



**JAXSTRONG**

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- ARMY VALUES: RESPECT

...AND MORE



# JAXSTRONG

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OUR WORK • OUR PEOPLE • OUR DISTRICT

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# COMMANDER'S CORNER

## MESSAGE FROM COL. ALAN DODD

TAKING CARE OF PEOPLE, DELIVERING ON PROJECTS ARE TOP PRIORITIES

Historically, funding levels have decreased as military demand decreases. We are witnessing one of those moments in history, as our Armed Forces draw down from Afghanistan. Couple that with the emphasis from Congress, the administration, and the American people for the federal government to reduce spending and you can easily see why our district must adjust the size of our workforce to the workload anticipated in the next few years as a result of decreasing budgets.

Decreasing budgets naturally lead to reduced project funding and, accordingly, fewer positions needed to meet mission objectives. The key to taking care of our people is to deliberately handle workforce decisions from the very beginning. We are doing that through attrition, offering incentives for those who are eligible to retire and allowing some to retire early, implementing a hiring freeze and remaining versatile in management's ability to move positions and people where needed the most.

We predict between now and fiscal year 2017, we will lose about 21 percent of our workforce, or about 188 positions. Despite this, I remain optimistic we will not have to implement a Reduction in Force (RIF) if we manage this right. Our sister district in Savannah has been going through this since 2012 and reduced their workforce by 33 percent; to date they have not needed to conduct a RIF. Your senior leaders in Jacksonville District are confident we will be equally successful.

Although the road ahead may have some challenges, we must continue to accomplish our mission. The American taxpayer expects us to deliver, we have always delivered, and we will continue to deliver the projects this nation needs.

Please remember, a decrease in our budget does not mean work is not getting done. Because of the way Corps projects are funded, the 2015 budget figure can be misleading. For instance, when this budget takes effect in October, the Corps will be doing more work than ever at Herbert Hoover Dike because most of that work was funded based on contracts awarded in 2011, 2012 and 2013.

When Congress appropriates money for 2015 based on the president's budget request, it provides the funding that allows us to award contracts for projects between Oct. 1, 2014 and Sept. 30, 2015. The money isn't spent right away; we hold it until we hire a contractor who then performs the work to our satisfaction. We can't, however, hire the contractor without funds available to pay the value of the contract and therefore have to request funding far in advance of when the money is actually spent.

The President's Budget for Fiscal Year 2015 (FY15) includes \$66 million for the U.S. Army Corps of Engineers' South Florida Ecosystem Restoration Program, of which \$38 million is for the Indian River Lagoon-South C-44 Reservoir and Stormwater Treatment Area project. These funds will enable the Corps to award the second construction contract for the C-44 project to build the reservoir and associated structures. The president's FY15 budget request maintains a strong commitment to the environment and, coupled with the state's commitment to expedite construction of the project's stormwater treatment area and pump station, demonstrates the dedicated and collaborative effort involved in completing this project.

Through these next few trying years, know that taking care of our people and delivering on our projects are our top priorities.

Army Strong. BUILDING STRONG®. JaxStrong.

Alan Dodd  
Colonel, U.S. Army  
District Commander

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## ON THE COVER

The U.S. Army Corps of Engineers, Jacksonville District recently completed two shoreline protection projects under the Flood Control and Coastal Emergency program, to address impacts resulting from 2012's Hurricane Sandy. Pictured here is the newly renourished Pompano Beach in Broward County, where 5.1 miles of eroded shoreline were restored. (Photo by Susan Jackson)



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# Two shore protection projects completed

BY SUSAN J. JACKSON



Before and after: Residents at the Starlight Towers complex temporarily relocated sea oats between the complex and the shoreline so the contractor could place sand in the low elevation area. Residents planted the vegetation to help protect the beach without realizing they cut off access for renourishment. (Photos courtesy of Eastman Aggregate Enterprises)

## Unprecedented beach project takes exceptional teamwork

In November 2013, the U.S. Army Corps of Engineers, Jacksonville District began an unprecedented project in Broward County to reconstruct 5.1 miles of eroded shoreline. The project, completed Feb. 28, was the first of its kind because it included 10,000 truck deliveries of sand from a mine in central Florida. The district uses the dredge delivery method to renourish federal beaches, but this project had to be completed prior to hurricane season and all dredges had been deployed to other projects.



Everyone contributed to making the Broward County beach renourishment a success, including residents, Broward officials and Corps and Eastman employees. (Photo by Susan Jackson)

The Corps' contractor, Eastman Aggregate Enterprises, started sand deliveries in early November, with crews trucking 126,700 cubic yards of beach quality sand 106 miles from the E.R. Jahan Ortona sand mine in Moore Haven to Pompano and Lauderdale by the Sea beaches. An average of 130 trucks per

day carried sand, each driver navigating two hours one way to make a single delivery. The project required about 10,000 deliveries, all of which were accomplished accident free.

Cynthia Perez, project manager, said the day-to-day operations were phenomenal and so was the community's involvement and cooperation. People went above and beyond to "do the right stuff."

"One resident reported that people were rolling out a sand dune in the project area. We coordinated with our contractor, who had before-and-after beach construction photos, and sent them with a report to the Florida Department of Environmental Protection (FDEP) policy compliance biologist for action," Perez said. FDEP immediately investigated the dune destruction. Dunes are important because they provide landward protection and animal habitat.

On another occasion, a Pompano Beach resident reported that sand had not been placed in front of the Starlight Towers, between the building and where residents had planted rows of sea oats to help protect the beach. The area contained a small walking path, but the contractor wasn't able to move vehicles through without destroying the vegetation.

Resident Betsy Vienna told Perez, "I'll yank the vegetation out if you want me to, as long as you deliver the sand." Perez requested that the area be inspected and quickly realized the low elevation between the towers and the vegetation would have a "ponding" effect without the sand, which could potentially create an unsafe and unhealthy environment.

"I walked Betsy through the FDEP permit process and within two days, FDEP's 'Fritz' Wettstein reviewed and approved the vegetation's temporary removal. The next day, Eastman went back to place several truckloads of sand. If our relationship with FDEP and the contractor wasn't so good, we couldn't have gotten this done so quickly," Perez said.

**BEACH RENOURISHMENT** (continued from PAGE 3)

Workers flatten delivered sand on a Broward County beach so it fills an engineer-designed template, which includes the sand placement's height and width along the beach. (Photo courtesy of Eastman Aggregate Enterprises)

"The contractor has just finished installing sand on the area behind our building. Five loads of sand!! The men were great to work with and they did an excellent job. Thank you very much from everyone here at Starlight," wrote Vienna in an e-mail to Perez.

At one point, the contractor stopped operations early and moved the construction vehicles to allow a wedding to take place on the beach. On another occasion, Eric Myers, Broward County environmental protection official, asked a resident to move his catamaran from the beach to facilitate sand placement. Realizing the man needed assistance, Myers, along with Corps and Eastman employees, relocated the catamaran.

It was teamwork every step of the way, Perez said.



Contractors deliver sand to a beach access site where it's scooped onto off-road vehicles for distribution further down the beach. Like a well-oiled machine, contractors and Corps personnel oversaw the operations of more than 130 sand deliveries daily. (Photo by Susan Jackson)



Workers place a layer of sand that renourishes beach-eroded areas along the Broward County shoreline. The district is restoring more than 38 miles of federal shore projects in Florida that were eroded by storm-induced waves in 2012. (Photo courtesy of Eastman Aggregate Enterprises)

**Eroded island receives critical sand in time for hurricane season**

Jacksonville District also completed dredging and renourishing eroded beaches on Anna Maria Island in Manatee County, Fla. At an estimated cost of \$12.3 million, the project was one of the largest renourishment events awarded by the district as part of the Flood Control and Coastal Emergency program.

**BEACH RENOURISHMENT** (continued from PAGE 4)



Before and after: At left, the ocean laps closely to the Beach House Restaurant. At right, the area near the restaurant receives sand as a result of the shoreline protection project. (Photo by Brian Austin)

Dredging and placement operations on Anna Maria began in mid-December 2013 and ran 24 hours daily. The Corps' contractor, Great Lakes Dredge and Dock (GLDD), placed approximately 900,000 cubic yards of dredged sediment from an offshore borrow area located south of Passage Key Inlet.

Manatee County Parks and Natural Resources Director Charlie Hunsicker said he was pleased with the renourishment, which was accomplished with minimal impacts to beachgoers.

The project required continuous coordination and communications between the Corps, contractor, sponsor, local residents and small businesses.

"The majority of project pumping operations occurred during peak tourist season on the island, with thousands of 'snow birds' vacationing on various beachfront properties," said Sirisha Rayaprolu, project manager. She estimated addressing about six phone calls a day from vacationers, local residents and businesses, to discuss the ongoing project.



Corps contractors Great Lakes Dredge and Dock move pipe along an Anna Maria Island beach in February. The offshore dredge vessel pumps sand through miles of pipes onto the beach. Cages at the opening of the pipeline capture debris such as shells, rocks and other objects to prevent their placement on the beach. (Photo by Brian Austin)

"It was all about maintaining clear communications, explaining the methods of our operations, and building a sustainable beach for the county," Rayaprolu said.

She and the project field team coordinated extensively with the Beach House Restaurant on the island, to communicate the operations and schedule, which was a major concern for more than a dozen weddings scheduled at the restaurant location.

*Sand placement increases storm protection for upland development. An added benefit is that this sand renourishment also helps restore shorebird and marine turtle habitat. This work was done in response to impacts resulting from Hurricane Sandy in 2012 and was 100 percent federally funded under the Flood Control and Coastal Emergency (FCCE) program. Jacksonville District is placing approximately 7.5 million cubic yards of sand on 38.5 miles of eroded beaches in Florida under the FCCE program*

"The restaurant now has an additional 180 feet of beach behind and around it because of the nourishment," Rayaprolu said. "The restaurant owners and staff are very happy about this additional beach, and of course all the brides are even happier!"

