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Three Forks of Beargrass Creek
Ecosystem Restoration Feasibility Study
reaches major milestone





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Louisville District Commander Col. Eric Crispino visits Beargrass Creek in Louisville, Ky., with Project Manager Laura Mattingly, Civil Works Branch Chief Matt Schueler and Biologist Steele McFadden to learn more about USACE's recommended plan. (USACE photo by Abby Korfhage)

 **Please conserve:
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Commander's Comments

Team Louisville,

What a whirlwind these past two months have been in the Louisville District. Between project visits, governance meetings, and team-building events like Military Appreciation Day at the Louisville Bats and our internal partnering session with our senior leaders, it has been a busy period for the district.

We also observed Memorial Day, a National Day of Awareness for us to honor our nation's fallen heroes who made the ultimate sacrifice for their country and took time to pause and reflect on those Americans who died in service to our nation.

Throughout June we observe National Safety Month and take time to reinforce the importance of safety in our workplace and across each of our construction sites. Safety, as always, is a top priority among our team members, and I want to personally thank everyone in the district for upholding safety as part of our mission.

In this issue of the Falls City Engineer, enjoy articles focused on many of our specialized programs and the efforts of our people and teams who make the district great. Stories include a highlight of construction safety week at the Louisville VA Medical Center, the signing of the Chief's report for the Three Forks of Beargrass Creek Ecosystem Restoration Project, highlights on our Dam Safety team and pollinators at Patoka Lake, and much more.

Our mission, as always, is accomplished because of the members



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

of our world-class team. The district's excellent reputation stands strong because of you and your efforts. The summer months ahead promise to be busy as recreation season is in full swing and many projects reach key milestones with celebratory groundbreakings and ribbon-cuttings filling the calendar for the next quarter.

I hope each of you have a safe and relaxing summer season. Stay safe!

Building Strong! Louisville Proud!

Col. Eric Crispino

Eric D Crispino

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Civil Works

Three Forks of Beargrass Creek Ecosystem Restoration Feasibility Study reaches major milestone with signing of Chiefs Report

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District recently completed an Ecosystem Restoration Feasibility study and recommended plan to restore both instream and riparian habitat within the Beargrass Creek watershed in Louisville, Kentucky.

Beargrass Creek has a 60 square mile watershed and is composed of three main branches (the South, Middle and Muddy forks), which reach throughout the city of Louisville. Historically, Beargrass Creek has suffered degraded habitat due to development and manipulation.

On May 24, 2022, Lt. Gen. Scott Spellmon, USACE Commanding General and 55th U.S. Army Chief of Engineers, signed the Chief's Report for the Three Forks of Beargrass Creek Ecosystem Restoration Feasibility Study recommending the project for congressional consideration — a major milestone for the project.

"The signing of the Chief's Report progresses the project to Congress for authorization and is the next step in allowing the Louisville District and our non-federal sponsor to proceed with project implementation," said Matt Schueler, USACE Louisville District Civil Works Planning, Programs, and Project Management Branch chief. "We are thankful for the efforts of our non-federal



Lt. Gen. Scott A. Spellmon, USACE Commanding General and 55th U.S. Army Chief of Engineers, signed the Chief's Report for the Three Forks of Beargrass Creek Ecosystem Restoration Feasibility Study May 24, 2022 – a major milestone for the project.

sponsor and our partners across local, state and federal levels for their strong support in advancing this project forward. Together, we will continue to work toward our collective goal of restoring habitat within the Beargrass Creek watershed."

Beargrass Creek has played an important role in the development of Louisville and flows through numerous neighborhoods as well as two historically significant Olmsted Parks: Cherokee Park and Seneca Park. The confluence with the

Ohio River is connected to the Louisville Loop and Waterfront Park, which has over two million visitors a year and hosts events year-round.

The study, which began in 2019, was completed in cooperation with the non-federal sponsor — Louisville and Jefferson County Metropolitan Sewer District, also known as MSD — and provides recommendations for aquatic ecosystem restoration of 620 acres and 8.8 miles of stream, wetland creation, barrier removals and floodplain access.

"Our Recommended Plan will restore habitat in the watershed at 12 sites, to include providing instream habitat for aquatic species, resculpting the stream to its natural meander, adding wetland areas, removing invasive plant species and establishing native plants," said Laura Mattingly, Louisville District project manager. "In addition to the restoration actions, we propose the addition of a boat ramp, trails and trail enhancements, an outdoor classroom, and bird watching areas. The plan not only improves the environmental quality of the watershed, it will also give our community more access to green space and recreational opportunities."

In addition, this plan adds 72 acres of wetlands, 110 acres of native canebrake, and 120 acres of bottomland hardwood as Kentucky has lost more than 81% of natural



The U.S. Army Corps of Engineers Deputy Commanding General for Civil and Emergency Operations Maj. Gen. William Graham (center) visited the Louisville District to learn more about the Three Forks of Beargrass Creek Ecosystem Restoration Feasibility Study and to tour some of the project's sites around the city of Louisville, April 29, 2022. Accompanying him is Matt Schueler, Chief of Civil Works Branch; Wolfie Miller, Louisville and Jefferson County Metropolitan Sewer District; Linda Murphy, Louisville District Deputy District Engineer; Laura Mattingly, project manager; Louisville District Commander Col. Eric Crispino; and Kyle McKay, Engineer Research and Development Center civil engineer.

