

Falls City Engineer

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U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT



***District employees give
a day to Henryville, Ind.,
clean-up***

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Falls City Engineer

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District Commander

Col. Luke T. Leonard

Public Affairs Chief

Todd Hornback

Send articles to Louisville District
Public Affairs office at:
sarah.r.mattingly@usace.army.mil

U.S. Army Corps of Engineers
CELRL-PA
P.O. Box 59
Louisville, KY 40201-0059

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On the cover: Henryville, Ind., following the Mar. 2 tornado outbreak.



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

Commander's Comments

If you are a Seinfeld fan, you may think that Risk Management is buzzword that you drop in casual conversation with your boss to make yourself look smarter; but you don't need a thick textbook to understand risk - the Army has provided us a useful chart!

Risk Management is nothing more than gauging the likelihood of something bad happening against the severity of the consequences. Once you've gauged the risk, the second step is knowing your authorities. A five-year-old understands that crossing the street is a moderate risk operation and that the approval authority for street crossing is a parent.

In the district, I'm the approval authority for operations that have a high risk for safety. The final step is mitigating - or taking active steps to lower the risk. Of course risk management principles apply to much more than just safety. Severity may be measured in terms of risks to the project schedule or cost, to potential damage to the environment or to our organizational reputation - but the same logic applies. Keep in mind that in much of

what we do in the Corps, risk and cost are integrally related.

As we enter a period of heavy construction and recreation, I hope you'll dust these principles off and keep them in mind as you go about your business and your lives this spring.

In the last six weeks, district employees logged several hundred volunteer hours supporting the clean-up in Henryville and in Mayor Fischer's Give-A-Day campaign. Thanks to all the volunteers and especially to Jason Root and Layna Thrush who were key in organizing our participation.

You'll notice that the Falls City Engineer has a new format. We've reduced the content to reduce staff in our Public Affairs office while still keeping our workforce and customers informed on projects and programs.

Col. Luke T. Leonard
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Composite Risk Management

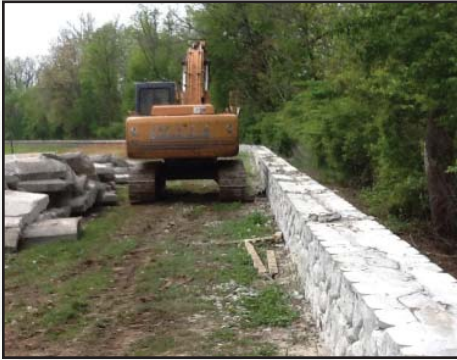
CRM MATRIX		HAZARD PROBABILITY				
		Frequent	Likely	Occasional	Seldom	Unlikely
		A	B	C	D	E
SEVERITY	Catastrophic	I	EXTREMELY HIGH			
	Critical	II	HIGH			
	Marginal	III	MODERATE			
	Negligible	IV			LOW	

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Indy levees upgraded to meet new requirements

Carol Labashosky, public affairs



Floodwall and levee alterations in Indianapolis should be complete in fall 2012.

Deb Tague, construction division

Alterations to Phases 3A and 3C of the Indianapolis North White River Flood Damage Reduction Project began in mid-March. Changes to this project and others across the command are required due to more stringent enforcement of upgraded design standards since Hurricane Katrina, according to Kevin Holden, landscape architect, U.S. Army Corps of Engineers, Headquarters. The

changes are necessary for project certification by the U.S. Army Corps of Engineers and acceptance by the Federal Emergency Management Agency (FEMA) to reduce or eliminate flood insurance requirements for property owners.

Current design standards require the sheet piling of I-walls be driven to greater embedment depths. To meet those standards, the Corps will place fill materials along the landside of the floodwall. Portions of the floodwall already meet the new design requirements. The work should be complete during the fall of 2012.

The Corps of Engineers completed construction of the Phase 3A Warfleigh and Phase 3C Broad Ripple sections of floodwall and earthen levee in 2004 and 2009, respectively.

