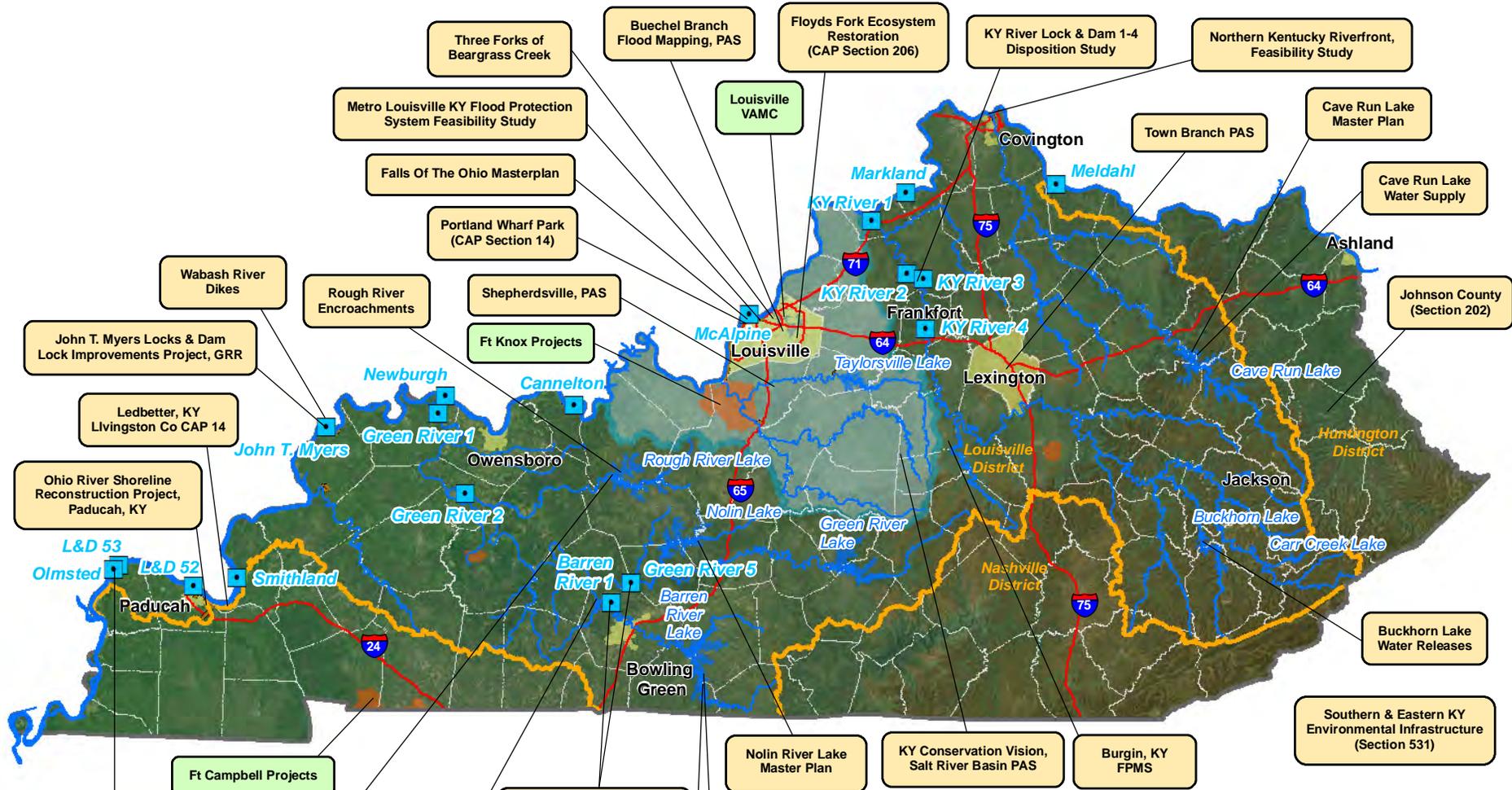


STATE OF KENTUCKY



Legend

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



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



MEMBER STATES

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

Current Phase:

Planning Assistance to States Study

Location and Description:

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

Authorization:

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

FY19 Activities:

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

Summarized Financial Data:

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

FY20 Planned Activities:

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

Issues and Other Information:

None

Congressional Interest:

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



OLMSTED LOCKS AND DAM PROJECT

As of: 28 January 2020

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

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

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

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

Project Description and Background: The project consists of two 110' X 1200' locks adjacent to the Illinois bank, and a dam comprised of five tainter gates, 1400' of boat-operated wickets and a fixed weir. The proposed replacement structure will eliminate Ohio River Locks & Dams 52 & 53. Locks & Dams 52 & 53 were completed in 1929 and the temporary 1,200' long lock chambers were added in 1969 at Locks & Dam 52 and 1979 at Locks & Dam 53. The antiquated design and age of these structures make it impossible to meet current traffic demands without significant delays. The existing structures have deteriorated structurally and are overstressed during normal operating conditions. Existing wicket dam has missing sections and wickets that will not raise making it very difficult to maintain pool during low water. The temporary locks at Locks & Dam 52 & 53 have significantly passed their 15-year design life.

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

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

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

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

Summarized Financial Data

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

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

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

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



Olmsted Locks and Dam August 2016



Olmsted Locks and Dam November 2019

Portland Wharf & Louisville Riverwalk Emergency Streambank Stabilization



Portland Wharf – Final placement of stone and installation of plant materials

Current Phase:

Construction

Location and Description:

The project area is located in Jefferson County, Kentucky along the left descending bank of the Ohio River approximately two miles west of the Louisville Central Business District.

There are two areas threatened by erosion within the study area: Portland Wharf Park and a segment of the Louisville River walk adjacent to Shawnee Golf Course. Portland Wharf was the historic riverboat landing for the City of Portland founded in 1811. The Wharf is part of an archaeological site known as “Portland Proper”. Portland Proper is listed on the National Register of Historic Places (NRHP) and its limits encompass the entirety of the Portland Wharf Park.

Construction at the Portland Wharf Site was completed in October 2017. The construction contract for the Louisville Riverwalk Site was awarded August 2017 and physical completion on the Riverwalk portion was completed in September 2018.

Authorization:

Section 14 of the 1946 Flood Control Act, as amended.

Summarized Financial Data:

| | <u>Construction</u> |
|---------------------------------|----------------------------|
| Estimated Federal Cost | \$2,194,691 |
| Estimated Non-Federal Cost | \$1,181,756 |
| Total Estimated Project Cost | \$3,376,447 |
| Allocation thru FY19 | \$2,653,544 |
| Balance to Complete after FY19 | \$0 |
| President’s Budget FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President’s Budget | \$0 |

FY 2019 Activities:

Project Closeout.

FY 2020 Planned Activities:

None.

Issues and Other Information:

Excess funds were returned to the non-federal sponsor.
Excess Federal funds will be returned.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. John Yarmuth

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

Kentucky Silver Jackets Projects:

- Turn Around Don't Drown – This project reduced loss of life and property by educating Kentucky drivers through public service announcements about the dangers of driving into flooded roads. Advertisement on Transit Authority of River City buses and bus stop covers were used to promote the campaign during peak flood season in 2019.

Non-Federal Sponsor:

- Kentucky Division of Water
- Kentucky Emergency Management Agency
- The Kentucky Geological Service
- Multiple Local Governments and Agencies

Federal Sponsors:

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

Activities for FY 2020:

Continue to coordinate with state and federal agencies across the Commonwealth in order to better reduce flood risks in Kentucky.

Issues and Other Information:

None

Dam Safety, Kentucky

Kentucky Dams - Special Studies



Barren Lake Dam, KY

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.

Summarized Financial Data:

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

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

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul

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
- * FY2020 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).
- * FY2020 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
- * FY2020 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): In the queue for study. The IES Report will address concerns with unacceptable foundation conditions and associated seepage in order to remove uncertainty and lower project risk. This will determine if the work needs to continue to complete a full Dam Safety Modification Report (DSMR).
- * FY2020 Planned Activities: Routine O&M surveillance and monitoring program.

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

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

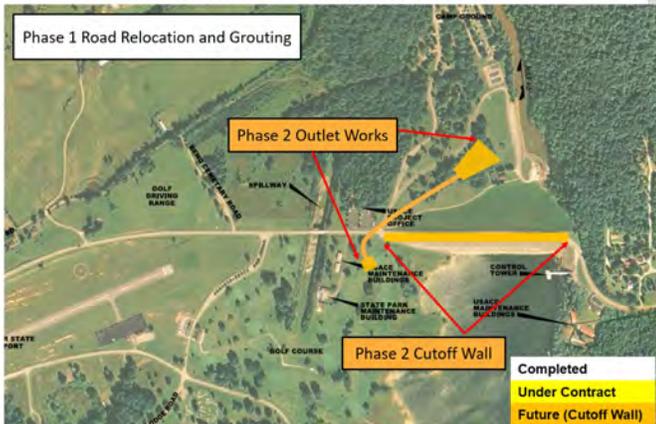
- * DSAC (Dam Safety Action Classification) Rating: Class 2
- * IRRMP (Interim Risk Reduction Measures Plan): Completed 15 April 2008
- * A Dam Safety Modification Report (DSMR) was completed in July 2012. The DSMR addressed unacceptable foundation conditions and associated seepage and identified a need for major rehabilitation in order to remove uncertainty and lower project risk.
- * 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 2020 Planned Activities: The Phase 2 Cutoff Wall contract advertisement was scheduled for December 2017, but was cancelled due to concerns regarding the structural integrity of the existing conduit during and after construction of the proposed cutoff wall. The Project Delivery Team is currently reevaluating design features as part of a Supplement to the previously-approved DSMR. Scheduled completion date for the DSMR Supplement is Summer 2020.

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

Rough River, KY Dam Safety Modification Project

ROUGH RIVER DAM OVERVIEW



Rough River dam safety modification overview

Current Phase:

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. 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 upper 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.

Authorization:

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

FY 19 Activities:

The Project Delivery Team (PDT) continued the evaluation of design measures to make a recommendation for a Modified Tentatively Selected Plan (TSP) using criteria such as constructability, effectiveness at risk reduction, operational impacts, environmental impacts, and cost. The modified TSP was presented to the Senior Oversight Group for Dam Safety in November of 2018 at which time the recommended TSP was endorsed. The PDT has continued to document the justification for the modified TSP in a Dam Safety Modification Study (DSMS) Supplement that will be presented to the Assistant Secretary of the Army for Civil Works (ASA(CW)) for approval. The DSMS Supplement has undergone quality control reviews including District Quality Control (DQC), Agency

Summarized Financial Data:

| | <u>Construction</u> |
|---------------------------------|---------------------|
| Estimated Federal Cost | TBD |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | TBD |
| Allocation thru FY19 | \$68,664,000 |
| Balance to Complete after FY19 | TBD |
| President's Budget for FY20 | \$40,000,000 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$20,000,000 |

Technical Review (ATR), legal, policy, and public review. Those reviews have been finalized and the cost estimate is currently being reviewed for certification. Once complete, the Supplemental DSMS will be finalized and submitted for approval. There will be significant cost and schedule impacts as a result of the modified design work.

