# Falls City Engineer

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U.S. ARMY CORPS OF ENGINEERS LOUISVILLE DISTRICT





#### **Falls City Engineer**

Vol. 6, Issue 5

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On the cover: The team at Newburgh Locks and Dam cleans accumulated mud and debris from tainter gates.

Please conserve:
Think before you print.

### Commander's Comments

Ladies and Gentlemen,

I want to congratulate all of you on a very strong FY14. We continued to perform well across all areas and met our customer commitments whenever possible. The personal and organizational commitment to success I saw as September drew to a close was very impressive with everyone working until the last minute to meet every requirement possible. FY15 looks to be equally challenging, but I am confident that all of you will work throughout the year to exceed last year's performance.

The end of FY14 has allowed me to look back at key statistics that show how effective the Louisville District was during the last year. Whether that was executing a total program of \$922.3 million, executing 3,063 contracting actions, or awarding \$394 million to small businesses, we performed well across the board.

Not covered in those statistics are some other examples of how the team in the Louisville District continues to provide value to our nation every day. From the Operations Division team at Newburgh Locks and Dam removing mud and debris from the tainter gates to the Reserve team associated with the Denton Army Reserve Center receiving the Lean, Clean, and Green Award, everyone takes pride in their work and remains critical to the success of our nation every day.

Finally, I would like to recognize the efforts of last year's Leadership Development Program class as they developed a Community Outreach site. In addition to the strong work performance of the district, I have noticed that there is also a strong desire to give back to the com-



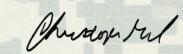
Col. Christopher G. Beck Commander and District Engineer Louisville District U.S. Army Corps of Engineers

munity by volunteering. This site provides a great resource for anyone interested in helping to find something they may like. You would be amazed how much volunteering inspires those that are supported, so if you see something that interests you, get out and support it.

Thanks again for all that you do!

**Building Strong!** 

Chris



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#### Here's mud in your eye

### Newburgh team up to elbows in cost-saving cleanup

Sarah Mattingly, public affairs

Tt's a dirty job.

In recent years, the tainter gates at Newburgh Locks and Dam—those gates which control the flow of water through the dam—had become filled with mud and debris, inhibiting inspections and repairs as well as decreasing the service life of the gates themselves. Rather than put out a contract to have the repairs done, the staff at Newburgh, working extra hours in extreme conditions, confronted the challenge of cleaning out the gates.

Since the 1990s, the skin sheets—sheets of metal that cover and enclose the gates—had begun deteriorating, allowing the rush of the Ohio River to deposit mud, sticks and other debris inside the gates.

"Over the years, it accumulated to the point it's at today, in some places up to five or six feet high," said Tony Barron, lockmaster, Newburgh Locks and Dam.

With the assistance of a couple of colleagues from Cannelton Locks and Dam just upriver, the locks and dam staff at Newburgh began taking off the large cover plates to expose the mud that was trapped inside and washing it out of the gates with a fire hose.

"It's something we felt we had the capability to do, but we had never tried to tackle it before," said Waylon Humphrey, Louisville District assistant operations manager.



Nathan Payne, summer laborer, uses a hose to wash mud and debris out of one of the tainter gates at Newburgh Locks and Dam, Newburgh, Ind.

Work on the first gate took approximately two weeks from start to finish. By the third gate, the team completed the process of removing the skin sheets, cleaning out the gate, and replacing the skin sheets in only six working days, effectively cutting in half the time required.

In addition to the necessary cleaning and repair, the removal of the mud prevents further wear and tear on the structure as well as deterioration inside gates—a major savings, according to Barron.

"The mechanics are going beyond their normal duties and their efforts are saving us money while adding life to the gates," said Louisville District Commander Col. Christopher Beck.

"It is very dirty, nasty, time consuming work," added Humphrey, "but it is a great benefit to the structure, and it comes at a great cost savings as hiring a contractor to perform this effort would greatly exceed our labor cost to accomplish."

Debris removal from three of the nine tainter gates was completed before the weather turned too cold to continue. The remaining gates will be finished in spring 2015.

"These guys did amazing work, so hats off to them," said Barron.



Jerry Edwards
Adam Hubbard
Nathan Payne
Mike Horsley
Steve Willis
Jerry Rainey
Jack Giralico
Carl Laswell (Cannelton)
Jeff Hill (Cannelton)

#### Additional support

Kenny Schaefer (Cannelton) Dallas Jackson (J.T. Myers)



A tainter gate at Newburgh Locks and Dam has been partially cleared of debris.

