

# HEARTLAND ENGINEER



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OCTOBER - DECEMBER 2014

## Building STRONG Leaders

NO  
SMOKING

SQUAT  
STAND  
REMOVE FIGURE  
8 FROM D-RING  
REMOVE ROPE  
FROM FIGURE 8

SQUAT  
STAND  
REMOVE FIGURE  
8 FROM D-RING  
REMOVE ROPE  
FROM FIGURE 8



Melissa Corkill,  
Section Chief, Civil Works  
Project Management  
Photo provided



## Employee Profile

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Melissa Corkill is the Section Chief of Civil Works Project Management. Corkill has been with the Kansas City District for 10 years. She holds a Bachelor of Science in Civil Engineering from Missouri University of Science and Technology and a master's in Engineering Management from Kansas University.

Corkill enjoys working for the Corps and helping civil works project managers and their teams achieve important goals of designing and constructing mostly flood risk management projects and Missouri River Rehabilitation projects. She is also the Leadership Development Program Manager for the class of 2015.

"It is important for their year-long LDP experience to flow seamlessly so that they are able to grow and learn as much as possible without procedural or program hiccups along the way," said Corkill. "A well coordinated LDP program allows the class to really explore and think about the Corps, themselves, and others in ways they otherwise might not do - when this happens, we all benefit."

She finds it nice to be able to tell her kids that what she is doing for the Corps is important to a lot of people and what we achieve as an organization helps protect the nation and our communities.



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### ON THE COVER:

The Kansas City District Leadership Development Program participants visited Fort Leonard Wood, Mo., on Oct. 29-31 and conducted training at the Rappel Wall. Photo by Tami Jacobs

## Commander's Notebook Holiday Edition

### Kansas City District:

My family I wish you and your family a safe and happy holiday season! I'd also like to extend special holiday wishes to those district heroes who are currently deployed and admirably serving our nation overseas. I ask that you keep our deployed Soldiers and Civilians at the forefront of your thoughts as they continue to serve the nation supporting overseas contingency operations. Here at home, the District Holiday Party at Pizza Bar was a fabulous event—thanks again to the Co-Op Club for coordinating this event. I know the various divisions and operating projects held their own luncheons and get-togethers over the holiday season. These events are special and help us to recognize and celebrate our collective accomplishments throughout the year. Enjoy the season, take some well-deserved time off to spend with your family and friends, and please remain safe in your various travels and activities. I know we'll all come back recharged as we enter 2015.

I know that many of you have chosen a worthy charity and opened up not only your hearts, but your checkbooks in support of this year's Combined Federal Campaign. I'm pleased to report that again the district has proven its enduring commitment to the people, communities and causes in need of assistance. Your generosity will surely reverberate throughout this season and into the New Year. I applaud your efforts and want to thank David Mathews and a large number of dedicated individuals who led the various fundraisers and other events to support our goal and, ultimately, assist those in need.

Throughout the year, I've had the opportunity to travel to many of our projects and to meet with numerous partners, organizations, businesses and stakeholders we work with steadily. During my visits I am continually reminded by those very groups of the level of professionalism and untiring dedication and devotion district employees bring to the programs and projects you work with.

Your continued hard work and exceptional work ethic do not go unnoticed. Your efforts are recognized and articulated in many ways and forums throughout my engagements. Thanks to each of you who strive to affirm the "Heartland Engineer's" sterling reputation.

I'm optimistic as we enter 2015, of all the challenges and opportunities we'll encounter. This year we'll complete several major district projects to include the district's largest MILCON project ever, the Fort Riley Hospital and a major civil works project at Stockton Lake as the recently installed hydropower turbine will be functional. Both projects bring significant "Value to the Nation" as the hospital will provide a state-of-the-art healthcare facility to deserving Soldier's, veterans and their family members who've proudly served our nation.

The completed Stockton Lake turbine will provide increased hydropower output, clean, renewable hydroelectric energy to more than 2.6 million end-users in six states and offsets the use of more than 29,000 tons of coal annually.

These are only a few of the projects in our portfolio that, when completed, will improve the quality of life for millions of those we so proudly serve. These projects serve as a true testament to the professionalism and resolve of this district. Well done.

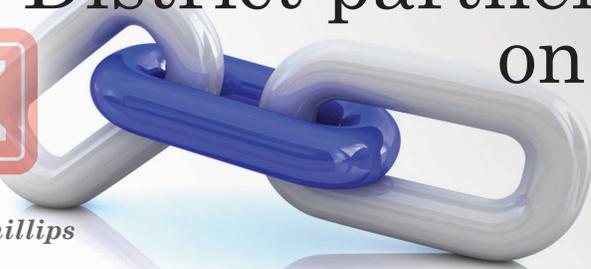
Finally, please remember the importance of winter safety. Please take time to focus on your holiday travel plans and outdoor activities. Now is also the time to prepare your home and vehicle for winter risks and hazards. Have an enjoyable and safe holiday season!

Happy Holidays




COL Andrew Sexton

# District partners with universities on important projects



By Amy Phillips

The U.S. Army Corps of Engineers Kansas City District recently entered into a Cooperative Agreement with seven universities to provide valuable environmental research, assistance and technical support on military installations.

The Cooperative Agreement was signed in July as part of a new procurement program within the district for partnering with universities to complete research and other assistance that have a scope that supports either public research or a public stimulation function and that are not solely a direct benefit to the government.

All the projects funded under the agreement support environmental conditions on military lands and waters. The research or program will provide benefits that extend into the neighboring civilian communities, watersheds, and ecosystems.

One of the first projects awarded under the Cooperative Agreement is for a regional groundwater study at Fort Leonard Wood.

“Missouri S&T will research regional groundwater flow and direction that encompasses the installation and evaluates surrounding areas to add to the body of knowledge available on the subject,” said Kale Horton, project manager.

The \$350,000 project was funded by the Army Environmental Command in the hopes that the groundwater model can be used for the environmental program at Fort Leonard Wood and adapted for use at other installations.

“We get to learn more about groundwater movement and how Army activities can potentially impact the Ozark Aquifer,” said Horton.

The university receives funding for valuable research that will be published in peer reviewed journals and presented at conferences. They have wide latitude to

execute the projects and there are benefits to the Army, the university, and the general public.

The universities we have partnered with on the agreement include, University of Missouri, University of Kansas, University of Nebraska – Lincoln, Missouri University of Science and Technology, Missouri State University, Lincoln University, and Colorado State University.

“The program is issued under a parent agreement with the seven universities and then specific work is awarded off of that agreement in the form of assistance orders,” said Horton.

The agreement has a five-year term to complete research or assistance with scopes authorized under a statute such as the National Defense Reauthorization Act or the Sikes Act and support a broader public stimulation.

“Congress has to tell us through enabling legislation that we can use an agreement for the type of work that is to be performed,” said Horton.