Continued from previous page

wetlands and 98% of all large canebrakes since the time of European settlement.

The project's economic benefits include \$106 million in regional construction expenditures, support for 1,780 full time jobs and \$202 million in economic output for the local area.

"The creek has suffered from 100 years of abuse and our work won't fix all the problems, but in addition to the improvements we are making, we want to show that Beargrass Creek is not beyond repair and hope that our work will inspire more groups to get involved," Mattingly said.

The next step will include authorization of the recommended plan in a Water Resources Development Act and execution of a Project Partnership Agreement with MSD. Once authorized and funded, design and construction will be initiated.



Abby Korfhage

Beargrass Creek has a 60 square mile watershed and is composed of three main branches (the South, Middle and Muddy forks), which reach throughout the city of Louisville. Historically, Beargrass Creek has suffered degraded habitat due to development and manipulation.

Louisville District Dam Safety team works hard to ensure dams are reliable

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers is responsible for more than 700 dams across the United States that provide multiple benefits such as flood risk management, navigation, water supply, hydropower, environmental stewardship, fish and wildlife conservation, and recreation. Through the Dam Safety Program, USACE provides oversight for its dams and works to ensure they remain safe, reliable and able to provide their intended benefits.

Dam safety professionals carry out the dam safety program to make sure these projects deliver their intended benefits while reducing risks to people, property and the environment through

continuous assessment, communication, and management. The Louisville District has a dedicated team that conducts comprehensive monitoring and inspections to keep their dams safe from failure. A dam failure — a sudden, uncontrolled release of water — can be a life threatening and destructive force, which is why the Corps of Engineers and the Louisville District strive to design, construct, maintain and operate safe dams.

To date, the Louisville District's dams have provided more than \$9 billion in flood risk reduction benefits.

The Dam Safety Program uses risk to inform how USACE manages the dams it operates and maintains, with life safety

being the highest priority. This approach is a best practice adopted to evaluate, prioritize and justify dam safety decisions. Using risk information allows USACE to repair its dams in the most effective manner within a constrained budget.

Louisville District's Dam Safety Program Manager, Jackie Rowe, has worked in dam safety for 20 years and is responsible for all funding and budget requests, assigning all annual dam safety tasks, and reviewing final documents before submission to the district's regional division office.

"The most challenging part of this program is the coordination with so many different groups, some internal at the Corps and some external," said Rowe. "We work with all engineering disciplines to complete inspections at each project. We work with the Risk Management Center to ensure all project risks are understood and properly managed. We work with the Mapping and Modeling Center to get up to date flood inundation mapping for our projects. We work with the operations project staff or each flood risk management and navigation project."

The team also works with emergency managers downstream of each project to ensure they are aware of the risks and have evacuation protocols in place.

"It is difficult to manage all of these relationships, but having a great dam safety team definitely helps," said Rowe.

During routine dam safety activities,



USACE

The Louisville District Dam Safety team inspects Buckhorn dam in Buckhorn, Ky., Aug. 8, 2016.

such as inspections or risk assessments, USACE examines its dams and identifies any possible issues. If an issue is identified during these routine activities, the dam safety team completes an issue evaluation study which provides a better understanding of how that issue may affect the dam's performance. These studies are often followed by a dam safety modification study, which answers the question of how the issue with the dam should be addressed.

"One of the biggest things I am seeing in the dam safety program is our aging infrastructure," said Kate Brandner, Louisville District Dam Safety Section chief. "The projects are performing remarkably well, no small part to the amazing staff at each of the projects, but as the projects age issues start arising."

Examples of such issues include service gates needing repair, riprap needing to be overlain to prevent damage to the embankment and equipment going bad and needing to be replaced.

"The resources needed to complete repairs are limited, and we have to prioritize funding to best address any risk associated with delaying repair," said Brandner. "Institutional knowledge is one of the hard to quantify resources that we have utilized to overcome issues; knowledge about what repair efforts work best or figuring out a best path forward. This knowledge comes from both within dam safety section and the staff at the project. They have a lot more intimate experience with the projects and can provide context that those of us in the office often lack."

Brandner has worked in dam safety since 2016, and in her current role, provides the rest of the team the resources they need to ensure the program is successful.

Kyle Murray, Louisville District Dam Safety coordinator for the Middle Wabash basin, is also a part of the team. Murray monitors and reviews instrumentation data for each dam in his area, which can provide indication of developing flaws within the dam structure. Annual and periodic inspections are also tasks performed by coordinators to ensure the dams are functioning as intended.

The program's coordinators are also responsible for Emergency Actions Plans (EAP), any risk reduction measures depending on the safety rating of the dam, and are considered the expert when it comes to dam safety relating to each project, according to Murray.

"What makes this program different, and challenging, is most of what you do are outside of view," said Murray. "In order for the program to function, it relies on other disciplines outside of dam safety such as structures and water resources groups."

Although it can be challenging at times, Murray says the hands-on aspect of his job is the best part.

"The work that gets done has a direct impact on the community with the overall flood mitigation aspect," said Murray. "The annual and periodic inspection are also great because you go out to the various projects and get your boots dirty."

Scott Kelly is the dam safety coordinator for the Green River Basin, and he enjoys the opportunity to work with different disciplines.

