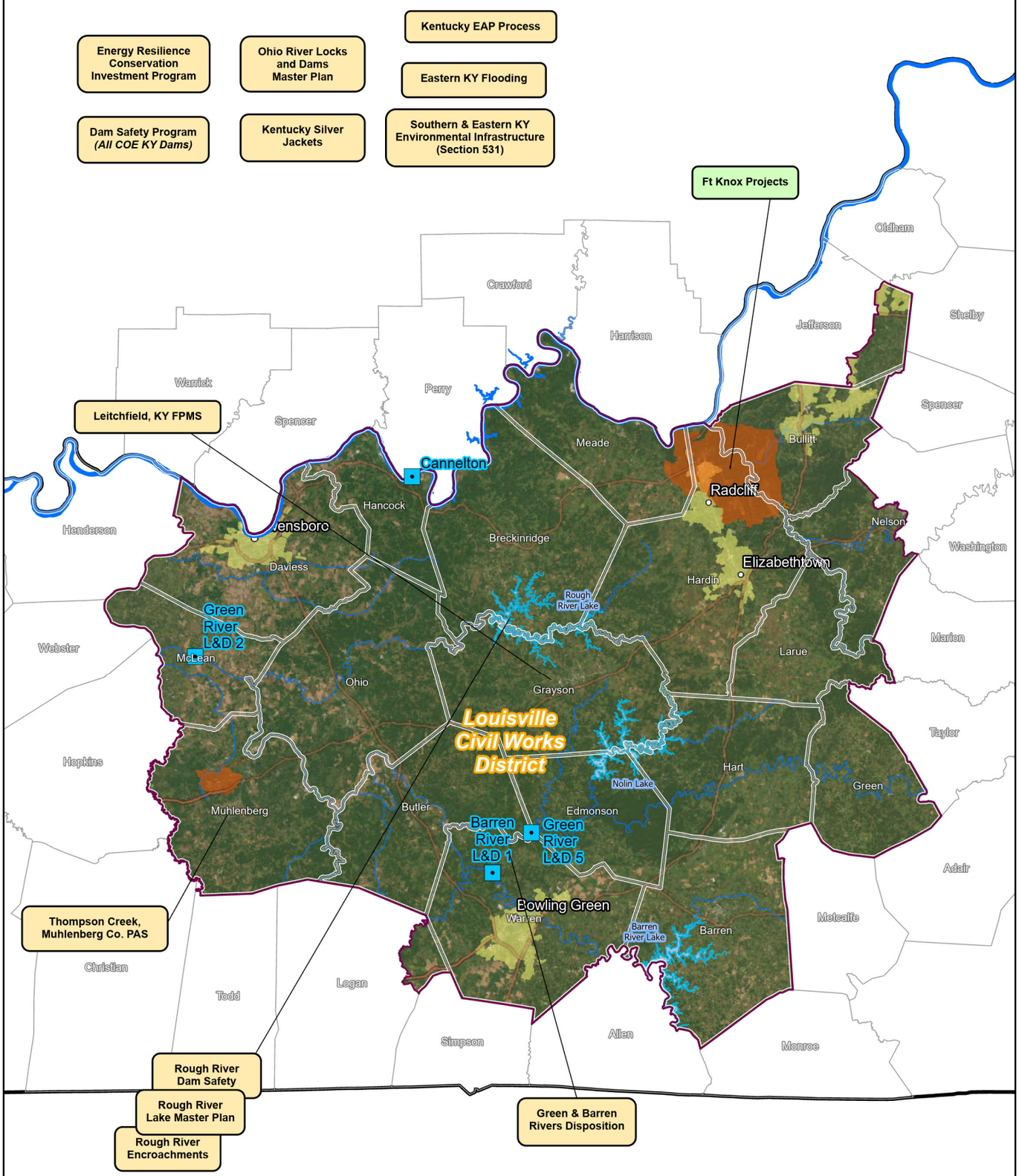
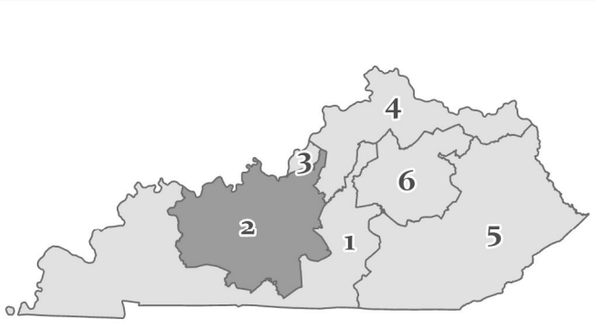
Kentucky Congressional District 2





Legend

- Lock & Dam
- Levee / Floodwall
- Major Stream
- Ohio River
- LRL Reservoir
- Military Installation
- Kentucky
- County Boundary
- Congressional District Boundary
- City
- Civil Project
- Military Project

As of 11/9/2023

Dam Safety, Kentucky
Kentucky Dams - Special Studies

Barren Lake Dam, KY

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

Current Phase:
Study

Project Location: Barren Lake Dam, Buckhorn Lake Dam, Carr Creek Lake Dam, Cave Run Lake Dam, Green River Lake Dam, Nolin Lake Dam, Rough River Lake Dam, and Taylorsville Lake Dam (See next pages 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.

