor Louisiana Ecological Services

Attachment

INNER HARBOR NAVIGATION CANAL LOCK REPLACEMENT PROJECT, ORLEANS PARISH, LOUISIANA

FISH AND WILDLIFE COORDINATION ACT REPORT



U.S. FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES LAFAYETTE, LOUISIANA MARCH 2019

INNER HARBOR NAVIGATION CANAL LOCK REPLACEMENT PROJECT, ORLEANS PARISH, LOUISIANA

FISH AND WILDLIFE COORDINATION ACT REPORT

SUBMITTED TO

NEW ORLEANS DISTRICT

U.S. ARMY CORPS OF ENGINEERS

NEW ORLEANS, LOUISIANA

PREPARED BY

CATHERINE BREAUX, FISH AND WILDLIFE BIOLOGIST

U.S. FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES

LAFAYETTE, LOUISIANA

MARCH 2019

EXECUTIVE SUMMARY

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction, including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under Federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the MRGO in 2009.

In concert with the above mentioned efforts, the Service prepared March 1997 and February 2009 Fish and Wildlife Coordination Act Reports (FWCAR) and a draft December 2016 FWCAR addressing the impacts on fish and wildlife resources from implementation of the Recommended Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference). The RP includes the replacement of the existing lock with a new lock having usable dimensions of 900 feet long by 110 feet wide by 22 feet deep lock to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge.

This final report, which compliments the updated SEIS, incorporates and supplements our March 1997 and February 2009 FWCAR. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document constitutes the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments are incorporated into the final report (see appendix).

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which

could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service and NMFS strongly supports using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.
- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the Inner Harbor Navigation Canal Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change the USACE should reinitiate consultation with the LDWF, Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.
- 7. Coordination should continue with the Service and NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.
- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.

9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, National Marine Fisheries Service (NMFS), and Louisiana Department of Wildlife and Fisheries (LDWF) should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

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Louisiana Department of Wildlife and Fisheries comment letter

INTRODUCTION

The Inner Harbor Navigation Canal (IHNC) and Lock, located in metropolitan New Orleans, provides a link between the Mississippi River, the Gulf Intracoastal Waterway (GIWW), and Lake Pontchartrain. Constructed in 1923 by the Board of Commissioners of the Port of New Orleans, the antiquated lock is currently operated beyond its design capacity. Because of an anticipated increase in barge and ship traffic, the lock replacement project was authorized, to be implemented by the U.S. Army Corps of Engineers, New Orleans (USACE), in Chapter 112 of the Rivers and Harbors and Flood Control Acts of 1956. The original Final Environmental Impact Statement (EIS) and Main Report for the Inner Harbor Navigation Canal Lock Replacement Project (also referred to as the IHNC new lock project and previously called the Mississippi River Gulf Outlet, New Lock and Connecting Channels), Orleans Parish, Louisiana, issued in March 1998, focused on the potential impacts of new lock construction, including impacts to the local community and supporting infrastructure. Following the release of the 1998 report and EIS, a 2009 Supplemental EIS (SEIS) was required under Federal court order to address the post-hurricane Katrina conditions of the area and provide an updated plan for dredging and disposal of canal bottom sediments and canal bank soils. Currently an additional SEIS is being conducted in order to reevaluate a need for a small draft lock as well as the previous deep draft lock due to changes in lock traffic since the closure of the MRGO in 2009.

In concert with the above mentioned efforts, the Service prepared March 1997 and February 2009 Fish and Wildlife Coordination Act Reports (FWCAR) and December 2016 draft FWCAR addressing the impacts on fish and wildlife resources from implementation of the Tentatively Selected Plan (RP), and also providing recommendations to mitigate adverse impacts on those resources (herein incorporated by reference). The RP includes the replacement of the existing lock with a new lock having usable dimensions of 900 feet long by 110 feet wide by 22 feet deep lock to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge.

This report, which compliments the updated SEIS, incorporates and supplements our March 1997 and February 2009 FWCAR. This report contains descriptions of the existing fish and wildlife resources of the project area, discusses future with- and without-project habitat conditions, identifies fish and wildlife-related impacts of the proposed project, and provides recommendations for the RP. This document does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report has been provided to the National Marine Fisheries Service (NMFS) and the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments will be incorporated into the final report.

