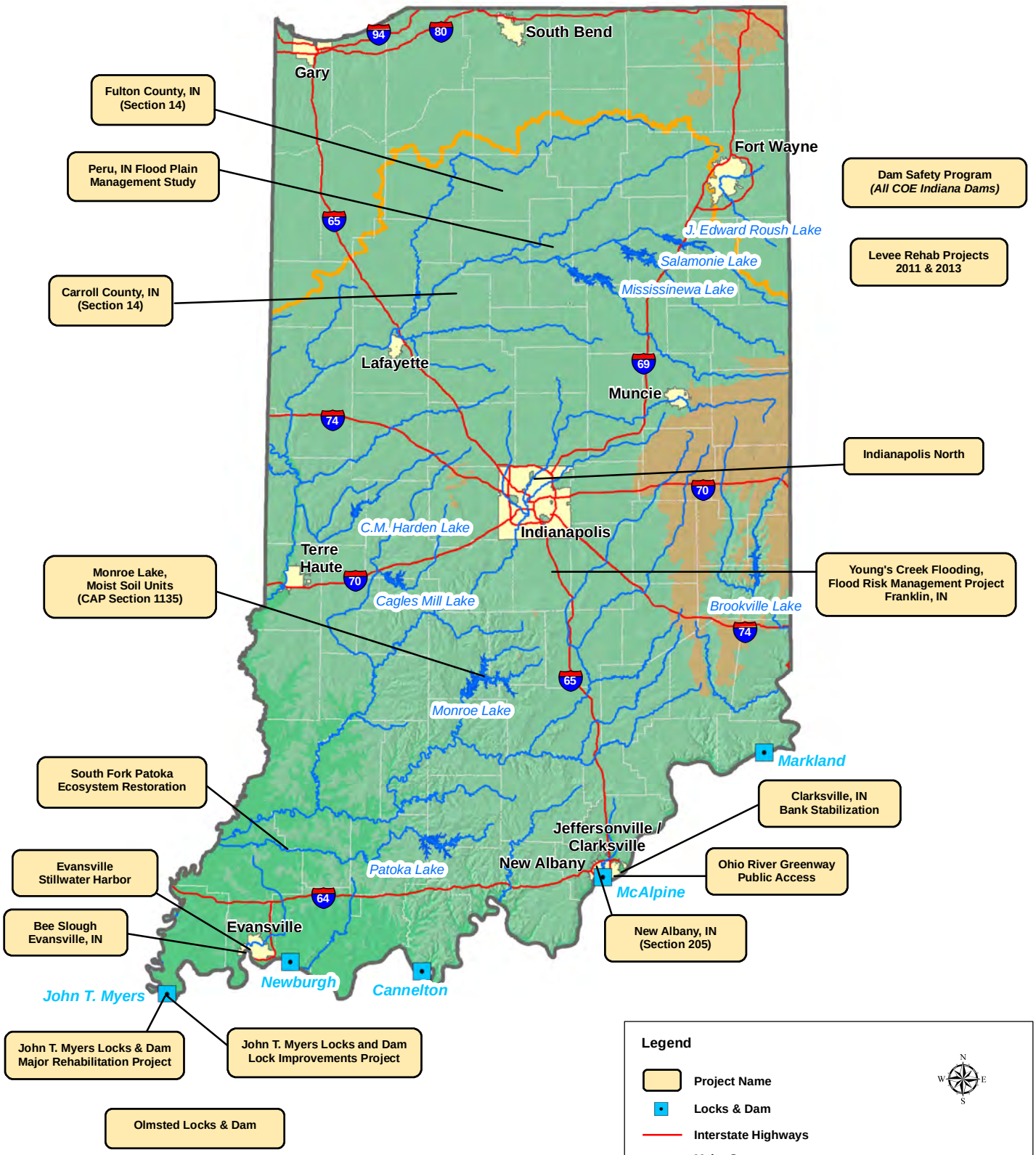
State of Indiana



YOUNGS CREEK, FRANKLIN, INDIANA

March 2016

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

Official Title: Youngs Creek Flooding, Franklin, Indiana, Flood Risk Management Project

Authorization: Section 205 of the 1948 Flood Control Act (P.L. 80-858), as amended.

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$300,000
Estimated Non-Federal Cost	$200,000
Total Estimated Project Cost	$500,000
Allocation thru FY15	$86,400
FY16 President's Budget	$0
FY16 Allocation to Date	$0
FY17 President's Budget	$0
Balance to Complete	$213,600

Project Location: Youngs Creek flows through the City of Franklin, Indiana, which lies in Johnson County and is located in south-central Indiana. Indianapolis, Indiana, is located about 20 miles to the north of Franklin. I-65 connects Franklin to Indianapolis to the north.

Project Description: The Youngs Creek watershed is 124 square miles and regularly experiences flooding every two-three years. The 2008 flood event caused over $180M in damages to government services, residences, and businesses. This study will evaluate possible flood risk management solutions.

Project Status: The Federal Interest Determination report to identify preliminary measures to address the flooding, and to evaluate the potential for Federal participation in the design and construction of those measures was approved March 9, 2015.

Non-Federal Sponsor: City of Franklin, Indiana

Where We Are Now: Negotiations for the Feasibility Cost Share Agreement (FCSA) with the City of Franklin are underway.

Issues and Other Information: None

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Map

Prairie Creek FPMS, Peru, IN

March 2016

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

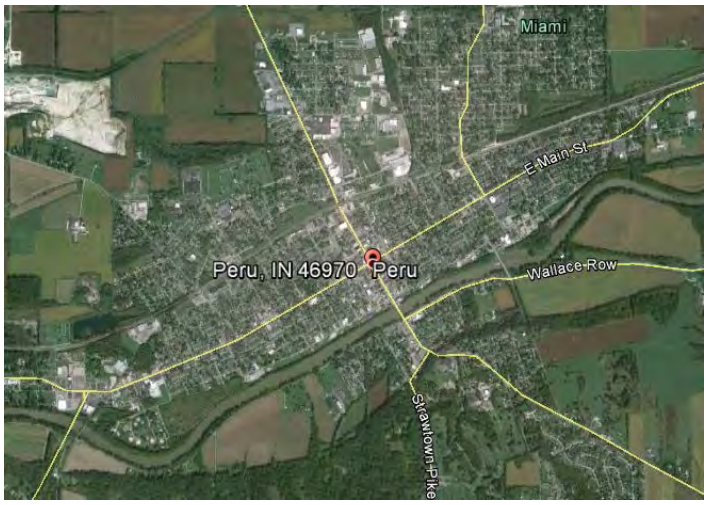
Official Title: Prairie Creek Floodplain Management Services (FPMS), Peru, IN

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

Project Phase: Feasibility

Project Location: The project is located in Peru, IN along Prairie Creek. Peru, IN is in Indiana's 5th Congressional District.

Project Description: This FPMS effort was requested by Peru, IN to review floodplain mapping produced by FEMA and the Indiana Department of Natural Resources.



Summarized Financial Data:

Estimated Federal Cost	$28,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$28,000
Allocation thru FY15	$28,000
Balance to Complete	$0
FY16 President's Budget	$0
FY16 Allocation	$0
FY17 President's Budget	$0

Project Status: Field verifications of information were completed during site visits on October 14, 2015 and December 9, 2015.