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 Mitch McConnell (KY)
SEN Rand Paul (KY)

Map

Individual Project Status:

Barren Lake Dam, KY

* 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.

Buckhorn Lake Dam, KY

* SPRA (Screening for Portfolio Risk Analysis): 2008

* DSAC (Dam Safety Action Classification) Rating: Class 3

* IRRMP (Interim Risk Reduction Measures Plan): Completed 15 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).

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

Carr Creek Lake Dam, KY

* 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

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

Cave Run Lake Dam, KY

* SPRA (Screening for Portfolio Risk Analysis): 2009

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

* IRRMP (Interim Risk Reduction Measures Plan): Completed 27 July 2010

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

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

Green River Lake Dam, KY

* SPRA (Screening for Portfolio Risk Analysis): 2006

* 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 findings from the previous 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 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. The DSAC rating was subsequently revised to a 4 in 2017 after a Periodic Assessment.

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

Nolin Lake Dam, KY

* SPRA (Screening for Portfolio Risk Analysis): 2006

* DSAC (Dam Safety Action Classification) Rating: Class 3

* IRRMP (Interim Risk Reduction Measures Plan): Completed 8 April 2008

* 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 3 based on the results of the risk analysis. Other recommendations were to install additional instrumentation in right and left abutments, and to update the current IRRMs. 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.

Rough River Lake Dam, KY (See detailed Fact Sheet for additional information)

* DSAC (Dam Safety Action Classification) Rating: Class 2

* IRRMP (Interim Risk Reduction Measures Plan): Completed 15 April 2008

* A Dam Safety Modification Report (DSMR) was completed in July 2012. The DSMR addressed unacceptable foundation conditions and associated seepage and identified a need for major rehabilitation in order to remove uncertainty and lower project risk. The Project Delivery Team (PDT) reevaluated design features as part of a Supplement to the previously approved DSMR. ASA(CW) endorsed the Supplemental DSMR on 20 October 2021.

* There is no emergency or imminent threat. However, failure of this dam from seepage/piping would result in catastrophic effects downstream including loss of life and significant economic losses.

* FY 2024 Planned Activities: The project design is complete. Additional funds are needed to advertise and award the contract. Once it is determined that additional funds will be available, the Plans and Specifications will need to undergo an updated BCOES certification and the package will be prepared for advertisement. These activities can be completed in FY24 with funds currently on hand.

As of 3/13/2022

Taylorsville Lake Dam, KY

* 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

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

As of 11/7/2023

Ohio River Locks and Dams Master Plan

Robert C. Byrd Locks and Dam

Current Phase:
Regional Master Plan Update

Location and Description:
The Regional Master Plan consists of the six locks and dams along the Ohio River including areas in West Virginia, Kentucky, and Ohio. The locations are listed below from east to west.

Willow Island Locks and Dam is located on the Ohio River, 161.7 miles downstream from Pittsburgh, PA, and 3.4 miles upstream from Waverly, WV.
Belleville Locks and Dam is located on the Ohio River at mile 204. Belleville Locks sit 203.9 miles below Pittsburgh, PA, and 0.5 miles below Belleville, WV.
Racine Locks and Dam is located on the Ohio River, 237.5 miles below Pittsburgh, PA and 1.5 miles downstream from Letart Falls, OH.
Robert C. Byrd Locks and Dam is located on the Ohio River, 279.2 miles below Pittsburgh, PA, and 9 miles below the City of Gallipolis, OH.
Greenup Locks and Dam is located on the Ohio River, 341.0 miles below Pittsburgh, PA, and 5.0 miles below Greenup, KY.
Meldahl Locks and Dam is located at mile 436 of the Ohio River in Felicity, Ohio. It is 436.2 miles below Pittsburgh, PA, and 1.7 miles below Chilo, OH.

The purpose of the locks and dams is to create a series of steps which river tows and other boats either climb or descend as they travel upstream or downstream. Additionally, the locks and dams provide the opportunity for public recreation and wildlife and vegetative habitats. Belleville and Greenup are also equipped with privately-owned hydroelectric plants.

Summarized Financial Data:

	Master Plan
Estimated Federal Cost	$610,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$610,000
Allocation thru FY23 (Federal)	$530,000
Balance to Complete after FY23	$80,000
FY24 Capability (FED)	$80,000
FY25 President's Budget	N/A

Authorization:
River and Harbor Act of 3 March 1909, Sixtieth Congress, 2nd Session. Flood Control Act of 1944 and amendments.

FY23 Activities:
Louisville District, in coordination with Huntington District, reformatted the initial draft Master Plan to fit the description of "integrated" vs "stand alone" Environmental Assessment.

FY24 Planned Activities:
The District quality control reviews are planned prior to public release and review of the draft report. Once public and agency review of the draft report is complete, the Districts will address public comments and finalize the report. The Master Plan update is scheduled for completion in July 2024.

Issues and Other Information:
The Louisville District is executing the Master Plan update on behalf of the Huntington District.