Rayaprolu said GLDD was very accommodating to local concerns, and was in constant coordination with the Corps' field and district offices as the project progressed. GLDD built sand "walkovers" over the pipes, allowing people access to the beach. "The field office did a great job overseeing this contract also – it was truly a team effort by all," she said.

**BEACH RENOURISHMENT** (continued from PAGE 5)

According to an Islander Times article, the manager of the Blue Water Beach Club on the Gulf, Holmes Beach, said he couldn't be more pleased with how quickly the renourishment went. "And the people were very accommodating. When I asked that equipment be moved so guests could get to the beach, they immediately complied and were very pleasant. They did a good job and our guests were happy," Sebastian Mueller said.

Another success of this project is that Manatee County is now able to use GLDD to nourish a local sponsor project at Coquina Beach, located at the southern end of the federal project, and is saving substantially on the contractor's mobilization. The Corps and county were proactively engaged to ensure a smooth transition between the projects, Rayaprolu said.

The local sponsor project is scheduled to finish by mid-April. ♦



A near-completed portion of beach renourishment on Anna Maria Island. (Photo by Brian Austin)



Visitors enjoy a newly renourished area on Anna Maria Island. (Photo by Brian Austin)



Beach enthusiasts constructed this castle fortress soon after beach renourishment. (Photo by Brian Austin)

## Working together to combat invasive species

BY ERICA SKOLTE



The Everglades Cooperative Invasive Species Management Area battles non-native animal species such as pythons and this black and white tegu, a voracious egg-eater that targets the nests of threatened and endangered animals such as sea turtles, crocodiles and birds. (Photo by Dennis Giardina)

In Florida and across the nation, invasive species bring with them high ecological and economic costs. It's far too big a problem for just one agency or group.

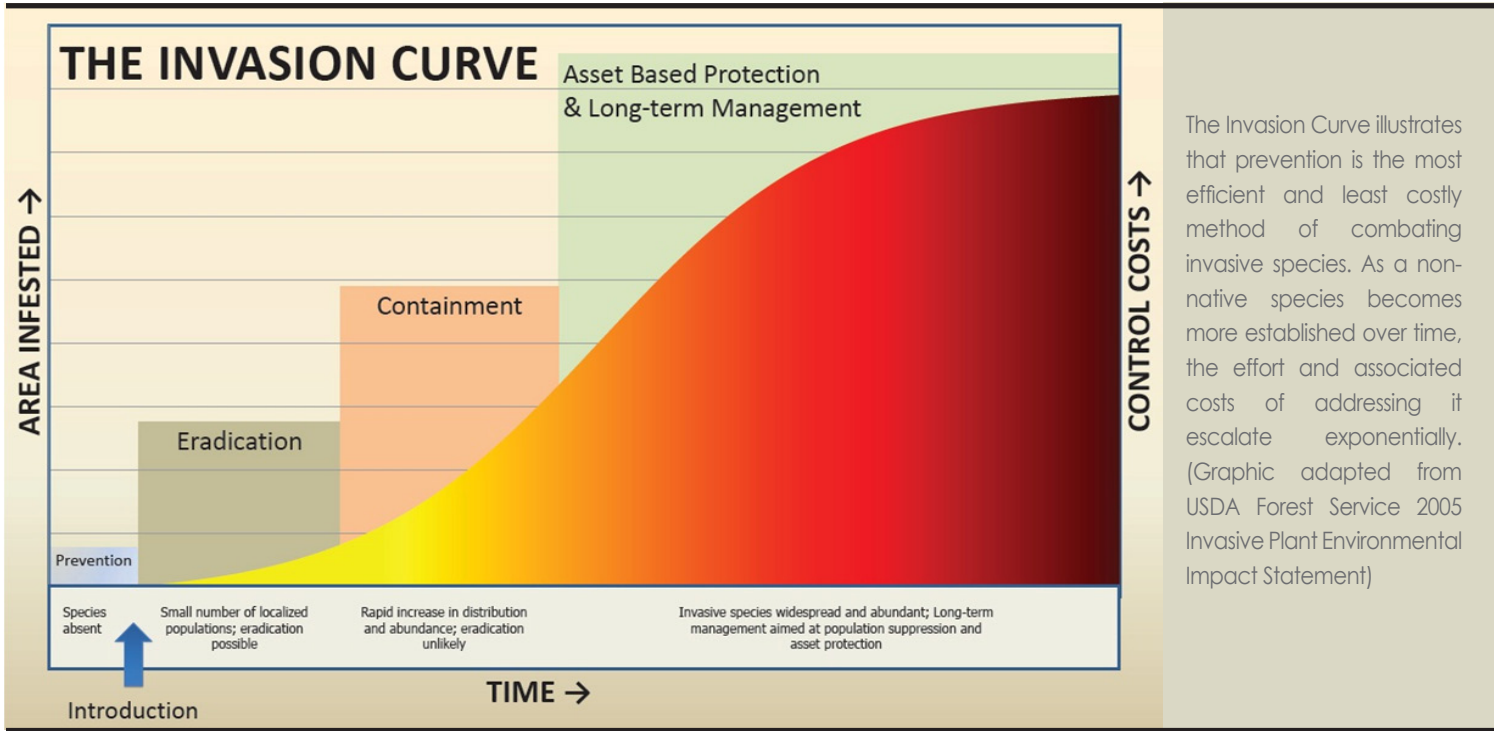
The Florida Invasive Species Partnership (FISP) is a collaborative group of federal, state and local agencies and non-government organizations, all with a stake in managing non-native species in Florida. As stated on the FISP website, "Because species can spread beyond fence lines, our goal is to connect private landowners and public land managers with invasive species expertise and assistance programs across boundaries...FISP increases communication, coordination and the sharing of resources to protect Florida's natural landscape."

FISP facilitates the formation of Cooperative Invasive Species Management Areas (CISMAs), alliances of stakeholders addressing regional invasive species management. Some of the concerns that they try to address include prevention, education/awareness, early detection, rapid response, monitoring and integrated pest management.

Though prevention is always the first line of defense, even the best prevention efforts will not stop all invasive species. According to the National Invasive Species Council, "Early detection and rapid response efforts increase the likelihood that invasions will be halted and eradicated. Once a species becomes widely established, the only action possible is the partial mitigation of negative impacts."

The cooperative groups provide expertise with common problems statewide, and serve as the experts on challenges in the local area. Each CISMA covers a certain type of

(CONTINUES ON PAGE 7)



The Invasion Curve illustrates that prevention is the most efficient and least costly method of combating invasive species. As a non-native species becomes more established over time, the effort and associated costs of addressing it escalate exponentially. (Graphic adapted from USDA Forest Service 2005 Invasive Plant Environmental Impact Statement)

habitat and climate zone. They are large enough to have regional impact but small enough to deal with specific local issues. Though some of the problems may overlap, others are localized. Members of these groups are often in the field and can help to monitor species locally. They try to identify and deal with potential problems before they become more serious. Some of the problems in south Florida are very different from those in north Florida.

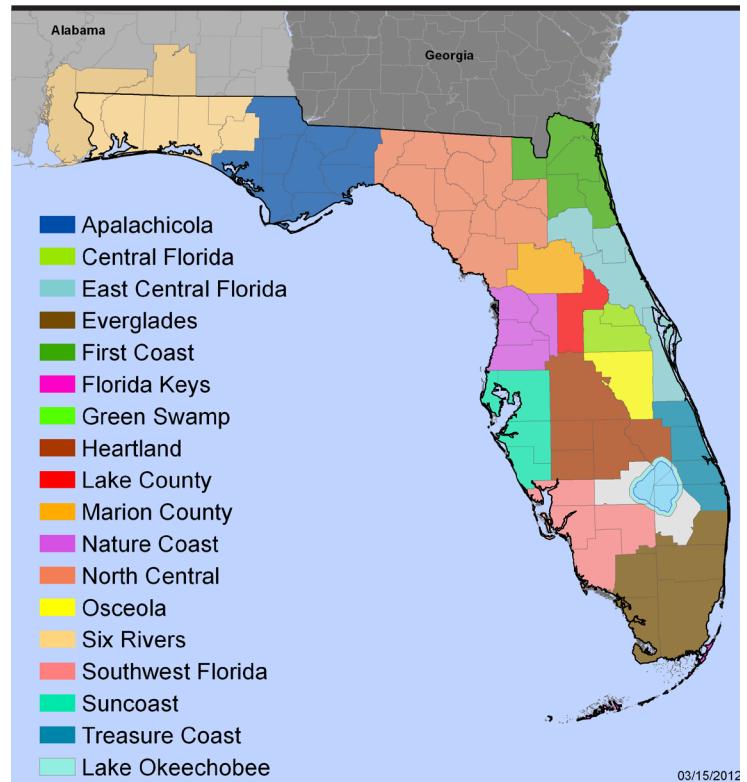
In south Florida, for example, a species of Asian mangrove (*Lumnitzera racemosa*) was brought into the country as a specimen plant at a botanical garden. Its population started to expand and escape into natural areas. The local Everglades CISMA had multiple workdays and successfully eradicated this new infestation. Follow-up is still needed to catch any new seedlings, but it appears the invasion has been stopped.

Another way that CISMAs raise awareness and help control invasive animal species is to sponsor Pet Amnesty Days, where people can turn in their unwanted pets without penalties, instead of releasing them into the wild.

In Jacksonville and north Florida, some of the early detection and rapid response efforts have targeted salt cedar and old world climbing fern. Brazilian pepper has firmly established itself in south Florida, but it is now creeping north along the coast and seems to be headed toward Jacksonville. "It's really important to be able to get on top of these species early on," said Jessica Spencer, a biologist with the U.S. Army Corps of Engineers in Jacksonville and member of the First Coast Invasive Working Group, the CISMA that covers northeast Florida. "We've got to control the problem before the species becomes established and starts to expand its range. Once the population expands, the impacts and the cost of control escalate exponentially."

