

ENGINEER UPDATE

U.S. ARMY CORPS OF ENGINEERS

Vol. 34 No. 2 February-March 2010

IN THIS ISSUE

Page 2
USACE responds in Haiti

Insights
Honor is a warrior value

Page 4
Engineer given top award

Page 5
The surprise was a zonkey

Page 6
Retiree finds true love

Page 7
Command sergeant major
on track to visit all districts

Page 8
Web site gives information
on endangered species

Page 9
Project will help restore
the Everglades

Page 10
HR Corner
Corps' NSPS transition
to be 'all at once'

Page 11
Around the Corps

Page 12
Complex project will help
protect New Orleans
from floods

Book honors WWII black engineers

By Bernard Tate
Headquarters

A book released by the Office of History sheds new light on the African-American engineer units that served during World War II. A ceremony on Feb. 22 at U.S. Army Corps of Engineers Headquarters officially unveiled *Nothing But Praise: A History of the 1321st Engineer General Service Regiment*.

"We were lucky," said Michael Brodhead, the book's editor, as he described the information donated by the family of Col. Aldo Bagnulo. Bagnulo commanded the 1321st in Europe during World War II, and his collected papers are the basis of the book.

Bagnulo died on Feb. 21, 2004, and was buried in Arlington National Cemetery. His wife Helen died in 2007.

"After my mother died, we were clearing out her apartment," said Michael Bagnulo, Col. Bagnulo's son, after the ceremony in the Executive Foyer in Headquarters. "Dad was an engineer and he kept records of everything, and we came across all this information about the 1321st. My wife Marcella said, 'This is too valuable to throw away. Let's see if we can find somebody that might be interested.'"

"So she started making phone calls, contacted the Corps' Office of History, and they said, 'Sure, we would be interested!' So we literally boxed everything up and took it to their office. They took one look and they were interested. So we turned all the documents over to the Office of History, and they took the ball and ran with it."

The collection of documents span Bagnulo's career as an Army officer from 1937 to 1965, most of that time as an engineer. It included a typewritten 37-page history of the 1321st Engineer General Service Regiment and more than 1,000 photos of the unit taken during training and at work in Europe during World War II.

Soon after the first donation, John Bagnulo, another of Aldo Bagnulo's sons, donated his father's World War II diary. Brodhead, archivist for the Office of History, immediately knew that all of this was priceless information about the African-American contribution to the war effort.

"There is little about the history of black engineer units," Brodhead said. "There is virtually nothing, certainly nothing with the quality of the Bagnulo manuscript. The

Continued on page three



Photo courtesy of the Office of History

This photo is part of the cover art for *Nothing But Praise: A History of the 1321st Engineer General Service Regiment*.

\$4.9B for civil works in FY11 budget

The president's budget for fiscal 2011 includes \$4.9 billion in gross discretionary funding for the civil works program of the U.S. Army Corps of Engineers, offset in part by a proposal to cancel \$52 million of prior year funding.

Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works, said, "This year's civil works budget for USACE supports the administration's priorities of improving the nation's infrastructure and revitalizing the economy. The budget funds the planning, design, construction, and the operation and maintenance of projects, and focuses on the Corps' three main water resources mission areas -- commercial navigation, flood and coastal storm damage reduction, and aquatic ecosystem restoration."

The Army civil works program also contributes to the protection of the nation's waters and wetlands, the restoration of sites contaminated as a result of the nation's early atomic weapons development program and emergency preparedness and training for natural disasters.

The new federal funding in the civil works budget consists of \$4 billion from the general fund, \$764 million from the harbor maintenance trust fund, \$82.3 million from the inland waterways trust fund, and \$41 million from special recreation user fees.

The new federal funding will be distributed as follows:

- \$2.3 billion for operation and maintenance (O&M)
- \$1.6 billion for construction

Continued on page three



US Army Corps
of Engineers
BUILDING STRONG®

BUILDING STRONG®

USACE teams respond in Haiti

U.S. military forces are supporting international disaster relief efforts underway in Haiti following the Jan. 12 earthquake that ravaged the Caribbean nation. The focus of the mission, named Operation Unified Response, is to alleviate the suffering of survivors and to support humanitarian relief efforts. All U.S. military operations are in support of the U.S. Agency for International Development (USAID), the lead federal agency coordinating U.S. disaster relief operations in Haiti.

Currently, the U.S. Army Corps of Engineers is supporting Operation Unified Response by providing subject matter experts in civil and structural engineering, temporary power and debris removal to the U.S. military.

"The Corps's mission is to provide technical engineering planning and design, infrastructure assessments, contract construction, environmental and real estate planning, and disaster response assistance in support to the USAID, U.S. Southern Command (SOUTHCOM), and other federal agencies for the on-going disaster response and recovery operations in Haiti," said Col. Frank Ford, chief of Operations at USACE Head-

quarters. "Right now, we have a small team on the ground to support Naval Facilities Command and SOUTHCOM, and are prepared to deploy additional people if requested."

Within 48 hours after the earthquake, Mobile District sent a team of engineers to Haiti to support SOUTHCOM's Joint Task Force by conducting engineering assessments of critical infrastructure. The team has assessed bridges, buildings, ports and airfields for soundness and needed repairs.

One of the more critical facilities assessed for structural integrity was the University of Haiti Hospital behind the Presidential Palace. In addition, the team repaired the hospital's generator that had been out of commission since the earthquake. This provided power for more than 1,500 patients.

The team has also been busy assessing locations to house the Haitian government, and locations to store food and supplies coming in from the relief efforts.

For information on how to contribute to the rescue efforts, visit the USAID's Web site at www.usaid.gov/haiti and search their "Haiti Earthquake Response" menu.



Mobile District Photo

The USACE team on top of a dam they inspected for damage in Haiti. From left are Cameron Chastin from Philadelphia District; Scott Chodkiewicz, Justin McDonald and Greg Hall, all of Mobile District; and Sgt. 1st Class Jason Jacot of the 249th Engineer Battalion (Prime Power).

Insights

Honor is a value for all warriors

By Col. Hanson Boney
Chaplain, U.S. Army Corps of Engineers

(This is the third in a series of articles about Army Values.)

When we think of honor, some unique individuals come to mind. Honor often refers to respect and recognition bestowed on an individual or group for extraordinary courage and leadership. In other contexts, the word implies deference, or yielding to another's judgment or preference out of respect.

Two soldiers, David of ancient Israel and Sgt. Alvin York of World War I, remind us that honor is the credo by which all armies, past and present, win battles and secure the peace.

In 1 Samuel 16, we are introduced to a teenage shepherd named David who is anointed to be king over Israel. He will succeed King Saul, whose faithfulness to God is often superseded by ambition and unwillingness to listen to council.

David's first conquest comes during the famed duel with Goliath (1 Samuel 17). In subsequent skirmishes, he gains a reputation as a skilled warrior to the dismay of Saul, whose image as king is eclipsed by David's exploits. Saul, in fits of jealousy, attempts to assassinate the young warrior on numerous occasions, but is unsuccessful.

David has several opportunities to seek revenge on Saul, but declines because he respects Saul as God's anointed king. In one instance, David gets close enough to kill Saul in a cave at Ein Gedi. But he restrains his soldiers from killing Saul, creeps close and cuts off a corner of Saul's robe.

Later David approaches Saul, bows down and says that he means Saul no harm, showing him the fragment of robe as proof (1 Samuel 24:3-22).

Saul did not come to a good end. He committed suicide at the battle of Mount Gilboa to avoid capture after being critically wounded by Philistine archers (1 Samuel 31:3-6). But instead of celebrating, David wrote a lament mourning Saul's death (2 Samuel 1:21-27).

David was an example of honor in the ancient past. In modern times, an unlikely warrior became one of America's greatest heroes during World War I, and demonstrated honor in his conduct afterward. His name was Alvin York.

York was an impoverished farm boy from Tennessee, the 11th of 13 children. By all accounts, York was devoted to his family, but in the years before the war, he was a violent alcoholic and barroom brawler. His mother, a devout Christian, cautioned him to reform and settle down, but to no avail.

Unlike the movie version where York is struck by lightning on his way to revenge a business deal gone awry, he converted after his best friend is killed during a barroom brawl. The event shook York so badly that he finally followed his mother's advice, became a pacifist and stopped drinking.

After his conversion, York fell in love with Gracie Williams, but their plans were interrupted by a draft notice. York, concerned that war would cause him to disobey God's commandment not to kill, applies for conscientious objector status.

York is an expert shot, and his superiors wish to keep him in the Army. His commanding officer, Capt. Edward Danforth, took the unusual step of giving York a few days of leave to contemplate the quote from Jesus, "Render unto Caesar what is Caesar's and unto God what is God's." (Matthew 22:16-22, Mark 12:13-17, Luke 20:20-26)

While York was on leave, his request for conscientious objection was approved, but he chose to go to France with his unit, the 82nd Infantry Division (forerunner of the modern 82nd Airborne Division).

In France, York (then a corporal), saw first-hand the savagery of war. During an attack on the Decauville Railroad in the Meuse-Argonne Offensive, York's battalion came under fire from well-placed German machine guns.

Four NCOs and 13 Soldiers including York were ordered to maneuver behind the German lines to take out the machine guns. While dealing with German prisoners, more machine

guns opened fire on the group, killing nine Soldiers and leaving York in charge of the rest.

York left the group with the prisoners and maneuvered his way around the machine guns, shooting enemy soldiers one at a time. The Germans, surprised by the audacity of this American Soldier, surrendered. York and his seven men marched 132 captured Germans back to American lines.

For his bravery, York was promoted to sergeant and awarded the Distinguished Service Cross, later upgraded to the Medal of Honor. France awarded him the Croix de Guerre and Legion Honor, Italy awarded him the Croce di Guerra, and Montenegro awarded him the War Medal.

After the war, York received numerous business offers, but he rejected them all because he did not want to dishonor the sacrifices of fellow Soldiers. Of his exploits, York told his division commander, Gen. George Duncan, "A higher power than man guided and watched over me and told me what to do."

Are you living with honor? Does your conduct reflect your deference to a higher truth? Are you a leader that people respect because you're willing to go beyond the call of duty? If you are, I salute you because few men and women today are willing to subordinate their desires for the good of others.

William Cullen Bryant said in his poem *Thanatopsis*, "So live that when thy summons comes to join the innumerable caravan where each shall take his chamber in the silent halls of death, thou go not down like a quarry slave at night scourged to his dungeon; but sustained and soothed by an unfaltering trust, approach thy grave like one who wraps the draperies of his couch about him and lies down to pleasant dreams."