"The inspection team consists of structural, electrical, mechanical, geotechnical, and hydraulic teammates, which requires coordination and frequent communication," said Kelly. "I enjoy going to the projects and talking with the lake manager and operations staff. I learn something new almost every trip. I gain a better understanding of operations which helps me to be a better coordinator."

Dams are a key part of USACE's flood risk management solutions and there is no doubt how hard the dam safety teams work to reduce risks to local communities.

"Our great team is the reason why Louisville District consistently meets dam safety operation and maintenance requirements and is highly regarded within, not just the region, but the entire USACE," said Kelly.

In addition to Rowe, Brandner, Murray and Kelly, the Louisville District Dam Safety team also includes John Bock, Engineering Division chief and Dam Safety Officer; Roger Olsen, Upper Kentucky coordinator; Bob Anderson, Miami River Basin coordinator; Jim Kelly, navigation coordinator; and Duane Pfouts, instrumentation manager.

Flooding can occur near dams in a variety of scenarios. USACE shares information to increase awareness about its dams and possible flooding, so stakeholders and the public can manage how they prepare for and respond to a flood event. The National Inventory of Dams is a great online resource to find out where dams are, what they were designed to do, and who manages them. Learn more by visiting: <https://nid.usace.army.mil>.



Kate Brandner, Louisville District Dam Safety chief, takes photos of a dam during an inspection.



The Dam Safety team inspects the embankment and verifies the current condition and performance of the project during a periodic inspection at Monroe Lake in Bloomington, Ind., May 16, 2022.

Introducing Louisville District's first ever River Ranger: Lisa Freeman



Lisa Freeman, Louisville District natural resources specialist presents the history and purpose of the Falls of the Ohio National Wildlife Conservation Area during an Earth Day clean-up event at Shawnee Park in Louisville, Ky., April 22, 2022.

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District manages nine locks and dams: seven on the Ohio River and two on the Green River in Kentucky. The Ohio River projects operate 24 hours a day, 365 days a year, serving both the towing industry and recreational boaters. It is a known fact that USACE is the steward of the lands and waters located on its projects. The Corps' guiding philosophy for natural resource management is to manage, conserve, and improve these natural resources that contribute to an increased quality of American life, now and for posterity. However, this is not only taking place at lake projects that provide recreational activities for the public, but also at the locks and dams.

Lisa Freeman, who has been with USACE for 27 years, is now the first to hold the title of "River Ranger" at the Louisville District where she assists with all natural resource issues at the locks and dam projects within the district's footprint.

Freeman has been serving in the position for last three years and says, "The River Ranger position is new for the Louisville District, so I have had the opportunity to introduce the lockmasters and other staff to what a river ranger does and how I can help them with natural resources issues."

Most people equate the word "ranger" to a park ranger, who helps manage the districts' flood risk management projects. And, although the positions are very similar in that fact that they help with all natural resource issues, a river ranger covers a wide range of duties specifically at locks on

dams on rivers.

"I collect and enter all data for the locks into the annual Natural Resource Management Assessment, Environmental Stewardship and RecStatus, Visitation Estimation and Reporting System visitation program, etc.," Freeman said. "I create recreation and environmental stewardship budget packages for the annual budget builds. I also put in packages for boundary surveys and help with identifying Corps boundaries as needed."

In addition, Freeman creates the initial information packages for any new USACE or Outgrant projects that will need environmental and cultural reviews and work with outgrants on any other questions or issues they have. She monitors outgrant activities to ensure compliance with their lease/license agreements and ensures protection of project's natural resources.

"I have assisted the locks with their existing pollinator plots and help them create new plots," Freeman said. "I provide visitor assistance and work with other recreation issues at the locks that have day use areas as well."

Freeman promotes and manages the water safety program for the locks and dams and is their representative for the district's Water Safety project delivery team. She also represents the locks and dams on project delivery teams for planning manager and ranger workshops.

"I attend meetings of local civic groups and agencies that have an interest in the Ohio and Green Rivers and participate in joint water safety and natural resource efforts with other groups as opportunities arise," Freeman said. "I write the scope

of work, create maps and submit all documentation needed for service contracts such as mowing and herbicide application for the locks and dams. I also submit the information needed for contracting to exercise option years for locks and dam service contracts."

Before being the first employee in the district's history to ever hold the river ranger position, Freeman was a natural resource specialist, also known as park ranger, at Taylorsville Lake in Taylorsville, Kentucky.

"My basic duties are pretty much the same, but since the locks and dams are focused on navigation, the perspective is very different than at a lake project," Freeman said. "A few of the locks have larger amounts of fee property, but most of the locks have just a small amount of property surrounding the locks and dam structures, unlike the lake projects that have a larger amount of fee property."

As with any job, there are some challenges.

"With nine locks and dams, it can be very difficult deciding where I am needed most," Freeman said. "It is also difficult balancing office work with being out in the field at the projects. It is definitely a learn-as-I-go position to be able to support the locks and dam as best as I am able."

However, Freeman has really enjoyed learning more about the locks and dams operate.

"All the staff at the locks have been great to work with and I have enjoyed getting to know them," Freeman added.

Although other USACE districts have had river rangers on their roles for several years, Freeman is the first one to fill this critical position in the district.



River Ranger Lisa Freeman staffs the water safety booth at Louisville Slugger Field May 15, 2022.

ERCIP aims to improve energy resilience, security and conservation for military projects

Charles Delano, public affairs

The Energy Resilience Conservation Investment Program is a critical part of the Department of Defense Military Construction program that aims to improve energy resilience, energy security and energy conservation of its existing missions.