Congressional Interest:
Greenup – Mitch McConnell (KY), Rand Paul (KY), Sherrod Brown (OH), J.D Vance, (OH), Thomas Massie (KY-4), Hal Rogers (KY-5), Bill Johnson (OH-6)

Meldahl – Sherrod Brown (OH), J.D. Vance, (OH), Mitch McConnell (KY), Rand Paul (KY), Brad Wenstrup (OH-2), Thomas Massie (KY-4)

RC Byrd – Joe Manchin (WV), Shelley Moore Capito (WV), Sherrod Brown (OH), J.D. Vance, (OH), Carol Miller (WV-1), Bill Johnson (OH-6)

Willow Island – Sherrod Brown (OH), J.D. Vance, (OH), Joe Manchin (WV), Shelley Moore Capito (WV), Bill Johnson (OH-6), Carol Miller (WV-1)

Racine – Joe Manchin (WV), Shelley Moore Capito (WV), Sherrod Brown (OH), J.D. Vance, (OH), Bill Johnson (OH-6), Carol Miller (WV-1)

Belleville – Joe Manchin (WV), Shelley Moore Capito (WV), Sherrod Brown (OH), J.D. Vance, (OH), Carol Miller (WV-1), Alexander Mooney (WV-2), Bill Johnson (OH-6)

Map

Kentucky Silver Jackets Program

Current Phase:
Active

Location and Description:
Projects are located throughout the Commonwealth of Kentucky.

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 Kentucky Silver Jackets FPMS Efforts:

- Kentucky Emergency Action Plan Template Process – This project is developing a template process that the Commonwealth of Kentucky will share with non-residential facilities located in a floodplain. These facilities can then use this template process to develop emergency action plans to reduce flood risk at their facilities. Two private sector businesses with manufacturing facilities in the floodplain will be assisting USACE with this effort.
- Kentucky Flooding & Flood Tools Outreach Campaign – This $87.5K study will develop a series of workshops across the Commonwealth 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.
- Kentucky Stream & Lake Gage Prioritization Study – This $60K effort will develop a plan and strategy to optimize/prioritize stream and lake gage placement in Kentucky 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 Kentucky.

Non-Federal Sponsors:
• Kentucky Division of Water
• Kentucky Emergency Management
• Kentucky Department for Local Government
• Kentucky Geological Service
• Kentucky Transportation Cabinet
• Kentucky Association of Mitigation Managers
• 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)
• Environmental Protection Agency (EPA)
• Tennessee Valley Authority (TVA)

Activities for FY 2024:
Continue to coordinate with state and federal agencies across the Commonwealth in order to better reduce flood risks in Kentucky. The Kentucky Silver Jackets team has been instrumental in coordinating resources, data, and information in response and recovery efforts for the flooding that ravaged Eastern Kentucky in July of 2022.

Issues and Other Information:
None

Map

Emergency Action Plan Template
Kentucky

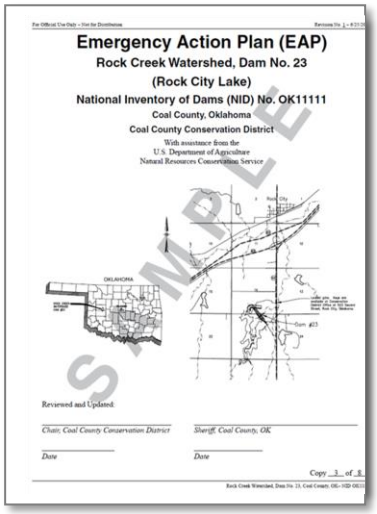
U.S. ARMY CORPS OF ENGINEERS **BUILDING STRONG®**

AUTHORIZATION: Section 206 of the Flood Control Act of 1960 (86-645)

PROJECT SPONSOR: Kentucky Emergency Management (KYEM)

LOCATION: Industries in the Commonwealth of Kentucky

Buffalo Trace Distillery on the Kentucky River



Congressional Member Interest	Key Stakeholder Interest
SEN Mitch McConnell (KY)	National Weather Service
SEN Rand Paul (KY)	U.S .Geological Services
REP Thomas Massie (KY-4)	Kentucky Division of Water
REP Andy Barr (KY-6)	Environmental Protection Agency
REP Brett Guthrie (KY-2)	Beam Suntory

PROJECT DESCRIPTION AND BACKGROUND:
Because of recent repeated flooding impacting one of Kentucky's largest industries, the Kentucky Silver Jackets Team would like to develop a Flooding Related Emergency Action Plan (EAP) Template Process for the Commonwealth to provide to industries and non-residential facilities located in or near the floodplain.

In many cases, non-residential facilities have inadequate flood warning and lack the knowledge and expertise on how to obtain flood warning related information or how to adequately use that information to mitigate, respond to or operate during flooding. The district has identified pilot facilities to partner within this effort: the Buffalo Trace Distillery, the Jim Beam Distillery located along the Kentucky River, and Jim Beam's Clermont, Kentucky distillery.

Map

Bourbon distillation is one of the fastest growing industries in Kentucky due to its economic impact, job creation, and tax revenue. These historic facilities were built in the floodplain because their operations require large quantities of water. Due to their historic nature, relocation is not a viable option.

