

Olmsted facts

Official title and location: Locks and Dam 52 and 53 Replacement Project (Olmsted Locks and Dam), IL and KY located 17 miles upstream from the Mississippi River near the town of Olmsted, Illinois, at Ohio River Mile 964.4.

Authorization and reauthorization: The Olmsted Locks and Dam project was authorized by Section 3(a)(6) of the Water Resources Development Act (WRDA) of 1988 at an estimated cost of \$775 million. Construction funds were first appropriated in Fiscal Year 1991. The project was reauthorized in Public Law No: 113-46 of 2013 at an estimated cost before inflation of \$2.918 billion. Prior to reauthorization almost \$1.7 billion had already been spent on the project. This reauthorization allows about \$1.2 billion more to be spent to complete the work. The project is cost shared 50/50 with the Inland Waterways Trust Fund.

Cost escalation and stabilization: Restrained annual funding, inflation, river conditions and a low initial dam cost estimate have contributed to the construction costs. Cost is being contained as a result of increased efficiencies gained by experience and lean construction that emphasizes continuous production planning and incorporates lessons learned. Due to the complexity of site conditions, finishing the dam with multiple cofferdams would not guarantee a less expensive project completed in a shorter amount of time.

Summarized Financial Data:

Estimated total federal cost	\$1,556,146,000
Estimated total Inland Waterways Trust Fund cost	\$1,526,631,000
Total estimated project cost with inflation	\$3,082,777,000
Authorized spending limit before inflation	\$2,918,000,000
Allocation through Sept. 30, 2013	\$1,668,981,000
President's proposed FY14 budget	\$163,000,000
Average annual net benefits of completed project	\$640,000,000

Project Description: The project consists of two 110 x 1,200-foot locks adjacent to the Illinois bank, and a dam composed of five tainter gates, 1,400 feet of boat-operated wickets and a fixed weir. The replacement structure will eliminate Ohio River locks and dams 52 and 53. Locks and dams 52 and 53 were completed in 1929 and their temporary 1,200-foot long lock chambers were added in 1969 at 52 and 1979 at 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, are overstressed during normal operating conditions and have significantly passed their design life.

Importance to the nation:

This strategic reach of the Ohio River provides a connection between the Mississippi, Tennessee and Cumberland rivers. More tonnage passes this point than any other

place in America's inland navigation system. In 2012, 91.4 million tons traversed this portion of the Ohio River. 25 percent of all coal shipped on the inland waterways transits Locks and Dam 52, destined for many of the 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. Commodities also move through this stretch to the Port of New Orleans for overseas markets.

Project Status: The twin 1,200-foot lock chambers were built in a dry cofferdam and completed in 2004. The dam is under construction in the river using a method known as "in-the-wet" in which giant shells are cast on land and then placed in the river. Fourteen dam shells have been set in the river and two more shells are scheduled to be set in the 2013 low water season. The project is scheduled to be operational in 2020 and the total project, including the removal of locks and dams 52 and 53, is scheduled to be completed in 2024.