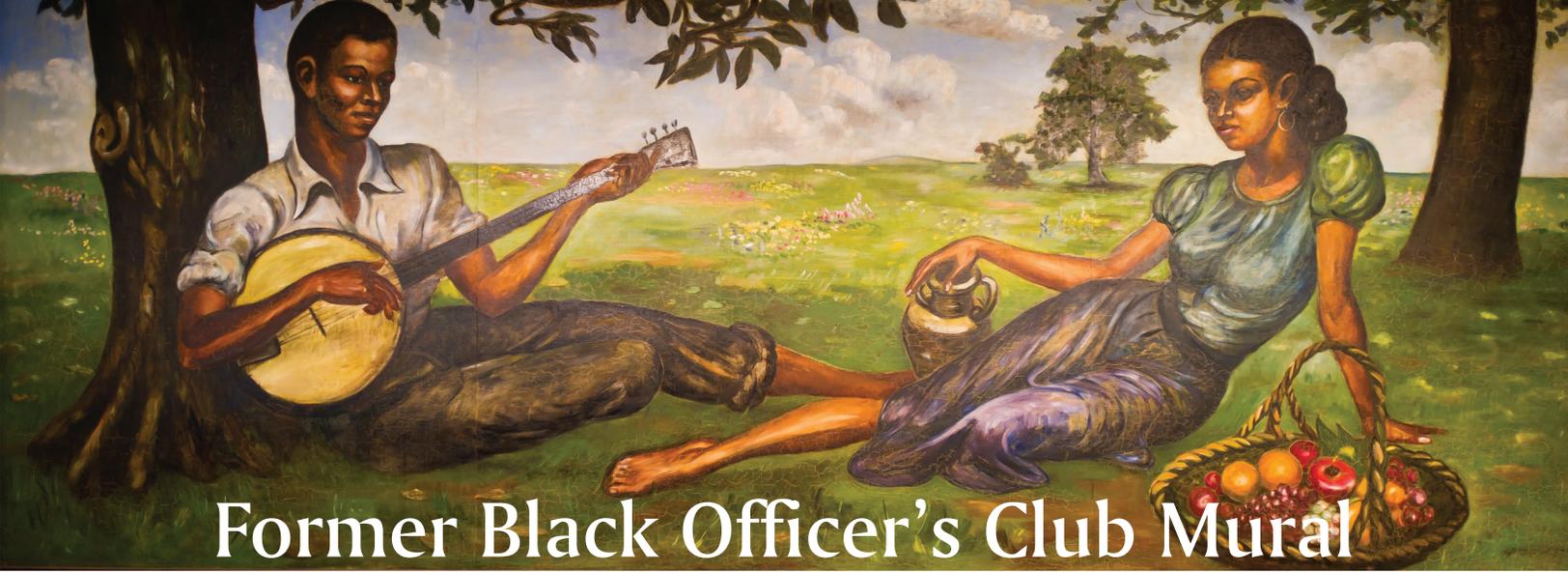
There is a difference between when you can use an agreement and when an actual contract is required. According to Horton, grants can be used as an alternate to a traditional contract for the maintenance, research and improvement of environmental, cultural or natural resources on military installations.

There are three assistance orders awarded under this program to date. These projects include: the groundwater research study at Fort Leonard Wood, restoration of the Samuel Countee Mural at the former Black Officer’s Club at Fort Leonard Wood and a bioremediation study at Fort Riley.

“These projects are important to the district, the Army customer, and the general public as they provide valuable information for our environmental program,” said Horton.



The U.S. Army Corps of Engineers entered into a Cooperative Agreement with several universities in July. The universities include: University of Missouri, University of Kansas, University of Nebraska – Lincoln, Missouri University of Science and Technology, Missouri State University, Lincoln University and Colorado State University.



## Former Black Officer's Club Mural to receive a facelift

By Amy Phillips

The new Cooperative Agreement tool the district deployed in July is currently being used to restore a valuable work of art of Fort Leonard Wood.

The Samuel Albert Countee Mural is a part of the history at Fort Leonard Wood and due to our agreement with the University of Missouri in Columbia, Mo., the art will be restored.

**“We are working with the University of Missouri curators to restore the painting due to the historic significance of the work which is part of the intrinsic value of the building it is housed in,”** said Kale Horton, project manager. **“This is another way we use the new Cooperative Agreement tool by working with a partner that has the knowledge of this type of work and can restore this historically important work of art.”**

The mural sits on top of a mantel in the building that is known as the Former Black Officer's Club that was built as a part of Fort Leonard Wood's initial construction and assigned for exclusive use of black officers during World War II. The artist of the mural was Staff Sgt. Samuel Countee, a professional artist and rising talent in the world of African American art. In addition to the mural, elaborate stonework around the exterior of the building was constructed by German Prisoners of War in 1945.

The \$80,000 mural restoration project is being conducted as part of an agreement between the University of Missouri and the Kansas City District and will restore the painting.

The mural was painted by Countee while he was stationed at Fort Leonard Wood during that era. It is believed that the mural was painted either in 1943 or 1945. The building and the mural were determined eligible for listing on the National Register of Historic Places by the Missouri State Historical Preservation Office, and stand as

a symbol of the African American experience during WWII. Building 2101 and the Countee mural serve as a reminder of a period when the nation was at war with two racially intolerant governments (Nazi Germany and Imperial Japan), but was at the same time struggling with inequality at home.

The mural measures four by 10.5 foot and depicts an African-American couple at a picnic. It was painted to remind African American Soldiers of better days that existed prior to the war and a hope for better days to come. In the mural, he is playing a banjo while she lounges back on an arm, listening. The painting recently appraised for \$371,000.

Countee went on to have artistic achievements and contributions to the pre-civil rights art and the African-American culture.

“The state historical preservation society and the national trust have shown interest in the mural because of the famous painter and the fact that it is pre-civil rights art,” said Horton.

The Samuel Countee Mural in building 2101 at Fort Leonard Wood, Mo., is one of the Cooperative Agreement projects between the Corps of Engineers, Kansas City District and the University of Missouri. Photo provided

# Fort Leonard Wood First in UV

By Keith Wigginton

The U.S. Army Corps of Engineers, Kansas City District is currently constructing at Fort Leonard Wood a water supply treatment facility which will employ a general ultraviolet (UV) irradiation disinfection treatment system to disinfect the post's potable water supply. Fort Leonard Wood is the first facility in Department of Defense to employ such a system for the purification of drinking, (potable) water.

Ultraviolet disinfection of water consists of a purely physical, chemical-free process. Ultraviolet disinfection systems utilize electromagnetic energy from a mercury vapor arc lamp to deliver lethal doses of UV radiation to an organism's genetic material (DNA and RNA). UV radiation attacks the vital DNA of bacteria directly; as a result the bacteria lose their reproductive capability and are destroyed. Even parasites such as Cryptosporidia or Giardia, which are extremely resistant to chemical disinfectants, are efficiently reduced. This greatly helps prevent the spread of waterborne diseases.