BUDGET INFORMATION:

Authorized Total Project Cost	$145,000
Non-Federal Sponsor Cost	$0
Federal Cost	$145,000
Funding Received to Date	$22,500

CURRENT STATUS:
The Louisville District started the project with a kickoff meeting in December 2022. This effort will develop a Template Process that will assist the Commonwealth in helping non-residential facilities and structures to develop or update flood related EAPs to be more resilient as floods occur.

An EAP template will allow the Commonwealth to assist manufacturers in this industry, other industries, and non-residential facilities in developing their own EAP, further decreasing flood risk, and associated economic impacts due to flooding. One of the key topics at the 2022 Annual Bourbon Industry Conference was the need for distilleries to develop and/or improve EAPs for their facilities. In addition, the Commonwealth will host virtual workshops to interested facilities to help disseminate information on the process and can work with the Kentucky Association of Manufacturing and other statewide non-residential organizations to further disseminate the information.

Project POC:
John Bock
Deputy District Engineer
john.r.bock@usace.army.mil
(502) 315-6104

Eastern KY Flooding, Planning Assistance To States (PAS)

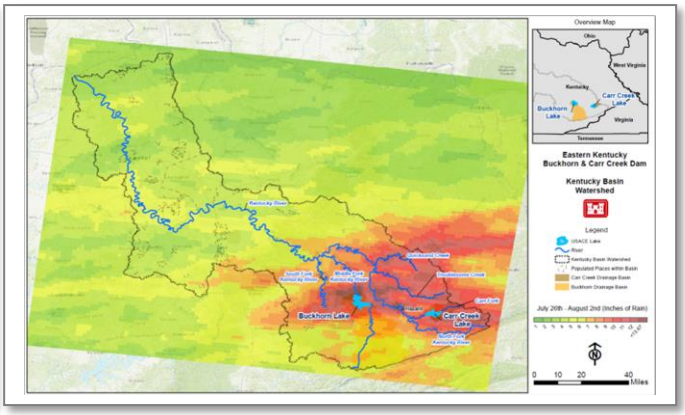
U.S. ARMY CORPS OF ENGINEERS **BUILDING STRONG®**

AUTHORIZATION: Planning Assistance to States (PAS) Section 22 of the Water Resources Development Act (WRDA) of 1974 (Public Law 93-251), as amended

PROJECT SPONSOR: Commonwealth of Kentucky Division of Water

LOCATION: Eastern, Kentucky

Image of flooding in Jackson, KY from July 2022.



Rainfall intensity map from July 2022 storms.

Congressional Member Interest	Key Stakeholder Interest
SEN Mitch McConnell (KY)	Affected counties and communities
SEN Rand Paul (KY)	Commonwealth of Kentucky
REP Hal Rogers (KY-5)	

PROJECT DESCRIPTION AND BACKGROUND: The project is located within Eastern Kentucky, and will encompass numerous counties including Breathitt, Clay, Estill, Harlan, Knott, Lee, Leslie, Letcher, Owsley, Perry, and Wolfe Counties.

The study will focus on the flooding that ravaged Eastern Kentucky in March of 2021 and July of 2023. The study will examine the hydrology and hydraulics associated with these flood events in the North Fork of the Kentucky River and its tributaries to develop possible flood mitigation strategies and improve flood warning systems & emergency evacuation procedures when applicable. The study will also look to capture, and model observed flood data in response to Eastern Kentucky flood events, and potential development of inundation mapping capability to support responses to future flood events.

BUDGET INFORMATION:

Authorized Total Project Cost	$1,000,000 (estimate)
Non-Federal Sponsor Cost	$500,000 (estimate)
Federal Cost	$500,000 (estimate)
Funding Received to Date	$0

CURRENT STATUS: The Louisville District and the Commonwealth of Kentucky are negotiating the final scope of work and will look to begin work on the study in FY 23. The Commonwealth of Kentucky will be utilizing in-kind resources as their cost share. The Water Resources Development Act of 2022 contained authorities in Section 8103 and Section 8201 in response to the flooding in Eastern Kentucky, but no funding has been appropriated yet.

Project POC:

John Bock
Deputy District Engineer
john.r.bock@usace.army.mil
(502) 315-6104

Southern and Eastern Kentucky Environmental Infrastructure Program

Current Phase: Varies per project.

Location and Description:
Southern and Eastern Kentucky.

The Section 531 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 Nashville, Huntington, and Louisville Districts, as determined by the location of the projects. Prior to design and/or construction of a Section 531 project, the Corps and the non-Federal sponsor enter into a Project Partnership Agreement (PPA) outlining the project scope, cost, and responsibilities for implementation.

Authorization:
Section 531 of the Water Resources Development Act of 1996 (Public Law 104-303), as amended.