Non-Federal Sponsor: N/A

Where We Are Now: Verification of the Indiana Department of Natural Resources and Federal Emergency Management Agency floodplain modeling is nearly complete.

Issues and Other Information: None

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Map

S. Fork Patoka Ecosystem Restoration

March 2016

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

Official Title: South Fork Patoka Ecosystem Restoration

Authorization: Section 1135 of the Water Resources Development Act of 1986 (P.L. 99-662), as amended

Project Phase: Feasibility

Project Location: The general study area includes the Patoka River from Winslow to Princeton, Indiana. This project is in Indiana's 8th Congressional District.

Summarized Financial Data:

Estimated Federal Cost	$249,000
Estimated Non-Federal Cost	$149,000
Total Estimated Project Cost	$398,000
Allocation thru FY15	$50,000
FY16 Allocation	$50,000
FY16 President's Budget	$0
FY 17 President's Budget	$0
Balance to Complete	$149,000

Project Description: In the early 1920's this stretch of the Patoka River was channelized reducing 36 miles of meandering stream to a 17 mile ditch. The river has also been adversely impacted by timbering, strip mining for coal, and a Corps of Engineers flood control dam in the headwaters. This study will consider possible restoration efforts or projects along the Patoka River including restoring the naturally meandering stream pattern.

Project Status: Active

Non-Federal Sponsor: Ball State University and Indiana Department of Natural Resources (potential sponsor)

Where We Are Now: The development of a Feasibility Cost Share Agreement is underway. Completion is expected in November 2016.

Issues and Other Information: None.

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Map

Olmsted Locks and Dam Project

February 2016

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. 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.

Project Status: The two 110' X 1200' locks and approach walls are complete. The fixed weir on the Kentucky bank is complete. As of 01 February 2016, all eighteen dam tainter gate shells are set and tainter gate #1 and #2 are erected. In the navigable pass section, eight of twelve paving blocks, the right boat abutment, and six of twelve navigable pass shells have been set in the river. Foundation pile driving operations for the navigable pass are underway. Current schedule is to be dam operational in October 2018 and project complete in March 2022.

Summarized Financial Data

2012 PACR	$3,099,000,000
2014 Total Estimated Project Cost (NWW certified)	$3,098,573,000
Estimated Federal Cost	$2,047,852,000
Estimated Inland Waterways Trust Fund Cost	$1,050,721,000
Allocation thru FY16 including ARRA allocation thru 30 Sept 15	$2,227,402,000
FY 16 Budget/Capability	$180,000,000/$268,000,000
FY 17 Budget	$225,000,000
Benefit to Cost Ratio (at 7%)	3.4
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 project authorization was increased on 17 October 2013 as part of a Continuing Appropriations Act, 2014 for $2,918,000,000. The project was cost shared 50/50 with the Inland Waterways Trust Fund (IWTF) through FY2013. The FY2014 Omnibus Appropriation Act changed the split of IWTF and federal cost share to 25/75 for FY2014 only. Water Resources Reform and Development Act of 2014 changed the IWTF and federal cost share to 15/85 beginning 1 October 2014.

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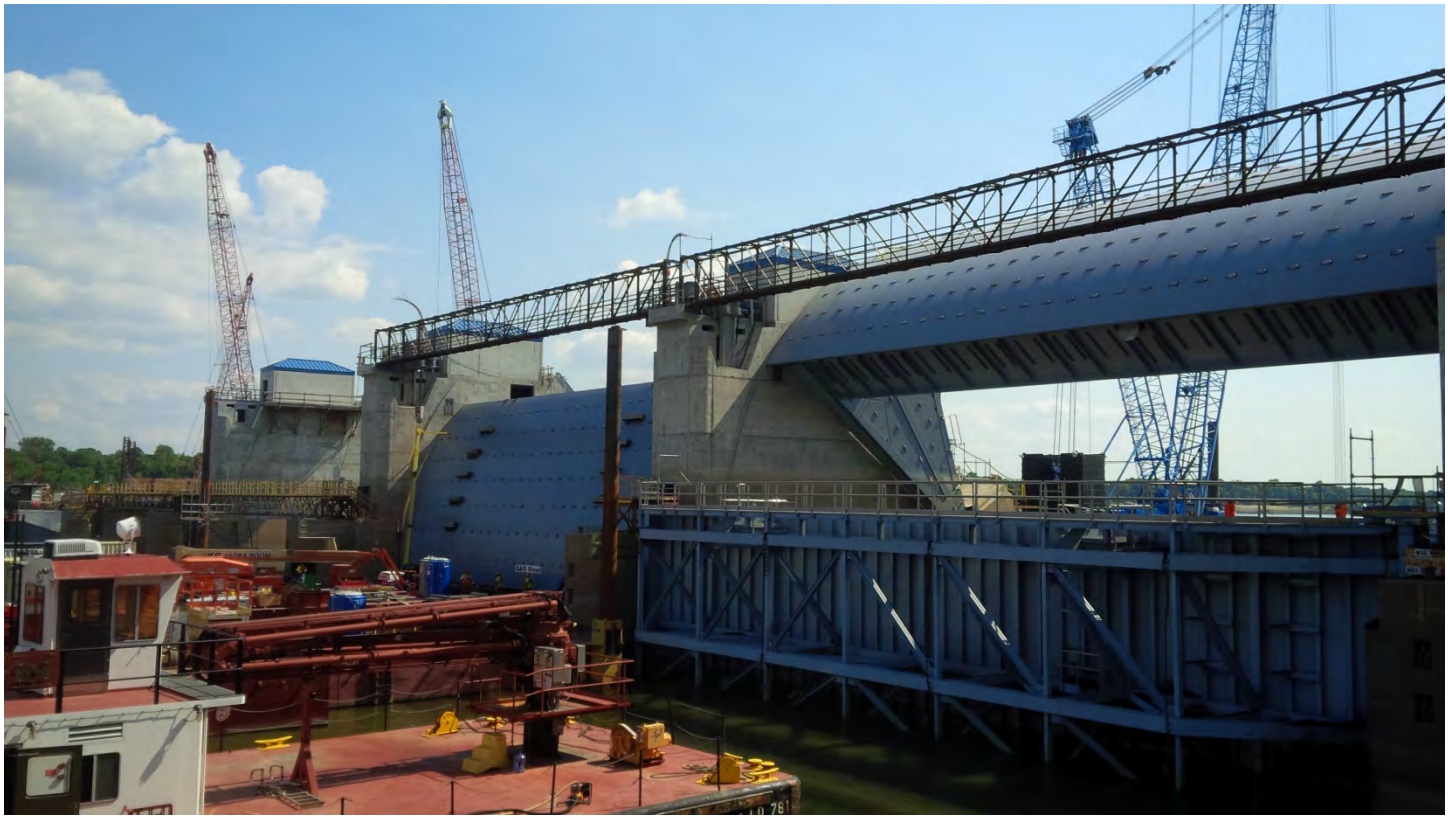
Map

As of 01 February 2016, $2,123,787,491 has been expended on the project. The annual average benefits from the Olmsted project are approximately $640M.

