



Mississippi River, Baton Rouge to the Gulf of Mexico, Mississippi River-Gulf Outlet, Louisiana, New Industrial Canal Lock and Connecting Channels Project



Draft Revised Community Impact Mitigation Plan

December 2024

The U.S. Department of Defense is committed to making its electronic and information technologies accessible to individuals with disabilities in accordance with Section 508 of the Rehabilitation Act (29 U.S.C. 794d), as amended in 1998. For persons with disabilities experiencing difficulties accessing content, please use the form @ <https://dodcio.defense.gov/DoDSection508/Section-508-Form/>. In this form, please indicate the nature of your accessibility issue/problem and your contact information so we can address your issue or question. For more information about Section 508, please visit the DoD Section 508 website. <https://dodcio.defense.gov/DoDSection508.aspx>.

Contents

Section 1 1

Introduction1

1.1 Introduction.....1

1.2 Project Description.....2

1.3 Community Impact Mitigation Plan Authority.....4

Section 2 6

Description of the Neighborhoods.....6

2.1 Neighborhoods Adjacent to the IHNC.....6

Section 3 9

Community Concerns.....9

3.1 Community Concerns9

Section 4 13

History of Mitigation Planning.....13

4.1 History of Mitigation planning13

Section 5 14

Evolution of the CIMP Effort.....14

5.1 Evolution of the Community Impact Mitigation Planning Effort14

Section 6 15

IHNC Lock Replacement Mitigation Plan.....15

6.1 Impact Avoidance/Analysis.....15

6.1.1 Noise.....15

6.1.2 Aesthetics.....16

6.1.3 Recreation.....17

6.1.4 Air Quality.....17

6.1.5 Safety.....17

6.1.6 Cultural Resources.....17

6.1.7 On Site Project Information Officer.....18

6.1.8 Video/Photo Documentation of Existing Conditions.....18

6.2 Direct Mitigation (Impact Minimization).....18

6.2.1 Noise.....18

6.2.2 Restricted Access.....19

6.2.3 Cultural Resources.....19

6.2.4 Aesthetics.....20

6.2.5 Recreation.....20

6.2.6	Employment	20
6.2.7	Business and Industrial Activity.....	21
6.3	General Mitigation.....	21
6.3.1	Noise.....	21
6.3.2	Aesthetics.....	22
6.3.3	Recreation.....	22
6.3.4	Community and Regional Growth.....	22
6.3.5	Community Cohesion.....	23
Section 7	25	
Coordination of the Mitigation Plan		25
7.1	Public Coordination of the Mitigation Plan.....	25
Section 8	26	
Plan Flexibility		26
8.1	Plan Flexibility	26
Section 9	27	
Implementation		27
9.1	Implementation.....	27
Section 10	28	
Conclusions		28
10.1	Conclusions	28

LIST OF TABLES

Table 2-1 IHNC Study Area: Total Population.....	8
Table 2-2 IHNC Study Area: % People of Color and % Low Income.....	8

LIST OF FIGURES

Figure 1-1 Location of the Existing and (Proposed) Future Lock.....	3
Figure 2-1 Primary Neighborhoods within the IHNC Project Area.....	6

Document Purpose: Identify measures that could be implemented to resolve the direct, indirect, temporary, and permanent social and cultural impacts on the community.

This page is left intentionally blank

SECTION 1

Introduction

1.1 INTRODUCTION

The Inner Harbor Navigation Canal (IHNC) Lock has been in service since 1923. The lock is undersized to meet the demands of waterborne traffic. A larger, more efficient lock is required to meet the demands of increased traffic and larger vessels. The IHNC is crucial to the state and the nation for several reasons. First, it facilitates the transport of vital commodities, contributing significantly to local and national economies by supporting industries such as petroleum, agriculture, and manufacturing. Additionally, the canal connects the Mississippi River to the Gulf of Mexico, enhancing access for shipping and trade, which is essential for the movement of goods both domestically and internationally. It also creates numerous jobs in shipping, logistics, and related sectors, bolstering the local economy. Furthermore, as part of a larger network of waterways, the canal supports the nation's infrastructure for transporting goods, providing an alternative to overland transport that can reduce congestion on highways and railroads. Lastly, it plays a key role in the distribution of energy resources, including oil and natural gas, which are critical for the nation's energy supply and security. Overall, the IHNC serves as a vital artery for commerce and trade, significantly impacting both the local and national economic landscape.

The Plan 3 - Preferred Plan is to replace the existing IHNC Lock, also referred to as the Industrial Canal Lock, with a 900ft.L x 110ft.W x -22ft. North American Vertical Datum (NAVD88). The depth of the replacement lock is designed to accommodate shallow-draft vessels plying the Gulf Intracoastal Waterway (GIWW) safely and efficiently, along with a limited number of deep-draft vessels currently using the IHNC that would be required to light load in order to safely navigate the new sill depth of 22 feet. The project involves constructing a cast-in-place concrete navigation lock along with associated support structures and facilities. A bypass channel will be provided around the construction site to ensure continued use of the existing lock and canal during construction. Dredged material deemed unsuitable for aquatic disposal will be transported to an approved landfill outside the study area. Additionally, storm damage and flood risk reduction features affected by the construction of the new lock will be replaced. A community impact mitigation plan will also be implemented to offset or compensate for the project's effects on surrounding communities. The plan may include partnership with local entities to provide resources or features that will benefit the community. In recognition of the potential impacts the construction of the replacement lock would have on the surrounding neighborhoods, Congress authorized the 1995 Community Impact Mitigation Plan (CIMP) in WRDA 1996 Section 326. The 1995 CIMP was further developed and

approved in the 1997 Evaluation Report. Subsequent to the development of the 1997 CIMP and due to both existing and anticipated traffic delays associated with bridge crossings of the IHNC, Congress also authorized the development of a Traffic Mitigation Program (TMP) in WRDA 2007, Section 5083. While the 1997 CIMP includes features that would reduce impacts on traffic, those traffic mitigation features will now be identified as part of the TMP.