Sources of drinking water (both tap water and bottled water) include: rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals. It can also pick up substances resulting from animal or human activity. Classes of contaminants that could be present include:

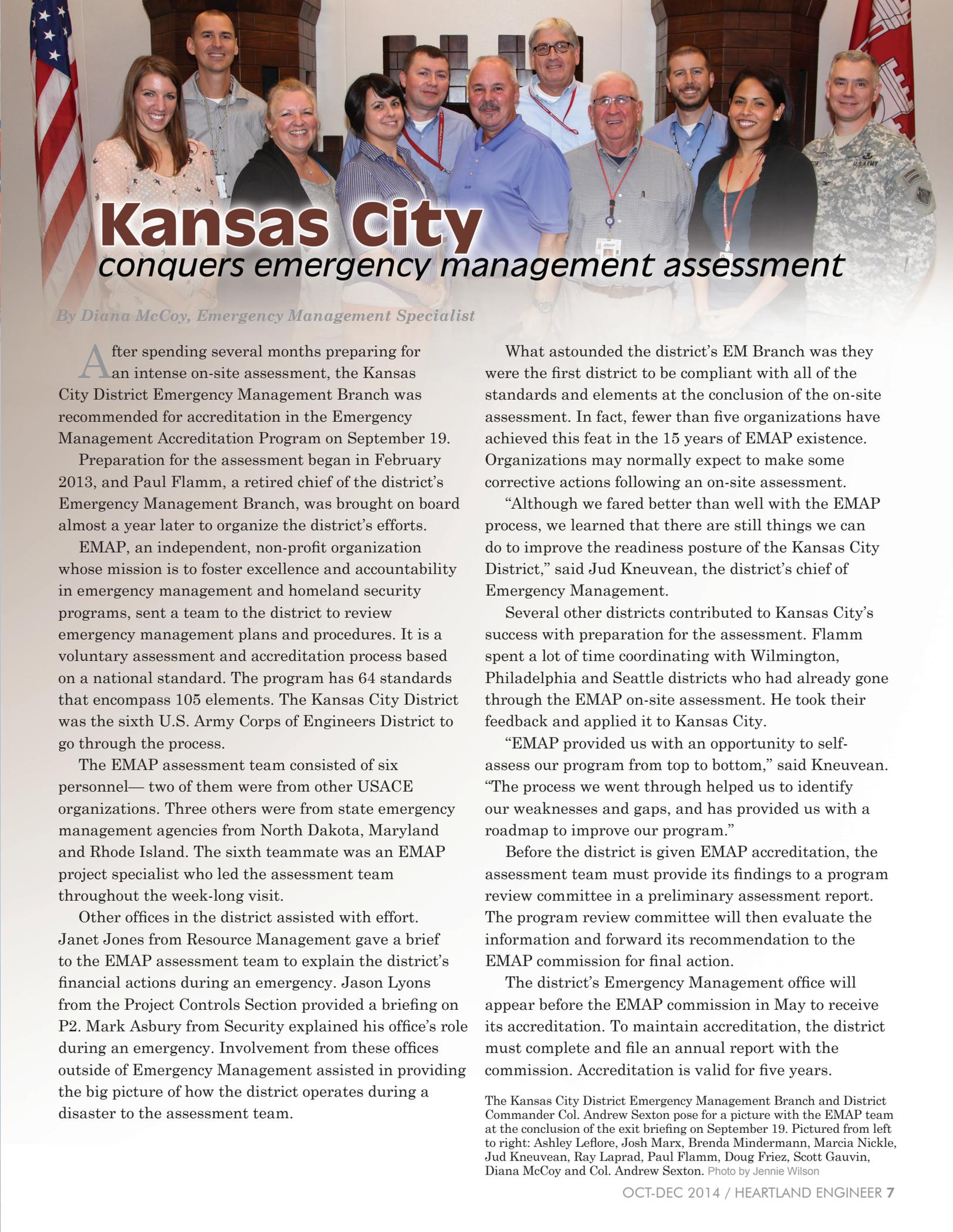
- **Microbial:** such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic:** such as salts and metals that can be naturally-occurring or the result of stormwater runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming. Some naturally occurring salts and metals could be radioactive.
- **Organic:** includes volatile and synthetic chemicals that are by-products of industrial processes or petroleum production. They can also come from gas stations, urban stormwater runoff, and septic systems.

Fort Leonard Wood's potable water sources are from both river and well water, but over 97 percent of this water is from the Big Piney River. Before being distributed, this water is treated to comply with drinking water quality standards at the Fort Leonard Wood Water Treatment Plant. At the plant, the river water is first treated by chemical coagulation and sedimentation to lower the concentration of suspended solids and naturally occurring metals. The water is then filtered and fluoridated to help prevent tooth decay and disinfected with chlorine.

In addition to the new UV treatment capability, the Corps of Engineers is upgrading the existing water plant's chemical treatment and monitoring capabilities, and installing a new high service pump facility to enhance water distribution to the entire post. The new Fort Leonard Wood water treatment plant will be able to process water at an average rate of 2.8 million gallons per day, with a peak capacity of six million gallons per day. These much needed improvements should come on-line by the end of calendar year 2014 and will significantly enhance the quality of the post's potable water supply.

Top: The UV reactors are installed in the facility which will help prevent the spread of waterborne diseases.

Bottom: The U.S. Army Corps of Engineers is constructing a water supply treatment facility at Fort Leonard Wood, Mo. Photos by William Steininger



# Kansas City conquers emergency management assessment

By Diana McCoy, Emergency Management Specialist

After spending several months preparing for an intense on-site assessment, the Kansas City District Emergency Management Branch was recommended for accreditation in the Emergency Management Accreditation Program on September 19.

Preparation for the assessment began in February 2013, and Paul Flamm, a retired chief of the district's Emergency Management Branch, was brought on board almost a year later to organize the district's efforts.

EMAP, an independent, non-profit organization whose mission is to foster excellence and accountability in emergency management and homeland security programs, sent a team to the district to review emergency management plans and procedures. It is a voluntary assessment and accreditation process based on a national standard. The program has 64 standards that encompass 105 elements. The Kansas City District was the sixth U.S. Army Corps of Engineers District to go through the process.

The EMAP assessment team consisted of six personnel—two of them were from other USACE organizations. Three others were from state emergency management agencies from North Dakota, Maryland and Rhode Island. The sixth teammate was an EMAP project specialist who led the assessment team throughout the week-long visit.

Other offices in the district assisted with effort. Janet Jones from Resource Management gave a brief to the EMAP assessment team to explain the district's financial actions during an emergency. Jason Lyons from the Project Controls Section provided a briefing on P2. Mark Asbury from Security explained his office's role during an emergency. Involvement from these offices outside of Emergency Management assisted in providing the big picture of how the district operates during a disaster to the assessment team.

What astounded the district's EM Branch was they were the first district to be compliant with all of the standards and elements at the conclusion of the on-site assessment. In fact, fewer than five organizations have achieved this feat in the 15 years of EMAP existence. Organizations may normally expect to make some corrective actions following an on-site assessment.

"Although we fared better than well with the EMAP process, we learned that there are still things we can do to improve the readiness posture of the Kansas City District," said Jud Kneuvean, the district's chief of Emergency Management.

Several other districts contributed to Kansas City's success with preparation for the assessment. Flamm spent a lot of time coordinating with Wilmington, Philadelphia and Seattle districts who had already gone through the EMAP on-site assessment. He took their feedback and applied it to Kansas City.

