

Falls City Engineer

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U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT

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On the cover: Contractors scan lanes on site using magnetometers. A majority of more than 5,300 items found were cultural debris such as bottle caps and hardware.



Please conserve:
Think before you print.

Commander's Comments

Ladies and Gentlemen,

Similar to this time last year, we have had several key personnel changes and retirements over the last couple of months. That has allowed many new folks to step up, and they are all doing very well. These changes have also allowed us to continue developmental opportunities throughout the district. These opportunities are paying great dividends as we broaden individual employees and are also significantly improving coordination and communication internally when people are placed in new organizations. I know some of these temporary assignments are challenging for those involved, but they are proving to be a great long-term benefit for the district as a whole.

Of particular note in this issue, I want to highlight and congratulate the Wright-Patterson Area Office for achieving OSHA Voluntary Protection Programs (VPP) certification. This is a very high honor as only three USACE field offices have achieved this distinction (two of them in the Louisville District) and shows a strong commitment to safety and the people working on and supporting their projects. This honor does not come easy and the entire team at Wright-Patterson has put a lot of effort into this achievement – well done!

As a district we also continue to reach out to organizations and agencies around us to support them and make them better. This commendable attitude was evident over the holidays. While many of us were on leave, we had volunteers working to address flooding in several smaller communities in our footprint. We also continue to work hard to support the communities in our area through initiatives like “Every



Col. Christopher G. Beck
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Kid in a Park,” managing Harmful Algal Blooms, or removing old unexploded ordnance from installations. All of these efforts showcase the value we bring to the nation and the diversity of tasks that you all work on each day.

Thanks again for all that you do!

Building Strong!

Chris

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Green River Lake rangers receive field trip grant

Carol Labashosky, public affairs

The Army Corps of Engineers Green River Lake, Campbellsville, Kentucky, is one of 186 federal sites selected to receive a 2015 field trip grant from the National Park Foundation, the official charity of America's national parks. This grant, part of the Foundation's Open Outdoors for Kids program, supports the White House youth initiative Every Kid in a Park.

Adair County School District is the partner who secured the grant with the cooperation of USACE. These funds will go directly to the school district partner, which will use the funds for travel expenses for buses and equipment to conduct field trips for approximately 200 fourth graders to Green River Lake. The Green River Lake Visitor Center and area has traditionally been a popular field trip destination for surrounding school districts, including Adair County. However, with recent budget constraints within the school systems and the travel expense of buses and extra personnel, school field trips are at risk of becoming a thing of the past. That's why this grant is so important. Hopefully, other school districts will learn of these successes and partner with their local federal agency to apply for future grants, if available.

"We want to introduce people, from all backgrounds and locations, to the



Jack Sweeney

Green River Lake, Campbellsville, Ky., is one of 186 federal sites selected to receive a 2015 field trip grant from the National Park Foundation.

wonders of public lands and waters and to help them discover how these national treasures—national parks, forests, wildlife refuges, and other public lands and waters are relevant to their lives," said Lori Brewster, manager, Green River Lake.

"The best way to do that is to give people the opportunity to experience them first-hand."

"By receiving this grant, we are hoping to reveal to children in the local school system what a gem they have in their own back yard at Green River Lake," said Larry Lemmon, lead ranger at Green

River Lake. "Their field trip experience here will hopefully plant a seed that will grow into a future appreciation of their public lands and the importance of protecting and enjoying them as they grow into adulthood."

U.S. Secretary of the Interior Sally Jewell said, "These generous grants will ensure children across the country have an opportunity to experience the great outdoors in their community while developing a lifelong connection to our nation's land, water and wildlife."

Corps water quality teams address water issues



Last summer, researchers at ERDC reached out to the Louisville water quality team to provide samples of different types of HABs to use in research projects. Above, Jennifer Thomason (left), Jade Young and Zac Wolf, the district water quality team, stand behind drums containing HAB samples from Louisville District reservoirs.