Upcoming Actions: The Government and navigation industry stakeholders are exposed to significant increased economic risk given the failing condition of Locks & Dams 52 & 53. Accordingly, efficient completion of the Olmsted project construction is the only sustainable mitigation measure available. Continued capability funding is required to meet a dam operational date of October 2018. Without annual capability level funding in place, the dam operational date will likely slip one or more years reverting to the less than optimum operational timeframe of September 2020 contemplated in the PACR forgoing approximately $1.28B in benefits.



Tainter Gates #1 and #2

OHIO RIVER GREENWAY, IN

March 2016

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

Official Title: Ohio River Greenway Public Access Project, Indiana

Authorization: Section 559 of the Water Resources Development Act (WRDA) of 1996, Public Law 104-303

Project Phase: Construction

Summarized Financial Data:

Estimated Federal Cost	$21,050,000
Estimated Non-Federal Cost	$21,050,000
Total Estimated Project Cost	$42,100,000
Allocation thru FY15 1/	$11,300,000
Balance to complete after FY15	$9,750,000
FY16 President's Budget	$0
FY16 Allocation	$0
FY17 President's Budget	$0

1/ Allocation thru FY13 includes $1,743,000 of ARRA funds.

Project Location: The project is located across from Louisville, Kentucky, and adjoins the McAlpine Locks and Dam project and the Falls of the Ohio National Wildlife Conservation Area in the Indiana communities of Jeffersonville, Clarksville, and New Albany. The greenway corridor is seven miles long.

Project Description: The project is being designed and constructed to provide access to the Ohio River and its environmental and recreation amenities. Access would be provided by a parkway, pedestrian and bicycle pathways, interpretive areas, passive recreation areas and trails, and it would integrate the existing and planned riverside development including the Falls of the Ohio State Park and Interpretive Center/Museum, the National Wildlife Conservation Area, and other federal and local river related facilities.

Project Status: FY09 carry-over funds, in the amount of $933,715, and a small portion of the $969,000 FY10 funds were used in FY10 to complete plans and specifications for two additional segments of the project. ARRA funds, in the amount of $1,743,000, were used to award two construction contracts in FY 10. Both contracts, one for a segment in Clarksville and the other for a segment in New Albany, were awarded in July 2010. $1.9M of the $3.643M received in ARRA funds has been reprogrammed because the non-Federal sponsor could not come up with matching funds. FY10 carry-over funds were used in FY11 to continue with design of another segment in Clarksville. Construction of the Clarksville segment was completed in 2011. Construction of the New Albany segment was completed in 2012.

Non-Federal Sponsors: Ohio River Greenway Commission, City of Jeffersonville, Town of Clarksville, and the City of New Albany, Indiana

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Map

Where We Are Now: Additional non-Federal funds are needed to design another segment of the project.

Issues and Other Information: The project was in the President's Budget in fiscal years 2001 through 2005. The project was suspended from budgeting in FY 2006 because of constrained budgets and higher priorities within the Corps.

New Albany, IN Section 205

February 2016

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

Official Title: New Albany, IN, Section 205

Authorization: Section 205 of the 1948 Flood Control Act (P.L. 80-858), as amended

Project Phase: Feasibility

Project Location: New Albany is in Indiana's 9th Congressional District. The area of New Albany of concern is the Falling Run watershed, which is the largest and most developed watershed draining the City of New Albany.

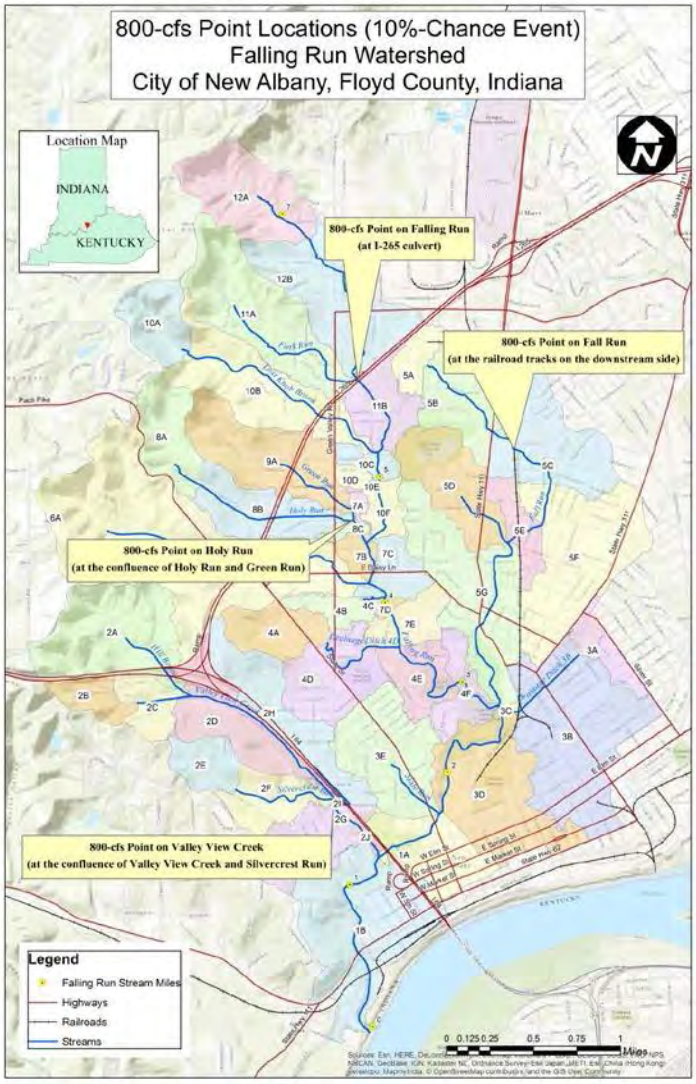
Project Description: Flood risk exists due to 258 parcels with at least one structure in the Falling Run 100-Year floodplain and 112 structures in its floodway.

Project Status: A Federal Interest Determination (FID) was completed and approved. This initial assessment was used to scope a feasibility study and negotiate a Feasibility Cost Sharing Agreement (FCSA) with a non-Federal Sponsor.

Non-Federal Sponsor: City of New Albany, IN

Where We Are Now: Both the non-Federal Sponsor and USCE are reviewing a draft FCSA.

Issues and Other Information: None



Summarized Financial Data:

Estimated Federal Cost	$275,000
Estimated Non-Federal Cost	$175,000
Total Estimated Project Cost	$450,000
Allocation thru FY15	$100,000
Balance to Complete	$175,000
FY16 President's Budget	$0
FY16 Allocation	$0
FY17 President's Budget	$0

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Map

Monroe Lake, MSUs

March 2016

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

Official Title: Monroe Lake, Moist Soil Units

Authorization: Section 1135 of the Water Resources Development Act of 1986 (P.L. 99-662), as amended

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$300,000
Estimated Non-Federal Cost	$200,000
Total Estimated Project Cost	$500,000
Allocation thru FY15	$50,000
FY16 President's Budget	$0
FY16 Allocation	$183,600
FY17 President's Budget	$0
Balance to Complete	$66,400

Project Location: The project proposed for modification is the Monroe Lake Reservoir. Monroe Lake is in the lower Wabash River watershed, 10 miles southeast of Bloomington, IN. This project is in Indiana's 9th Congressional District.

