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Olmsted Locks and Dam sets record, replaces first wickets





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On the cover: The U.S. Army Corps of Engineers Louisville District Olmsted Locks and Dam staff replace the project's first wickets as part of the annual maintenance requirement. (USACE photo by Abby Korfhage)

 **Please conserve:**
Think before you print.

Commander's Comments

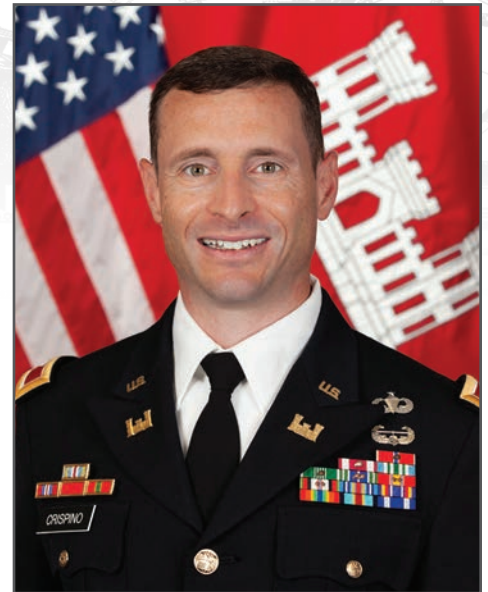
Team Louisville,

First and foremost, let me say congratulations on an excellent ending to fiscal year 2021! It has been a tremendous year where you have continued to respond to diverse challenges and issues with flexibility and innovation. I am honored to be a part of this team.

As we start fiscal year 22 and take time to celebrate the milestones of another successful year end, keep in mind our ultimate goal is to finish quality projects safely, on time, and within budget. The work you do each day has a positive impact on the region and the nation by reducing disaster risk, strengthening our economy, and supporting our national security.

This month's issue of the Falls City Engineer highlights some of our recent successes from the last few months. These include the removal of Dam No. 5 from the Green River, the first wicket replacement at Olmsted Locks and Dam, groundbreaking ceremonies for projects at Scott Air Force Base and Naval Surface Warfare Center – Crane Division, our teams receiving top-level awards and much more.

While COVID-19 persists, I want to thank you for taking measures to maintain a safe, healthy work environment for yourself and your co-workers. I continue to encourage everyone to work together and keep yourself,



Col. Eric Crispino
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

others and our families and friends in good health.

I am very proud of our Louisville team and I look forward to watching the district continue to lead across this region to deliver for our partners and stakeholders with world-class excellence.

Louisville Proud!

Eric D Crispino

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Olmsted Locks and Dam sets record, replaces first wickets

Abby Korfhage, public affairs

Near the confluence of the Mississippi, Ohio, Tennessee and Cumberland Rivers is where more commerce passes through than any other location on the entire U.S. inland waterways, making the U.S. Army Corps of Engineers, Louisville District's Olmsted Locks and Dam one of the busiest locks in the country. More than 70 million tons of commerce passes through the Olmsted, Illinois, facility each year.

Olmsted Locks and Dam is very different from the other locks and dams on the Ohio River because it is the only one with a wicket dam.

"A wicket is a type of moveable dam structure," said Ryan Lawrence, Louisville District Locks and Dams assistant operations manager. "During higher flows, wickets lay flat at the bottom of the river. This allows the river to flow unrestricted and for boats to pass the dam without utilizing the locks. As flows and river gages decrease, there becomes a need to lift this moveable dam into the raised position to impound water to ensure a navigable river depth upstream to Smithland Locks and Dam, Barkley Lock and Dam and Kentucky Lock and Dam."

Olmsted has 140 wickets, weighing approximately 36,000 pounds each, and the Olmsted staff is responsible for raising and lowering them each time.

"The first time we raised the dam, it took about seven days, and now we are down to about ten and a half hours to raise the dam," said Brad Stout, Louisville District Locks and Dams operations manager.

This process takes a minimum of seven people, but typically 8-10 are utilized to provide redundancy in key positions, according to Lawrence. Each wicket is lifted one at a time by a wicket lifter operated by one of the three trained employees until all 140 wickets are standing.

Already this year, the dam has been raised ten times – the most it has had to be raised in a year since the facility went into operation in fall of 2018.