Todd Hornback, public affairs

Coordination between the Louisville District water quality team and the Engineer Research and Development Center, known as ERDC, in Vicksburg, Mississippi, has led to a focus of sharing information and water samples across the Great Lakes and Ohio River Division river districts and ERDC.

"We have a great relationship with the ERDC environmental analysis laboratory and we are sending the bulk of our water quality samples to them," said Jade Young, Louisville District limnologist and water quality team leader.

This relationship led to a December 2015 meeting in Louisville among Louisville, Nashville, Huntington, and

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Pittsburgh districts and ERDC to discuss capabilities and water quality issues.

A follow up meeting at ERDC in Vicksburg for a tour of the facilities catered to water quality issues, including fish barriers, environmental testing and harmful algal blooms, known as HABs.

Specific to HABs, ERDC is investigating treatments and how they affect different species of algae. ERDC created a work unit to discuss early detection of HABs and possible causes including nutrients found in fertilizers.

One treatment method is hydrodynamic cavitation where high levels of oxygen are

forced into water to break up algae cells and destroy toxins. The Louisville District water quality team has volunteered to host an in situ test of this method in one of the district's reservoirs. Although the technology is not expected to be feasible for large bodies of water such as district lakes, the process may be used in more confined lake and river areas such as areas immediately surrounding intakes for drinking water.

The work group is focusing on comparing Louisville District's Barren River Lake, known for HABs, and Nashville District's Dale Hollow Lake, where HABs are not found. Although the lakes are in

the same region of the country, the team is working to find variances to explain why Barren River Lake is more susceptible to HABs.

"We jokingly call them the HABs and the HAB nots," Young said of the two lakes.

She added, "Although the responsibility to protect the public from HABs is on the state agencies, we have a responsibility to advance the understanding of HABs because of our congressionally authorized project purposes. We are all helping each other—the Corps and state agencies—to address this field as a whole."

Military

Wright-Patt Area Office is third Corps VPP site



The Wright-Patterson Resident Area Office employees are recognized as the third Corps of Engineers certified site for Voluntary Protection Programs. Leonard Litton, acting director, Office of the Under Secretary for Personnel and Readiness (center), is pictured with Col. Christopher Beck and Kevin Jefferson, area engineer, Wright-Patt.

Todd Hornback, public affairs

The Wright-Patterson Area Office near Dayton, Ohio, has been named the third U.S. Army Corps of Engineers site to be certified in the Occupational Safety and Health Administration Voluntary Protection Programs—one of only 54 sites in the Department of Army and 2,400 across the nation according to the Office of the Undersecretary.

"Congratulations on your long and successful journey," said Leonard Litton, acting director, personnel risk reduction, Office of the Undersecretary for Personnel and Readiness. Litton addressed approximately 40 people during

the induction ceremony Jan. 15 at the Area Office. "This puts you in an elite group in the nation—there are a very small number of VPP star sites in the nation as a whole. It puts you in a very elite group in the Corps of Engineers and the Army as well. Be proud of what you have accomplished."

Created in 1982, OSHA's programs promote effective worksite-based safety and health. In the VPP, management, labor and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system.

"Implementing a world-class safety

program is not only the right thing to do, it's good for business, and it's good for the mission because when people come to work every day in a safe environment, they accomplish the mission much more effectively and more importantly, go home to their family and friends intact," Litton said.

Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health. VPP focuses on continual improvement by developing and implementing systems to effectively identify, evaluate, prevent and control occupational hazards to prevent employee injuries and illnesses.

"Our directive says we protect workers, and over my career that started to mean more than anything else in my career. We protect workers—not just our own—all workers," said Gaye Johnson, assistant area director, OSHA, during the induction ceremony.

Handing the VPP flag to Kevin Jefferson, area engineer, Wright-Patterson Area Office, Johnson addressed the Corps workers and added, "On behalf of the Corps of Engineers and the Louisville District, Kevin is accepting this flag on behalf of all the workers, not just you, but the workers you protect. So when I hand this to him, I am handing it to all of you."