DESCRIPTION OF STUDY AREA

The study area is located in southeastern Louisiana within Orleans Parish (Figure 1). The IHNC lock, one of the busiest locks in the Nation, is located in Orleans Parish. It connects the Mississippi River with the GIWW. The area surrounding the lock is highly urbanized. Both the IHNC and adjacent residential and industrial lands have negligible value to fish and wildlife.

Figure 1. The Project Area and Feature Locations for the Inner Harbor Navigation Canal, New Orleans, Louisiana Project.



FISH AND WILDLIFE RESOURCES

Description of Habitats

Fish and wildlife habitats found in the study area include developed lands and open water. Developed habitats in the study area include residential and commercial areas, as well as roads and existing levees. Those habitats do not support significant wildlife use.

Some of the development is located on higher elevations of the Mississippi River natural levees and former distributary channels; however, vast acreages of swamp and marsh have been placed under forced drainage systems and developed.

Major open water areas in and around the project area include Lake Pontchartrain, the IHNC, the Mississippi River, the GIWW, and the MRGO.

Restoration activities near the project area include MRGO closure, surge barrier, wetland creation demonstration, Coastal Wetlands Planning, Protection and Restoration Act projects, and beneficial use of dredged material during USACE maintenance of Federal navigation channels.

Fisheries Resources

The IHNC has minimal fishery value. Representative freshwater fishes found in the adjacent Mississippi River include channel catfish, blue catfish, freshwater drum, yellow bass, largemouth bass, and white crappie.

The project may be located within an area identified as Essential Fish Habitat (EFH) by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA, Magnuson-Stevens Act; P.L. 104-297). The USACE should consult with the NMFS regarding EFH.

Wildlife Resources

The project area provides habitat for a number of songbirds. Neotropical migrants expected in the project area include warblers, vireos, wrens, flycatchers, and many other species. Resident species include the blue jay, cardinal, and mourning dove. Seabirds using the adjacent open water areas may include laughing gull and several species of terns. Small game mammals that may be present in the project area and adjacent wooded areas include gray squirrel, eastern cottontail, and raccoon; and common furbearers include the mink, nutria, and muskrat. Nongame mammals that occur in the area include Virginia opossum, nine-banded armadillo, and several species of bats, rodents and insectivores. Reptiles include the common snapping turtle, red-eared turtle, various water snakes, five-lined skink, and green anole. Representative amphibians include the green treefrog, southern leopard frog, and northern spring peeper.

Threatened and Endangered Species

Federally listed threatened and endangered species and/or their designated critical habitat occurring in the study area include the endangered West Indian manatees (*Trichechus manatus*), the threatened Gulf sturgeon (also known as the Atlantic sturgeon, *Acipenser oxyrhynchus desotoi*), and the endangered pallid sturgeon (*Scaphirhynchus albus*).

Federally listed as an endangered species, West Indian manatees (Trichechus manatus) occasionally enter Lakes Pontchartrain and Maurepas, and associated coastal waters and streams during the summer months (i.e., June through September). Manatee occurrences appear to be increasing, and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of Louisiana. They have also been occasionally observed elsewhere along the Louisiana Gulf coast. Should the proposed project involve activity in the aquatic environment in those areas during summer months, further consultation with this office will be necessary.

The Gulf sturgeon (Acipenser oxyrhynchus desotoi), federally listed as a threatened species, is an anadromous fish that occurs in many rivers, streams, and estuarine waters along the northern Gulf coast between the Mississippi River and the Suwannee River, Florida. In Louisiana, Gulf sturgeon have been reported at Rigolets Pass, rivers and lakes of the Lake Pontchartrain basin, and adjacent estuarine areas. On March 19, 2003, the Service and the National Marine Fisheries Service (NMFS) published a final rule in the Federal Register (Volume 68, No. 53) designating critical habitat for the Gulf sturgeon in Louisiana, Mississippi, Alabama, and Florida. Portions of the Pearl and Bogue Chitto Rivers, Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, and Lake Borgne within Louisiana were included in that designation. While sturgeon have been documented in study area waterways, those waterways are not designated critical habitat.