This is possible only when we live with a sense of honor, integrity and an understanding of the greater good.

(The opinions expressed in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)

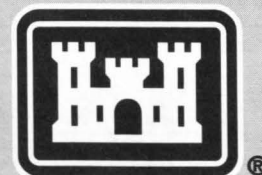
ENGINEER UPDATE is an unofficial publication under the provisions of AR 360-1. It is published monthly by offset for the Headquarters, U.S. Army Corps of Engineers.

Editorial views and opinions expressed are not necessarily those of the Corps of Engineers or the Department of the Army. Letters to the editor are encouraged.

Deadline for submitting articles is the 15th of the month preceding publication.

Address mail to: EDITOR, ENGINEER UPDATE, CEPA-C, Washington, D.C. 20314-1000.
Telephone (202) 761-4285. Photographs are U.S. Army photos unless otherwise credited. Available on the internet at www.usace.army.mil.

Commander, USACE..... Lt. Gen. Robert L. Van Antwerp
Chief, Public Affairs W. Curry Graham
Editor Bernard W. Tate



Civil works budget

Continued from page one

- \$240 million for flood control on the Mississippi River and tributaries (MR&T)
- \$193 million for the regulatory program
- \$185 million for expenses
- \$130 million for the formerly utilized sites remedial action program
- \$104 million for investigations
- \$30 million for flood control and coastal emergencies
- \$6 million for the Office of the Assistant Secretary of the Army for Civil Works

Non-federal partners are expected to make about \$400 million in cost-sharing contributions to the rivers and harbors contributed funds in fiscal 2011. In addition, \$16 million in federal permanent appropriations will be available to USACE in fiscal 2011, and about \$83 million will be available from the federal coastal wetlands restoration trust fund for the work of the interagency task force led by USACE.

The fiscal 2011 O&M program is funded at \$2.5 billion, including \$154 million in the MR&T account. The budget emphasizes performance of existing projects by focusing on the maintenance of key commercial navigation, flood and storm damage reduction and other facilities.

Among navigation projects, the O&M program gives priority to the harbors and waterway segments that support high volumes of commercial traffic. The budget also funds harbors that support significant commercial fishing, subsistence, or public transportation benefits.

The fiscal 2011 O&M account also includes \$15 million for the national levee inventory program for ongoing development of the national levee database. The coastal data information program will be budgeted \$3 million, and \$10 million for global change sustainability.

The total fiscal 2011 construction program is \$1.77 billion, including \$85 million in the MR&T account. The construction program uses objective, performance-based guidelines to guide the allocation of funding toward the highest-per-

forming economic and environmental construction projects. Flood and storm damage reduction, commercial navigation, aquatic ecosystem restoration, and hydropower projects are ranked within categories as projects that provide:

- Dam safety assurance, seepage control or static instability corrections
- Significant reduction of risk to human safety
- Environmental mitigation
- High performance based on benefit-to-cost ratios
- Restoration of significant aquatic ecosystems, such as the Florida Everglades, the California Bay-Delta and the Louisiana coast.

The budget funds 95 construction projects, consisting of 10 dam safety assurance, seepage control and static instability correction projects; 20 projects justified on the basis of life-saving benefits; six project completions; two new starts; and 57 continuing projects.

By program area, the 95 funded construction projects are 49 flood and coastal storm damage reduction projects (two budgeted for completion), 25 navigation projects (three budgeted for completion), 17 aquatic ecosystem restoration projects (including five projects required by biological opinions), and four hydropower replacement projects (one budgeted for completion).

Among the construction projects funded in the budget are the South Florida/Everglades ecosystem restoration program (\$180 million); the Columbia River fish mitigation in Washington, Oregon, and Idaho (\$138 million); Olmsted Locks and Dam in Illinois and Kentucky (\$136 million); seepage control at Wolf Creek Dam on Lake Cumberland, Ky., (\$134 million); and seepage control at Herbert Hoover Dike in Florida (\$105 million).

The fiscal 2011 construction program includes two new construction starts. They are the Louisiana Coastal Area program (\$19 million for aquatic ecosystem restoration) and Onion Creek in the Lower Colorado River Basin, Texas, (\$10 million for non-structural flood damage reduction).

The budget includes funding for both construction of projects to reduce storm damage along the coast, and for periodic renourishment of such projects. The fiscal 2011 program supports a total of nine shore protection projects -- two are initial construction and seven are periodic renourishment.

The regulatory program is funded at \$193 million. With these funds, USACE will continue to protect the nation's water-related resources, improve compliance and enforcement of wetlands regulations and improve permitting processes.

The investigations budget includes funding to support the Water Resources Priorities Study (a high-priority evaluation of the nation's vulnerability to flooding), and the administration's ongoing efforts to revise the water resources principles and guidelines, which is more than 25 years old.

Emergency management is provided \$30 million in the flood control and coastal emergencies account to pay for salaries and related expenses for preparedness for and training to respond to floods, hurricanes and other natural disasters. The emergency management program also includes \$6.8 million for the national emergency preparedness program and \$6.5 million for facility protection and security, both funded in the O&M account.

Recreation activities are provided \$280 million in fiscal 2011 from the O&M and MR&T accounts.

The budget proposes to replace the current excise tax on diesel fuel for the inland waterways with a new funding mechanism that will raise the revenue needed to meet the authorized non-federal cost share of inland waterways capital investments in a way that is more efficient and more equitable than the excise tax. The proposal would preserve the landmark cost-sharing reform established by Congress in 1986, while supporting inland waterways construction, expansion, replacement and rehabilitation work.

The fiscal 2011 Army civil works budget press book, including a state-by-state breakdown, is available at www.usace.army.mil/CECW/PID/Pages/decwm_progdev.aspx.

History book

Continued from page one

public can easily get the impression that certain high-profile units such as the Tuskegee Army were the only significant contributions African-Americans made to winning World War II. There were a lot more. What the 1321st Engineers did was not glamorous, but it was essential."

"This is important on a couple of levels," said John Lonnquest, director of the Office of History. "One, these Engineer General Service Regiments often labored in the shadows. They weren't glamorous combat engineers; they didn't cross rivers under fire. But they performed tremendously vital missions. They worked on main routes of communication, they built facilities and supply depots, they did everything. But not many people know what they did. So the history of 1321st gives us some insight into the role of the Engineer General Service Regiments.

"But more important, there were about 80 Engineer General Service Regiments in World War II, and about 50 of those were entirely African-American except for some of their officers like Col. Bagnulo," Lonnquest continued. "We know little about them. Three African-American Engineer General Service Regiments helped carve the ALCAN Highway out of the Alaskan wilderness and we have some photos of that.



Photo courtesy of the Office of History

Soldiers of the 1321st Engineer General Service Regiment rebuild a bridge in Germany during World War II.

But we really don't have anything about the African American Engineer General Service Regiments in Europe.

"Col. Bagnulo's history of the 1321st, along with his diary and the photos, lets us zoom in on one unit," Lonnquest said. "But in many ways their experiences represent hundreds of thousands of engineers in both

black and white units. So this history gives us a perspective on a lot of engineer soldiers who served in World War II."

Brodhead and the rest of the Office of History staff spent about two years studying the Bagnulo donation and compiling and editing it into a 120-page book. The title of the book comes from a diary entry on May

15, 1945, when Bagnulo wrote, "There has been nothing but praise for our performance in connection with that work on the autobahn." The book includes an edited version of the 1321st history, Bagnulo's complete diary, and dozens of photos.

Brodhead said that *Nothing But Praise* does not exhaust the Bagnulo collection. Bagnulo served as an Army officer for 29 years, from 1936 to 1965. "He commanded St. Paul District and Eastern Ocean District, and he ended his career with NASA," Brodhead said. "There is more material in there that could be potentially helpful."

The full text of the book is available at <http://140.194.76.129/publications/eng-pamphlets/ep870-1-69/toc.htm>.

The Office of History will distribute copies of the book to divisions, districts, centers and field activities in the coming weeks. USACE employees can request one free printed copy of *Nothing But Praise* (EP 870-1-69) from the USACE Publications Depot by faxing a request to (301) 394-0084, or by writing to:

USACE Publications Depot
2803 52nd Ave.
Hyattsville, Md. 20781-1102

The Government Printing Office sells copies of the book for \$15 apiece at <http://bookstore.gpo.gov>.

Young engineer given top award

Article and Photo
By Elizabeth Vlahos
Defense Media Activity

The commanding general of U.S. Africa Command and a structural engineer in New Orleans were recognized Feb. 20 at the 24th Annual Black Engineer of the Year Awards (BEYA).

Gen. William "Kip" Ward, commander of U.S. Africa Command, was honored with the Lifetime Achievement Award. Jeremy Laster, a structural engineer for New Orleans District, was recognized as the Most Promising Engineer or Scientist in Government for his work in designing and developing the Hurricane Risk Reduction System.

Lt. Gen. Robert Van Antwerp, the Chief of Engineers, presented the award to Laster during the ceremony.

"Jeremy Laster is a bright young star in the Corps of Engineers," Van Antwerp said.

"He's emerging as one of our most outstanding young engineers and leaders."

Van Antwerp recited Laster's many projects, including developing structural designs, flood walls, cofferdams and evaluating foundation requirements for the difficult soils in southern Louisiana.

In his acceptance speech Laster said, "When I was in high school, my 10th grade chemistry professor told me something that changed my life. He said, 'If I were in your shoes, I'd go to Jackson State University and major in engineering.' Well, I took his advice, and I stand before you tonight, and I will continue to stand before you as a structural engineer for the Corps of Engineers."

Ward was recognized for his leadership and mentoring throughout his 39 years in the Army. He is the only active-duty, four-star African-American general, and he is only the fifth African-American to achieve this rank. He also has the distinction of being the first



Lt. Gen. Robert L. Van Antwerp, chief of engineers, presents Jeremy Laster with the award for Most Promising Engineer or Scientist in Government at the 24th Annual Black Engineer of the Year Awards.

commander of U.S. Africa Command based in Stuttgart, Germany.

BEYA recognizes significant achievements of black engineers throughout the U.S. Those who demonstrate outstanding performance and help shape the course of engi-

neering, science and technology are honored as Modern-Day Technology Leaders, including servicemembers, students, executives, educators and professionals.

(Elizabeth Vlahos serves with Defense Media Activity - Anacostia.)