In response, Jefferson reinforced the area office takes safety seriously.

"People think you have to force people to want to adopt the culture of safety in

Jacqueline Tate

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protecting themselves and protecting others. It wasn't that way here," Jefferson said. "The workers here truly embraced it, and they do look out for each other."

The resident office has worked for the VPP certification since 2008 when employees formed committees to tackle each element of the program. During the next years, the office made adjustments and tweaks to the written safety program reflecting OSHA and other regulatory requirements. In 2012, the resident office submitted the final application. On August 21, 2015, the office received OSHA confirmation they were approved as a Star Site under VPP. The Area Office is the third in the Corps of Engineers to receive the certificate—Columbus Resident Office, under the helm of the Area Office, received the notoriety as the first Corps of Engineers VPP certified site in 2014.

According to John Hearn, resident office supervisor construction management specialist, safety has been an integral part of the resident office.

"As an office, we have not had a lost-time accident since 2005," Hearn said. "I can't be more proud of the employees who have helped us through this certification."

The area office continues to be well below the industry standards for injury and illness rates. The area office created nine

committees, comprised of employees, as participants in the program and encourage all employees to look out for one another and keep safety as their number one goal.

As the committee chair for crane safety, Chris Childs, construction control representative, said the VPP certification is "really creating a culture of safety. When VPP came and we decided to do committees, we felt we had a need to look specifically to cranes."

The importance and realization of incorporating safety into a construction project comes to life as the team completes the \$40 million hangar—part of the National Museum of the United States Air Force located at Wright-Patterson Air Force Base. With workers lifting beam configurations weighing in at 126,000 pounds, the resident office committee created a 239-page crane lift plan for the hangar project.

According to Chris Hesse, a resident office project engineer, the support of leadership is an integral part of the VPP success story.

"It gives me the tools. If I need to look at a safety issue, I know I have the support," Hesse said.

That support goes through the command to district leadership. Louisville District Commander Col. Christopher



Todd Hornback

Retired Air Force Lt. Gen. John Hudson, director, National Museum of the U.S. Air Force, gives a tour of the displays under construction in the new \$40 million hangar.

Beck confirmed during the ceremony his support to the entire Wright-Patterson Area Office team.

"I would like to congratulate everyone in the office," Beck said. "This is the launching off point of what this really means."

Addressing Hearn and Jefferson, Beck added, "What you two and this entire team have shown—the commitment and culture to safety. It's not just one player or one worker—it's the team."

Emergency Operations

Flood fight teams deploy after heavy December rains



Eric Cheng

A.J. Fleming (left), Jacob Nienaber and Kate Brandner of the Louisville District Flood Fight Team discuss strategy and coordinate coverage of Levee Unit 5 near Mount Carmel, Indiana, during the December 2015/January 2016 floods in Kentucky, Indiana and Illinois.

The Ohio River Valley experienced heavier than usual rainfall in late December 2015 which contributed to flooding in the area, especially along the Wabash River.

Over the course of the nearly two-week event, the Louisville District Emergency Operations Center and Levee Safety staff monitored the lakes, rivers and levees in the district footprint. Four flood fight teams were deployed across the area to check potential trouble spots and provide technical assistance to local communities.

Early in January 2016, the waters had already begun to recede, but the district EOC continued to monitor the situation and maintain communications with affected communities until Jan. 8.

In-house team designs Fort Sheridan Army Reserve Center



Army Corps of Engineers and Accel/Pacific Joint Venture conduct a site visit at the Fort Sheridan Army Reserve Center which is under construction.