"We try to reach out to folks on public and private lands. We provide treatment recommendations, management advice and sometimes we can even help with treatment," said Spencer. "We are a good resource for land managers all over the state."

For more information, visit the Florida Invasive Species Partnership website: [www.floridainvasives.org](http://www.floridainvasives.org) and the National Invasive Species Council website: [http://www.invasivespecies.gov/global/EDRR/EDRR\\_index.html](http://www.invasivespecies.gov/global/EDRR/EDRR_index.html).



Cooperative Invasive Species Management Areas (CISMAs) are an alliance of stakeholders addressing invasive species management in geographic regions. (Graphic courtesy of Florida Invasive Species Partnership)

## Marine Design Center helps provide vessels for missions

BY JOHN H. CAMPBELL



*Florida II* captain Rory Riker (right) demonstrates the navigation systems aboard Jacksonville District's newest survey vessel to visitors during an event this winter near Fernandina Beach. The Corps' Marine Design Center, based in Philadelphia District, invited visitors from four other districts who want to upgrade their fleets, to see what options are available for consideration. (Photo by John Campbell)

When thinking about the U.S. Army Corps of Engineers' work, what may most readily come to mind is massive flood control projects, environmental restoration and shoreline protection. In some areas, inland waterway navigation and harbor dredging for deep-draft ships is prevalent.

However, along with the Corps' roles in port and waterway navigation comes the need for a fleet of ships – vessels that can conduct surveys, move equipment and, on occasion, dredge material to deepen a channel. The fleet numbers in the thousands, but where do Corps districts get help in finding this specialized equipment?

The answer lies in a small suite of offices, located in Philadelphia District, known as the MDC...the Marine Design Center.

The MDC dates back to 1929. It is the Corps' center of expertise for development and application of innovative technologies for naval architecture and marine engineering. The center provides expertise in every realm of boating resources, from the design of vessels to procuring the ships and their equipment.

"We help divisions and districts throughout the Corps with the design, procurement and maintenance of the fleet," said Michael Kelley, senior project manager with the MDC.

The MDC played a significant role in helping Jacksonville District with the design and acquisition of its newest survey vessel, *Florida II*, a 62-foot aluminum catamaran that was delivered in 2013.

"Jacksonville District came to us, we looked at needs and developed options," said Kelley. "As we determine what options were available, we started developing a more specific budget for the project, helped secure the needed funding, and procured the contract necessary to build the boat."

"The MDC was great to work with," said Phil Bates, Jacksonville District plant manager. "They helped with the design specifications and with contract administration. We were very pleased."

The expertise within MDC isn't just limited to designing new boats. Staff has also implemented modifications to existing equipment, which has made dredging operations safer for marine life.

"Jacksonville District and the Engineering Research & Development Center designed a 'turtle deflector' in the early 1990s to help keep sea turtles from being hurt by dredging operations," said Bates. "The MDC developed a prototype from the design and devised a methodology to implement the deflector. It has had a major impact in reducing injuries to turtles in dredging operations from Texas to Delaware."

The MDC has experience with all of the vessels used by the Corps, including dredges, towboats, floating cranes and survey vessels. They have done work for a number of other federal agencies, including the U.S. Coast Guard, the U.S. Fish & Wildlife Service, the National Park Service and the Panama Canal Commission.

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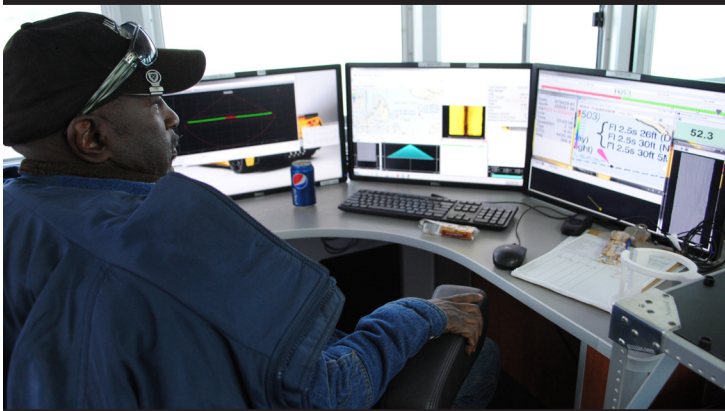


MARINE DESIGN CENTER (continued from PAGE 8)



The *Florida II* sits dockside at Fernandina Beach after returning from a demonstration of its capabilities. The event was coordinated by the Corps' Marine Design Center, which helps districts develop and apply innovative technologies in naval architecture and marine engineering. (Photo by John Campbell)

"The rules and regulations governing boat construction are much different when compared to rules for building construction," said Kelley. "There are so many things to consider in terms of making the vessel navigable as well as providing an environment where people can get their work done."



Jacksonville District surveyor Robert Jenkins observes data as it pops up on computer screens while running surveys near Fernandina Beach. Jenkins was demonstrating the state-of-the-art equipment aboard the *Florida II* as part of a Marine Design Center demonstration on the vessel's capabilities. (Photo by John Campbell)

Kelley has been with the MDC for 13 years. He lists the modernization of an 80-year-old boat among his finest accomplishments.

"We worked on the dredge boat *Potter*," said Kelley. "We had to cut off the top three decks of the boat. It was quite a challenge, trying to meld 1930s workmanship with the 21st century, but we turned out a great product."

2014 promises to be a busy year for Kelley and his co-workers. They recently hosted survey boat operators in Fernandina

Beach to demonstrate the full range of capabilities of *Florida II*.

"We have survey vessels in the works this year for Baltimore, New Orleans, Norfolk, and Philadelphia Districts," said Kelley. "We are also working on a large barge for Mobile District."

Since taking delivery of *Florida II* last year, Jacksonville District has turned to the MDC again.

"We bought another boat through them," said Bates. "They were very helpful in the contracting process; it was really fast, only two months. We are also working with them to design a 120-foot barge that will be used by our South Florida Operations Office to help with maintenance of the dike surrounding Lake Okeechobee and the locks on the Okeechobee Waterway."

"Ultimately, we want the operators of our boats to be happy," said Kelley. "Anything the MDC can do to help accomplish their mission we will consider." ♦



The St. Louis District's Dredge *Potter* was modernized by the Marine Design Center (MDC) in 2011. MDC senior project manager Michael Kelley, a 13-year veteran of the center, listed the project among his finest accomplishments with the Corps. (Photo courtesy of Marine Design Center)

# Jacksonville District team members employ the Golden Rule

BY SUSAN J. JACKSON

## ARMY VALUES

Loyalty

Duty

Respect

Selfless  
Service

Honor

Integrity

Personal  
Courage



Julie Coco Evans, budget analyst in the South Florida Operations Office, respects and is respected by her team members for always taking time to answer questions. (Photo courtesy of Steve Dunham)

*Treat people as they should be treated. In the Soldier's Code, we pledge to "treat others with dignity and respect while expecting others to do the same." Respect is what allows us to appreciate the best in other people. Respect is trusting that all people have done their jobs and fulfilled their duty. And self-respect is a vital ingredient with the Army value of respect, which results from knowing you have put forth your best effort. The Army is one team and each of us has something to contribute. – U.S. Army website, [www.army.mil/values/](http://www.army.mil/values/).*

Inside the South Florida Operations Office (SFOO) in Clewiston, Chester "Wayne" Sullivan has earned respect as a civil technician, but he is also greatly admired for his smooth and easy-going manner in communicating with others.

"I have routinely witnessed Wayne in chaotic or challenging events, and he always holds fellow employees or members of the public with the highest regard," said Tim Murphy, deputy chief, Operations Division. "He's simply a very honest, down-to-earth employee who always gets excellent results."

Sullivan, a veteran of 13 years in the oftentimes exciting SFOO, says he believes "the first and most important part of respect in the workplace is to listen to the people around you, and keep an open mind while you are listening."

Listening, patience and keeping an open mind is difficult for some, especially when "fight or flight" adrenalin kicks in. "I think that respect is something that is taught to a person from the time they are born. If a person grows up around people that are willing to listen and help them,

respect comes naturally; it isn't something that you learn overnight," Sullivan said.

He said there are several people that he respects in the SFOO, but at the top of his list is Julie Coco Evans, SFOO budget analyst. Each time he goes into her office, she stops what she is doing to answer his questions, "no matter how high the papers are stacked on her desk. It's easy to respect someone when they respect you," he said.

Operations Division's Shaun Pierce has earned similar kudos for how she treats others and gets the job done.

"She's quietly become one of our great problem solvers," Murphy said. "Teammates approach [her] because they know she will simply make it happen."

With 21 years of service to the nation, Pierce started working for Jacksonville District in Engineering Division in 2007. She transferred to Operations Division in 2009, where she now supports Emergency Management (EM) Branch. She coordinates with EM, South Atlantic Division and other offices to ensure funds are received and available to process requests for individuals who are deployed or attending training exercises, said Tina Cox, budget analyst.



Chester "Wayne" Sullivan, civil technician in the South Florida Operations Office, believes the most important part of respect in the workplace is to listen to people and keep an open mind. (Photo courtesy of Chester "Wayne" Sullivan)

"She works until all funds are received to ensure the employees are able to leave on time and she ensures there is adequate funding throughout the deployments, many times coordinating and requesting additional funds for labor and travel," Cox said.

Much of Pierce's job requires exceptional people and organizational skills. She said she learned most of those skills while growing up.

"If you experience respect, it's easy to understand the importance of respecting others. I learned

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**ARMY VALUES - RESPECT** (continued from PAGE 10)

what I know simply by being around respectful parents, grandparents and other adults who played significant roles in my life such as pastors, teachers and supervisors.”