On April 22, 2022, the U.S. Army Corps of Engineers Louisville District was assigned the mission of providing program management and construction contract management and administration of ERCIP projects. USACE solicited across the Enterprise for a centralized approach to support the ERCIP Program. The Great Lakes and Ohio River Division, Louisville District and Huntsville Engineering Center were selected to deliver the ERCIP program for their strong collaborative approach.

The geographic districts have the responsibility for participating in planning and design, performing design reviews along with Louisville District and the Huntsville Engineering Center, and supporting Louisville District by providing on-site construction management oversight in accordance with the construction management plan.

“This is an exciting, challenging program with a strong, highly motivated team comprised of LRD, LRL, and HNC subject matter experts,” said Rachael Haunz, Chief, Military/IIS Project Management Branch. “The team has put in many hours of high energy effort in developing this collaborative approach and has done an outstanding job.”

In order to qualify for ERCIP funding, projects must enhance energy resilience and security, reduce energy or water

consumption or construct renewable energy systems. Examples of energy resilience include microgrids, battery energy storage systems, clean energy generation systems and hardening of electrical infrastructure against attack or natural disasters.

“We see this new partnership with the Huntsville Center on the Army ERCIP as an opportunity to expand the success of Louisville District’s nationwide reserve programs,” said Ian Mitchell, Chief, Reserve Branch. “We are excited to continue working with our geographic district partners on the delivery of this program.”

The U.S. Army Corps of Engineers Louisville District manages military construction for more than 306,000 square miles that encompasses Michigan, Illinois, Indiana, Ohio as well as construction for all reserve projects.



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USACE Construction Division Chief promoted to Brigadier General in U.S. Army Reserve

Charles Delano, public affairs

Kirk Dailey, U.S. Army Corps of Engineers Louisville District construction division chief was promoted to brigadier general in the U.S. Army Reserve during a ceremony held at the Romano Mazzoli Federal Building in Louisville, Ky., April 22, 2022.

"I could not be more proud of my friend Kirk for his promotion, and proud of Louisville," said USACE Deputy Commanding General Maj. Gen. Richard Heitkamp who presided over the ceremony. "I've known Kirk for a long time and we're very fortunate to have such a capable officer."

Dailey's promotion highlights a dual career which began in October 1990 in the U.S. Army Reserve and January 1992 in USACE. Dailey will now serve as the Deputy Commanding General of the 416th Theater Engineer Command.

"I considered myself honored and blessed to have achieved the levels I have and to have worked with the incredible people that I have been able to work with throughout both of my careers," said Dailey.

When asked about a person who influenced his career, Dailey spoke about how U.S. Army Brig. Gen. Christie Nixon taught him the importance of making tough decisions. Through her mentorship, Dailey learned to weigh short-term difficulties while considering long-term benefits.

"I learned to have that long-term vision to see how the second and third order effects might play out," said Dailey. "She really helped influenced that in me when



U.S. Army Corps of Engineers Deputy Commanding General Maj. Gen. Richard Heitkamp (left) administers the oath of office to U.S. Army Brig. Gen. Kirk Dailey during a promotion ceremony in Louisville, Kentucky April 22, 2022. Dailey will serve as the deputy commanding general of the 416th Theater Engineering Command for the U.S. Army Reserve and currently serves as USACE Louisville District construction division chief.

dealing with challenging situations."

Dailey credits U.S. Army Col. Jeff Anderson for providing Army leadership skills and experience that he uses at USACE. From Anderson, he learned to accept change when top-level decisions are made and to be an agent of change.

"I learned to change what I could," said Dailey. "Accepting what is instead of being opposed to what is."

Dailey gleaned his leadership style from U.S. Army Brig. Gen. Bryan Watson during a deployment to Afghanistan. Although he already had an appreciation for servant leadership, Watson provided a true-to-life example of purposefully leading to serve.

"At successive levels our role is to support the warfighter and ensure that everything we do isn't to perpetuate

leadership," said Dailey. "The soldier on the ground has to live with the decisions that are made at the headquarters level."

Dailey provides some insight for new employees who are starting a career in USACE. His strongest piece of advice is to seek advice along the way and to find a mentor at a level at what you aspire to become.

"If you wait for someone to seek you out to give you career advice, you are probably going to be waiting for a long time," said Dailey.

During his time away from USACE, Dailey spends time with family, travels and sets aside quiet time for introspection. One of his favorite activities is wine tasting and he has even taken a class to appreciate the different varieties.

Grissom Air Reserve Base cuts ribbon on new Aerial Port Facility

Abby Korfhage, public affairs

Grissom Air Reserve Base, in Miami County, Indiana, held a ribbon cutting ceremony for the new Aerial Port Facility, June 3, 2022. The U.S. Army Corps of Engineers Louisville District managed the design and the construction of the project.

The \$10 million facility is home to the 49th Aerial Port Squadron and it's 122 airmen responsible for preparing and loading cargo onto military planes. The new 11,870 square-foot building, which sits on four acres, includes dedicated classrooms, computers, areas for command support staff, storage for equipment, an indoor training space and is conveniently located next to the airfield ramp.

"Great work by the team on finishing this project, it will provide critical training capability for the Air Force Reserve," said U.S. Army Corps of Engineers Louisville District Commander Col. Eric Crispino.