"We are well beyond average operations and setting the record for number of dam operations in a single season," said Waylon Humphrey, Louisville District Operation Division deputy chief.

In addition to having to physically raise and lower the dam, the Olmsted team must



Louisville District project personnel successfully remove and replace two wickets at Olmsted Locks and Dam in Olmsted, Ill., on Sept. 14, 2021.

also maintain the wickets, which adds additional duties.

"It is different here because of the amount of responsibility we have," said Shane Byassee, Olmsted Locks and Dam lockmaster. "We have the two [lock] chambers. We operate and maintain the 140 wickets. We have to have a floating plant section, that is not typical at any other lock and dam in the nation. We also have a tow boat, a smaller work vessel, derrick boat cranes, two wicket lifters on-hand and a large amount of floating plant equipment that we have to operate and maintain."

Maintaining the wickets means replacing 14 of them a year as part of routine maintenance, and on September 14, 2021, the team made project history by replacing the very first ones.

"The first wickets to be replaced at Olmsted Locks and Dam as part of the annual maintenance requirement was successful due to the dedicated personnel and teamwork throughout the process of methodically planning, testing and executing the replacement with minimal unforeseen issues," said Stout. "Although we have had success in the past with replacing wickets at Locks and Dam 52 and 53, the Olmsted Locks and Dam wickets presented a new challenge, and our site personnel were up to the task."

The team first identified which wickets they wanted to remove and replace. Then the day before, they set a dive box around those wickets. The dive box is similar to a three-sided box that sits on the bottom of

the river floor and blocks the flow of water, so divers have better access to the wickets and aren't fighting against the river current.

"We selected these two wickets because of how the dikes are created on the Kentucky bank – it's a lot slacker water over there and allows us to work through our processes easier," said Stout. "The divers are crucial to the wicket replacement operations and diving here is substantially different than what we faced at Locks and Dams 52 and 53."

Once everything was set in place with the dive team ready to go, a crane was hooked to the top of the wicket to help move it. Stephen Panter, marine machinery repairer, was the first diver in the water. Panter went in and out of the river multiple times during the removal process. He was responsible for several critical tasks, all taking place under water.

Once the wicket was completely detached and the hardware was removed, the crane operator lifted the 36,000-pound wicket out of the Ohio River.

After the older wicket was out of the way, the crane placed the new wicket in its spot. This time, it was Jesse Hall, lock and dam equipment mechanic, who dove into the river to make sure the castings lined up – as it all has to fit in perfectly like a puzzle. Once everything was in the correct position, Hall descended into the river once again to put in the required hardware and lock everything in place.

Continued on next page

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The entire operation took about nine hours for the first two wickets to be removed and replaced. Any old wickets that are replaced will be rehabbed and staged for future use.

“The locks and dams are here to provide safe and reliable navigation,” said Lawrence. “If the wickets are not maintained and are not raised in time to meet the targets, vessels could become grounded due to insufficient water, city or industry water intakes could be impacted, and biological impacts could occur, such as exposing mussel beds. That is why both operation and maintenance of the wickets are so important.”

As Olmsted Locks and Dam hits another milestone and continues to set records, the facility proves yet again how critical the infrastructure is in keeping America’s water highway moving.



Abby Korfhage

Louisville District Locks and Dams Assistant Operations Manager Ryan Lawrence measures the angle of a wicket in preparation for removal, Sept. 14, 2021.

Kickoff event for Johnson County flood mitigation brings together USACE, community leaders

Abby Korfhage, public affairs

A kickoff event for a flood mitigation project was held in Johnson County, Kentucky, Sept. 16, 2021. The celebration brought together the U.S. Army Corps of Engineers Louisville District, Johnson County Fiscal Court and City of Paintsville officials, who are closely coordinating on the Section 202 Johnson County Flood Risk Management Project.

The event included remarks from U.S. Congressman Hal Rogers, USACE Louisville District Commander Col. Eric Crispino, City of Paintsville Mayor Bill Mike Runyon and Johnson County Judge Executive Mark McKenzie.