FY 20 Planned Activities:

The PDT will continue design of modified TSP which included internal design work, Geotechnical investigation contracts, computer modeling, and construction and analysis of a physical model. The project is currently scheduled for an intermediate design review in the late spring of 2020 to include internal reviews, ATR, and design review by industry experts currently under contract with the district.

Issues and Other Information:

The Corps completed a Dam Safety Modification Report (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. 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 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 hold the lake below the normal recreation pool level (summer pool 495 feet). Louisville District 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 the future public awareness campaign. After the construction, the surface of the dam will be restored and its appearance will look much as it does currently.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative Brett Guthrie (KY-2)

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 140 residential developments and there is an estimated 491 existing habitable structure encroachments located on flowage easement. The project consists of releasing the 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 17, 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

FY 19 Activities:

The Assistant Secretary of the Army, Civil Works (ASA(CW)) authorized the Corps to release the human habitation restriction over the entire tract above elevation 534' m.s.l. (Scenario A properties) while maintaining the

flowage easement rights. In addition, the ASA (CW) authorized the Corps to release the human habitation restriction on vacant lands above elevation 534 m.s.l. that are encumbered by flowage easement.

The Corps hosted two landowner meetings to discuss the requirements and process of releasing the human habitation restriction on flowage easement.

Summarized Financial Data:

| | |
|----------------------------------|-------------|
| FY17 Work Plan (WP142314) | \$1,900,000 |
| Flowage easement survey contract | |
| FY18 Pres Budget (WP27025) | \$250,000 |
| FY19 Work Plan | \$100,000 |
| FY19 Remaining Item (NRM) | \$150,000 |
| In the FY19 Energy & Water Bill | |
| FY20 Remaining Item (NRM) | \$200,000 |
| In the FY19 Energy & Water Bill | |

FY 20 Planned Activities:

The PDT will continue to process the resolution requests. It is estimated 50 packages can be processed per year.

For Scenario A and vacant land, execute a release of human habitation restriction 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. The Government will retain its right to occasionally flood the property.

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 477 encroachments (337-Scenario A; 88-Scenario B; 52-Scenario C). One Scenario A has been completed.

Issues and Other Information:

The America's Water Infrastructure Act of 2018 (Public Law 115-270), Title I, Subtitle A, Section 1175 prohibits 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.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative Brett Guthrie (KY-02)

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 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.

Authorizations:

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:

| | <u>Disposal</u> |
|---------------------------------|------------------------|
| Estimated Federal Cost | \$285,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$285,000 |
| Allocation thru FY19 | \$285,000 |
| Balance to Complete after FY19 | \$0 |
| President's Budget FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY19 Activities:

Execution of Memorandum of Agreements (MOA) which identify applicable mitigation and potential deed restrictions at each lock and dam. Completion of the disposal reports and transfer of properties to identified recipients. Completed cultural and historic surveys and negotiated MOA.

FY20 Planned Activities:

Continue partnerships with the working group. Completion of Section 106 coordination for all locks and dams. Develop removal strategy for Green River 5 and Barren River 1. Finalize disposal package for Green River 3 to transfer the property. Complete the transfer of the former Green River Lock and Dam 6 site. Execute Contributed Funds Agreement with The Nature Conservancy and issue contract order for removal of Green River 5.

Issues and Other Information:

Removal of Green River 5 and Barren River 1 can be completed prior to disposal using Federal or contributed funds not included in total project cost shown above. Planned stabilization actions at Green River Lock and Dam 3 are funded through the U.S. Economic Development Administration and will require separate Section 7 and Section 106 coordination for that federal action.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie
Rep. James Comer

Green River 5 and Barren River 1 Comprehensive Plan



View looking downstream from Green River Lock and Dam 5

Current Phase:

Study

Location and Description:

This Study is located in Edmonson County and Warren County in south-central Kentucky.

Commercial navigation at Green River Lock and Dam 5 and Barren River Lock and Dam 1 was deauthorized in the Water Infrastructure Improvements Act of 2016 (WIIN). The legislation also directed disposition of the land and improvements associated with the facilities. This Planning Assistance to States (PAS) project establishes a framework to inform public and private decisions about the future use of Green River Lock and Dam 5 and Barren River Lock and Dam 1, as well as associated lands and structures.

The Nature Conservancy (TNC) partnered with the USACE to identify and analyze infrastructure impacts that could result from the future removal of Green River Lock and Dam 5 and Barren River Lock and Dam 1. This analysis was completed in January 2019 as a cost-shared study under Section 22 of the Water Resources Development Act of 1974, as amended

Authorization:

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

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|---------------------|
| Estimated Federal Cost | \$45,125 |
| Estimated Non-Federal Cost | \$45,125 |
| Total Estimated Project Cost | \$90,250 |
| Allocation thru FY19 | \$45,125 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY 2019 Activities:

The final report was completed and project was closed.

FY20 Planned Activities:

None.

Issues and Other Information:

None at this time.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie
Rep. James Comer

Barren River Lake, KY, Water Supply Reallocation Project



Barren River Lake

Current Phase:
Feasibility Study

Location and Description:

The Barren River Lake project is located in south central Kentucky, approximately 23 miles southwest of Bowling Green, Kentucky. The dam site is on Barren River, 79.2 miles above its confluence with the Green River.

Bowling Green Municipal Utilities (BGMU) serves over 90,000 people in Warren County, Kentucky with drinking water. In the next 50 years, the City of Bowling Green is facing a critical water shortage, especially if the region continues with its present rate of growth.

The Louisville District executed a contributed funds agreement with the City of Bowling Green on 3 July 2014 for an initial water supply analysis to investigate the impact of providing additional release from Barren River Lake during certain drought periods. During most periods, Barren River's flow at Bowling Green provides ample volume to meet the needs of BGMU. It is only during periods of drought that flow augmentation from Barren River Lake would be required. The initial water supply analysis was completed in October 2015 and determined that there is sufficient storage available to proceed into a full feasibility study.

Authorization:

Section 216, 1970 Flood Control Act (P.L. 91-611)

Summarized Financial Data:

| | <u>Feasibility</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$0 |
| Estimated Non-Federal Cost | \$243,000 |
| Total Estimated Project Cost | \$243,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY 19 Activities:

The Draft Barren River Lake Water Supply Storage Reallocation Report and Integrated Environmental Assessment was completed including receiving and resolving comments from Agency Technical Review, Vertical Team Review, and Public Review.

FY 20 Planned Activities:

The Final Report will be submitted for approval and the Water Storage Agreement will be completed and executed. The approval level for the Water Supply Agreement is the Assistant Secretary of the Army for Civil Works.

Issues and Other Information:

The City of Bowling Green submitted a Letter of Intent to initiate the feasibility of a water supply storage reallocation within Barren River Lake in order to augment the City's water supply. The Corps and the City of Bowling Green executed a Contributed Funds Agreement on 12 July 2017. The City (BGMU) has provided funds in the amount of \$243,000 to complete this study.

Typically, the feasibility study is cost shared 50% Federal / 50% non-Federal. Due to the importance of this study to the Sponsor, the Sponsor opted to use a Contributed Funds agreement to complete the work.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative Brett Guthrie

Nolin Lake, Kentucky Master Plan Update



Nolin Lake

Current Phase:

Master Plan Update

Location and Description:

Nolin Lake is located in Edmonson, Grayson, and Hart counties on the Nolin. The Dam is about 7.8 miles above the Nolin River, about 70 miles southwest of Louisville, KY.

Nolin Lake was authorized under the Flood Control Act June 28, 1938. The Louisville District of the U.S. Army Corps of Engineers designed, built, and operates the project for flood control in the Nolin and Green River Valleys to reduce flood flows in the Ohio River. During the fall and winter months, when excessive rainfall is likely, the lake is kept at a relatively low level referred to as winter pool. Should heavy rains occur, surface water runoff is stored in the lake until swollen streams and rivers below the dam have receded and can handle the release of the stored water without damage to lives or property.

The master plan update will provide guidance for the preservation, conservation, restoration, maintenance, management and development of project lands, waters and associated resources located at Nolin Lake.

The Corps also developed the lake for municipal and industrial water supply. Edmonson County has contracted with the Corps for water supply storage.

Summarized Financial Data:

| | <u>Master Plan</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$265,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$265,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$265,000 |
| President's Budget for FY20 | \$265,000 |
| FY20 Allocation (thru JAN 2020) | \$45,000 |
| FY21 President's Budget | \$0 |

Authorization:

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

FY19 Activities:

None

FY20 Planned Activities:

Master Plan will be initiated including the completion of the Project Management Plan and public scoping meetings.

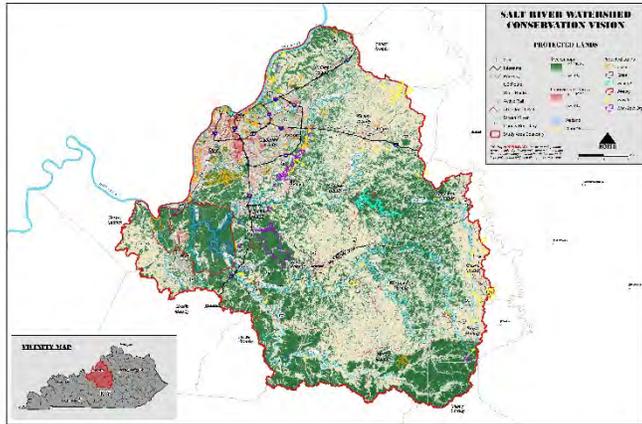
Issues and Other Information:

None

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie
Rep. James Comer

Kentucky Conservation Vision Map, Salt River Basin



Protected Lands Map – Salt River Basin, Kentucky

Current Phase:

Planning Assistance to States Study- Phase II

Location and Description:

The study area is located in north-central Kentucky and includes the Salt River drainage and its tributaries.

This study will result in a plan focused on the enhancement and protection of water quality through the stewardship of natural habitats and agricultural lands for the benefit of biodiversity, human health and economic development of communities located in the lower Salt River watershed (watershed generally includes Louisville and surrounding counties).

Authorization:

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

FY 19 Activities:

Phase II was initiated from the data collection phase in February 2019 and completed in September 2019.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|--------------|
| Estimated Federal Cost | \$103,037 |
| Estimated Non-Federal Cost | \$103,037 |
| Total Estimated Project Cost | \$206,074 |
| Allocation thru FY19 | \$103,037 |
| Balance to Complete after FY19 | \$0 |
| President's Budget FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

Final meeting with sponsor to deliver final report and project closeout.