The Indianapolis North White River Flood Damage Reduction Project is cost-shared between the U. S. Army Corps of Engineers and City of Indianapolis for

construction of approximately three and a half miles of floodwall and earthen levee along the east bank of the White River in northern Indianapolis. The floodwall and levee are being constructed in three sections – Broad Ripple, Warfleigh and South Warfleigh. Two sections are complete. Ultimately, the project will remove an estimated 1,500 businesses and homes from the 300-year floodplain.

The Corps of Engineers will issue a draft Supplemental Environmental Impact Statement (SEIS) on the project that will be circulated for agency and public review this spring. The SEIS will help determine the way ahead on the project.

Michael Holley, civil works project manager, has recently retired, and the project has been turned over to Bonnie Jennings, project engineer, who is currently working in Engineering Division, civil design section in the Louisville District.

Upper Wabash lakes and local agencies partner, build osprey platforms

John Scheiber, Upper Wabash Project Office



An osprey on her nest at Caesar Creek Lake in Waynesville, Ohio. New platforms were installed at the Upper Wabash project in Indiana to encourage osprey nesting there.

This spring, the U.S Army Corps of Engineers Upper Wabash project office in Indiana, including J. Edward Roush Lake, Salamonie Lake, and Mississinewa Lake, helped coordinate a partnership with Wabash County Rural Electric Membership Cooperative (REMC), United REMC, and Peru Utilities to install five osprey nesting platforms on the three properties. This idea was suggested by

summer ranger Jared Mobley a few years ago. He had spotted an osprey near the Salamonie Dam and presented the idea that a nesting platform could keep the osprey in the immediate area for visitors at the Upper Wabash Project Office to view during the summer months. Wabash County REMC, United REMC, and Peru Utilities donated the poles and installation. The platforms were built by the USACE

maintenance staffs at the prospective lakes. The nesting platform at Salamonie Lake can be seen from the Upper Wabash Project Office and from Salamonie Dam Road. The two nesting platforms at Roush Lake can be seen at Wahk-Shin-Gah pond and a pond just south of United REMC's building near I-69. The two nesting platforms at Mississinewa Lake can be seen from the Mississinewa Dam Road. The U.S. Army Corps of Engineers would like to send huge thanks to the partners that facilitated this project. Their contribution is a great improvement for local visitors.



Jeremy Sobecki and Neil Brooks, Indiana Department of Natural Resources, and Joe Thompson and Ben Landrum, United REMC, install an osprey nesting platform at J. Edward Roush Lake in Huntington, Ind.

USACE Louisville District

New Army Reserve Center comes to Lake Park, Fla.

Carol Labashosky, public affairs



Artist's rendering of a typical Reserve Center. The building would use an architectural style of the region and plants native to the area.

The U.S. Army Corps of Engineers Louisville District has awarded a construction contract to Blackhawk-Jamco Joint Venture, San Antonio, Texas, to construct a new Army Reserve Center in the Town of Lake Park, Fla. The contractor is a Service-Disabled Veteran-Owned Small Business for this \$16 million project.

The project is part of the restructuring program to support changes in the Army Reserve to improve training for Florida's Army Reservists. These Reservists are part of the 81st Regional Support Command, headquartered at Ft. Jackson, S.C. Approximately 600 Reservists will be assigned to this Reserve Center, with 205 training on the largest drill weekend.

There will be 15-30 permanent full-time personnel working in the Center during the week. The Reserve Center will bring job opportunities to the local community and contracting opportunities for maintenance, cleaning and lawn care.

The design and build contract is for construction of an Army Reserve Center training building, organizational maintenance shop, unheated storage building and parking. The Reserve Center will be constructed on 13 acres of land at the corner of North Congress Avenue and Silver Beach Road. The Reserve campus includes a training facility with administrative, educational, library, learning center, weapons simulator, and physical

fitness areas for two Army Reserve units. The approximate sizes of the buildings are: training building – 51,800 square feet; organizational maintenance shop – 9,373 square feet; storage building – 3,341 square feet.

In addition to structures, supporting features include parking, fencing and general site improvements. The project will be ADA accessible and completed using sustainable design and construction practices.

The Army worked with the Town of Lake Park to incorporate features into the building that will enhance the area, including a design using the Mizner style of architecture to blend into regional styles, orienting the building toward North Congress Avenue and adding a landscape buffer to screen the parking areas.