Project Description: The feasibility phase of this study will address ecosystem restoration to provide aquatic, wetland and riparian habitat adjacent to Monroe Lake. These habitat types will be restored where similar habitat was flooded out when Monroe Lake was designed and built. These different habitats will enhance flora diversity and benefit a diverse array of fish and avian species, including threatened and endangered species.

Project Status: The Feasibility Cost Sharing Agreement was executed in October 2015.

Non-Federal Sponsor: Indiana Department of Natural Resources

Where We Are Now: The Feasibility Study is underway.

Issues and Other Information: None

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Map

J. T. MYERS MAJOR REHAB

March 2016

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

Official Title: John T. Myers Locks and Dam Major Rehabilitation Project

Authorization: Section 6 of the Rivers and Harbors Act, approved 3 March 1909

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$11,300,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$11,300,000
Allocation thru FY15	$0
Balance to Complete	$0
FY16 Allocation	$0
FY17 President's Budget	$0

Project Location: John T. Myers Locks and Dam are located at Ohio River Mile 846.0, about 3 miles below Uniontown, KY.

Project Description: The John T. Myers navigation facility consists of a 1200-foot long main lock chamber, a 600-foot auxiliary lock, a high lift dam with 10 tainter gates, and a fixed weir section. In the 1990's the gated-dam was observed to have sustained significant structural damage with repair costs potentially exceeding the current inland waterways navigation major rehabilitation threshold.

A Major Rehab Evaluation study was initiated in 2001. Engineering risk analysis of the observed erosion of the large holes in the reinforced concrete stilling basin, piers, and baffle blocks within several gate bays of the dam determined a high probability of failure by 2020. Failure of a stilling basin could result in loss of the navigation pool which, during low river stages, would cease commercial traffic, disrupt municipal and industrial water intakes, and cause potential damage to marinas and fleeting facilities. This was a major finding in the report and a large part of the proposed Major Rehab scope of work. A draft report was completed in 2005. Comments from USACE HQ required additional analysis.

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Map

In 2014 the condition of the stilling basin erosion and other components of the J.T. Myers Dam were reassessed. The economic analysis and risk and reliability engineering analyses of the required repairs were updated. Observed stilling basin scour has not progressed in the last 10 years. Accordingly the probability of failure for this significant part of the major rehab scope is low and does not economically justify the cost of repairs to the dam using a dewatering box.

Other areas of concern include seizing of hinged-brackets that attach hoisting cables to the tainter gates and major maintenance needs for operating machinery and associated electrical service and controls still exist. As determined by risk and reliability analyses, various structural, mechanical and electrical components of the navigation dam will be repaired or replaced based on the maintenance priorities of the Ohio River navigation system.

Project Status: The Corps of Engineers Louisville District conducted a Major Rehabilitation Evaluation project in accordance with Appendix E of ER 1105-2-100. The Project Delivery Team (PDT) has verified that the preliminary repair costs of various required repair items that meet risk and economic viability considerations totals less than the $20 Million cost thresholds to be included in the Corps Major Rehab program. Operation and Maintenance (O&M) funds are being used to complete the report and the associated reviews.

Non-Federal Sponsor: As a Major Rehab project the cost would be cost-shared 50/50 with the Inland Waterways Trust Fund (IWTF). As major maintenance items future actions will be 100% federal funded under O&M program funds.

Where We Are Now: The PDT will complete a Major Maintenance Report which will consolidate and summarize project findings. The completed report will be provided in March 2016 to the Louisville District Operations Division for their use in preparing future maintenance O&M funded work packages.

Issues and Other Information: A Value Engineering workshop was held in November 2015 that identified the potential scope for capital investments over the next 15 years.

J. T. MYERS LOCK EXTENSION

March 2016

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

Official Title: John T. Myers Lock and Dam, Indiana and Kentucky

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

Project Phase: Construction

Summarized Financial Data:

Estimated Federal Cost	$226,561,000
Estimated Non-Federal Cost	$216,239,000
Total Estimated Project Cost	$442,800,000
Allocation thru FY15 1/	$19,456,946
Balance to Complete	$423,343,054
FY 16 President's Budget	$0
FY 16 Allocation	TBD
FY 17 Present's Budget	TBD

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.

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

Project Description: 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.

In September 2004, the Corps awarded the first site preparation contract for construction of an Operations 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 Corps would proceed towards award of the remaining contracts. The Corps plans to award two contracts to construct the lock extension and its new approach walls.

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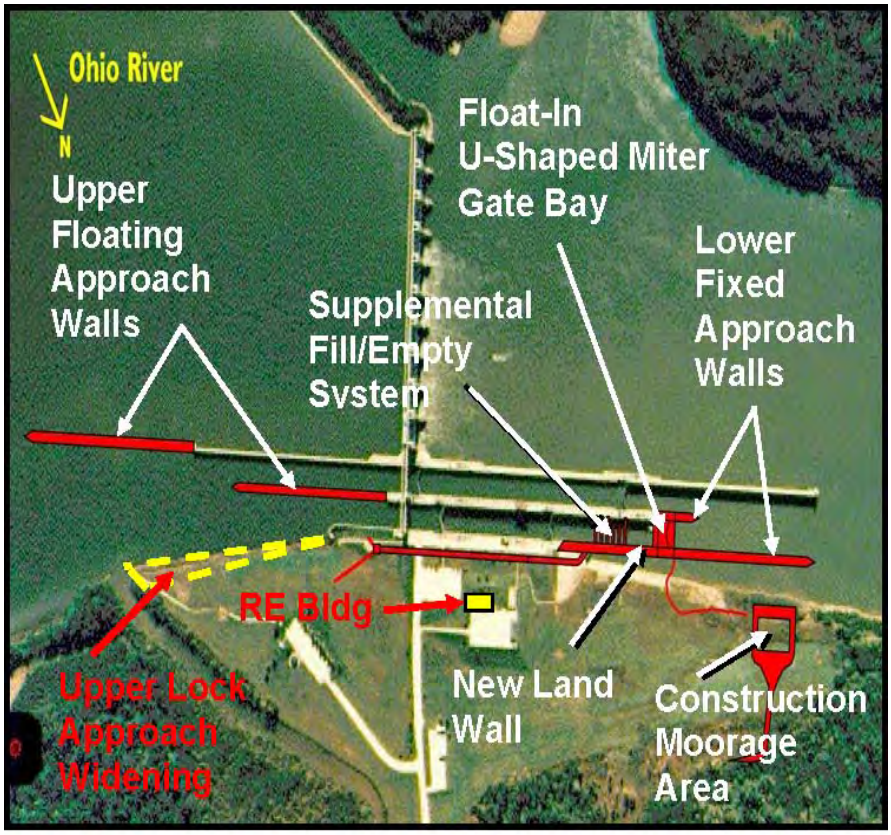
Map



Project Status: 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.

The 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.