Issues and Other Information:

None.

Congressional Interest:

Sen. Mitch McConnell
 Sen. Rand Paul
 Rep. John Yarmuth
 Rep. Brett Guthrie
 Rep. Thomas Massie

Burgin, KY Floodplain Management Services Project



Flooding damage from Fall of 2018 flooding event. Received further flooding in February of 2019

Current Phase:

Study

Location and Description:

The study area is located in Burgin, a community in Mercer County, KY about 3 miles west of Harrodsburg, KY.

The floodplain management services study is authorized as a Remaining Item and is studying localized flooding resulting from a drainage area less than 1.5 square miles and flooding at 5 locations. The study will evaluate local hydrology and best conceptual placement of drainage pipe to be installed by the Non-Federal Sponsor at their cost. The study will be of adequate technical sufficiency for the Non-Federal Sponsor to use technical data in preparation of a FEMA Hazard Mitigation Grant. The grant will be used to offset construction costs of drainage pipe and Non-Federal Sponsor will be responsible for all operation and maintenance costs of built feature.

Authorization:

Flood Control Act of 1960 (PL 86-645), as amended

FY 19 Activities:

The Louisville District was contacted by staff from Representative Guthrie and a site visit was arranged. Louisville District staff met with Town Mayor, Mercer County Sanitation District and Congressmen Guthrie to discuss path forward.

Summarized Financial Data:

| | <u>Construction</u> |
|---------------------------------|----------------------------|
| Estimated Federal Cost | \$85,000 |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | \$85,000 |
| Allocation thru FY19 | \$25,000 |
| Balance to Complete after FY19 | \$60,000 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY 20 Planned Activities:

Remaining activities for Fiscal Year 2020 include evaluation and examination of the local hydrology and hydraulics to provide technical details to the City of Burgin and Mercer County. Multiple agencies including the Kentucky Division of Water, Mercer County Sanitation District and Bluegrass Area Development District have recently completed evaluations of flooding in the community and the District is coordinating this study with those groups. The final report will be completed in FY20.

Issues and Other Information:

Flooding in Burgin has intensified recently due to complications from installation of a county sanitary sewer which left the City with inadequate storm drainage. The Louisville District performed a Section 205 Preliminary Assessment for the City of Burgin in 1999 to examine both structural and non-structural flood risk management measures. Several alternatives were examined including new drainage channels, upgrading culverts, and creation of a detention basin. All of the alternatives examined had benefit to cost ratios below unity, and ultimately the study was terminated.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative Brett Guthrie (OH-6)

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:

| | <u>Study</u> |
|--------------------------|--------------|
| Authorized Program Limit | \$40,000,000 |
| FY 19 Allocation | \$0 |

Louisville District Section 531 Projects:

- o Vicco, Perry County, Kentucky - The project will make repairs to a waste water treatment plant (WWTP) and existing collection system. The existing WWTP will receive a new clarifier that will increase capacity and efficacy of treatment processes. Total project cost is estimated at \$774,272. PPA executed on March 29, 2018. EA and FONSI scheduled to be completed by April 2020.

- o City of Hyden, Leslie County, Kentucky – 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.
- o Roxana, Letcher County, Kentucky – The project consist of design and construction of approximately 50,000 linear feet of 10-inch through 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. February 29th, 2019 EA and FONSI signed.
- o Pippa Passes, Knott County, Kentucky – The project proposes to rehabilitate the existing sewer by trenchless sewer rehabilitation methods and/or completely replace severely damaged section of the existing pipe with new SDR 35 OVC and manholes. The WWTP also needs some upgrades to the clarifier, sludge, and disinfection circuits. Total project cost is estimated at \$673,543. PPA executed on March 29, 2018. February 4th, 2019 EA and FONSI signed. Construction is complete. Sponsor submitting final invoices.
- o Mount Vernon, Rock Castle County, Kentucky – 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 25th, 2019. EA and FONSI scheduled to be completed by May 2020.

Issues and Other Information:

Authorized limit has been reached.

Congressional Interest:

Senator Mitch McConnell
 Senator Rand Paul
 Representative Harold Rogers

Buckhorn Lake, Kentucky – Winter Pool Elevation Raise



Buckhorn Lake – Buckhorn, Kentucky

Current Phase:

New Start

Location and Description:

Buckhorn Lake, KY was authorized by the Flood Control Act of 1938 (Public Law 761, 75th Congress). The 1,230 acre lake is located in Leslie and Perry counties in the mountainous region of southeastern Kentucky, about 15 miles northwest of Hazard and 18 miles from Whitesburg. The dam site is located 43.3 miles above the mouth of the Middle Fork of the Kentucky River and 0.5 miles upstream of Buckhorn, KY. The lake operates as a unit of the general plan for the Ohio River Basin to effect reductions in flood stages at all point downstream from the lake. The area receiving the most protection is the valley of the Middle Fork of the Kentucky River below the dam. Additional project purposes are water quality, recreation, and fish and wildlife.

Summarized Financial Data:

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

Authorization:

Flood Control Act of 1938 (Public Law 761, 75th Congress)

FY 19 Activities:

None

FY20 Planned Activities:

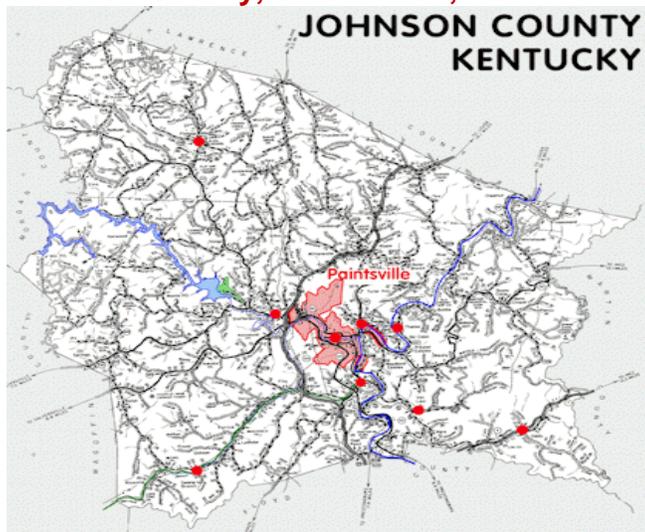
Louisville District received a request from Kentucky River Area Development District to study and assess raising Buckhorn Lake's winter pool elevation by 10 feet. This request was submitted in 2003. KY River Area Development District believes that increasing the winter pool elevation by 10 feet would greatly increase tourism and recreation use at the project. This study would examine the impacts (structural, functional, and environmental) on all other project features at Buckhorn Lake if the winter pool elevation were increased by 10 feet.

Issues and Other Information:

None

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Harold (Hal) Rogers (KY-05)

Johnson County, Section 202, KY*Paintsville and Johnson County, Kentucky***Current Phase:**

Construction - Detailed Project Report (DPR)

Location and Description:

Johnson County is located generally 3 hours east of Louisville, Kentucky and is home to over 20,000 residents. The City of Paintsville is the County Seat with a population of just over 3,000 residents and is flood prone as a result of backwater from the Levisa Fork of the Big Sandy River as well as headwater flooding from Paint Creek. This Flood Risk Management (FRM) project will evaluate structural solutions to protect the City of Paintsville as well as develop a non-structural solution for the remainder of the county.

Authorization:

Section 202 of the 1981 Energy and Water Development Appropriations Act (PL 96-367; 94 STAT. 1339), as amended.

FY19 Activities:

A Focused Alternative Array Milestone meeting (FAAM) was completed on December 19, 2018 in which the PDT recommended screening the list of potential alternatives to a total of 2 structural alternatives for the City of Paintsville and one nonstructural alternative for Johnson County. Within FY19 the team finalized a Draft DPR detailing a solution to reduce flood risk for the City of Paintsville within the authorized limit of \$118,000,000.

Summarized Financial Data:

| | |
|---------------------------------|---------------|
| Estimated Federal Cost | \$118,000,000 |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | \$118,000,000 |
| Allocation thru FY19 | \$2,800,000 |
| Balance to Complete after FY19 | \$115,200,000 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$1,500,000 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

On December 12, 2019 the PDT conducted the Tentatively Selected Plan (TSP) Milestone Meeting. In the second quarter the team will obtain District Quality Control (DQC) certification, conduct the complete Agency Technical Reviews (ATR), and conduct public and agency reviews. Once the reviews have been completed, the PDT will obtain approval of the DPR, initiate design efforts, and execute a Project Partnership Agreement (PPA).

Issues and Other Information:

This study and project were funded under the Bipartisan Budget Act of 2018. Section 202 of the 1981 Energy and Water Development Appropriations Act (PL 96-367; 94 STAT. 1339), as amended, allows for the Detailed Project Report (DPR) to be completed at full federal expense with the appropriate cost share being recouped after an ability to pay calculation is completed during the feasibility phase. The Johnson County project, as an ongoing construction project, had Federal expenditures prior to the 2018 Bipartisan Budget Act that must be cost shared prior to the initiation of construction activities under this Supplemental program. This cost share amount is expected to be approximately \$100,000. The CSX Railroad has property which may need to be acquired and is the highest risk associated with this project.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Harold Rogers

Cave Run Lake, Kentucky Master Plan Update



Cave Run Lake

Current Phase:

Master Plan Update

Location and Description:

Cave Run Lake is located in Rowan, Menifee, Morgan, and Bath counties on the Licking River. The Dam is about 173.6 miles above mouth, about 4 miles upstream of Farmers, Kentucky and 84 miles southeast of Cincinnati, OH.

Cave Run Lake was authorized under the Flood Control Acts approved 22 June 1936 and 28 June 1938. The Louisville District of the U.S. Army Corps of Engineers designed, built, and operates the project for flood control in the Licking River Valley to reduce flood flows in the Ohio River. During the fall and winter months, when excessive rainfall is likely, the lake is kept at a relatively low level referred to as winter pool. Should heavy rains occur, surface water runoff is stored in the lake until swollen streams and rivers below the dam have receded and can handle the release of the stored water without damage to lives or property.

Summarized Financial Data:

| | <u>Master Plan</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$275,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$275,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$275,000 |
| President's Budget for FY20 | \$275,000 |
| FY20 Allocation (thru JAN 2020) | \$45,000 |
| FY21 President's Budget | \$0 |

management and development of project lands, waters and associated resources located at Cave Run Lake

Authorization:

Flood Control Act approved 22 June 1936 (Public Law No. 738, 74th Congress, 1st Session) and Flood Control Act approved 28 June 1938 (Public Law No. 761, 75th Congress, 3rd Session).