"EMAP provided us with an opportunity to self-assess our program from top to bottom," said Kneuvean. "The process we went through helped us to identify our weaknesses and gaps, and has provided us with a roadmap to improve our program."

Before the district is given EMAP accreditation, the assessment team must provide its findings to a program review committee in a preliminary assessment report. The program review committee will then evaluate the information and forward its recommendation to the EMAP commission for final action.

The district's Emergency Management office will appear before the EMAP commission in May to receive its accreditation. To maintain accreditation, the district must complete and file an annual report with the commission. Accreditation is valid for five years.

The Kansas City District Emergency Management Branch and District Commander Col. Andrew Sexton pose for a picture with the EMAP team at the conclusion of the exit briefing on September 19. Pictured from left to right: Ashley Leflore, Josh Marx, Brenda Mindermann, Marcia Nickle, Jud Kneuvean, Ray Laprad, Paul Flamm, Doug Friez, Scott Gauvin, Diana McCoy and Col. Andrew Sexton. Photo by Jennie Wilson

# BLUE RIVER CHANNEL PROJECT NEARING AN END

By John D. Holm, Heather Collins-Allen, Melissa Corkill and Amy Phillips

The Blue River Channel Modification project that started in 1983 has come to an end. When construction began on the channel, the future of the Blue River was destined to change and this project, which was an ambitious undertaking to increase water conveyance in the downstream-most 12 miles of the river to reduce the impacts of flooding, was a joint effort between the Kansas City District and the project sponsor, the City of Kansas City, Mo.

The certificate of completion on this project was signed by Col. Andrew Sexton at the October Program Review Board on October 14 as district employees that were involved in the project looked on. Below is a look back at the project:

In the early 20th century, the banks of the Blue River in Kansas City, Mo., were lined with boat houses and resorts that served as social and cultural meeting points. However by the middle of the century, intense urban and industrial development occurred along portions of the river. Frequent flooding of the river was creating economic hardship for residents and business alike. With approval for the Blue River Channel Modification Project in 1970, the future of the Blue River was destined to change. This project has been an ambitious undertaking to increase water conveyance in the downstream most 12 miles of the river to reduce the impacts of flooding. The project has been a joint effort between the U.S. Army Corps of Engineers Kansas City District and the City of Kansas City, Mo. Over a nearly 40 year period of time, detailed design and construction of the project occurred in distinct phases.

## History of Flooding Along the Blue River

The Blue River watershed is 289 square miles in size and is located in metropolitan Kansas City. The downstream portion of the river flows through some of the most industrialized sections of the city. Over the years, the Blue River has been subject to frequent flooding. The shape of the basin, topographic conditions, dense soils, and urbanization have been contributing factors towards the rapid concentration



Col. Andrew Sexton, district commander, signs the Blue River Channel Maintenance Manual and certificate of completion during the Civil Works Program Review Board on Oct. 14 while district employees involved with the long, complex project look on.  
Photo by Jennie Wilson

of storm water runoff causing frequent floods. Urbanization resulted in development occurring near the channel edge, indiscriminate land filling, and other obstructions to the flow of water. The most severe flood on the Blue River occurred in September 1961. This flood cost two lives, forced the evacuation of hundreds of people from their homes, forced the closing of numerous factories, and severely disrupted transportation on streets, highways, and railroad lines in the lower reaches of the river. Damages from this flood were estimated to be \$8 million at the time, roughly \$61 million in 2012 dollars. To address flood problems along the Blue River, Congress authorized the Blue River Basin Projects, Missouri and Kansas, as part of the Flood Control Act of 1970.

## The Blue River Channel Modification Project

Part of the Blue River Basin Projects authorized the modification of the Blue River channel from its mouth to approximately 12 miles upstream. This section of the river would be modified to increase channel conveyance to 35,000 cubic feet per second. The general design for the project had been developed by the middle of the

1970s and consisted of channel clearing, enlarging, paving, and cutting off meanders. However, because the overall length of the project was more than 12 miles long, detailed design and construction of the project occurred in phases beginning near the mouth of the river and working upstream.

Construction on the downstream most portion of the project began in 1983. Work continued through the 1980s to widening and deepening additional reaches of the river. Typically, large amounts of riprap were used to stabilize the channel banks. In one location, the banks were stabilized by installing more than 14 miles of vertically driven H-piles. In another reach, more than 775,000 cubic yards of material was excavated from along 3,480 feet of channel before it was completely lined with 22,000 cubic yards of concrete. In the early years of the project, no environmental features were incorporated into the design of the project. The sole objective was to provide for 35,000 cfs of water conveyance through the channel.

### **The Incorporation of Environmental Features**

When construction had started on the Blue River Channel Modification Project in the 1980s, the environmental quality in the river was severely degraded. In many locations, only a very narrow riparian corridor existed along the river, providing practically no wildlife habitat. Automobile junkyards had encroached on the channel to such a degree that old cars were actually in the river channel. A large number of old tires and other garbage had also been disposed of in the river. Additionally, two low water dams had been constructed on the river to pond water for industrial use, restricting the movement of fish and other aquatic organisms. Work on the lower reaches of the Blue River did have some environmental benefits as a result of removing extensive amounts of solid waste and the low water dams from the river. By the late 1990s, approximately eight miles of the Blue River Channel Modification Project had been completed. Around this time, there was a paradigm shift in the design of the project and more current, environmentally friendly engineering design features were incorporated into the remaining phases. At first, this consisted of small features such as constructing wing dikes in some sections of the channel to diversify water velocities and depths to benefit fish and other aquatic organisms. Then in 2010, along a 3,700 linear feet long section of river, structures consisting of root wads, lunger logs, riffle structures, and boulder clusters were installed. These features created habitat for fish and aquatic organisms by providing cover, creating variability in

water velocities and depths, creating rock interstitial spaces, and increasing the amount of organic debris, such as tree leaves, that accumulated in the channel. Instead of solely relying on riprap and non-native grasses to provide bank stability, native willow trees, grasses, and wildflowers were planted along the channel banks. These features were incorporated with no added cost, while still providing a channel that would convey a flow of 35,000 cfs within its banks.

### **The final phase of the Blue River Channel**

Modification project was to provide a transition between the modified and non-modified sections of the river and include a significant grade control structure between the two sections. The original design for this phase of the project would have widened and straightened the channel and included a large concrete grade control structure approximately 57 feet high, 160 feet wide, and 257 feet long. The cost for this portion of the project was estimated at \$40 million. This reach of the river also was one of the only places within the entire 12 mile long project area that had a functioning riparian corridor, providing some habitat for urban wildlife. In an effort to reduce cost and protect the environment, it was determined that grade control through this reach of river could be accomplished by using a series of six riprap grade control structures and 10 riprap toe revetments instead of a single large concrete grade control structure. Additionally, the new design would not result in any additional channelization of the river, benefiting the environment. Also, the riparian corridor would only be minimally impacted by the new design. This design would also cost approximately \$10 million; about a 75 percent reduction in cost compared to the original design.

