

CONGRESSIONAL DISTRICT IN06

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IN Silver Jackets Program

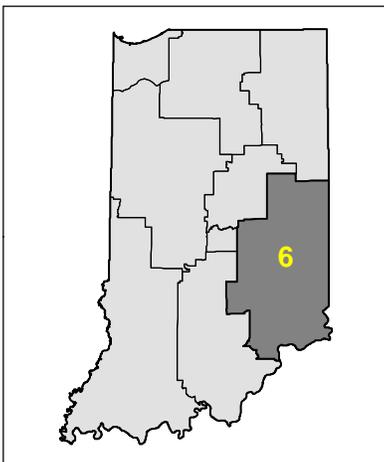
Dam Safety Program
(COE Indiana Dams)

Olmsted Locks & Dam

Brookville Lake
Master Plan



Location Map



Legend

- Lock & Dam
- Interstate Highway
- Levee / Floodwall
- Major Stream
- Waterbody
- Watershed
- Military Installation
- LRL Civil Works Boundary
- City
- County Boundary
- Civil Project
- Military Project



Dam Safety, Indiana Indiana Dams - Special Studies



Brookville Dam, IN

Current Phase: Study

Project Location: Brookville Lake Dam, Cagles Mill Lake Dam, CM Harden Lake Dam, Mississinewa Lake Dam, Monroe Lake Dam, Patoka Lake Dam, J.E. Roush Lake Dam & Markle Levee, and Salamonie Lake Dam (See below for site specific information)

Study and Program Information:

During normal operations, these dams are routinely inspected daily, weekly, and monthly by USACE operations staff and annually by Louisville District dam safety staff. The dams also receive a comprehensive inspection every five years by a multi-discipline team of Louisville District engineers.

The USACE has instituted a “risk informed” dam safety program. The initial step was conducting a Screening Portfolio Risk Assessment (SPRA). A team of engineers conducted a screening level review of the dam’s construction, performance history, and instrumentation to evaluate current dam behavior, as well as economic consequences and the population at risk of potential dam failure. After the initial screening, the risk is re-evaluated every ten years as part of a routine Periodic Assessment (PA) in conjunction with the 5 year comprehensive site inspection. The findings are reviewed by the Dam Senior Oversight Group (DSOG) and a Dam Safety Action Classification (DSAC) rating is assigned based upon confirmed or unconfirmed dam safety issues and the combination of life or economic consequences should failure occur. The DSAC ratings are used to prioritize further study to confirm the proposed dam safety issues. If the DSAC rating is 1 through 3, an Interim Risk Reduction Measures (IRRM)

Summarized Financial Data:

Dam Safety Special Studies are part of a national program with funds distributed by the Corps of Engineers (USACE) Headquarters Dam Safety Office on a priority basis.

Plan is established while further investigations are conducted and/or remedial actions are implemented as necessary.

The first study phase is an Issue Evaluation Study (IES) which confirms the dam safety issue. Should more information be necessary to confirm the issues, an IES Phase II study may be undertaken to gather the necessary data to reduce the uncertainty. The results of these studies are presented to the USACE Risk Management Center (RMC) and the DSOG. The results may indicate the need to progress to the next phase of study or reduce the DSAC rating for the dam. If the case is made that the dam is in need of remedial construction then the project moves to the Dam Safety Modification Report (DSMR). The DSMR report analyzes potential remedial construction elements to determine the best “fix” to reduce the overall project risk. These studies and remedial construction are prioritized based upon the relative risk estimates at each stage to best make use of the available funding and resources.