Award FY	Contract Funding	Description of Contract Work
2010	Fully Funded	Upper Bank site prep and Access Road (ARRA-funded)
2010	Fully Funded	Construction of Resident Engineer's building (ARRA-funded)
TBD	Fully Funded	Spare miter gate and storage area
TBD	Fully Funded	Aquatic mitigation
TBD	Incremental	Construction of lock extension
TBD	Incremental	Construction of lock approach walls

Non-Federal Sponsor: The project is cost shared 50/50 with the Inland Waterways Trust Fund.

Where We Are Now: Awaiting funds to continue design and construction of the lock extension project.

Issues and Other Information: The John T. Myers project passes the highest tonnage of all the Ohio River high lift locks with a 600-foot auxiliary chamber. Currently, 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.

INDIANAPOLIS NORTH, IN

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

Official Title: Indianapolis, White River (North), Indiana

March 2016

Authorization: Flood Control Act (FCA) of 1936, as amended, Section 10 of FCA 1946, and subject to cost sharing provisions of the Water Resources Development Act of 1986.

Project Phase: Construction

Summarized Financial Data:

Estimated Federal Cost	$37,340,427
Estimated Non-Federal Cost	$12,649,756
Allocation thru FY15	$27,907,427
Balance to Complete	$0
FY16 President's Budget	$0
FY16 Allocation	$9,433,000
FY17 President's Budget	$0

Project Location: The project is located in northern Indianapolis, IN, along a 3 ½-mile reach of the White River.

Project Description: The project involves construction of earthen levees and floodwalls in three sections – Warfleigh (Phase 3A), South Warfleigh (Phase 3B) and Broad Ripple (Phase 3C). (See attached project map.) All three sections must be completed to achieve the project benefits within the designated areas of protection. Phases 3A and 3C were substantially completed in 2004 and 2009, respectively. As a result of design standard revisions made after Hurricane Katrina, a construction contract was awarded in September 2011 for modifications to the I-wall for Phases 3A and 3C. This construction contract was completed in August 2013.

Project Status: Construction of the first of three sections of the Phase 3B levee was completed in June of 2014, Phase 3B-1. A construction contract was awarded in September 2014 provide a portion of the mitigation required for the project. A subsequent mitigation contract was awarded in September 2015 to provide additional required mitigation. Plans are currently being developed for two separate construction contracts. Levee Section 3B-2 and a project to clear and grub trees along previous phases (3A and 3C) are projected to be awarded in summer of 2016. Levee Section 3B-3 is expected to be awarded in FY17.

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Map

Non-Federal Sponsor: City of Indianapolis, Department of Public Works.

Where We Are Now: In September 2011, the Corps of Engineers (Louisville District) awarded a construction contract to modify the floodwall for Phases 3A and 3C. This work was completed in August 2013. This work was necessary due to design standard revisions made post-Hurricane Katrina.

The Louisville District prepared a Supplemental Environmental Impact Statement (SEIS) in July 2012. The Louisville District finalized the SEIS and issued a Record of Decision on 27 June 2014.

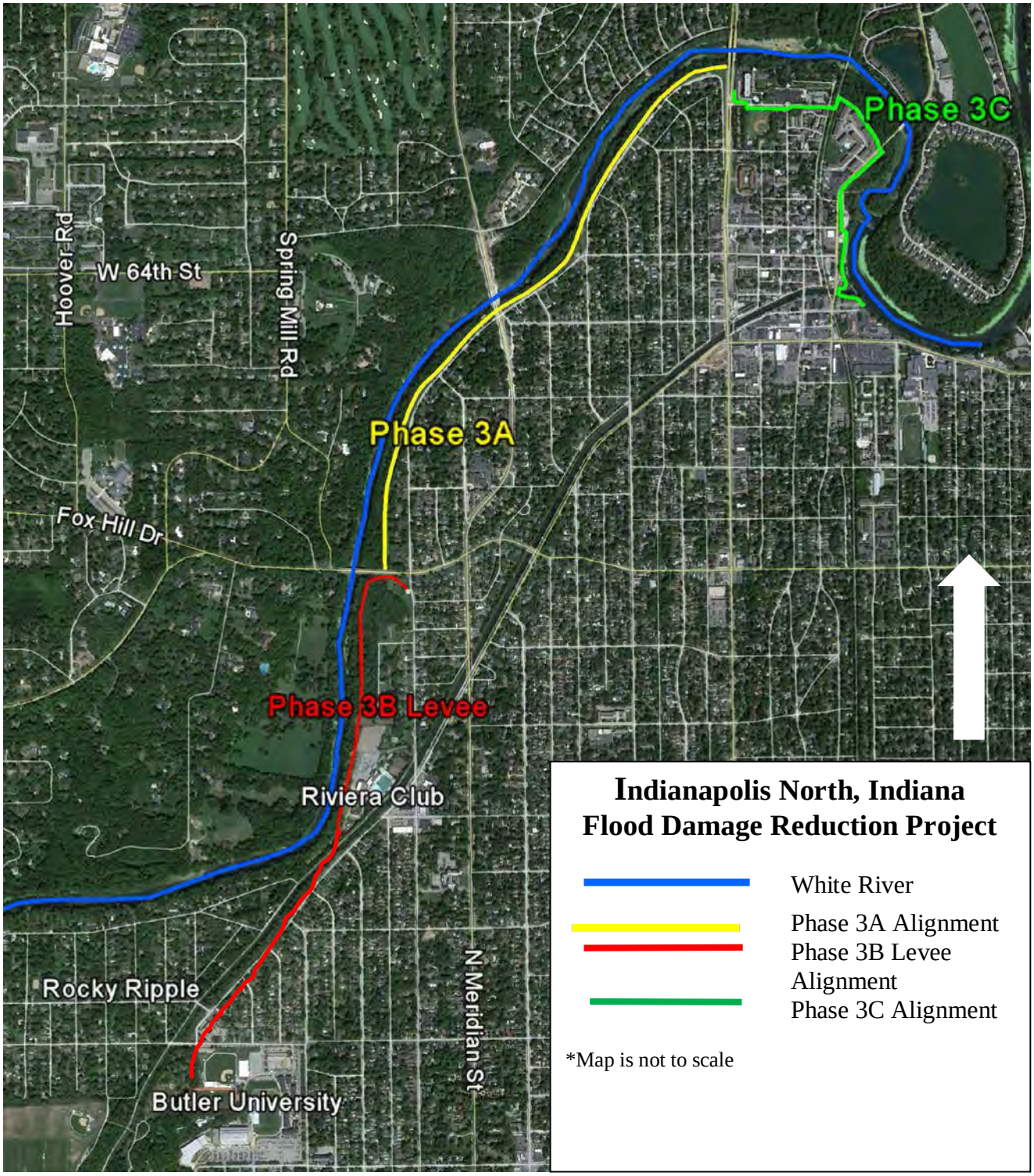
Phase 3B is the final phase of this project. In September 2012, a contract was awarded for construction of the first segment of the levee for Phase 3B, section 3B-1. This work was completed in June 2014. A contract to construct Phase 3B-2 is projected to be awarded in summer of 2016. Upon receipt of the remaining funds, a contract will be awarded for construction of the Phase 3B-3 floodwall section. This final section is projected to be awarded in FY17.

Issues and Other Information: The project is sponsored by the Indianapolis Department of Public Works at a cost share of 75% Federal and 25% non-Federal. It was designed to provide flood damage reduction for approximately 1,500 residential and commercial structures that would be inundated by an annual 0.35 percent chance flood event (300-year flood event).

