existing lock

history of the lock replacement project

summary of the seis

ih nc lock replacement project

artist rendition
How the IHNC Lock works

Gates are closed and the lower valve is open, allowing the chamber to equalize. Gate A opens and the towboat is allowed to enter the lock chamber.

Gates are closed with the towboat in the chamber. The upper valve is open, allowing the water level to equalize.

When the water levels equalize, Gate B opens, allowing the towboat to leave the lock.

For more information on how locks with miter gates work, like the IHNC Lock, visit www.mvn.usace.army.mil and click “How a Lock Works” on the bottom right under “Featured Videos.”
It took five years and more than $8.5 million to build 85 years ago, and it’s still being used today, 24 hours a day, 365 days a year.

Built by the Board of Commissioners of the Port of New Orleans, the Inner Harbor Navigation Canal (IHNC) Lock was constructed in part to allow steamboats to pass from the Mississippi River to Lake Pontchartrain.

At the start of World War II in 1939, the Gulf Intracoastal Waterway, one of the most remarkable arteries of transportation in America, was rerouted to greatly employ the IHNC and the lock.

Owners of the lock at its advent, the Port of New Orleans charged 5 cents per gross ton to pass through until it was leased to the federal government in 1942, eliminating the toll. In 1986, the port sold the lock to the government, which has owned it ever since.

The IHNC Lock has a conventional lock design, with a reinforced concrete U-shaped chamber and gate bays at the river and canal ends. The approaches outside the gates at each end are protected by timber guide walls and large dolphins. The lock is 640 ft. long and 75 ft. wide, shorter and narrower than more modern locks on the Gulf Intracoastal Waterway.

Just as important as its navigability, the IHNC Lock also prevents the low areas east of the structure from flooding because of high water in the Mississippi River. It also employs 18 personnel to operate.

Because of its age and relatively small size, the IHNC Lock was authorized for replacement in 1956. Until that project moves forward, the Corps will continue to operate the 1920s vintage lock to ensure commodities such as aviation fuel, consumer fuel, coal, petrochemicals and refined products along the Gulf Coast can continue to reach their destinations the most cost-effective way.

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<th>March</th>
<th>April</th>
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It was 1960 when the Corps received Congressional authorization to replace the small, aging Inner Harbor Navigation Canal (IHNC) Lock, but those opposing the project reached a milestone when the Federal District Court, Eastern New Orleans District, stopped all work on the project in 2006.

Originally, a total of eight sites for the new lock were evaluated, and the Corps further developed two plans in an environmental impact statement prepared in 1997.

After Hurricane Katrina, a federal court ordered the Corps to cease work on all initiatives associated with the project and prepare a supplemental environmental impact statement (SEIS). The SEIS now underway will address the changes in the existing conditions since the 1997 EIS, the impacts of Hurricane Katrina and the recommended plan and its alternatives on the environment.

Although the judge did not give a completion date for the SEIS, a draft is currently out for review.

**SEIS major conclusions and alternatives**

**Option 1.** Under the No-build/Deauthorization Alternative, the IHNC Lock Replacement project would be deauthorized by Congress and would rule out constructing a new lock. The federal government would continue to operate and maintain the existing lock.

**Option 2.** The 1997 EIS Plan called for replacing the existing lock with a new 1,200-foot long, 110-foot wide and 36-foot-deep lock in the IHNC, north of the Claiborne Ave. Bridge. It also included extending the Mississippi River levees and floodwalls from the existing lock to the new lock. In addition, the plan recommended replacing the existing St. Claude Ave. Bridge with a low-level double bascule bridge and modifying the Claiborne Ave. Bridge to make it compatible with the new lock. This option calls for constructing parts of the lock at an offsite location or graving site and floating to the new lock location. The Corps would dispose of dredged material removed during construction at an appropriate disposal site.

**Option 3.** The Cast-in-Place (CIP) Plan is similar to the 1997 Plan in lock design, location and bridge modifications. The difference is that it requires the construction of seven lock monoliths founded on piles within a cellular sheet pile cofferdam.

**Option 4.** The Float-in-Place Plan is the new recommended plan. Similar to option 1, it requires two separate construction locations - the graving site, and a new lock site. Different from option 1 is that additional evaluation has further refined the location and design of the confined disposal facility for contaminated dredged material, the location and size of the graving site, and the methods for disposal of all dredged material.