Pierce greatly admired former co-worker Joyce Fortenberry, who retired as a workforce management specialist for Engineering Division. “She treated everyone with dignity and respect. Being able to deal with people effectively was a skill that seemed to come naturally to her. If there was an employee in the workplace who I might emulate, it would definitely be someone like her,” said Pierce.

“Things always go more smoothly when employees and management work as a team by showing respect towards each other,” Pierce added. She described respect as “thinking and acting in a way that shows others you care about their feelings as well as their well-being.”



Rafael Rios, geologist in Engineering Division, is a world-renowned expert on grouting, blasting and rock quarrying who shares his expertise through programs like the Geotechnical and Materials Community of Practice Traveling Scholar Program. (Photo by Ty Erickson)

One way to do this is to share knowledge with others.

Known for his grouting, blasting and rock quarrying expertise throughout the U.S. Army Corps of Engineers, Rafael Rios, geologist in Engineering Division, Geotechnical Branch has served more than 36 years with Jacksonville District, where he has developed, honed and shared his life’s work with others.

“I admire and commend Rafael for the respect he has earned throughout the Corps, from local to national peers in the discipline of engineering geology,” said Luis Ruiz, chief, Geotechnical Branch.

Rios is known for his work on grouting at the Cerrillos and Portugués dams, and quarry development and rock quality determination in Puerto Rico, Florida, Georgia and South Carolina. In addition, he is known for blasting on most port and harbor projects along the eastern seaboard, as well as the Palm Valley Bridge demolition and numerous upland projects.



Operations Division's Shaun Pierce describes respect as “thinking and acting in a way that shows others you care about their feelings as well as their well-being.” (Photo courtesy of Shaun Pierce)

On any given day, he’s consulted by South Atlantic Division and districts around the globe for assistance on grouting and blasting matters. Some of his endeavors also include rewriting blasting and grouting engineering manuals and consulting on dam projects for Wilmington, Sacramento, Savannah, Mobile and Korea districts.

“The respect [for] Rafael [by] headquarters is demonstrated in his selection as the first expert to conduct a regional series of lectures on blasting in the newly created [Geotechnical and Materials Community of Practice] Traveling Scholar Program,” Ruiz said. He added that Rios’ own values toward others “have reflected back on him tenfold, as seen through his contributions and accomplishments for the Corps and the nation.” ♦



Geologist Rafael Rios enjoys a rappel journey while taking a closer look at a project. (USACE file photo)

# Navy veteran urges women to take risks, open doors

BY NAKEIR NOBLES



Manuela Voicu (left), Women's History Month coordinator, with retired Lt. Cmdr. Anita Pierce, Women's History Month keynote speaker. Pierce, who retired from the U.S. Navy after 25 years, told the audience to take a chance. (Photo by David Kimery)

Retired Lt. Cmdr. Anita Pierce was the keynote speaker for Jacksonville District's Women's History Month observance March 17. The event was sponsored by the Equal Employment Opportunity Office.

The 2014 theme, Celebrating Women of Character, Courage and Commitment, highlighted the struggle, sacrifices and victories of our nation's women.

In his opening remarks, Maj. Mark Himes, deputy commander said, "Women's History Month allows us an opportunity to pause, reflect upon and honor the extraordinary women throughout history and those that continue to make history with their accomplishments, contributions and leadership to our nation and throughout the world."

"As a military organization, I'm proud to celebrate examples, from the estimated 21,000 Army nurses who served overseas and stateside during World War I to recent examples such as Army Gen. Ann Dunwoody, the first woman in the U.S. military to achieve the [Army's highest] rank in November 2008. I'm also proud to be a part of an organization like the U.S. Army Corps of Engineers, which recognizes and values the efforts, achievements and contributions of women," Himes added.

Pierce, who retired in 2008 from the United States Navy after a 25-year naval career, told the audience to "take a chance. I don't believe in coincidence. It's not a coincidence that I'm here today. My life was on purpose. God put me everywhere I was."

Born and raised in Chicago, Pierce says she was the first of her siblings to leave home. "I have to admit, I joined the Navy to finish college." After talking to her detailee, she was given two choices of duty stations – Memphis, Tenn. or Rota, Spain. "I

had never been out of Chicago before. Rota was a neat duty station. I didn't have a clue. I took a chance."

Pierce says women who we may have never met have opened doors for us. "The sacrifices can work for us and continue to make women succeed," she said. "The 19th Amendment allowed women the right to vote. Susan B. Anthony was an activist who worked to help us vote in the 1920s. What if she decided [activism] was too tough? Women like Amelia Earhart," Pierce said, "who was committed to flying and in June 1921, without support, her commitment to flying opened doors for women in aviation. It's not easy, it takes sacrifice," Pierce said.

"Rosa Parks," Pierce added, "without her courage and commitment we wouldn't have the civil rights movement. Do you think she set out to make history?" In 2009, when Sonia Sotomayor was appointed to the Supreme Court, "she opened doors for poor children around the world."

"Lilly Ledbetter was taught by her parents the importance of working hard. After working 19 years for Goodyear, Ledbetter found she had been unfairly paid," Pierce said. "Today women are paid 77 cents for every dollar a man makes," Pierce explained. To help address this wage gap, President Obama signed the Lilly Ledbetter Fair Pay Act on January 29, 2009, restoring protection against pay discrimination.

In closing, Pierce told the audience, "Be always willing to learn. We must have integrity and principles that cannot be compromised. We should have an adventure with the unknown, have a work-life balance. We're better when we take care of ourselves. To open the door for others, you have to open the door for yourself." ♦



Colleen Shanklin (right), chief of the Equal Employment Opportunity Office, presents guest speaker retired Lt. Cmdr. Anita Pierce with a plaque for her participation in the district's Women's History Month observance. (Photo by David Kimery)

# Agua mala (bad water)

BY TERRY S. HINES



Jo-Ellen Darcy (right), Assistant Secretary of the Army for Civil Works speaks with some of the youth from Caño Martín Peña, who are working to improve the environment in their community. (Photo by Bárbara Cardenales Torres)

Puerto Rico, Spanish for “rich port,” is a 3,515-square mile island, home to about 3.6 million people, about a third of which live in the San Juan metropolitan area. It is sometimes referred to in Spanish as “La Isla del Encanto,” or the Enchanted Island. But for the 26,000 who live in the Caño Martín Peña area, most of whom live under the poverty level, the “enchanted” description might ring a bit hollow.

A 3.5-mile long tidal channel, the Caño Martín Peña (CMP), was in 1936 about 200 to 400 feet wide. It connected this community by water to Rio Puerto Nuevo and ultimately San Juan Harbor and provided a vital connection between San Juan Bay and San José Lagoon. Impoverished peasants who migrated to San Juan during the first half of the 20th century built their homes in the mangroves bordering the CMP. For decades, the CMP has been a symbol of urban poverty and environmental degradation.

Today, the water in the channel is heavily polluted with sediment, trash, fecal contamination and coliform bacteria. During rain events, this polluted water makes its way into the flooded streets, where it pools at levels of up to three or more feet. The bacteria it carries make both the young and the elderly susceptible to gastrointestinal and respiratory problems. One resident said that rats and cockroaches run rampant during these floods. It rains a lot in Puerto Rico.

For decades, vegetative material and household waste were used to dry the wetlands adjacent to the CMP and the channel itself. Construction debris, old television sets, refrigerators and other forms of trash found a home in the CMP as well. Today the channel is only four to 16 feet wide and navigation is impossible. In fact, one can actually walk across it. Combined with a lack of sewer systems in the impoverished community, the CMP acts like a toilet bowl, flushing waste into the San Juan Estuary.

Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works) recently visited CMP with members of ENLACE, an alliance of community, public and private organizations that work together on behalf of the eight communities along the channel. The goal of the visit was to see firsthand how dredging the channel may work, in partnership with other community improvement efforts by ENLACE, to literally change the lives and health of those who live there. Darcy was accompanied by Maj. Gen. Todd Semonite, deputy commanding general of the U.S. Army Corps of Engineers; Brig. Gen. Ed Jackson, commander of South Atlantic Division and Col. Alan Dodd, commander of Jacksonville District.

“On [this,] my second visit to Caño Martín Peña, I was reminded of the passion that the people living here have for restoring their own backyard,” said Darcy. “The channel was chosen to be part of the president’s Urban Water Federal Partnership program. This partnership will reconnect the inhabitants of eight urban communities in San Juan with their waterways. Together with local government and organizations we are improving water quality, restoring the watershed and addressing public safety.”

The U.S. Army Corps of Engineers, Jacksonville District is working on the review and approval of a Feasibility Report and Environmental Impact Statement for this environmental restoration project, as authorized by Section 5127 of the Water Resources and Development Act of 2007. Upon approval of the report and the provision of federal funding, the project will move into the design phase, and contingent upon future funding, the project will then move into construction.

“This project is not only key to the environment, but to the health and well-being of the residents of the Caño,” said Jim Suggs, project manager. “The approval of this report will be the lynch

## CAÑO MARTÍN PEÑA (continued from PAGE 13)



In 1936, the Caño Martín Peña was 200 to 400 feet wide and served as a 3.5-mile navigable waterway between San Juan Bay and the San Jose Lagoon. Impoverished peasants migrated to San Juan in the early 1900s and built houses in the mangroves bordering the channel. The migration doubled in the 1950s. (Photo courtesy of ENLACE)

pin to success for the project's path forward and completion. Ultimately, the benefactors of our efforts will be the residents of the Caño."



