

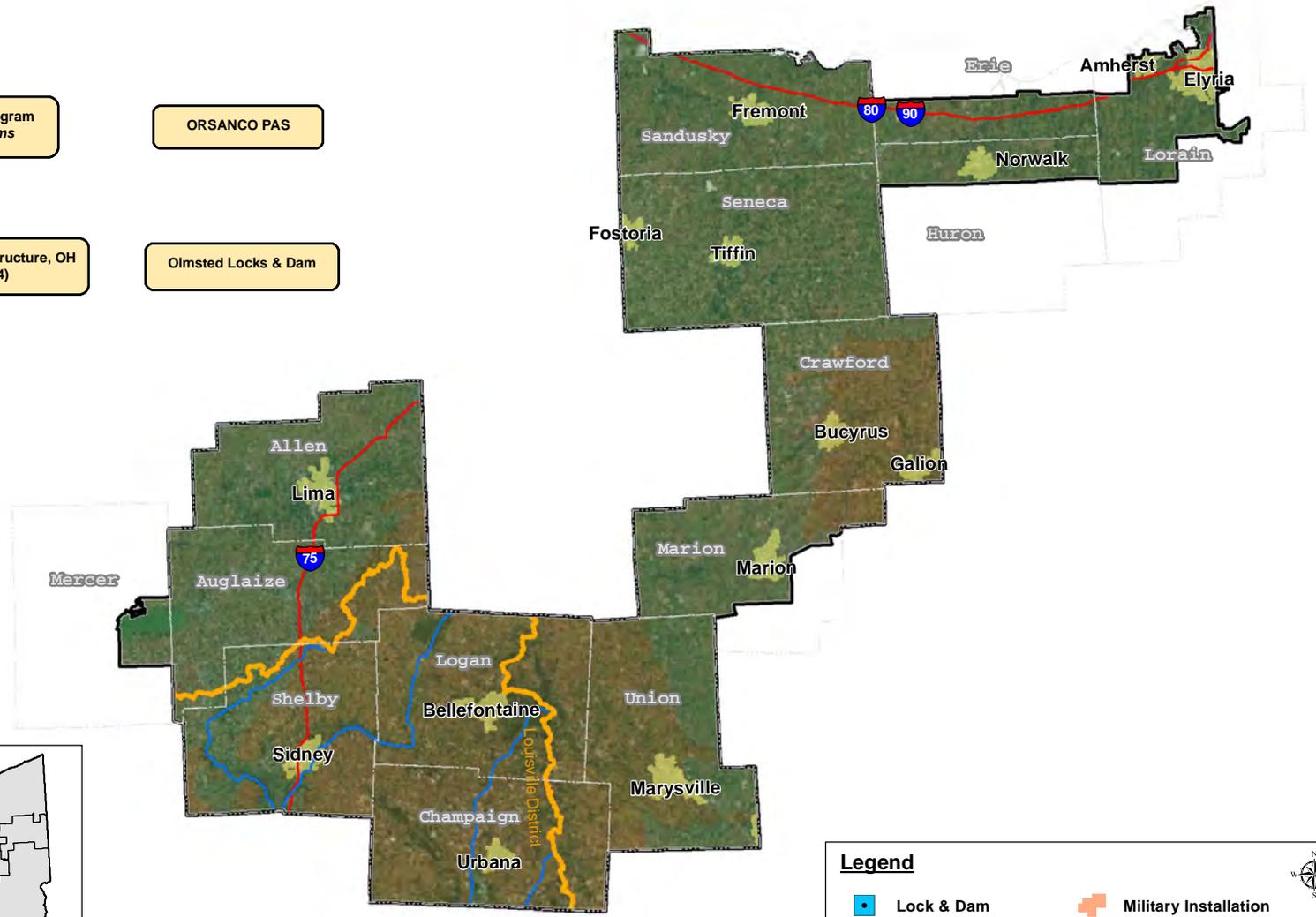
CONGRESSIONAL DISTRICT OH04

Dam Safety Program
COE OH Dams

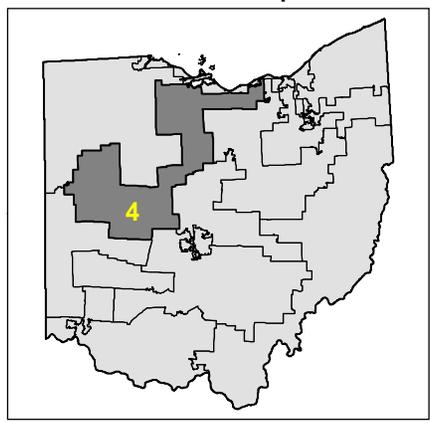
ORSANCO PAS

Environmental Infrastructure, OH
(Section 594)

Olmsted Locks & Dam



Location Map



Legend

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

Dam Safety, Ohio

Ohio Dams - Special Studies



Caesar Creek Lake Dam, OH

Current Phase: Study

Project Location:

Caesar Creek Lake Dam, C.J. Brown Lake Dam, W.H. Harsha Lake Dam, and West Fork 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 dam also receives 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) Plan is established while further investigations are conducted and/or remedial actions are implemented as necessary.