Summarized Financial Data:

Authorized Program Limit	$40,000,000
FY 23 Allocation	$1,000,000

Louisville District Section 531 Projects:

- City of Hyden, Leslie County – The project entails design and construction of approximately three miles of sewer force main and 50 grinder pumps to fifty households in the City of Hyden. This project will mitigate environmental contamination by replacing the 25 failing septic systems and 14 straight pipe sewer systems within the project area. Total project cost is estimated at $766,667. PPA executed on March 23, 2018. EA/FONSI signed in October 2020. Plans and Specs were approved by the District in July 2023 and Ready to Advertise is scheduled for March 2024.
- Roxana, Letcher County – The project consists of design and construction of approximately 50,000 linear feet of 10-inch through a 3-inch water transmission main along with elevated storage tank and booster pump station to support the construction and operation of an 800-acre Federal correctional facility in Roxana, Kentucky. The extension would provide access to potable water to approximately 100 households. Total project cost is estimated at $1,433,333. PPA executed on March 21, 2018. EA/FONSI signed in February 2019. Currently waiting on OSMRE for their Environmental reviews before this can go to bid.
- Mount Vernon, Rock Castle County – The project will consist of the design and construction of improvements to the public drinking water plant. Currently the public water is very unpalatable, and the improvements will directly increase the quality of life for residents. Total project cost is estimated at $1,000,000. PPA executed on February 25, 2019. EA/FONSI signed in December 2020.Bids received in August of 2023 showed the estimate tripled in amount from original estimate. The sponsor will submit an application in Spring of 2024 for additional funding to help complete the project.
- City of Hazard, Perry County – The project will consist of the design and construction of improvements to the Buckhorn Dam Tailwater Channel Raw Water Intake Structure. Currently the public water is very unpalatable, and the improvement will directly increase the quality of life for residents. Total project cost is estimated at $1,433,333. The PPA was signed in December 2022. The EA/FONSI has been through public review and currently in ATR review.
- Troublesome Creek Environmental Authority, Perry County – The project will consist of the design and construction of improvement of the Sewer Collection Project Phase III. Total project cost is estimated at $623,333. The PPA is schedule to be executed in December 2023.
- Leeco Road, Leslie County sanitary sewer extension. The proposed project will include several miles of two- and four-inch force main, with a main pump station at the campground, and 40 individual grinders for 40 homes along the proposed line. The proposed project will eliminate failing septic tanks located within the drainage of the existing Hyden-Leslie County Water Treatment Plant source water of the Middle Fork of the Kentucky River. PPA execution is expected in the 2nd quarter of FY 24. The total project cost received is $1,333.333.
- City of Jackson, Breathitt County – This project will increase water storage in the current system and increase the system pressure in this area of the city's service area. It will replace an aging in-ground pump station and tank both located at King's Ridge. This project will serve a new housing development site for flood victims affected by the July 2022 Flood in

Map

eastern Kentucky. The Kickoff meeting was in August 2023. The Total project cost is $1,333.333.

Issues and Other Information:
None.

Congressional Interest:
SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Harold (Hal) Rogers (KY)

eastern Kentucky. The Kickoff meeting was in August 2023. The Total project cost is $1,333.333.

Issues and Other Information:
None.

Congressional Interest:
SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Harold (Hal) Rogers (KY)

Fort Knox, KY

Location and Description:
Fort Knox is one of the most multifunctional installations in the Army. The units and organizations here run the gamut from U.S. Army Forces Command warfighting units and Reserve component training units to commands such as U.S. Army Cadet Command and U.S. Army Recruiting Command, which are responsible for identifying, educating and recruiting the Army's newest officers and Soldiers. The commander of Cadet Command also serves as the installation's commanding general. In addition, U.S. Army Human Resources Command - located in the Lt. Gen. Timothy J. Maude complex- manages all Soldiers' personnel actions, from initial enlistment through retirement. Fort Knox is home to more than 30 commands and organizations with a daytime population of about 26,260 Soldiers, civilian employees and Family members.

Authorization:
Military Construction, Army
Minor Construction, Army
Operation and Maintenance, Army

FY24 Activities:
Design, procurement, and construction management activities. Including:
- 4 MILCON, Army projects (Digital Air/Ground Integration Range, Van Voorhis ES, Scott Middle School, Child Development Center)
- 1 MILCON, Army Reserve project (ASF Hanger)
- 1 Minor MILCON project (Separate Toilet/Shower Bldg)
- 3 O&M Projects (V-Corps HQ, Track Repair, Middle/High School Gym Floor Replacement)

FY25 Planned Activities:
Design, procurement, and construction management activities and continued support of new projects.

Issues and Other Information:
NSTR

Summarized Financial Data:

Military Estimated Federal Cost
$2,237,233,338

Army Reserve Estimated Federal Cost
$90,000,000

Congressional Interest:
Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Rep. Brett Guthrie (KY)

Map

As of 11/6/2023

Leitchfield, Kentucky
Flood Plain Management Services

Summarized Financial Data:	Study
Estimated Federal Cost	$100,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$100,000
Allocation thru FY23 (Federal)	$100,000
Balance to Complete after FY23	$0
FY24 Capability (FED)	$0
FY25 President's Budget	N/A

Current Phase:
Study

Location and Description:
Leitchfield is located in central western Kentucky near the Kentucky River. The city population is approximately 6,000. The study area primarily includes a one square-mile neighborhood located just north of the downtown area.

The study will focus on an evaluation of nuisance flooding in the vicinity of the city of Leitchfield in Grayson County, Kentucky. Leitchfield experiences periodic flooding with the most recent flooding in both 2019 and 2020. This study will examine the stormwater infrastructure within the extents of the nuisance flooding. After discussion and coordination with the Leitchfield mayor and city engineer, the Project Delivery Team (PDT) determined there is a significant need for an analysis of the most recent flooding, as well as data collected from field surveys focused on the stormwater infrastructure corridors within the area of concern.