Jo-Ellen Darcy (right), Assistant Secretary of the Army for Civil Works and Maj. Gen. Todd Semonite (center), deputy commanding general of the U.S. Army Corps of Engineers were accompanied by Antoinette Sedillo-Lopez (second from right), executive director of ENLACE on a visit to Caño Martín Peña to see firsthand how dredging this channel, along with community improvement efforts can change the lives and health of those who live there. (Photo by Bárbara Cardenas Torres)

Legislation established Project ENLACE Caño Martín Peña with a mission to implement a \$744 million land use and development plan. The Caño Martín Peña Special Planning District Act (Law 489) also created the Caño Martín Peña Community Land Trust, a first in Puerto Rico, which guarantees affordable housing, resolves land tenure issues, and reinvests any future increase in land value back into the community. The Land Trust is essential to the plan's implementation, as it prevents gentrification and ensures that the current residents benefit directly from investment in infrastructure, urban reform and environmental restoration.

"After hosting Ms. Darcy and the Corps team, we are confident that the process to approve the feasibility report will continue to move forward expeditiously so this urgent restoration project – 50 years in the making – can become a reality," said Lyvia N. Rodriguez Del Valle, executive director, Corporación del Proyecto ENLACE del Caño Martín Peña. "The Caño communities and their local and federal partners continue to work towards this goal of environmental justice and new economic development opportunities for Puerto Rico."

ENLACE addresses environmental justice through mechanisms that allow for transparency, trust in institutions, bottom-up participation, interdisciplinary approaches, respect for diversity, concurrent planning and implementation, constant evaluation and celebration of successes. Successful projects have included outreach on environmental awareness to more than 3,000 students, the construction of the first vacuum sewer system in Puerto Rico, and the relocation of hundreds of households to allow for dredging of the contaminated channel. ♦



Caño Martín Peña in Puerto Rico is a symbol of urban poverty and environmental degradation. It was used as an illegal landfill for construction waste and trash, ranging from tires and refrigerators to hazardous waste and even raw sewage from a community without access to sanitation treatment. (Photo courtesy of ENLACE)

## The tradition continues

### Annual Engineering Career Day promotes STEM; Eagle's View Academy takes top honors

STORY BY JEAN PAVLOV  
PHOTOS BY TY ERICKSON



Eagle's View Academy Team A won the overall Engineering Career Day competition and received the James L. Garland Award for Engineering Excellence. Pictured left to right are Col. Alan M. Dodd, district commander, Team A members Tucker Davis, Ryan Criswell, Ryan Stevens and Eric Rodich and Capt. Christopher Kiwus, commander, Naval Facilities Engineering Command Southeast.

The ever-increasing pace of change challenges teachers, organizations, mentors and leaders to inspire students' interest in science, technology, engineering and math (STEM) disciplines and encourage them to pursue careers in these vital fields. The goal of STEM is to provide a cache of well-trained and motivated students from which to hire tomorrow's workforce.

The National Society of Professional Engineers began the National Engineers Week observation in 1951, in conjunction with President George Washington's birthday. Washington is considered the nation's first engineer, notably for his survey work. The annual observation highlights the contributions engineers make to society and emphasizes the importance of learning STEM skills.

For the last 12 years, the U.S. Army Corps of Engineers, Jacksonville District and the Society of American Military Engineers (SAME) have co-sponsored Engineering Career Day during National Engineers Week. This year's event, "Launching Your Career" was held Feb. 21 and was the largest career day to date. More than 150 high school students and their teachers, from 15 public

and private schools in northeast Florida, attended the day-long event.

"The Corps and SAME have been actively involved in engaging local students in engineering activities during Engineering Career Week for many years," said Lauren Borochaner, chief of Engineering Division. "We believe that these local students are the engineers and scientists of the future, and early mentoring is crucial for their future success. Our partnership with local schools benefits the profession overall."

Upon arrival, the student teams were given an on-the-spot "surprise" problem that required them to build a bridge capable of spanning a 7.75-inch chasm, with only a single sheet of standard letter-size paper. The bridge was then loaded with sightseers (pennies) until it collapsed. Eagle's View Academy, Team A, won first place by supporting 255 sightseers, or nearly 28 ounces on their bridge.

"It was amazing to see the creativity in this simple, yet challenging task. It was hard to believe the winning team loaded 255 pennies on their bridge before it collapsed," said Jack McCarthy, a career day judge from Naval Facilities Engineering Command Southeast.

### STEM statistics

- Since the graduating class of 2004, overall interest in STEM majors and careers among high school seniors has increased by more than 20 percent; however, the gender gap is increasing – only 14.5 percent of female students express interest in STEM compared to 39.6 percent of male students.
- In 2012, mechanical engineering was the most popular major or career choice among STEM students, and biology was second. Along with mechanical engineering, male students are significantly more interested in game design/development and computer science. Female students are significantly more interested in biology, chemistry, marine biology and environmental science.
- About 28 percent of high school freshmen declare interest in a STEM-related field. Of these students, more than half will lose interest in STEM by the time they graduate high school.
- High school students in Florida are 40 percent more likely to be interested in a marine biology major or career than students nationally.
- Florida ranks fourth among the 50 states (after California, Texas and New York), with a projected estimate of 411,000 STEM jobs by 2018.
- By 2018, the bulk of STEM jobs will be in computing (71 percent), followed by engineering (16 percent), science (11 percent) and math (2 percent).

Source: STEMconnector/  
My College Options Report,  
2012-2013

## ENGINEERING CAREER DAY (continued from PAGE 15)



Matt Lesser (standing, right), event chairman, addresses the record number of participants. The Engineering Career Day event challenged four-person student teams to compete in building and entering a take-home project, completing an on-the-spot surprise project assigned the day of the event and completing a trivia challenge.

"The goal of career day is to expose local students who may already have an interest in STEM disciplines to various aspects of engineering and encourage them to consider pursuing a

STEM-related college degree. By providing a challenging technical take-home project and a surprise problem the day of the event, students get the opportunity to realize engineering can be interesting and fun," said event chairman Matt Lesser.



Col. Alan Dodd (right), district commander, observes as one of the high school teams prepares its ping pong ball launcher for competition. The launcher was the take-home project for this year's event, and was one of three assignments that teams from 15 northeast Florida high schools completed.

In keeping with the theme of the event, this year's take-home problem involved developing a ping pong ball "launcher," capable of rapidly and accurately firing at a target that consisted of three vertical holes of varying diameters from a distance of 15 feet. Each team received 50 balls and only ten minutes to set up and launch, which made the task even more challenging. Teams earned points for the number of balls that went through the holes as well as for equipment aesthetics. A wide variety of launchers were designed and built for the challenge. Eagle's View Academy scored well in the highly competitive event, with a first place win for its Team B and second place for Team A.

The guest speaker for the event was Scott Burch, deputy chief of Engineering Division. He was the lead geotechnical engineer for the Portugués Dam as well as the engineering technical lead for the Tamiami Trail Feasibility Study and the Herbert Hoover Dike Major Rehabilitation Report. His speech was entitled, "Engineering and Time Travel - And How You Can Change the Future."

Eagle's View Academy entered four teams, with Teams A and B placing first and second overall respectively. Col. Alan M. Dodd, district commander and Capt. Christopher H. Kiwus, U.S. Navy, CEC, commander of Naval Facilities Engineering Command Southeast and current president of the Jacksonville



**ENGINEERING CAREER DAY** (continued from PAGE 16)


Tucker Davis stacks pennies on the winning paper bridge made by his team, Eagle's View Academy Team A.

SAME Post, presented Eagle's View Team A with the James L. Garland Award for Engineering Excellence. The trophy lists all past winners and will make Eagle's View Academy its home for the next year.

"It's great to see so many kids engaged and interested in engineering. It was a thrill for me to be able to be a part of today's activities," said Kiwus.



High school students met with representatives of colleges and universities as well as engineering firms and government agencies during the annual Engineering Career Day event Feb. 21.

Judges and exhibitors for the event included representatives of engineering firms and professional organizations, academia and government.

Jacksonville District's continued investment in STEM educational opportunities serves to empower students by providing training, mentoring and access to STEM opportunities and ensuring students are prepared to take advantage of them. ♦

## Participating Schools

- Atlantic Coast High School
- Baldwin Middle Senior High School
- Bishop Kenny High School
- Christ's Church Academy
- Eagle's View Academy
- Englewood High School
- Fernandina Beach High School
- First Coast High School
- Fletcher High School
- Frank H. Peterson Academies of Technology
- Providence School
- Providence Extension Program
- Robert E. Lee High School
- Trinity Christian Academy
- Yulee High School

## Engineering Career Day Winners

### Overall

- 1st Place: Eagle's View Academy, Team A (Ryan Criswell, Ryan Stephens, Eric Rodlich and Tucker Davis; Instructor – Susan Dixon)
- 2nd Place: Eagle's View Academy, Team B (Cameron Olsen, Dalton Bishop, Logan Shull and Jon Ehly; Instructor – Susan Dixon)
- 3rd Place: Bishop Kenny High School, Team C (Connor Noe, Harris Newsteder, Erik Sampayo and Royce Reyes; Instructor – Vicki Schmidt)
- Special Recognition: Atlantic Coast High School (Siyuan Wu, Zachary Joswick, Kyle See, and Arya Khalesi; Instructors – Aseema Sharma and Joseph Williams)

### Surprise Problem

- 1st Place: Eagle's View Academy, Team A
- 2nd Place: Providence High School, Team C (Grace and Emma Stottemyer, Ashley Hughes and Cairis Barron; Instructor – Laura McGill)
- 3rd Place: Christ's Church Academy, Team C (Rebecca Carter, Rachel Faircloth, Riley Brandvold and Sean Quinlan; Instructor – Eugene Clifford)

### Take-Home Challenge

- 1st Place: Eagle's View Academy, Team B
- 2nd Place: Eagle's View Academy; Team A
- 3rd Place: Bishop Kenny High School, Team C

## 8th Annual Air Potato Roundup raises awareness about invasive species

BY ERICA SKOLTE



The air potato roundup is a family-friendly event where even young children like Shane Huebner, age three (seated at table) can participate, since it's almost like an Easter egg hunt. Pictured left to right, Stephanie Dean, Liane Patrylo, Riley Lane, Jon Lane, Madi Lane and Angie Huebner all volunteered at Montclair Elementary School in Orange Park to battle invasive species in their local community. (Photo by Kitty Lane)

It's almost like a scene from a science fiction movie. Florida is being taken over by...potatoes.