“Flood control has been one of my top priorities since I was elected to federal office,” said Congressman Rogers. “I

don’t want our folks to go to bed in fear every time a storm rolls through the mountains, and thanks to the Army Corps and local leaders, we have completed some impressive projects in several communities to help protect the people of southern and eastern Kentucky for generations. We’re hoping to do the same thing here in Johnson County.”

The \$118 million project is intended to reduce flood risk for the city of Paintsville, Kentucky.

“The Johnson County Fiscal Court, the City of Paintsville and Congressman Rogers have played a significant role to bring us where we are today,” said Crispino. “In August 2018, the Louisville District was first assigned to design, construct and look at cost effective means to address flooding issues in the City of Paintsville and Johnson County. We have divided the project into three phases for construction and implementation.”

USACE will begin awarding contracts for the first two phases in fiscal year 2022, which includes a flood warning system, as well as some features to reduce risk to the county courthouse and several structures in the surrounding area, according to Crispino.

Several members of the community attended the event to show their support of the project.

“The Johnson County Section 202 Flood Mitigation Project will improve public

safety, reduce the impact from flooding for Paintsville and Johnson County and create jobs; therefore, impacting our local economy,” said McKenzie.

As the project moves forward, USACE is planning to keep interested parties informed with quarterly public meetings, which will be held throughout the year, to update city officials and residents of the project status.

“As we continue to move forward on implementing this project, we’ll keep the communities informed,” said Crispino. “We really look forward to continuing the strong partnership that we have with the city and the county as we continue with the design and the construction of this critically important project to all of USACE.”



Abby Korfhage

Louisville District Commander Col. Eric Crispino speaks at the kickoff event for the Johnson County flood mitigation project.



Abby Korfhage

Congressman Hal Rogers, Paintsville Mayor Bill Mike Runyon, Johnson County Judge-Executive Mark McKenzie and U.S. Army Corps of Engineers Louisville District Commander Col. Eric Crispino joined representatives from Integrated Right of Way, a real estate acquisitions firm, to sign a ceremonial contract that sees the beginning of the flood mitigation project in Johnson County.

Green River Lock and Dam 5 removal improves safety, enhances habitat



The removal of Green River Lock and Dam No. 5, near Roundhill, Ky, will restore free-flowing conditions to 73 miles of the Green River.

Abby Korfhage, public affairs

A steady downpour and muddy terrain could not keep five conservation partners from celebrating the largest dam removal in Kentucky's history.

The U.S. Army Corps of Engineers, Louisville District, in partnership with the U.S. Fish and Wildlife Service, The Nature Conservancy, Kentucky Department of Fish and Wildlife Resources and Kentucky Waterways Alliance celebrated the removal of lock and dam No. 5 from the Green River during a ceremony held Monday, September 20, near Roundhill, Kentucky.

The event highlighted the many benefits of the dam removal that will make the river safer for people, healthier for fish and mussels, and an economic boon to local communities.

"We are excited to partner with the U.S. Fish and Wildlife Service and The Nature Conservancy on the removal of Green River Lock and Dam 5," said Louisville District Commander Col. Eric Crispino during the ceremony. "This project will restore the natural flow to this portion of the Green River, the most environmentally diverse river in the inland navigation system, as well as support our ecosystem restoration mission."

The U.S. Fish and Wildlife Service continues to lead the \$4.6 million project where crews have been deconstructing the structures on site since June 2021. Work is expected to proceed through the fall and, following completion, The Nature Conservancy will take ownership of the site.

"Removing Lock and Dam number five on the Green River is a really big deal," said David Phemister, state director for The Nature Conservancy in Kentucky.

"This is not just an ecological victory, but this is really a victory for river access and the local economies. We're committed to working with the local community, Butler County and others to make sure this is a public park accessible to all."

Green River Lock and Dam No. 5 was built in 1933-34 for commercial use. USACE ceased operation of the structure in 1951 due to it no longer being needed. The structure has stood unused for 70 years, creating a pooled condition in the river with lower oxygen levels, more sediment and higher temperatures—all issues for aquatic life and the overall health of the river. The dam also presents a barrier to boat traffic, with no portage or bypass options.

Once the dam is removed, it will restore free-flowing conditions to 73 miles of the Green River. There are many Green River species that thrive in moving water. These include many aquatic insects that serve as food for foraging bats, including three bat species that are endangered. It will also improve safety and access for recreational canoeists and kayakers and overall fishery including highly sought-after gamefish such as smallmouth bass, rock bass and muskellunge.

