Project Factsheet for:
Lockport Lock and Dam, Upper Pool, Illinois

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Project Location Information

Location: Lockport, Illinois
River Basin(s): Illinois
State(s): IL
Congressional District(s): IL-11 , IL-13

Status

Lockport Lock and Dam, Upper Pool, Illinois has the approach dike under construction installing a 4,300 ft. cut-off wall with low strength concrete that will be completed in Sep 2009. The second feature is in the plans and specs stage for replacing 2.6 miles of the canal wall (Stage III), which is part of the guide-wall to the Lock and Dam. Construction should started in Sept 09 and completed Nov 2012. The third feature also in the plans and specifications stage is the rehabilitation of the controlling works (Stage II) which is approximately 3 miles upstream of the Lock and Dam and is used by the Metropolitan Water Reclamation District to control the water levels in the Illinois Waterway. Construction should start in FY10.

Associated projects using O&M funds will clear trees from the embankment, fill exciter bays in the Dam's Hydropower section with low strength concrete to stop leaking of the waterway into the powerhouse and repair the dam spillway.

Description

The project is located within a three mile reach of the Lockport Lock Pool of the Illinois Waterway River (Mile 291.0 - 294.1) at Lockport, Illinois. As part of the Chicago Sanitary Ship Canal, which extends from the Chicago River to the Illinois Waterway, the structures extend up river from the Lockport Lock. Lockport upper pool is a perched pool 38 feet above surrounding communities. The Lockport Pool Approach Dike and Walls were ranked in 2005 as a Category DSAC II, which is defined as a dam that has confirmed (unsafe) or unconfirmed (potentially unsafe) dam safety issues. Dam safety funds in FY06 and FY07 were used to initiate design efforts. The embankment requires significant repairs and rehabilitation to ensure continued structural integrity, continued retention of navigation pool, safe access to the hydropower plant, continued safe use of the controlling works, and avoid downstream flooding in the event of failure. Without major funding, the District's ability to adequately restore the embankment's water retaining function will be prevented.

The Metropolitan Water Reclamation District of Greater Chicago (MWRD), through Congressional action, transferred the operations and maintenance responsibilities of the substructures and support structures to the US Army Corps of Engineers in the early 1980's for this roughly forty-five (45) foot high embankment, the controlling works, the powerhouse substructures, and all pool retention structures. The embankment has had a long history of sinkhole development and surface slumping. The District made improvements to the structural stability and erosion resistance of the embankment with the addition of a rock fill shell. In an attempt to prevent further sinkhole development, a shallow cutoff trench was also constructed in the early 1990's and although it has performed satisfactorily for nearly 10-11 years, sinkhole development has resumed in 2001 and 2002. The age and non-homogeneous nature of the original embankment, an extension of the embankment's original height and the numerous "quick" inexpensive repairs that have been made through the years makes it difficult to guarantee continued satisfactory performance. There is also a great concern that individual (MWRD employees) traversing this embankment to reach the hydropower plant is in danger of driving into a sinkhole.

In 2007 $4,700,000 in "WEDGE" funds were made available to continue design, initiate Approach Dike test section construction to validate repair methodology, initiate design, and implement risk reduction measures.

Summarized Financial Data

	Rehabilitation	Major Maintenance
Estimated Federal Cost	$141,318,000	$1,877,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Project Cost	$141,318,000	$1,877,000
Federal Allocations through FY 2008	$25,118,000	$1,690,000
Allocations for FY 2009 (Tentative)	$27,369,000	$187,000
Budget Request for FY 2010	TBD	$0
Balance to Complete after FY 2010	$88,831,000	$0

Major Work Item (This Fiscal Year)

The remaining 1300 feet of cutoff wall and 4300 feet of paving will be completed in the fourth quarter FY09. Design and assemble of the contract documents for Stage 3 Canal Wall will be ready for a FY09 fourth quarter award of a base construction contract. Stage 2 Controlling Works is in design and assemble of contract documents for a FY10 construction contract award.

Major Work Item (Next Fiscal Year)

Continue construction of the canal wall (Stage III),and award contract for construction of Stage II, Controlling Works repair.

Authority

CG - Construction General --

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