The pallid sturgeon is an endangered fish found in Louisiana, in both the Mississippi (which is hydrologically connected to the IHNC and will be used for disposal of dredged material) and Atchafalaya Rivers (with known concentrations in the vicinity of the Old River Control Structure Complex). The pallid sturgeon is adapted to large, free-flowing, turbid rivers with a diverse assemblage of physical characteristics that are in a constant state of change. Many life history details and subsequent habitat requirements of this fish are not known. However, the pallid sturgeon is believed to utilize Louisiana riverine habitat during reproductive stages of its life cycle. Habitat loss through river channelization and dams has adversely affected this species throughout its range. Should the proposed project directly or indirectly affect the pallid sturgeon or its habitat, further consultation with this office will be necessary.

DESCRIPTION OF RECOMMENDED PLAN

The main feature of the recommended plan (RP) is replacement of the existing lock with a new lock having usable dimensions of 900 feet long by 110 feet wide by 22 feet deep which is to be constructed between the banks of the IHNC, north of the Claiborne Avenue Bridge and south of the Florida Avenue Bridge. Prior activities and work that have been completed for the prior deep-draft lock replacement project that was under construction include: Acquisition of real estate required for project construction except for temporary construction easements; demolition and removal of the Galvez Street Wharf; demolition and removal of all businesses on the east bank of the IHNC between the existing lock and Florida Avenue; environmental remediation of that area; and testing of various pile driving equipment. These activities are compatible with and applicable to this lock replacement plan.

Under the No-action alternative, the proposed construction of a replacement lock or an additional lock would not occur. The Federal government would continue to operate and maintain the existing lock. Delay times would be similar to existing conditions due to the inadequate dimensions of the existing lock. Lock repairs and maintenance would be a continuous concern due to the age and condition of the lock.

Dredged Material Disposal Plans

The lock replacement alternatives evaluated in prior reports (2007 and 2009) would have required large areas for the disposal of dredged material generated from lock construction. In those reports, large quantities, up to 1,400,000 cubic yards, were to be excavated with hydraulic dredges and pumped as a slurry to confined disposal areas located along the south bank of the GIWW/MRGO east of the IHNC. This material had been determined unsuitable for open water disposal and therefore required upland confinement. The confined disposal areas varied in size from around 200 to over 500 acres, depending on the lock size and construction method (float-in or cast-in-place). Material determined suitable for aquatic disposal was to be used beneficially to mitigate for effects of the confined disposal areas on wooded wetland habitat. Material to be dredged near the old lock site, late in the construction sequence, was to be hydraulically dredged and disposed of in the deep channel of the Mississippi River. The 2009 SEIS evaluated an option for disposal of the contaminated material in a solid waste landfill; however the time, cost and logistics of dredging such a large quantities of material necessary to build a deep draft lock with mechanical equipment, and hauling and disposing of it in a landfill, made this option impractical, and it was not part of the recommended plan.

A reevaluation of dredged material disposal alternatives was conducted for the current study. Current surveys from 2016 provided the basis for calculating quantities of material from each dredged material management unit (DMMU). DMMUs (Figure 2) were established during preparation of the 2009 SEIS to designate dredging areas based on expected levels of contaminants of concern. It was determined that the required dredging quantities for all DMMUs were significantly reduced from the volumes described for all of the alternatives assessed in the 2009 SEIS.

Cost estimates were developed and evaluated for disposing material not suitable for open water into a confined disposal area versus disposal into a solid waste landfill. The landfill disposal alternative was determined to cost less and to have less project-related environmental impacts than the confined disposal alternative.



Figure 2. Layout of 11 Dredged Material Management Units (DMMU) used for the assessment of sediments and soils for the IHNC Lock Replacement Project.

PROJECT IMPACTS

The President's Council on Environmental Quality defined the term "mitigation" in the National Environmental Policy Act regulations to include:

(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.

The Service supports and adopts this definition of mitigation and considers its specific elements to represent the desirable sequence of steps in the mitigation planning process. Based on current and expected future without-project conditions, the planning goal of the Service is to develop a balanced project, i.e., one that is responsive to the IHNC New Lock project needs while addressing the co-equal need for fish and wildlife resource conservation.