Removal of this dam was championed by U.S. Senator Mitch McConnell who called for federal legislation. Federal legislation was signed Dec. 16, 2016, deauthorizing the dam from the USACE inventory and directing its removal.

"Kentucky's waterways form the backbone of our commerce, transportation, and recreation, but because of the Green River Dam – which sat unused since 1951 – that important natural asset was threatened. With the completion of today's removal, we will finally return the Green River to

its original, unimpeded state and reopen a crucial portion of the Commonwealth to boaters, sportsmen, and wildlife," said Senator McConnell. "As Senate Republican Leader and a senior member of the Senate Appropriations Committee, I was proud to collaborate with local stakeholders to champion the 2016 Water Infrastructure Improvements for the Nation Act and subsequent appropriations measures for the U.S. Fish and Wildlife Service that made this removal project possible. I look forward to continuing my work to provide Kentuckians with the clean, healthy, and free-flowing water infrastructure we deserve."

The Green River is one of the most biodiverse rivers in the country. It is home to more than 150 fish species, more than 70 mussel species and 43 endemic species (species existing nowhere else in the world). Aquatic species include nine endangered mussel species, one endangered fish, and one endangered freshwater shrimp—the Kentucky cave shrimp.

"This project illustrates the concepts of partnerships and revolutionizing the U.S. Army Corps of Engineers, two priorities of the Chief of Engineers," Crispino said. "The Louisville District is proud to be part of the partnership and we look forward to seeing the Green River free flowing again soon."



U.S. Army Corps of Engineers Louisville District Commander Col. Eric Crispino provides remarks about partnership during the celebratory event held Sept. 20, 2021.

New facility for next-generation radiation testing breaks ground at NSWC Crane



Charles Delano

Leaders representing the U.S. Army Corps of Engineers, Louisville District and the Naval Surface Warfare Center, Crane Division, participate in a groundbreaking ceremony for a radiation testing facility at NSWC Crane, Indiana Oct. 4, 2021. (From left to right) Tyler Krempp, Krempp Construction, retired Maj. Gen. Clif Tooley, Jr., president for defense development, Indiana Economic Development Corporation, Brett Hamilton, deputy principal director for microelectronics, Office of the Undersecretary of Defense for Research and Engineering, U.S. Navy Capt. Duncan McKay, commanding officer, NSWC Crane, Dr. Angela Lewis, technical director, NSWC Crane, U.S. Army Lt. Col. Latoya Manzey, deputy commander, U.S. Army Corps of Engineers, Louisville District and Shana Goodman, manager, NSWC Crane.

Charles Delano, public affairs

Leaders with the U.S. Army Corps of Engineers, Louisville District, Naval Surface Warfare Center, Crane Division and Krempp Construction participated in the ceremonial breaking of ground, Oct. 4, 2021, which marked the start of construction for a Strategic Radiation Testing Modernization Facility at NSWC Crane. The facility, which will include Short-Pulse Gamma testing, is the first of several planned capabilities to be housed at NSWC Crane.

"It has been great collaborating with US Army Corps of Engineers on the Radiation Modernization Facility," said Dr. Angie Lewis, NSWC Crane technical

director. "They bring tremendous skill and knowledge to this ongoing effort, and their continued support will ensure mission success for this critical capability. We appreciate their willingness to bring this unique testing facility to the warfighter."

The 10,000 square foot facility will provide the necessary infrastructure for next-generation testing of radiation-hardened electronic components for nuclear deterrence, missile defense and space systems. The new radiation testing capabilities provided by this project will greatly enhance the national ability to provide research, development, test and evaluation data to systems designers and manufacturers.

The project delivery team faced

various challenges during the planning and design for the facility. One major aspect of the project was the development of a construction schedule that would allow for the planned turnover of the new facility in time for the delivery and installation of the Short-Pulse Gamma testing equipment. Any delay in completion of the facility would result in added storage costs for the SPG equipment and loss of testing capacity.

Another challenge was the communications with California-based SPG vendor were conducted at a distance. Discussions about lab criteria to accommodate the installation and operation of the SPG equipment were conducted virtually due to COVID-19 restrictions.