FY19 Activities:

None

FY20 Planned Activities:

Master Plan will be initiated, including the completion of public and stakeholder scoping meetings.

Issues and Other Information:

None

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Harold Rogers
Rep. Andy Barr

Cave Run Lake, KY Water Supply Reallocation Project



Cave Run Lake, KY

Current Phase:
Feasibility Study

Location and Description:

Cave Run Lake is located in Rowan, Menifee, Morgan, and Bath counties on the Licking River. The Dam is about 173.6 miles above the mouth, 4 miles upstream of Farmers, Kentucky, and 84 miles southeast of Cincinnati, OH.

Cave Run Lake was authorized under the Flood Control Acts approved 22 June 1936 and 28 June 1938. The Louisville District of the U.S. Army Corps of Engineers designed, built, and operates the project for flood control in the Licking River Valley to reduce flood flows in the Ohio River. During the fall and winter months, when excessive rainfall is likely, the lake is kept at a relatively low level referred to as winter pool. Should heavy rains occur, surface water runoff is stored in the lake until swollen streams and rivers below the dam have receded and can handle the release of the stored water without damage to lives or property.

The Morehead Utility Plant Board (MUPB) has served as the utility arm of the City of Morehead, KY treating and distributing water since 1950. MUPB serves over 60,000 people in Rowan and Bath County, Kentucky with drinking water. MUPB currently withdraws water supply from the Licking River, but this permit is limited to 8.0 MGD

Authorization:

Water Supply Act of 1958, Title III (Public Law 85-500 – codified as amended at 43 U.S.C. § 390b)

Summarized Financial Data:

| | <u>Feasibility</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$0 |
| Estimated Non-Federal Cost | \$250,000 |
| Total Estimated Project Cost | \$250,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY 19 Activities:

The City of Morehead, KY submitted a Letter of Intent to initiate the feasibility of water supply storage reallocation within Cave Run Lake in order to augment the City's water supply. MUPB approved to move forward and execute a Contributed Funds Agreement.

FY 20 Planned Activities:

Notification of intent to accept contributed funds submitted to Congress. Execution of Contributed Funds Agreement and initiation of water demand model and water supply needs analysis.

FY 21 Planned Activities:

Initiation and completion of Feasibility Study and Final Reallocation Report and Water Supply Storage Agreement. Approval of the Final Report and execution of a Water Storage Agreement will take place concurrently. The approval level for the Water Supply Agreement is the Assistant Secretary of the Army for Civil Works.

Issues and Other Information:

The City of Morehead, KY submitted a Letter of Intent to initiate the feasibility of a water supply storage reallocation within Cave Run Lake in order to augment the City's water supply. The Corps and the City of Morehead plan to execute a Contributed Funds Agreement in FY2020. The City (MUPB) will provide funds in the amount of \$250,000 to complete this study.

Typically, the feasibility study is cost shared 50% Federal / 50% non-Federal. Due to the importance of this study to the Sponsor, the Sponsor opted to use a Contributed Funds agreement to complete the work.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative Harold Rogers
Representative Andy Barr

Town Branch Park Conceptual Plan Technical Assistance Study



Artist's conceptualization of water features within Town Branch Park.

Current Phase:

Study

Location and Description:

This Planning Assistance to States (PAS) study will assist the Town Branch Fund in collecting data to plan the construction of Town Branch Park in the heart of downtown Lexington, Kentucky. Town Branch Creek is the focus of this restorative park design.

Authorization:

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

FY19 Activities:

Initiate and complete environmental site assessment, surveys, and geotechnical work.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|---------------------|
| Estimated Federal Cost | \$175,000 |
| Estimated Non-Federal Cost | \$175,000 |
| Total Estimated Project Cost | \$350,000 |
| Allocation thru FY19 | \$175,000 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY19 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

Prepare the final report, submit the report to the local sponsor, and closeout the project.

Issues and Other Information:

None

Congressional Interest:

Sen. Rand Paul
Sen. Mitch McConnell
Rep. Andy Barr

Northern Kentucky Riverfront Ecosystem Restoration Feasibility Study



Above: Tentatively Selected Plan Location and Restoration Measures

Current Phase: Feasibility

Location and Description:

The project area is located along 12 miles of the Ohio River across from Cincinnati, OH. The project area includes the riparian areas of the cities of Ft. Thomas, Dayton, Bellevue, Newport, Covington and Ludlow, including about ½ mile upstream of the Licking River from the mouth of the Ohio River.

A feasibility level study is being performed for ecosystem restoration and compatible recreation along the Ohio River and the mouth of the Licking River. The primary goal is to restore riparian structure and function, including geomorphology, vegetation and wildlife, with the potential added benefit of enhancing compatible public access to the rivers. Incidental benefits also include providing additional retention time for stormwater and flood waters.

Authorization:

Section 1135 of Water Resources Development Act of 1986, as amended – Aquatic Ecosystem Restoration Study

FY19 Activities:

Termination and conversion of the GI Feasibility Study to a CAP 1135 project, execution of the Feasibility Cost Share Agreement, release draft Detailed Project Report (DPR) and integrated Environmental Assessment for concurrent policy, public, and agency review.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|--------------|
| Estimated Federal Cost | \$20,000 |
| Estimated Non-Federal Cost | \$20,000 |
| Total Estimated Project Cost | \$40,000 |
| Allocation thru FY19 | \$20,000 |
| Balance to Complete after FY19 | \$0 |
| President's Budget FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

Completion of all necessary levels of review for the detailed project report. Approval of the final version of the report and completion of the feasibility phase. Negotiate a multi-party project partnership agreement with the cities of Dayton, Bellevue, Newport, Covington and Ludlow for the implementation phase.

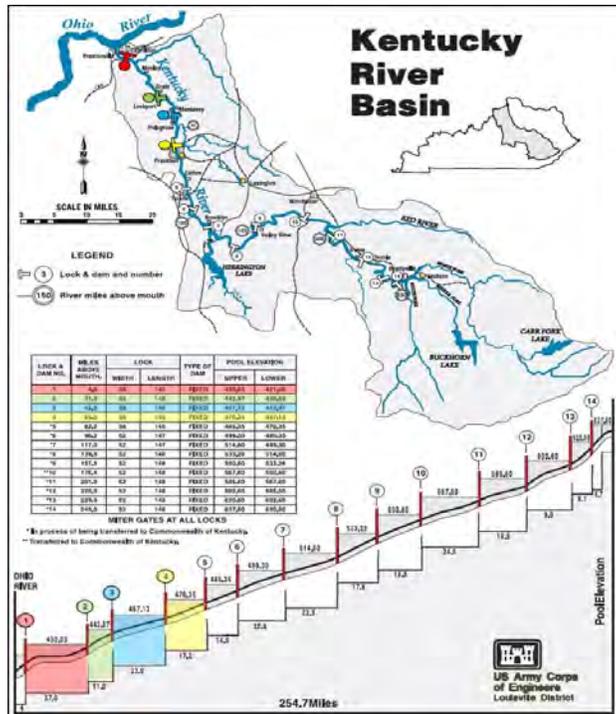
Issues and Other Information:

Under the General Investigations Feasibility Study phase, this project had a total cost of approximately \$880,000. Under the Continuing Authorities Program, and additional \$40,000 will go towards the completion of the Detailed Project Report.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Thomas Massie

Kentucky River Locks and Dams 1-4 Disposition Study



Kentucky River Navigation System

Current Phase:

Disposal

Location and Description:

The study area begins at the confluence of the Kentucky River with the Ohio River in Carrollton, KY (545.9 miles below Pittsburgh) and extends upstream (south) approximately 82 miles to Lock and Dam 5 near Lawrenceburg, KY. The study area includes the physical structures for KY 1-4, as well as the navigation pools that they form.

The Disposition Study recommended that Kentucky River Locks and Dams 1-4 should be deauthorized for commercial navigation (Congressionally authorized purpose) and conveyed through special legislation to the Kentucky River Authority.

Authorization:

Section 1331 (c) of the America's Water Infrastructure Act of 2018

Summarized Financial Data:

| | Disposal |
|---------------------------------|-----------------|
| Estimated Federal Cost | \$300,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$300,000 |
| Allocation thru FY19 | \$100,000 |
| Balance to Complete after FY19 | \$200,000 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$200,000 |
| FY21 President's Budget | \$0 |

FY 2019 Activities:

Initiation of cultural resource surveys and Memorandum of Agreement. Contract award for cultural resource work.

FY20 Planned Activities:

Complete disposal including completion of cultural resources surveys, Completion of the Memorandum of Agreement (MOA) and the associated deed transfer documents, and coordination with the State Historic Preservation Office. The MOA will include the identification of applicable mitigation and potential deed restrictions.

Issues and Other Information:

None.

Congressional Interest:

- Sen. Mitch McConnell
- Sen. Rand Paul
- Rep. Thomas Massie
- Rep. Andy Barr

Floyds Fork Ecosystem Restoration, Kentucky



Floyds Fork, Kentucky

Current Phase:

Feasibility

Location and Description:

Floyds Fork is a 62-mile long tributary to the Salt River that runs through Henry, Jefferson, and Bullitt Counties in Kentucky.

Work under this authority includes aquatic ecosystem restoration projects that will improve the quality of the environment, are in the public interest, and are cost-effective. The focus of this effort is a feasibility study to identify ecosystem restoration opportunities along Floyds Fork to create, enhance and/or protect wetland and wildlife habitat within the Floyds Fork watershed.

Authorization:

Section 206 of the Water Resources Development Act of 1996 (P.L. 99-662), as amended – Aquatic Ecosystem Restoration Study

FY 2019 Activities:

Execution of the feasibility cost share agreement occurred on 5 August 2019. Subsequent to that signing, the Corps submitted an invoice to the non-Federal sponsor for their required cost share funds.

Summarized Financial Data:

| | <u>Feasibility</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$130,000 |
| Estimated Non-Federal Cost | \$ 30,000 |
| Total Estimated Project Cost | \$160,000 |
| Allocation thru FY19 | \$100,000 |
| Balance to Complete After FY19 | \$30,000 |
| President's Budget FY20 | \$0 |
| Allocation thru FY20 (JAN 2020) | \$30,000 |
| FY21 President's Budget | \$0 |

Planned FY 20 Activities:

Formulation of ecosystem restoration measures and alternatives, completion of the environmental assessment, preparation of the detailed project report, and completion of the feasibility study.

Issues and Other Information:

None.

Congressional Interest:

Sen. Mitch McConnell
 Sen. Rand Paul
 Rep. John Yarmuth
 Rep. Brett Guthrie
 Rep. Thomas Massie

**Buechel Branch Flood Mapping
Louisville, Kentucky**



Louisville Metropolitan Sewer District is the Non-Federal Sponsor

Current Phase:

Study

Location and Description:

This study area is located in eastern Jefferson County, Kentucky on the Buechel Branch of Beargrass Creek.

