



**JAXSTRONG**

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- CONGRESS AUTHORIZES EIGHT JACKSONVILLE DISTRICT PROJECTS
- WATER MANAGERS PREPARE FOR WET SEASON
- ARMY VALUES: INTEGRITY
- ...AND MORE



# JAXSTRONG

*jacksonville*

OUR WORK • OUR PEOPLE • OUR DISTRICT

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# COMMANDER'S CORNER

## MESSAGE FROM COL. ALAN DODD

JACKSONVILLE DISTRICT GETS THE JOB DONE—ON WEEKENDS AND HOLIDAYS AS WELL

As America celebrates the 238th anniversary of its founding, many people will take to roads and waterways to enjoy the multitude of recreational opportunities offered by the U.S Army Corps of Engineers. This month, I want to highlight the contributions of the people who are frequently called upon to sacrifice their weekends and holidays so the rest of us can enjoy time off in a safe and relaxing manner.

Many people work within our Operations Division to help Floridians enjoy their time off. Our lock and dam operators help facilitate the movement of boat traffic at five locations on the Okeechobee Waterway (OWW) and at Port Canaveral. During normal operations, these locks are open at least 12 hours daily, including weekends and holidays, 365 days a year. The operators at these locations work many long hours to keep commercial and recreational boaters safe as they transit the locks.

Our park rangers and volunteers help facilitate safe movement into and out of campgrounds and other recreation facilities. They educate people on the missions, roles and responsibilities of the Corps through presentations and exhibits. So much of this interaction comes after "normal" business hours and on weekends. However, the value they add to our organization is immeasurable in terms of the goodwill they develop by nourishing an environment conducive to friends and families enjoying each other's company at our recreation facilities.

However, it's not only lock operators and park rangers who frequently sacrifice their weekends. Another group of workers that spend a lot of time on the water when others are relaxing are those who work the district's hydro-survey program. Travel demands and contract schedules frequently force members of this group to work while others are relaxing. Additionally, constantly changing weather, sea and tidal conditions dictate when work can be performed and schedules are regularly adjusted to meet the requirements.

From time to time, we have all had to pull assignments on weekends and holidays. Occasionally, Engineering will be asked to work on designs; Contracting may be asked to tweak a procurement. All of us face deadlines to allow others within the Army Corps of Engineers family to perform their work in a timely manner. As your commander, I greatly appreciate the extra effort each of you contributes to complete our missions.

In closing, I hope each of you is able to spend some special time with your family and friends over the Independence Day weekend. I personally ask that you keep safety in the forefront of all activities. The information shared by the Safety Office's "101 Critical Days of Summer" campaign is very valuable. Please take a moment to review this information. Assess your situation, consider your options and take appropriate action.

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Colonel, U.S. Army  
District Commander

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## ON THE COVER

In support of the Miami Harbor deepening and widening project, artificial reefs were constructed and about 1,000 healthy corals were relocated. Here, a diver carefully attaches corals to the artificial reef structure after relocating them from the edge of the channel. (Photo courtesy of CSA Ocean Sciences, Inc.)



# Corps makes good progress on Miami Harbor project

BY SUSAN JACKSON



*Acropora cervicornis* (staghorn coral, an endangered species), relocated by CSA Ocean Sciences, Inc. scientific divers, seems to be adjusting. GPS coordinates will guide monitors directly to the relocation sites. (Photo courtesy of CSA Ocean Sciences, Inc.)

Progress is moving swiftly with the Miami Harbor deepening and widening project, including the successful construction of artificial reefs and relocation of about 1,000 healthy corals.

Jacksonville District and its contractors are now at the 35 percent completion mark, with more than one million cubic yards of material removed and the majority of mitigation construction completed.

Operations began in November to dredge about 2.1 million cubic yards of material from the harbor entrance, relocate coral, create artificial reef and construct seagrass mitigation sites. This outer channel work is scheduled for completion by November. The project also includes deepening and widening the inner channel, with full project completion scheduled for July 2015.

The Corps' contractor, Great Lakes Dredge & Dock Company, continues construction of approximately ten acres of artificial reefs. Divers and scientists have already transplanted healthy corals greater than 25 centimeters and more than 700 healthy corals 10 centimeters or larger from the project area to adjacent natural reef tracts and onto a portion of the newly created artificial reefs. Divers carefully harvested the corals from the channel's edges, as collecting from the channel bottom was too dangerous in the busy port.