The 1995 Draft CIMP, which serves as the authorizing document for the CIMP, addresses impact to the four neighborhoods adjacent to the existing IHNC Lock: Bywater, Holy Cross, Lower Ninth Ward, and St. Claude. This updated CIMP allows USACE to identify a robust suite of improvements to address impacts to these neighborhoods, which have a direct border with the IHNC Lock and will see impacts in their community due to construction. Through past efforts on the report, these communities have been publicly identified and participated in engagement with the USACE. Along with actions to minimize impacts resulting from the replacement lock, the CIMP includes a plan to invest in the community to build new features or implement programs to address new and long-standing community needs and bolster quality of life. The scale of the mitigation features will be appropriate to the scale of the impacts, and mitigation will be paired and site-specific where applicable. Indirect impacts would be addressed by CIMP alternatives that provide resources across the four previously identified neighborhoods.

1.2 PROJECT DESCRIPTION

The IHNC Lock Replacement project aims to replace the aging lock to improve vessel transit times and decrease lock shutdowns for repairs while ensuring environmental sustainability and economic viability. This replacement will also maintain the authorized Mississippi River Levee flood risk reduction and Hurricane and Storm Damage Risk Reduction System (HSDRRS) features.

At that time, USACE was considering moving the canal and lock 200 feet to the east of the existing canal, which would have involved much greater impacts than the current plan due to the bridge replacements, extensive excavation and acquisition of private properties that would have been required.

The existing lock is situated along the IHNC in New Orleans, Louisiana. The IHNC is a man-made canal that connects the Mississippi River, the GIWW, and Lake Pontchartrain. The Port of New Orleans acquired the former Sisters of the Order of Saint Ursula property in 1918 and construction of the canal began the same year. The lock was completed in 1921 and officially opened to traffic in 1923. The IHNC Lock is located in a densely populated and highly developed area of the city, adjacent to some of New Orleans' oldest neighborhoods, including the Holy Cross and Bywater National Register Historic Districts (NRHDs). Current industrial

activity along the IHNC includes metal and scrap recycling yards, marine-related businesses, bulk material businesses, and light industries.

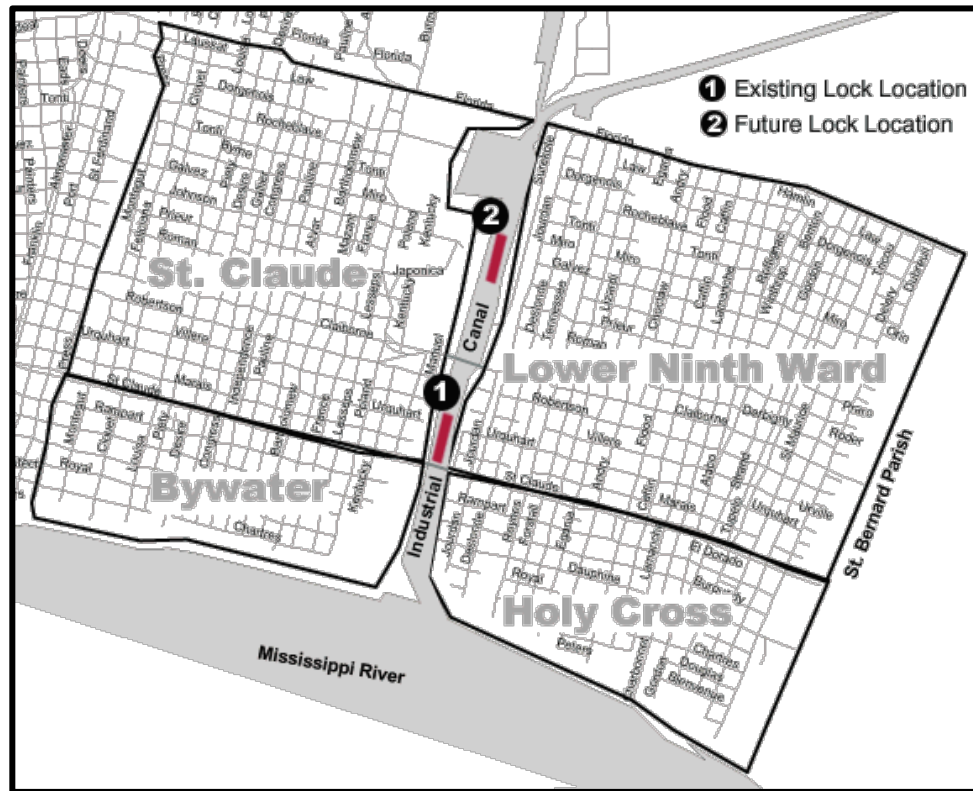


Figure 1-1. Location of the Existing and (ProText Boxposed) Future Lock

The new lock would be located approximately 2,400 ft north of the existing lock, and north of Claiborne Avenue Bridge. Figure 1-1 shows the location of the proposed new lock labeled '2'.

Starting on the southwest side of the project, the new floodwall will connect to the existing floodwall on the west side of the existing IHNC Lock. The new floodwall will connect to the new lock on the east side. The new lock will tie to a new floodwall on the northwest side of the project.

On the southeast side of the project, the new levee floodwall will connect to the existing Mississippi River levee floodwall on the east side of the existing IHNC Lock and extend to the new lock wall on the east side. The new floodwall segments under the St. Claude and North Claiborne Avenue bridges will tie to the new levees on the east side. The Port of New Orleans owns the commercial waterfront properties along the IHNC and Mississippi River in the project area. They lease many of these spaces to private marine-related industries, some of which maintain active operations.

The proposed lock will be a concrete cast-in-place lock with sector gates, a pile foundation, and a side port culvert filling and emptying system. The dimensions of the new lock chamber for the Plan 3 - Preferred Plan will be 900 ft long by 110 ft wide. It will be a shallow draft lock with a sill elevation of -22.0 ft NAVD88.

The proposed lock location was primarily chosen due to its ease of access and little to no obstructions located near the open channel.