#### Corps water safety message reaches thousands of Hoosiers



Seamoor the Water Safety Serpent encourages young Hoosiers to always wear their life jackets.

Carol Labashosky, public affairs

on Sept. 20-21 USACE park rangers and natural resource project managers from lakes in the Louisville District's Middle Wabash Area participated in the 2014 Ford Hoosier Outdoor Experience held at Fort Harrison State Park, Indianapolis, Indiana. This is the fourth year that USACE participated in this event, staffing a water safety educational outreach station from 10 a.m.— 7 p.m. both days.

The Hoosier Outdoor Experience is Indiana's largest hands-on outdoor recreation event. The event is presented by the Indiana Department of Natural Resources and the Indiana Natural Resources Foundation, and various sponsors including grassroots organizations. Every year, approximately 30,000 people attend this free two-day experience to try more than 50 outdoor activities spread across the park's 1,700 acres. Visitors can choose from activities such as fishing, camping skills, hiking, horseback riding, outdoor cooking, shooting sports, canoeing and kayaking.

The goal of the event is to get more Hoosiers interested in outdoor recreation. A large number of participants have little or no outdoor recreation skills or knowledge. This event illustrates what outdoor recreation activities are available in Indiana and how to do them.

Recognizing that these 30,000 Hoosiers are seeking recreational opportunities in Indiana and may find their way to a USACE project, the Middle Wabash Area rangers want to get their water safety message to these folks earlier than later. USACE is strongly committed to reducing public recreation fatalities at all facilities. Outreach and education efforts play a key role in the success of the water safety program.

With this goal in mind, USACE Middle Wabash Area rangers staffed a large water safety outreach exhibit, featuring a patrol boat, life jacket display/fitting station, and Seamoor the Sea Serpent, a robotic water safety mascot that talks. Utilizing these tools, rangers were able to accomplish their water safety mission by promoting the use of life jackets, distributing educational materials for water safety awareness, and answering questions from visitors.

At the end of a long but enjoyable weekend, according to the USACE staff, the mission was successfully executed by the USACE Middle Wabash Area park rangers and managers.

"We reached more than 7,629 men, women and children with the Corps water safety messages, and that was our total contacts for the weekend. It's important to remind people both young and old to wear their life jackets when they are on the water," said Dave Cable, USACE Louisville District Middle Wabash Area operations manager.

#### **Participants**

Stan Akin, Patoka park manager Shannon Phelps, Monroe park manager

Sara Mundy, Monroe park ranger Tyler Blankenship, Harden park ranger

Ryan Poland, Middle Wabash Area park ranger

Clark Baker, Cagles park manager Dave Cable, Middle Wabash Area operations manager



The Corps of Engineers had a booth at the Hoosier Outdoor Experience in September.

David

### Military Construction

#### New boilers up and running at Defense Supply Center Columbus



Three new boilers are operating at the Defense Finance and Accounting Services offices, Columbus, Ohio.

Katie Newton, public affairs

Just in time for winter, three new boilers are now operational at the Defense Finance and Accounting Services offices in Columbus, Ohio. The new higherficiency condensing boilers in Building 21-A serve as the main heating source for

a 600,000 square foot, seven-story facility and will provide a significant cost-savings to the government.

In the past, numerous issues with the original dry back boilers occurred—tubes and face plates cracked and leaked—causing the boilers to shut down for repairs.

"Because of their age, the old boilers were not very efficient, and in fall of 2013 all three dry back boilers had to undergo a major overhaul just to get through the tough heating season," said Clayton Hayes, Louisville District project manager. The repairs were very costly and time consuming."

So in the spring of 2014, the design for new boilers was initiated. By summer, a contract was awarded for the \$550,000 Operations and Maintenance project. The new boilers were installed along with new controls and were operational by the end of September 2014.

The new condensing boilers are expected to deliver a significantly higher efficiency rating and have an anticipated pay-back period of less than eight years based on the difference in efficiency compared to the old boilers.

"It's a huge savings to the government because of the efficiency of the new boilers versus the old ones," said Hayes. "The pay-back is huge."

Final commissioning will be completed after the boilers are used in the upcoming cold weather season.