New school built in Serbia village

Article and Photo
By Justin Ward
Europe District

By Western standards, the \$444,000 special-needs community center may seem ordinary. But to the community of Varvarin in Serbia, and especially to the children who go to the center, it is anything but.

"Facilities like this are why I come to work," said Darrell Cullins, Europe District project engineer. "These kids, and this community as a whole, had nothing. So this center is a big help."

The project is one of several construction and renovation projects managed by Europe District in the Balkans and funded by the U.S. European Command's Humanitarian Assistance program.

The program helps the community recognize that the U.S. is a friend and partner, said Charles Brady, EUCOM's HA program manager.

"Our focus here, like our focus for all our HA projects, is to build friendships, stability and capacity for this country to take care of its own," Brady said.

The one-story school for children with special needs, completed in early December, was built with the "Right to Smile" association, a Belgrade-based non-governmental organization for parents of children with special needs.

It will provide an "inclusive education" model where students with special needs are educated in regular classes as much as possible.

"Before this facility, we did not have a



This new school will serve special-needs children in Varvarin, Serbia.

facility for children with disabilities, and children with disabilities were deprived of any daycare center," said Varvarin mayor Zoran Milenkovic. "We are very glad that the children are going to have a place where they can spend their days."

The center, which took just over a year to complete, provides several work rooms, classrooms, bathrooms and sleeping areas for the children.

The building also provides a kitchen, dining room and gymnasium, as well as office space for the association, a laundry room and a small storage room. It was furnished in late January, and turned over to the local school district shortly thereafter.

"Our intent is to support the U.S. European Command and the U.S. Embassy to build friendships by providing facilities that offer stability," Cullins said. "We're providing opportunities for these kids that they wouldn't have otherwise."

Maj. Devin Braun, bilateral affairs officer at the U.S. Embassy in Belgrade, was part of the local team who advocated that EUCOM humanitarian assistance funds to be used in Varvarin.

This central Serbian town of 2,200, 65 miles south of Belgrade, is known throughout the Balkans as a poor and vulnerable community.

"We look at communities where U.S.

support and dollars would provide the most stability, security and friendship," Braun said. "Then they see what project would benefit them most. In this community, they needed this facility."

The city was the site of a 1999 NATO bombing campaign that destroyed a bridge across the Great Morava River. The bombing was part of the military operation against the Federal Republic of Yugoslavia during the Kosovo War to destroy military infrastructure as well as bridges, government facilities and factories.

"We want to thank the embassy of the U.S. for this project," Milenkovic said. "Without such assistance it wouldn't be possible for a municipality such as ours to have adequate resources to build such a daycare center for children who need such an establishment. And therefore we are grateful that the U.S. has been able to provide us such a capacity."

The school is one of 16 ongoing HA projects, valued at about \$5 million total, that Europe District is managing for EUCOM, including sites in Albania, Croatia, Estonia, Latvia and Moldova.

The district is also managing 12 projects for the U.S. African Command, valued at about \$4 million total, at sites in Mauritania, Mali, Niger and Zambia.

Most of the district's HA projects are simple, cost-effective facilities that provide an allied nation the ability to become more self reliant, said Cullins, who oversees most of the projects in Eastern Europe. Typical projects include schools, wells and health facilities.

Wreck of Civil War gunboat found

By Courtney Brodbeck
Galveston District

The wreckage of the *USS Westfield* lay beneath the murky surface of the Texas City Channel until Galveston District orchestrated an archaeological recovery of artifacts from the Civil War shipwreck. A Dahlgren cannon was among the artifacts recovered.

This recovery is part of a larger effort to deepen the Texas City Ship Channel. The \$71 million project will deepen nearly seven miles of the channel from 40 feet to 45 feet. The added five feet will allow larger vessels to navigate the channel to provide products to the various industries, according to Sharon Tirpak, project manager.

"The deepening will help industry bring in more crude petroleum to refine into gasoline and other petrochemical products," she said.

The scattered remnants of the *Westfield* were rediscovered in 2005 by archaeologists from PBS&J, a company contracted to work for the U.S. Army Corps of Engineers. Recovering the rusted remains of the *Westfield* began Nov. 18, according to Janelle Stokes, regional environmental specialist for Galveston District.

The *USS Westfield*, an 822-ton side-wheel inshore gunboat, was built in 1861 in New York City as a civilian ferry. The ship was purchased by the Navy in November 1861 and commissioned in January 1862. Sent to the Gulf of Mexico in February 1862, the *Westfield* took part in the April campaign to open the lower Mississippi River and capture New



Photo courtesy of Galveston District

A Dahlgren cannon is retrieved from the wreck of the *USS Westfield*.

Orleans. During the next three months, the gunboat supported the mortar schooner flotilla in operations up the river toward Vicksburg, Miss.

The *Westfield* joined the Union blockade of Texas later in the summer of 1862, and participated in the capture of Galveston, Texas, in early October.

The *Westfield* continued to operate in the area, but on Jan. 1, 1863, while serving as flagship of the Union naval forces off Galveston, the *Westfield* ran aground and was threatened by a Confederate attack.

To prevent Confederate forces from capturing the powerfully armed ship, the captain, William Renshaw, ordered it

destroyed. Renshaw poured turpentine on the deck and laid a fuse trail from the powder magazine. When Renshaw lit the fuse, he and 13 of his crew were killed by a premature explosion.

It would be 146 years before the *Westfield* would be discovered.

All artifacts from the site are the property of the Navy, which retains permanent ownership of all sunken naval ships and aircraft. USACE worked with the Naval History and Heritage Command and the Texas Historical Commission to ensure that the recovery efforts met all relevant archaeological regulations and standards.

USACE funded the heavy lifting required for the project through an interagency agreement with the Navy supervisor of salvage. A civilian Navy subcontractor, Donjon Marine, provided the equipment and personnel to recover the artifacts.

All artifacts were transported to the Center for Maritime Archaeology and Conservation at Texas A&M University for stabilization, assessment and conservation. The primary goal of the conservation project is to preserve the artifacts to the greatest degree possible. Concretions will be removed through electrolysis and manual cleaning. Metal and organic artifacts will go through a variety of chemical and electrolytic processes to stabilize and preserve the artifacts.

Conservation is expected to take two or three years. After conservation is complete, these pieces of history will be shared with the public and placed in museums that have long-term loan agreements with the Navy.

The surprise was...a zonkey?

Article and Photos
By Chris Gray-Garcia
Sacramento District

Fred Dolling watched as his wife Lisa pulled into the driveway of their country home towing a horse trailer and thought, "Maybe it's a cow."

They had talked about buying a cow. Fred's family kept jersey cows when he was growing up, and he thought maybe Lisa had bought him one. He went out to the truck to help her unload whatever was in that trailer, but he just stared as she opened the gate.

It was *not* a cow.

"I looked into the trailer, and I thought, 'What is this?'" Fred said.

"It was a surprise," Lisa said.

"It *was* a surprise," Fred said.

"It" was a zonkey.

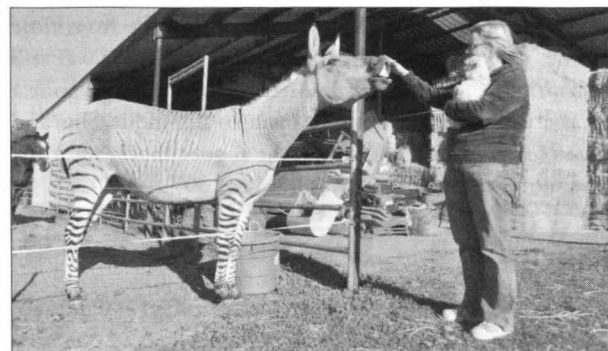
A zonkey, as its name suggests, is the offspring of a zebra and a donkey, with a temperament that combines the unrulier dispositions of both. Lisa had seen one advertised in the paper and went out to have a look. "He was just the cutest thing," said Lisa, a Sacramento District park technician at Stanislaus River Park, Calif. "I was hooked."

She named him Zippy.

"We've always been animal lovers," Lisa explained. "I've always had a thing for exotic animals, especially zebras. Zippy is a character. He's a little ornery, but he loves people."

Zippy wasn't the Dollings' first pet. They already had two longhorn steers, a pygmy goat and a llama. None of them uncommon in California, but Zippy was their first exotic pet. A year or so after they bought him, the Dollings bought a camel, Joey.

Counting Zippy and Joey, the Dolling family menagerie now numbers 21, including a jersey cow, a horse, seven cats, and five dogs.



(Right) Fred and Lisa Dollings with their camel, Joey. (Above) Lisa spends a moment with Zippy the zonkey. They have 21 pets, including two longhorn steers, a cow, a horse, a llama, a pygmy goat, five dogs and seven cats.

"It is a handful," Fred said. "The hard thing is finding someone to take care of them when we go on vacation."

Finding a vet to care for them, Lisa said, has been another challenge. But aside from that, keeping them isn't hard. Lisa says that feed isn't as expensive as one would imagine, and "they get along with the horse and the dog and the cats."

"If you separate the horse and the zonkey, they cry," Fred added. "They don't want to be separated."

"They're our hobby, I guess," Lisa said. "Some people go to the lake or to the mountains. We've got our animals."

In a small town like Knights Ferry, with animals like theirs, everyone knows the Dollings. When their neighbors have company, Zippy and Joey are often part of the tour. "They've got a lot of friends," Lisa said.

But their animals aren't known just locally. The Dollings live just up the road from the Stanislaus River Parks headquarters office. The park and the Dollings' farm are located off one of the main roads to Yosemite National Park,



so they get their fair share of passing traffic. They often find strangers parked outside their fence, taking photos with Joey. Once, they found a ski cap in his enclosure, and they speculate that Joey snatched it off the head of someone who got a little too close.

The Dollings have been asked to show Zippy and Joey at the California state fair, and someone from a nearby church asked them once whether they might use Joey in their Christmas nativity scene.

Fred chuckled and said, "We had to tell them, 'No, they don't leave the farm.'"

"Anyway, we don't have a trailer big enough to move him," Lisa added.

The Dollings are sometimes approached to take in rescue animals, too. Someone offered them an ostrich once. Someone else offered them a zebra. For now, though, 20 are enough. Still, "I wouldn't mind getting a zebra one day," Lisa said. "No giraffes or elephants, though."

A USACE love story

Retiree finds true love in Corps

By Bernard Tate
Headquarters

Retirees join the Reemployed Annuitant's Cadre (RAC) for many reasons. They earn extra income in retirement; they travel to disaster areas and use their skills to help people; they take a break from the routine of retirement.