Thirty-eight staghorn coral (*Acropora cervicornis*) colonies, a branching coral species that's listed as "threatened" and therefore protected under the Endangered Species Act, were relocated outside the project area, to avoid potential impacts. A fragment from each coral was also collected and

transported to a permitted *Acropora* nursery at the University of Miami's Rosenstiel School of Marine and Atmospheric Science. The National Marine Fisheries Service's 2011 Biological Opinion included these and additional measures to minimize impacts to the coral colonies and preserve genetic material to aid in the recovery of the species.

As part of the Army Corps of Engineers' two-year coral relocation monitoring program, scientists assessed the staghorn colonies about 40 days post-relocation to evaluate survivorship, health, security of the reattachment bond and any breakage of branches.

"After 40 days, all of the 38 relocated staghorn colonies were alive and in good health, with only minor bleaching and partial mortality," said scientist Anne McCarthy from CSA Ocean Sciences, Inc. "Encouragingly, several colonies were also observed as having new tissue growth over the epoxy base, demonstrating the coral's ability to rapidly adapt to its new environment."

McCarthy and her team conducted a comprehensive survey of corals, using a diver-operated underwater navigation system that allowed for the precise location of candidate corals for relocation. Scientific divers also conducted a visual health assessment of each coral colony to document any signs of disease, bleaching, or recent tissue mortality to provide a baseline for later comparison during monitoring.

"I'm very pleased with the overall progress," said Laurel Reichold, project manager. "The mitigation construction and relocations went exceptionally well, and we anticipate a very

## MIAMI CORALS (continued from PAGE 3)



Biologist Terri Jordan-Sellers on the job at Miami Harbor. She works closely with environmental and wildlife agencies to ensure Army Corps of Engineers projects are conducted in a way that avoids or minimizes impacts to marine life or habitat. (Photo courtesy of Terri Jordan-Sellers)

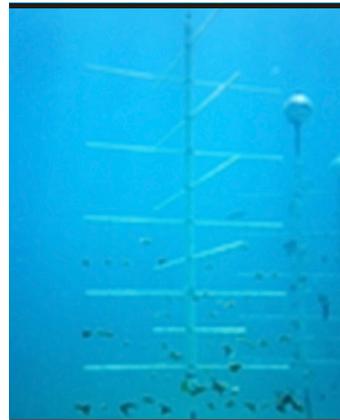
good survival and growth rate for the relocated corals."

Once the coral relocation work was completed, the Corps opened the project area to the Florida Fish and Wildlife Conservation Commission for a limited time, so permit holders could also collect additional marine resources prior to dredging.

Corps biologist Terri Jordan-Sellers, who works closely with environmental and wildlife agencies and similar parties, said she was pleased the Corps was able to provide an access window. "Staying on schedule with construction work is extremely important, and I'm very glad we were able to provide an opportunity for recovery of some corals that would have otherwise been lost."



Scientific divers surveyed coral locations and documented their conditions prior to beginning relocation efforts. The healthiest corals, like this one, were selected for relocation. (Photo courtesy of CSA Ocean Sciences, Inc.)



Relocated coral will grow fairly swiftly from this artificial reef structure, located north of the Miami Harbor entrance channel. (Photo courtesy of CSA Ocean Sciences, Inc.)

Excavation – or stripping off loose materials – construction started June 7 and will last several weeks, followed by cutter-suction operations - or digging out the rock in the outer channel area. After this occurs, the Corps will have a good idea of areas that might require underwater confined blasting.

"So far, Great Lakes [Dredge and Dock] has made

### Did you know?

- Although coral is often mistaken for a rock or a plant, it's actually composed of tiny, fragile animals called coral polyps. There are hundreds of different species of corals, generally classified as either hard or soft coral. Hard corals grow in colonies and are the architects of coral reefs.
- Coral reefs are found in more than 100 countries.
- The coral reefs existing today began growing as early as 50 million years ago, and their ancestors were formed at least 350 million years ago.
- Corals need sunlight and clear, clean, warm saltwater to survive. Corals grow at different rates, depending on water temperature, salinity, turbulence and food availability.