This Planning Assistance to States (PAS) project will provide Louisville Metropolitan Sewer District (MSD) with an update of floodplain mapping on Buechel Branch in Jefferson County, Kentucky.

Authorization:

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

FY 2019 Activities:

The floodplain mapping on Buechel Branch will be completed in March 2019. The PAS study was completed in 2019.

FY 2020 Planned Activities:

None. Study is complete.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|---------------------|
| Estimated Federal Cost | \$40,422 |
| Estimated Non-Federal Cost | \$40,422 |
| Total Estimated Project Cost | \$80,844 |
| Allocation thru FY19 | \$40,422 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY19 Allocation (thru OCT 2019) | \$0 |
| FY20 President's Budget | \$0 |

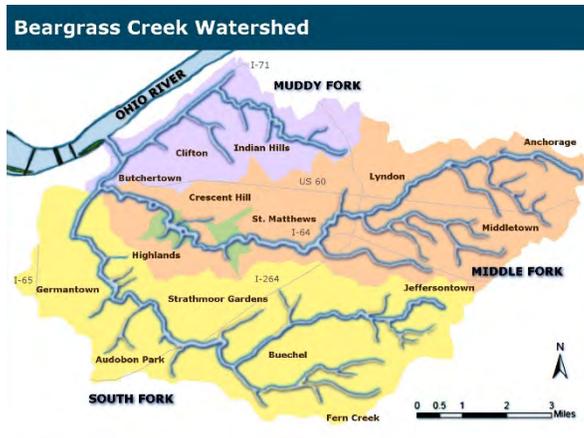
Issues and Other Information:

None at this time.

Congressional Interests:

Senator Mitch McConnell
Senator Rand Paul
Representative John Yarmuth

Three Forks of Beargrass Creek Jefferson County, Kentucky



Beargrass Creek Watershed, Jefferson County, Kentucky

Current Phase:

Feasibility

Location and Description:

The study area includes three major branches of Beargrass Creek; the South Fork, the Middle Fork, and the Muddy Fork, in Jefferson County, KY. The three forks converge just east of downtown Louisville before discharging into the Ohio River.

The primary issue this study will investigate is the restoration of natural stream meanders, improvement of instream structure, creation of wetland habitat, and restoration of riparian corridors along the three forks of Beargrass Creek. The existing stream channelization, flow manipulations, and elimination of riparian buffers have resulted in increased water temperatures, low dissolved oxygen content, and stressed aquatic ecosystems in a stream channel that bisects an Olmsted park, a botanical gardens, a State Nature Preserve, and the Louisville Zoo.

Authorization:

Resolution adopted on 5 May 1987 by the Committee on Environment and Public Works of the United States Senate.

FY19 Activities:

Feasibility Cost Share Agreement with Louisville and Jefferson County Metropolitan Sewer District was executed on 5 August 2019. Project Management Plan was initiated.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|--------------|
| Estimated Federal Cost | \$1,500,000 |
| Estimated Non-Federal Cost | \$1,500,000 |
| Total Estimated Project Cost | \$3,000,000 |
| Allocation thru FY19 | \$250,000 |
| Balance to Complete after FY19 | \$1,250,000 |
| President's Budget FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

Complete the initial scoping phase. Sign Project Management Plan that includes the scope, schedule, and budget for the study. Approve Review Plan that identifies the responsible entities and team members for various levels of review of the draft detailed project report. Conduct Alternatives Milestone Meeting in March 2020.

Issues and Other Information:

None.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. John Yarmuth

Metro Louisville, Kentucky Flood Protection System



Aging Pump Station - Louisville, Kentucky

Current Phase: Feasibility Study

Location and Description:

The project consists of a levee and floodwall system, with numerous pumping stations for maintaining interior drainage in times of flooding. The project was constructed between March 1947 and March 1956, and was assigned to local interests in February 1957. The project affords protection for loss of life and property damage to the City of Louisville against an Ohio River flood equal to the maximum flood of record (January 1937). The project is operated and maintained by the Louisville and Jefferson County Metropolitan Sewer District (MSD). The feasibility study consists of an investigation of the rehabilitation work needed for the repair/replacement of aging project features including floodwalls, gate structures, and pump station equipment constructed as a part of the project which was originally authorized by Section 4 of the Flood Control Act of June 28, 1938 (52 Stat. 1217).

The area protected includes a major medical complex in downtown Louisville, including University Hospital, the region's major trauma center; the downtown entertainment district; and the national headquarters for Humana. Also included within the line of protection are the University of Louisville main campus as well as Old Louisville, the nation's largest Victorian neighborhood, and a National Register District.

Authorization:

Section 216 of the Flood Control Act of 1970.

FY 19 Activities:

The Draft Feasibility Study was prepared and the Tentatively Selected Plan was briefed to the Vertical Team in September 2019. The Feasibility Report

Summarized Financial Data:

| | <u>Feasibility</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$2,000,000 |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | \$2,000,000 |
| Allocation thru FY19 | \$1,000,000 |
| Balance to Complete after FY19 | \$1,000,000 |
| President's Budget for FY19 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$500,000 |
| FY21 President's Budget | \$0 |

continues to undergo Quality Control reviews including District Quality Control and Agency Technical Review.

FY20 Planned Activities:

The feasibility report is currently undergoing concurrent review and will be completed in FY20, culminating with a signed Chief's Report at the end of FY20. Design may be initiated in FY20 upon authorization of the project.

Issues and Other Information:

A 2008 Initial Appraisal study examined ten pumping stations over 50 years old and determined that federal involvement in a detailed study to reconstruct or replace the pumping stations is warranted. The feasibility study authority contained in Section 4044 of the Water Resources Development Act of 2007 did not limit the study to the pumping stations, but authorized the investigation of measures to address the rehabilitation of the project. Project features including the pump stations have been in service for sixty years, and although well maintained, pose a risk to system reliability. In 2004, MSD commissioned a study of the pumping stations in an effort to determine potential problems and prioritize resources to aid in resolution of these problems. The pump motors in these stations are all originals. This equipment has also exceeded its life expectancy and has become increasingly difficult to service due to a scarcity of parts. Due to age, replacement of broken or worn out parts sometimes results in nationwide searches for expensive, rare, used parts. As years pass, obsolescence is getting progressively worse and chances of equipment failure are increasing, especially when placed under heavy loads.

Increased development in the watersheds upstream and in the project area combined with the current reality of larger frequent severe weather resulted in a need to evaluate and determine the existing flood protection system's capacity to manage the increased flood runoff.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. John Yarmuth

Veterans Affairs Medical Center (VAMC) Louisville



Artists' rendering of the east entrance to the VAMC - Louisville, Kentucky

Current Phase:

Design/Construction Procurement

Location and Description:

The project is located in Louisville, KY. The project includes a new approximately 910,000 square foot medical facility, 18,800 square foot regional laundry, and 44,200 square foot central utility plant - a total of approximately 973,000 square feet of new construction. The project also includes new structured parking for approximately 2,600 cars. The associated scope also includes new infrastructure including underground utilities, roadways, sidewalks, perimeter fencing, landscaping and other site improvements. The overall project will replace the existing Louisville VA Medical Center (Robley Rex), which opened in 1952. The existing property will be disposed of once vacated. This disposal effort is not included in this construction contract.

Authorization:

Interagency Agreement (IAA) between VA CFM and USACE, Number VA101F-15-M0005, Order 0001, dated 31 AUG 2015.

FY 19 Activities:

Continued progress on design, to include incorporation of three User Requested Changes.

FY20 Planned Activities:

Complete design efforts, to include incorporation of two additional User Requested Changes, and advertise project.

Summarized Financial Data:

| | <u>Construction</u> |
|--------------------------------|----------------------------|
| Estimated Federal Cost | \$860,000,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$860,000,000 |
| Appropriations thru FY19 | |
| - No year FY09 | \$ 75,000,000 |
| - FY16 | \$ 75,000,000 |
| - FY19 | \$300,000,000 |
| President's Budget for FY20 | \$410,000,000 |
| Balance to Complete After FY20 | \$0 |

Issues and Other Information:

Record of Decision (ROD) for site location was signed by VA Secretary Shulkin on 12 October 2017. The ROD established the location and recommended the current scope described above. However, the City of Crossgate filed a lawsuit against the DVA in March 2018, challenging the site selection process. Therefore, the DVA advised USACE in September 2018 not to proceed with any solicitation until the Administrative Record is certified by the court, which has yet to occur.

USACE and a multi-disciplined team is continuing to review and finalize the construction documents for the project, including the incorporation of User Requested Changes due to criteria updates. USACE and CFM are continuing to prepare for advertisement once the litigation is concluded. The litigation could potentially continue past the current planned advertisement date of December 2020. Current escalation estimates indicate litigation delay could cause total project cost to exceed project authorization.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. John Yarmuth

Falls of the Ohio National Wildlife Conservation Area Master Plan Update



Falls of the Ohio – 2018 Land Classification Map

Current Phase:

Master Plan Update

Location and Description:

The Falls of the Ohio National Wildlife Conservation Area (NWCA) boundary encompasses approximately 1,400 acres of land and water, and is located in the Ohio River immediately downstream of the Kentucky and Indiana Railroad Bridge and the upper tainter gates and dam of McAlpine Locks and Dam. The Downstream boundary is the Kentucky and Indiana Railroad Bridge. The metropolitan areas of Louisville, Kentucky; Jeffersonville, Clarksville, and New Albany, Indiana surround the area.

The master plan update provides guidance for the preservation, conservation, restoration, maintenance, management and development of project lands, waters and associated resources located at the NWCA.

Authorization:

The NWCA was authorized by Title II of Public Law 97-137 which was signed into law on December 29, 1981

Summarized Financial Data:

| | <u>Master Plan</u> |
|---------------------------------|---------------------------|
| Estimated Federal Cost | \$198,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$198,000 |
| Allocation thru FY19 | \$198,000 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY19 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY 2019 Activities:

Completion of the Falls of the Ohio NWCA Master Plan Update.

FY20 Planned Activities:

Project is complete.

Issues and Other Information:

None

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. John Yarmuth

City of Shepherdsville Development of a Comprehensive Riverine Master Plan



Old Iron Bridge on Salt River upstream of project site (Shepherdsville, Kentucky)

Current Phase:

Study

Location and Description:

This Planning Assistance to States (PAS) study will assist the City of Shepherdsville in improving access to the Salt River by means of a riverfront park master plan.

Authorization:

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

FY19 Activities:

Advertised and awarded contract for collection of data. Initiated a series of public and stakeholder meetings to gain input on desired inputs for the master plan.