Authorization:
The Flood Plain Management Services (FPMS) Program is authorized by Section 206 of the 1960 Flood Control Act (Public Law 86-645), as amended.

Sponsor:
City of Leitchfield, Kentucky

FY23 Activities:
The PDT assessed existing conditions and performed surveys of the areas of concern. Utilizing this information, modeling was performed on an array of alternatives to reduce flooding from stormwater issues in the project area and recommendations were made based on modeling results and cost estimates. A final report and appendices detailing this work was delivered to the sponsor in September 2023.

FY24 Planned Activities:
The PDT held a closeout meeting with the sponsor in Leitchfield, KY and is working on closing out the project in November 2023.

Issues and Other Information:
None.

Congressional Interest:
SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Brett Guthrie (KY-2)

Map

As of 11/7/2023

Thompson Creek, Kentucky Flood Plain Management Services

2001 Flooding in Graham, Kentucky

Summarized Financial Data:

	Study
Estimated Federal Cost	$150,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$150,000
Allocation thru FY23 (Federal)	$150,000
Balance to Complete After FY23	$0
FY24 Capability (FED)	$0
FY25 President's Budget	N/A

Current Phase:
Study

Location and Description:
Thompson Creek is located in Muhlenberg County, approximately nine miles north of Hopkinsville, KY in western Kentucky. This study will focus on flooding in and around Graham, Kentucky in Muhlenberg County from Thompson Creek to the Pond River. Graham, KY and the surrounding areas experience periodic Spring flooding, with the most recent flood event occurring in 2022. This study will examine the basic hydrology of the watershed and refine channel hydraulics in order to determine the discharges of various design frequency flood events.

Authorization:
The Flood Plain Management Services (FPMS) Program is authorized by Section 206 of the 1960 Flood Control Act (Public Law 86-645), as amended.

Sponsor:
Muhlenberg County, Kentucky

FY 23 Activities:
The Project Delivery Team (PDT) drafted the Project Management Plan, surveyed the project area's existing conditions, and performed modeling on existing conditions and various alternatives related to flood risk management.

FY 24 Planned Activities:
The PDT will review and finalize the report. The report will be provided to the Non-Federal Sponsor. Close-out the project.

Issues and Other Information:
None.

Congressional Interest:
SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Brett Guthrie (KY-02)

Map

As of 11/9/2023

Rough River Lake, Kentucky
Master Plan Update

Rough River Lake Dam – Falls of Rough, Kentucky

Summarized Financial Data:

Estimated Federal Cost	$262,350
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$262,350
Allocation thru FY23 (Federal)	$262,350
Balance to Complete after FY23	$0
FY24 Capability (FED)	$0
FY25 President's Budget	N/A

Current Phase:
Master Plan Update

Location and Description:
Rough River Lake is situated in Breckinridge, Hardin, and Grayson counties in south central Kentucky. The dam is located on the Rough River near the community of Falls of Rough, about 20 miles from Leitchfield, Kentucky and 95 miles southwest of Louisville, Kentucky.
.
The Louisville District, Corps of Engineers designed, constructed, and operates the project to reduce flood damages downstream from the dam. The Corps, in cooperation with the Commonwealth of Kentucky, manages the 5,100-acre lake and over 9,300-acres in-fee land for wildlife, fisheries, and recreation.

Authorization:
Flood Control Act approved 28 June 1938 (Public Law No. 761, 75th Congress, 3rd Session)

FY23 Activities
The District completed the final draft Master Plan and integrated Environmental Assessment (EA), including final public and stakeholder reviews.

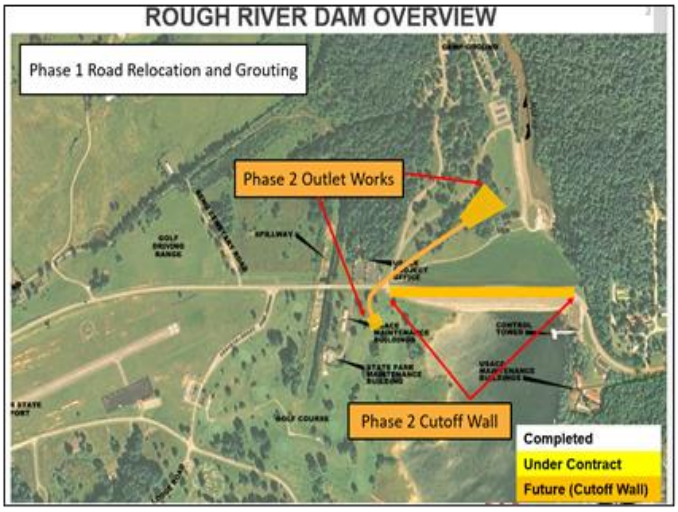
FY24 Planned Activities:
Final District Quality Control and leadership reviews/signatures will complete the Master Plan in the 1st Quarter of FY24.

