

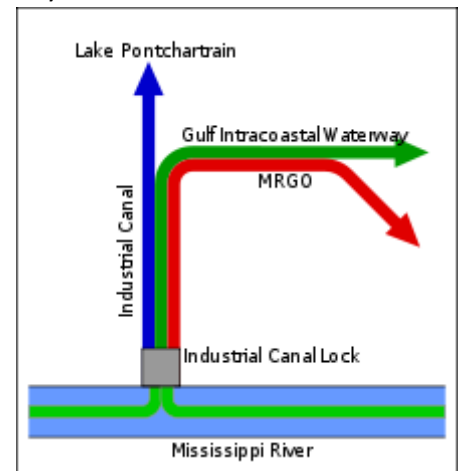


Lake Pontchartrain Basin Maritime History Briefs

The Industrial Canal- Design, Construction and Connections

Responding to the need for access from Lake Pontchartrain to the Mississippi River, the Port of New Orleans completed a 5-year project in 1923 to construct the Inner Harbor Navigation Canal and Lock, commonly referred to as the Industrial Canal. Subsequently, the Gulf Intracoastal Waterway (GIWW) was constructed from The Rigolets and connected to the Industrial Canal in the 1940's. This

system allowed traffic from the Mississippi River to Lake Pontchartrain and the Mississippi Sound and points east. Simplified, the Canal and its connections can be represented by the diagram to the right. Discussed below, MRGO is the Mississippi River Gulf Outlet channel connected to the GIWW in 1965 but closed in 2009.



The Industrial Canal project was initiated in July 1914 when the Louisiana State Government authorized the Port of New Orleans to build a “deep-water shipping canal between Lake Pontchartrain and the Mississippi River”. Earlier proposals to link the Lake to the River during Spanish colonial rule period (1763-1803) were abandoned due the difficulties of dealing with the varying levels of the River. Factors that motivated construction of the Canal included but were not necessarily limited to the recent completion of the Panama Canal and the corresponding expectation of increased shipping and competing with railroads. The Port awarded a contract to the consulting firm of Ford, Bacon and Davis Engineers to conduct a planning study to recommend the route and features of the Canal including the lock required at the juncture of the Canal with the Mississippi River. Five locations for the Canal were proposed for consideration, several of which incorporated either the Carondelet Canal or the New Basin Canal. The route options were originally evaluated for barge traffic which would require a lock at the Mississippi River with a draft of 10’. The report noted that two of the route options, Press Street and Jackson Barracks, could be constructed to accommodate ship drafts of 15’ or above. Ultimately, a lock system with a draft of 30’ was selected. This required construction of a lock with a depth of 50’ to accommodate vessels with a draft up to 30’ and up to 20’ differences in Lake and River levels.



As completed, the Canal passes through the Ninth Ward of New Orleans- the upper Ninth Ward in the vicinity of the Lake and the lower Ninth Ward in the vicinity of the River. In the latter area, property originally occupied by the Ursuline Convent comprising 700' of river frontage was purchased for construction of the lock. In its final configuration, the Canal was 5.3 mi in length; 300' wide at its surface and 150' wide at its bottom; and 30' deep. The

lock system (photo above) had 5 gates, a width of 74' and a depth of 50'. Subsequently, an agreement was reached with the US Corps of Engineers to manage and maintain that portion of the Canal extending from the juncture of the Canal and the GIWW to the Mississippi River including the lock. The Corps undertook a major lock repair project in 1998 during which the lock was closed for two months forcing normal Canal traffic to detour to an outlet near the mouth of the Mississippi River.

As early as 1956, replacement of the Canal Lock with a larger lock was authorized but it was not until 1998 that Congress allocated funds for replacement. Pressure for replacement of the existing lock with a larger lock was generated by shipping interests concerned about the long delays experienced by barge tows navigating the lock. The allocation of funds in 1998 initiated site acquisition and preparation efforts but also the outcry of the effected communities to the project. Expressed concerns about the replacement project included but were not necessarily limited to environmental problems, economic disruption, and economic justification.

The design of the new lock provided a considerably larger chamber than the existing lock. Comparatively, the new lock was designed to be 110' wide compared to 75'; 31.5' deep compared to 30'; and 1200 ft long compared to only 640'. The lock was to be fabricated nearby and floated into place just north of the existing lock. On 10/21/2022, I received the following response from the US Army Corps of Engineers concerning my inquiry regarding the status of the new lock project:

" We have recently resumed our study on the IHNC Lock Replacement Project. We are currently working on the Community Impact Mitigation Plan, Sect. 106 Historic Preservation documentation, Traffic Impact Mitigation Plan and feasibility level of design of the lock and bridge. At this time, I don't have an updated schedule for completion of the study but expect one soon. As a note, no construction on the lock can begin until the study is fully complete, all necessary approvals secured and construction-specific funds are allocated."

In 1965, the 76-mi Mississippi River Gulf Outlet (MRGO) channel was completed by the US Corps of Engineers, linking the Gulf to the GIWW and the docks along and in the vicinity of the



inner harbor of the Industrial Canal. The expectation was that such a link would effectively relocate the Port of New Orleans from the wharves along the Mississippi River to the facilities along the GIWW and the Industrial Canal. For a variety of reasons, principally insufficient funding, this Port relocation never materialized. The channel received criticism for its potential negative

environmental impacts- saltwater intrusion, wetlands erosion, and amplified storm surge. The latter concern was realized due to the contributions of the channel to the flooding accompanying Hurricane Katrina in 2005. This significant negative impact resulted in the



construction of a storm surge barrier and permanent closure of the Outlet to maritime shipping in April 2009. The photo shows the surge barrier under construction. The GIWW is in the foreground, the MRGO in the background.

Sources

Wikipedia Encyclopedia Articles- Gulf Intracoastal Waterway, Industrial Canal, Mississippi River Gulf Outlet

Personal Communication from Ricky Boyett, Chief, Public Affairs, USACE, New Orleans, October 21, 2022.