Carol Labashosky, public affairs

The Fort Sheridan, Illinois, Army Reserve Center project design was developed by Louisville District in-house designers. The team was involved throughout the entire process from facilitating the initial design charrette with the 88th Reserve Support Command, Fort McCoy, Wisconsin, determining the layout of functional spaces and providing support for construction. The two-story project includes a Training Center, the Organizational Maintenance Shop (OMS), an Unheated Storage Building, and a Military Equipment Parking area.

During weekend drills, service members will be able to utilize new offices, a library, fitness room and training classrooms. The team helped the Reserve to determine functional spaces best suited for the Reserve's mission. On the second floor, a large space with plenty of natural lighting will be used for offices and cubicles, or open team meeting areas for Reservists. The furniture package was also fully developed by district interior designers to create a complete and comprehensive interior design, coordinating the furniture features and finishes with the building's interior finishes.

The center will not only house more than 70 full-time employees, but it will support more than 215 88th Army Reserve Command personnel during training for one weekend a month and two weeks during the year. The project demolished four old buildings from the original Fort Sheridan Army post. These buildings had been remodeled several

times over the years but were not adequate to accommodate training missions for national defense.

This was one of the first Louisville District projects to utilize the true energy charrette process where all stakeholders were involved in what energy saving measures would be used, how LEED Silver Certification would be achieved, and how the energy saving measures and LEED credits would determine the site and building design features, according to Melissa Meyers, Louisville District architectural section chief.

Calvin Schmid, Louisville District contracting officer representative, pointed out that the construction methodology used for the project was Insulated Concrete Forms, which assemble like Legos to create a solid concrete core wall with insulation on both sides—the advantage being that the walls provide a tight and well-insulated building envelope.

Energy efficient plumbing, heating, ventilation, air conditioning and electrical systems will not only be LEED certified but will also undergo testing to assure all systems work according to the design intent. Additional energy saving features include the solar hot water system in the training building and transpired solar wall panels using solar energy to heat the OMS spaces.

The project will be completed during calendar year 2016.



This furniture and furniture plan is a representation of how the Fort Sheridan Army Reserve Center furniture will look.

Corps removes grenades from Rock Island Arsenal housing area

Todd Hornback, public affairs

A partnership among federal agencies and contractors has cleared property of explosives at a housing project at Rock Island Arsenal, Illinois.

The Arsenal contacted the U.S. Army Corps of Engineers, Louisville District, after discovering a 40 mm grenade during a preliminary sweep within a housing development.

“Since it is a housing area, we decided to do a full clearance of the site to a depth of two feet,” said Nicholas Stolte, project manager for the Military Munitions Design Center, Huntsville, Alabama, adding safety was a priority for the removal. “The 40 mms are one of the most sensitive unexploded ordnance items that we encounter. The slightest movement can cause a detonation.”

The Army Environmental Command requested the Corps to execute a removal action with the objective to have the 4.12 acres cleared by Dec. 23, 2015. The Corps received funds Oct. 1 and awarded the contract by Nov. 19. To facilitate the project schedule, the Huntsville Design Center prepared the Explosive Safety Submission, known as an ESS, and staffed it for signature by the Department of Defense Explosive Safety Board in Washington, D.C., while the team worked on the procurement. HydroGeoLogic, Inc., the contractor, prepared work and safety plans. The team held biweekly project delivery team conference calls in the first two weeks of December and approved the contractor to perform the removal action Dec. 11 with approved work plans and ESS.



Contractors scan property at Rock Island Arsenal to detect metal objects up to a two-foot depth. In the thorough scan of more than four acres, contractors found two grenades.

“The process normally takes three to four months, but all parties worked together to meet the client’s objective,” said Brooks Evens, a Louisville District geologist and technical manager.

The team cleared more than four acres, investigated more than 5,300 metal objects referred to as anomalies, and safely disposed of two M406 40 mm high explosive grenades. The contractor completed the removal action 32 days ahead of the 60-day required work schedule starting Nov. 23 with completion Dec. 21, 2015.

