



OLMSTED LOCKS AND DAM PROJECT

As of: 5 October 2021

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Official Title: Locks and Dam 52 and 53 Replacement Project (Olmsted Locks and Dam), IL and KY

Location: The project is located near Olmsted, IL near Ohio River Mile 964.4.

Purpose: Construct the new Olmsted Locks and Dam to replace Ohio River Locks and Dams 52 & 53. Demolish Locks and Dams 52 & 53 once Olmsted is operational.

Project Description and Background: The project consists of two 110' X 1200' locks adjacent to the Illinois bank, and a dam comprised of five Tainter gates, 1400' of boat-operated wickets and a fixed weir. The proposed replacement structure will eliminate Ohio River Locks & Dams 52 & 53. Locks & Dams 52 & 53 were completed in 1929 and the temporary 1,200' long lock chambers were added in 1969 at Locks & Dam 52 and 1979 at Locks & Dam 53. The antiquated design and age of these structures make it impossible to meet current traffic demands without significant delays. The existing structures have deteriorated structurally and are overstressed during normal operating conditions. Existing wicket dam has missing sections and wickets that will not raise making it very difficult to maintain pool during low water. The temporary locks at Locks & Dam 52 & 53 have significantly passed their 15-year design life.

This strategic reach of the Ohio River provides a connection between the Mississippi River, Tennessee River and Cumberland River. More tonnage passes this point than any other place in America's inland navigation system. In 2011, 91 million tons (Locks & Dam 52), traversed this portion of the Ohio River. 25% of all coal shipped on the inland waterways transits Locks & Dam 52, destined for many of the 50 power plants located on the Ohio River System or the 17 power plants located in eight states on the Upper or Lower Mississippi River.

Current Status and Outstanding Issues: Early operation of Olmsted and unseasonably high river elevations from Sept 2018 to Aug 2019 impacted the ability to complete all remaining work on the Dam as scheduled. The Dam contract is now complete with all work done and the contractor has demobilized from the site.

The two 110' X 1200' locks and approach walls are complete. All damming surfaces to include left boat abutment, right boat abutment, 5 Tainter gates, fixed weir on the Kentucky bank, and all twelve navigable pass shells containing wickets are complete and operable. In addition, the following project components have also been completed; Harbor Access, Resident Office Conversion (Pole Barns), Refurbish Bulkheads, and Locks & Dams 52 and 53 Landside Demo.

Work currently under contract: Z-Drive Workboat 55% complete, Locks & Dam 52 Marine Demo 80% complete, Locks & Dam 53 Marine Phase II 25% complete, Final Site Restoration 90% complete, and Historic Book 10% complete.

Remaining work to complete the project (Maintenance crane and Floating Mooring Bit Extensions) are progressing through design with procurement scheduled for 2nd Qtr. FY22.

The District received a letter from a downstream landowner claiming the construction and operation of the project has caused property erosion. Research showed the erosion was naturally occurring and not the result of the project. Response to the landowner was sent on 11 Jan 2021. LRL, along with congressional staffers, reached out to the local community leadership and provided information on other federally funded programs that may be able to assist.

Summarized Financial Data:

2012 PACR	\$3,099,000,000
2018 Total Estimated Project Cost (NWW certified)	\$2,867,296,000
Estimated Federal Cost	\$1,856,981,000
Estimated Inland Waterways Trust Fund Cost	\$1,010,315,000
Allocation thru FY21 including ARRA allocation thru 30 Sept 15	\$2,853,402,000
Benefit to Cost Ratio (at 7%)	1.98
Non-Federal Sponsor	N/A

The Olmsted Locks & Dam project was authorized by Section 3(a)(6) of the Water Resources Development Act (WRDA) of 1988. The authorized project cost was increased on 17 October 2013 as part of a Continuing Appropriations Act, 2014 to \$2,918,000,000. The project was funded 50%/50% from the General Treasury and the Inland Waterways Trust Fund (IWTF) through FY2013. The FY2014 Omnibus Appropriation Act changed the split of IWTF and General Treasury funds to 25%/75% for FY2014 only. Water Resources Reform and Development Act of 2014 changed the IWTF and General Treasury shares to 15%/85% beginning 1 Oct 2014. As of 30 Sep 2021, \$2.725B has been expended on the project. The most recent (2018) economic update forecast annual average benefits at \$236M. PACR annual benefits were calculated at \$640M.

Upcoming Actions: Olmsted was put into service on 6 Sep 2018 ahead of the scheduled 1 Oct 2018 date, and 4 years ahead of the PACR milestone, to mitigate significant economic exposure to industry stakeholders given the failing condition of Locks & Dams 52 & 53. This early operational date and subsequent unseasonable extended high-water event impacted completion of several critical items of the dam to include isolation piles and shell patching. An additional \$63M was received through FY20 Work Plan for project delays due to the high-water impact to the cost-reimbursement contract extension and procurement of remaining work. LRL continues

to actively prosecute completion of remaining work and to complete the project ahead of the CSRA date of 2026.

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Olmsted Locks and Dam September 2018



Olmsted Locks and Dam November 2019