

Project Factsheet for: Backlog of Maintenance - Major Rehabilitation and Major Maintenance - Mississippi River & Illinois Waterway Locks And Dams

Date Last Updated: 2006-09-11 15:51:57.0

Project Location Information

Location: Mississippi River & Illinois Waterway Locks And Dams

State(s): IA, IL, MN, MO, WI

Congressional District(s): IA-1, IA-2, IA-3, IA-4, IA-5, IL-11, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, IL-19, IL-2, IL-3, MN-1, MN-7, MO-6, MO-9, WI-1, WI-2, WI-3, WI-5, WI-6

Status

Operations and Maintenance and Major Rehabilitation Programs are unable to adequately fund maintenance activities to ensure the navigation system operates at an acceptable level of performance.

The Mississippi Valley Division created a Product Delivery Team in early 2006 to address this problem regionally for the entire Mississippi River and Illinois Waterway Locks and Dams systems. Prior to creating the regional PDT, the amount of maintenance being deferred was increasing for some locks and dams in some districts while other districts were awarding contract improvements annually. The regional approach should improve this inequity. The PDT meets regularly, at least quarterly or more often as necessary.

Description

The Major Rehabilitation and Major Maintenance Program for the Locks and Dams on the Mississippi River and Illinois Waterway has been ongoing since 1975.

- Major rehabilitation consists of reliability or efficiency improvements.
 - Reliability improvements are considered when they significantly extend the physical life of a component, have direct consequences to navigation, and can be economically justified by benefit-to-cost analysis. The region focuses on this method of major rehabilitation.
 - Efficiency improvements are considered if they enhance operation efficiency of the component.
- Major maintenance is categorized as major repairs or improvements that don't qualify for major rehabilitation and must be funded out of the regular O&M Budget.
- The remainder of the regular O&M Budget dollar is used for baseline (routine) operation and maintenance.
- The O&M Budget has not seen significant increases and has not been allowed to increase to match inflation.
- The O&M Budget is not sufficient to fund the entire Major Maintenance costs for the Locks and Dams. The Major Maintenance improvements not funded are added to a list of backlog maintenance.

MAJOR MAINTENANCE OF MISSISSIPPI RIVER AND ILLINOIS WATERWAY LOCKS AND DAMS

L&D Components not Justified for Major Rehabilitation

Consequence of not Doing Work

Lock Miter Gates

Miter gate failure would cause closure of locks to all navigation.

Auxiliary Miter Gate

Continued deterioration and potential loss of upstream navigation pool would occur if gate were to fail.

Lock and Dam Electrical Systems

Electrical failures cause temporary power outages that delay navigation traffic.

Repair Dam Roller and Tainter Gates

Deterioration of gate structure would occur with possibility for failure and inability to regulate navigation.

Lock and Dam Concrete

Greater probability of damage to miter gates by transiting tows. Can also close river to navigation.

Summarized Financial Data

The Mississippi Valley Division Regional Backlog of Maintenance is valued at more than \$908,000,000.

- The top ten priority items on the MVD Regional Backlog of Maintenance are valued at \$38.1 million.
 - Rock Island District has three of the top ten regional priority items, valued at \$12.8 million.
 - Mississippi River L/D 18 Dam Concrete Safety Repairs, valued at \$2.2 million (priority 4 in region)

Mississippi River L/D 21 Systemic Miter Gate Replacement valued at \$3.7 million (priority 7 in region)
Illinois Waterway Lockport Lock Approach Dike Repairs - Cutoff Wall, valued at \$6.9 million (priority 10 in region)

Authority

OM - Operations and Maintenance -- River and Harbor Act of 1930

Project Manager Information

Name: Denise Tyler, Mgt Support Branch, Operations Division

Phone: (309)794-5275

E-mail: denise.e.tyler@usace.army.mil