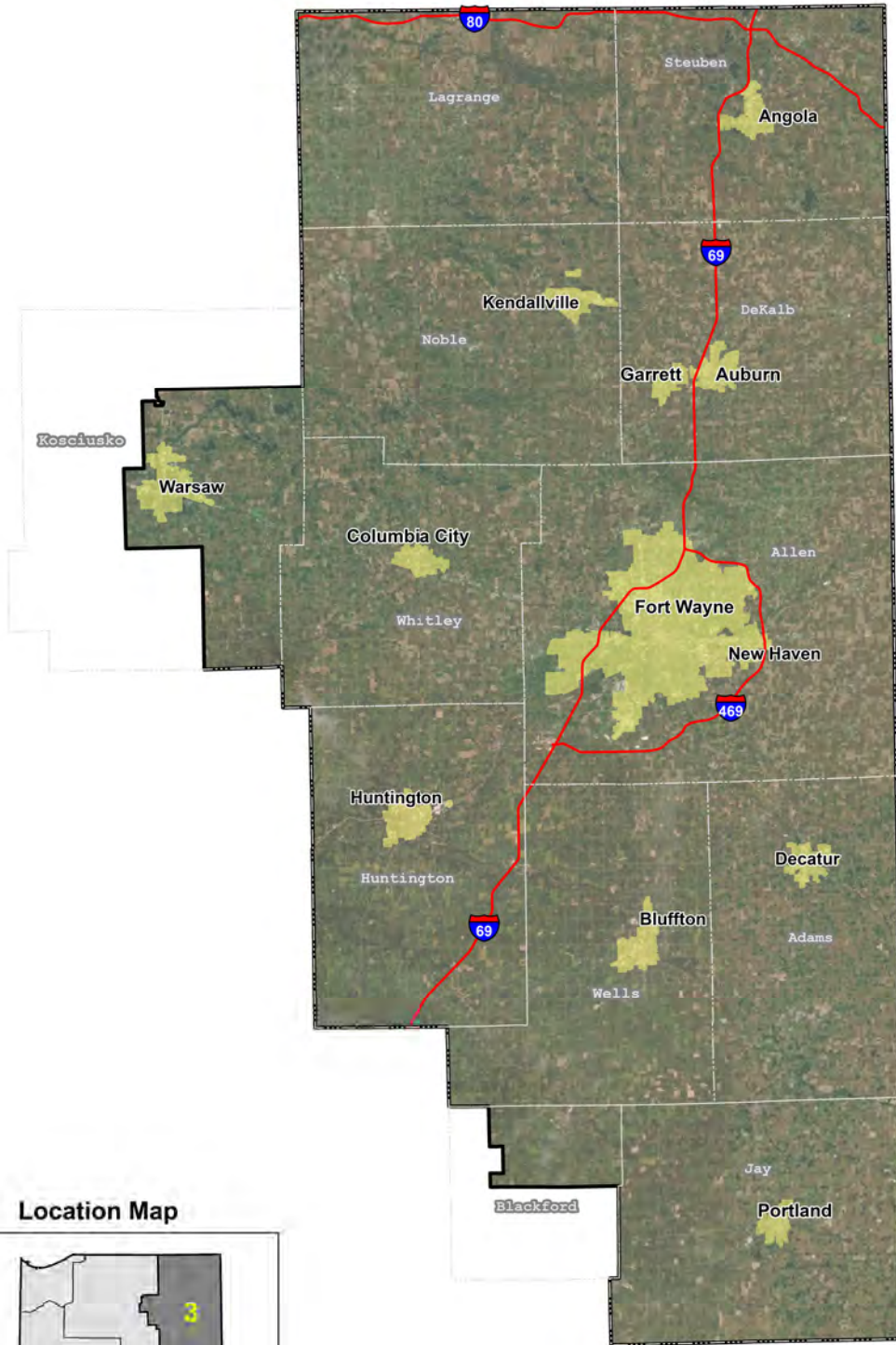


CONGRESSIONAL DISTRICT IN03



Dam Safety Program
(COE Indiana Dams)

Olmsted Locks & Dam

IN Silver Jackets Program

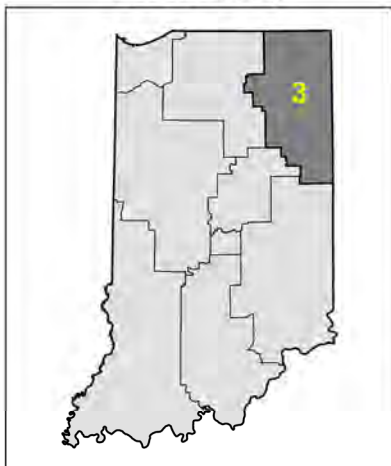
ORSANCO PAS

Indiana Dam Education

Indiana Wetland Education

Indiana Building Footprint

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, Indiana Indiana Dams - Special Studies



Brookville Dam, IN

Current Phase: Study

Project Location: Brookville Lake Dam, Cagles Mill Lake Dam, CM Harden Lake Dam, Monroe Lake Dam, and Patoka 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) 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 needs 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:

SEN Mike Braun (IN)
SEN Todd Young (IN)



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.
- * FY2022 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
- * FY2022 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.
- * FY2022 Planned Activities: Routine O&M surveillance and monitoring program.

