



## **Olmsted Locks and Dam Project**

September 2016

## 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 in Olmsted, IL near Ohio River Mile 964.4.

<u>Purpose</u>: 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. 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.

<u>Project Status</u>: The two 110' X 1200' locks and approach walls are complete. The fixed weir on the Kentucky bank is complete. As of 16 September 2016, all eighteen dam tainter gate shells are set and tainter gate #1, #2 and #3 are erected with #4 arriving to the Olmsted site on 14 September 2016. In the navigable pass section, all twelve paving blocks, the right boat abutment, and eight of twelve navigable pass shells have been set in the river. Foundation pile driving operations for the navigable pass will be complete by 30 September 2016. The left boat abutment piling (thin wall cofferdam) was completed 15 September 2016. Current schedule is to be dam operational in October 2018 and project complete in March 2022.

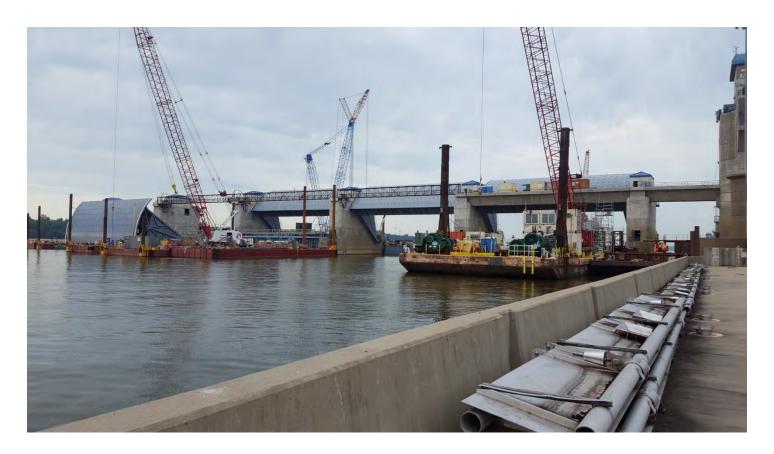
## Summarized Financial Data

2012 PACR	\$3,099,000,000
2016 Total Estimated Project Cost (NWW certified)	\$3,059,266,000
Estimated Federal Cost	\$1,940,324,000
Estimated Inland Waterways Trust Fund Cost	\$1,118,942,000
Allocation thru FY16 including ARRA allocation thru 30 Sept 15	\$2,227,402,000
FY 16 Budget	\$268,000,000
FY 17 Budget/Capability	\$225,000,000/\$250,000,000
Benefit to Cost Ratio (at 7%)	3.4
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 project authorization was increased on 17 October 2013 as part of a Continuing Appropriations Act, 2014 for \$2,918,000,000. The project was cost shared 50/50 with the Inland Waterways Trust Fund (IWTF) through FY2013. The FY2014 Omnibus Appropriation Act changed the split of IWTF and federal cost share to 25/75 for FY2014 only. Water Resources Reform and Development Act of 2014 changed the IWTF and federal cost share to 15/85 beginning 1 October 2014.

As of 01 September 2016, \$2,243,357,078 has been expended on the project. The annual average benefits from the Olmsted project are approximately \$640M.

<u>Upcoming Actions</u>: The Government and navigation industry stakeholders are exposed to significant increased economic risk given the failing condition of Locks & Dams 52 & 53. Accordingly, efficient completion of the Olmsted project construction is the only sustainable mitigation measure available. Continued capability funding is required to meet a dam operational date of October 2018. Without annual capability level funding in place, the dam operational date will likely slip one or more years reverting to the less than optimum operational timeframe of September 2020 contemplated in the PACR forgoing approximately \$1.28B in benefits.



Tainter Gates #1, #2 and #3 erected. Tainter Gate #4 delivered (far left).