Additionally, construction of new facility needed to meet funding guidelines set by the Laboratory Revitalization Program authority. Included in the cost was a significant amount of funding for site preparation. The topography, which is made up of mostly undisturbed ground, required the removal of many trees while the surface needed to be re-graded to establish a suitable construction footprint.

"Although there were many challenges that we had to address during our design, build, request for proposal development and advertisement phases, our PDT remained focused on completion of the new facility in advance of the delivery of the SPG equipment," said James Cruz, project manager. "With construction phase now starting, our PDT stands ready to work with Krempp Construction to expedite resolution of any issues, especially those that have the potential to lead to time growth."

The \$6.7 million project was awarded to Krempp Construction, Inc. on April 30, 2021 and is scheduled to be completed January 2023.

Intelligence Production Complex project gets topped out

Charles Delano, public affairs

A "topping out" ceremony took place October 27, 2021, to signify that the highest beam was being placed on the five-story Intelligence Production Complex III at Wright-Patterson Air Force Base. A painted beam incorporating signatures from project team members, an American flag and a traditional evergreen, which

has origins from Scandinavian folklore, was hoisted to the top of the \$156 million, 255, 000 square foot National Air and Space Intelligence Center facility. This milestone was reached with the significant achievement of 70,000 safe work hours. The U.S. Army Corps of Engineers and contractors broke ground for the IPC III November 2020, and it is scheduled for occupancy in early 2025.



Charles Delano

Louisville District completes battle course at Fort Campbell

Charles Delano, Public Affairs

The U.S. Army Corps of Engineers, Louisville District completed construction of a \$6.3 million Automated Infantry Platoon Battle Course with Range Operations Control Area at Fort Campbell, Kentucky, which will allow platoons to conduct individual and collective maneuvers to defeat a variety of threats.

The 54-acre facility features 41 Stationary Infantry Targets, six Stationary Armor Targets with Battle Effects Simulator, one Moving Armor Target, nine Machinegun-Observation Bunkers equipped with a Sound Effects Simulator, 14 Moving Infantry Targets and one trench obstacle providing six objectives for soldiers to hone the skills necessary to detect, identify, engage and defeat

stationary and moving infantry and armor threats.

“The addition of this range enhances Fort Campbell’s arsenal of training capabilities. The AIPBC will allow units up to platoon level to train, test and prepare themselves, either mounted or dismounted on refining skills necessary to successfully conduct tactical movements in a live-fire environment,” said Paul Shannon, Fort Campbell range management authority. “The austere environment that this range was built on will challenge communications, line-of-sight, and command and control of maneuver elements as they engage an array of targets under the most intense and demanding conditions imaginable.”

Modifications from the standard battle course were incorporated due to the diverse

terrain of the range location. MGBs were relocated due to line of site concerns for some targets. The MAT, measuring more than 600 meters, had to be relocated in order to provide a safer and more functional target for training operations.

“I can’t express the importance of partnering enough,” said Caleb Simpkins, USACE Louisville District project engineer. “I have to give the credit to all parties for implementing good partnering practices and striving to deliver a quality project on time.”

Inclement weather proved to be a challenge for the contractor, Intec Group, due to the massive amount of excavation work involved with building the range and control area.

“Despite experiencing over 30% of contract time growth due to unusually severe weather conditions, we were still able to complete range construction in advance of scheduled target installation,” said James Cruz, USACE Louisville District military support section project manager. “Well done to Intec Group LLC’s management team for their efforts in achieving substantial completion ahead of the contract required completion date.”

The project, which also included construction of a range control building, training classroom, operations/storage building, covered mess, ammunition breakdown building and latrine, was completed September 17. In addition, installation of self-contained heating and air conditioning, electric service, information systems and other site improvements were accomplished. The new course will be in use by the end of April 2022 after additional computer systems and targets are installed.



Caleb Simpkins

The U.S. Army Corps of Engineers Louisville District completes construction of the Moving Area Target (MAT) structure at Fort Campbell, Kentucky Sept. 17, 2021. The MAT is one of several target areas integrated into the Automated Infantry Platoon Battle Course that allows soldiers to hone the skills necessary to detect, identify, engage and defeat stationary and moving infantry and armor threats.