The 81st Regional Support Command will host a ground breaking ceremony on Saturday, May 19, 2012, at the site which is located on N. Congress Ave, just North of Silver Beach Road, beginning at 10 a.m.

The next step in the process is the design of the Army Reserve Center which is estimated to take five months. The construction will be complete in 2013.

Military Construction

New chapel complex opens at Fort Campbell

Jon Fleshman, public affairs



Jon Fleshman, public affairs

Admiring the Kawai grand piano on the stage in the activity room of the new chapel the Louisville District built for the Fort Campbell, Ky., military community are (l to r): Chaplain (Maj.) Jay Tobin, Corps of Engineers project engineer Jason Phillips and Chaplain (Col.) Roger Heath. Project manager Nora Hawk coordinated the funding of the piano as an option to the chapel project base contract. Easter 2012 was the first service conducted in the new sanctuary.



Fort Campbell Chaplain's Office

Innovative technology to aid in clean-up at Camp Ellis

Katie Newton, public affairs



USACE Huntsville Center

The Geometrics Metal Mapper is now being used at Corps' environmental clean-up projects to assist with advanced classification such as differentiating between ordnance and nonhazardous debris. The Metal Mapper will be used at the former Camp Ellis Military Reserve in Illinois during the remedial investigation this fall.

A new method of technology will aid in clean-up of the Former Camp Ellis Military Reserve in Fulton County, Ill. The innovative method, called Metal Mapper, will help geophysicists to locate and distinguish between ordnance and other metallic items more efficiently. The

Geometrics Metal Mapper, is a commercially available sensor that the Corps is now using to collect data for advanced classification at environmental clean-up sites.

Advanced classification is used to differentiate between potentially hazardous munitions and other nonhazardous geology and debris that are detected. By avoiding scrap metal such as mufflers and metal cans geophysicists can spend their time concentrating on potential ordnance at the site.

"The intent of this technology is that it will actually take less time and effort to gather data because there won't be a need to dig as many anomalies as with the old technology," said Louisville District Project Manager Valerie Doss.

Additionally, the new classification system has the potential to support more cost-effective use of available resources.

"The majority of the cost for a munitions response site is attributed to digging holes," said Elise Goggin, geophysicist, Army Corps of Engineers Huntsville Cen-

ter. "The ability to discriminate between ordnance and other metal means we will ultimately dig less and provide a reduction in project cost."

The Corps' Formerly Used Defense Site Program (FUDS) owns four metal mappers that will be used at several projects nationwide this year. "We are encouraging project teams to try to incorporate this technology if their site is appropriate," said Goggin.

"Camp Ellis is a suitable site because there is limited vegetation and the terrain can accommodate a vehicle to pull the equipment," said Goggin.

The metal mapper looks much like a sled and is moved across the ground by a utility vehicle. It will first be used on the ground at the Camp Ellis site in the fall of 2012 during the remedial investigation.

"We hope to be able to put this technology to use on many more of our Louisville District sites in the near future," said Doss. "This is a great step in the right direction toward cost-effective and timely clean-ups."

Spotlight

District employees give a day to Henryville, Ind., clean-up

Sarah Mattingly, public affairs



A group from the U.S. Army Corps of Engineers, Louisville District, volunteered recently to assist with relief efforts in the tornado-ravaged town of Henryville, Ind. The group volunteered through Metro United Way, and each person used his or her annual leave to make time for the cause.

"It was an emotional day, but we were all really glad we did it," said Jason Root, resident engineer, Fort Knox Resident Office. "The outpouring of support was really good to see. I was very proud of my friends and co-workers that day."



Jason Root, Fort Knox Resident Office

New book details origins of Corps' disaster relief mission

John Neville, public affairs



Ferry service maintained between Madison, Ind., Highway Bridge and Kentucky State Highway at Milton, Ky., under supervision of the U.S. Army Corps of Engineers in Jan. 1937.

For nearly 200 years, the U.S. Army Corps of Engineers has responded in times of disaster, but not until 1882 did Congress officially task the Corps with the rapid emergency response mission it holds today.