The physical features associated with the construction of the replacement lock structure are:

1. Chamber Concrete Monoliths/Pile Foundation
2. Sector Gate Monoliths/Pile Foundation
3. Steel Sector Gates
4. Timber Guide walls
5. Floating Concrete Guide walls
6. End Cell Dolphins
7. Cofferdam
8. Floodwalls
9. Levee
10. Maintenance Bulkheads
11. Maintenance Bulkhead Storage Platform
12. Culvert Roller Gates
13. Culvert Bulkheads

Other major project features include:

- Replacement of the St. Claude Avenue Bridge
- Permanent Mooring Cells
- Construction of a Bypass Navigation Channel near the new lock

1.3 COMMUNITY IMPACT MITIGATION PLAN AUTHORITY

Congress authorized the CIMP in 1996. The Water Resources Development Act, 1996, SEC. 326, Mississippi River-Gulf Outlet, Louisiana, authorizing language states:

Section 844 of the Water Resources Development Act of 1986 (100 Stat. 4177) is amended by adding at the end the following: “(c) COMMUNITY IMPACT MITIGATION PLAN.—Using funds made available under subsection (a), the Secretary shall implement a comprehensive community impact mitigation plan, as described in the evaluation report of the New Orleans District Engineer dated August 1995, that, to the maximum extent practicable, provides for mitigation or compensation, or both, for the direct and indirect social and cultural impacts that

the project described in subsection (a) will have on the affected areas referred to in subsection (b).

SECTION 2

Description of the Neighborhoods

2.1 NEIGHBORHOODS ADJACENT TO THE IHNC

The Bywater and Holy Cross neighborhoods run along the Mississippi River and lie west and east, respectively, of the IHNC and south of St. Claude Avenue. The St. Claude and Lower Ninth Ward neighborhoods are north of St. Claude Avenue and extend north to Florida Avenue and lie west and east respectively of the IHNC. The eastern boundary of the Lower Ninth Ward and Holy Cross neighborhoods is the Orleans and St. Bernard Parish line. The western boundary of the Bywater and St. Claude neighborhoods is the Franklin-Almonaster corridor. Figure 2-1 shows the neighborhoods relative to the IHNC.



Figure 2-1 Primary Neighborhoods within the IHNC Project Area.

The Bywater neighborhood includes the Bywater Historic District, a NRHD listed in the National Register of Historic Places (NRHP) in 1986. The historic district is also locally designated under New Orleans Historic District Landmarks Commission (NO HDLC) jurisdiction. The boundaries of the locally designated district vary slightly from the NRHD boundaries. Originally called Faubourg Washington, the area began in the early nineteenth century as a Creole downriver suburb of the original City of New Orleans. The neighborhood is dominated by shotgun homes and Creole cottages. Bywater has undergone a significant level of demographic change in recent decades but retains some of the earliest architectural development in New Orleans.

The Holy Cross neighborhood includes the Holy Cross Historic District, a NRHD listed in the NRHP in 1986. The historic district is also locally designated under NO HDLC jurisdiction. The boundaries of the locally designated district vary slightly from the NRHD boundaries. The Holy Cross neighborhood developed in the nineteenth century and was named after Holy Cross High School, a Catholic high school founded in the neighborhood by the Brothers of the Holy Cross in the mid-1850s. The neighborhood is dominated by shotgun homes. The Holy Cross neighborhood features a riverfront industrial area, recreational use along the IHNC, and government use along the eastern boundary of the neighborhood (Jackson Barracks).

The St. Claude neighborhood is primarily residential, with a large industrial area along the west side of the IHNC from Claiborne Avenue to Florida Avenue and warehouses and industrial development to the east side along the New Orleans Public Belt Railroad Oliver Yard. The Bywater neighborhood is also primarily residential, with industrial development and the former Naval Support Facility (now owned by the City of New Orleans) along the Mississippi riverfront and along Press Street. Some warehouse development is located along the western edge of the Bywater neighborhood adjacent to the New Orleans Public Belt Railroad and the Faubourg Marigny.

The Lower Ninth Ward neighborhood, a primarily residential area with an industrial zone located along the IHNC, and Jackson Barracks, a U.S. Army National Guard facility is located along the eastern boundary of the neighborhood. The construction of the Industrial Canal in 1923 established the term Lower Ninth Ward and separated the neighborhood from the rest of New Orleans.

Despite being ravaged by Hurricane Katrina, the project area, which encompasses zip code 70117 and includes the neighborhoods of Florida, St. Claude, Bywater, Holy Cross, and the Upper and Lower Ninth Wards, still contains several small businesses such as corner grocery stores, neighborhood bars, restaurants, gas stations, and auto services. The primary commercial corridors for all four neighborhoods are St. Claude and Claiborne Avenues. The

four adjacent neighborhoods comprise a sizeable population whether considering total number of persons, total number of households, or total number of family households.

Table 2-1 depicts the total population in each of the neighborhoods and the whole of Orleans Parish.

Table 2-1 IHNC Study Area: Total Population

	Holy Cross	Lower 9th Ward	Bywater	St. Claude	Orleans Parish
Total Population	2,698	4,603	4,277	8,055	383,974
Households	1,329	1,710	2,397	3,375	156,586

Source U.S. Environmental Protection Agency (EPA), 2023 EJ Screen Technical Documentation, data from 2021.

Table 2-2 describes the racial demographics in the neighborhoods and the whole of Orleans Parish.

Table 2-2 IHNC Study Area: % People of Color and % Low Income

	% People of Color	% Low Income
Bywater	24.36 %	37.64 %
Holy Cross	80.13 %	54.43 %
Lower 9th Ward	94.11 %	52.73 %
St. Claude	83.53 %	62.61 %
Orleans Parish	69.41 %	43.22 %

Source U.S. Environmental Protection Agency (EPA), 2023 EJ Screen Technical Documentation, data from 2021.

In 2000, all four adjacent neighborhoods comprising the study area were designated as over 50% minority populations. However, for the Bywater neighborhood, recent projections estimate a significant decline in the number and proportion of racial minorities, from an estimated 67.6% in 2000 down to 24.4% in 2021, based on economic statistics and U.S. Census Bureau 2017-2021 American Community Survey (ACS) data and accessed via the EJSCREEN tool. The other three surrounding neighborhoods in the project area remain EJ communities based on minority criteria.