**MIAMI CORALS** (continued from **PAGE 4**)

significant progress dredging the outer channel without the need for blasting," Reichold said. "Confined underwater blasting may occur in the October timeframe if conventional dredging methodologies can't excavate the material, but we won't know where or how much may be required until then."

Used successfully in Miami Harbor in 2005, confined underwater blasting is a method that pre-treats or fractures the top of bedrock prior to dredging. The majority of blast energy is confined in the rock, and studies show that by using this technique there's an up to 90 percent decrease in the strength of the pressure wave, which helps protect the ecosystem. The Corps' detailed plan includes extensive monitoring and protocols to ensure protection of wildlife. These protocols were shown effective during the 2005 job, as there were no reported injuries or deaths of mammals, sea turtles or any other sustained habitat impacts.



A CSA Ocean Sciences, Inc. diver carefully guides crates during transport of coral colonies. (Photo courtesy of CSA Ocean Sciences, Inc.)

Go to <http://www.youtube.com/watch?v=6hrktfPANMM> to watch a 35-minute video in which Jordan-Sellers explains underwater confined blasting, using examples from operations conducted in Miami Harbor and other projects. Jordan-Sellers also teaches environmental science at Jacksonville University, and requires her students to view this video.

Dr. Mark Fonesca, CSA scientist and world-renowned expert on seagrass restoration, is the senior ecologist implementing the project's ongoing seagrass mitigation plan. Fonesca literally wrote the seagrass restoration book during his 30 years with the National Oceanic and Atmospheric Administration as a research scientist and research branch chief.

"I feel like I'm working with the "A Team," Jordan-Sellers said. "I couldn't have selected a better group of scientists - and they bring with them the latest and greatest equipment and technologies. It's wonderful to be a part of this and learn so much from others." ♦

## Florida II provides capability to perform important archaeological research

BY ERICA SKOLTE

PHOTOS BY NATALIE GARRETT



The Florida II in port, as it awaits another mission.

The *Florida II* is a survey vessel, but it has the capability to provide much more information than just water depth. The design specifications and specialized equipment it carries make it possible to do many different types of surveys, and suitable for underwater archaeological research.

"As part of National Environmental Policy Act (NEPA) compliance, we have to do cultural resource surveys on all projects we initiate, whether they are terrestrial or underwater, at least a year in advance of work being done," said Natalie Garrett, archaeologist. "That includes upland dredge disposal sites and inlets like Jacksonville Harbor. We need to make sure that there are no historic sites, including shipwrecks, such as those from the Civil War and World War II."

"We have to identify any sites within our project areas and coordinate with the State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officer (THPO) and take any actions required to make sure the sites aren't adversely affected," said Wendy Weaver, an archaeologist with special training in underwater archaeology, who has been evaluating terrestrial and submerged cultural resources with the U.S. Army Corps of Engineers for five years.

During a cultural resources survey, archaeologists look for historic properties, including structures, shipwrecks and potential prehistoric or other archaeological sites.