Absent completion of the project, critical facilities, such as a fire station, waterworks pumping station, and large sewage lift stations would be inundated in major flood events. In addition, portions of the Butler University property, including student housing and a child development/ daycare facility, would be inundated in a 100-year flood event. During such events, structures would be submerged in up to 7 1/2 feet of water. Through February 2015, the non-Federal sponsor has provided cash contributions of $5,553,000 for design and construction of the project. All three sections of the floodwall and levee, as shown on the attached map, must be completed to achieve the project benefits within the designated areas of protection.

Based upon the General Reevaluation Report completed in September 1996, the project's benefit-to-cost ratio (BCR) was 2.4 at 7 percent. This project meets policy criteria as a high priority budgetable project. However, its completion has been slowed by limited annual Federal appropriations. Because of the delayed completion, project costs have risen sharply due, in part, to high world demand for steel, cement, and fuel. The project's BCR is currently 1.3 at 7 percent.

The existing Phase 3A levee is tree-covered on the river slope of the embankment. There are also small areas of trees along the river slope of Phase 3C. Additional tree clearing is required for both phases to meet current Corps' guidance for vegetation management on earthen levees and for levee certification.


Phase 3C
Hoover Rd
W 64th St
Spring Mill Rd
Phase 3A
Fox Hill Dr
Phase 3B Levee
Riviera Club
Rocky Ripple
N Meridian St
Butler University
Indianapolis North, Indiana
Flood Damage Reduction Project
White River
Phase 3A Alignment
Phase 3B Levee Alignment
Phase 3C Alignment
*Map is not to scale

WABASH LEVEE UNIT NO. 5 LEVEE REHABILITATION (2011 Flood Event)

March 2016

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Official Title: Wabash Levee Unit No. 5 Levee Rehabilitation

Authorization: Public Law 84-99

Project Phase: Engineering and Design

Summarized Financial Data:

Estimated Federal Cost	$7,590,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$7,590,000
FCCE funds for E&D through FY15	$561,800
Balance to Complete	TBD
FY16 President's Budget	N/A
FY16 Allocation	N/A
FY17 President's Budget	N/A

Project Location: The Wabash Levee Unit #5 Levee Rehabilitation Project is located in Gibson and Posey Counties in Indiana on the left bank of the Wabash River and on the right bank of the White River.

Non-Federal Sponsor: Committee for Care and Maintenance for the Care of Wabash Levee Unit 5 Levee

Project Description: The project consists of rehabilitation work to the existing levee, which was damaged in the 2011 Flood Event. Repairs will include installation of seepage berms in areas that had sand boils.

Project Status: The Project Information Report (PIR) report was approved on 8 January 2016 and a fund request to complete Engineering, Design, and Environmental activities (in accordance with the National Environmental Policy Act – NEPA) has been submitted. The current schedule is for a construction contract to be awarded in October 2016.

Where We are Now: Upon receipt of funds, continuation of Engineering and Design will proceed, along with Environmental site clearances of the proposed borrow areas.

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Map

WABASH LEVEE UNIT NO. 5 LEVEE REHABILITATION (2013 Flood Event)

March 2016

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Official Title: Wabash Levee Unit No. 5 Levee Rehabilitation

Authorization: Public Law 84-99

Project Phase: Engineering and Design

Summarized Financial Data:

Estimated Federal Cost	$3,055,820
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$3,055,820
FCCE funds for E&D through FY15	$0
Balance to Complete	TBD
FY16 President's Budget	N/A
FY16 Allocation	N/A
FY17 President's Budget	N/A

Project Location: The Wabash Levee Unit #5 Levee Rehabilitation Project is located in Gibson and Posey Counties in Indiana on the left bank of the Wabash River and on the right bank of the White River.

Non-Federal Sponsor: Committee for Care and Maintenance for the Care of Wabash Levee Unit 5 Levee

Project Description: The project consists of rehabilitation work to the existing levee, which was damaged in the 2013 Flood Event. Repairs will include installation of seepage berms in areas that had sand boils, and relief wells in areas where seepage berms cannot be constructed due to space limitations.

Project Status: The Project Information Report (PIR) was approved on 8 January 2016 and a fund request to complete Engineering and Design has been submitted. The current schedule is for a construction contract to be awarded in October 2016.

Where We are Now: Upon receipt of funds, continuation of Engineering and Design will proceed.

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Map

GILL TOWNSHIP LEVEE REHABILITATION
(2013 Flood Event)

March 2016

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

Official Title: Gill Township Levee Rehabilitation

Authorization: Public Law 84-99

Project Phase: Engineering and Design

Summarized Financial Data:

Estimated Federal Cost	$1,281,111
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$1,281,111
FCCE funds for E&D through FY15	$0
Balance to Complete	TBD
FY16 President's Budget	N/A
FY16 Allocation	N/A
FY17 President's Budget	N/A

Project Location: The Gill Township Levee Rehabilitation Project is located in Sullivan County, Indiana on the left bank of the Wabash River.

Non-Federal Sponsor: Gill Township Levee Association

Project Description: The project consists of rehabilitation work to the existing levee, which was damaged in the 2013 flood event. The recommended repair includes installation of relief wells to intercept excessive seepage pressures between the levee and the pump station.

Project Status: The Flood Event of 2015 revealed that the original intended repair would be insufficient to repair the damage that occurred in the 2013 flood event. An addendum letter was sent to LRD for approval. The addendum detailed the changes to the recommended repairs based on observations made during the 2015 flood event.

Where We are Now: Awaiting approval of the addendum letter by LRD. Funding for completion of the engineering and design will be requested upon approval of the project.

DAM SAFETY, INDIANA

February 2016

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

Official Title: Corps of Engineers Dam Safety Program; Indiana Dams - Dam Safety Portfolio Risk Management

Project Phase: Routine Dam Safety Inspection and Assessment/Risk Studies

Summarized Financial Data: The Dam Safety Risk Studies are part of a national program with funds distributed by the Corps of Engineers (COE) Headquarters Dam Safety Office on a priority basis

Project Location: Brookville Lake Dam, Cagles Mill Lake Dam, CM Harden Lake Dam, Mississinewa Lake Dam, Monroe Lake Dam, Patoka Lake Dam, J.E. Roush Lake Dam & Markle Levee, and Salamonie Lake Dam (See next pages for site specific information)

Non-Federal Sponsor: N/A

Study and Program Information: During normal operations, these dams are routinely inspected daily, weekly, and monthly by COE 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 COE 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 Senior Oversight Group and a Dam Safety Action Classification (DSAC) rating is assigned based upon confirmed or unconfirmed dam safety issues and the combination of life or economic consequences should failure occur. The DSAC ratings are used to prioritize further study to confirm the proposed dam safety issues. If the DSAC rating is 1 through 3, an Interim Risk Reduction Measures (IRRM) Plan is established while further investigations are conducted and/or remedial actions are implemented as necessary.