Summarized Financial Data:

| | <u>Study</u> |
|---------------------------------|---------------------|
| Estimated Federal Cost | \$100,000 |
| Estimated Non-Federal Cost | \$100,000 |
| Total Estimated Project Cost | \$200,000 |
| Allocation thru FY19 | \$100,000 |
| Balance to Complete after FY19 | \$0 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

FY20 Planned Activities:

Completion of the draft report and approval of the final comprehensive master plan report is planned in FY20. Final approval of the Shepherdsville Park Master Plan expected in March 2020.

Issues and Other Information:

None

Congressional Interest:

Sen. Rand Paul
Sen. Mitch McConnell
Rep. Brett Guthrie

Wabash River Dikes



Current Phase:

Design and Construction

Location and Description:

The project area is located in the Ohio River near the confluence with the Wabash River.

Authorization:

P.L. 116-20

FY19 Activities:

No activities were initiated in FY2019 since no Federal funds were received.

Planned FY20 Activities:

FY19 O&M Supplemental funds will be used to prepare the Project Management Plan (PMP) and develop a resource loaded schedule. Initiate required Real Estate activities necessary for easements and acquisitions, cultural investigations and ecological assessments. Continue hydraulic modeling needed to aid design and move plans and specs forward.

Summarized Financial Data:

| | <u>Construction</u> |
|----------------------------------|---------------------|
| Estimated Federal Cost | \$26,000,000 |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | \$26,000,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$26,000,000 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020)* | \$625,000 |
| FY21 President's Budget | \$0 |

*FY19 O&M Supplemental Funds

Issues and Other Information:

The FY19 Supplemental (O&M) Bill authorized \$26M for the design and construction of river dikes in the Ohio River near the confluence of the Wabash River. In 2008, the Wabash River cut-through reduced the river by 13 miles. This has resulted in an annual dredging of the Ohio River near the mouth of the Wabash River at a cost of \$1.5M (2016 dollars) annually. Prior to 2008 (1932-2007), the average annual dredging cost was only \$86K (2016 dollars). The construction of river dikes is being evaluated, which should reduce the need for dredging in this area.

Congressional Interests:

Sen. Todd Young (IN)
 Sen. Mike Braun (IN)
 Sen. Mitch McConnell (KY)
 Sen. Rand Paul (KY)
 Sen. Richard J. Durbin (IL)
 Sen. Tammy Duckworth (IL)
 Rep. Larry Bucshon (IN-08)
 Rep. James Comer (KY-01)
 Rep. John Shimkus (IL-15)

John T. Myers Locks and Dam, IN and KY



J.T. Myers 600' Lock Extension

Current Phase:

Construction

Location and Description:

The project is located on the right bank of the Ohio River at river mile 846.0' approximately 3.5 miles downstream of Uniontown, KY, with the lock chambers towards the Indiana shore.

The John T. Myers Lock Extension Project will extend the existing 600-foot long auxiliary lock chamber to a 1,200-foot long lock chamber. This effort will give the navigation facility twin 1,200-foot locks for inland navigation tow traffic. This additional lock capacity will enable the facility, in operation since 1969, to manage tow traffic during planned and unscheduled main lock closures without significant delays to inland navigation. Many contracts are required to design and construct the project. Preconstruction, Engineering and Design (PED) efforts since 2000 have included hydraulic model studies and engineering analysis and foundation explorations towards preparation of project plans and specifications.

Authorization:

Water Resources Development Act (WRDA) 2000, Public Law 106-541

FY19 Activities:

No activities were completed in FY2019 since no Federal funds were available.

Planned FY20 Activities:

FY 2020 funds, if available, would be used to re-evaluate the cost and economics of the current approved plan.

Issues and Other Information:

In September 2004, the Corps awarded the first site preparation contract for construction of an Operations

Summarized Financial Data:

| | <u>Construction</u> |
|---------------------------------|----------------------------|
| Estimated Federal Cost | \$226,561,000 |
| Estimated Non-Federal Cost | \$216,239,000 |
| Total Estimated Project Cost | \$442,800,000 |
| Allocation thru FY19 1/ | \$19,456,946 |
| Balance to Complete After FY19 | \$423,343,054 |
| President's Budget for FY20 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$0 |
| FY21 President's Budget | \$0 |

1/ Includes funds (\$10,110,000) provided by the American Recovery and Reinvestment Act of 2009 (ARRA), Public Law 111-5, which are not cost shared with IWTF appropriations.

Support Facility. Those construction activities were completed in late 2005. The remaining site preparation contracts will include: a) excavation of the river bank to widen the upper lock approach; b) construction of a Resident Engineer's building; c) miter gate storage area, with spare gate; and d) implementation of aquatic mitigation. Based upon physical modeling, it is necessary to widen the upper approach area for downbound entry of commercial towing vessels into the extended auxiliary lock chamber. The spare miter gate will allow the Corps to expedite both scheduled maintenance activities and emergency repairs to the existing lock miter gates. Environmental mitigation will involve installation of a series of in-water features, over three consecutive summer and fall low water seasons, to enhance aquatic habitat in the nearby vicinity of the project. Upon receipt of additional funding the District would proceed towards award of the remaining contracts. The District plans to award two contracts to construct the lock extension and its new approach walls.

The Corps of Engineers has suspended design of the project until receipt of additional funds. The American Recovery and Reinvestment Act of 2009 provided the Corps of Engineers with funding to award the contracts for construction of the upper lock approach widening and Resident Engineer's building. The approach widening contract was awarded on December 17, 2009 and was substantially complete in July 2012. The Resident Engineer's Building was awarded on March 31, 2010, and was substantially complete in December 2011.

Construction of the remaining work will be accomplished by award of both fully and incrementally-funded contracts. The schedule will be developed upon receipt of additional funds.

The John T. Myers project passes the highest tonnage of all the Ohio River high lift locks with a 600-foot auxiliary chamber. Approximately 73 million tons of commodities were shipped through the J. T. Myers locks in 2010. The project authorization was a product of the Ohio River Mainstem Systems Study, which used a

regional systems approach to address the investments needed to provide an efficient navigation system on the Ohio River Mainstem through 2060. This project represents a reinvestment in the river transportation infrastructure.

Congressional Interests:

Senator Mitch McConnell

Senator Rand Paul

Senator Todd Young

Senator Mike Braun

Senator Richard J. Durbin

Senator Tammy Duckworth

Representative John Shimkus (IL-15)

Representative Larry Bucshon (IN-8)

Representative James Comer (KY-1)

Ledbetter, Kentucky Section 14



City of Ledbetter, KY

Summarized Financial Data:

| | <u>Feasibility</u> |
|---------------------------------|--------------------|
| Estimated Federal Cost | \$100,000 |
| Estimated Non-Federal Cost | \$0 |
| Total Estimated Project Cost | \$100,000 |
| Allocation thru FY19 | \$0 |
| Balance to Complete after FY19 | \$100,000 |
| President's Budget for FY19 | \$0 |
| FY20 Allocation (thru JAN 2020) | \$50,000 |
| FY21 President's Budget | \$0 |

Current Phase:

Feasibility

Location and Description:

The project is located within the corporate city limits of Ledbetter in Livingston County, Kentucky along Riverside Drive. The project is located within the 1st Congressional District of Kentucky.

The project will examine measures of bank stabilization for slope failures along the Ohio River near Riverside Drive. The principal cause of the erosion is the scouring of the bank due to the high velocities that concentrate along the left bank of the river during high flow conditions.

Authorization:

Section 14 of the 1946 Flood Control Act, as amended.

FY19 Activities:

Received approval as a new start Continuing Authorities Program study.

FY20 Planned Activities:

Initiate the feasibility study, prepare a Federal Interest Determination, and develop a list of focused alternatives for the project.

Issues and Other Information:

Under the current Continuing Resolution, new start projects cannot be initiated. As such, this study is on hold.

Congressional Interest:

Sen. Mitch McConnell
 Sen. Rand Paul
 Rep. James Comer

Ohio River Shoreline, Paducah, KY Reconstruction Project



Pump Station #2 pipes and pumps supported by scaffolding

Current Phase:

Construction

Location and Description:

The Paducah, Kentucky Local Flood Protection Project is located in McCracken County, Kentucky, on the left bank of the Ohio River, 934.4 miles below Pittsburgh, Pennsylvania.

The project consists of rehabilitation work to the existing floodwall/levee which will involve repair/replacement of aging pumping station equipment, corrugated metal pipes, concrete, and other appurtenant features.

Authorization:

Section 5077 of the Water Resources Development Act (WRDA) of 2007, Public Law 110-114; Section 7002 of the Water Resources Reform and Development Act (WRRDA) 2014; and Section 1401 of the Water Infrastructure Improvement (WIIN) Act of 2016, Public Law 114-322

FY 2019 Activities:

The Phase 2 construction contract was awarded in July 2019.

FY 2020 Planned Activities:

The Phase I construction contractor continues to prepare the pump stations 7 and 11 for new pumps. The Phase II construction contractor is currently providing all necessary initial contract required documents for review.

Issues and Other Information: The Paducah, KY Local Flood Protection Project was removed from the Rehabilitation Inspection Program under Public Law 84-99, in the fall of 2007, because of corroded metal drainage pipes. The City of Paducah risked FEMA decertification of their local flood protection

Summarized Financial Data:

| | |
|---------------------------------|--------------|
| Estimated Federal Cost | \$24,247,473 |
| Estimated Non Federal Cost | \$13,056,332 |
| Total Estimated Project Cost | \$37,303,805 |
| Allocation thru FY19 | \$20,309,900 |
| Balance to Complete after FY19 | \$4,000,000 |
| FY20 President's Budget | \$0 |
| FY20 Allocation (thru JAN 2020) | \$4,000,000 |
| FY 21 President's Budget | \$0 |

project if they did not soon repair corroded metal pipes that drain normal storm water runoff through the earthen levee and into the river. Failure of those drainage pipes could cause interior flooding or breach the earthen levee, and thus threaten the local population and damage properties. The City completed repair of the pipes and was recertified in the Rehabilitation Inspection Program in January 2010. Section 5077 of WRDA 2007 provided authority for the project and contained language indicating that the "Secretary shall complete a feasibility report" and, if feasible, "carry out the project at a total cost of \$3,000,000." Section 2003 of WRDA 2007 provides non-Federal interests may receive in-kind credit for costs of planning, design, management, mitigation, construction, and construction services. Once the PPA was executed in July 2017, these Work In-Kind (WIK) costs can now be credited towards the sponsor's contribution of matching funds.