Potatoes?

What do you do when foreign potatoes invade and attempt to take over the native plants? You try to "nip it in the spud!"

Volunteers observed National Invasive Species Awareness Week in a "hands-on" way, by participating in the 8th Annual Air Potato Roundup March 1, hosted by the First Coast Invasive Working Group.

"People often wonder how they can get involved and help out," said biologist Jessica Spencer. "The annual Air Potato Roundup is a family-friendly event where people of all ages – even little ones – can get outdoors together and make a difference. Last year, 162 volunteers removed a combined 4,940 pounds of air potatoes from nine sites. This year, we removed almost twice as much. Invasive species such as air potato smother our native plants and are one of the greatest ecological threats to natural communities in Florida. Roundup volunteers help protect and conserve Florida's natural areas through the removal of air potato."

"Volunteers collected the 'potatoes' that grow on the vines and drop to the ground during the winter. Each of these potatoes will



The aerial tubers, or bulbils, of the air potato dry and fall to the ground during the winter, making them easy to collect. Here are some of the 9,257 pounds of air potatoes that were collected this year. (Photo by Kitty Lane)

(CONTINUES ON PAGE 19)

**AIR POTATO** (continued from **PAGE 18**)

Volunteers, including students from Sandalwood High School, harvested air potatoes that had fallen to the ground during the winter. (Photo by Steven Sherrill)

sprout a new vine that can grow extremely quickly – about eight inches per day. It climbs to the tops of trees and takes over native plants. The potatoes can survive for 20 years and produce thousands of new potatoes during that time,” said Spencer. “This event helps to raise awareness about invasive species, and gives us a platform to talk about other species, not just air potato. It helps to get people involved in their community and gets them outside.”

“This year, we collected 9,257 pounds of air potato during our First Coast Roundup,” said Tina Gordon, co-chair of the First Coast Invasive Working Group and Coastal Training Program Coordinator at Guana Tolomato Matanzas National Estuarine Research Reserve. “Howell Park came in with the most weight, about 2,600 pounds; and Jacksonville Arboretum had the most volunteers, with 74 people. Our two largest potatoes came from Tree Hill Nature Center, at a whopping 40.6 centimeters and 38.1 centimeters.”

For some, the event was a family affair. Riley and Madi Lane joined their parents, who are both “regulars” on the battlefield against invasive species. Their father, Jon Lane, is the chief of the Invasive Species Management Branch. Their mother, Kitty Lane, demonstrates Invasive Plant Curriculum throughout the state of Florida as the outreach coordinator for the University of Florida’s Institute of Food and Agricultural Sciences Center for Aquatic and Invasive Plants (UF/IFAS CAIP)-Invasive Plant Education Initiative. The family spent the day collecting air potatoes near Montclair Elementary School in Orange Park. “We all agree that removing invasive

plants makes us feel like we have done something good for the woods where our dogs run, the ecosystem and ultimately the planet,” said Kitty Lane.

Work sites also included the Jacksonville Zoo and Gardens, Timucuan Ecological and Historic Preserve, Tillie K. Fowler Park, Jacksonville University, Kathryn Abbey Hanna Park, Tree Hill Nature Center and the Jacksonville Arboretum and Gardens in Jacksonville; Howell Park in Atlantic Beach; Fort Mose Historic State Park and St. Johns River State College in St. Augustine; and Montclair Elementary School and St. Johns River State College in Orange Park.

Based on the calls that Spencer received about the event, it is likely that they will reach out to additional sites for the event next year. The dates will again be coordinated to coincide with National Invasive Species Week.

The event also generated many calls from homeowners about how to deal with air potato in their own yards and how to dispose of the air potatoes. Spencer recommends throwing the air potatoes out with the regular garbage, where they will be covered with so much other material that they will decompose rather than sprout.

For more information on backyard air potato management, visit <http://1.usa.gov/1g5HyKv>.

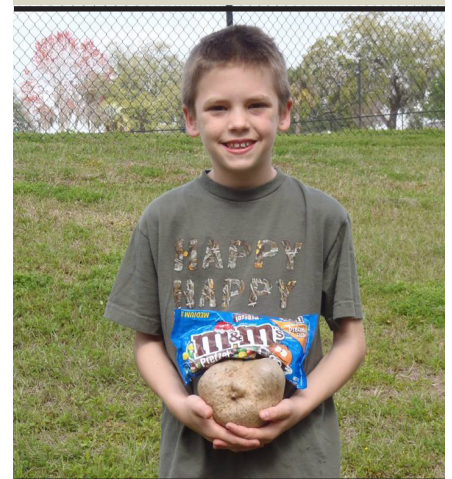
“Thank you to everyone who participated in the Air Potato Roundup and helped to spread the word about invasives in our communities,” said Gordon. “We hope that you will join us again next year.” ♦



The largest air potato overall was this whopper found at Tree Hill Nature Center, which measured in at almost 16 inches around! (Photo by Mark Mumaw)



Work site exhibits helped volunteers identify and target air potato plants and tubers. (Photo by Kitty Lane)



Gregory Darnell found this large air potato while working with his mother, Michelle Darnell, at the St. Johns River State College Orange Park Campus site. (Photo by Karen Meyer)

# Tarpon Springs project protects infrastructure, hurricane evacuation route

BY NAKEIR NOBLES



Prior to the Whitcomb and Kreamer Bayous Hurricane and Storm Damage Reduction Project, the banks experienced erosion that threatened city- and county-maintained roadways. (Photo courtesy of Jim Suggs)

Fifteen years after its initial start and nearly 10 years after the execution of the Feasibility Cost Sharing Agreement (FCSA) with the city of Tarpon Springs, Jacksonville District completed construction on the Whitcomb and Kreamer Bayous Hurricane and Storm Damage Reduction Project. The project, located in Tarpon Springs, is a Continuing Authorities Program (CAP) Section 103 Hurricane and Storm Damage Protection Project.

CAP authorizes the U.S. Army Corps of Engineers to plan, design and construct small-scale projects under existing program authority from Congress. Local governments and agencies seeking assistance may request the Corps to investigate potential water resource issues that may fit a particular authority. Section 103 of CAP allows the Corps to assist in the protection of public infrastructure on small beaches against erosion and damages caused by natural, storm-driven waves and currents.

Typical projects include protecting utilities, roadways and other public infrastructure systems. The maximum federal limit is \$5 million per project.

When the project's FCSA was executed in 2004, Jim Suggs served as project manager, followed by Emilio Gonzalez in 2005. Suggs resumed project manager duties in 2011. He said the project has been around for some time and many people worked hard to make it happen.

Suggs said the completion of the project came with challenges. Section 103, he said, was one of the authorities not supported by the administration. "I had to fight for the project," he said. "We had a really good sponsor who was patient throughout all of our struggles."

Prior to the project's implementation and completion, the area experienced erosion of the bayou banks, which threatened the city- and county-maintained roadways. Portions of the roadways were subject to frequent flooding due to low elevation construction. The roads provided the only emergency evacuation route for some residents.

The completed project stabilized the shoreline and protects the adjacent roadways. "It keeps the hurricane evacuation area and homes from going into the bayous," Suggs said.

Although not one of the district's more familiar, "big dollar" projects, Suggs says this project is just as important. "We fulfilled our obligation to our sponsor from design to construction. We put forth the same effort as with big projects. To the customer, it's just as important. Recent conversations with the city [Tarpon Springs] officials proved they are satisfied with our work and appreciated our efforts."

Suggs said all of the team members on the project delivery team (PDT) played a significant role in the completion of this project. "Without them, it wouldn't have happened. I am very proud to be a part of this PDT," he said. ♦



Now that the project is completed, shorelines and adjacent roadways are protected. The evacuation area and homes are protected from the bayous. (Photo courtesy of Jim Suggs)

# Earth Day: A good time to revisit the USACE Environmental Operating Principles

BY CANDICE WALTERS, HQUSACE



Mangroves in Puerto Rico. (USACE file photo)

Since 2002, the U.S. Army Corps of Engineers has lived by its Environmental Operating Principles (EOPs).

The seven principles, often called the Corps of Engineers “Green Ethics,” have encouraged Corps employees to consider the environment in everything they do. They have served the Corps of Engineers well, setting the direction the Corps would take to achieve greater synergy between sustainability and the execution of its projects and programs.

But now the nation’s resource challenges and priorities have evolved, focusing more on sustainability and the need to conserve water, electricity, fuel and other precious resources. The Corps, as well as the nation, has learned more about the impacts of global factors such as climate and sea level change.

With those challenges and priorities in mind, Lt. General Thomas P. Bostick, commanding general of the U.S. Army Corps of Engineers, issued a “reinvigorated” Environmental Operating Principles in 2012, a more concise version with a clearer format that emphasizes the proactive nature of each principle.

“The Corps of Engineers’ level of environmental commitment



A Willet enjoys a birds-eye view of Merritt Island National Wildlife Refuge. (Photo by John Palmer)

**EARTH DAY** (continued from PAGE 21)


Water lily. (USACE file photo)

must expand and intensify," Bostick said at that time. "As with other Corps guidance and principles, it was necessary to revise the EOPs periodically to reinforce their value to how the Corps operates.

"The reinvigorated principles provide direction on how the Corps protects and restores natural systems and the environment while encouraging productive, sustainable economic development that improve the quality of life for everyone," he said. They are:

- Foster sustainability as a way of life throughout the organization.
- Proactively consider environmental consequences of all Corps activities and act accordingly.
- Create mutually supporting economic and environmentally sustainable solutions.
- Continue to meet our corporate responsibility and accountability under the law for activities undertaken by the Corps, which may impact human and natural environments.
- Consider the environment in employing a risk management and systems approach throughout life cycles of projects and programs.
- Leverage scientific, economic and social knowledge to understand the environmental context and effects of Corps actions in a collaborative manner.
- Employ an open, transparent process.