The Service's Mitigation Policy (Federal Register, Volume 46, No. 15, January 23, 1981) identifies four resource categories that are used to ensure that the level of mitigation recommended by Service biologists will be consistent with the fish and wildlife resource values involved. Considering the high value of bottomland hardwood for fish and wildlife and the relative scarcity of that habitat type, those wetlands are designated as Resource Category 2 habitats, the mitigation goal for which is no net loss of in-kind habitat value.

The landfill disposal alternative for contaminated dredged material eliminates all projectrelated environmental impacts to wetlands and fish and wildlife habitats and the need for mitigating any environmental impacts. The confined disposal alternative would have covered 82 acres of wooded wetlands and required compensatory mitigation of resource 2 category. It would also have required perpetual maintenance of this isolated site by the Government to assure the site is never altered or disturbed, and seasonal mowing would have been necessary to minimize wildlife usage.

Other dredged material (Figure 2) originating from DMMU's 3 (New Lock Construction), 4 (New Lock Construction), 6 (North Bypass Channel), 9 (Existing Lock Demolition) and 10 (South Bypass Channel) (total 755,500 CY) would be disposed of in the Mississippi River. For DMMU's 9 and 10, construction of the south bypass channel and demolition of the existing lock would occur later in the overall sequence of tasks, in years 9 and 10, respectively.

The Service commends the USACE for avoiding wetland impacts for the IHNC Lock Replacement Project. The contaminant levels documented in the IHNC sediments and soils could have posed a significant threat to those species using areas affected by contaminated spoil disposal. If the landfill option is not used or any other changes occur in the handling of contaminated dredged material, the USACE should consult with the Service to find an appropriate solution. Based upon the information provided, the Service has no objections to the USACE dredged sediment disposal plans as they are proposed.

Wildlife Resources

During implementation of the RP, construction activities at the lock location may disrupt or displace wildlife resources. However, this temporary impact (11 years) would be localized to an area that has little wildlife value and most wildlife species would move to an area with more favorable conditions and return after construction is completed. After completion of the new lock wildlife conditions would be similar to current conditions.

Fisheries Resources

Impacts to fisheries at the new lock site would generally be associated with construction activities and would be temporary (11 years) and include injury or mortality to sessile and slow-moving aquatic organisms due to burial or increased turbidity. More mobile fisheries would be temporarily displaced to other suitable locations. After construction activities cease, displaced fishery species would return to the proposed action area.

Essential Fish Habitat

Impacts to EFH resulting from construction activities would be localized and temporary. There would be increases in turbidity as a result of construction in the IHNC site. Once construction is complete it is expected EFH would return to similar to existing conditions.

Threatened and Endangered species

The USACE is responsible for determining whether the selected alternative is likely (or not likely) to adversely affect any listed species and/or critical habitat, and for requesting the Service's concurrence with that determination. If the USACE determines, and the Service concurs, that the selected alternative is likely to adversely affect listed species and/or critical habitat, a request for formal consultation in accordance with Section 7 of the Endangered Species Act should be submitted to the Service. That request should also include the USACE rationale supporting their determination.

FISH AND WILDLIFE CONSERVATION MEASURES

The potential of additional marsh creation and enhancement should be considered with beneficial use of non-contaminated dredged material or by diverting water and/or sediment to the head of Bayou Bienvenue. Coastal marshes are considered by the Service to be aquatic resources of national importance due to their increasing scarcity and high habitat value for fish and wildlife within Federal trusteeship (i.e., migratory

waterfowl, wading birds, other migratory birds, threatened and endangered species, and inter-jurisdictional fisheries).

- 1. The Service encourages the use of all suitable dredged material for marsh creation.
- 2. The Service also encourages the USACE to consider the feasibility of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 3. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, National Marine Fisheries Service (NMFS), and Louisiana Department of Wildlife and Fisheries (LDWF) should be consulted regarding the adequacy of any proposed alternative.