SECTION 3

Community Concerns

3.1 COMMUNITY CONCERNS

Over the life of this planning effort, community members from the four neighborhoods and the wider study area of Orleans and St. Bernard Parishes have expressed concerns related to a declining population and property values, a depressed housing market, crime, high vacancy rates, high unemployment, flood risk, traffic delays, and loss of access to green space and riverfront walking paths. In January 2024, on behalf of USACE, CDM Smith and their subcontractor Bright Moments, asked interested parties what concerns they have and how they would expect to see USACE address impacts caused by the IHNC Lock Replacement project, such as noise, business interruption, vibration, relocations, air quality, community cohesion, etc. That effort was coined the “Community Opportunities Plan of Action” (COPA) and was completed in two phases. Full documentation of the 2024 community engagement effort can be found on the USACE IHNC website. IHNC Community Opportunities Plan of Action Phase 1 and Phase 2 Report.

During Phase 1 of the COPA meetings, more than 20 community stewards representing the four neighborhoods adjacent to the lock provided input on their needs and vision for their communities. Three overall themes, identified below, coalesced from the comments received and conversations held during these meetings. Participants also suggested several ideas for community opportunities including a splash pad, job training, business assistance, green infrastructure, affordable housing, a police substation, and a health clinic.

Community feedback identified themes of concern and desire including:

- The need for transparency and the current lack of trust in the Government within the community
- The need for self-sustaining communities
- The need to understand project details (e.g., timeline, budget, footprint, and impacts).

To instill greater trust and increase transparency, the majority of participants called for a more regular cadence of communication across traditional communication channels, such as email, texts, and calls. They did not seem particular about the channel but more about the frequency to understand what was happening with the lock replacement project. Community

stewards also emphasized that the investments and improvements should be community-driven. They also expressed a desire that the investment and improvements continue beyond the project.

There is a desire for self-sustaining communities. Economic development opportunities are important for each community; however, there were multiple concerns about gentrification. Balancing the need to maintain affordability in the neighborhoods while making improvements will be critical. The community is proud of the progress made to date. They are concerned the project will erode or erase those successes and progress made thus far. Community stewards want to see walkability and support for small businesses.

Participants also emphasized the need for Americans with Disabilities Act (ADA)–accessible transportation options within the community and on the new bridge. Easy access across the canal is important to integrate the Lower Ninth Ward into the Greater New Orleans area. They want the bridge to be built to serve all persons in the community, including those without cars and/or with disabilities. Safe, easy-to-use, and ADA-accessible transportation options are desired.

Culture is essential. The community does not just want historical monuments and plaques, but they want cultural investments that are long-term and based on the community. It is important to community stewards that USACE acknowledges the history/those who risked their lives to build the IHNC lock and community. However, there was concern that people and businesses need their basic needs met first, such as housing and food, before they can focus on other types of community improvements.

There were questions and misconceptions about the overall lock replacement project. The community was concerned about transportation and use of the bridge before, during, and after construction. They were particularly worried with how the bridge shutdown would impact businesses during construction and what happens with the bridges during an evacuation. There was a misconception that the bridge would be shut down completely for extended periods of time, if not for the full duration of the whole project.

Frequently asked questions and concerns:

1. Will the St. Claude Bridge be closed the entire time during construction?
 - No, the St. Claude Bridge will remain open, and traffic will be reduced to single lanes while the replacement bridge is under construction. There may be brief and temporary periods of total bridge closure, but those will be minimized.
2. Will the canal be significantly widened?

- No, while the channel will be dredged and a by-pass channel will be dug, this will occur within the existing IHNC footprint - between the existing flood risk reduction features. The widening of the channel will occur at the location of the existing lock to eliminate the bottleneck that is present at the current lock.
3. Would the USACE use dynamite to remove the existing infrastructure?
- No, deconstruction will occur mechanically; no dynamite will be used to remove the existing infrastructure.
4. Will there be increased flooding during and after construction?
- In the current Flood Risk Management system, the existing IHNC Lock, which is over 100 years old, is deficient in elevation and routinely requires USACE to undertake additional flood fighting measures when high river stages are forecast. With the proposed project in place, the new levee and floodwall segments, in conjunction with the new IHNC Lock structure and gates, will provide an upgrade from the current system and will reduce the need for additional flood fighting measures in the area. The length of the existing Flood Risk Management features along the Mississippi River will increase due to the relocation of the IHNC Lock north of Claiborne Avenue with new Mississippi River levees and floodwalls being constructed as part of the project. These risk reduction features will be built using the Mississippi River Levee (MRL) current design standards. The proposed project features are being designed to accommodate the future hydraulic conditions that are anticipated along the MRL and will account for the likelihood for riverine and hurricane storm surge stages. In addition to reducing costs and manpower efforts required to flood fight the existing lock during flood stage events, there will be an increase in reliability of this segment of the levee system. Construction of the IHNC Lock replacement will not interfere with the ability of the non-Federal sponsors to operate and maintain appropriate levels of risk reduction. The new lock will be within the limits of the IHNC and will not affect the current Sewerage and Water Board (S&WB) of New Orleans' drainage infrastructure in the adjacent neighborhoods. Additional flood risk reduction features added for this project are replacing the current features and will not adversely affect the current S&WB drainage system. In addition, during construction of the IHNC lock replacement project, measures will be taken to maintain the functionality of the S&WB and City of New Orleans drainage infrastructure.
5. This project provides no direct benefits to the neighborhoods.

- The economic benefits of the new lock will contribute to the nation's waterborne commerce infrastructure and boost the national economy. While construction will create some local jobs, the primary benefits will be felt by the navigation industry, with fewer direct advantages for the local community, which will bear the impacts of a lengthy construction period. Local residents have expressed concerns about potential quality of life issues, such as disruptions and inconveniences caused by the project. In recognition of this burden, Congress directed the USACE to develop and fund a CIMP (WRDA 1996) and later a TMP (2007). These initiatives aim to address and mitigate the project's impacts through avoidance and direct and indirect mitigation efforts.

SECTION 4

History of Mitigation Planning

4.1 HISTORY OF MITIGATION PLANNING

Mitigation planning began decades ago during a time when USACE was considering construction of a replacement lock 200 feet east of the existing lock structure on the IHNC. Due to the acute, pervasive, and disruptive impacts to the surrounding community that construction would cause, USACE sought community involvement in mitigation planning. Beginning in 1986, with responses to the scoping input request, USACE became cognizant of the specific concerns of neighborhood residents in the vicinity of the IHNC. Implementation of the 200-foot East plan, identified in 1990 as the tentatively selected plan would have resulted in substantial residential relocations, exposure of the adjacent community to sustained, unacceptable levels of construction noise, and prolonged traffic congestion associated with the replacement of two vehicular bridges that span the canal.