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.
- * FY2022 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.

* FY2022 Planned Activities: Routine O&M surveillance and monitoring program.





OLMSTED LOCKS AND DAM PROJECT

As of: 9 March 2022

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 near 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: Early operation of Olmsted and unseasonably high river elevations from Sept 2018 to Aug 2019 impacted the ability to complete all remaining work on the Dam as scheduled. The Dam contract is now complete with all work done and the contractor has demobilized from the site.

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. In addition, the following project components have also been completed; Harbor Access, Resident Office Conversion (Pole Barns), Refurbish Bulkheads, Locks & Dams 52 and 53 Landside Demo and Final Site Restoration.



Work currently under contract: Z-Drive Workboat 65% complete, Locks & Dam 52 Marine Demo 80% complete, Locks & Dam 53 Marine Phase II 35% complete and Historic Book 20% complete.

Remaining work to complete the project (Maintenance crane and Floating Mooring Bit Extensions) are progressing through design with procurement scheduled for 3rd Qtr. FY22.

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 FY21 including ARRA allocation thru 30 Sept 15	\$2,853,402,000
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 2021, \$2.725B 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: Olmsted was put into service on 6 Sep 2018 ahead of the scheduled 1 Oct 2018 date, and 4 years ahead of the PACR milestone, to mitigate significant economic exposure to industry stakeholders given the failing condition of Locks & Dams 52 & 53. This early operational date and subsequent unseasonable extended high-water event impacted completion of several critical items of the dam to include isolation piles and shell patching. An additional \$63M was received through the FY20 Work Plan for project delays due to the high-water impact to the cost-reimbursement contract extension and procurement of remaining work. LRL continues to actively prosecute completion of remaining work and to complete the project ahead of the Cost Scheduled Risk Analysis date of 2026.

HQs POC: Ryan Fisher, CECW-LRD, 202-761-1379





Olmsted Locks and Dam November 2019

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

Current Indiana Silver Jackets FPMS Efforts

- Indiana Building Outline Analysis - This Project will develop a process based on three pilot counties in Indiana to classify and augment deficient building outline & classification data with Indiana Dept of Local Government Finance attributes and cross reference with available flood risk data sets to improve mitigation planning efforts in those counties.
- Indiana Wetland Education - This Project will deliver an educational outreach program for Indiana communities focusing on the importance of wetlands and how they impact water quality and reduce flood risk.
- Indiana Dam Education & Awareness - This Project will deliver an educational outreach program to local officials and first responders focusing on dam safety awareness and education. Topics will include inspections, best practices, USACE inundation maps, and the importance of Emergency Action Plans.

Non-Federal Sponsors:

- 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 (INAFSM)
- Indiana Geographic Information Council
- The Nature Conservancy
- 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)
- US Fish & Wildlife Service (USFWS)

Activities for FY 2022:

Continue to coordinate with state and federal agencies across the State in order to better reduce flood and other natural hazard risks in Indiana.

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 (PAS) 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.

FY21 Activities:

Released the Final Report to the non-federal sponsor, stakeholders, the public, and Congressional interests. Phase I was completed. Scoped and implemented Phase II.

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 FY21	\$200,000
Balance to Complete after FY21	\$0
FY22 Final Appropriation	TBD
FY22 Allocation (thru Jan 2022)	\$0
FY23 President's Budget	TBD

FY22 Planned Activities:

Closeout of three Phase II projects.

Issues and Other Information:

Excess funds from Phase I were used to implement the Phase II project which entails three smaller reports: a data management plan, a long-term water resource plan, and a water trail plan.

Congressional Interest:

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



Indiana Dam Education & Awareness (IDEA)



Current Phase:

N/A

Location and Description:

This project will deliver an educational outreach program to local officials and first responders focusing on dam safety awareness and education. Topics will include inspections, best practices, USACE inundation maps, and importance of Emergency Action Plans.

As infrastructure ages, the Indiana Silver Jackets Team realized there is a widespread lack of knowledge regarding dams & dam safety by local officials across the State. The IDEA campaign will consist of a series of three workshops held in targeted areas (Upper Wabash, Patoka, and Raccoon Lake) identified by Indiana's State Dam Safety Officer that would lead to the biggest impact across the State. Partners in development of the program will include representatives from the USACE, NRCS, and IN Dept of Natural Resources. The program will focus on general dam awareness, inspection criteria, maintenance, best practices, practices to avoid, information on available inundation maps, and emphasize the importance of developing Emergency Action Plans. In addition, roles & responsibilities of federal, state, local, and private individuals will be discussed with regards to dam ownership. Dams discussed at the workshops would include USACE reservoir dams, dams owned/operated by other federal agencies, state agencies, local communities, and private individuals.

Authorization:

Section 206 of the Flood Control Act of 1960 (PL 86-645).