Although project modifications have been incorporated to minimize socioeconomic and noise impacts and alterations to traffic patterns during the lock and bridge construction, short-term adverse impacts are anticipated to housing, business and industrial activity, community services, tax revenues, and vehicle transportation. Additionally, long-term adverse impacts would occur on aesthetics and recreational resources from the IHNC Lock Replacement Project due to the modification of levees and floodwalls.

Although the demographics of nearby neighborhoods have changed dramatically due to Hurricane Katrina, a community impact mitigation plan was implemented as part of the 1997 EIS Plan and would continue to fund numerous projects to avoid, minimize and compensate for adverse social impacts to the nearby neighborhoods. However, the design refinements and more analysis of impacts to the post-Hurricane Katrina natural and human environment in this plan reflect the concerns expressed during a public scoping meeting held April 4, 2007.

When the 45-day public comment period ends on the draft SEIS Nov. 24, the Corps will include responses to questions and comments made during the public review process in the final SEIS. Once completed, the SEIS will be provided to the court, which holds the fate of the IHNC Lock Replacement Project.
A walk through time on the IHNC Lock Replacement Project

by Melissa Biehl

Nationally the IHNC Lock plays a pivotal role in the nation’s shipping industry. The new lock will reduce shipping costs to the navigation industry, provide additional industrial output and create jobs around the nation...

As he took a break from his ship duties, he breathed in his surroundings. The faint caw of the seagulls and the water splashing against the hull of the boat put him in a trance. It had been days since he last saw his beautiful wife and children, but the thought of seeing them when the tour is done renews his spirit. The captain last estimated they would be through the Industrial Canal in about ten hours.

It has been five hours since his last announcement, then he heard the captain on the loudspeaker: “Crew I am sorry but our trip through this area will take a little longer than I thought. The lock in the canal is experiencing complications and it could take longer.”

His hopes of seeing his family diminished with the captain’s announcement. He will have to call his family and let them know he will not be home for Thanksgiving. Another holiday missed.

Other people in the shipping industry have shared the same experience of being on the Industrial Canal waiting and wondering if they would make their deliveries on time.

The Inner Harbor Navigation Canal (IHNC) Lock Replacement Project, known locally as the Industrial Canal Lock, was authorized by Congress 52 years ago. Currently the IHNC Lock is one of the most congested locks, with the average wait of 10 hours, while some craft have frequent delays for 24 to 36 hours. Delays have ramifications to the local and national economy as they generate millions of dollars to the industry. Since 1956, the project has evolved through public input, legislation and engineering advancements.

The IHNC Lock Replacement Project has been underway for over half a century and has a colorful history. During this time politicians, engineers, contractors and the surrounding communities have influenced the project. President Jimmy Carter recognized the importance of the project in 1977 when he addressed Congress concerning the fiscal year 1978 budget. “This project should be modified to eliminate consideration of the new channel location. Further study should be carried out to determine whether repair or replacement is needed of the existing lock at the existing site. If replacement and expansions are deemed necessary, special care should be taken to minimize dislocation and disruption of residents near the site.”

His comments are significant because years later a mitigation plan was added to the project, which benefits the local communities.
Talk to the Corps about the IHNC Lock Replacement Project

Would you like to learn more about the Inner Harbor Navigation Canal (IHNC) Lock Replacement Project? Talk with experts from the U.S. Army Corps of Engineers, New Orleans District at a public hearing Nov. 12, 2008 at Martin Luther King, Jr. Charter School, 1617 Caffin Ave., in the Lower Ninth Ward. The meeting will begin with an open house from 6 to 7 p.m.

“We’ve reached a key project milestone,” said Larry Poindexter, senior project manager of the IHNC or Industrial Canal Lock Replacement Project. “The draft Supplemental Environmental Impact Statement recommends the Corps replace the existing lock with a new lock to be located within the current project right-of-way.”

Following the open house, New Orleans District Commander Col. Alvin Lee will facilitate the formal public hearing, which begins at 7 p.m.

“We will give a brief presentation discussing content of the draft SEIS then begin a comment-only period which will be captured by a certified court reporter,” said Richard Boe, environmental manager of the project.

“Every person who attends the public meeting will be offered the opportunity to provide their comments or questions about the draft SEIS,” added Boe.