Caleb Simpkins

The U.S. Army Corps of Engineers Louisville District completes construction of the Range Operations Control Area (ROCA) at Fort Campbell, Ky., Sept. 17, 2021. The ROCA is part of the Automated Infantry Platoon Battle Course which will allow platoons to train and test infantry units up to the platoon level, either mounted or dismounted, on the skills necessary to conduct tactical movement techniques, detect, identify, engage and defeat stationary and moving infantry and armor targets in a tactical array.

Westover Air Reserve Base breaks ground on one project, cuts ribbon on another

Abby Korfhage, public affairs

The U.S. Army Corps Engineers Louisville District recently reached milestones for two projects located at the Westover Air Reserve Base in Chicopee, Massachusetts.

Construction is set to begin on the new Regional ISO Maintenance Hangar Project as work concludes on the Indoor Small Arms Range onsite.

The Regional ISO Maintenance Hangar project was awarded June 17, 2021. ISO stands for Isochronal Inspections, which are in-depth inspections of aircrafts after they have flown a certain number of hours or are a certain age, according to Jimmy Marshall, Louisville District project manager.

This project will consist of constructing a 105,000 square foot high-bay aircraft maintenance hangar to support eight permanently assigned C-5 aircraft. The hangar will also include an office area, restrooms and a sheet metal shop.

"This project is unique in that it will be a state-of-the-art facility and will serve

as the Regional ISO Inspection Hangar to support the C-5 aircraft for the Air Force Reserves Fleet," said Marshall.

According to a 2019 news release from Westover ARB, this project will replace the current 70-year-old Regional ISO Maintenance Hangar. Westover ARB is the home to the only C-5 minor ISO maintenance hangar in the entire Air Force. C-5M Super Galaxy aircraft from all bases come to Westover ARB for maintenance work.

Another project the Louisville District manages at Westover ARB is the Indoor Small Arms Range. This \$9.5 million project was awarded Aug. 1, 2019.

"We are very excited to bring this new indoor range training facility to Westover Air Reserve Base," said Marshall. "This replaces an outdoor range and will provide year around training for the Reservists and security personnel."

The Louisville District team oversaw the design, planning and construction of the indoor small arms range, which includes associated storage, restrooms and a

weapons cleaning room. The range is a 28-lane live firing range facility with 25-meter firing lanes.

Carl Mudd, Louisville District Architecture Section chief, and his team were instrumental in the design, according to Marshall.

"The new Indoor Small Arms Range at Westover ARB is a perfect example of the type of unique military construction projects that Louisville District and our in-house design team performs in our area of responsibility and nation-wide for the Reserves program," said Mudd.

Military installations are like small cities and consist of various building types (barracks, administration, utility, ranges, etc.) and each come with their own design criteria and challenges, according to Mudd.

The in-house design team executed an indoor shooting range design that posed several challenges including adequate range ventilation to reduce the chance of overexposure to airborne contaminants, noise attenuation to reduce the impacts of harmful noise to personnel at the range, and coordination of complex range equipment such as target systems, bullet traps and overhead baffles.

"The Air Force Civil Engineer Center provided a standard design, but it was up to our project delivery team to absorb the criteria, adapt the standard and coordinate between all the design disciplines – civil, structural, architecture, interior design, mechanical, plumbing, fire protection and electrical," said Mudd. "I'm very thankful to have been part of such a talented team of designers and engineers to deliver another facility for our military service members."

The indoor small arms range project was the first in-house design project to follow the Air Force's new third-party certification to meet the Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. Instead of LEED, the project delivery team used the Department of Defense version of Guiding Principles Compliance certification of the Green Business Certification Inc.

The groundbreaking ceremony for the new ISO Hangar, and the ribbon cutting for the Small Arms Range, were both held Oct. 19, 2021.



The new Indoor Small Arms Range onsite at Westover Air Reserve Base is a 28-lane live firing range facility with 25-meter firing lanes.



Rendering of the new Regional ISO Maintenance Hangar at Westover Air Reserve Base in Chicopee, Mass.

A History of FUDS - Formerly Used Defense Sites

Charles Delano, public affairs

Have you ever wondered about the history of the Formerly Used Defense Sites and the U.S. Army Corps of Engineers involvement?