The newly constructed facility gives

aerial porters their own dedicated space to conduct training, process air cargo, load and unload aircraft and perform joint inspections of cargo and equipment used for air transportation and will be utilized for decades to come.



Environmental engineers monitor water quality through groundwater sampling

Charles Delano, public affairs

Whether it is a current or formerly owned, leased or Department of Defense possessed property, the U.S. Army Corps of Engineers Louisville District manages the environmental restoration of sites contaminated with hazardous, toxic or radioactive waste or ordnance in Michigan, Illinois, Indiana, Ohio and Kentucky.

Through the Formerly Used Defense Sites, Installation Restoration, Base Realignment and Closure, Interagency and International Services and Environmental Quality programs, the environmental section aims to protect human health and the environment.

One tool the environmental section installs to use in the restoration process are groundwater monitoring wells. These wells provide samples of groundwater, which are tested for hazardous or toxic contaminants that could possibly cause a risk to people and the environment. Sampling data shows the concentration of harmful chemicals in the groundwater, which is compared to federal and state limits.

The most accurate groundwater samples come from wells that have been installed and properly developed at a site. The quickest method to collect groundwater samples is to bore directly into the aquifer to obtain the sample. The U.S. Army Corps of Engineers primarily uses a low-flow groundwater sampling method, which



Environmental Engineers Brandon Steele and Anna Scoggins and Student Co-op Alexandra Wright sample groundwater at the Former Illinois Ordnance Works.

slowly pumps the groundwater without disturbing the aquifer itself.

The first step to collect groundwater samples is to make sure the water that is collected is representative of the aquifer. Members of the environmental section collect measurements of water quality, such as pH, temperature, dissolved oxygen, clarity, and others.

As the water is drawn out of the

well and the parameters stop changing, it indicates that water is being drawn from the actual aquifer. After enough groundwater is purged and the parameters stabilize, containers are filled with the groundwater and sent to an Environmental Laboratory Approval Program accredited lab. The containers are provided by the lab conducting the tests and vary based on the contaminant that is being measured. The filled containers are carefully labeled with the location and time of the sample and are packed into coolers with ice for shipping. The ice limits changes to the contaminant concentration during the shipping process.

USACE follows quality control procedures to ensure accurate data. Duplicate samples are collected at ten percent of the locations. The duplicate samples are compared to initial samples to ensure the samples show a similar concentration. Samples of clean water that have been exposed to our equipment after decontamination are also collected to test the decontamination procedure and check for cross contamination.

Before moving to a new sampling location, any reusable equipment is decontaminated and cleaned. Single-use equipment such as the flexible tubing and gloves are disposed.

Groundwater testing is one way the Louisville District's environmental program works to build a strong, sustainable environment for future generations.



Groundwater is purged at the former Camp Breckinridge in Kentucky using a peristaltic pump while water quality measurements are collected using a Horiba U-51 flow through cell. The water level in the well is measured during purging to make sure the pumping rate is not faster than the well is being refilled from the aquifer.

Construction continues on Canandaigua VA hospital project

Michael Maddox, public affairs

Work continues on multiple projects across the campus of the Canandaigua VA Medical Center, as visitors can notice the work on new facilities and upgrades to current buildings across 75 percent of the hospital's grounds.

The work is being done thanks to recommendations from the Department of Veterans Affairs' Capital Asset Realignment for Enhanced Services (CARES) program noting that the decades-old facilities were being underutilized, said Gerry DiPaola, USACE Project Manager for the Canandaigua VA Medical Center construction.

"This project enhances the use of the current VA Medical Center in Canandaigua. A study was conducted by the VA and it identified an underutilization of facilities at Canandaigua and so to improve services, the study called for a revised outpatient clinic — a 21st-century outpatient clinic — along with community living center cottages to provide housing to veterans that would benefit from an assisted living type of arrangement," he said. "So basically, the project better utilizes the infrastructure that is at Canandaigua right now, both medically and assisted living care type of facility."

The work at the Canandaigua VA campus is split up into phases to allow for multiple teams to work on multiple projects at the same time, DiPaola explained.

We have Phase 1, which is the outpatient clinic consolidation, bringing all the clinic services under one roof versus multiple buildings currently, and then you have Phase 2, which is the renovation of Buildings 3 and 9 and the new cottages - right now we have 96 cottages under contract," he said. "There are plans



Contractors use teamwork to raise one of the walls of one set of cottages being built on the site of the Canandaigua VA Medical Center in New York. The cottages are part of Phase 2 of construction.

for a Phase 3 to award, through a new acquisition, the contract options (Cottage A/B and renovations to Buildings 4 and 5) that were unable to be awarded under Phase 2. We are working with our Office of Construction & Facilities Management partners to ensure this plan moves forward."

DiPaola said there are many things that need to be taken into account when working on an active medical facility's campus.

"One of the main considerations is that we're still able to have an active medical center, in other words, maintaining patient services and seeing them with minimal disruption to their normal routine while the work is taking place," he said. "It's a great

accomplishment — keeping the existing facility up in operation while constructing new infrastructure and renovating the existing."

"For example, veterans still need to be able to get from the parking or drop-off area all the way to the clinics and back again without injury, without postponing appointments or displacing staff. That's been a really high priority for us to ensure the medical center can remain fully in operation during the work, especially the suicide prevention call center," DiPaola added.