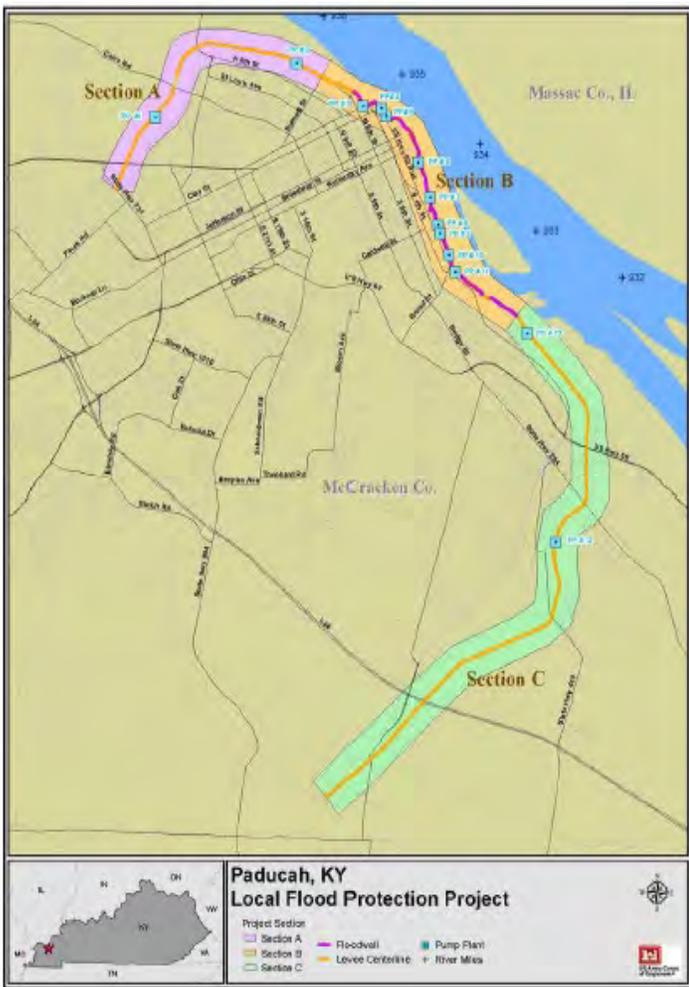
The estimated total project cost, as developed in the feasibility study, was authorized in WRDDA 2014 for \$20,700,000. Estimated project costs have increased since this authorization. A Post Authorization Change Report (PACR) was prepared and approved. Based on language in the Water Infrastructure Improvement (WIIN) Act of 2016 the project was reauthorized to \$31,246,000.

CONGRESSIONAL INTERESTS:

Senator Mitch McConnell
Senator Rand Paul
Representative James Comer (KY-1)

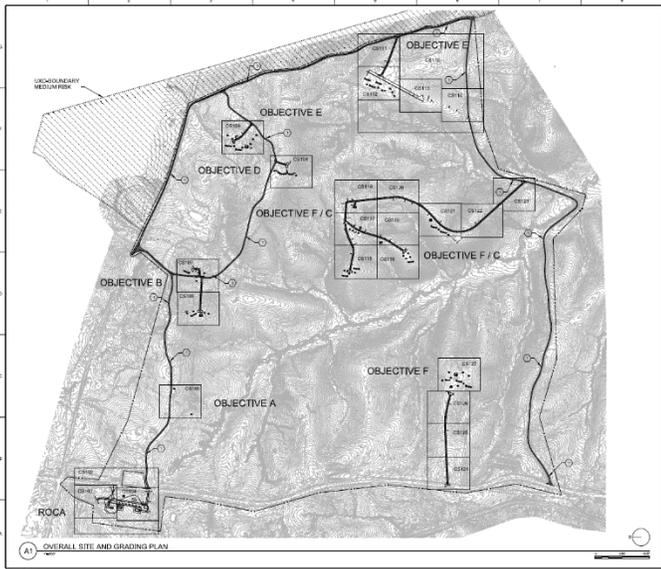


Vicinity Map – Paducah, KY



Project Area Map

Fort Campbell, KY – Automated Infantry Platoon Battle Course



FY20 Activities:

Complete full design, advertise and award construction contract by 30 Sep 2020.

FY21 Planned Activities:

Construction execution.

Issues and Other Information:

NSTR

Summarized Financial Data:

Estimated Federal Cost

Construction

\$7,100,000

Congressional Interest:

Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Sen. Lamar Alexander (TN)
Sen. Bob Corker (TN)
Rep. James Comer (KY)
Rep. Marsha Blackburn (TN)

Current Phase:

Advertisement/award

Location and Description:

Construct a modified infantry platoon battle course at Fort Campbell, KY.

Authorization:

FY20 Military Construction, Army

Fort Campbell, KY – Avigation Easements



FY20 Activities:

Issue offers to sell packages to landowners, negotiate (if required) and execute closings.

FY21 Planned Activities:

Pursue condemnation (if required).

Issues and Other Information:

NSTR

Summarized Financial Data:

Estimated Federal Cost

Construction

\$3,200,000

Congressional Interest:

Sen. Mitch McConnell (KY)

Sen. Rand Paul (KY)

Sen. Lamar Alexander (TN)

Sen. Bob Corker (TN)

Rep. James Comer (KY)

Rep. Marsha Blackburn (TN)

Current Phase:

Advertisement/award

Location and Description:

Acquire real estate interests on approximately 357 acres (320 acres of restrictive avigation easements and 37 acres of fee purchase) within the primary flight approach (05-23) of Fort Campbell Army Airfield (CAAF) main runway.

Authorization:

FY20 Military Construction, Army

**Fort Campbell, KY –
Trestle Bridge (Railroad Bridge 49)**



Current Phase:
Construction

Location and Description: The Trestle Bridge Railroad Bridge 49 (RRB49) is located approximately 10.5 miles north of Fort Campbell, Kentucky in Christian County. The project will develop the full design of a concrete girder bridge to replace the existing wooden Trestle Bridge.

Authorization:
FY18 Operation & Maintenance, Army

FY19 Activities:

Awarded the Replacement of the Trestle Bridge on 15 November 18 in the amount of \$5.7M. Begin demolition and construction efforts.

FY20 Planned Activities:

Completed the replacement of the Trestle Bridge on December 2019 and open the rail line on 18 Dec 19.

Issues and Other Information:

The Trestle Railroad Bridge is part of the main route for deployment activities by Ft Campbell forces.

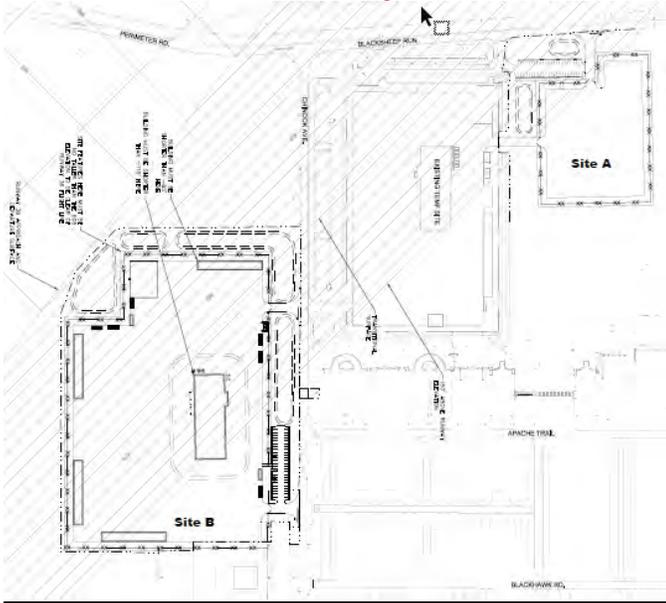
Summarized Financial Data:

| | <u>Construction</u> |
|-------------------------------|----------------------------|
| Estimated Federal Cost | \$6.7M |
| Actual cost as of 30 Jan 2020 | \$6.1M |

Congressional Interest:

Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Sen. Lamar Alexander (TN)
Sen. Bob Corker (TN)
Rep. James Comer (KY)
Rep. Marsha Blackburn (TN)

Fort Campbell, KY – Vehicle Maintenance Shop



Current Phase:
Design.

Location and Description:

The project will construct a Vehicle Maintenance Shop (VMS) at Fort Campbell, KY. The VMS facility will include 58,200 SF Tactical Equipment Maintenance Facility (TEMF), a 63,074 SY Organizational Vehicle Parking, 12,600 SF Organizational Storage Building, 5,400 SF Organizational Storage Building, 7,200 SF Organizational Storage Building, and two 840 SF POL/Hazardous Material Storage each.

Authorization:

FY19 Military Construction, Army

FY19 Activities:

N/A

FY20 Planned Activities:

Site adapt the facility at Site B.

FY21 Planned Activities:

Advertise, award a construction contract, and start construction of the new facility.

Issues and Other Information:

On 3 Oct 19, Department of Publics Work (DPW) Environmental disclosed that a Solid Waste Management Unit (SWMU) with land use controls was located at the project Site A that had not been identified previously. One option would be for Louisville District (LRL) to develop a Work Plan that would be submitted to the Kentucky Department of Environmental Protection (KDEP) for approval. This would impact the project schedule and delay the RTA for 18 months. On 7 Nov 19, Savanna District (SAS) provide a site plan to move all facilities from Site A to site B with a cost for the facility in the amount of \$27.2M. DPW agreed to proceed with the project at Site B on 19 Dec 19. SAS provide a schedule on 16 Jan 20 with a Ready to advertise (RTA) day of 30 Oct 2020. SAS would need to site adapt the facility and conduct new geotechnical investigations for Site B, in order to design the foundations for all the structures before the design could be completed.

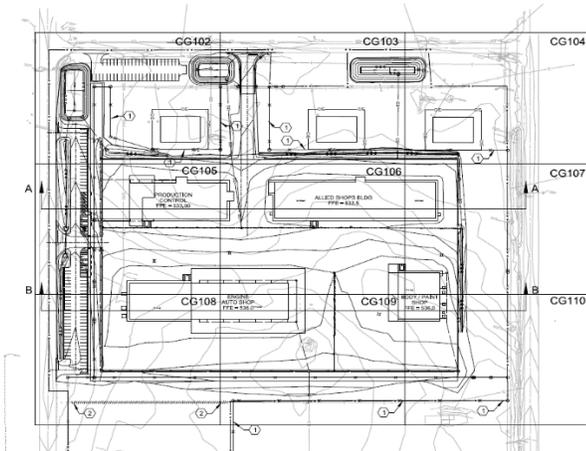
Summarized Financial Data:

| | <u>Construction</u> |
|------------------------|----------------------------|
| Estimated Federal Cost | \$32,000,000 |

Congressional Interest:

Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Sen. Lamar Alexander (TN)
Sen. Bob Corker (TN)
Rep. James Comer (KY)
Rep. Marsha Blackburn (TN)

Fort Campbell, KY – General Purpose Maintenance Shop



Current Phase:

Advertisement/award

Location and Description:

Construct a 123,000 SF Depot Level Logistics Readiness Maintenance Shop at Fort Campbell, KY.