Recognizing that lock construction at this location would impact the neighboring community, the New Orleans District commissioned a contractor to prepare a socio-economic impact evaluation and mitigation plan for the five (5) alternative locations being considered at the time. The team quickly concluded that the magnitude of the impacts associated with the alternative locations for the IHNC lock under consideration was similar and the impact on the receptors was similar under all alternatives. Due to the duration and intensity of the construction impacts for the project as proposed at that time, pre-project mitigation was warranted to improve conditions in the area and, thereby, increase its ability to withstand the prolonged adverse impacts associated with the construction of the proposed plan. It was also their strong recommendation that consideration be given to the location in the IHNC between Florida Avenue and Claiborne Avenue because constructing the new lock at this location would impact fewer area residents. The evaluation concluded that a north of Claiborne Avenue location would reduce right-of-way requirements and somewhat limit the project's construction activity to a confined area.

The USACE developed a draft CIMP in 1995 and updated the CIMP in 1997. However, the neighborhoods have changed significantly due to a number of factors, including but not limited to flooding that occurred due to Hurricane Katrina in 2005. In 2007, in recognition of the potential impacts the construction of the new lock north of Claiborne Avenue would have on traffic, Congress authorized the development and maintenance of a TMP. This was authorized in the Water Resource Development Act of 2007, in section 5083, subsection 2, which directs the Secretary (of the Army) to develop and maintain a transportation mitigation

program relating to the IHNC Lock Replacement in coordination with St. Bernard and Orleans Parishes, the Old Arabi Neighborhood Association, and other interested parties. As a result of the changed conditions in the neighborhood and the addition of the 2007 TMP authorization, CEMVN has prepared a revised CIMP and new TMP.

SECTION 5

Evolution of the CIMP Effort

5.1 EVOLUTION OF THE COMMUNITY IMPACT MITIGATION PLANNING EFFORT

The Water Resources Development Act of 1996 (WRDA 1996) authorized the implementation of the CIMP described in Volume 2 (Appendix A) of the preliminary draft 1995 Evaluation Report, as recommended by the District Engineer for the New Orleans District (1995 Report). At the time of the enactment of WRDA 1996, the 1995 Report had yet to undergo full review within USACE. The 1997 Evaluation Report, as approved by the Chief of Engineers, recommended the construction of the locally preferred plan, a deep draft lock in the vicinity of the existing lock, with dimensions of 1200ft.L x 110ft.W x -36ft. deep NAVD88, with all costs of the deep draft increment (those costs in excess of the costs allocated to the construction of the shallow draft NED plan) being borne by the Port of New Orleans. In approving the 1997 Evaluation Report, the Chief of Engineers also, within his discretionary authority, approved changes to the CIMP, as initially authorized in WRDA 1996. The 2000 Supplemental Evaluation Report, approved by the Assistant Secretary of the Army for Civil Works (ASA(CW)), determined that a federal interest existed in the implementation of the deep draft increment (the former locally preferred increment) and established the cost-sharing requirements for the Authorized Project, which was a composite of the deep draft increment and the NED Plan (the shallow draft increment).

A traffic study was conducted in 2023 to analyze potential impacts to surrounding communities which have informed proposed mitigation strategies and are addressed in the new TMP.

SECTION 6

IHNC Lock Replacement Mitigation Plan

6.1 IMPACT AVOIDANCE/ANALYSIS

Impact avoidance refers to actions taken by USACE that are designed to avoid adverse construction impacts and which represent prudent and innovative engineering design and construction practice. These actions are incorporated into the construction plan because construction will occur in an urban environment. Included in the construction cost of the project, but not in the CIMP are the following impact avoidance measures, listed by impact:

6.1.1 Noise

The actions to be taken by USACE and any contractors or subcontractors, that are designed to avoid adverse impacts from noise include:

- a. Conduct a pre-construction pile test using a variety of pile drivers at selected locations in order to measure noise levels and delineate the area exposed to a “Normally Unacceptable” level of noise, which is defined as above the 65 dBA contour but not greater than 75 dBA contours, which is classified as “Unacceptable.” USACE will conduct additional pile load testing, background noise studies, and noise measurements associated with pile load testing in the Pre-construction Engineering and Design (PED) phase. The updated pile load testing will be performed in conjunction with noise measurements from both vibratory and impact pile driving of steel and concrete piles. Additionally, several locations that vary in proximity from the primary construction area will be established to conduct a 24-hour ambient noise measurement to document up-to-date project area baseline noise conditions. Contract specifications would limit noise to certain levels at specified distances from the construction sites and require monitoring of noise levels by the contractor to verify adherence to the contract specifications. Contract specifications would also require pile-driving equipment designed to minimize noise levels.
- b. Include a provision in the contract specifications limiting noise to certain levels at given distances from the construction site. The standard would generally allow no “unacceptable” noise levels attributable to lock or bridge construction to invade residential areas. Concerning the St. Claude Avenue bridge approaches, the standard would limit the exposure to high noise levels (above 65 dBA or equivalent) to those structures adjacent to the construction site if the total elimination of noise is not possible. While the contractor would have discretion in compliance with the standard, the form of compliance would likely include the employment of specialized, quieter

equipment, remote deployment or isolation of some equipment, and the placement of baffle walls or other sound absorption devices.

- c. Include contract specifications to verify the containment of noise levels. Contractors would be required to use noise monitoring equipment to verify adherence to contract specifications that limit the unacceptable levels of noise at given distances from construction sites.
- d. Contract specifications will require the use of a vibratory hammer or other pile-driving equipment that is designed to minimize noise emissions. This depends on the results of the pile tests previously mentioned. Recognizing the adverse impacts associated with pile driving with standard equipment within an urban environment, the construction industry and construction equipment manufacturers have, in recent years, modified pile driving technology. Specialized pile drivers significantly reduce noise, particularly for jobs that require relatively small piles, as is typically required for constructing floodwalls and bridge approaches.
- e. Designate specific routes for construction-related traffic away from residential and commercial areas and designate locations for construction staging areas away from heavily populated areas.