SERVICE POSITION AND RECOMMENDATIONS

The lock replacement will have minimal impacts to fish and wildlife resources. The Service commends the USACE for avoiding wetland impacts with contaminated dredged material which could have posed a threat to fish and wildlife resources. The Service does not oppose replacement of the IHNC lock, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

- 1. The Service and NMFS strongly support the additional project feature of constructing a siphon or concrete channel around the lock to divert water from the river to the head of Bayou Bienvenue.
- 2. The Service strongly supports using all clean dredged material to create brackish marsh that will improve fish and wildlife habitat in the project area.
- 3. The Service recommends the use of silt curtains while dredging material at the IHNC to minimize siltation and the spread of contaminated materials.
- 4. If contaminated material is used for backfill at the new lock, that material must be contained so that it is not open to or redistributed in the IHNC.
- 5. The Service and NMFS shall be provided an opportunity to review and submit recommendations on future detailed planning reports (e.g., Design Document Report, Engineering Document Report, etc.) and the draft plans and specifications on the Inner Harbor Navigation Canal Lock Replacement Project addressed in this report.
- 6. Part of Bayou Bienvenue is a Louisiana designated Natural and Scenic River. LDWF has reviewed the project and determined that Bayou Bienvenue will not be

adversely impacted by the project; therefore, no Scenic Stream Permit will be required. If any project features should change, the USACE should reinitiate consultation with the LDWF Scenic Rivers Program prior to conducting any activities within or adjacent to the banks of that bayou. Scenic Rivers Coordinator Chris Davis can be contacted at (225) 765-2642.

- Coordination should continue with the Service and NMFS on detailed contract specifications to avoid and minimize potential impacts to manatees, Gulf sturgeon, and pallid sturgeon. Incorporation of protective conservation measures presented in this report should be included in applicable plans and specifications.
- 8. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.
- 9. Should the landfill option for disposal of contaminated dredged material change or not be used, the Service, National Marine Fisheries Service (NMFS), and Louisiana Department of Wildlife and Fisheries (LDWF) should be consulted regarding the adequacy of any proposed alternative.

Provided that the above recommendations are included in the feasibility report and related authorizing documents, the Service will support further planning and implementation of the RP.

LITERATURE CITED

- U.S. Army Corps of Engineers, New Orleans District. 1997. Mississippi River Gulf Outlet New Lock and Connecting Channels Environmental Impact Statement. 118 pages.
- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 1997. Mississippi River-Gulf Outlet New Lock and Connecting Channels, Louisiana, Re-evaluation Study Fish and Wildlife Coordination Act Report.
- U.S. Fish and Wildlife Service, Ecological Services, Lafayette, Louisiana. 2009. Inner Harbor Navigation Canal Lock Replacement Project, Orleans Parish, Louisiana, Fish and Wildlife Coordination Act Report. 52 pages.



JOHN BEL EDWARDS GOVERNOR State of Louisiana Department of Wildlife and Fisheries

CHARLES J. MELANCON SECRETARY

December 7, 2016

Mr. Joe Ransom, Supervisor U.S. Fish and Wildlife Service 646 Cajundome Blvd. Suite 400 Lafayette, LA 70506

RE: Notice Number: Inner Harbor Navigation Canal Lock Replacement Project Applicant: U.S. Fish and Wildlife Service Notice Date: December 1, 2016

Dear Mr. Ransom:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the above referenced Fish and Wildlife Coordination Act Report concerning the proposed Inner Harbor Navigation Canal Lock Replacement Project (IHNC), in Orleans Parish, Louisiana. Based upon this review, the following has been determined:

Scenic Rivers:

The U.S. Fish and Wildlife Service noted the presence of Bayou Bienvenue, a Louisiana Scenic Stream, within the vicinity of the proposed IHNC. LDWF has reviewed the project and determined that Bayou Bienvenue will not be adversely impacted by project related activates and, therefore, no Scenic River Permit will be required. Scenic Rivers Coordinator Chris Davis can be contacted at 225-765-2642 should additional questions remain regarding this issue.

Additional comments:

Given the project's location within a previously developed site and a lack of associated wetland impacts, LDWF has no objection to the implementation of the IHNC as proposed. However, with the exception of any Scenic Rivers concerns (addressed above), LDWF does concur with implementation of the fish and wildlife conservation recommendations made by the U.S. Fish and Wildlife Service in their report.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. Please do not hesitate to contact Habitat Section biologist Zachary Chain at 225-763-3587 should you need further assistance.

Sincerely,

Kyle F. Balkum **Biologist Director** zc/cm

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