**Test your environmental knowledge**

1. What is the leading source of energy in the United States?
  - a. Coal
  - b. Oil
  - c. Nuclear power
  - d. Natural gas
2. Which of the following sources of energy is not renewable?
  - a. Petroleum
  - b. Hydropower
  - c. Biomass
  - d. Solar power
3. How much of the world's water is available for human use?
  - a. 97 percent
  - b. 23 percent
  - c. 3 percent
  - d. Less than 1 percent
4. About how long does it take for a Styrofoam cup to decompose?
  - a. 10 years
  - b. 2 months
  - c. 400 years
  - d. 150 years
5. What is the most common type of debris that litters our oceans?
  - a. Bags
  - b. Plastic beverage bottles
  - c. Cigarettes
  - d. Food packaging
6. What is the most common type of trash thrown away by Americans?
  - a. Paper and cardboard
  - b. Metals
  - c. Glass
  - d. Plastics

Source: [www.infoplease.com](http://www.infoplease.com)

Answers: 1.b; 2.a; 3.d; 4.c; 5.c; 6.a



(CONTINUES ON PAGE 23)

EARTH DAY (continued from PAGE 22)

## Help Our Planet - Pledge an Act of Green this Earth Day!

- Reduce – Reuse – Recycle!
- Buy local produce. Check out the farmer's market locator tool at: <http://www.localharvest.org/farmers-markets/>.



*Within three days of harvest, the average piece of produce has lost close to one-third of its original nutrients. And transporting produce over long distances emits hundreds of pounds of greenhouse gases into the atmosphere.*

Plant only native trees, plants and flowers.

- Conserve water.
- Switch to energy efficient light bulbs and appliances.
- Start composting.
- Adjust your hot water tank temperature to no more than 120°.
- Decrease the amount of disposable plastic used.



*More than 300 million tons of plastic are produced each year, and only 10 percent is properly recycled.*

- Use canvas or cloth bags for shopping instead of paper or plastic bags.
- Unplug appliances when not in use or turn off power strips when not using.
- Properly recycle old electronic devices (TV, cell phone, computer, printer, etc.) through a recycling unit that specifically handles electronics.
- Reduce the junk mail you receive – free tools like those offered by websites [www.DMAchoice.org](http://www.DMAchoice.org) and [www.catalogchoice.org](http://www.catalogchoice.org) can help.
- Car pool – use public transportation – bicycle or walk when possible.



*The U.S. Environmental Protection Agency revealed a new set of regulations March 3, 2014 addressing vehicle emission standards. It is anticipated that the new standards will help states reach national air quality standards, save the country \$6.7 billion to \$19 billion worth of health costs, and prevent up to 2,000 premature deaths per year.*

Pick up trash and dispose of it responsibly.

- Vote green – learn about and make your voice heard on environmental issues.
- Discover your ecological footprint: <http://www.earthday.org/footprint-calculator> and learn about ways to decrease it.



*We consume the equivalent of 1.5 planets' worth of natural resources every year.*

Source, including photos: [www.earthday.org](http://www.earthday.org) ♦

# Jax Facts: How well do you know Jacksonville District?

BY NANCY J. STICHT



Congratulations to **Carrie Bond, Regulatory Division**, the first district team member to submit the correct answers to all ten of the following questions, based on stories that appeared in the March issue of JaxStrong. (Photo by Nikki Nobles)

**1. What is currently threatening oceanfront infrastructure in Flagler County?**

A. Shoreline erosion threatens oceanfront infrastructure, including State Road A1A, the only north-south hurricane evacuation route for coastal communities. (Corps plan for Flagler County project well received, pg. 6)

**2. At what two recent south Florida events did Jacksonville District share water safety information?**

A. The district participated in the South Florida Fair and the FLW fishing tournament. (Corps shares water safety messages at south Florida events, pg. 8)

**3. What Army value is defined by fulfilling one's obligations and being able to accomplish tasks as part of a team?**

A. Duty. (Teamwork gets the job done in Operations Division, pg. 5)

**4. What is the tentatively selected plan for the Flagler County Hurricane and Storm Damage Reduction Project?**

A. The project would include building a 10-foot seaward extension of the existing dune along 2.6 miles of shoreline, between 7th and 28th streets in central Flagler Beach. (Corps plan for Flagler County project well received, pg. 6)

**5. When will the Faka Union Pump Station at Picayune Strand be completed?**

A. The project is expected to be completed by fall 2014. (Checking in on Picayune Strand Restoration Project, pg. 9)

**6. What is the recommended plan and the anticipated benefits for the Lake Worth Inlet project?**

A. The plan is to widen and deepen the channel and employ an improved advance maintenance plan. Once completed, the project will improve ship maneuverability and navigation safety, and will decrease operations and maintenance events, saving approximately \$850,000 annually. (COL Dodd's column, pg. 2)

**7. For what accomplishment was Jacksonville District's small business program recently recognized?**

A. The district was recognized for awarding \$2.9 million in contracts to AbilityOne nonprofit agencies, the second highest dollar amount awarded to AbilityOne contractors by a Corps district. (Jacksonville District receives the AbilityOne award at small business conference, pg. 10)

**8. The theme of the 2014 African American/Black History Month observance was "Civil Rights in America." What milestone did it highlight, and what was its significance?**

A. Black History Month focused on the 50th anniversary of the passage of the 1964 Civil Rights Act, which outlawed major forms of discrimination against racial, ethnic, national and religious minorities and women, ended voter registration inequality and racial segregation in schools, workplaces and other public facilities. (Black History Month events engage and educate, pg. 13)

**9. What is the first thick-arch, roller-compacted concrete dam in the U.S. Army Corps of Engineers' inventory, and where is it located?**

A. Portugués Dam near Ponce, Puerto Rico. (Jacksonville District makes history with completion of Portugués Dam, pg. 3)

**10. What is the current and recommended depth for the federal channel at Jacksonville Harbor?**

A. The current depth is 40 feet, and the recommended depth is 47 feet. (COL Dodd's column, pg. 2) ♦



# HOLOCAUST

## NATIONAL DAYS OF REMEMBRANCE

genoclast

gen-o-blast \jə-nə-ˈblɑːst\ n [ˈgen- + -blast]: a natural germ cell — gen-o-blas-tic \jə-nə-ˈblɑːstɪk\ adj

gen-o-ci-dal \jə-nə-ˈsɪd-i-əl\ adj [ˈgen- + -cid- + -al]: tending toward or producing genocide (~ acts) (the degradation of anthropology to a ~ weapon by the Nazis — *Scientific Monthly*)

gen-o-cide \jə-nə-ˈsɪd\ n-s [ˈgen- + -cid-] 1: the use of deliberate systematic measures (as killing, bodily or mental injury, or unfavorable conditions, prevention of births) calculated to bring about the extermination of a racial, political, or cultural group or to destroy the language, religion, or culture of a group 2: one who advocates or practices genocide

gen-o-cline \jə-nə-ˈklaɪn\ n [ˈgen- + -cline]: a sequence of intergrading forms produced by hybridization between adjacent genetically distinct populations — compare ECOCLINE, GENE FLOW

gen-o-ese \jə-nə-ˈwiːz, -ēs\ adj, usu cap [Genoa, Italy + E -ese] 1: of, relating to, or characteristic of Genoa, Italy 2: of, relating to, or characteristic of the Genoese

gen-o-ese \jə-nə-ˈwiːz, -ēs\ adj, usu cap [Genoa, Italy + E -ese] 1: of, relating to, or characteristic of Genoa, Italy 2: of, relating to, or characteristic of the Genoese

### Confronting the Holocaust: AMERICAN RESPONSES

800,000  
KILLED IN  
100 DAYS  
1994

100 FRANQUE NATIONAL DU RWANDA

Rwanda

Rwandaise

UMUKONDO W'UTUHAWE

# Volunteers contribute to recreation program in many ways

STORY BY ERICA SKOLTE  
PHOTOS COURTESY OF PHILLIP HART



Volunteer Flo Chapman (right) discusses with a visitor the many options for camping around Lake Okeechobee.

How much does Jacksonville District appreciate its volunteers? Let us count the ways. April 6-12 is Volunteer Appreciation Week, a good time to recognize the many roles our volunteers play and the valuable contributions they make to support Corps missions every day.

The Corps' volunteer program helps to sustain missions such as recreation and water safety when challenges like shrinking budgets occur. Since October 2013, the volunteer program has already saved the Corps more than \$196,000 in staff-hours. These dedicated and talented volunteers act as park and visitor center hosts, perform special projects and maintenance tasks, and provide public water safety education.

## Park Hosts

Park hosts have welcomed more than 100,000 visitors to district recreational areas in south Florida since October 2013. They ensure that visitors comply with rules and regulations of the park. "You can tell that the host is really great when we have compliance with the rules, and no complaints," said park ranger and volunteer coordinator Phillip Hart. "They also clean the park on the days that the Goodwill custodians cannot do so. They have never been asked to do this cleaning, they just do it. Pride in a beautiful park is their reward."

## Visitor Center Hosts

The visitor center hosts are the first contact visitors have with the U.S. Army Corps of Engineers at Corps recreation areas. These hosts perform a variety of tasks, including greeting visitors, proofreading documents, working on spreadsheets, scheduling schools for the water safety program and more.

## Maintenance

Three volunteers work on maintenance projects, saving hundreds of thousands of dollars a year by reclaiming building materials and using volunteer staff-hours. They work on projects at W.P. Franklin and Ortona Locks, along the Okeechobee Waterway and the Central and South Florida project. Each year and with few resources, they find new and creative

ways to add amenities to the parks and keep them beautiful. This year, they created a bridge over a swale to Sessler Road, providing safe access for fishermen. "The neat thing is that I asked whether they could do this project with no money or new materials. They were able to construct the bridge using composite material, wood, bolts and nuts that were used or leftover from other projects," said Hart.