To get a better understanding of the FUDS program, let's begin with a look at our country's history.

Throughout the formation of this nation, Department of Defense installations were built to support military readiness, expand training capability during conflict and test warfare capabilities.

As training and testing needs changed, the properties, which were no longer used, were disposed of by DOD, transferring the properties to other owners for private or public uses.

As public environmental awareness increased, Congress formally established the Defense Environmental Restoration Program (DERP) in 1986. FUDS, a program within DERP, provides for the environmental restoration or cleanup of DoD contamination at properties that were formerly owned by, leased to or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense and were transferred from DoD control prior to 17 October 1986.

USACE executes the FUDS program on behalf of the U.S. Army and DOD by investigating and, if required, cleaning up potential DoD contamination or munitions that may remain on FUDS properties.

Using a risk-based approach for prioritizing work, USACE collaborates with regulators and stakeholders to ensure that higher risk sites are addressed first.

Activities performed on FUDS properties are classified into three primary programs which include the Installation Restoration Program, Military Munitions Response Program and Building Demolition and Debris Removal program.

USACE investigates potential DoD contaminants and provides the cleanup of hazardous substances, pollutants and contaminants released as a result of DoD activities through the IRP. The MMRP addresses DoD release of unexploded ordnance, discarded military munitions and munitions constituents. The removal of unsafe buildings and structures at FUDS properties that were transferred to state, local governments, or Native Corporations of Alaska is addressed through the BD/DR program.

In addition to DERP, Congress passed the Superfund Amendments and Reauthorization Act in 1986, which amended the Comprehensive Environmental Response, Compensation and Liability Act of 1980. This amendment established the DERP, authorizing the Secretary of Defense to carry out response actions with respect to DoD releases of hazardous substances from active installation and FUDS. Where DOD may share responsibility with a third party or subsequent owner, those sites are addressed

through a Potentially Responsible Party project. Louisville District is the PRP District for the Great Lakes and Ohio River Division.

The Louisville District current FUDS Program includes projects in Kentucky, Illinois, Indiana, Ohio and Michigan and has managed more than \$12 million in restoration efforts in FY21.



Contractors install monitoring wells at Racine Army Airfield and Missile Site in Michigan as part of the Defense Environmental Restoration Program - Formerly Used Defense Sites.



As part of the Military Munitions Response Program on Formerly Used Defense Sites, contractors work to detect buried munitions using a vehicle-towed digital metal detector at the Camp Ellis Military Reservation in Fulton County, Illinois January 17, 2018.

District recognizes employees in end of year awards ceremony

Madison Thompson, public affairs

As the fiscal year concludes and a new year of projects and contracts awaits, it is important to look back and acknowledge the hard-working members of the USACE team. The challenges and adversities of the past year have not slowed down the USACE – Louisville District members in the slightest.

Among those recognized as part of the district's end of year awards ceremony were two teams who won headquarters level awards for the efforts to revolutionized project delivery.

The McAlpine Locks and Dam Gate, North Chamber Gate Replacement team was recognized as the 2021 Project Delivery Team of the Year for Merit as part of the 2021 Program and Project Management Community of Practice Awards.

The Project Delivery Team (PDT) successfully executed the Louisville District McAlpine Locks and Dam Gate Changeout Project, which consisted of replacing both miter gates, ahead of schedule and under budget.



Louisville District Commander Col. Eric Crispino presents Keith Sutton from the Quality Management Team with a certificate of appreciation.



Louisville District Commander Col. Eric Crispino (left) presents the Innovation of the Year award to the New Lock at the Soo - New Lock Chamber BIM Modeling Team.

"The McAlpine Gate Replacement project was a tremendous challenge," said Craig Moulton, Louisville District project manager. "But the team rose to the occasion to complete the work."

The PDT completed the project in a single, six-month closure, while managing several challenges including working through an ongoing global pandemic. The project was completed in 40% less closure time than originally scheduled and 27% under budget. Because of the PDT's success, the project established a new standard that saved the operations and maintenance program millions of dollars and drastically reduced future impacts to navigation stakeholders.