In his book titled *Situation Desperate: U.S. Army Engineer Disaster Relief Operations, Origins to 1950*, author Leland Johnson explains how the emergency response mission evolved from its tentative beginnings to 1950, when permanent federal policy on disaster response was passed.

One of the first, and probably the most famous, critics of giving explicit federal authorization for disaster relief was James Madison, often referred to as the Father of the Constitution. Madison believed relief should be funded and executed at the state and local level. He believed there was not a word in the constitution that granted Congress the right to direct public revenues for what he called, "charitable relief."

Elias Boudinot, a congressman from New Jersey and former president of the Continental Congress disagreed with Madison's interpretation of the Constitution. Boudinot argued that refusal to assist would be contrary to the theory and practice of the Constitution. Boudinot cited past congressional authorization of subsistence to Indian tribes and prisoners of war. Boudinot also defended his argument with his reading of the first paragraph of the Constitution: "...Congress is warranted to provide for the exigencies regarding the general welfare."

The debate between Madison and Boudinot in 1794 concerned the French Refugee Bill. Thousands of French slaveholders fled Haiti for U.S shores during

that nation's revolution. Many of the refugees became public wards, supported at the state and local level and through charities as well. Funding for the immigrants was running out and states began petitioning the federal government for assistance.

Boudinot and Madison held their ground until Samuel Smith of Maryland raised the important role France played in the American Revolution. Madison acknowledged the war debt America owed the French and suggested he and the rest of Congress could avoid the constitutional question by subtracting the cost of aiding refugees from the remaining debt. The measure passed.

However, the aid administered to the French, Johnson concludes, was not considered a precedent for later enacted disaster relief legislation because the Haitian revolution was not considered an American disaster. Even the federal assistance to those who lost land in the greatest earthquake to hit the North American continent—the New Madrid earthquake of 1811—was not considered disaster relief. Instead, Johnson notes that Congress used its constitutional authority to dispose of public lands, and, that had the bill reached the House for a vote, Madison, who was president at the time, would have vetoed it anyway.

From 1794 until 1882, the debate of federal involvement in emergency response arose from time to time, usually during local, national and international calamities. Those who favored states rights over federal involvement in local issues, held the upper hand in Congress and blocked attempts to pass federal disaster relief laws. However, in times of crisis Congress managed to provide relief using

other federal congressional and executive powers.

The American Civil War changed everything. When the war was over, Johnson writes, Congress took on the responsibility of assisting the millions of slaves in their transition to a free life. Many slaves turned to farming. When the Mississippi River flooded in 1866, thousands of farmers, most of them former slaves, lost their crops. Congress authorized the issuance of tons of rations to the affected farmers. The issuance, Johnson writes, "Would later open the door to a wider application of this principle—that the federal government had a responsibility to relieve suffering in the wake of great disasters."

The end of the war also curtailed the power of those lawmakers whom favored states' rights. Congress began allowing the Army's Quartermaster Corps and the Freedmen's Bureau to distribute rations, clothing, and tents to those affected by catastrophes. Then, in February of 1882, two waves flooded nearly the entire alluvial valley of the Mississippi River below Cairo, Ill. The massive waves overtopped and tore through most of the levees, forcing thousands of people to the hills without food and shelter during the coldest month of the year. Congress committed \$100,000 for quartermaster supplies.

However, Sen. George Vest of Missouri discovered much of the money would be spent on commercial transportation costs. A steamboat owner from St. Louis informed the senator of the Corps of Engineers' vast fleet of workboats located at several points along the river, and that they could deliver the supplies at a lower cost. The use of the boats marked the beginning of the U.S. Army Corps of Engineers' role in disaster relief in this nation and around the world. Until 1950, the Corps usually only participated in rescue, relief, and flood fighting. Passage of the Federal Disaster Relief Act of 1950 expanded the Corps role to recovery, reconstruction, and rehabilitation.

For a more in depth look at the Corps' disaster relief origins and to learn about dozens of actual responses, Johnson's book, *Situation Desperate: U.S. Army Engineer Disaster Relief Operations, Origins to 1950*, is available from the U.S. Government Printing Office at bookstore.gpo.gov.

U.S. Engineer Office, Cincinnati, Ohio