Volunteers George Schisler (left) and Donald Chapman (right) constructed this bridge using scrap composite material and lumber to provide safer, better access for the fishermen who use the recreation area.

## Water Safety

Corps volunteers visit schools and teach water safety to kindergarten through fifth grade students. This year, the volunteers will reach out to more than 49,000 children. "This program saves the lives of our children," said Hart. "Thousands of dollars and staff-hours are also saved because volunteers conduct this important program. These folks are up at 5 a.m., drive through rush hour traffic, and put hundreds of miles on their own personal vehicles to ensure the children of south Florida are safe in and around the water. It is just another way that our volunteers provide much-needed and greatly appreciated support and service to the Corps, the public and the nation." ♦



Park host Bonnie Latour checks the life jackets at the life jacket loaner station at the W.P. Franklin boat ramp, where boaters can borrow free life jackets for the day.

# Volunteers instrumental in Regulatory mission success

BY NAKEIR NOBLES



Retirees Pete Cangialosi (left) and Audrey Sibbald volunteer at the Fort Myers Regulatory Office. Cangialosi, a former environmental engineer, and Sibbald, who wanted something interesting and challenging after retirement, found the perfect fit in supporting the team as it investigates potential unauthorized or non-compliant actions.

In administering the U.S. Army Corps of Engineers' largest regulatory program, the Jacksonville District team values the work of volunteers to help accomplish its mission.

Behind the district's involvement in wetland restoration, watershed protection and regulatory activities are volunteers who are gaining valuable knowledge about the environment

in which they live, work and play – and they're using that knowledge to contribute to a healthy environment.

Volunteers who choose to donate their time to the Corps can expect to be exposed to fieldwork that allows them to assist with wetland identification and delineations; intergovernmental relations and administrative and public outreach.

Audrey Siu, a biologist and volunteer program coordinator with the Miami Regulatory office, has been with the district nearly seven years and works with the volunteers on a daily basis.

"Our office currently has four volunteers with jobs from clerical tasks such as file creation to writing complex multivariable decision documents." The volunteers, Siu says, "are highly motivated and produce an appreciable amount of work. Ultimately, the office staff reviews their documents."

Katherine Kelly and Lizzie Garcia, who both began volunteering with the Miami office in January 2013, and Alec Basseda, who began in early 2014, all value the experiences they've had and the lessons learned.



Graduate student Alec Basseda volunteers with the Miami Regulatory office. Basseda has been with the office since January 2014. (Photo provided by Megan Clouser)

Kelly says she started volunteering to see if she would like it. She did, and is "hoping to find something similar after graduation."

They all hope to remain in the regulatory field after graduation.

"I am interested in policy and environmental regulation within the marine environment," Garcia said. I hope to go to law school and continue with policy," while Basseda may be venturing toward consulting.

Siu says many volunteers are college students who are required to provide a minimum of 10 volunteer hours a week. "Ten hours helps them understand the fundamentals of the regulatory program. In return for their dedication, they may earn college credit for an independent study. More importantly, they leave the volunteer program with a real-world understanding of how laws and regulations are implemented," said Siu. "If they choose to enter the public sector upon graduation, they are well-prepared."

**Volunteer Appreciation Week**  
April 6-12, 2014



**THANK YOU FOR GIVING YOUR TIME**

## VOLUNTEERS (continued from PAGE 27)



Lizzie Garcia (left) and Katherine Kelly with certificates of appreciation from the Miami Regulatory office. Both will soon graduate and pursue careers within the regulatory arena. (Photo provided by Megan Clouser)

Volunteering in the Miami Regulatory office, "has been a great learning experience to apply to the real world. The site visits allow us to apply the work we do in the office to the field," Garcia said.

In contrast, while the Miami volunteer staff is mostly college students, the Fort Myers volunteer staff is a little different.

Cynthia Ovdenk started the volunteer program for the Fort Myers office in 2005, and at any one time, trains and supervises up to six volunteers to assist the enforcement section program.

Audrey Sibbald and Pete Cangialosi, both retirees, have volunteered in the enforcement section in Fort Myers for about a year. Each volunteer about six hours a day; however, if accompanying a project manager on a field visit, the day may be a little longer.

Sibbald, a recent retiree, said she was "looking for something interesting and challenging and this [regulatory] fit the bill." She reviews permits and permitting documentation submitted by the permit applicant. "The work I do helps keep the project on track."

Cangialosi, who retired to Florida from Minnesota, said that in looking for volunteer work, he wanted something in the environmental area. He is a former environmental engineer.

Both Sibbald and Cangialosi say they enjoy the Corps work, although they wish they could do more. "We do something beneficial...we feel we could do more if we had more tools at our disposal," they said. As volunteers, they are unable to access the Corps' computer system. "That's understandable," they said.

"If we had our own computers, we wouldn't have to interrupt staff to help us help them," Cangialosi said.

Despite the challenges, Cangialosi says volunteering affords him the opportunity to have relationships with other technical people, while learning about other areas of ecology. ♦

## Serving through volunteerism

Volunteer Appreciation Week is April 6-12

### Find a volunteer opportunity:

- America's Natural and Cultural Resources Volunteer Portal: [www.volunteer.gov](http://www.volunteer.gov)
- United We Serve: [www.serve.org](http://www.serve.org)
- Points of Light: [www.pointsoflight.org](http://www.pointsoflight.org)

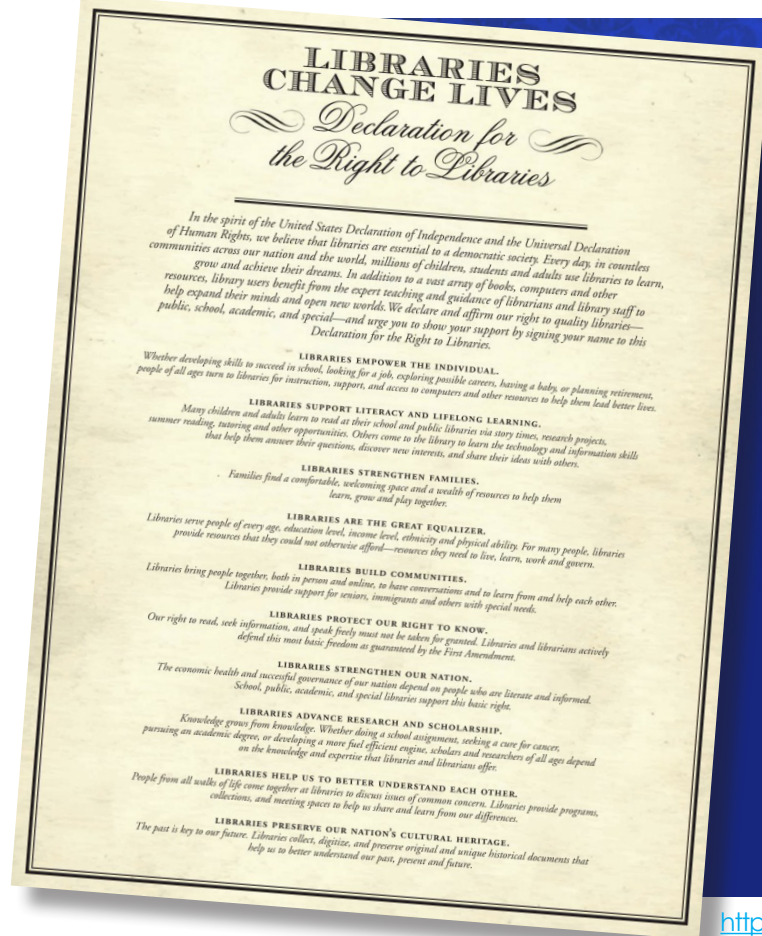


### Benefits for volunteers:

- As a way to thank volunteers, an annual pass is awarded to those who volunteer at least 250 hours at one or more recreation sites managed by the Department of the Interior's Bureau of Land Management, National Park Service, U.S. Fish & Wildlife Service, Bureau of Reclamation and the Department of Agriculture's Forest Service. The pass is good for one year from the date of issuance, and covers the pass holder and up to three guests for entrance or amenity fees. For more information about the pass, visit: <http://store.usgs.gov/pass/volunteer.html>.
- The U.S. Army Corps of Engineers has a similar program. Volunteers who accrue 100 hours of service at Corps facilities may receive an Annual Day Use Pass that permits the holder and all accompanying passengers in a vehicle to use any or all boat launch ramps and/or designated, developed swimming beaches at any Corps-operated recreation area for one year from date of issuance, except at facilities located within a fee campground and reserved exclusively for the use of campers. ♦

OVERSEAS CONTINGENCY OPERATIONS  
WELCOMEHOME

RICK MCMILLEN



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In the spirit of the United States Declaration of Independence and the Universal Declaration of Human Rights, we believe that libraries are essential to a democratic society. Every day, in countless communities across our nation and the world, millions of children, students and adults use libraries to learn, grow and achieve their dreams. In addition to a vast array of books, computers and other resources, library users benefit from the expert teaching and guidance of librarians and library staff to help expand their minds and open new worlds. We declare and affirm our right to quality libraries—public, school, academic, and special—and urge you to show your support by signing your name to this Declaration for the Right to Libraries.

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- Libraries support literacy and lifelong learning.*
- Libraries strengthen families.*
- Libraries are the great equalizer.*
- Libraries build communities.*
- Libraries protect our right to know.*
- Libraries strengthen our nation.*
- Libraries advance research and scholarship.*
- Libraries help us to better understand each other.*
- Libraries preserve our nation's cultural heritage.*

<http://www.ilovelibraries.org/declaration/sign>



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U.S. Army Corps of Engineers, Jacksonville District

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