Likewise, the New Lock at the Soo – Lock Chamber BIM Modeling Team was recognized for their innovative approach in designing the new chamber in Sault Ste. Marie, Michigan using virtual reality. The team, which is comprised of members from across the Great Lakes and Ohio River Division, earned the 2021 Innovative of the Year Award for their unique approach.

The Louisville District is playing a key role in the regional design effort and the virtual reality simulation has proved a useful tool for designers and users to collaborate.

"The model allows us to elicit customer feedback," said Gary Grunwald, USACE Louisville District civil engineer. "It allows us to see potential clashes so we can make necessary modifications now, saving both time and money."

Col. Kimberly Peebles, Great Lakes and Ohio River Division Commander, had the opportunity to try on the virtual reality headset and tour the mega-project during her visit to the Louisville District in August.

"This is an incredible and talented team of teams that produced something very special with tangible mission results," said Peebles upon the announcement of the award. "I had an opportunity to virtually 'walk' the new lock design. Truly incredible! We look forward to future opportunities to advance collaboration and design through technology and innovation – Together!"

The team will be formally recognized at the Innovation Summit in Vicksburg, Miss., at the end of October.

To close out the fiscal year, USACE Louisville District Commander Col. Eric Crispino had this to say. "Congratulations to everyone who was selected for an award this year. Well done. Your performance reflects great credit to yourself and the district."

Many others were recognized during the end of year ceremony, which can be viewed here: <https://youtu.be/NXjB0eRzpA0>



Louisville District Commander Col. Eric Crispino (left) presents awards to the McAlpine Miter Gate Replacement PDT for being the Project Delivery Team of the Year. Awardees pictured include Jeremy Ball, Craig Moulton, and Josh Saylor. Not pictured: Gary Chambers, Jerry Edwards, Todd Jennings, Tracey Keel and Dewey Takacy.

District closes fiscal year with day at the ballpark

Madison Thompson, public affairs

U.S. Army Corps of Engineers, Louisville District employees gathered at Louisville Slugger Field Sept. 26, 2021 to recognize and celebrate the hard work by district employees over the past year.

The cloudless sky provided perfect weather for event attendees as employees and their families watched one of America's favorite pastimes at Louisville Slugger Field.

Louisville District Commander Col. Eric Crispino, threw out the first pitch of the game. Even though the Bats lost the game to the Toledo Mud Hens (9-4), the event was successful in more ways than one.

Park rangers Cole Upton and Kaitlin Cook from Green River Lake, and Jacob Kramer from Buckhorn Lake, staffed a water safety booth where they shared the water safety message with hundreds of fans as part of the event. Upton, who served as the Bobber the Water Safety Dog mascot, handed out water safety giveaways and countless high-fives to young fans.

"Being at the Bats game was a huge success. Hundreds of contacts were made answering questions of what the Corps of Engineers does and why we do it, giving kids a chance to interact with a beloved mascot, and to help spread the message of water safety into their daily lives," said Upton.

Cook agreed with her fellow ranger co-worker that the day was a resounding success for guests and families.

"It was a great day. We, as rangers, had a lot of fun working the event. The kids had a blast interacting with Bobber," said Cook.

Attending these events is important for

several reasons, according to the rangers.

"Being at the Bats game gave members of the public that don't normally interact with Corps employees a chance to learn about what we do, why we do it, and about recreational activities that are available," said Upton.

Rangers often serve as the face of the Corps by interacting with the public at numerous outreach events throughout the year. For some, this is a staple in being part of the USACE Louisville District team.

"I'm grateful to be involved in an organization that has such a focus on community outreach," said Cook.



Katie Newton



Katie Newton

Bobber the Water Safety Dog mascot visits with fans and promotes water safety prior to the game.



Katie Newton

Bobber the water safety dog, piloted by park ranger Cole Upton, poses with fellow park rangers Kaitlin Cook and Jacob Kramer during baseball game.



Louisville District Commander Col. Eric Crispino throws the opening pitch at Slugger Field on Sept. 26



Interested in learning about Bobber and how to keep yourself safe while you're swimming or camping near water? For activities for children of all ages, safety tips, and fun infographics like this one, check out the link below or stay up to date on our social media platforms on Facebook, Instagram, and Twitter @LouisvilleUSACE <http://bobber.info/>

Katie Newton