### **Environmental Stewardship**

The Blue River Channel Modification Project illustrates how changes in society's values toward improving the environment have changed over the past 40 years. At the time the project began in the 1970s, the only objective of the project was to provide flood risk management. Now, as major construction on the project has been completed, it is clear that both flood risk management and stewardship of the environment can both be incorporated into channel modification projects. This presents an additional set of challenges for teams that design these projects, but the results are worth the effort.

*(Editor's Note: This article first appeared in the July/August/September issue of the Heartland Engineer.)*

# LDP2014



# USACE civilians get introduction into the life of a FLW Soldier in training

By Dawn Arden, Guidon Assistant Editor

Civilian-federal employees from the U.S. Army Corps of Engineers, Kansas City District got a taste of the life of an Army Soldier in training during a three-day visit to Fort Leonard Wood Oct. 29-31, as part of their Leadership Development Program.

The 10 men and women participating in this year's program conducted training on Range 31 (the Grenade Assault Course), Engagement Skills Trainer, TA 136 (Rappel Wall), TA 137 (Leader Development Course) and the Shoot House on Range 33, among others.

"The feedback was overwhelmingly positive," said Melissa Corkill, USACE supervisor. "They enjoyed every bit and will benefit greatly from this small glimpse of the Army."

To give them an in-depth feel for what a new Soldier in training goes through, the group went through the receiving process at the 31st Engineer Battalion just minutes after arriving, followed by the issuing of barracks and needed gear.

"They did this shock and awe red phase for us when we first arrived," said Hilary Winans, USACE contract specialist. "You see it in the movies, but it was very different having it thrown at you. It was an interesting experience to get even a taste of it."

Heath Kruger, USACE park ranger, said the experience was a unique opportunity for them as civilians.

"It's a really neat experience," Kruger said. "This is something that very few of us civilians have the opportunity to experience, having the opportunity to see military personnel in their actual setting, go through the training they do and be able to observe the day-to-day life of a private coming up through the ranks."

Both Winans and Kruger agree that visiting Fort Leonard Wood has given them a better understanding of what the Corps of Engineers does for the Army.

"This is a good tool for us in teambuilding, also a greater overall understanding of our organization and its functions here," Kruger said.

Winans added, "This brings it more into focus – what I'm doing helps the Soldiers."

Kruger said the experience has left him with a deeper respect for military members.

"First and foremost, this continues to instill a deep respect in me for all military personnel, especially the folks here at Fort Leonard Wood," Kruger said.

"They've been really good as coaches to help us develop as future leaders," he added.

The Kansas City District Leadership Development Program, or LDP, is a year-long program that has been bringing its participants to Fort Leonard Wood for the past 10 years.

LDP was designed to develop the leadership and management skills of the district's current and future leaders and managers by analyzing their leadership style, preparation of an Individual Development Plan, attending classes and visiting USACE sites.

Participation in team projects and having a senior manager mentor are also part of the program.

Top left: The LDP participants took part in the Leader Development Course at Fort Leonard Wood, Mo., during their three-day visit from Oct. 29-31.

Bottom left: The 2014 Leadership Development Program participants pose during their visit to Fort Leonard Wood, Mo. The program participants visit the Army installation every October to get a glimpse into the life of an Army Soldier in training.

Right: The participants of the LDP program visited the Rappel Wall at Fort Leonard Wood during their trip in October.

Photos by Tami Jacobs

# 25-Year Success for Disabled Hunters



Story and photos by Trisha Dorsey

Offering over 65 blinds in a prime deer habitat location, makes the U.S. Army Corps of Engineer's Smithville Lake Managed Deer Hunt the world's largest. This year's event took place November 22 and 23, 2014, marking its 25th Anniversary.

"Throughout our 25-year managed hunt history at Smithville Lake, 1,327 disabled hunters have harvested 1,306 deer. Applicants apply from all over the states hoping to secure a spot in this annual event. We offer 65 hunting blinds, making Smithville Lake's Managed Deer Hunt the worlds largest," informs Derek Dorsey, Smithville Lake park manager. "The managed deer hunt is vital for us to help control our large deer herd and it provides an excellent opportunity for disabled hunters to return to the outdoors."

Established in 1990, the managed hunt provides a tremendous opportunity on prime hunting ground for disabled hunters that use a wheelchair for their primary source of mobility to harvest deer. Starting with only 15 blinds, this event has more than quadrupled in size and now allows up to 65 disabled individuals to partake.

Last year, 16 new fiberglass blinds were aquired to provide a covered and slightly warmer location for individuals to hide in. Funds were provided by a grant obtained through the Missouri Conservation Heritage Foundation.

The Corps staff at Smithville Lake coordinates and hosts the hunt, however multiple agencies and volunteers assist in the efforts. The Kearney Boy Scouts Troop 397 of Kearney, Mo., has made and served a hearty breakfast to these hunters for the past 20 years. The Smithville Kiwanis Club of Smithville, Mo., has provided a chili lunch for this hunt for the past 25 years. And staff with the Missouri Department of Conservation assist with checking deer and building blinds.

When most people are still sleeping...these participants, agencies and volunteers begin lining up under the stars at Smithville Lake near 3 a.m. Even though hunters cannot pull the trigger until just before sunrise, they do arrive early to check in, check permits, hear the policies and rules, mingle with those they haven't seen for a year and meet those who are new

over a vast breakfast sponsored by the local boy scouts.

Eric Will from Kansas City, Mo., has participated in this managed hunt since inception. "It a great hunt, lots of fun, great opportunity for me to be able to go out and deer hunt. This weekend, I'd be happy for a big buck, to stay dry and not to get stuck in the mud. This hunt is always a good time," explains Will. He recognized the great benefit from this hunt and began to spread the word.

Billy Cumpton from Adrian, Mo., over 100 miles away from Will, quickly jumped at the opportunity as well and has participated 23 of the 25 years.

"Eric and some others visited the rehab center I was at and informed me of this hunting

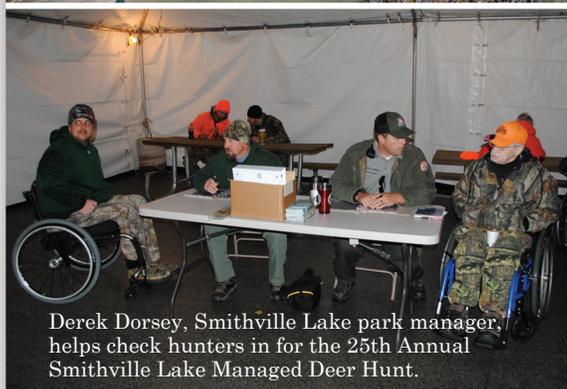
opportunity. I missed the first one and the other year missed was while I was playing wheelchair basketball in Japan," informs Cumpton. "I enjoy coming here to see all my friends from past years, hear their stories and see a lot of deer. Always fun."

There were 101 applicants this year from six states, however, with only 65 blinds, not everyone secures a spot in this heavily sought after hunt. Participants secure their spot through a drawing system. However, those who aren't pulled may still have another chance. They are kept on a list of alternates which is called upon if a participant drops out, or if a participant harvests the maximum number of deer on the first day.

