

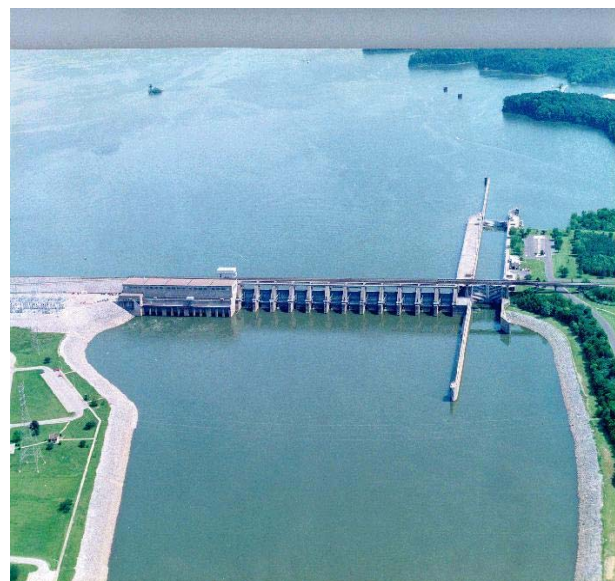


WATERWAYS
COUNCIL, INC.

Kentucky and Barkley Lock & Dams



Kentucky Lock and Dam



Barkley Lock and Dam

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



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Location

Tennessee River Mile 22.4, in Livingston and Marshall Counties, Kentucky.

Existing Structures

The original 110' x 600' lock chamber was completed in 1945.

Annual Tonnage and Projected Traffic Growth

In 2008, tonnage on the Kentucky-Barkley system was over 35.3 million tons of commerce worth more than \$5.4 billion, with over 34 million tons transiting Kentucky. Major commodities included coal, aggregates, iron/steel and grain. Projected traffic growth in the Kentucky-Barkley system is 57 million tons by 2030. (source: *Ohio River Main Stem Systems Study – Interim Feasibility Report*)

Summary of Problems

The single chamber is insufficient to handle increasing tonnage. The lack of an auxiliary chamber forces tows to use Barkley Lock during periods of extended delays and closures. Kentucky Lock is at 90% capacity and tows face average delays of 5 to 6 hours.

Corps of Engineers Actions

Ground was broken in October 1999 on a new 110' x 1200' lock. The existing lock will continue to be used as an auxiliary.

Kentucky and Barkley Locks and Dam

Project Description

The Kentucky Lock Addition project, located at Mile 22.4 of the Tennessee River in western Kentucky, was authorized by the Water Resources Development Act of 1996. The project consists of a new 110' X 1200' lock to be located landward and adjacent to the existing 110' X 600' lock. In addition three major relocations are required to construct the lock: 1) the relocation of four large transmission towers; 2) construction of a new two-lane highway bridge across the Tennessee River; and 3) construction of a new single track railroad bridge across the Tennessee River. The new lock is needed because of the existing lock's inability to meet current and future traffic demands without significant delays. Over the last 10 years, average delays per tow have ranged from three to seven hours, and projected traffic increases will only aggravate these delays.

Transportation Importance to the System

Kentucky Lock is the lowermost lock on the Tennessee River and is the gateway for the 12 locks located upstream on the Tennessee and Cumberland Rivers. From 1997 to 2004 annual tonnage passing through the Kentucky-Barkley system has ranged from 35 to 43 million tons. Products shipped to or received from 20 states are included in this tonnage. Traffic forecasts by the Corps of Engineers' Navigation Center indicated that tonnage levels will range between 51.8 and 54.9 million tons by 2020.

Project Funding History

The project is cost-shared 50/50 with the Inland Waterways Trust Fund. The total project cost is estimated to be \$663.5 million for an assumed completion date of 2015. Delays beyond 2015 will increase this cost estimate. Average annual benefits are \$70.7 million (Oct. 03 \$), and the project has a benefit to cost ratio of 2.5 and a remaining benefit to remaining cost ratio of 3.6 (both at an interest rate of 7%). Construction on the project commenced in July 1998. At the end of FY 09, it was estimated that \$390 million was needed to complete the project. Unfortunately, only \$945,000 was appropriated in FY 10 and only \$2.868 was requested in FY 11. Completion date under current funding levels is unknown.

January 2010