6.1.2 Aesthetics

The actions to be taken by USACE and any contractors or subcontractors that are designed to avoid adverse impacts to aesthetics include:

- a. Improve or add lighting along designated detour routes, including existing and new routes. This lighting will improve nighttime aesthetics and offer added safety and security for adjacent residents.
- b. Areas around levees, floodwalls, and bridge approaches will be landscaped as long as the locations comply with the minimum acceptable buffer between vegetation and flood protection structures as specified by USACE. Various species of trees, shrubs, and ground cover will be used. Flowering trees and shrubs will be planted in areas where structural elements such as bridge approaches and floodwalls are to be constructed. Vegetation will soften the visual impacts of these construction elements within the neighborhoods.
- c. Textured surfaces will be employed on the exteriors of floodwalls, bridge approaches, and bridge piers. These textured surfaces will enhance not only the visual appeal but also add interest to concrete surfaces viewed by neighborhood residents. Interesting shadow patterns and textured variety will improve aesthetic design quality.

6.1.3 Recreation

The actions to be taken by USACE and any contractors or subcontractors that are designed to avoid adverse impacts on recreation include:

- a. Keep bike and pedestrian traffic open along St. Claude Avenue as frequently as possible to ensure safety during the construction process.
- b. When it is not feasible to enable walkers and bikers to cross St. Claude during construction, ensure an alternative safe route across the canal.

6.1.4 Air Quality

The actions taken by USACE and any contractors or subcontractors that are designed to avoid adverse impacts on air quality include:

- a. Contract specifications will require compliance with Federal and State Air Quality Standards and preservation of air quality within specified levels. The contractor will be required to monitor air quality levels to verify compliance. Measures to preserve air quality may include wetting levees and construction roads, mesh barriers, and other appropriate measures to reduce dust.

6.1.5 Safety

Safety will be vital throughout the construction of the project. The following specific measures will be included:

- a. Media notices will be a key role in fostering transparency and community involvement, ensuring citizens are well-informed about construction activities.
- b. Lighting will be installed at all construction sites, as might be appropriate.
- c. Signs, markers, and fences will be erected at construction sites.
- d. Contract specifications will require contractors to arrange for barriers and potentially evening security patrols to isolate potential hazards at the construction sites and discourage theft and vandalism.

6.1.6 Cultural Resources

In addition to the noise (6.1.1), aesthetics (6.1.2), and air quality (6.1.4) impact avoidance measures detailed above, USACE will require a vibration monitoring plan to safeguard historic properties within the Areas of Potential Effects (APEs) from potential vibratory damage due to construction activity. Additionally, CEMVN currently is negotiating and developing an Amended Memorandum of Agreement (AMOA) that will address adverse impacts to historic properties. Stipulations within the agreement document will detail the avoidance, minimization,

or mitigation measures USACE has agreed to ensure are implemented. The AMOA, once executed, will be a legally binding agreement per Section 110(1) of the NHPA.

6.1.7 On Site Project Information Officer

While media releases will inform the public of the planned construction activities and schedule, USACE also recognizes a need to provide information to the community members in the four neighborhoods. A community engagement specialist will be available to engage with the public and answer questions and concerns about the construction process.

6.1.8 Video/Photo Documentation of Existing Conditions

A video/photo documentation program will be implemented by a contractor to establish existing exterior conditions of structures within the National Historic Preservation Act (NHPA) Section 106 Above-Ground Resources Area of Potential Effects (APE) at the beginning of the construction period. This documentation will be available to assist evaluation of whether project-induced vibrations may have caused damage in the event a resident or business later files a claim with the contractor.

6.2 DIRECT MITIGATION (IMPACT MINIMIZATION)

Direct mitigation refers to actions taken by USACE to minimize adverse direct impacts that remain following the implementation of the normal procedures described in the previous section.

6.2.1 Noise

In an effort to minimize direct impacts of noise the following mitigation measures will be deployed:

- a. Any residential or commercial structures within high noise levels (above 65 dBA) will be soundproofed to the extent possible. However, soundproofing may not eliminate all high noise levels under normal procedures. It is estimated that noise from the bridge construction could impact about 236 single-family units, 94 multiple-living units, and 4 churches. Soundproofing measures could include installing insulation, noise-cancelling machines, or sound walls.
- b. The hours of pile driving and heavy truck hauling on designated routes will be restricted to at most 10 hours per day and not at night. Pile driving for the new St. Claude Avenue bridge will be scheduled during the summer to minimize noise impacts on schools.

6.2.2 Restricted Access

Temporary relocation of residents may be required due to restricted access to private properties. Temporary relocation may be made available for residents immediately adjacent to the construction activity, especially adjacent to the St. Claude Avenue bridge approaches. Temporary relocations would be voluntary, offered for up to one year, and would include benefits as provided for temporarily displaced persons under the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), 1970, as amended.

6.2.3 Cultural Resources

In an effort to minimize direct impacts to cultural resources the following mitigation measures will be deployed:

- a. One or more of the locks and/or bridge components will be salvaged. These components will be selected after study by a civil engineering historian of technology to determine which elements of the structures will serve as the best representation of historic character. The artifacts will be appropriately conserved to prevent deterioration. They will be displayed in an appropriate setting to display the history of the structures to visitors.
- b. Commemoration of historical and cultural spaces with historical markers. This would include the St. Claude Avenue Bridge and could also include such sites as the Florida Avenue Bridge, Battleground Baptist Church, TEP Center (former McDonogh 19 Elementary School), Bush Park, St. Maurice Complex, and other locations throughout the four neighborhoods.
- c. A brochure addressing various historical features of the existing lock and bridge as well as significant historical attributes of the surrounding community will be published. This brochure, prepared by historians and technical writers, will serve as a powerful educational tool, illustrated to vividly convey the history of the area to visitors. It will be featured in a visitor information facility at the lock or at other suitable locations for distribution.
- d. A large display concentrating on maritime history will be constructed in the area. The display would interpret the navigation history in New Orleans and the South Louisiana area. It could incorporate some part of the mechanism of the existing IHNC Lock in the interpretive program.