Congressional Interests:

Senator Mike Braun
Senator Todd Young

Individual Project Status:

Brookville Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2007
- * DSAC (Dam Safety Action Classification) Rating: Class 4
- * IRRMP (Interim Risk Reduction Measures Plan): N/A since it is DSAC 4.
- * IES (Issue Evaluation Study): The findings of the Phase 2 IES risk analysis were presented to the Risk Management Center (RMC) in November 2011 and to the Dam Senior Oversight Group (DSOG) in February 2012. The RMC and DSOG agreed with the report recommendation that the project be reclassified to a DSAC 4 based on the results of the risk analysis.
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

Cagles Mill Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2007
- * DSAC (Dam Safety Action Classification) Rating: Class 4
- * IRRMP (Interim Risk Reduction Measures Plan): N/A since it is DSAC 4
- * IES (Issue Evaluation Study): Not required since it is a DSAC 4
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

Cecil M Harden Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2009
- * DSAC (Dam Safety Action Classification) Rating: Class 3
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 30 June 2010
- * IES (Issue Evaluation Study): The findings of the IES risk analysis were presented to the Risk Management Center (RMC) in September 2013 and to the Dam Senior Oversight Group (DSOG) in October 2013. The RMC and DSOG agreed with the report recommendation that the project be reclassified from a DSAC 2 to a DSAC 3 based on the results of the risk analysis. Remedial construction is not warranted at this time. This structure has been reprioritized in the risk study queue.
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

Mississinewa Dam, IN (See detailed Fact Sheet for additional information)

- * SPRA (Screening for Portfolio Risk Analysis): 2009
- * DSAC (Dam Safety Action Classification) Rating: Class 2
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 27 July 2010
- * IES (Issue Evaluation Study): As a result of the 2014 Periodic Assessment, the dam was rated as a DSAC 2. The IES Phase 2 was initiated in August 2015 and determined that Dam Safety Modification Report (DSMR would not be required).
- * FY2020 Planned Activities: The Final SQRA Report was completed and approved. DSOG agreed with the PDT and risk cadre to reclassify from a DSAC 2 to a DSAC 4. There is no further work required.

Monroe Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2006
- * DSAC (Dam Safety Action Classification) Rating: Class 5
- * IRRMP (Interim Risk Reduction Measures Plan): N/A since it is DSAC 5
- * IES (Issue Evaluation Study): Not required since it is a DSAC 5
- * Note: The DSAC rating was revised to a 5 in 2017 based on the results from a Periodic Assessment.
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

Patoka Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2008
- * DSAC (Dam Safety Action Classification) Rating: Class 4
- * IRRMP (Interim Risk Reduction Measures Plan): N/A since it is DSAC 4
- * IES (Issue Evaluation Study): Not required since it is a DSAC 4
- * Note: The previous Phase 2 IES was initiated in February 2014. The IES terminated at an early stage and a Semi Quantitative Risk Assessment (SQRA) was completed in August 2015. The DSAC rating was changed from a DSAC 2 to a DSAC 4. Remedial construction is not warranted at this time. This structure has been reprioritized in the risk study queue.
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

J.E. Roush Dam, IN

- * SPRA (Screening for Portfolio Risk Analysis): 2005
- * DSAC (Dam Safety Action Classification) Rating: Class 3
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 6 November 2007
- * IES (Issue Evaluation Study): The findings of the Dam Safety Modification Report (DSMR) were presented to the Risk Management Center (RMC) in March 2010 and the Dam Senior Oversight Group (DSOG) in June 2010. Based on the reviews, the study was converted from the existing DSMR to a Phase 2 Issue Evaluation Study (IES).
- * The findings of the Phase 2 IES risk analysis were presented to the RMC in March 2013 and to the DSOG in April 2013. The RMC and DSOG agreed with the report recommendation that the project be reclassified to a DSAC 3 based on the results of the risk analysis. Other recommendations were to continue the increased instrumentation monitoring and collecting of performance data and to update the current IRRMs. Remedial construction is not warranted at this time. This structure has been reprioritized in the risk study queue.
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

Salamonie Dam, IN

* SPRA (Screening for Portfolio Risk Analysis): 2005

* DSAC (Dam Safety Action Classification) Rating: Class 4

* IRRMP (Interim Risk Reduction Measures Plan): N/A since it is DSAC 4

* IES (Issue Evaluation Study): Not required since it is a DSAC 4

* Note: The Dam Safety Modification Report (DSMR) was reviewed by the Risk Management Center (RMC) in March 2010 and the Dam Senior Oversight Group (DSOG) in June 2010. Based on the reviews, the title of the study was changed to an Issue Evaluation Study (IES). The report was revised and the IES was completed in April 2011. The DSOG re-classified this dam from a DSAC 2 to a DSAC 4. Remedial construction is not warranted at this time. This structure has been reprioritized in the risk study queue.