Summarized Financial Data:

	<u>Feasibility</u>
Estimated Federal Cost	\$75,000
Estimated Non-Federal Cost	\$0
Total Estimated Project Cost	\$75,000
Allocation thru FY2021	\$0
Balance to Complete after FY21	\$75,000
FY22 Final Appropriation	TBD
FY22 Allocation	\$75,000
FY23 President's Budget	TBD

FY 21 Activities:

N/A

FY 22 Planned Activities:

Develop and deliver dam safety education and awareness workshops.

Issues and Other Information:

Congressional Interest:

SEN Todd Young (IN)
 SEN Mike Braun (IN)
 REP Frank Mrvan (IN)
 REP Jackie Walorski (IN)
 REP Jim Banks (IN)
 REP Jim Baird (IN)
 REP Victoria Spartz (IN)
 REP Greg Pence (IN)
 REP Andre Carson (IN)
 REP Larry Bucshon (IN)
 REP Trey Hollingsworth (IN)



Indiana Wetland Education & Outreach



Current Phase:
N/A

Location and Description:
This Project will deliver an educational outreach program for Indiana communities focusing on the importance of wetlands and how they impact water quality and reduce flood risk.

The Indiana Silver Jackets Team has noticed that developmental pressures from a variety of sectors have resulted in many of the state's wetlands being filled or drained. Studies done by IUPUI have shown that streams without functioning wetlands in the watershed have peak discharges up to 24% higher than those with functioning wetlands. Lack of knowledge of the importance of wetlands is ultimately leading to increased flooding. This outreach effort will develop an educational program focused on reaching out to local officials, landowners, farmers, and agricultural interests. It will consist of a series of four workshops held in areas at risk of losing wetlands, video clips, and an ESRI Story Map product to be shared broadly through social media and hosted by our state partners. Partners in development of the program will include representatives from USACE, NRCS, Indiana Department of Natural Resources, Indiana Department for Environmental Management, Indiana Department of Agriculture, Indiana Association of Floodplain & Stormwater Management, local watershed groups, and state groups focused on agriculture. The program will focus on the economic impacts of wetlands, how wetlands naturally reduce flood risk and improve water quality.

Authorization:
Section 206 of the Flood Control Act of 1960 (PL 86-645).

Summarized Financial Data:

	Feasibility
Estimated Federal Cost	\$75,000
Estimated Non-Federal Cost	\$0
Total Estimated Project Cost	\$75,000
Allocation thru FY2021	\$0
Balance to Complete after FY21	\$75,000
FY22 Final Appropriation	TBD
FY22 Allocation	\$75,000
FY23 President's Budget	TBD

FY 21 Activities:
None. Funding was not available in FY 21.

FY22 Planned Activities:
Develop and deliver workshops to entities across Indiana relating to wetland education.

Issues and Other Information:
None

- Congressional Interest:**
- SEN Todd Young (IN)
 - SEN Mike Braun (IN)
 - REP Frank Mrvan (IN)
 - REP Jackie Walorski (IN)
 - REP Jim Banks (IN)
 - REP Jim Baird (IN)
 - REP Victoria Spartz (IN)
 - REP Greg Pence (IN)
 - REP Andre Carson (IN)
 - REP Larry Bucshon (IN)
 - REP Trey Hollingsworth (IN)



Indiana Building Footprint Outline Analysis



Current Phase:

N/A

Location and Description:

This project will develop a process based on three pilot counties in Indiana to classify and augment deficient building outline & classification data with the Indiana Department of Local Government Finance attributes and other available flood risk data sets to improve mitigation planning efforts in those counties.

Development of this process is critical to risk analysis across the state. Three pilot counties will be selected; one that is primarily urban, one primarily rural/agricultural, and one with mixed development.

Once developed, the process can be replicated to other counties across the state as funding becomes available. Partners for data coordination, sharing, and execution of analysis in this effort will include the Indiana Department of Homeland Security, the Indiana Department of Natural Resources, and Indiana University-Purdue University of Indianapolis.

Authorization:

Section 206 of the Flood Control Act of 1960 (PL 86-645).

FY 21 Activities:

Initial Team Meeting was held, and data gathering was initiated.

FY22 Planned Activities:

Completion of the study.

Issues and Other Information:

None

Summarized Financial Data:

	<u>Feasibility</u>
Estimated Federal Cost	\$150,000
Estimated Non-Federal Cost	\$0
Total Estimated Project Cost	\$150,000
Allocation thru FY21	\$65,000
Balance to Complete after FY21	\$85,000
FY22 Final Appropriation	TBD
FY22 Allocation (thru JAN 2022)	\$85,000
FY23 President's Budget	TBD

Congressional Interest:

SEN Todd Young (IN)
 SEN Mike Braun (IN)
 REP Frank Mrvan (IN)
 REP Jackie Walorski (IN)
 REP Jim Banks (IN)
 REP Jim Baird (IN)
 REP Victoria Spartz (IN)
 REP Greg Pence (IN)
 REP Andre Carson (IN)
 REP Larry Bucshon (IN)
 REP Trey Hollingsworth (IN)