But no one has found what Mary Nelson found through the RAC – *true love!*

"When I came here to work for the Reemployed Annuitant Office (RAO) in 2007, I never dreamed that it would lead to marriage," said Nelson, human resources management services specialist for RAO. "But that's what happened, and I couldn't be happier." (See sidebar article on next page for information about the Reemployed Annuitant Cadre.)

43 years ago

It is a love story with roots that reach back 43 years.

Mary Jefferson (her maiden name), Jesse Burciaga, Johnny Nelson and Shirley Oliver met and became good friends in 1966 in Huntsville, Ala.

Mary married Jesse, and Johnny married Shirley. They went their separate ways in 1973 when Mary got caught in a RIF (reduction in force) at Redstone Arsenal. Mary and Jesse moved to Jackson, Miss., where Mary worked for the Veterans' Administration Medical Center (VAMC). Johnny and Shirley eventually moved to Northern Virginia.

"But we stayed in contact because we were good friends," Nelson said. "Whenever I came to Washington for programs or meetings I visited with Shirley, and her family. I'm the godmother of their daughter, Meka. So we kept in touch all this time."

Mary and Jesse divorced in 1986 after 15 years of marriage. Mary had a varied career in human resources, including a stint with Mississippi Valley Division 1986-2001. She retired from the VAMC in Jackson in 2004 with 37 years of federal service.

Meanwhile, Johnny retired from the Department of Health and Human Services as the director of Voluntary Compliance and Outreach Division for the Office of Civil Rights, and acting director of Programs, Policy and Training Division.

Shirley died suddenly of a heart attack in 2006 while she and Johnny were on vacation in Rome, Italy. Mary came for Shirley's funeral in Chantilly, Va., but she and Johnny remained just distant, cordial friends.

Hurricane Katrina

Then Hurricane Katrina changed everything.

Mary was working for the AARP when the hurricane struck. Mary Burrow, who had worked with Mary in MVD, contacted her and said the Recovery Field Office in New Orleans needed someone with personnel skills.

So Mary e-mailed her resume to Burrow, who forwarded it to Don Binder. Binder managed the RAO at that time, and he was impressed with Mary's resume. He told her she could work in the Recovery Field Office for a month, and then he wanted her to come to come to Headquarters and work for the RAC.

There was a high demand for reemployed annuitants in New Orleans, and only about 250 retirees in the system at that time. Therefore, Binder needed someone to handle the personnel work while he focused on recruiting.

So Mary moved to the Washington, D.C., area in February 2007.

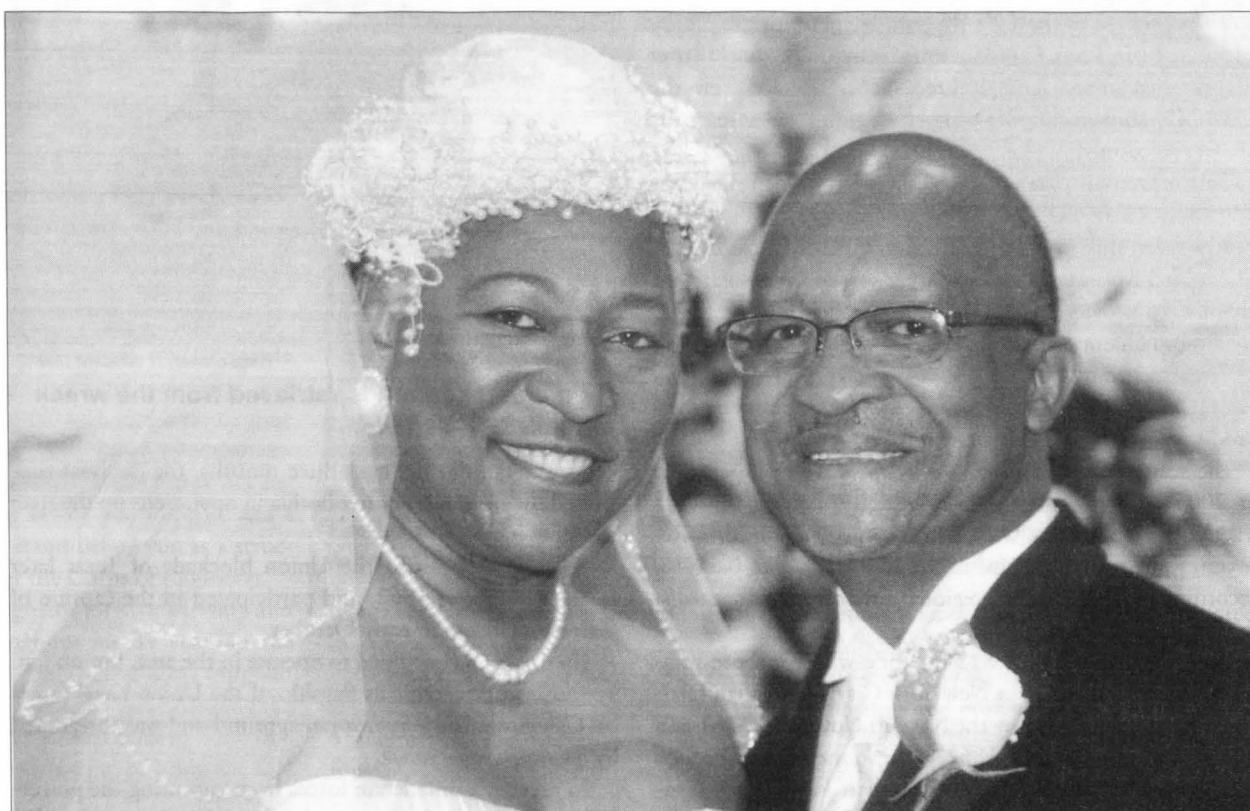


Photo courtesy of Mary Nelson

Mary and Johnny Nelson on their wedding day. They reconnected after 43 years when Mary's work with the Reemployed Annuitant's Cadre brought her to the Washington, D.C., area.

"My daughter Jessmye drove me here, and she called Shirley's daughter Meeka to tell her I was on TDY in Washington, and asked Meeka to check on me from time to time," Nelson said. "In the meantime, Johnny was still mourning the loss of Shirley. After Shirley had been gone a year, he went to his timeshare cabin in the mountains and prayed for guidance, and he got the answer that it was time to be more sociable. This was in May 2007.

Dating

"Johnny knew I was in town, so he called me and we went to dinner. We talked about our children and our families and had a really great time talking and laughing.

"It was strictly two old friends getting together," Nelson added. "Then about two or three weeks later he called and we went to dinner again. It was another nice place, the food was excellent, and we again had a really great time."

Mary and Johnny started spending more time together, and they could do so because the RAC was growing thanks to Don Binder's recruiting and Mary's skill in the personnel operation. So Binder extended Mary for another six months in the Headquarters RAO.

"Time moved on, and in December 2007 I could not get a flight home for Christmas," Nelson said. "So Johnny said, 'If you're going to be here, let's spend Christmas together.' So we went to the Inner Harbor in Baltimore and had a very enjoyable Christmas dinner.

"About that time we both started thinking, 'Hmm...this is nice, and we enjoy each other's company.' But neither of us said anything to the other. It just kind of...evolved. We were having dinner and going to movies and plays, and finally we decided, 'Well, why don't we just start dating?' That was in the fall of 2008."

So Mary's romance grew, and the RAC grew as well. Mary's skills were still vital to the operation, so she extended in the DC area again.

"Things were really progressing," Nelson said. "In March

2009, we decided 'We need to make this official,' because he's a deacon in his church and I'm a missionary in my church. So we started planning a wedding date.

Proposal

"We spent Easter with Johnny's son and his son's wife to tell them about our plans, and then the next weekend we went to Charlotte, N.C., to tell his daughter," she continued. "On our way back to Virginia Johnny said 'I need to stop by my house for something.' When we got to his house he said, 'I need to go in my office. Just have a seat.'

So I sat down, and he walked toward his office, but then he turned around, came back, got down on one knee, and asked, 'Will you marry me?'

"I couldn't answer, I just sat there screaming and laughing," Mary said. "In all that time, it never occurred to me that he had not *proposed!* So Johnny asked again, 'Well, will you marry me?'

"And I screamed, 'Yes! Yes! I'll marry you!'

By this time, Don Binder had moved on to another program, and Tim Alderman was managing the RAO. Alderman asked Mary to continue handling the personnel operations, which worked out because she was well along with her wedding plans.

All thanks to RAO

Johnny and Mary Nelson were married Sept. 5 at the Parish St. Missionary Baptist Church in Jackson, Miss. They honeymooned in Hot Springs, Ark.

"It's all through the Rehired Annuitants Office," Nelson said. "Johnny and I were laughing about it before Christmas. We never dreamed that our paths would cross again and we would get married, and now there we were, planning our first Christmas together. His children and grandchildren all came, and my children and grandchildren all came, so we had 21 people in our home for Christmas."

Command Sgt. Maj. on track to visit all USACE districts

By Bernard Tate
Headquarters

Command Sgt. Maj. Micheal Buxbaum is about halfway through his tenure as the command sergeant major of the U.S. Army Corps of Engineers, and there is still a lot he wants to accomplish.

"I came on board at USACE in May 2008, and my tenure will take me through August 2011," Buxbaum said. "So far I've been able to visit 21 of our districts, and my goal is to get to the remaining 19. My plan is to visit every district in USACE; I made the commitment to Lt. Gen. Van Antwerp when I came on board that I would visit them all, and I think I'm on track to do just that."

That's not unusual -- every sergeant major is on the road a lot because the job requires visiting troop units. What *is* unusual is that for the USACE command sergeant major, "the road" covers more than half of planet Earth. His longest trip this quarter was a visit to Afghanistan with Lt. Gen. Robert Van Antwerp, the commanding general.