Summarized Financial Data:

The 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.

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 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 Rob Portman
Senator Sherrod Brown

Individual Project Status:

Caesar Creek Lake Dam, OH

- * SPRA (Screening for Portfolio Risk Analysis): 2008
- * DSAC (Dam Safety Action Classification) Rating: Class 3
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 9 April 2009
- * IES (Issue Evaluation Study): In the queue for study. The IES Report will address concerns with unacceptable foundation conditions and associated seepage in order to remove uncertainty and lower project risk. This will determine if the work needs to continue to complete a full Dam Safety Modification Report (DSMR).
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

C.J. Brown Lake Dam, OH

- * SPRA (Screening for Portfolio Risk Analysis): 2009
- * 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.

W.H. Harsha Lake Dam, OH

- * SPRA (Screening for Portfolio Risk Analysis): 2009
- * DSAC (Dam Safety Action Classification) Rating: Class 3
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 24 February 2018.
- * IES (Issue Evaluation Study): In the queue for study. The IES Report will address concerns with unacceptable foundation conditions and associated seepage in order to remove uncertainty and lower project risk. This will determine if the work needs to continue to complete a full Dam Safety Modification Report (DSMR).
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

West Fork Lake Dam, OH

- * SPRA (Screening for Portfolio Risk Analysis): 2008
- * DSAC (Dam Safety Action Classification) Rating: Class 3
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 17 April 2009
- * IES (Issue Evaluation Study): Not started. The IES Report will address concerns with unacceptable foundation conditions and associated seepage in order to remove uncertainty and lower project risk. This will determine if the work needs to continue to complete a full Dam Safety Modification Report (DSMR).
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.



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.

HQs POC: Catherine Shuman, CECW-LRD, 202-761-1379,
Catherine.M.Shuman@usace.army.mil



Olmsted Locks and Dam August 2016



Olmsted Locks and Dam November 2019

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

Ohio and North Dakota Environmental Infrastructure Program



Tech Town Conceptual Design

Current Phase:

Varies per project

Location and Description:

The State of Ohio.

The Section 594 program is cost shared with a non-Federal sponsor, and requires a local match of 25%. The Huntington District Corps of Engineers is the overall program manager, with responsibility for project implementation assigned to the Pittsburgh, Huntington, and Louisville Districts, as determined by the location of the projects. Prior to design and/or construction of a Section 594 project, the Corps and the non-Federal sponsor enter into a Project Partnership Agreement outlining the project scope, cost, and responsibilities for implementation

Authorization:

Section 594 of the Water Resources Development Act of 1999 (Public Law 106-53), as amended.

Summarized Financial Data:

Design/Construction

Authorized Program Limit	\$60,000,000
FY 19 Allocation	\$ 2,000,000

Issues and Other Information:

None

Louisville District Section 594 Projects:

- Tech Town, OH - Sewer Infrastructure Project - Design and construction of new and replacement sewer, water, and drainage systems in downtown Dayton, Ohio at a cost of \$4,391,467. The infrastructure will support a high tech industrial site as part of Dayton's effort to revitalize downtown Dayton and the waterfront.
- University of Dayton, Brown and Stewart Streets Project, OH - The project consists of the design and construction of the water supply, wastewater, and surface drainage facilities for the proposed development at an estimated cost of \$6,576,000. Sponsor is submitting invoices to LRL.
- Village of Ludlow Falls, OH – The project consists of design and construction of gravity sewer collection lines, grinder pumps and appurtenant structures in the Village of Ludlow Falls with a lift station to transport wastewater to the Village of West Milton Waste Water Treatment Plant. Total project cost is estimated at \$1,433,333. PPA executed on March 21, 2018. EA and FONSI signed on July 12th, 2019.
- Preble County, OH – This project will consist of the design and construction of a new waste water collection and treatment system. Estimated total project cost is \$1,366,666. PPA was executed on September 23rd, 2019.
- Logan County, OH – The Lewistown Sewer System project was selected for FY19. The project consists of the design and construction of a new collection system to separate storm water and sanitary sewers in Lewistown. Total project cost estimated at \$1,333,333. PPA executed on September 17th, 2019.
- Madison County, OH – The Summerford Sanitary Sewer Collection project was selected for FY19. The project consists of the design and construction of a new collection system to separate storm water and sanitary sewers in Summerford. Total project cost estimated at \$1,333,333. PPA was executed on September 23rd, 2019.

Congressional Interest:

Senator Sherrod Brown
 Senator Rob Portman
 Representative Steve Chabot
 Representative Brad Wenstrup
 Representative Joyce Beatty
 Representative Jim Jordan
 Representative Bob Gibbs
 Representative Steve Stivers