

Ohio River, Dashields Locks and Dam

Facility Description: Facility is located 13.3 miles downriver from Pittsburgh at Glenwillard, PA. It was built from 1927-1929 and began operation in August 1929. It is comprised of a 1,585 foot fixed crest dam, a 110 ft x 600ft land side lock, and a 56ft x 360ft river side lock which provide for a 10 foot vertical lift.



Transportation Importance to the System: Dashields L/D is the second of six navigation facilities on the Ohio River operated by the Pittsburgh District. Each year from 2000 to 2005, Dashields Locks passed over 2,000 recreational vessels, 4,200 commercial tows, and over 22 million tons of cargo. Cargo consists of coal, petroleum, chemicals, crude materials, manufactured goods, farm products, manufactured machinery, and other commodities. Coal is the principal commodity at Dashields. Electric utilities move coal from mines in Pennsylvania and Ohio to power plants serving the mid-Atlantic, southeastern and midwestern regions of the United States. Steel companies move coal from West Virginia and Kentucky mines to coking facilities on the Monongahela River. Construction and companies use this facility to move raw materials into the region. Average annual transportation cost savings associated with this facility from 2000 to 2005 is over \$173 million.

Risk of economic impacts of unscheduled lock outages: Failure to provide adequate funding to maintain this facility will have significant detrimental effects to the local and regional economy. Failure of the dam or any critical lock component in the main or auxiliary chambers, or both, will result in increased transportation costs and delays to the shipment of critical raw materials for power production, manufacturing, and other commercial activities.

Scope of work to achieve acceptable level of risk: The projected 5 year (FY 2008 through FY 2012) average cost to operate and maintain Dashields Locks and Dam at an acceptable level of risk is \$3.7M per year. Maintenance items include maintenance, repair, and/or replacement of lock operating equipment; lock gates, anchorages, and sills; lock valves; lock walls; and hydraulic systems. These costs are above and beyond the routine day to day maintenance of all system components.