Olmsted Locks & Dams

Waterways Council, Inc. is the national public policy organization advocating a modern and well-maintained national system of ports and inland waterways.

Location	Ohio River Mile 964.4, in Pulaski County, Illinois and Ballard County, Kentucky; approximately 2 miles downstream of Locks and Dam 53.
Existing Structures	Locks and Dams 52 and 53, each with a 110’ x 600’ lock chamber and a wicket dam were built in 1929. In 1969 a temporary 110’ x 1200’ lock was built at Lock and Dam 52 and in 1979 a temporary 110’ x 1200’ lock was built at Lock and Dam 53.
Annual Tonnage and Projected Traffic Growth	2008 tonnage at Locks and Dam 53 and 52 totaled 76.1 and 90.0 million tons of commerce, respectively, worth over $17 billion; 38% of this tonnage was coal. Other major commodities included aggregates, iron/steel, grain, petroleum and chemicals. Projected Traffic Growth is 141 million tons by 2030. (source*: Ohio River Main Stem Systems Study – Interim Feasibility Report)*
Summary of Problems	Locks 52 and 53 are deteriorating structurally, have no steel reinforcements and are 50 to 100% stressed under normal operating conditions. The temporary locks are inefficient, often shut down and are past their 15-year life.
Corps of Engineers Actions	Ground was broken on the project in 1996. Locks and Dam 52 and 53 will be replaced with a single facility consisting of twin 100’ x 1200’ lock chambers and a submersible dam.

Olmsted Locks and Dam

Project Description

The Olmsted project consists of twin 1200' locks and a new dam to replace Locks 52 and 53. Construction began in 1992. The Olmsted Locks and Dam is located on the Ohio River near Olmsted, Illinois, at mile 964.4 below Pittsburgh, Pennsylvania. The Navigation locks are located on the right descending bank or Illinois side of the river. The upper pool maintained above the dam extends upstream for a distance of 45.9 miles to the Smithland Locks and Dam at mile 918.5. The Olmsted project involves underwater foundation preparation, lift-in construction of the tainter gates and navigable pass shells for the dam, floating approach walls, directly connected hydraulic cylinder operation of the culvert valves, miter gates, tainter gates, and a central station to operate both the dam and the twin locks. The project is currently scheduled for a 2018 completion, depending upon funding.

Transportation Importance to the System

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 2008, 76.1 and 90.0 million tons (Locks & Dam 53 and 52, respectively), valued at $17 billion, traversed this portion of the Ohio River. 38% of all coal shipped on the inland waterways transits Locks & Dam 52, destined for the more than 50 power plants located on the Ohio River System or for many of the 17 power plants located in the eight states on the Upper or Lower Mississippi River. Traffic at the Olmsted project is projected at 1412 million tons by 2030.

Project Funding History

The project is cost-shared 50/50 with the Inland Waterway Trust Fund. Total Project Cost is $2.1 billion. The total benefit to cost ratio is 10.8 to 1 based on an interest rate of 7 percent. The average annual navigation benefits for this project are $591,008,641 (December 07 dollars). Construction funds were first appropriated in FY91. $101.521 was appropriated in FY 10. Approximately $1 billion has been expended through FY10. $136 million has been requested for FY 11.

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