Issues and Other Information:
None

Congressional Interest:
Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Rep. James Comer (KY-1)
Rep Brett Guthrie (KY-2)

Map

Rough River Dam Safety Modification



Overver of Rough River Dam Safety Modification Project

Current Phase:
Design and Construction

Location and Description:

The dam site is located on Rough River, 89.3 miles east of the confluence with the Green River. The project consists of two phases of rehabilitation work to the dam foundation to eliminate seepage concerns. The first phase of construction consisted of grouting of the bedrock foundation. The first construction contract (Phase 1A) was awarded in March 2014 and completed in September 2015. This contract relocated KY State Hwy 79, which crosses the dam, to the upstream slope of the dam. The exploratory drilling and grouting contract (Phase 1B) was awarded in April 2015 to Advanced Construction Techniques, Inc. and was physically completed in May 2017. Based on the conditions encountered, a decision was made to proceed to Phase 2, which involves a deep concrete cutoff wall through the embankment and into the foundation rock. The dam is currently classified as a Dam Safety Action Classification (DSAC) 2.

Authorization:
Flood Control Act (Public Law 761, 75th Congress, 28 June 1938)

FY23 Activities:
In FY23 an updated Risk Assessment was completed that resulted in classification of the project as DSAC 2 and the implementation of additional Interim Risk Reduction Measures (IRRMs). The most significant of the IRRMs that was implemented was a pool restriction that delayed the start of the Spring fill by 2 weeks and lowered the targeted Summer pool by 5 feet to elevation 490. Additional IRRMs that have been completed or are on-going include additional stockpiling of materials, increased risk communication, and others.

Summarized Financial Data:	**Design &** Construction
Estimated Federal Cost	$518,713,000*
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$518,713,000*
Allocation thru FY23	$117,414,000
Balance to Complete after FY23	$401,299,000
FY24 Capability (FED)	$360,000,000
FY25 President's Budget	TBD

*The Cost Estimate was certified in February 2023. A Business Case requesting approval of an Incremental Funding Clause has been submitted. If approved, the capabilities for future years will be adjusted.

FY24 Planned Activities:
The project design is complete. Additional funds are needed to advertise and award the contract. Once it is determined that additional funds will be available, the Plans and Specifications will need to undergo an updated BCOES certification and the package will be prepared for advertisement. These activities can be completed in FY24 with funds currently on hand.

Issues and Other Information:

USACE completed a DSMR in July 2012. The DSMR addressed unacceptable risk due to foundation conditions that can be found when a dam is constructed on karst geology (solutioned limestone). The report recommended major rehabilitation to ensure the structure's integrity and lower the project's risk. As a result of the first phase of construction, the Dam Safety Action Classification (DSAC) was changed from DSAC 2 to DSAC 3. Due to on-going evaluation of the project instrumentation since that time it was decided to update the risk assessment, which was completed in FY23. The updated risk assessment resulted in classification as a DSAC 2 and the implementation of additional IRRMs, including a pool restriction. While the dam is currently operating as intended and there is no emergency or imminent threat, failure of the dam would result in catastrophic effects downstream, including potential loss of life and significant economic losses.

Changes to lake operations during construction that would impact normal public use will be minimized as much as possible. However, at some point during the construction it may be necessary to temporarily revise the target pool elevations to ensure the safety of the project. USACE will be responsible for communicating project status with coordination from local, state, and federal agencies and other stakeholders. Rough River Lake staff will aid in future public awareness campaigns. After the construction, the surface of the dam will be restored, and its appearance will look much as it does currently.

Congressional Interest:
SEN Mitch McConnel
SEN Rand Paul
REP Brett Guthrie (KY-2)

Map

Rough River Lake, KY
Flowage Easement Encroachment Resolution

Current Phase:
Processing landowner resolution requests.

Location and Description:
Rough River Lake is located in rural Breckinridge, Grayson, and Hardin counties, Kentucky. The United States of America purchased 318 miles of flowage easement surrounding Rough River Lake. The flowage easement grants the Corps of Engineers a perpetual right to overflow, flood, and submerge the easement area, consistent with project operations, and prohibit habitable structures from being constructed. Rough River is surrounded by over 151 residential developments and there is an estimated 375 existing habitable structure encroachments located on flowage easement. The project consists of releasing the flowage easement or human habitation restriction, if certain requirements are met, to resolve these encroachments.

Authorization:
Rough River Lake Flowage Easement Encroachment Resolution Plan, approved 3 Jan 2017

Memorandum, ASA-CW, dated 3 Jan 2017, Subject: Rough River Lake Flowage Easement Encroachment Resolution Plan

Memorandum, ASA-CW, dated 20 June 2019, Subject: Additional Guidance for Rough River Lake Flowage Easement Encroachment Resolution

Memorandum, ASA-CW, dated 23 Sep 2021, Subject: Implementation Guidance for Section 328 of the Water Resources Development Act (WRDA) of 2020, Extinguishment of Flowage Easements, Rough River Lake, Kentucky

Prior Activities:
The America's Water Infrastructure Act of 2018 (Public Law 115-270), Title I, Subtitle A, Section 1175 prohibited the Corps of Engineers from collecting from eligible property owners any administrative fee associated with resolving a flowage easement encroachment at Rough River Lake. All administrative fees collected have been refunded. Property owners are still required to obtain at their expense a private-property survey and septic inspection.