### Ribbon cutting for security enhancements at DSCC

Katie Newton, public affairs

Aribbon-cutting ceremony was held for the \$10.5 million security enhancements project at the Defense Supply Center Installation in Columbus, Ohio on Sept. 26, 2014.

The project provides better facilities to inspect incoming automobile traffic. The facility enables more efficient processing of visitors with the construction of a new main entrance gate, a 2,960 square foot visitor registration office, vehicle inspection canopies with gate house and guard house, and active/passive barriers meeting anti-terrorism/force protection security requirements.

The project involved relocating the entrance gate and constructing a new asphalt five traffic lane entrance road into the installation so the new gate along Yearling Road can now handle higher volumes of traffic and minimize delays.



Claytor

### Lean, Clean and Green Award goes to Louisville



The Denton Army Reserve Center features sustainable design and architectural elements.

Carol Labashosky, public affairs, with contributions from Candice Walters, USACE Headquarters public affairs

The Louisville District's Denton, Texas, Army Reserve Center (ARC) and Organizational Maintenance Shop was awarded Army Corps of Engineers Headquarters' Lean, Clean and Green Award for 2014. The project's green features are many, and the sustainable design and construction template has been emulated by other federal agencies.

The Denton ARC was designed and constructed for the Army Reserve to support combat readiness training for Reserve Soldiers in preparation for deployments to the Middle East and other overseas locations.

The ARC and Organizational Maintenance Shop include a rainwater harvesting and reservoir system, photovoltaic solar panels, a solar heating system for showers and a ground-coupled heat-pump system using an 84-bore well field (300-foot deep wells) to draw energy from the earth for heating and cooling the building. The hot Texas climate was taken into consideration when designing the roof. Reflective roof surfaces were used to reduce heat gain and associated cooling costs. The Reserve Center and maintenance shop were constructed by GCC McCarthy Joint

Venture II, Dallas, Texas, and designed by GLMV Architects, Inc., Wichita, Kansas, working with Louisville District's project delivery team led by Joni Hibbard, project manager.

Pioneering leadership from the Louisville District emphasized use of energy charrettes to establish building-performance goals and sustainable-design strategies, notwithstanding its stunning architectural elements. Strategies used at Denton, such as day lighting to reduce artificial lighting costs, rooftop solar energy systems to offset building energy use requirements, and air barrier systems to effectively control energy lost through infiltration, are cost effective measures and key to creating high-performance buildings that consume less energy.

The ARC is a 37,000-square-foot training building with an 8,000-square three-bay military vehicle maintenance shop and a storage building. The ARC is multifunctional, as are most Reserve Centers, with assembly hall, classrooms, library, weapons simulator, administrative offices and fitness center.

The project delivery team members recognized were Ray Frye, executive officer; Patty Germano, project management specialist; Joni Hibbard, project manager; Jodi Little, budget analyst; Jackie Preston, realty specialist; and Shane Rushing, contracting officer's representative.

"This project team is committed to sustainability and ensuring that the agency's Environmental Operating Principles are put into practice every day. "It's one thing to have goals and targets for sustainability, but they are meaningless without the people and teams who figure out how to achieve them. These are the people who are doing that, and I congratulate them," said U.S. Army Corps of Engineers Commander Lt. Gen. Thomas Bostick, Washington, D.C.

The award citation reads, "This award recognizes outstanding organizational achievement in building efficiency, renewable energy development and deployment. The winning project must demonstrate measurable results in energy efficiency, increased use of renewable energy, and reduced greenhouse gas pollution; or decreased petroleum fuel consumption and greenhouse gas pollution reduction; or decreased petroleum fuel consumption and green house gas pollution reduction. The Denton Army Reserve Center has several sustainable design features that make it an energy-efficient, high-performing complex that provide an estimated annual savings of 130,000 kilowatts."

The Denton ARC, which was completed in 2013, is also LEED Silver certified. LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes bestin-class building strategies and practices. To receive LEED certification, building projects must satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each rating system, and teams choose the best fit for their project.



Louisville District Commander Col. Christopher Beck presents the award to the project team (left to right) Raymond Frye, Shane Rushing, Jodi Little and Joni Hibbard. Not pictured are Patty Germano and Jakcie Preston.

bra Hunter

#### Sampling begins at Raco Army Airfield and Missile Site

Katie Newton, public affairs

The U.S. Army Corps of Engineers (USACE) Louisville District spent three weeks working at the Raco Army Airfield and Missile site, conducting sampling and installing new monitoring wells in an effort to delineate a trichloroethene (TCE) groundwater plume.