People attending can also provide written comments at the public hearing for anyone who is not able to attend the public hearing. Comments can be submitted to Richard Boe by Nov. 24, 2008.

Speakers will be called in the order in which they sign in at the meeting, provided a speaker card and have three minutes to share their sentiments on the project. The final SEIS will address all comments made during the public hearing and written comments collected through Nov. 24, 2008.

Copies of the draft SEIS and appendices are currently available at: www.mvn.usace.army.mil/prj/ihnc.

Printed copies of the document are available for public review at the following locations:

• St. Bernard Parish Library, 7701 Judge Perez Dr., Arabi, LA
• Orleans Parish Library Main Branch, 219 Loyola Ave. (3rd Floor), New Orleans, LA
• Martin Luther King Branch Library, 1611 Caffin Ave., New Orleans, LA
• Alvar Library, 913 Alvar St., New Orleans, LA

Written comments on the IHNC Lock Replacement Project should be addressed to:

U.S. Army Corps of Engineers (PM-RP)
c/o Richard Boe
P.O. Box 60267
New Orleans, LA 70160-0267
Phone: (504) 862-1505
Fax: (504) 862-2088
E-mail: ihnclockreplacement@usace.army.mil.
The New lock is proposed to be located within the existing channel, north of the current structure.

The yellow circle above does not represent actual length or width of the new lock.
During the late 1970s, communities surrounding the lock became active in the project development and interested in how it affects them. St. Claude, Holy Cross, Bywater, and the Lower 9th Ward communities surround the current lock. Nearby residents expressed their concerns about the project through lawsuits, protests and attendance at Corps public meetings. The citizens’ comments during public meetings stemmed mostly from misinformation.

Examples of the misinformation in these areas were: the Corps is going to widen the canal; there will be 10-12 years of continuous disruptions during the construction; the project will cause long periods of significant traffic congestion on neighborhood streets; and, the project has been “shoved down the throat” of the neighborhoods.

In actuality, the Corps will not be widening the canal, which is 690 feet between centerlines of the levees; however, the project plan is to enlarge the lock to accommodate modern vessel traffic. Estimated construction time is 10 to 12 years and disruption to the surrounding communities during the construction period is minimal because most of the work done is scheduled to be in the canal and in phases. There should be minimal traffic congestion during construction because most of the work will be transported in by water. The Corps has listened to the people in these areas by providing a temporary bridge and changing the new lock construction site.

Other concerns of the residents included noise, aesthetics, pollution and property value damage. These concerns helped lead to the creation of the award-winning Community-Based Mitigation Plan.

During the 1990s, community meetings began and the mitigation plan was developed. The Corps addressed community concerns by developing a community-based mitigation committee to allow residents to provide valuable input toward the formulation and implementation of the community mitigation plan. The first steps of the community mitigation plan helped unemployed people living near the project site receive job training for entry level construction careers. The first job-training class started in the late 1990s and included 16 people, 13 of whom graduated from the program in 2001. Other projects produced by the committee were:

- a farmers market that united the four surrounding communities
- removing vacant lots to improve community aesthetics
- improving the living conditions of low-income residents

To adhere to other request by the citizens, the Corps minimized the impacts of the replacement lock by recommending floating in the lock parts by water, as described in the 1997 EIS. The plan recommended one graving site, in a remote area, for construction of the lock modules to minimize noise. A graving site is an off-site location where each phase of the project is constructed. Once constructed, a tug boat takes the module down to the new lock site.

A lawsuit in 2003 eventually led to a federal judge’s 2006 decision that ordered all construction and mitigation to stop.

The IHNC lock replacement story is captivating because it provides conflict, historical significance, and longevity. A number of Corps engineers, project managers and contractors have spent decades on the lock replacement project because of the benefits the project offers to New Orleans and the nation. During the life of the replacement project, 21 district commanders and three senior project managers have devoted time and energy to meet the project mission.

Nationally the IHNC Lock plays a pivotal role in the nation’s shipping industry. The new lock will reduce shipping costs to the navigation industry, provide additional industrial output and create jobs around the nation. A new lock on the IHNC requires less maintenance, allows for safer navigation as well as increases in the quantity of goods transported.

After years of missing holidays with his family, he finally has a glimmer of hope. The captain explained that there is a new lock on the Industrial Canal and they should be passing through shortly. His energy returns as he anticipates seeing his family on time this Thanksgiving.

All photos courtesy of the USACE.