The U.S. Army Corps of Engineer's Managed Deer Hunt at Smithville Lake has proven to grow with vast interest. It's an opportunity, a privilege, and for some, a tradition.



Billy Cumpton from Adrian, Mo., sits in his deer blind on Nov. 22 during the 25th Smithville Lake Managed Deer Hunt. This was the 23rd year that Cumpton has participated.



Derek Dorsey, Smithville Lake park manager, helps check hunters in for the 25th Annual Smithville Lake Managed Deer Hunt.

# Hunting in the Heartland

*Story and photo by Capt. Joshua Poling*

Fog filled the morning air like a thick blanket masking the majority of the lake from the hunting party's view. The distant sound of a mallard quacking broke the silent morning air, perking the attention of the Labrador Retriever who was patiently waiting to perform. While the morning sun began to crest over the horizon, the fog slowly began to break revealing the silhouette of the surrounding lake shore and skyline. As if they had set morning alarm clocks, the ducks began to fill the air over Smithville Lake prompting gunshots to ring out over the lake. The Missouri duck season opener had begun.

With the various hunting seasons well under way in the states that encompass the Kansas City District, it is helpful to remember all the hunting and outdoor recreation opportunities that U.S. Army Corps of Engineers has to offer. While Smithville Lake, north of Kansas City, Mo., is an example of an outdoor recreation spot, the district manages and operates multiple areas. This article is meant to encourage readers to take the time to experience the vast opportunities that the district has to offer.

While waterfowl hunting is just one example of the many hunting opportunities available on USACE property, the district boasts a plethora of hunting to be experienced. Common species available for chase on division lands include: deer, turkey, waterfowl,

upland game and small game. The district manages and maintains 18 lakes and surrounding areas for outdoor recreation. The district alone manages over 730,000 acres of land and water for the benefit of the public. These acres provide opportunities for hunting, fishing, bird watching and agricultural leases. This ample amount of acreage is an example of why USACE managed land is a common destination for the outdoor enthusiast and hunter.

When traveling to one of the district maintained areas, it is important to gather information on the area you will hunt. Each district managed area has its own unique set of rules and regulations governing the area. The majority of the district managed areas have information and regulations that can be found by searching for the area on the internet. Areas that maintain websites quite frequently provide area regulations, maps and weather updates. District areas also have informational offices at most of their locations where it is easy to attain information on what and where to hunt. It is not uncommon to find that two areas will have completely different regulations regarding the techniques and opportunities allotted to hunters. Also, in accordance with district managed areas, one must be sure to adhere to their respective state's hunting regulations. For the majority of instances, district managed



Capt. Joshua Poling's Labrador Retriever Abe waits patiently while duck hunting at Smithville Lake.

properties will reflect the regulations set in place by each state.

The most important thing to remember while visiting district managed areas is to enjoy your time spent afield and to do so safely. Access to these areas is not just an enjoyment, it is a privilege. Hunters are encouraged to treat the land with the respect it deserves and to be courteous to any other outdoor goers they might encounter. Observing the rules and regulations protects you and others enjoying the area. Make the most of your experience while outdoors, enjoy it whether or not you return home empty handed and always try to take a friend or child hunting. The experience of being outdoors is worth every second spent afield.

# Muscle vs Mussel

Story and photos by David S. Kolarik

U.S. Army Corps of Engineers Park Rangers recently discovered zebra mussels for the first time in a 13 acre cove at Pomona Lake at Management Park Boat Ramp.

The Kansas Department of Wildlife, Parks and Tourism confirmed the presence of the invasive zebra mussels in Pomona Reservoir in Osage County, Kan. A small adult group was discovered on a rock in the cove near the south end of the dam. KDWPT staff found more zebra mussels the next day and sampled other parts of the lake to determine if the population had spread and fortunately they had not.

Pomona Reservoir covers approximately 4,000 acres and is located 24 miles south of Topeka. It is managed by the Kansas City District, and KDWPT manages the fishery. The lake, completed in 1963, is home to Pomona State Park and several USACE parks. It is a popular destination for fishing, camping, swimming, hiking, and a variety of boating and other water-related activities.

Twenty-three Kansas lakes now have confirmed zebra mussel populations. Other reservoirs in northeast Kansas with zebra mussel infestations include Milford, Perry, John Redmond, Clinton and Melvern.

## ABOUT ZEBRA MUSSELS

Zebra mussels are dime-sized mollusks with striped, sharp-edged, two-part shells. They can produce huge populations in a short time and do not require a host fish to reproduce. A large female zebra mussel can produce one million eggs, and then fertilized eggs develop into microscopic veligers that are invisible to the naked eye. Veligers drift in the water for at least two weeks before they settle out as young mussels which quickly grow to adult size and reproduce within a few months.

After settling, zebra mussels develop byssal threads that attach their shells to submerged hard surfaces such as rocks, piers, and flooded timber. They also attach to pipes, water intake structures, boat hulls, propellers, and submerged parts of outboard motors. As populations increase, they can clog intake pipes and prevent water treatment and electrical generating plants from drawing water. In 2012, two Kansas communities, Council Grove

and Osage City, experienced temporary water shortages from zebra mussel infestations before water intake structures could be cleaned up. Removing large numbers of zebra mussels to ensure adequate water flow can be labor-intensive and costly.

Zebra mussels are native to the Black and Caspian seas of western Asia and eastern Europe and were spread around the world in the ballast water of cargo ships. They were discovered in Lake St. Clair and the Detroit River in 1988 and quickly spread throughout the Great Lakes and other rivers including the Mississippi, Illinois, Ohio, Tennessee, Arkansas and Hudson. They were first discovered in Kansas in 2003 at El Dorado Reservoir. Despite public education efforts to alert boaters about the dangers of zebra mussels and how to prevent spreading them, the species continues to show up in new lakes every year. Moving water in boats and bait buckets has been identified as a likely vector.

Both USACE and KDWPT officials agree that there is no known method to completely rid a lake of zebra mussels. Fortunately, the population appeared to be limited to Management Cove, so officials treated the cove soon after the discovery in an attempt to kill as many of the mussels as possible to slow their spread.

Mike Watkins, a Wildlife Biologist with the Kansas City District said, "KDWPT and USACE collectively will do everything and anything within reason to eradicate and or mitigate the spread of zebra mussels in Pomona Lake."

The Kansas City District and KDWPT worked closely and swiftly to treat the cove with a herbicide called copper sulfate. The small blue crystals were distributed throughout the 13 acre cove with the hope that the chemical would eliminate the mussels.

According to the KDWPT, this was a great collaborative effort between the Corps of Engineers and KDWPT, and the rapid response by both parties was incredible. From purchasing the chemical and getting all the permits in order to mapping the cove, gathering equipment and applying the chemical, staff from both agencies put a lot of time and effort into this treatment.



The objectives of this treatment was to attempt to knock back the existing zebra mussel population while demonstrating that both our agencies are committed to controlling aquatic nuisance species with appropriate techniques.