The Louisville District project team; Military Munitions Design Center representatives from the U.S. Army Engineering and Support Center in Huntsville, with support from the Baltimore District MMDC; AEC; Rock

Island Arsenal; and HydroGeoLogic, Inc., worked in unison to detect and remove the ordnance.

The removal required coordination with the installation to close one of the installation’s primary roadways and evacuate non-essential personnel from adjacent buildings. Wintry weather conditions, frozen ground, underground utilities and safety requirements served as some of the obstacles the team overcame leading to a successful removal with no health or safety incidents.

The work minimized impacts to the installation, opened the road earlier than scheduled and garnered the contractor the 2015 Excellence Award for Environmental Services from the Society of American Engineers, Kentuckiana Post.

“We were able to accomplish the removal for the customer and the Army,” said Evens. He added, knowing the importance of minimizing impacts to Rock Island Arsenal, everyone responded immediately to what was needed to accomplish the mission.

It is not uncommon for an installation to have unexploded ordnance, Evens said, but it is unknown why munitions hid below the surface at the Army Housing Site 2 when historical records did not document any munitions-related activity. One theory is that soil containing the grenades was brought in from an outside location as fill material.



A M406 40 mm grenade is uncovered near a housing area. The unexploded ordnance is a reminder for anyone finding ordnance to recognize, retreat and report the ordnance.

Louisville District employees explain sound business practices



Cristie Mitchell (right), chief, West Section Reserve Support Branch, and Chris Inlow, chief, East Section Reserve Support Branch, participate in district branch and section chief meetings at the SAME Workshop held in Louisville Jan 26-27, 2016.

Carol Labashosky, public affairs

The 2016 Federal Forum and Kentuckiana Post Small Business Workshop (SAME) was held in Louisville Jan. 26-27. Successful project delivery to customers is the district's basic business tenet. Guest speakers at the workshop took this further noting that "project delivery" begins with lasting relationships and commitments between the district and contractors.

Deputy for Small Business Crystal May and other presenters emphasized that doing business with the Corps requires pre-planning. Monitoring the district's forecasted projects is a key resource for contractors to prepare before the projects are advertised on the Federal Business Opportunities (FBO) website. A business

capabilities statement and business cards are "must haves" during face-to-face business, agreed May and HUB Zone/8(a) Certification Program Manager Vernice Mathis. Mathis was also a guest speaker. "Make sure you have your NAICS (North American Industry Classification System) code and CAGE (Commercial and Government Entity) code on your capability statement," added May. She also said all active contracts are listed on the Louisville District's web site which is a great resource when searching for potential subcontracting opportunities. All of the Louisville District's business opportunities are under keyword W912QR in FBO.

A valuable tip that May articulated during the meeting was to know the

district's mission. "Do the homework so you can be prepared to discuss how your capabilities fit into our mission," she said. Corps districts have different missions, so knowing what they buy is essential.

Chris Brackett, contracting, military/ Reserve branch chief, presented on source selection guidance and best practices. Brackett described the differences between trade-off and lowest priced technically acceptable, and he emphasized that contractors need to read the evaluation criteria, attend the site visit, and always request a debriefing. In addition, contractors should not expect the contracting officer to open discussions, and make sure to provide their best price in the original proposal submission.

May provided information to the group on the status of the district's small business program. It can be described as robust, to say the least. A staggering accomplishment for the district was its FY15 awards of \$322 million to small business within the \$809 million of total contracts. The Louisville District's target was 25 percent and the district achieved 40 percent.

Coming full circle, District Commander Col. Christopher Beck said, "We (the Corps) are a powerful organization that values partnerships that lead to a project to support the nation." The district team values those business contractors who enforce quality, follow schedules and honor their commitments, he said. "Step into a partnership – a lasting relationship," he said.

Breakout sessions with Corps subject matter experts were well attended. These sessions included:

- Project Management
- Contracting
- Small Business
- Engineering
- Construction
- Regulatory

Approximately 300 attendees joined in the workshop.

Carol Labashosky