The first study phase is an Issue Evaluation Study (IES) which confirms the dam safety issue. If more information is 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 COE Risk Management Center (RMC) and the Dam Senior Oversight Group (DSOG). The results may indicate the need to progress to the next phase of study or reduce the DSAC rating for the dam. If the case is made that the dam is in need of remedial construction then the project moves to the Dam Safety Modification Report (DSMR). The DSMR analyzes potential remedial construction elements to determine the best "fix" to reduce the overall project risk. These studies and remedial construction are prioritized based upon the relative risk estimates at each stage to best make use of the available funding and resources.

Project Location: Brookville Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2007
* DSAC (Dam Safety Action Classification) Rating: Class 4
* IRRMP (Interim Risk Reduction Measures Plan): Completed 11 March 2009
* The findings of the Phase 2 Issue Evaluation Study (IES) risk analysis were presented to the Risk Management Center (RMC) in November 2011 and to the Dam Senior Oversight Group (DSOG) in February 2012. The RMC and DSOG agreed with the report recommendation that the project be reclassified to a DSAC 4 based on the results of the risk analysis.

Where We Are Now: Remedial construction is not warranted at this time and the dam was re-classified to a DSAC 4. The project is following the routine O&M surveillance and monitoring program.

Project Location: Cagles Mill Dam, IN

Project Status:

* 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

Where We Are Now: Routine O&M surveillance and monitoring program.

Project Location: Cecil M Harden Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2009
* DSAC (Dam Safety Action Classification) Rating: Class 3
* IRRMP (Interim Risk Reduction Measures Plan): Completed 30 June 2010
* The findings of the Issue Evaluation Study (IES) risk analysis were presented to the Risk Management Center (RMC) in September 2013 and to the Dam Senior Oversight Group (DSOG) in October 2013. The RMC and DSOG agreed with the report recommendation that the project be reclassified from a DSAC 2 to a DSAC 3 based on the results of the risk analysis. Another recommendation was to pursue subsurface exploration and instrumentation at the ridgeline and dam abutments.

Where We Are Now: Remedial construction is not warranted at this time and the dam was re-classified to a DSAC 3. A Scope of Work and estimate is being prepared for subsurface exploration and instrumentation at the ridgeline and dam abutments. This work will be performed when funding is available. This structure has been reprioritized in the risk study queue.

Project Location: Mississinewa Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2009
* DSAC (Dam Safety Action Classification) Rating: Class 2
* IRRMP (Interim Risk Reduction Measures Plan): Completed 27 July 2010
* IES (Issue Evaluation Study): As a result of the 2014 Periodic Assessment, the dam was downgraded to a DSAC 2 rating. The IES Phase 2 was initiated in August 2015. 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).

Where We Are Now: IES Phase 2 work was initiated in August 2015. Additional field surveys will be performed this FY and a Drilling and Instrumentation Plan is being developed. The drilling and instrumentation are scheduled for completion in June 2016.

Project Location: Monroe Dam, IN

Project Status:

* 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

Where We Are Now: Routine O&M surveillance and monitoring program.

Project Location: Patoka Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2008
* DSAC (Dam Safety Action Classification) Rating: Class 4
* IRRMP (Interim Risk Reduction Measures Plan): Completed 30 April 2009
* IES (Issue Evaluation Study): The IES was initiated in February 2014. The IES terminated at an early stage and a Semi Quantitative Risk Assessment (SQRA) was completed in August 2015. The DSAC rating was changed from a DSAC 2 to a DSAC 4. Remedial construction is not warranted at this time. This structure has been reprioritized in the risk study queue.

Where We Are Now: Routine O&M surveillance and monitoring program.

Project Location: J.E. Roush Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2005
* DSAC (Dam Safety Action Classification) Rating: Class 3
* IRRMP (Interim Risk Reduction Measures Plan): Completed 6 November 2007
* The findings of the Dam Safety Modification Report (DSMR) were presented to the Risk Management Center (RMC) in March 2010 and the Dam Senior Oversight Group (DSOG) in June 2010. Based on the reviews, the study was converted from the existing DSMR to a Phase 2 Issue Evaluation Study (IES).
* The findings of the Phase 2 IES risk analysis were presented to the RMC in March 2013 and to the DSOG in April 2013. 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 continue the increased instrumentation monitoring and collecting of performance data and to update the current IRRMs.

Where We Are Now: Remedial construction is not warranted at this time and the dam was re-classified to a DSAC 3. This structure has been reprioritized in the risk study queue.

Project Location: Salamonie Dam, IN

Project Status:

* SPRA (Screening for Portfolio Risk Analysis): 2005
* DSAC (Dam Safety Action Classification) Rating: Class 4
* IRRMP (Interim Risk Reduction Measures Plan): Completed 6 November 2007
* The Dam Safety Modification Report (DSMR) was reviewed by the Risk Management Center (RMC) in March 2010 and the Dam Senior Oversight Group (DSOG) in June 2010. Based on the reviews, the title of the study was changed to an Issue Evaluation Study (IES). The report was revised and the IES was completed in April 2011. The DSOG re-classified this dam from a DSAC 2 to a DSAC 4.

Where We Are Now: Remedial construction is not warranted at this time and the dam was re-classified to a DSAC 4. This structure has been reprioritized in the risk study queue.

Fulton County, Indiana

March 2016

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

Official Title: Fulton County, IN Section 14 Emergency Streambank Stabilization Project

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

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$100,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$100,000
Allocation thru FY15	$100,000
Balance to Complete Feasibility	$0
FY 16 President's Budget	$0
FY16 Allocation	$50,000
FY 17 President's Budget	$0

Project Location: The project area is located in Fulton County, Indiana along the bank of the Tippecanoe River, along CR 350N approximately 0.5 mile east of old 31. The project is located in the 4th Congressional District.

Project Description: County Road 350N is threatened during to ongoing erosion along this portion of the Tippecanoe River. The feasibility study will evaluate stabilization alternatives, select one, and develop project design data, including plans and specifications. The impact of the project on the environment will be documented in an environmental assessment (EA). The decision to approve and construct a project under Section 14 is based on information from the feasibility study. At the conclusion of the feasibility study, a draft project partnership agreement (PPA) is drawn up which defines the obligations of the federal government and the sponsor in the construction, maintenance, and cost sharing of the project.

Project Status: Active

Non-Federal Sponsor: Fulton County, Indiana

Where We Are Now: The Feasibility Study is underway and is expected to be complete by September 2016. If it is determined that the Feasibility Study cost will exceed $100,000, the $50,000 FY 16 allocation will require a cost share match. Feasibility Study costs in excess of $100,000 are cost shared 50% Federal and 50% Non-Federal.

Issues and Other Information: None

Evansville Stillwater Harbor, IN

March 2016

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

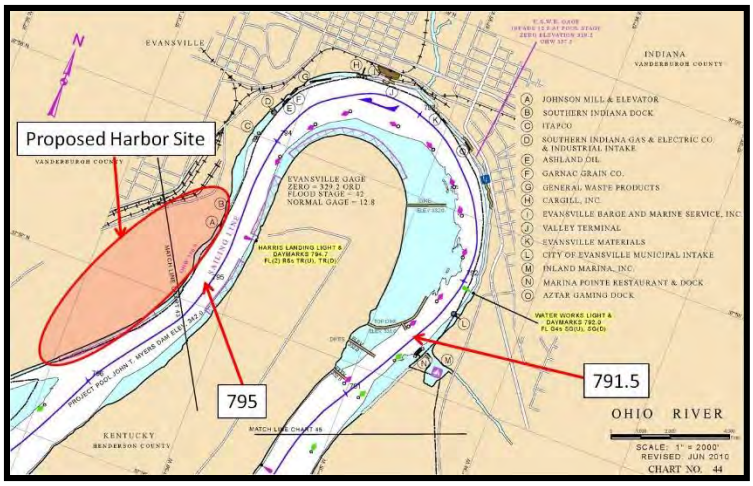
Official Title: Evansville Stillwater Harbor, IN

Authorization: House Report, May 7, 1997.