Authorization:

FY20 Military Construction, Army

FY20 Activities:

Complete full design, advertise and award construction contract by 30 Sep 2020.

FY21 Planned Activities:

Construction execution.

Issues and Other Information:

NSTR

Summarized Financial Data:

Estimated Federal Cost

Construction

\$51,000,000

Congressional Interest:

Sen. Mitch McConnell (KY)

Sen. Rand Paul (KY)

Sen. Lamar Alexander (TN)

Sen. Bob Corker (TN)

Rep. James Comer (KY)

Rep. Marsha Blackburn (TN)

Fort Campbell, KY – Microgrid



Current Phase:

Design

Location and Description:

Install up to 12 MW natural gas power generation capacity to include generator sets, plant building(s), natural gas lines, radiators, heat exchangers, transformers, controls, optimization programming, auto switching, protective relays/interlocks, and other required equipment/appurtenances/communications to generate power to serve the critical Fort Campbell airfields and supporting substations.

Authorization:

FY19 Military Construction, Army

FY19 Activities:

Develop a design/built package of Microgrid system for a full and usable facility within \$18M. Prepare solicitation package for advertisement and award.

FY20 Planned Activities:

Complete Impact Studies and incorporate requirements in the project documents.

FY21 Planned Activities:

Prepare solicitation package for advertisement and award. Construct the facility and transfer it to the privatized utility provider.

Issues and Other Information:

There are three studies required before the project design can be completed. 1) City Light & Power Interconnection Impact Study. This study was completed October 2019 at a cost of approximately \$41K; 2) Clarksville Gas & Water Gas Flow Study and System Modeling to determine whether capacity and pressure would sustain the new facility. This was started in December 2019 with anticipated completion of April 2020; and 3) TVA Interconnection System Impact Study. Study is pending completion of the agreement between TVA and the Louisville District (LRL). Anticipated duration is six months at a cost of approximately \$100K. On 9 JAN 20, TVA acknowledged the Revised Agreement was acceptable with no comments. Impact Study shall start shortly after a 7600B is signed in Feb 2020. Design will be completed once all studies requirements are incorporated into the project documents.

Summarized Financial Data:

| | <u>Construction</u> |
|------------------------|---------------------|
| Estimated Federal Cost | \$18,000,000 |

Congressional Interest:

Sen. Mitch McConnell (KY)
 Sen. Rand Paul (KY)
 Sen. Lamar Alexander (TN)
 Sen. Bob Corker (TN)
 Rep. James Comer (KY)
 Rep. Marsha Blackburn (TN)

**Fort Campbell, KY –
SOF A/G Integration Urban Live Fire Range**



Current Phase:

Construction

Location and Description:

Construct a SOF Air/Ground Integration Urban Live Fire Range at Fort Campbell, KY.

Authorization:

FY19 Military Construction, Defense

FY20 Planned Activities:

Construction execution.

FY21 Planned Activities:

Construction execution.

Issues and Other Information:

NSTR

Summarized Financial Data:

Estimated Federal Cost

Construction

\$9,838,000

Congressional Interest:

Sen. Mitch McConnell (KY)

Sen. Rand Paul (KY)

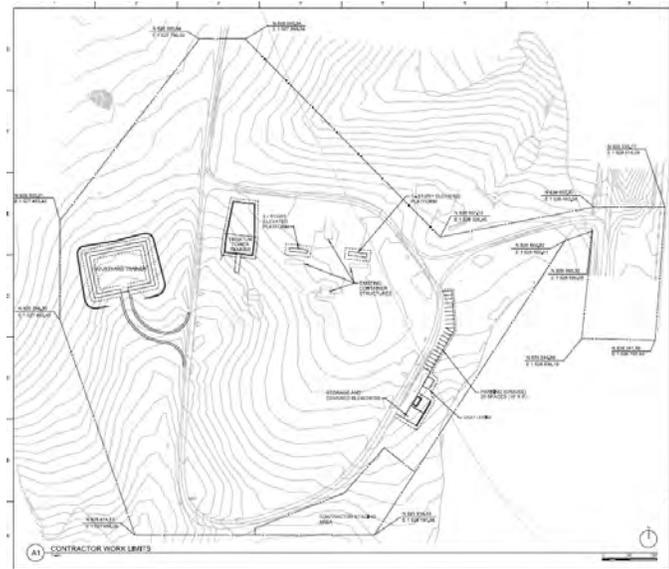
Sen. Lamar Alexander (TN)

Sen. Bob Corker (TN)

Rep. James Comer (KY)

Rep. Marsha Blackburn (TN)

**Fort Campbell, KY –
SOF Multi-use Helicopter Trng Facility**



Current Phase:

Advertisement

Location and Description:

Construct a SOF Multi-use Helicopter Training Facility at Fort Campbell, KY.

Authorization:

FY19 Military Construction, Defense

FY20 Activities:

Advertisement/award

FY21 Planned Activities:

Construction execution (if ATR approved).

Issues and Other Information:

Awaiting Above Threshold Re-programming (ATR) approval.

Summarized Financial Data:

| | |
|-----------------------------------|----------------------------|
| | <u>Construction</u> |
| SOF Multi-Use Helicopter Trng Fac | \$9,990,000 |

Congressional Interest:

Sen. Mitch McConnell (KY)
Sen. Rand Paul (KY)
Sen. Lamar Alexander (TN)
Sen. Bob Corker (TN)
Rep. James Comer (KY)
Rep. Marsha Blackburn (TN)

Fort Knox, KY – VA Community Based Outpatient Clinic



Ongoing construction of the CBOC at Fort Knox, KY. This view is the entrance of the building.

Current Phase:

Construction (Design/Build)

Location and Description:

Construct a new VA Community Based Outpatient Clinic (CBOC) at Fort Knox, KY located on 6 acres adjacent to the recently constructed Fort Knox Medical Clinic replacement project. This CBOC will be 18,093 SF with mental health and primary care capabilities.

Authorization:

Interagency Agreement (IAA) Number VA101F-15-M0005, Order 0027, between DVA and USACE, dated 15 SEP 2016.

FY 2019 Activities:

Design portion of contract completed, construction began.

FY20 Planned Activities:

Construction completion (scheduled for 02 JUL 2020).

Summarized Financial Data:

| | <u>Construction</u> |
|--------------------------------|----------------------------|
| Estimated Federal Cost | \$10,254,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$10,254,000 |
| Allocation thru FY19 | \$10,254,000 |
| President's Budget for FY20 | N/A |
| Balance to Complete After FY20 | N/A |

Issues and Other Information:

Design work completed by design-build contractor. Construction began in FEB 2019 and is currently ongoing. The contractor is behind schedule by 125 days. The new beneficial occupancy date is 02 JUL 2020. The USACE team is making every effort to assist the contractor in minimizing delay.

The current CBOC is housed in the Ireland Army Community Hospital (IRACH), which will be demolished in 1QTRFY21 as part of the Fort Knox Clinic's construction contract. Delays in CBOC construction will not affect patient coverage for veterans, but may delay the start of IRACH demolition.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie

Fort Knox, KY – DHA Medical Clinic Replacement



Completed Clinic ready for patients at Fort Knox, KY

Current Phase:

Construction

Location and Description:

New Medical Clinic sited adjacent to the current Ireland Army Community Hospital (IRACH), Fort Knox, KY at the corner of Spearhead Div Ave and Wilson Rd.

This project provides a new medical clinic replacement with clinical support activities. Supporting facilities include utilities, connection to the existing Central Utility Plant, site improvements, parking, access roads, and environmental protection measures. The contract includes the demolition of the existing IRACH.

Authorization:

FY16 Military Construction, Department of Defense Medical (PN 86953)

FY19 Activities:

Clinic Construction continued

FY20 Planned Activities:

Clinic construction complete (01 NOV 2019)

FY21 Planned Activities:

Hospital demolition begins OCT 2020

Summarized Financial Data:

| | <u>Construction</u> |
|--------------------------------|----------------------------|
| Programmed Amount | \$80,000,000 |
| Estimated Non-Federal Cost | N/A |
| Total Estimated Project Cost | \$63,100,000 |
| President's Budget for FY20 | N/A |
| Balance to Complete After FY20 | N/A |

Issues and Other Information:

Construction complete. Ribbon cutting and First Patient Date occurred as scheduled on 21 and 22 JAN20, respectively. Clinic construction experienced only 1% cost growth. Clinic was awarded LEED Gold certification at no cost to the government.

Hospital demolition work will begin in October 2020 and is scheduled for completion on 09 July 2021.

Continued synchronization with adjacent VA Community Based Outpatient Clinic (CBOC) will be vital to project success. The current CBOC is housed in IRACH, therefore delays in CBOC project completion may delay the start of IRACH demolition.

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie

Fort Knox, KY – Digital Air/Ground Integration Range



Current Phase:

Construction

Location and Description:

Construct a Digital Air/Ground Integrated Range (DAGIR) at Fort Knox, KY. This upgrade to the Fort Knox Yano Range includes range operations control area, range control tower, operations/storage building, renovation of the After Action Review (AAR) building, renovation of covered mess, renovation of ammo loading dock, and upgrade of the unit staging area. A total of 4,010 SF of new facilities will be constructed. Demolish 2 buildings at Fort Knox.

Authorization:

FY19 Military Construction, Army

FY19 Activities:

The construction contract was awarded on 26 Sep 19 to P & R JV of Elizabethtown, KY in the amount of \$22,896,809.

FY20 Planned Activities:

Execute the construction contract with completion expected FY21.

Issues and Other Information:

Started UXO clearance in SEP 2019.

Only the second range of this type in Army inventory. On October 2019 the Huntsville District (HNC) notified Louisville District (LRL) the UXO cleanup was taking more effort than anticipated and HNC run out of funds for the cleanup. On 13 DEC 19, DAMO-TRS approved \$1M to provide UXO construction support services and on 20 DEC 19 HNC informed that G3 identified funding to complete the UXO clearance of the project site north of the Rolling Fork River in the approximate amount of \$10M. HNC have been trying to get a funding assurance letter to be endorsed by the G8/Comptroller. Once the letter is provided LRL will issue a partial NTP to allow the Construction Contractor to perform work south of the Rolling Fork River. LRL estimated it would take the Contractor approximate 13 months to perform all work required south of the river.

Summarized Financial Data:

| | |
|------------------------|--------------|
| Construction | |
| Estimated Federal Cost | \$26,000,000 |

Congressional Interest:

Sen. Mitch McConnell
Sen. Rand Paul
Rep. Brett Guthrie