

Energy Resilience Conservation Investment Program

Location and Description:

ERCIP projects are located at various Military Installations to include but not limited to: Fort Bliss, Fort Liberty, Fort Buchanan, Fort Cavazos, Fort Riley, Fort Sill, Fort Stewart, Lake City Army Ammunition Plant, Aberdeen Proving Ground, Anniston Army Depot, Joint Base Lewis-McChord, Camp Arijfan, Rock Island Arsenal, White Sands Missile Range, USAG Ansbach, Camp Buehring and Tooele Army Depot.

ERCIP is a subset of the Defense-Wide MILCON Program specifically intended to fund projects that improve energy and water resilience, contribute to mission assurance, save energy, and reduce DoD's energy costs. ERCIP accomplishes this through construction of new, high-efficiency energy systems and technologies or through modernizing existing energy systems.

Authorization:

Authority for the ERCIP program is established by 10 USC § 2914

FY24 Activities:

Design, procurement, and construction management activities for projects in the ERCIP program.

FY25 Planned Activities:

Design, procurement, and construction management activities for projects in the ERCIP program.

FY26 Planned Activities:

Design, procurement, and construction management activities for projects in the ERCIP program.

Issues and Other Information:

Real property transfer/conveyance rules conflict with installation contracts with privatized utilities.

Summarized Financial Data:

LRL Current Military Program
Estimated Federal Cost

\$1,197,645,000

Project	Description	Installation	PN	FY	PA
1	Construct Microgrid Controls, 690 kW PV, 275kW GEN, 570 kWh BESS	PR010 - Juana Diaz, Puerto Rico	95004	2022	\$ 12,190,000
2	Construct Microgrid Control System, 460 kW PV, 275kW GEN, 660 kWh BESS	PR013 – Ramey; Puerto Rico	95005	2022	\$ 10,120,000
3	Fort Liberty Emergency Water System	Fort Liberty	97484	2022	\$ 7,705,000
4	Install Microgrid, 750 kWPV Array, 750 kWh BESS, and 680k Generator Set	Conroe ASF	93347	2023	\$ 9,600,000
5	Camp Arijfan ERCIP Power Generation and Microgrid	Camp Arifjan, Kuwait	94849	2023	\$ 26,850,000
6	Ft. Riley ERCIP Power Generation and Microgrid	Fort Riley	98161	2023	\$ 25,780,000
7	Ft. Stewart HAAF ERCIP Power Generation and Microgrid	Fort Stewart HAAF	98162	2023	\$ 25,400,000
8	Ft. Cavazos Power Generation and Microgird	Fort Cavazos (Hood)	99143	2023	\$ 31,500,000
9	Camp Ruehring FY24 Microgrid	Camp Buehring, KW	94933	2024	\$ 18,850,000
10	Ft. Liberty Camp MacKall FY24 Microgrid	Ft Liberty (Bragg) - Camp MacKall	98901	2024	\$ 10,500,000
11	Microgrid and Backup Power	Fort Buchanan	99144	2024	\$ 56,000,000
12	JBLM DES FY24 Microgrid	Joint Base Lewis-McChord	99146	2024	\$49,850,000
13	Lake City FY24 Microgrid CHP	Lake City Army Ammo Plant	99147	2024	\$80,100,000
14	Ft. Cavazos FY24 Microgrid	Fort Cavazos (Hood)	99288	2024	\$ 18,250,000
15	Ft. Sill FY24 Microgrid	Fort Sill	101861	2024	\$ 76,650,000
16	Critical Water Storage	Fort Liberty	98977	2025	\$ 25,000,000
17	Anniston Army Depot (ANAD) Power Generation and Microgrid	Anniston Army Depot	100945	2025	\$54,000,000
18	Rock Island Arsenal Power Generation and Microgrid	Rock Island Arsenal	100946	2025	\$ 67,500,000
19	JBLM FY25 Grey Army Airfield (GAAF)	Joint Base Lewis-McChord	100947	2025	\$ 38,300,000
20	Aberdeen Proving Grounds (APG) 2MW Microgrid	Aberdeen Proving Ground	100949	2025	\$ 29,400,000
21	Power Generation and Microgrid	White Sands Missile Range	80635	2026	\$ 38,000,000
22	Water Distribution Lines, Potable Industrial Area	Hawthorne Army Depot	86677	2026	\$ 5,000,000
23	Install Microgrid, 575 KW PV, 300kW/1200kW Bat Energy Stor System (BESS), and Two 200kW Elec Turb	Ft. Sheridan	94042	2026	\$ 5,600,000
24	Install Microgrid, 450kW PV, and 500kW/2000kWh Bat Energy Storage Sys (BESS)	Belgium	95066	2026	\$ 17,000,000
25	Power Generation and Microgird	Camp Buerhing, KW	96153	2026	\$ 21,300,000
26	Main Potable Water Lines for Resilience	Tooele Army Depot	98650	2026	\$ 18,500,000
27	Construct Potable Water Purification System at Las Casas Lake	Fort Buchanan	98709	2026	\$ 17,500,000
28	Install Microgrid, 4MW PV, 2MW/8MWh Bat Energy Stor Sys (BESS), and 2MW Generator	Ft. Liberty (Bragg)	100873	2026	\$ 38,000,000
29	Install Microgrid, 1MW PV, 500kW/3MWh Bat Energy Stor Sys (BESS), and 500kW Generator	Joint Base Lewis-McChord	101472	2026	\$ 39,000,000
30	Install Microgrid with PV, Battery Energy Storage System (BESS), and Generation	USAG Ansbach (Katterbach), Germany	102238	2026	\$ 26,000,000
31	Install Microgrid, PV, Battery Energy Storage System, and Generation	USAG Ansbach (Storck Barracks), Germany	102287	2026	\$ 27,000,000
32	Install 12 MW of Ground-Mounted Solar PV and 4MW/4MWh Bat Energy Stor Sys (BESS)	Ft. Sill	102300	2026	\$ 29,000,000
33	Install Microgrid, 500kW PV, 1MW/2MWh Bat Energy Stor Sys (BESS), and 2MW Generator	Ft. Liberty (Bragg)	102321	2026	\$ 15,500,000
34	Install Microgrid, 2.5 MW PV, 5 MWh Battery Energy Storage System (BESS)	Parks RFTA	102712	2026	\$ 37,000,000
35	Install 2.4 MW PV and 10 MWh Battery Energy Storage System	Camp Roberts Enclave	102945	2026	\$ 60,000,000
36	Power Generation and Microgrid	Ft. Carson	102984	2026	\$ 58,000,000
37	Redstone Electric Power, Microgrid	Redstone Arsenal	103043		\$ 33,000,000
38	Install 1750 kW of Natural Gas Generators and Microgrid	Fort Bliss	93031	2026	\$ 7,100,000
39	DPTMS Simulation Training Campus Microgrid	Fort Bliss	98799		\$ 8,600,000
40	5 MW NG Generator - Resiliency, McGregor / Westbrook Ranges	Fort Bliss	98991		\$ 12,000,000
41	5 MW NG Generator - Resilency, East Bliss Substation	Fort Bliss	99008	2026	\$ 11,000,000