6.2.4 Aesthetics

In an effort to minimize direct impacts to local aesthetics the following mitigation measures will be deployed:

- a. The oak grove adjacent to the existing lock, along Sister Street will be impacted. The mature oak trees located on site will be removed. Due to the age, size, and condition of these trees, transplanting is unlikely to be successful. This decision was made after careful consideration of all options. New plantings will be made to replace the trees removed.
- b. Public rights-of-way along existing detour routes will be landscaped. This will not only beautify the area but also serve as a landscaped visual buffer and help dampen noise. The use of flowering trees and shrubs will be used to offer the maximum diversity and aesthetic benefits, enhancing the overall environment.

6.2.5 Recreation

In an effort to minimize direct impacts to local recreation the following mitigation measures will be deployed:

- a. An all-weather access road on or near the levee and/or the floodwalls will be constructed to preserve and provide recreational opportunities. The existing levee currently enjoys significant use by joggers, walkers, and bicyclists. This path will have an asphalt surface to promote two-way bicycle traffic. Ancillary facilities such as benches, trash receptacles, solar lighting, and water fountains will be installed along the route. This corridor will be safely isolated from vehicular traffic by using bollards or plant materials in areas of possible conflict.
- b. One or more observation decks on the flood risk management features will be constructed to preserve current opportunities associated with the levee. These observation decks will be constructed on top of the elevated floodwall. Benches will be installed regularly, allowing users a place to sit or rest while watching waterborne activity, including the lock itself. Lighting will be provided, and green space will be created for any additional vacant areas created by the reconstruction of the St. Claude Avenue Bridge approaches. The lighting will improve nighttime aesthetics and offer improved safety and security to residents.

6.2.6 Employment

In an effort to minimize direct impacts to local employment the following mitigation measures will be deployed:

- a. Contractors will be encouraged to hire locally. However, if locals are not properly trained, they will not be hired. A program to expand the skilled labor workforce within the affected community will be established to meet Water Resources Development Act of 1986 intent that the Government “make a maximum effort to assure minorities the full participation of members of minority groups, living in the affected areas, in the construction of the replacement or additional lock and connecting channels authorized by subsection (a) of this section, including actions to encourage the use, wherever possible, of minority-owned firms.”
- b. A program will be developed to assist with tuition to train in skills required in project construction at existing vocational/technical or similar type schools for qualified individuals who meet the residency requirement.

6.2.7 Business and Industrial Activity

In an effort to minimize direct impacts to local business and industry the following mitigation measures will be deployed:

- a. Commercial establishments, school, and landlords that demonstrate a decline in sales, tuition, or rent may receive assistance and/or benefits to avoid, limit, or offset losses.

6.3 GENERAL MITIGATION

Mitigation for indirect impacts will be actions taken by USACE or by a local project sponsor in cooperation with local government, community groups, and residents to alleviate those adverse impacts that remain following the implementation of both impact avoidance procedures and the direct impact minimization measures described above.

The intent of indirect impact compensation is to make the communities whole and resilient to the impacts of construction activity for the duration of those activities. Those impacts include:

6.3.1 Noise

Very high levels of construction-related noise would be limited to residents and businesses adjacent to the St. Claude Avenue Bridge approaches and along Jourdan Avenue. Residential structures in the vicinity of the St. Claude Avenue Bridge approach and lock deconstruction and construction zones could still be impacted by high noise levels, even with noise abatement. Those structure owners and renters could be offered temporary relocation benefits to avoid high levels of noise (75 dBA).

6.3.2 Aesthetics

The replacement of the single low-rise bascule bridge with a low-rise double-leaf bascule bridge with new approaches on St. Claude Avenue, and the incorporation of new levees in some areas along the IHNC will permanently alter the current aesthetic character and recreational opportunities within the neighborhoods.

All project features will consider the appropriate use of textured surfaces, landscaping, appropriate paint selection, pedestrian routes, and public use facilities. However, some members of the adjacent neighborhoods consider changes to the present aesthetic undesirable.

The addition of pocket parks, green infrastructure, landscaping, lighting, and benches, as well as pedestrian paths along the new levee sections are all possible aesthetic mitigation features. USACE will work with appropriate departments within the City of New Orleans to determine if there is interest in the city acting as a non-federal sponsor and to ensure there is an operation and maintenance plan in place for aesthetic mitigation features.

6.3.3 Recreation

In cooperation with a non-federal sponsor, community facilities at appropriate locations within each of the neighborhoods, such as playgrounds, community gardens, tot lots, and linear parks, may be provided or rehabilitated in conjunction with existing local programs during the project's construction. In January of 2024, the City of New Orleans released 'The Big Green Easy', a masterplan for citywide park and recreation improvements. The masterplan has already identified parks and greenspaces adjacent to the project area that need improvement for these facilities and programs. Features may also include recreational and educational programming for community members at existing community centers and nonprofits that serve the public. Facilities developed in cooperation with a non-federal sponsor as part of this feature may be incorporated into existing programs. The addition of walking paths along accessible floodwalls and atop levees combined with improvements to paths currently atop levees at the southern end of the project will offer greater recreational opportunities for residents in the four neighborhoods around the IHNC.

6.3.4 Community and Regional Growth

Residual construction noise, some bridge restrictions during construction, and residual traffic delays coupled with the extended construction period could reduce the overall desirability of living in the affected neighborhoods. While these impacts are considered temporary in relation to the overall lifespan of the project, the 10-year construction window may result in residents' and business owners' perception as prolonged disruptions. However, increased frequency of

Claiborne Avenue bridge raising after construction of the new lock, when the Mississippi River is high and navigation traffic increases, may have a more permanent impact on the growth in the area.

The New Orleans District of USACE will work with the City of New Orleans Regional Planning Commission and will continue engaging with the community. As the project moves into a pre-construction, engineering, and design phase to identify appropriate strategies, the USACE and the city will collectively ensure that this project does not negatively impact community and regional growth in the long term.

6.3.5 Community Cohesion

Bridge restrictions and residual noise from construction activities will likely disrupt some of the routine activities of residents, such as shopping, visiting with neighbors, walking in the area, and simple joys of sitting on the front porch. The residual project impacts indicated above cannot be avoided or mitigated fully and cannot be measured accurately.