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$2,650,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$2,650,000
Allocation thru FY15	$0
Balance to Complete Feasibility	$2,650,000
FY16 President's Budget	$0
FY 16 Allocation	$0
FY 17 President's Budget	$0
Balance to Complete	$2,650,000



Project Location: The project area is located in Evansville, Indiana on the right descending bank between Ohio River Mile (RM) 795 and 796.

Project Description: The project would create a still water harbor by notching into the land area to provide for barge fleeting and unloading of barges out of the Ohio River channel. The land portion of the intermodal facility would be connected to an adjacent railroad yard for train transportation and to surface streets for freight truck traffic and unloading. The remainder of the land-based portion would be warehousing and storage facilities for container shipments and commodities to be brought in by barge, rail, and truck.

The purpose of this facility is to provide for the anticipated increase in container shipments of goods and commodities to and from Asian markets and Midwest markets. Evansville's strategic location on the Ohio River positions it as the northern most point for barge traffic from the Gulf of Mexico to connect with CSX and Norfolk Southern Rail Lines for further interior movement of containers in international and domestic trade. With the current construction of Sea Point, the proposed container dock at mile marker 12.2 above Head of Passes near the mouth of the Mississippi River near Venice, Louisiana, the international container trade has been projected to expand significantly.

Project Status: Active

Non-Federal Sponsor: City of Evansville, Indiana

Where We Are Now: This study was converted from the Continuing Authorities Program to a General Investigation and the 905(b) Reconnaissance Report was approved in August 2012.

Issues and Other Information: Section 105(a) of Public Law 99-662 (WRDA 1986) specifies a 50 percent non-Federal cost share for all feasibility studies, except for studies of "inland waterway system" improvements. The law does not define that system, and current Army policy is to limit the exemption to the waterways subject to waterway fuel taxes. Since the Ohio River system is subject to the taxes, it is not anticipated that non-Federal funds will be required for a feasibility study of the Evansville Stillwater Harbor.

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Map

Clarksville, IN Erosion

March 2016

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

Official Title: Clarksville, IN Erosion

Authorization: Section 9 of the 1946 Flood Control Act (33 USC 701q), as amended

Project Phase: Preconstruction, Engineering, and Design

Summarized Financial Data:

Estimated Federal Cost	TBD
Estimated Non-Federal Cost	TBD
Total Estimated Project Cost	TBD
Allocation thru FY15	$0
Balance to Complete	$TBD
FY16 President's Budget	$0
FY16 Allocation	$0
FY 17 President's Budget	$0

Project Location: Clarksville is in Indiana's 9th Congressional District. The study area is located along the north shore of the Ohio River between Mile 605.5 and 606.5.

Project Description: Riverbank erosion is threatening a portion of the Falls of the Ohio National Wildlife Conservation Area; a portion of the Ohio River Greenway Public Access project; Emery Crossing Road/Harrison Lane; Mill Creek Bridge; Lewis & Clark Bicentennial Park; and the George Rogers Clark Homesite. Local interests believe that the erosion is primarily due to the operation of the lower tainter gates of McAlpine Locks and Dam. Erosion has been occurring in this area for over 40 years and several attempts to stabilize the bank have not completely taken care of the problem.

Project Status: A follow-up Assessment Report was completed, outlining the problem as well as previous efforts undertaken by local government as well as the US Army Corps of Engineers to remedy the erosion over the past 40+ years. The District has also had numerous meetings with the Town of Clarksville to discuss the erosion, and the fact that further funds are needed to design a solution. Currently, a Flood Plain Management Study (FPMS) is underway which will include modeling of the river currents adjacent to the site.

Non-Federal Sponsor: Town of Clarksville, IN

Where We Are Now: Funding is needed to design and construct a solution to the erosion problem.

Issues and Other Information: District personnel continue to coordinate with Town of Clarksville Officials through the process.

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Map

Carroll County, Indiana

March 2016

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

Official Title: Carroll County, IN Section 14 Emergency Streambank Stabilization Project

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

Project Phase: Feasibility

Summarized Financial Data:

Estimated Federal Cost	$100,000
Estimated Non-Federal Cost	$0
Total Estimated Project Cost	$100,000
Allocation thru FY15	$50,000
Balance to Complete Feasibility	$50,000
FY 16 President's Budget	$0
FY16 Allocation	$50,000
FY17 President's Budget	$0

Project Location: The project area is located in Carroll County, Indiana along the bank of the Tippecanoe River, adjacent to County Road 1200 West.

Project Description: The feasibility study will evaluate stabilization alternatives, select one, and develop project design data, including plans and specifications. The impact of the project on the environment will be documented in an environmental assessment (EA). The decision to approve and construct a project under Section 14 is based on information from the feasibility study. At the conclusion of the feasibility study, a draft project partnership agreement (PPA) is drawn up which defines the obligations of the federal government and the sponsor in the construction, maintenance, and cost sharing of the project.

Project Status: Active

Non-Federal Sponsor: Carroll County, Indiana

Where We Are Now: The Feasibility Study is underway and a decision on federal interest is expected by 31 March 2016.

Issues and Other Information: None

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Map

Bee Slough, Evansville, IN

February 2016

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

Official Title: Bee Slough, Evansville, IN

Authorization: Section 1135 of the Water Resources Development Act of 1986 (P.L. 99-662), as amended

Project Phase: Feasibility

Project Location: The project is located in Evansville, Indiana, along both sides of the local flood risk management project near the Evansville wastewater treatment facility and on the Ohio River floodplain, near Ohio River Mile 792. This project is in Indiana's 8th Congressional District.

Project Description: The feasibility phase of this study will address ecosystem restoration to provide aquatic, wetland and riparian habitat. The project involves restoration of wetlands and riparian woodlands along Bee Slough. While a general area is under consideration exact acreage to be restored has not yet been determined.

Summarized Financial Data:

Estimated Federal Cost	$300,000
Estimated Non-Federal Cost	$200,000
Total Estimated Project Cost	$500,000
Balance to Complete	$200,000
Allocation thru FY15	$100,000
FY16 President's Budget	$0
FY16 Allocation	$0
FY17 President's Budget	$0

Project Status: A draft Federal Interest Determination (FID) Report has been completed and is being reviewed internally. The last site visit was conducted on September 2, 2015.

Non-Federal Sponsor: TBD

Where We Are Now: The Federal Interest Determination (FID) was approved by LRD on Dec 30, 2015. We are now working to develop a Project Management Plan and negotiate a Feasibility Cost Sharing Agreement (FCSA) with a non-Federal Sponsor.

Issues and Other Information: None