* FY2020 Activities: Routine O&M surveillance and monitoring program.

Indiana Silver Jackets Program



Current Phase:

Active

Location and Description:

Projects are located throughout the State of Indiana.

Silver Jackets teams in states across the United States bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another in reducing flood risk and other natural disasters. By applying their shared knowledge, the teams enhance response and recovery efforts when such events do occur. While some states do not use the "Silver Jackets" name, there are a growing number of states applying the Silver Jackets approach – the ultimate goal is a state-led interagency team in every state. No single agency has all the answers, but leveraging multiple programs and perspectives can provide a cohesive solution.

Although each state Silver Jackets team is unique, common agency participants include state agencies with mission areas of hazard mitigation, emergency management, floodplain management, natural resources management or conservation, etc. Federal participation typically includes the U.S. Army Corps of Engineers and the Federal Emergency Management Agency and often

others such as the National Weather Service and the U.S. Geological Survey.

Authorization:

USACE Flood Risk Management Program

Indiana Silver Jackets Projects

- Indiana Flood Mitigation Planner – This platform will provide a searchable database for flood risk and mitigation related data. It will inform residents about flood hazard risks and equip decision makers, officials and developers with information in support of risk-informed choices to make their projects resilient today and into the future.

Non-Federal Sponsor:

- Indiana Department of Natural Resources (IDNR)
- Indiana Department of Homeland Security (IDHS)
- Indiana Department of Environmental Management
- Indiana Office of Community and Rural Affairs
- Indiana Air National Guard
- Indiana University
- Indiana University Purdue University of Indianapolis
- Purdue University
- Indiana Association of Floodplain and Storm water Management (ASFPM)
- Indiana Geographic Information Council
- Multiple Local Governments and agencies

Federal Sponsors:

- U.S. Army Corps of Engineers (USACE)
- Federal Emergency Management Agency (FEMA)
- Natural Resources Conservation Service (NRCS)
- U.S. Geological Survey (USGS)
- National Weather Service (NWS)

Activities for FY 2020:

Complete the design and build of the IFMP. Final Release by spring 2020.

Issues and Other Information:

None

Ohio River Valley Sanitary Commission Development of a Basin-Wide Strategic Plan



MEMBER STATES

States joined in the Ohio River Valley Sanitary Commission compact formed in 1948.

Current Phase:

Planning Assistance to States Study

Location and Description:

This study will be a collaborative effort to create an actionable plan that will prioritize regional goals and objectives for general improvements in economic health, ecological well-being, and quality of life for residents throughout the Basin.

Authorization:

Section 22(a) (1) of the Water Resources Development Act of 1974 (Public Law 93-251), as amended.

FY19 Activities:

Execution of the Letter Agreement and study initiation. Letter Agreement was signed February 25, 2019. Numerous stakeholder outreach efforts were completed to identify problems and opportunities in the basin.

Summarized Financial Data:

	<u>Study</u>
Estimated Federal Cost	\$200,000
Estimated Non-Federal Cost	\$200,000
Total Estimated Project Cost	\$400,000
Allocation thru FY19	\$200,000
Balance to Complete after FY19	\$0
President's Budget for FY20	\$0
FY20 Allocation (thru JAN 2020)	\$0
FY21 President's Budget	\$0

FY20 Planned Activities:

Completion of a two-day summit as part of the ORBA/OBCRE workshop. Focus group held in Pittsburgh, Cincinnati, and Nashville during the week of January 26-31, 2020. Currently revising and preparing draft report in February 2020 with District Quality Control and release of final report scheduled for March 2020.

Issues and Other Information:

None

Congressional Interest:

All Congressional Members in Kentucky, Indiana, Ohio, and Illinois



OLMSTED LOCKS AND DAM PROJECT

As of: 28 January 2020

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Official Title: Locks and Dam 52 and 53 Replacement Project (Olmsted Locks and Dam), IL and KY

Location: The project is located in Olmsted, IL near Ohio River Mile 964.4.