- USACE and a local partner will work with residents in the vicinity of the IHNC Lock replacement project who may be temporarily displaced by the project to relocate in Orleans Parish. Incentives offered might include relocation assistance within Orleans Parish to ensure that community members stay within the parish.
- In cooperation with a non-federal entity, resources may be provided to establish a business assistance program in the area to serve as a stimulus for local business development. This program would help create new businesses, help existing businesses expand, provide high-tech educational facilities, create new jobs, preserve old ones, and help revitalize the neighborhoods adjacent to the project in the Ninth Ward. This will be in conjunction with local state, and federal government and implemented in conjunction with the City of New Orleans and/or one of the local universities.
- Sponsor programs for educating local residents on maintaining their housing. These programs could be administered by established local agencies, neighborhood community development corporations, or other appropriate agencies. Partnering with these local agencies will help expedite the implementation of this mitigation measure.
- Crime is of the utmost importance to residents in the surrounding communities, and increased police presence in these areas has proven to help reduce crime and improve the quality of life.

There is similar concern from residents about the availability of and access to emergency medical services. During project construction, the mitigation plan could include partnership with local law enforcement and local emergency medical providers so they can continue to provide essential services to these areas. The Transportation Mitigation Program also will provide for enhanced communication between emergency dispatchers and Emergency Medical Service with real time bridge status information.

Mitigation measures may include a temporary police or emergency services substation for the eastern side of the IHNC that would address impacts to community cohesion, and community growth.

SECTION 7

Coordination of the Mitigation Plan

7.1 PUBLIC COORDINATION OF THE MITIGATION PLAN

As mentioned in section 6.1.6, to disseminate information in the community, the project team would establish a community presence in the project area by opening and staffing a project information office. The purpose of the office will be to afford residents of the affected community the opportunity to obtain pertinent information about the proposed project. This office would also serve as a repository for prior studies, reports, and other information about the lock replacement project. As the project moves into Pre-Construction Engineering and Design (PED), community engagement with mitigation planning efforts will restart, and local partners will be identified to deliver the various programs and features. Implementation of features requiring partnership with non-federal entities will be contingent upon the execution of a partnership agreement with a capable non-federal entity.

SECTION 8

Plan Flexibility

8.1 PLAN FLEXIBILITY

The 1997 CIMP identified a need for flexibility to accommodate changes in conditions that cannot be anticipated. The USACE team recognizes the continued need for flexibility through the construction phase of the project to best meet the needs of the community. To accommodate changing conditions, USACE is committed to allowing maximum flexibility within the scope of the resources that are made available. It is intended that some of the programs initiated under the auspices of the mitigation plan of the project could continue to exist even after the project is completed, with funding coming from other sources outside of the project.

This is particularly true of programs implemented under the plan previously discussed. Some of the items identified in this plan could change as conditions change. Given community support, some items might even be substituted for items currently proposed.

Coordination with local stakeholders will continue to occur during Pre-Construction and Engineering Design and throughout the construction phase. Features that require the cooperation of a non-federal interest would be implemented only after the execution of a legally binding agreement between the Government and a capable non-federal sponsor. The agreement will describe the project feature and the responsibilities of the Government and the non-federal sponsor in the execution and operation and maintenance of the feature.

All features that may be implemented will need to be identified before substantial completion of the primary features.

SECTION 9

Implementation

9.1 IMPLEMENTATION

The implementation of the proposed community impact mitigation plan will begin during the construction phase of the project but prior to the actual construction of the lock replacement and continue throughout the duration of the construction phase. Project mitigation will be initiated after construction funds are appropriated.

The New Orleans District of USACE intends that neighborhoods adjacent to the project construction area remain livable, vibrant communities during construction. Assuming willing and capable partners are identified, elements of this mitigation plan such as the business assistance program, housing revitalization and fortification fund, and job training, would be implemented during the pre-construction period. Through the support and involvement of the non-federal sponsor, one of the indirect impact compensation elements could continue even after the project is completed.

Any partnering entity will enter into a Partnering Agreement. This is a legally binding agreement between the Government and a non-Federal sponsor that describes the responsibilities of the Government and the non-federal sponsor in the execution of the work. This agreement will include a commitment to continue working together for the benefit of all local stakeholders and to implement the features recommended in this mitigation plan.

SECTION 10

Conclusions

10.1 CONCLUSIONS

The community impact mitigation plan is integral to the IHNC Lock Replacement Plan. However, this effort is a departure from traditional USACE environmental analysis and mitigation planning, but it is due to specific authorization for the project to develop CIMP and TMP, which recognized the unique urban environment and potential impacts to the communities surrounding the area where the project is located. It is consistent with the requirements of NEPA (PL 91-190), Section 122 of the River and Harbor Act of 1970 (PL 91-611), and other essential considerations of national policy including, Executive Order 12898 and the more recent Executive Orders (EOs) signed by President Biden, EOs 14008 and 14096. All three of the Executive Orders direct Federal agencies to identify and address adverse, disproportionate impacts to communities with Environmental Justice (EJ) concerns and to engage with the community in those efforts.

The recommended community impact mitigation plan aims not only to restore but also to enhance the quality of the human environment in the affected area, minimizing and compensating for adverse impacts where feasible. The neighborhoods most affected—Holy Cross, Bywater, St. Claude, and Lower Ninth Ward—are historic areas of New Orleans, and construction at the North of Claiborne Avenue site will necessitate the relocation of three residential units, potentially affecting social cohesion as community members may consider selling their homes before construction begins.

Implementing this project would impact the adjacent neighborhoods, particularly given the historic vulnerabilities these communities have faced following Hurricane Betsy and the catastrophic flooding following Hurricane Katrina. Construction would occur over a 10-year period, raising concerns that the project could undermine two of the area's greatest strengths: its strong neighborhood atmosphere and community cohesion. Thus, effective implementation of this mitigation plan would buffer these qualities against the project's potential adverse effects.

Moreover, there is a national initiative to revitalize neglected urban areas through programs like Community Development Block Grants (CDBG), the HOME Investment Partnerships

Program, and Empowerment Zones. Completing this mitigation plan alongside the lock replacement could enhance such revitalization efforts.