The Water Resources Development Act of 2020 (Public Law 116-260), Title III, Section 328 requires the extinguishment of any flowage easement or portion of flowage easement held by the United States on developed land of the landowner at Rough River Lake that is above elevation 534' m.s.l. and is not required to address backwater effects. Additionally, $10M was authorized to implement guidance.

The Assistant Secretary of the Army, Civil Works (ASA(CW)) authorized the Corps to release the flowage easement over the entire tract above elevation 534' m.s.l. (Scenario A properties). In addition, the ASA (CW) authorized the Corps to release the flowage easement on vacant lands above elevation 534' m.s.l. that are encumbered by flowage easement.

FY 24 Planned Activities:
The Project Delivery Team will continue to process resolution requests. It is estimated 50 encroachments will be resolved per year. Estimate 10-20 years to resolve all encroachments.

For Scenario A and vacant land, dispose flowage easement on the tract above elevation 534' m.s.l. to the underlying landowner, upon their request, as long as the property is not required to address backwater effects.

For Scenarios B and C, if the requirements for the release of human habitation restriction can be met, execute a release on the portion of the structure below the 534' m.s.l. If requirements for the release of human habitation restriction cannot be met, enforce the terms of the easement by requiring removal of the entire or portion of the structure below 534' m.s.l. where practical.

To date, there is an estimated total of 375 unresolved encroachments (242-Scenario A; 89-Scenario B; 44-Scenario C). A total of 267 encroachments have been resolved (189-Scenario A, 47-Scenario B, 31-Scenario C). Quitclaim Deeds have been executed for 31 vacant properties.

Summarized Financial Data:

Allocation thru FY23	$3,930,300
FY24 Pres Budget (WP352683)	$529,650
FY25 Pres Budget	TBD

Congressional Interests:

SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Brett Guthrie (KY-2)

Map

Green River Locks and Dams 3, 4, 5 & 6 and Barren River Lock and Dam 1 Disposal

Green River Lock and Dam 3 (Rochester, Kentucky)

Current Phase:
Disposal

Location and Description:
Five locks and dams on the Green and Barren Rivers in south-central Kentucky are no longer used for their original authorized purpose of commercial navigation. The Louisville District completed a Disposition Study in 2014 to evaluate the formerly used navigation facilities and to make recommendations regarding the possible deauthorization and/or disposal of the facilities.

All five projects were deauthorized in the 2016 Water Resources and Infrastructure Improvements to the Nation (WIIN) Act which included language directing disposal to identified recipients.

Section 1311 of the Water Resources Development Act (WRDA) 2018 clarified that Green River Lock & Dam 5 and Barren River Lock & Dam 1 may be removed under USACE ownership and that contributed funds could be used to accomplish the removal.

Statutory compliance with Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act are required prior to disposal.

Authorization:
Section 1315 of the Water Infrastructure Improvements for the Nation Act (WIIN) of 2016.

Section 1311 of the Water Resources Development Act (WRDA) 2018.

Summarized Financial Data:	**Disposal**
Estimated Federal Cost	$285,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$285,000
Allocation thru FY23 (Federal)	$285,000
Balance to Complete after FY23	$0
FY24 Capability (FED)	$0
FY25 President's Budget	TBD

FY23 Activities:
The Louisville District continued partnerships with the working group, completed the Section 106 coordination for all locks and dams, and continued working on a solution for the Edmonson County Water District (ECWD) intake located within the pool of Green River Lock and Dam 5. The District completed the deeds and disposal reports for the conveyance of Green River Lock and Dam 6 and Barren River Lock and Dam 1.

FY24 Planned Activities:
The District has finalized disposal packages for Green River Lock & Dam 6 (going to Kentucky Department of Fish and Wildlife Resources and The National Park Service) and Barren River Lock & Dam 1 (going to the Kentucky Department of Fish and Wildlife Resources) and intends to submit them to HQUSACE for deed review. The District has identified temporary work packages to minimize identified safety hazards at Green River Lock & Dam 4 to allow for the disposal to Butler County. In addition, the District is currently working with U.S. Fish and Wildlife Resources to potentially remove the remaining portions of the dam and other improvements within the river. Green River Lock and Dam 5 is currently in a paused status until a viable solution for the Edmonson County Water District has been identified.

Issues and Other Information:
Regional low water coinciding with the removal of Green River Lock and Dam 5 delayed the complete removal of Green River Lock and Dam 5 when ECWD became alarmed at water levels and the potential impact to their intake located on the Green River. The Nature Conservancy (TNC) is contracted with Kimley-Horn Engineering to assist in identifying potential alternatives for the ECWD. Once a viable solution is developed and funding identified, removal efforts will resume.

Congressional Interest:
SEN Mitch McConnell (KY)
SEN Rand Paul (KY)
REP Brett Guthrie (KY-2)
REP James Comer (KY-1)

Map

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	2026	$ 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	2026	$ 8,600,000
40	5 MW NG Generator - Resiliency, McGregor / Westbrook Ranges	Fort Bliss	98991	2026	$ 12,000,000
41	5 MW NG Generator - Resilency, East Bliss Substation	Fort Bliss	99008	2026	$ 11,000,000