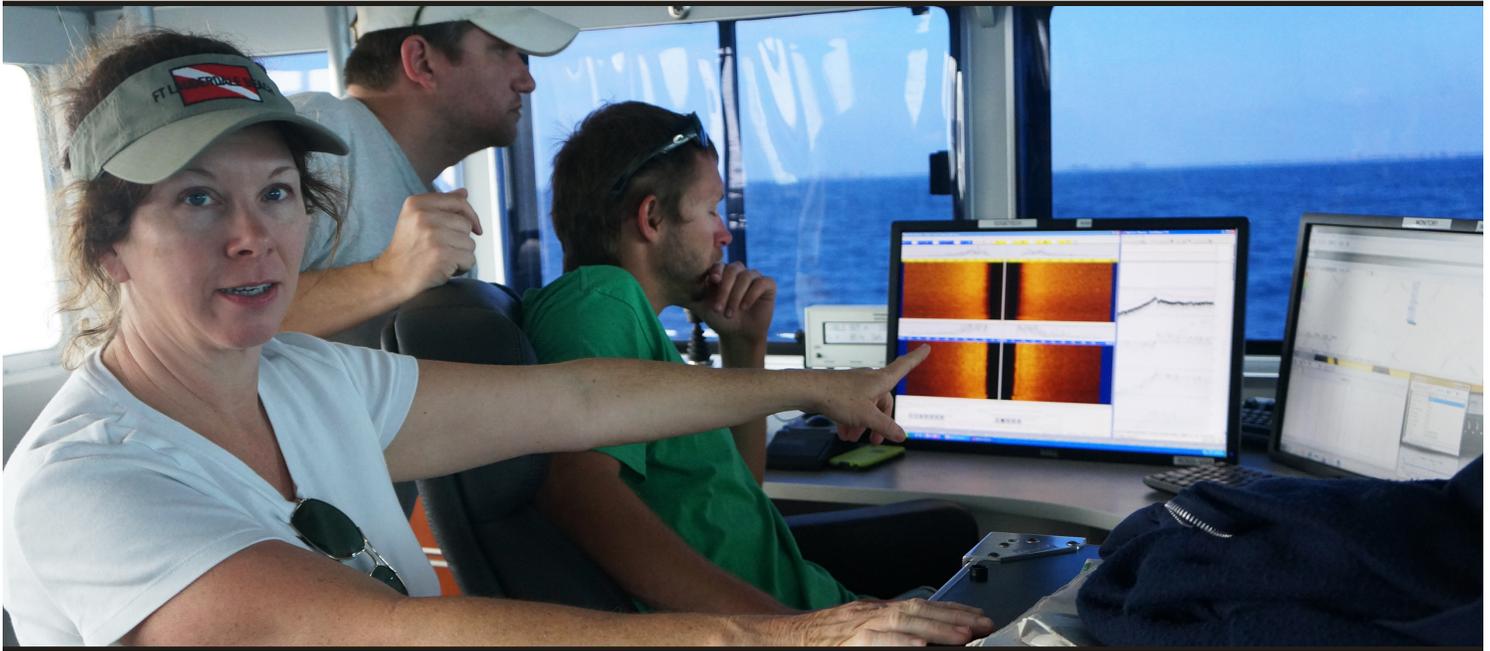
Shipwrecks are protected by the state of Florida, and in federal waters, they are protected under the National Historic Preservation Act (NHPA) and the Abandoned Shipwrecks Act. Sometimes there will be a buffer zone around a site, and prohibitions against any bottom-disturbing activities, such as dredging, dumping or anchoring.

"I was really impressed with the capabilities of the *Florida II*. We are capable of doing many archaeological surveys in house, rather than having to contract [the work] out," said Weaver.

The *Florida II* is fully equipped with specialized software, hardware and equipment that is deployed and towed off the stern of the vessel. One specialized piece of equipment that can be towed is a magnetometer, which is similar to a metal detector. It picks up on materials that have some component of iron, but does not detect gold, silver, aluminum or brass.

(CONTINUES ON **PAGE 6**)

## FLORIDA II CAPABILITIES (continued from PAGE 5)



Archaeologist Wendy Weaver (left) and *Florida II* crew members Matt Staley (center) and Chad Harralson (right) review data in real time as they tow the equipment in transects over a pre-selected area. The left monitor shows the sub-bottom profiler with results in orange and the side scan sonar on the right. The magnetometer readings are visible on the far right monitor.

Things like fiberglass hulls would not be picked up, but rigging and engine parts would. Metal ship hulls, cannons, anchors and anchor chains and even old wooden shipwrecks with nails could be detected, as well as things like unexploded ordnance. Magnetometers are also helpful for finding shipwrecks that have been covered by sand during hurricanes.

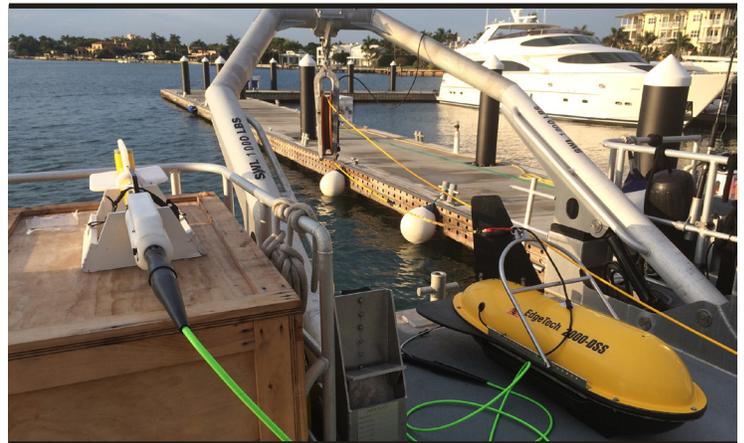
Another feature is the side scan sonar, which takes a picture of the surface using sound waves. It can find boats, debris and objects like crab traps sitting on the surface.