Ensuring the safety of patients, visitors, and staff throughout the construction period is a team effort.

"You have life safety requirements that need to be maintained during construction and communicating all of the construction activities with key departments within the medical center (Police, Fire Department, Patient Safety, and Infection Prevention) — those four really need to be informed as to the contractor's work plan so any concerns can be addressed prior to the actual work being accomplished," he explained. "It can present some challenges at times, but we have been able to develop workarounds to ensure key requirements from those four departments: security, life safety, and infection prevention so that when patients



Still in an early phase of construction, the steel frame of the Community Center has been erected on the site of the Canandaigua VA Medical Center in New York. The Community Center is a part of Phase 2 of construction.

Continued from previous page

arrive for their appointments they can rest assured their visit will be safe and they can return home hopefully better than when they arrived.”

Matthew Lowe, Chief of the Veterans Affairs Division for the U.S. Army Corps of Engineers, Louisville District, agreed that partnership has been key to the success of the project.

“Renovating and upgrading a VA medical center involves multiple stakeholders with a variety of interests, and it’s encouraging that everyone involved is working together to ensure success for this project,” he added. “The VA CFM and the Canandaigua Medical Center leadership and staff have been instrumental in working through challenges and unknowns throughout these projects.”

That coordination among stakeholders has helped ensure every measure is taken to protect the health of patients and staff.

“A lot goes into keeping the medical center safe for the patients and staff as well. For example, it’s been studied quite heavily that construction debris/dust and odors have a negative effect on humans, especially on patients that may have an immune deficiency syndrome because there are a lot of harmful contaminants associated with construction that can become airborne and if ingested can really cause people some hardships,” DiPaola said. “That’s why construction in medical facilities requires the use of negative air machines (i.e. vacuum) to ensure that the construction area air is not being introduced into the hospital environment - it’s filtered and exhausted properly.”

Being an Army veteran himself, DiPaola said he appreciates the moments his work allows him to be on-site and interact with veterans/patients.

“When you walk into the building checking on work and you pass a Veteran or simply hold a door open, it’s always a good feeling saying hello or to provide directions to a clinic or exit door. It’s great to be able to talk to veterans and let them know what’s going on and see the benefit of all of the work taking place here,” he shared. “I always look at it as, well, someday I may be using these facilities, so let’s make sure they are built well to serve the Veteran population for as long as possible and improve the quality of life for as many Veterans as we can.”

Lowe said he is proud to be a part of this project that will benefit thousands of Veterans for years to come.



Michael Maddox

Work is nearing completion in the atrium area of Building 2, the Outpatient Clinic of the Canandaigua VA Medical Center in Canandaigua, New York. Building 2 is tentatively scheduled to be complete by the end of this year.

“I’ve spent almost 25 years building new facilities and maintaining infrastructure on numerous military installations, but these are projects all about supporting and taking care of our Veterans,” he shared. “It’s a gift to be involved in any capacity with men and women who were willing to sacrifice it all for our country. So not only am I thrilled, but equally humbled to be part of something that will benefit Veterans.”

This project constructs a new 84,000 square foot Outpatient Clinic, a new chiller/emergency generator plant, renovates

85,000 square feet of existing facility space, and upgrades existing roadways and site utilities as well as the renovation and building of 96 community living center cottages and a community center.

These state-of-the-art facilities will seamlessly blend into the existing historical campus of Canandaigua and provide world-class healthcare to approximately 65,000 veterans living near the greater Canandaigua area.

Phase 1 is anticipated to be complete in 2023, and Phase 2 is planned to be completed in 2024.

Louisville Veterans Administration Medical Center project team recognizes Construction Safety Week

Michael Maddox, public affairs

Personnel from the U.S. Army Corps of Engineers Louisville District, the new Louisville VA Medical Center, and the Walsh-Turner Joint Venture II came together May 2 to kick off a week of events in recognition of Construction Safety Week.

This year's theme is "Connected. Supported. Safe," and it seemed fitting as speakers from the various organizations involved in the building of the new Louisville VA Medical Center addressed the crowd about the importance of safety and teamwork.

Gary Schoeffler, site safety and health officer for Walsh-Turner Joint Venture II, said it takes everyone's commitment to safety and their fellow workers to ensure and maintain safety on a construction site.

"Safety is a value, a belief and an obligation that unites us across individual teams, companies and the entire industry. It's a connection that is seen and felt between our fellow workers on the job site, between office, management and craft, between companies and even competition, who stand together to keep everyone safe and improve our safety culture industry-wide," he said. "It's a strong bond that keeps us connected to each other, and to something bigger than ourselves. We are responsible for the well-being and safety of everyone on every job site. And it is through this connectedness that we are able to ensure everyone can do their best work

and return home safely every day."

Matt Lowe, chief of the USACE Louisville District VA Division, also spoke on the importance of safety on this and every construction project.

"Safety is something that we want to encourage because it's paramount to any project. USACE has been partnering with construction companies using the EM 385 (USACE Safety Manual) for over 80 years, and when you are doing something for that long we can all get complacent – we can genuinely hear the phrase 'Safety First' but not take the time to reemphasize that safety is truly supposed to be of first importance and our job sites should be creating that culture of safety," he said.

He expanded this by sharing two points.