The site, just southwest of Sault Ste. Marie, Michigan, in the Hiawatha National Forest was used as an airfield for 21 years and a missile base for 13 years, ending in 1972.

Under the Formerly Used Defense Sites (FUDS) program, USACE cleans up Department of Defense (DoD)-related contamination on properties that were owned, leased, possessed or used by the Defense Department.

Louisville District environmental engineers Josh Van Bogaert and Brittney Hyde were present to oversee the fieldwork with contractor Geo Consultants, LLC. From Aug. 18 to Sept. 9, the project team installed 12 borings and five new monitoring wells up to 276 feet deep. More than 200 Volatile Organic Compound (VOC) samples were analyzed at an onsite mobile laboratory.

"The team executed a dynamic work plan extremely well," said Van Bogaert. "Working in very difficult hydrogeological



Contractors installed monitoring wells at the Raco Army Airfield and Missile Site in the Hiawatha National Forest in Michigan as part of the ongoing environmental remedial investigation.

conditions with heaving sands, we learned that the TCE plume is over 100 feet deeper and twice as long as previously known."

The first round of groundwater sampling from the new wells was completed on Oct. 2 with the next round to occur in spring 2015.

"Adverse winter weather prevents additional investigation this year. We are in the process of analyzing the data from this phase, so we can plan the next phase of investigation to take place in spring 2015," said Van Bogaert.

After all sampling is complete a remedial investigation report will be prepared to summarize the results of all the field efforts, describe the extent of the TCE plume and determine if there is any potential risk to human health and the environment. The report will be completed after all field work is finished.



Contractors use a track-mounted rotosonic drill rig to install monitoring wells at the Raco Army Airfield and Missile Site in the Hiawatha National Forest in Michigan as part of the ongoing environmental remedial investigation.

losh Van Ba

#### Contaminated soil removed at Hanna City Air Force Station

Katie Newton, public affairs

The U.S. Army Corps of Engineers (USACE) Louisville District has completed a remedial response at the Former Hanna City Air Force Station (HCAFS) near Peoria, Illinois, by removing more than 727 tons of contaminated soil from the site.

Over the past 20 years, USACE has been conducting environmental investigations at the site, which was used by the U.S. Air Force from 1952 to 1968 as a radar tracking and investigation facility.



Twelve inches of surface soil was removed from the contaminated areas at the former Hanna City Air Force Station in Illinois and replaced with clean soil to restore the site.

Five areas on the property were identified as posing potential risks to onsite workers and potential residents due to regular exposure to polycyclic aromatic hydrocarbons (PAHs) in the soil.

Since USACE cleans up Department of Defense-related contamination on properties that were owned, leased, possessed or used by the Defense Department under the Formerly Used Defense Sites (FUDS) program, USACE took action to remove the contaminated surface soil from the property.

"The remedial action removed 485 cubic yards of soil that contained polyaromatic hydrocarbons at concentrations that exceeded the Tiered Approach to Corrective Action Objectives (TACO) Tier 1 criteria," said Dr. David Brancato, Louisville District technical manager for the project. "This soil was classified as non-special waste material and hauled off to Waste Management's Peoria City/ County Landfill in Brimfield, Illinois. The area was then filled with clean soil from nearby Pottstown."



More than 485 cubic yards of soil containing polyaromatic hydrocarbons were excavated and hauled off the site to a Waste Management

"This remedy was the best approach as it is protective of human health and the environment," said Brancato. "By removing a foot of surface soil from the areas of concern the property can be designated for unlimited use and unrestricted exposure. This remedy is also protective of residential users should the property be converted to residential use in the future."

The site work was completed in June 2014, and USACE has officially closed out the project.

### Spotlight

### District LDP promotes volunteerism among workforce

Sarah Mattingly, public affairs

Life's most persistent and urgent question is, 'What are you doing for others?'

The immortal words of Dr. Martin Luther King, Jr., remind us of our obligation to give of ourselves to better the world around us. The best of intentions, however, are frequently stymied by the dilemma of how to begin.