"This time we had a specific list of folks we wanted to talk to in reference to the troop build-up in Afghanistan, and our piece of that," Buxbaum said. "Lt. Gen. Van Antwerp talked with three of the senior commanders, as well as the U.S. ambassador. While he was doing that, I visited several projects we're doing in AED North and AED South,

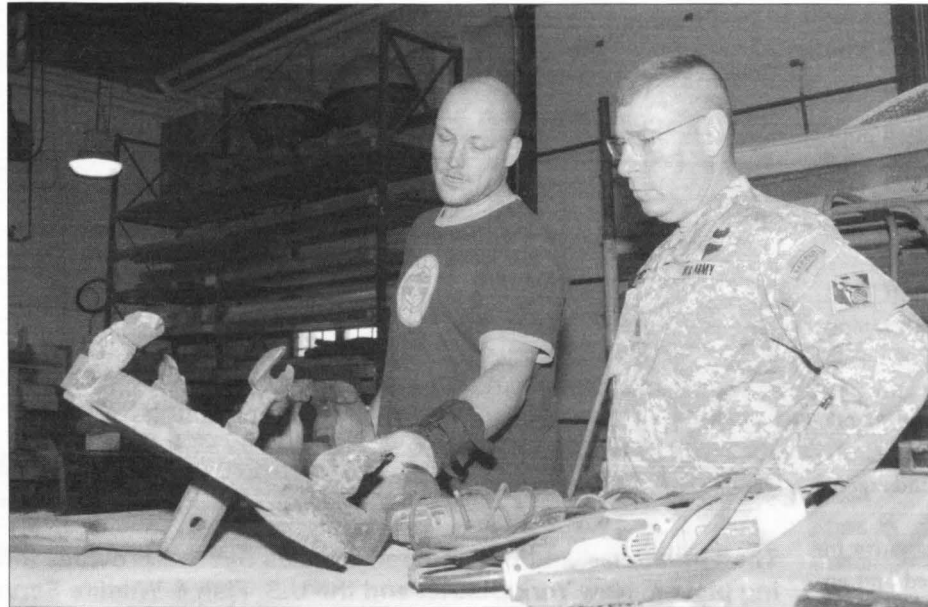


Photo by Curt Biberdorf, Alaska District

Command Sgt. Maj. Micheal Buxbaum talks with Paul Owens during a visit to the Drill Shop in Alaska District.

plus I talked with the sergeants major.

"There's a lot of work going on both inside and outside the wire," Buxbaum said. "Our numbers are going to grow to more than 500 in Afghanistan, and we've got to have housing for them. A lot of our folks are living kind of tight right now, and I told them, 'Be patient. Your new home should be done soon; we're building them as fast as we can."

"I also visited the training facilities that

we're building for the Afghan National Police and the Afghan National Army," Buxbaum added. "It's all state-of-the-art stuff, as good as the facilities our Soldiers use."

The situations in Iraq and Afghanistan have evolved ever since the beginning of Operation Enduring Freedom and Operation Iraq Freedom, and have changed even in the two years since Buxbaum became the USACE command sergeant major.

"Iraq is not business as usual by any stretch," Buxbaum said. "You're still going to ride in an up-armored vehicle, and there are still bad guys there. Is it as bad as it was in 2006? No. Is our workload coming down? Yes. We don't have as many projects on our books any more in Iraq, so we're finishing up what we do have on our plate. The Status of Forces Agreement says that U.S. forces must be out of Iraq by 2011. So the mark on our wall is to get everything done by 2011."

Although the workload is decreasing in Iraq, it is increasing in Afghanistan.

"There's a lot of construction because of the buildup," Buxbaum said. "The president says we're going to send 30,000-plus troops to Afghanistan, and they're going to need someplace to live. So that's what we're doing, along with our partners in the Navy's SeeBees and the Air Force's Red Horse. This is an all-hands-on-deck thing. The workload is going up, and USACE could use another 300 people in Afghanistan today."

Although the situations in Iraq and Afghanistan may change, the challenges and benefits of working there do not.

"I tell volunteers that they're going to be worked long and hard while they're there," Buxbaum said. "You'll probably do more and learn more in a six-month or one-year tour there than you will on a three-year proj-

Continued on page ten

RAC is win-win for retirees, Corps

By Bernard Tate
Headquarters

For more than 1,100 federal retirees, retirement papers did not mean they stopped working for the U.S. Army Corps of Engineers. They are members of the Reemployed Annuitants Cadre (RAC), which gives federal retirees the chance to work temporarily during disasters or other situations that require a "surge" of USACE personnel.

Whether to supplement their retirement income, get those last few quarters of Social Security, remain active in their professions or just to continue serving the nation, there are many reasons for the annuitants to continue to work, resulting in a win-win for USACE and the members of the cadre.

"Our retirees are a great asset," said Tim Alderman, the RAC program manager. "Many of them had experience dealing with disasters when they were full-time employees, and every retiree we deploy is one less permanent USACE employee we have to deploy. Our retirees can either deploy directly, or can backfill for a full-time employee who is downrange."

"Certainly the big advantage for many of the cadre is the pay," Alderman added. "Annuitants receive pay for their work in the cadre in addition to their annuities. Federal annuities are never reduced by the additional pay they earn."

Although reemployed annuitants are best known for their work during disasters and other emergencies, they also

backfill for absent employees, work on projects, and mentor younger employees. They can activate for any length of time up to six months.

The requirements to join the RAC are fairly simple.

"Basically, you have to be retired," Alderman said. "There's no time limit on when they retired, except if they went out on a VSIP. Then they're barred from re-employment for five years. There's certainly no age limit."

"There's a medical requirement, just like for all our employees who deploy," Alderman continued. "They do a self-evaluation, a doctor screens the information, makes a medical judgment, and lets us know if the person is deployable. One of the advantages to the program is the flexibility. When we call and ask an annuitant if they want to deploy or take on an assignment, they can always decline. We'll just come back to them next time."

"Other issues are mostly administrative," Alderman said. "There's a packet of forms that we send them electronically. They send us a copy of their Standard Form 50, Notification of Personnel Action for their retirement, a copy of their resume, several other forms we provide, plus the medical form. That paperwork comes here, and we make a skills assessment comparing their background to the Corps' needs. If they're someone whose experience that USACE can use, we turn the information over to the Civilian Personnel Advisory Center here in Headquarters. CPAC works with the Civilian Personnel Operations Center to bring them on the rolls."

The RAC needs retirees with all sorts of skills, but some career fields are in especially high demand.

"We always need engineers," said Mary Nelson, human resources management services specialist for the Reemployed Annuitant Office. "We need all kinds of engineers -- general engineers, civil engineers, electrical engineers, environmental engineers, you name it. As soon as we get their paperwork we get them into the system."

Nelson said that the RAC also needs construction inspectors, construction representatives, maintenance people and other blue-collar workers, and safety and occupational health specialists.

"And that's just some of the big ones," Nelson said. "We need all kinds of career fields in the RAC -- accountants, human resource, resource management, budget and contracting professionals, administrative assistants and public affairs specialists."

"When we have a disaster, we need people of all levels," Nelson added. "We need people to do the blue roofs, and debris people, and people to distribute the water and ice, and all the other things that need to be done during a disaster. During the ice storms in Kentucky in 2009, we were sending 30, 50, 60 people to the field at a time."

For information about the Reemployed Annuitants Cadre, or to join the RAC, contact Tim Alderman at (202) 761-7099, timothy.d.alderman@usace.army.mil, or Mary Nelson at (202) 761-8548, mary.j.burciaga@usace.army.mil.

Web site gives information on threatened, endangered species

By JoAnne Castagna
New York District

The U.S. Fish & Wildlife Service reports that bird populations are plummeting at an alarming rate. One way they keep an eye on threatened and endangered birds is by partnering with New York District.

The district and USF&WS collaborated to create a Web site that includes a geographic information system (GIS) as a user-friendly repository of information about threatened and endangered bird and plant species along the New York and New Jersey coast. Scientists, decision-makers and interested citizens can use this information to come up with joint solutions for protecting these species.

The Web site is called the Threatened and Endangered Species System (TESS) <http://tess.usace.army.mil>.

"The Web site provides a central point of data entry for surveys and site observations related to threatened and endangered species," said Rose Dopsovic, a contractor with Mobile District who is assisting New York District.

Any agency interested in monitoring and managing threatened and endangered species can submit their observations to the Web site. Presently the site has data on piping plovers, common terns, least terns, and plants including the seabeach amaranth.

The Web site has a seamless interface to GIS, which takes information from various sources, such as aerial photographs and electronic data, and combines them to perform analysis. GIS produces electronic maps, reports and charts that individuals can use to solve complex problems.

On the TESS Web site, GIS helps people retrieve information to make critical decisions that help protect threatened and endangered species. The site provides two ways for people to retrieve information about the species – electronic maps or a database of raw information.

Visitors can view a map of the New York and New Jersey shoreline. To retrieve information about a species, they can either select a portion of the map and pull up data on that particular coastal area, or they can search the database to find information.

The TESS Web site also provides several seasons' worth of habitat information that can be used to analyze and make decisions that will improve the survival of threatened and endangered species. System users can see where birds are nesting and plants are growing each season. If they notice a change in these habitat locations from one season to another, they can investigate why this occurred.

Robert Smith, acting regional endangered species expert for New York District, has conducted many sight observations and posted them to the TESS Web site. He said, "Wildlife can change where it lives for a number of reasons, including if a predator has entered a habitat, or a man-made project is in progress in the area. In fact, USACE is required to monitor and protect wildlife near any of its projects.

Having several seasons worth of bird and plant habitat information also helps people find relationships between information. "For example, we can see how a storm event affects the population of a species in an area by viewing the habitat before and after the event," Dopsovic said.

The Web site can provide qualitative and quantitative information. For example, after a storm, a person can find out what types of habitats were chosen by species (qualitative), and the number of young per nest or the total change in population caused by a disaster (quantitative).

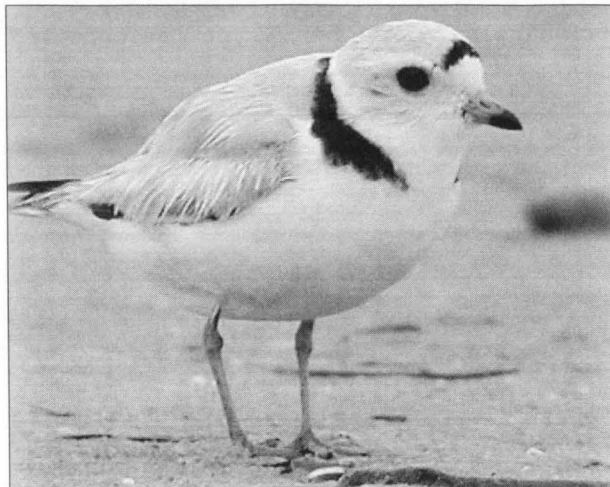


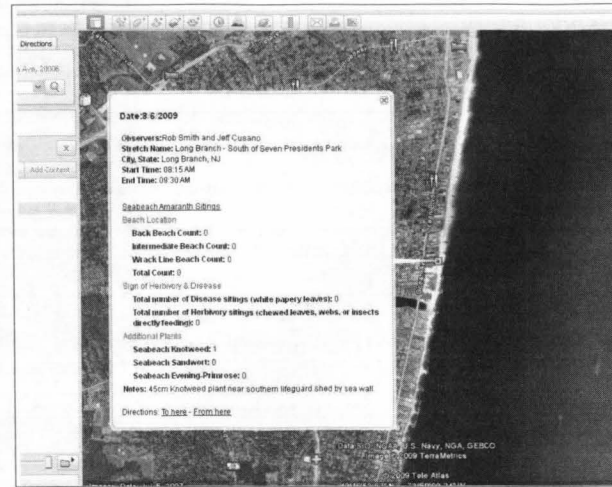
Photo courtesy of New York District

The Threatened and Endangered Species System provides information about species like the piping plover. New York District and the U.S. Fish & Wildlife Service collaborated to create the site.