After the treatment, the Corps of Engineers project staff found a number of open, dead zebra mussel shells in the cove. On October 27, USACE and KDWPT returned to Pomona to collect zebra mussels from the treated cove. Within approximately 30 minutes of sampling, they collected 23 zebra mussels from the boat ramp. Only one of which was clearly dead. The others were placed in lake water and taken back for observation at the KDWPT Emporia office. After observation, it was clear that the 22 remaining individuals were still alive as the mussels were observed filtering water with their siphons, and would close when provoked.

Although the treatment did not kill the zebra mussel population in the cove, there are definite positives to take away. Not only did USACE and KDWPT rapidly respond to the finding of zebra mussels in a coordinated manner, but they also successfully applied the chemical without incident. Based on the numerous dead shells found by the Corps of Engineers project staff prior to water levels rising, some portion of the zebra mussel population in the cove was killed, even though a complete kill was not achieved. Both agencies believe they met the goal of demonstrating their commitment to controlling aquatic nuisance species through direct management actions where feasible, and have partially met their goal of knocking back the existing zebra mussel population in the cove.

Officials emphasize that everyone using the lake plays a key role in stemming the spread of mussels to uninfested lakes.

“This situation shows how important it is for boaters, anglers, swimmers and skiers to be aware of aquatic nuisance species and to take precautions to prevent their spread,” said Jessica Howell, KDWPT Aquatic Nuisance Species Coordinator.

Prevention is the best way to avoid spreading ANS. They often travel by “hitchhiking” with unsuspecting lake-goers. “Always clean, drain, and dry boats and other equipment and don’t transfer lake water or live fish to another body of water. This will help stop the spread of not only zebra mussels, but most aquatic nuisance species that may be present,” Howell said.

The lake was added to the list of ANS-designated waters in Kansas, and notices were posted at various locations around the reservoir.

Zebra mussels are just one of the non-native aquatic species that threaten our waters and native wildlife. After using any body of water, people must remember to follow regulations and precautions that will prevent their spread:

- Clean, drain and dry boats and equipment between uses
- Use wild-caught bait only in the lake or pool where it was caught
- Do not move live fish from waters infested with zebra mussels or other aquatic nuisance species
- Drain livewells and bilges and remove drain plugs from all vessels prior to transport

Left: The Corps of Engineers in a collaborative effort with the Kansas Department of Wildlife, Parks and Tourism made a rapid response to treat Pomona Lake after zebra mussels were discovered in a cove in October.

Right: Pomona Lake Park rangers prepare to put buoys in a cove at the lake to keep boaters out while the cove was being treated for zebra mussels on Oct. 15.



# The *Kansas City District* works to preserve historical site

By Amy Phillips

Construction of the Blue River Channel Flood Damage Reduction project that began in the early 1980s and included a grade control structure project that would have resulted in channel improvements through the National Register of Historic Places listed Byram's Ford Civil War battlefield, located within the current Byram's Ford Industrial Park. The project as then designed would have impacted and destroyed portions of this important battlefield site.

As the battlefield was of national significance and important to the community, the Corps worked with the State Historic preservation officer, the City of Kansas City, and Civil War Round Table of Kansas City to adjust the original design. The district, as well as the city and the Civil War Round Table of Kansas City, worked to make sure that the channel modifications would not impact the civil war battlefield and destroy any remnants of the Byram's Ford crossing, part of the Oregon Trail.

**"We were able to come up with a different solution and replace the originally planned large concrete structure with a series of rock weirs and thereby avoided the loss of the site,"** said Kent Myers, project manager.

"The change in plans also added a more natural appearance to the former battlefield which was very appealing to the Civil War Round Table and the State Historic Preservation Officer" noted Kansas City District Archeologist Tim Meade.

The Corps worked with the City to restore the lands that had been acquired for construction, back to native habitat as part of the channel project's environmental

mitigation. The plan was for the district to go in and clear the area out, clean it up and create a native grass habitat. We were charged with establishing native grasses in the area, according to Myers.

Construction of the more than \$750,000 Byram's Ford portion of the Blue River Channel Project began in the fall of 2011. The physical part of the project to establish the habitat was completed in 2012 but the district had to establish the native grasses on the property by 2014. The completion was just in time for the 150th Anniversary of the battle for the crossing at Byram's Ford but with the drought in 2012, the district will have an ongoing project to continue the establishment of the native grasses.

"The changes we were able to make in the design was a win, win for everyone. The historical society, the city and the Corps and we were still able to mitigated floods while preserving the history of the area," said Myers.

The anniversary and reenactment of the "Battle of Westport," was held on October 25 in Swope Park in Kansas City, Mo., and history buffs were able to visit the actual site.

"The district worked very hard with the City of Kansas City, Kansas City Parks Department and local historians preparing for this weekend," said Kraft, Chief, Construction Support Branch

"The Corps worked intensively with the City, BF Industrial Area and Monett Civil War Association over the last 30 years to get to this point," said Meade.

There were two reenactments on Saturday and a walking tour of the Byram's Ford battleground site. The walking tour traversed the Byram's Ford site and included a walk to the Blue River where the tour guide described the Confederate Troops and Union Army activity at the Byram's Ford river crossing.

Civil war reenactors ride into battle during the 150th Anniversary of the Battle of Westport at Swope Park in Kansas City, Mo., on October 25. Photos by Fred Kraft



On October 25 a Civil War Reenactment marked the 150th Anniversary of the battle for the crossing at Byrams Ford.



# District reports significant reductions in water related accidents and workplace safety deficiencies

By Jeff Stokes

The Kansas City District U.S. Army Corps of Engineers Safety Office reports that accidental drowning at area lakes and inspection deficiencies within the district's military construction sites are down from this time last year.

More than 15 million people visit the district's 18 lake project recreation sites annually during the summer season beginning on Memorial Day and ending after the Labor Day holiday. The good news is that this year the district reported significantly fewer drownings compared to the last fiscal year at lake projects in our four state area.

Annual safety inspection deficiencies within the district and at the military construction sites in our two state boundaries have also improved.

Water Safety – The fatalities of accidental drowning reported from May to August 2014 have declined from 12 in fiscal year 13 to seven in FY 14 with no ground related fatalities. The district hires 13 public safety rangers each summer with the primary purpose of promoting public safety. The rangers go through a rigorous two day training program to prepare them to work with the public and conduct safety programs with visitors at the lakes.

This summer, they successfully conducted numerous water safety outreach efforts throughout local communities and provided the public with water safety information to

include: give-a-ways, water safety quizzes and water safety materials. Each year, thousands of school children receive guided tours and information regarding water safety and the proper wear of life jackets.

Several district lakes have water safety life jacket loaner stations, which by design, are brightly colored to catch visitors eyes. Many of the lake project gate attendants issue life jackets to those who need them. The district utilizes a robust advertising campaign to inform the public about water safety. These successful efforts include posting water safety messages on bulletin boards at the lakes, safety messages on lake maps and brochures, banners at key entrances to the parks, and water safety decals on highly used boat ramps and docks.

Annual Safety Inspections – Under the Occupational Safety and Health Act, employers are required to furnish each employee a place of employment that is free from recognized hazards that cause or may cause death or serious physical harm. Inspecting the workplace to identify hazards is one method to meet this requirement. The number of workspace safety deficiencies within the district declined during FY14.