The Louisville District Leadership Development Program (LDP) members sought to remedy that problem with the creation of the Community Outreach Program—an internal website designed to promote volunteerism within the district using an organized, central system for information sharing and collaboration.

"If you have the personal drive to help others, but you don't know where to begin, you can go to our site to find a list of opportunities where you can volunteer in the community," said Aaron Steele, engineering division.

The site, built on the SharePoint platform, was created to be a user-driven hub



Members of the Louisville District Leadership Development Program discuss the new internal Sharepoint site for promoting volunteerism among the workforce.

in which any Louisville District employee can find opportunities to volunteer as well as post upcoming events to inform the rest of the work force.

"The more people that use it, the more useful it will be," said Steele.

The site contains a calendar and list of current causes in which district employees can participate, along with associated information, locations and participation requirements. Volunteer opportunities range from STEM programs and Corps lake

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#### Continued from page 8

cleanups to local science fairs and food banks. Also included are opportunities to represent and promote the district through public speaking engagements, recruitment and professional stewardship.

"Users can set up alerts to be emailed about any news related to the events they're interested in," said Marcus Doddridge, engineering division. He added that district employees are encouraged to create listings for events. "Whether they're looking for volunteers to clean up a park, serve food at a church fundraiser or want a professional to speak at their child's school, this site is a great place to get something new started."

Employees should also use the site to report their own volunteer activity.

Answering a few simple questions will allow district leadership to understand the scope of volunteerism across the district as well as to provide incentives for volunteer activity.

"Fundamentally, we want people to take ownership of the site," said Doddridge. "It's there for their use."

### Employee spotlight: Capt. Chelsey O'Nan

Executive Officer, Olmsted Project, Olmsted, Ill.

Carol Labashosky, public affairs

#### Tell us about your job.

Executive Officer for the Chief of Olmsted. Military liaison and representative between the Olmsted Locks and Dam Project and Louisville District/Command Team

**How long this assignment will last?** Approximately two to three years

#### What is your Military Occupational Speciality and what was your previous assignment?

12A (Engineer Officer); Previous assignment: Company Commander for Headquarters and Headquarters Company/65th Engineer Battalion, Schofield Barracks, Hawaii

#### What is your educational background?

Bachelor of Science in Economics from the United States Military Academy, West Point, New York; Master of Science in Engineering Management from Missouri University of Science and Technology

#### What do you think will be the most fulfilling part of the new job?

Learning and understanding the importance of the Corps' mission, the amount of impact that it has on industry, and the ability to take what I learn and apply the information in future jobs; working with a great team that truly appreciates the mili-

tary, the Corps, and who enjoy working on a challenging project.

## The Olmsted Dam construction project has many components. What do you see as the most challenging part of the new job?

Truly understanding all of details that the project entails, not just the bigger picture.

#### How long have you been with the Louisville District?

Approximately one month

#### How has your transition been with Capt. Ian McBride, who recently left for the Engineer Captains Career Course (ECCC) at Ft. Leonard Wood, Missouri?

Smooth, informative, and extremely helpful

#### What are your thoughts on working on the river?

I fell in love with the water while on the crew team in college. There is a sense of serenity that comes with the water in the morning, and it is a joy to be near that once again.

#### Are you accustomed to river life, lakes and oceans, or are you more of a land lubber?

Born and raised in Colorado, I spent very little time around water other than the occasional youth group whitewater rafting



Capt. Chelsey O'Nan is pictured in the foreground of the Olmsted, III., dam construction project.

trips. However, my family loved spending time in the Rocky Mountains bike riding, camping, skiing, and hiking.

I rowed on the Army Crew team at West Point, and I fell in love with the water. I now enjoy kayaking and SUPing (standup paddle boarding), which I was able to try for the first time during my tour in Hawaii.

#### How do you spend your time outside of work?

I spend time with friends and family, traveling, enjoying outdoor activities—running, biking, hiking, kayaking—seeing new sites, and trying new things.

### District employee to be featured on ABC's Shark Tank

A Nov. 7 episode of "Shark Tank" will feature a Louisville District employee, Capt. Ashley Drake as part of the Veterans Small Business Week episode.

According to a "Shark Tank" news release, Drake, construction division, "has a great solution for those who, like her, are fans of CrossFit training but need a non-slip protective glove to safely shield hands from injury during weight and bar work."

"Shark Tank" airs on Fridays at 9 p.m. ET on ABC.