Dopsovic said, "We can also track trends in habitats. For example, we are able to see if birds are more or less likely to nest in beach fill areas." Beach fill areas are portions of the coast that eroded and were replenished with sand dredged from the ocean.

Having seasonal habitat information can also improve the quality of life for New York and New Jersey residents that visit the beach.

Jeff Cusano, project geographer at New York District, said, "Often we place fencing along the coast to protect threatened and endangered wildlife from being harmed by people visiting the beach. Usually a large area is fenced off



Screen capture courtesy of New York District

at first, which can annoy the public that wants to visit the beach. Seasonal habitat information helps us monitor where these species are actually living, and we can adjust where we have the fencing."

In the near future, the TESS Web site will include more threatened and endangered species and may cover more of the Northeast coastal region.

Using GIS on a Web site "provides a great tool for managers to see what is going on with a click of a button," Smith said. "If more of our partners and local groups adopt and use the Web site, it will be a great benefit to all parties interested in monitoring and protecting these species."

Wind machine adds new dimension to testing

By Megan Holland
Engineer Research & Development Center

A wind machine is adding a new dimension to the Coastal & Hydraulics Laboratory's (CHL) Lake Borgne model, and industry experts are calling the technology "spot on."

"Lake Borgne" is the name given to a not-yet-built flood control structure for New Orleans' Gulf Intracoastal Waterway. The Hurricane Protection Office and New Orleans District requested a model of the future structure and the waterway.

"Specifically, the project is about protecting New Orleans from a storm surge if something like Hurricane Katrina happens again," said Howard Park, CHL research hydraulic engineer and project investigator. "This particular structure must be able to keep flood waters out while maintaining the ability for day-to-day navigation, a factor that makes things more difficult.

"When we started this research, I knew wind was going to be the driving issue for the design, particularly in reference to empty vessels," Park said. "At the time I knew nothing about wind except that it blows."

Typically, wind conditions are simulated by computer on CHL's Ship/Tow Simulator, but this time things were different.



Photo by David Roberts, ERDC

A barge-tow model reacts to the wind machine as Howard Park maneuvers it through the Lake Borgne model at the Coastal & Hydraulics Lab.

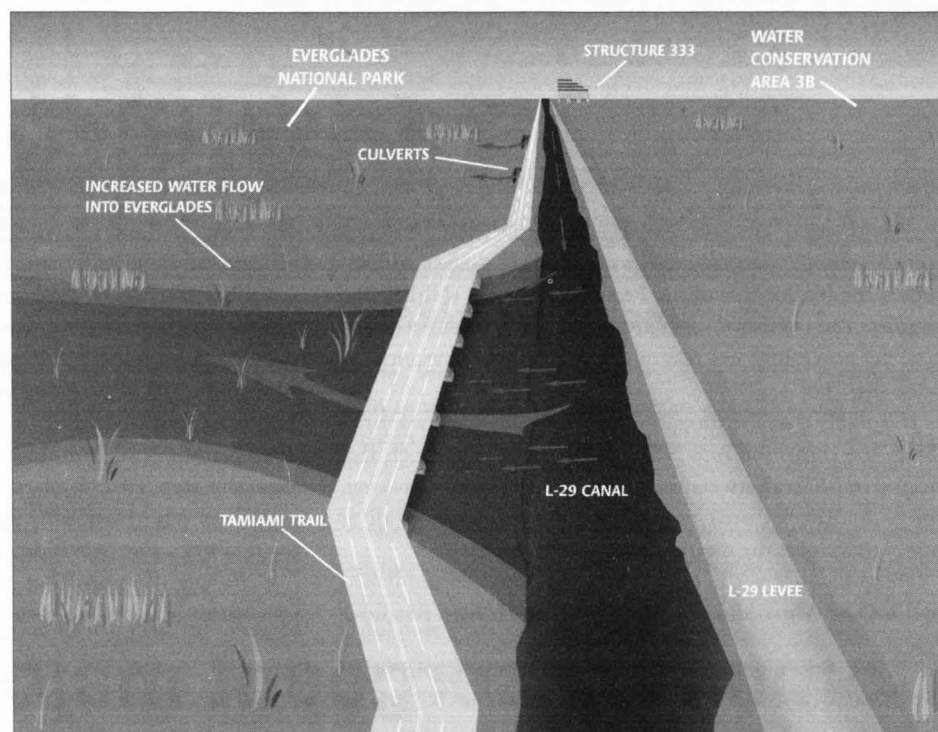
"The simulator models wind, current and other forces," said Dennis Webb, chief of CHL's Navigation Branch and operator of the Ship/Tow Simulator. "The water current affects the tow in the simulator, but the tow does not affect the flow field. That's beyond present state-of-the-art simulator technology.

Continued on next page



Photo and Graphic courtesy of Jacksonville District

The photo at left shows how the Tamiami Trail blocks water flow into the Everglades, and the effect on vegetation. The graphic at right shows how the new project will increase water flow.



Project will help restore Everglades

Article by Susan Jackson
and Nanciann Regalado
Jacksonville District

Several hundred Everglades restoration supporters joined federal and state partners at the Tamiami Trail in Florida to celebrate a key restoration project and a new era of ecosystem restoration initiatives.

The construction project, managed by Jacksonville District, will remove one of the most damaging barriers to freshwater flow into the parched northeastern area of Everglades National Park. It includes building a one-mile bridge to replace part of the Tamiami Trail, an east-west highway that has blocked natural freshwater flows into the park for decades.

The project will help revive wetland habitat for more than 60 threatened and endangered species.

"This marks a new beginning for the park and a major milestone along the journey to restore the Everglades," said Col. Al Pantano, Jacksonville District commander, during the ceremony. "We're proud to serve alongside our partners because what we're doing in ecosystem restoration will make a tremendous difference for future generations, not only in Florida but across the nation. Engineers, scientists and

many others are working together to research, design and build projects to restore the Everglades. The expertise we develop and lessons we learn will aid future restoration projects around the world."

The groundbreaking brought fresh hope for long-awaited restoration projects, officials said.

"If you're building a house, it's like watching the framing going in," said Stuart Appelbaum, the district's Everglades program manager. "We're not ready to move in, but it's an important part of what we're building. It's the first step forward, with many other construction projects to come."

2010 will see construction starts on projects such as Pica-yune Strand, C-111 Canal and the Site 1 Impoundment.

Jacksonville District is overseeing the Tamiami Trail bridging project construction, and the Department of the Interior is funding most of it. Other partners include the State of Florida and the South Florida Water Management District.

In 2008, the U.S. Army Corps of Engineers estimated the project cost to be about \$200 million. Changes in the nation's economy have dramatically decreased the project's cost estimate to less than 50 percent of the original estimate.

"This cost savings come with great another benefit — much-needed jobs in an area that is experiencing a very high unemployment rate," said Dan Kimball, superintendent of

Everglades National Park.

In September, the Corps awarded an \$81 million contract to build the bridge and raise and reinforce an additional 9.7 miles of Tamiami Trail, which will allow higher water levels in the adjacent L-29 Canal. Higher water levels in the canal will drive water into the park when it is needed most. Projected completion of the bridge and road-raising construction is 2013.

In 1989, Congress approved the Everglades National Park Protection and Expansion Act so that interagency partners could modify the Central and Southern Florida Project (the regional flood reduction system) to improve water deliveries to Everglades National Park, and take steps to restore the park's natural hydrologic conditions. Addressing the Tamiami Trail's hydrological and ecological effects is a major part of this legislation.

State and local agencies built the trail in the 1920s to support travel between Tampa and Miami, two of the earliest centers of population growth in southern Florida. Decades later, restoration agencies identified the trail as one of the most serious environmental threats to the Everglades.

For more Tamiami Trail project details and information about the Comprehensive Everglades Restoration Plan, visit www.everglades.org.

Wind simulator

Continued from previous page

"Because the tow moves through the floodgates in the Lake Borgne structure, the constriction caused by the structure has a definite impact on the current," Webb said. "Therefore, the simulator study was followed by the physical model to include the effect of the tow on the flow through the structure. But to replicate the same conditions we ran for the simulator, we had to add a wind machine."

"The simulator is great in so many ways, but in this instance it's beneficial to actually see the effects of the wind," Park added. "It's easy to tell when the wind machine is turned on because there is a visible difference in surface conditions. It's not easy to see that on a computer."

There was only one major problem with the requirement of a wind machine to complete the research — the device they needed didn't exist. Though the use of a wind machine in water research is not a new concept, the most recent recorded use was nearly 60 years ago.

"Someone found a magazine article about a machine used in the 1950s and sent it to me," Park said. "I had a good

laugh over it, because the photo looks like what we have now. That's how I knew we must be on the right track."

For the wind machine to be beneficial, several factors come into play. First, the machine had to move easily along the edge of the model to create a uniform flow as the model vessel maneuvers through the waterway. It also had to be set at a variety of wind speeds, as well as have the ability to control where the stream of air hits the boat and/or water.

"I called Directorate of Public Works and gave them a list of what I needed the structure to do," Park said. "They took the idea and ran with it. They incorporated everything we needed, except the lightweight feature we hoped for; that just couldn't be done without more experience with the technology."

The resulting machine is a large structure made from variable speed box fans, vents and tubing. Though it is heavy, it has attached wheels that allow two researchers to roll the wind machine alongside the model boat as it maneuvers in the Lake Borgne physical model.

When combined with cameras tracking the exact move-

ments of the empty model vessels, the results of the machine have already proved beneficial. ERDC researchers have requested dredging of areas along the Gulf Intracoastal Waterway that have serious potential to cause wind-pushed vessels to run aground after the Lake Borgne structure is built.