The district reviews the deficiencies identified during regularly scheduled safety "tool box" meetings to eliminate or mitigate safety risks. Safety remains a major

focus and is the responsibility of supervisors, Collateral Duty Safety Officers and employees.

Safety successes are a reflection of the commitment our leaders and district personnel have to one another and the public. Everyone is urged to keep the momentum going by continuing to do what works for safety: staying engaged, holding themselves accountable for their personal well-being and always looking out for one another. When we stay on top of risk, we'll close the year with fewer accidental deaths.

Whether planning a day trip to the lake, making reservations at a campsite, or conducting day to day operations as a district employee, the U.S. Army Corps of Engineers Kansas City District wants everyone to be safe and avoid becoming a statistic.

The need for safety awareness continues into the winter months as hunting season goes into effect. Water safety is equally as important during the winter hunting season.

To learn more about staying safe and recreational opportunities in the Kansas City District, please visit our website below:

[www.nwk.usace.army.mil/Locations/DistrictLakes/Safety.aspx](http://www.nwk.usace.army.mil/Locations/DistrictLakes/Safety.aspx)

# FY2015 OPERATIONS PLAN

## U.S. Army Corps of Engineers Kansas City District *The Heartland Engineers*



### COMMANDER'S PRIORITIES

- Mission Accomplishment
- Taking Care of People
- Training and Leadership Development
- Customer Focus
- Safety On and Off Duty

### USACE MISSION:

Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce risk from disaster.

### NORTHWESTERN DIVISION MISSION:

Provide engineering services and stewardship of existing water resource infrastructure, conducts water resources development, military construction, environmental protection and restoration, and emergency response operations within our assigned areas of operations to serve the Army and the Nation. On order the Northwestern Division provides Field Force Engineering services to deployed forces or their USACE elements.

### KANSAS CITY DISTRICT MISSION:

The U.S. Army Engineer District, Kansas City, plans, manages and executes civil works, military, environmental and emergency response programs within assigned areas of responsibility to support the nation's military and engineering needs.

### WHAT IS OUR DISTRICT PASSIONATE ABOUT?

Provide Power Projection Platform for the World's most Powerful Military; Mitigate, Recover and Restore Ecosystems of National Significance; Protect the Public and Infrastructure from Floods; Cleanup the Nation's Toxic Waste Sites; Provide Clean, Renewable and Low Cost Power to the People; Provide Navigable Waterways for Clean and Cheap Transportation of Goods; and Provide the Public with the Finest Recreational Facilities.

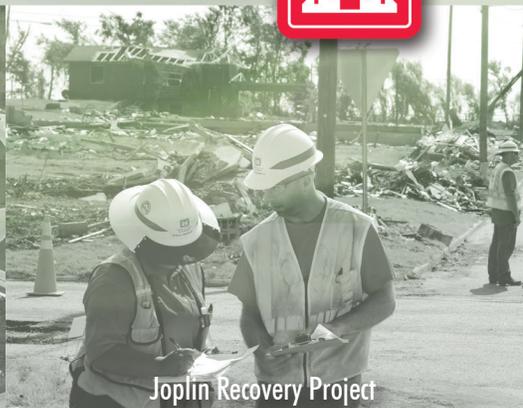
BUILDING STRONG



Turkey Creek Tunnel Restoration Project



Fort Riley Hospital



Joplin Recovery Project

**Jameson Island Shallow Water Habitat Project –  
Northwestern Division PDT of the Year**

John Akin  
Glen Bellew  
Chance Bitner  
Amy Blair  
Kevin Bond  
Ian Bowen  
Douglas Brock  
Gary Cain  
James Campbell  
Antonella Cerchi  
Andrew Gosnell  
Kyle Haake  
David Hoover  
Douglas Jump  
David Kolarik

Katie LaFontaine  
Christopher Liles  
Andrew Marske  
Diana McCoy  
Dane Morris  
Amy Phillips  
Kevin Pugh  
James Rudy  
Jean Schumacher  
John Shelley  
John Skelton  
Cory Weathers  
David Wennerstrom  
Zachary White

**Coin Presentations:  
2014 Kansas City Corporate Challenge PDT**

Joshua Boeckmann  
Ben Davis  
Rebecca Hunter  
Kenneth Kamp  
Jennifer Kolarik  
Angela Loewen  
Andrew Marske  
Diana McCoy  
Kenneth Simmons  
Mathew Ward

**East Bottoms Design PDT**

Brenda Adams  
Reed Brown  
Ron Jansen  
Susan Windhorst

**Garfield Superfund Site PDT**

Molly Boughan  
Charles Colbert  
Amy Darpinian  
Jacqueline Frazier  
William (Josh) Hill  
Angie Mason

**Kansas City District Heartland Hero**

Jeff Salter

**Kansas City District Heartland Awards:  
Day of Caring – Volunteerism**

Jennifer Henggeler  
Heather Hill

**Pohatcong PDT – Teamwork and Commitment**

Shelly Allen  
Francis Bales  
Andrew Gosnell  
Nancy Higginbotham  
Kris Huber  
Angela Mason  
Patrick Miramontez  
Robert Pender  
David Roberts  
Phil Rosewicz  
Shelley Thomas

**Leadership for multiple AE contracts,  
SRM projects at Fort Riley  
and Fort Leavenworth**

Bryan Smith

**NWD One Star Note**

Brian Rast – NWD Silver Jackets Coordinator  
Scott Mensing – NWD 2014 Project Manager  
of the Year

**Army Commander's Award  
for Civilian Service**

Mike Watkins – 25 years as the Kansas City  
District's lead for the Kansas City Corporation  
Challenge from 1989 to 2014.

**NWK 2014 Project Manager of the Year**

Eric Omundson

**Army Superior Civilian Service Award**

Scott Mensing – Turkey Creek Flood Damage  
Reduction Project Manager

**Army Good Conduct Medal  
and Impact Award**

Staff Sgt. Jonathan Long

Col. Andrew Sexton recognizes Mike Watkins for his 25 years  
as the Kansas City District's lead for the Kansas City Corporate  
Challenge from 1989 to 2014. Photos by Jennie Wilson

# Awards



Scott Mensing is presented with a Northwestern Division One Star Note for being named the 2014 division project manager of the year. Service award for his work on the Turkey Creek Flood Damage Reduction project.

Col. Andrew Sexton presents Brian Rast with a Northwestern Division One Star Note for his work as the Silver Jackets coordinator.

Jeff Salter is recognized at the Oct. 21 awards ceremony by Col. Andrew Sexton as the Kansas City District Heartland Hero.



Col. Andrew Sexton presents the trophy to the winning team at the Inaugural Team Building Turkey Bowl flag football game on Nov. 21. Photo by Jennie Wilson

# Around the District



District employees visited Rathbun Lake on Sept. 29. Photo by Jennie Wilson

Over 300 people lined up for the Smithville Lake Annual Duck Blind Drawing on Sept. 20. Photo by Trisha Dorsey



District employees brave the wet conditions to enjoy the End of Year Cookout on Oct. 10. Photo by Jennie Wilson