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 reevaluated 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

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.

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.

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.
- * FY2024 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
- * FY2024 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.
- * FY2024 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.
- * FY2024 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.
- * FY2024 Planned Activities: Routine O&M surveillance and monitoring program.

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



Project Area

Current Phase:

Construction

Location and Description:

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.

Authorization:

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

Summarized Financial Data:

Authorized Total Project Cost \$2,867,296,000
Estimated Federal Cost \$1,856,981,000
Estimated Inland Waterways Trust Fund Funding received to date: \$2,853,403,115

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.

Sponsor: Inland Waterways Trust Fund

Status:

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 costreimbursement contract extension and procurement of remaining work. LRL continues to actively work towards completion of remaining work and to complete the project ahead of the Cost Scheduled Risk Analysis date of 2026. The Dam contract is now complete and the contractor has demobilized from the site.

FY24 Planned Activities:

The evaluation of a trench cleaning design is underway to develop a diver-less process to clean sediment and debris from the wicket trench. The evaluation of proposals is scheduled for the 1st Quarter of FY24. A contract for the development of a design is planned to be awarded with a follow-on construction contract to build and implement the diver-less trench cleaning process. All activities are scheduled to be complete in FY26.

Issues and Other Information:

The project has four pending REAs that are being evaluated.

Congressional Interest:

SEN Mitch McConnell (KY) SEN Rand Paul (KY)

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 Flood Inundation Mapping Effectiveness Study - This \$135K study compared high water marks from recent flooding events to some of Indiana's existing flood inundation maps, and coordination with local officials to determine how effective these existing maps are in planning, mitigation, and response efforts.

- Indiana Stream & Floodplain Movement Study This \$140K effort examined existing floodplain, hydraulic modeling, and fluvial erosion data applied Intensity-Duration-Frequency (IDF) curves indicating potential future climate change impacts to identify target areas for stream movement as well as associated floodplain changes in the future.
- Indiana Flooding & Flood Tools Outreach Campaign
 This \$85K study will develop a series of workshops
 across Indiana to better educate county judge
 executives, county magistrates, county surveyors,
 emergency/floodplain managers, and soil and water
 conservation personnel about flooding causes,
 available flood risk reduction tools, and potential
 mitigation best practices. These workshops will
 focus on flash, riverine, and stormwater flooding;
 climate change impacts, flood related
 regulations/best practices, and available FRM data
 and tools.
- Indiana Stream & Lake Gage Prioritization Study This \$60K effort will develop a plan and strategy to optimize/prioritize stream and lake gage placement in Indiana based on multiple factors and working with multiple partners. This effort would in turn lead to better stream and lake data, increased awareness, and reductions in flood risk across Indiana.

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 2024:

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