"It's working better than we ever thought it would," Park said. "I've had several people in the industry look at it and they're tickled to death. They think we're spot-on. I think we're close, but there's still more work to do."

Among the bugs that need to be worked out is the uncertainty of exact wind speed. Currently, all model results are compared to a similar test on the computer simulator to check the wind speed.

"We've really learned a lot from this," said Marshall Thomas, lead technician for the project. "We now know that this type of research is important to safe navigation."

"I really do believe this machine we've created will be beneficial in the future on other projects," Park added. "It will have to be tweaked and upgraded, but we're definitely on the right track."

HR Corner

NSPS transition coming soon

The recently enacted National Defense Authorization Act for fiscal 2010 (NDAA 2010) contains a provision to repeal the National Security Personnel System (NSPS) and requires the transition of NSPS employees, with no loss in pay, to previously existing civilian personnel systems no later than Jan. 1, 2012.

It is likely that the transition *out* of NSPS will look similar to the transition *into* NSPS, a "spiraled" approach that occurs in phases between now and Jan. 1, 2012. However, the U.S. Army Corps of Engineers will transition all at once, therefore, the districts will not be spiraled.

There has not yet been a transition schedule published by DoD or Army, and the Directorate of Human Resources

is awaiting further guidance on that process.

Some of the highlights are:

- "No employees shall suffer any loss of or decrease in pay" as the federal government transitions from NSPS to the General Schedule (GS) system. This wording is included in the 2010 NDAA and is a requirement for converting employees out of NSPS.

- Current NSPS employees earning a rate of pay higher than the step 10 rate of the GS equivalent grade will be placed on pay retention. Specific guidance will be forthcoming once pay provisions are finalized.

- During the transition period, NSPS remains in effect for organizations working under the system. Organizations

and employees currently covered by NSPS will continue to follow NSPS regulations, policies and procedures until such time as the transition takes place for their organization.

Employees are encouraged to frequently check the DoD NSPS Web site for updates at www.cpms.osd.mil/nsps.

This transition back to GS may be challenging, but the entire human resources community is committed to supporting all USACE employees to ensure that it is as minimally disruptive as possible. If you have any questions, please do not hesitate to contact either your local division human resources office, or your local Civilian Personnel Action Center representative.

Command sergeant major

Continued from page seven

ect in the States. The challenges that you meet in those theaters are like nothing you've dealt with back home. If you think it's going to take a week to do something, it's going to take three. They call it the 'Afghan Factor.' If you think it's going to cost \$100, it's going to cost \$300. If you need one, bring three.

"And you've got to hone your cultural awareness," Buxbaum continued. "When you do business in Afghanistan, during the first meeting, you *don't* talk business. You talk family and personal stuff like that. They'd like to get to know you first, so during the first meeting you'll drink some tea and talk family. Your second visit, *then* you talk business."

Buxbaum said that some people get hooked on the challenges. "We've got people who have been in Afghanistan for up to three years. They love what they're doing. They want to be able to start a project and take it to completion. And there are opportunities for everybody. I don't care if you're from human resources, resource management or a logistician; we've got opportunities for you. I encourage everybody to do at least one tour."

The need for volunteers is something that never changes in Iraq and Afghanistan.

"No one has been turned away if they want to volunteer, but it's all driven by the needs," Buxbaum said. "For example, if I need 10 mechanical engineers in Iraq and 15 volunteer, then five aren't going. Or they may go later. But I might need 20 mechanical engineers in Afghanistan. So if you volunteer, look at where the needs are, and be flexible about where you're willing to go, and when. But we're not going to turn anyone away."

Afghanistan was not the only trip that Buxbaum made this quarter – he is on the road constantly.

"I did a whirlwind tour of Japan and Korea in November," Buxbaum said. "I haven't been in Korea since 1979. I did my first tour in the Army in Korea as a new Soldier stationed with the 2nd Engineer Battalion, and I didn't recognize *any* of the sights! Seoul now has modern highways, a huge modern airport; everything is comparable to other modern cities.

"You flat-out would not recognize Camp Humphreys," Buxbaum continued. "We're building a huge facility there. I personally think that's the largest military construction project we have going – upwards of more than \$10 billion. We're building huge, multi-story barracks for Soldiers, and family housing units. There are already three under construction, with several more getting under way soon. You'll be able to take your family to Korea for an accompanied three-year tour when it's all done.

The command sergeant major also visited Japan.

"It's different there," he said. "The Japanese government provides the funding for most of our projects. We're still the

construction agent, but they pay the bill, which I thought was unusual. And I talked to a couple of Japanese contractors, and *that* was cool. You go to our construction sites, and you can tell they're construction sites. But over there, it's very clean. They put steel plates on the ground so you don't track dirt into the building. When they start laying carpet, they give you booties to wear so you don't get the carpets dirty. But their construction is solid, state-of-the-art stuff."

Buxbaum's travels also include contact with engineer Soldiers because he is dual-hatted as the command sergeant major of USACE, and the senior enlisted engineer Soldier.

"In early November I visited the Engineer School at Fort Leonard Wood," Buxbaum said. "As I travel about, I visit our tactical units, and I always ask, 'Is the training that you receive at Fort Leonard Wood what you need in the field? If it's not, tell me what you need.' Then I go back to the schoolhouse periodically and sit down with the regimental sergeant major and the commandant and say, 'This is what you're training, and this is what the field says they need.'"

"They understand that because every rotation in Iraq or Afghanistan is different," Buxbaum said. "During my two tours there, the big thing was route clearance and building expeditionary facilities. So the schoolhouse trained our Soldiers on route clearance and expeditionary construction.

"Later, our combat engineers needed to do electrical work with 220 volts because everything in Iraq is 220, instead of the 110 volts we have here," Buxbaum said. "So the schoolhouse revamped some of its training, and trained our Soldiers on 220-volt systems. So I always visit engineer units when I travel, talk to Soldiers, and find out what they need."

Safety is a priority for Buxbaum

Each quarter Command Sgt. Maj. Micheal Buxbaum wants to emphasize a different work-related issue, and this quarter it is safety.

"We enjoyed a successful safety program last year," Buxbaum said. "I talked to Richard Wright, our chief of Safety and Occupational Health, and he said we did very well. But to me *any* lost-time accident is one too many, so take a look at your safety procedures. If you think you've got a good program, make it *better*. I don't want 2010 to be the year where we have a serious preventable accident. And of course don't forget to recognize those folks who make your programs a success.

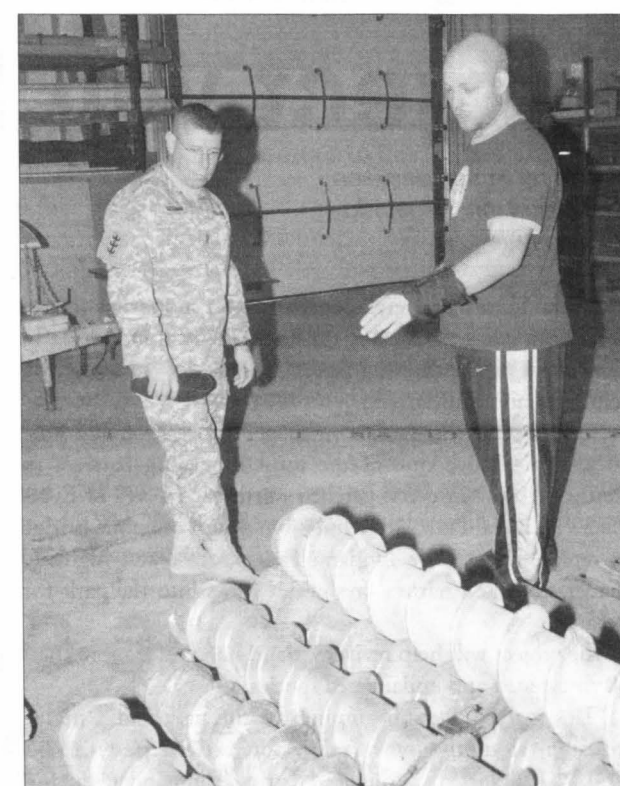


Photo by Curt Biberdorf, Alaska District

Paul Owens, a driller with the Soils & Geology Section, explains Drill Shop operations to Command Sgt. Maj. Micheal Buxbaum during Buxbaum's visit to Alaska District.

"One of the first things I look for at a project site is to see who's wearing their personal protective equipment (PPE)," Buxbaum added. "If everyone has their PPE on, I know that safety's a top issue on that project. When I visit our Iraqi or Afghan construction sites now, even the contractors and workers are wearing their PPE, and those who remember the early days know that wasn't always the case.

"So safety is on everyone's mind, but I ask that everyone take another look at their safety program," Buxbaum concluded. "Take it off the shelf, blow the dust off, and take another hard look at it for 2010. Let's make 2010 our safest year yet as we continue with our record workload."

AROUND THE CORPS



Col. (retired) John O'Dowd passed away Jan. 26. He commanded New York District during the response the terrorist attacks on Sept. 11, 2001, and later commanded Afghanistan Engineer District.

John O'Dowd

Col. John O'Dowd, U.S. Army retired, passed away Jan. 26 after succumbing to a heart attack while on a flight from Louisville, Ky., to Chicago. He was 53.

O'Dowd commanded Afghanistan Engineer District from July 2004 to July 2005. Prior to Afghanistan, O'Dowd commanded New York District where he played an important role in the response to the terrorist attacks on the World Trade Center on Sept. 11, 2001. O'Dowd and his engineers were on site to coordinate the rescue and recovery effort. He called up all the heavy earth-moving machinery that the district had available to begin rescue operations at Ground Zero, and deployed the district's boats to help evacuate civilians from Manhattan.

O'Dowd is survived by his wife Francesca, his daughters Elizabeth and Katie, his son Scott, as well as his brothers William and Daniel and his sister Kathryn.

A Mass of Christian burial was held at St. Patrick's Church in Brooklyn, N.Y., Feb. 1. O'Dowd was interred the same day in the cemetery at the U.S. Military Academy, West Point.

Federal employee survey

The 2010 Federal Employee Viewpoint Survey is on the way.

The survey, formerly called the Federal Human Capital Survey, is a critical tool for change. In the next few months, about 500,000 federal employees will receive an e-mail invitation from the Office of Personnel Management to provide

their opinions on topics ranging from leadership to job satisfaction to work/life balance.