Purpose: Construct the new Olmsted Locks and Dam to replace Ohio River Locks and Dams 52 & 53. Demolish Locks and Dams 52 & 53 once Olmsted is operational.

Project Description and Background: The project consists of two 110' X 1200' locks adjacent to the Illinois bank, and a dam comprised of five tainter gates, 1400' of boat-operated wickets and a fixed weir. The proposed replacement structure will eliminate Ohio River Locks & Dams 52 & 53. Locks & Dams 52 & 53 were completed in 1929 and the temporary 1,200' long lock chambers were added in 1969 at Locks & Dam 52 and 1979 at Locks & Dam 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 and are overstressed during normal operating conditions. Existing wicket dam has missing sections and wickets that will not raise making it very difficult to maintain pool during low water. The temporary locks at Locks & Dam 52 & 53 have significantly passed their 15-year design life.

This strategic reach of the Ohio River provides a connection between the Mississippi River, Tennessee River and Cumberland River. More tonnage passes this point than any other place in America's inland navigation system. In 2011, 91 million tons (Locks & Dam 52), traversed this portion of the Ohio River. 25% of all coal shipped on the inland waterways transits Locks & Dam 52, destined for many of the 50 power plants located on the Ohio River System or the 17 power plants located in eight states on the Upper or Lower Mississippi River.

Current Status and Outstanding Issues: The two 110' X 1200' locks and approach walls are complete. All damming surfaces to include left boat abutment, right boat abutment, 5 Tainter gates, fixed weir on the Kentucky bank and all twelve navigable pass shells containing wickets are complete and operable.

L&D 52 Marine Demo is approximately 25% complete and L&D 53 Marine Demo Phase I is approximately 65% complete. New Z-drive workboat has been awarded and delivery expected in June 2022.

Remaining required work originally scheduled to be awarded in 2019 was deferred to FY 20 allowing those funds to be used to complete all features of the dam and start 53 Marine Demo Phase I. Work Plan funding in the amounts of \$38M (FY20) and \$25M (FY21) are being requested to execute the deferred work. This additional \$63M completes the project well within the Congressionally Authorized Amount.

Summarized Financial Data

2012 PACR	\$3,099,000,000
2018 Total Estimated Project Cost (NWW certified)	\$2,867,296,000
Estimated Federal Cost	\$1,856,981,000
Estimated Inland Waterways Trust Fund Cost	\$1,010,315,000
Allocation thru FY19 including ARRA allocation thru 30 Sept 15	\$2,790,402,000
FY 19 President's Budget	\$35,000,000
FY 19 Work Plan	\$15,000,000
Benefit to Cost Ratio (at 7%)	1.98
Non-Federal Sponsor	N/A

The Olmsted Locks & Dam project was authorized by Section 3(a)(6) of the Water Resources Development Act (WRDA) of 1988. The authorized project cost was increased on 17 October 2013 as part of a Continuing Appropriations Act, 2014 to \$2,918,000,000. The project was funded 50%/50% from the General Treasury and the Inland Waterways Trust Fund (IWTF) through FY2013. The FY2014 Omnibus Appropriation Act changed the split of IWTF and General Treasury funds to 25%/75% for FY2014 only. Water Resources Reform and Development Act of 2014 changed the IWTF and General Treasury shares to 15%/85% beginning 1 Oct 2014. As of 30 Sep 2018, \$2.545B has been expended on the project. The most recent (2018) economic update forecast annual average benefits at \$236M. PACR annual benefits were calculated at \$640M.

Upcoming Actions: Remaining items required to complete the project include: L&D 53 Marine Demo Phase II, Landside Demo of 52 and 53, Resurface County Road, Refurbish Bulkheads, Upstream Harbor Access, Abutment Wicket Blanks, Final site Restoration with building Conversions and Cultural Resource documentation, are Being scoped and ready for contract acquisition. Awards on all items are expected by the end of the calendar year 2020.

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Olmsted Locks and Dam August 2016



Olmsted Locks and Dam November 2019