"Safety is not just following the rules. As a kid, you either followed the rules because someone was there to make sure you did so, or there was some fear of the consequences for not following them. But the way to ensure someone embraces a rule is for them to see the value and meaning of those rules," Lowe said. "We don't want to be safe just because someone said so, it's because of the value it provides. Safety has to be something you believe in, something you're passionate for, something where you will do more than talk the talk, but instead walk the walk."

"The second thing is that safety has purpose, and ultimately, it has purpose because of who you are. That purpose is you. Everyone here has someone they love



Michael Maddox

Members of the USACE Louisville District VA Division observe an aerial boom safety demonstration May 2 as part of the National Construction Week events held at the site of the Louisville VA Medical Center. The event was one of several scheduled for the week by members of the Walsh-Turner Joint Venture II, which is constructing the new medical facility.

and everyone here is loved by somebody – you need to go home in the same shape that you showed up," he said. "This is going to be an amazing medical center serving tens of thousands of Veterans and their families for decades to come. But there is no brick, piece of steel, foot of pipe, nothing that is out here is more important than any one of you. I genuinely believe this, so please look out for your brothers and sisters because when I say safety has purpose, that purpose is to protect and guard the most valuable resource on this project...you!"

Other activities that took place on the site during the week in recognition of National Construction Safety Week included demonstrations on aerial boom safety, trench safety, and confined space rescues.

The \$900 million project designed by URS-SmithGroup is being constructed by Walsh-Turner Joint Venture II, Chicago, Illinois.

The project includes the construction of a new 910,115 square foot medical center, parking structures, a 42,205 square foot central utility plant, roadways, sidewalks, and other site improvements.

Construction is anticipated to be complete in 2026.

To learn more about the project visit: www.va.gov/louisville-health-care/programs/new-robley-rex-va-medical-center.



Michael Maddox

Members of the USACE Louisville District VA Division observe an aerial boom safety demonstration May 2 as part of National Construction Week events held at the site of the Louisville VA Medical Center.

The buzz around Patoka Lake is that pollinators are an important part of nature

Mike Maddox, public affairs

This week is National Pollinator Week, June 20-26, and those interested in learning about pollinators and how they fit into the ecosystem can visit Patoka Lake in Dubois, Ind., to see some local pollinators in action.

Patoka Lake is home to two hives of honeybees – each containing 20,000 to 60,000 of the flying little pollinators.

The hives at Patoka are still fairly new to the area, but Jim Merkley, park ranger and beekeeper at Patoka Lake, said that so far they have added a new and interesting element to the ecosystem.

“We got our bees in 2020 after a ranger at another lake retired and they didn’t have anyone else who could take care of them. We had already had a good pollinator plan in place at that time for wildflowers and we were already really excited about doing that kind of stuff so getting bees was a good fit for us,” he said. “I took them over in the fall of 2020 right after I came here - I was brand new to bees and had never done anything with them before. It’s been a really fascinating experience.”

Merkley said he has taken a personal interest in being the caretaker for the pollinators from day one.

“We had a book here in the office that I read, I got online and started watching YouTube videos, and I got ahold of a beekeeper who is a neighbor of us here and she showed me about bees – I sort of took what she showed me and ran from there,” he shared. “I actually also got some at home because I was so fascinated by them. I got some for me, and my brother and sister-in-law are into it and I talked some of our really good friends into getting a beehive too so, between all of us, we learn together with our bees.”



Patoka Lake is home to two hives of honeybees – each containing 20,000 to 60,000 of the flying little pollinators.



Jim Merkley, park ranger and beekeeper at Patoka Lake, inspects a frame with honeybees on it to see if the hive is healthy and its residents are all doing their jobs June 1, 2022.

Besides possibly being a little scary to those who are afraid of them, the bees serve an important role in nature.

“Bees in our ecosystem are very important. I’m not well-versed on it, but I do know that a lot of the food we get at the store relies on pollinators – not just honeybees but pollinators in general,” he said.

Birds, bats, butterflies, moths, flies, beetles, wasps, small mammals, and most importantly, bees are pollinators. They visit flowers to drink nectar or feed off of pollen and transport pollen grains as they move from spot to spot.

Merkley said care goes into maintaining the area to encourage a healthy crop of pollen-producing fauna for all of the pollinators in the area.

“One of the things that we do here to help our pollinators is we burn areas once a year, usually in the late winter. It helps the pollinator plants regenerate – the ground really likes to have that area open for the seeds because it helps them out a lot,” he explained.

Many people are afraid of being stung by bees, but Merkley recommends letting them be and allowing them to go about their business if possible.

“Just remember that they’re pollinators. I know people are scared of them - I don’t like getting stung either - but they do help our society by helping our ecosystem,” he said.

Besides being the hives’ caretaker, Merkley has also been able to share his knowledge and his flying friends to educate others about them.

“We have a “live hive” where I can take part of the beehive into schools and show the kids a lot of the brood and stuff like that. It helps them to get hands-on without actually touching bees and can help them get past their fears,” he shared. “I have also talked to people or groups who are wanting to get into beekeeping because while I’ll say I’m not an expert, I do have the insight of a first-year beekeeper and can share what it’s taken me to get through the first year.”

National Pollinator Week is an annual event celebrated internationally in support of pollinator health. It’s a time to celebrate pollinators and spread the word about what can be done to protect them. According to the Pollinator Partnership, it was established 14 years ago when the U.S. Senate unanimously approved and designated one week in June as “National Pollinator Week” - marked a necessary step toward addressing the urgent issue of declining pollinator populations. Pollinator Week has now grown into an international celebration, promoting the valuable ecosystem services provided by bees, birds, butterflies, bats, beetles, moths, wasps, and flies.