If you are invited to participate, please do so. The survey takes about 25 minutes, and your responses are confidential.

Broad Meadows Marsh

Broad Meadows Marsh is getting a facelift after decades of dredged material filled about 110 acres of marsh and estuarine habitat. The site was used by USACE for dredged material disposal from the Town River in Quincy, Mass., and the marsh has become a soupy mix of dredged material, water and reeds.

With the help of Massachusetts Congressman William Delahunt, a project to recreate the marsh has begun. The city of Quincy budgeted \$1 million for the project, while Delahunt secured \$3.76 million in federal funds.

The restoration plan reads like a recipe: create 35 acres of low salt marsh (including channels), 20 acres of high marsh, and five acres of bordering vegetative wetlands. While 35 acres of salt marsh restoration may seem inconsequential, it "is significant considering how densely developed the area around the project site is," said Hunt Durey, acting deputy director, Massachusetts Division of Ecological Restoration. "A restoration project of this size makes a difference because there isn't a lot of healthy salt marsh left in the region."

"Salt marshes are known as nursery, nesting, shelter and feeding habitats for fish, birds, mammals and shellfish," said Catherine Rogers, an ecologist with New England District's Engineering and Planning Division. This transformation from degraded landscape to healthy salt marsh will "increase the ecological value of the area, giving more variety in the number of species and animals that can use the marsh."

Data buoy

New England District and the Rhode Island Coastal Resources Management Council have partnered to study the shoreline in southern Rhode Island. The Rhode Island Regional Sediment Management (RSM) Plan will develop a plan to manage sand as a resource rather than waste.

As part of this study, a significant level of data collection, surveying and numerical modeling will be performed. A new directional wave buoy was acquired to measure both wave height and direction. The district and ERDC partnered with the Scripps Oceanographic Institute's Coastal Data Information Program (CDIP) to purchase and deploy the buoy, and to process the data. The district is responsible for buoy maintenance and retrieval. Funding for the \$150,000 buoy comes from the RSM Plan.

The buoy was deployed about 30 miles southeast of Block Island, R.I. That location was chosen based on input from coastal experts, fishermen, local interests, researchers and coordination among state and federal agencies.

All data generated by the buoy will be available to researchers and the general public in real time. The data will be primarily hosted by the CDIP program, but is also hosted on National Oceanographic and Atmospheric Administration's National Data Buoy Center Web page as node 44097. Uses for the data include fishing, diving and other research that depends on wave data.

For more information and buoy data, please visit the Scripps CDIP Web site at <http://cdip.ucsd.edu>

Coastal America Award

The Sesuit Creek-Bridge Street Salt Marsh restoration team received the Coastal America Award during the 2008 partnership award ceremony in Dennis, Mass. More than 20 partners who make up the team were recognized for completing the largest salt marsh restoration in Massachusetts.

The project restored tidal flow to 65 acres of degraded salt marsh by replacing the single deteriorated 24-inch diameter Bridge Street culvert with two 10-by-12-foot box culverts.

According to Bill Hubbard, chief of New England District's Evaluation Branch, replacing the culvert did more than restore the salt marsh. This culvert and four others were barriers to fish passage at Scargo Lake. "There is now unrestricted access for fish and other species dependent on this rich coastal resource," Hubbard said.

Established in 1997, Coastal America is a partnership of federal, state, local and private resources working to protect and restore the marine environment. New England District has received 11 Coastal America Awards.

Solar power in Afghanistan

On a hill that overlooks an Afghan National Army ammunition depot near Kabul, Afghan soldiers watch the area from their observation post. Security is tight here, and living conditions are spartan. Afghanistan Engineer District-North has installed solar panels to provide solar energy. Funded by the NATO Training Mission-Afghanistan, this energy source will keep spotlights on throughout the night, and bring some comfort to the soldiers.

"It gets cold here and it gets hot here," said AED-N project manager Elizabeth Chien. "The guard towers that the solar panels power give the soldiers warmth in the winter, and power air conditioning units for the summer. More important, there are high-powered spotlights that use a lot of energy. The Afghans will no longer have to rely on diesel generators to power the lights."

"This system is automatic," Chien said. "It will take power, store power, and discharge power as necessary. If necessary, it can switch automatically to diesel generators if the batteries run out."

Chien said the solar power system will be monitored for one year to see how it functions in all four seasons.

Solar power in Iraq

More than 35 kilometers (22 miles) of roadway in Fallujah and surrounding communities are now lit with 1,200 solar-powered street lights thanks to Gulf Region District. The final phase of the project was completed recently by project engineers at Al-Anbar Resident Office based in Ramadi.

Solar power is recognized as a method for reducing the reliance on carbon-based energy generation and the resulting greenhouse gases. But solar power in Iraq has a more palpable benefit. Iraq's degraded power distribution infrastructure causes frequent and unexpected outages.

In addition, in a country with limited power generation capabilities, solar lights allow energy to be redistributed to areas of critical need. In an area where hard-wired lights may only operate for a couple of hours, a solar-powered light will provide continuous illumination throughout the night.

The final phase was completed Dec. 28 at a cost of \$2.9 million funded by Multinational Forces West-Iraq.

Great Wonders of USACE

Complex project will protect New Orleans from floods

By Susan Spaht
and Bob Anderson

On Aug. 29, 2005, the Louisiana coast was hit by Hurricane Katrina and, a few weeks later, by Hurricane Rita. The damage done by these combined storms made it the worst natural disaster in American history.

Following the storms, the U.S. Congress moved swiftly to provide funding, and the U.S. Army Corps of Engineers immediately began to repair the damage. As part of this massive effort, USACE designed a perimeter protection system for Greater New Orleans (a five-parish area) that consists of 350 miles of levees, floodwalls, gates and pumping structures. It is called the Hurricane and Storm Damage Risk Reduction System (HSDRRS). Congress funded the effort through six different emergency supplementals totaling nearly \$15 billion, and USACE was off and running on its colossal and unprecedented mission.

The Corps' goal is to provide 100-year level of protection for the Greater New Orleans area by the start of hurricane season 2011. (A 100-year storm is one that has a one percent chance of occurring in any given year.)

And to deliver on the promise of robust surge protection to Louisiana, USACE must execute collaborative, synchronized and deliberate actions performed by quality people fully dedicated to providing a quality product.

"Our goal is ambitious and aggressive, but achievable," said Karen Durham-Aguilera, director of Task Force Hope. "All along, we've said we can't achieve this monumental effort alone. It will require continued shared responsibilities, organizational teamwork and constant effort by USACE, Louisiana, the levee authorities, the parishes, other federal agencies, all of our partners."

In addition to a shared project vision that depends on trust and exceptional collaboration with its non-Corps partners, the Mississippi Valley Division, under Brig. Gen. Michael Walsh, developed an interdependent approach to a regional business model that called on the expertise of all six districts in the division.

"With the improvements we are making with this regional approach, we will stand and deliver by focusing all of our division's resources (people, money, equipment) on the HSDRRS," Walsh said. "We are also improving MVD's flexibility and adaptability, and we are increasing regional responsibility and accountability, while also decreasing the amount of stress placed on one district. This will allow us to better leverage the resources of the entire region."

In addition to all six districts, MVD called upon the expertise of several other districts and divisions around the country.

"Our business model efficiently and effectively puts the resources of the entire Corps on delivery of our nation's highest-priority domestic civil works project," added Mark Mazzanti, MVD's director of programs.

The HSDRRS is an unprecedented effort that involves developing new design criteria, high-tech project modeling, expedited environmental compliance, and design-build and early contractor involvement construction processes. The project delivery process has included more than 150 public meetings around the entire five-parish area.

Of the 353 contracts, more than 230 have been awarded



New Orleans District Photo

The Inner Harbor Navigation Canal Surge Barrier is just part of the Hurricane and Storm Damage Risk Reduction System that will give a 100-year level of protection for the Greater New Orleans area. A 100-year storm has a one percent chance of occurring in any given year.

through 2009, and more than \$6.6 billion has been obligated from the almost \$15 billion program. USACE has completed 154 contracts, and has 76 under construction.

"Our success to date results from a shared vision between federal, state and non-governmental organizations," Walsh said. "We are on track to meet the June 2011 deadline, but only if we can continue moving forward with that shared vision. It will take the full cooperation of all of the groups involved in building the system."

To date, USACE has:

- Completed five new safe rooms so pump station operators can operate the interior drainage system during storm events
- Added storm proofing in Jefferson Parish totaling more than \$28 million
- Completed 47 pump station repairs in Jefferson, Orleans and St. Bernard parishes for a total of more than \$56 million
- Awarded contracts for 16 pump station repairs in Plaquemines Parish for more than \$19 million.

The projects were all completed in 2009 except for one pump station that is scheduled for completion in November 2010. The safe rooms and pump station repairs were all 100 percent federally funded.

Execution of the HSDRRS is more than one-third complete and the work is on track to make the 2011 goal to provide 100-year level storm surge protection. The Inner Harbor Navigation Canal Surge Barrier project is the Corps' largest-ever design-build civil works project -- a concrete pile-supported wall more than a mile and a half long built across two major waterways with three navigable gated structures.

Construction of the massive system also comes with incredible challenges. A good example occurred during the early stages of the IHNC. Despite a four-month delay that involved design changes and navigational safety enhancements, the project remains on schedule to provide one percent risk reduction by June 2011. By working two 10-hour shifts a day, seven days a week, the contractor's crews have made up much of the lost time.

"Our stepped-up production rate has been even more effective than we anticipated," said Col. Robert Sinkler, commander of the Hurricane Protection Office. "At this rate, we expect to have much of the structure completed in 2010."

Another large project is the Gulf Intracoastal Waterway - West Closure Complex. This project, another major feature of the HSDRRS, will reduce the risk of storm surge for three parishes by removing more than 25 miles of levees, floodwalls, gates and pumping stations from exposure to storm surge. The project will be configured with navigation structures for vessel traffic, and will include one of the largest pump stations in the world, capable of evacuating nearly 20,000 cubic feet per second of interior water.

USACE is now entering the fourth year of design and construction activity on the HSDRRS. All across the Greater New Orleans area, citizens are witnessing the burgeoning of the system as levees and floodwalls rise and pump stations take shape.

"The system is already stronger and more resilient than at any time in its history, and we are committed to completing the 100-year system in June 2011," Durham-Aguilera said.

(Susan Spaht is a contractor with the Public Affairs Office of New Orleans District. Bob Anderson is the public affairs officer of Mississippi Valley Division.)