Learn more by visiting www.pollinator.org/pollinator-week.

USACE Drones provide an eye in the sky for engineers

Charles Delano, public affairs

In March of 2020, Geographic Information System Specialist Rachel Byrd and Project Engineer Ryan Fagan with the U.S. Army Corps of Engineers Louisville District's Engineering Division piloted the inaugural Small Unmanned Aircraft System flight for the district in an open field at the Parklands of Floyds Fork in Louisville, Ky.

"What I like about flying drones is that it offers an opportunity to solve problems in real time," said Byrd.

Although the district's quad-bladed sUAS (drone) was used to capture photographic and video imagery during the maiden flight, that is not the only data that can be collected with the remotely piloted aircraft. Other data, which is used for visual inspections, mapping, terrain modeling, high-resolution aerial images, energy transfer or thermal imaging and volumetric estimations are captured through the use of the camera and GPS sensors.

Engineers use data to safely complete bridge structural inspections, perform thermal inspections of roofs, calculate debris during emergency operations and assess land erosion at stream banks.

"It is important to stay current with technology and having the capability to put a drone into the air allows us to collect, view and use imagery or data in ways we've never been able to before," said Paul Deatrick, Supervisory Geographer and

Aircrew Training Program Manager. "Our program gives new options to traditional recon, survey and inspection processes which leads to new ways to visualize and analyze projects for our engineers."

Before taking to flight, a mission requires a qualified remote pilot, a visual observer and detailed mission planning. To be qualified to fly, remote pilots must complete a four-hour basic UAS qualification course, 32-hour sUAS qualification course and demonstrate proficiency to a USACE Mission Briefing Officer or the Aircrew Training Program Manager. Visual observers must complete training with an MBO.

Visual observers keep the sUAS in line of sight when experiencing communication issues with the drone and simultaneously assist the pilot to avoid hazards such as tree limbs, raptors and other wildlife.

Mission planning begins with identifying what data is needed from the drone and whether or not it is the best method for collecting the data. The remote pilot confers with the customer and creates a mission plan which includes determining the date and time, identifying the mission area, coordinating airspace, assessing risk and obtaining necessary approvals. The mission packet is reviewed by an MBO, ATPM and finally approved by the Mission Approval Authority at USACE HQ.

Recreational use of drones at Louisville

District USACE properties is limited to December first through April first at specific locations within Barren River Lake, Green River Lake, Nolin River Lake and Rough River Lake. Drones may not be flown near critical infrastructures such as locks and dams and will only blow in daylight hours while maintaining visual line of site while the aircraft is in operation. Remote pilots must follow applicable state laws and Federal Aviation Administration regulations including any UAS registration requirements.

USACE Aviation Program Management Office provides oversight for all aviation activities and is responsible for the standards and training.



GIS Specialist and Remote Pilot Rachel Byrd operates a small Unmanned Aircraft System.

It takes all of us: National Safety Month spotlight

Madison Thompson, public affairs

Every June, The U.S. Army Corps of Engineers Louisville District recognizes National Safety Month and takes time to reinforce the importance of safety in the workplace and across each of our projects. The Louisville District strives to complete projects ahead of time, under budget, safely; and June provides the perfect opportunity to focus on safety as construction projects are in full swing.

Safety ranges from wearing your hard hat and steel-toed shoes while on a project site, updating fire safety and emergency plans for office spaces. Safety in the district is a top priority, and it is essential to create a culture of safety.

According to the National Safety Council and the Army Safety Center, creating a safety culture includes evaluating your workplace for potential hazards, ensure proper guidance is available for employees, promote and reward reporting, and ensure leaders are engaged in maintaining a healthy work environment. Leaders can prevent

injuries, illnesses and mishaps that damage readiness.

In the words of Honorable Rachel Jacobson, Assistant Secretary of the Army (Installations, Energy and Environment), "Safety is taking care of our people. If we are successful in safety, we are successful in taking care of our people."

The Safety and Occupational Health Office makes protection a priority.

One of the Safety and Occupational Health Office's goals is to enhance mission success and enhance the readiness of the Louisville District by providing safe and healthful solutions to protect lives and resources against preventable loss.

"As a safety professional, we take all mishaps personal and work hard to prevent mishaps from occurring. But safety takes all of us," said Jeremy Ball, Chief of Safety and Occupational Health. "Safety takes discipline to put in the work such as relevant work task safety meetings, safety training, routine inspections, risk management, identifying and controlling hazards

with our activity hazard analysis form, putting safety first when compiling our budgets, incorporating safety policy, never taking shortcuts, and holding everyone accountable."

Ball also emphasized that safety is not meant for just one person to manage.

"We are all safety officers. When you witness someone not following established safety procedures, address it. Don't just tell them they are doing something unsafe, show them how to execute that task safely," said Ball. "Lead with safety by setting the example, this is especially true for our leaders and supervisors. Set the example by doing the routine safety duties routinely."

"Safety isn't just a supervisor or safety office responsibility. It takes all of us," Ball said.

For the summer months to come, keep personal health and protection in the forefront of your mind. Whether it is during boating and fishing season, vacation or working on site and in the office, keep one another and our community safe.