The sub-bottom profiler penetrates below the surface. It shows reef areas and other formations that might support marine life, as well as old shorelines, where it is common to have archaeological sites. It can show things like old riverbeds and shell middens, piles of shell that may indicate that there was an archaeological site there before the sea level rose and covered it.

Archaeologists know that archaeological sites on land often project out onto the continental shelf, since some of the areas that are currently underwater once were previously on dry land. For example, when the paleochannels (former river channels that don't exist anymore because they are now totally underwater) of the Econfina and Aucilla Rivers were followed three miles out into the Gulf of Mexico, archaeologists found a mastodon kill site in about 15 feet of water. Arrowheads, mastodon teeth and bones were evidence that the site was where a huge mastodon was killed and butchered.

"That's why it's important to look for archaeological sites underwater," said Weaver. "There's always the potential for them to occur. We have found some promising sub-bottom data on the Atlantic Coast, but haven't identified any archaeological sites as of yet."

"We have done some surveys in smaller vessels in shallower water, but offshore, the *Florida II* provides a bigger, more stable platform that allows work to continue even in rougher weather," said Weaver. "In addition, the survey grid is programmed in, so the transects that the vessel follows are very uniform." ♦



The large yellow capsule is the Edgetech 2000DS, which houses the side scan sonar and sub-bottom profiler. The side scan sonar sees the surface of the ocean floor and the sub-bottom profiler detects features just beneath the surface. Attached to this equipment via the green cable is the magnetometer, which is like a metal detector that picks up ferrous materials above and below the surface of the ocean floor, particularly ship hulls, ship elements, fittings, cannons, anchors and more.



Specialized research equipment can be towed underwater off the stern of the *Florida II*. The equipment provides important data required for many different types of Corps projects.

# Congress authorizes eight Jacksonville District projects

BY JENN MILLER



The Canaveral Harbor deepening project will improve navigation safety and allow passage of larger ships. (USACE file photo)



The Biscayne Bay Coastal Wetlands Project, one of eight included in the Water Resources Reform and Development Act signed June 10, will improve the ecology of Biscayne Bay, including the freshwater wetlands, tidal creeks and near-shore habitat. (USACE file photo)

Eight U.S. Army Corps of Engineers, Jacksonville District projects that will provide critical infrastructure to local ports and ecosystem restoration efforts in Florida received approval as part of the Water Resources Reform and Development Act (WRRDA) of 2014, which was signed by President Barack Obama June 10.

Four navigation projects and four Everglades restoration projects were included in the bill that, in total, authorized 34 Corps projects across the nation.

“Receiving authorization for these projects demonstrates the valuable work we’re doing here in Florida and the quality work Jacksonville District continues to deliver,” said Col. Alan Dodd, Jacksonville District commander. “Congressional authorization is the first step. It now makes these projects eligible for funding during the appropriations process. After receiving appropriations, we can then finalize designs, partnership agreements and contract actions that will enable us to start construction.”

The eight Jacksonville District projects that have received congressional authorization are:

- Jacksonville Harbor’s Mile Point Project: Will improve navigation safety by reducing the impacts of ebb tide crosscurrents at the confluence of the St. Johns River with the Intracoastal Waterway.
- Jacksonville Harbor Project: Will deepen the Jacksonville

Harbor channel to allow passage of larger ships, thereby reducing transportation costs and improving navigation safety.

- Canaveral Harbor Project: Will deepen Canaveral Harbor to improve navigation safety and allow passage of larger ships.
- Lake Worth Inlet Project: Will widen and deepen Lake Worth Inlet to increase overall port efficiency and safety and generate transportation cost savings.
- Caloosahatchee River (C-43) West Basin Storage Reservoir Project: Will capture and store basin stormwater runoff, along with a portion of water discharged from Lake Okeechobee; water will be slowly released into the Caloosahatchee River.
- C-111 Spreader Canal Western Project: Will preserve clean water for Everglades National Park and restore freshwater flows to Florida Bay.
- Broward County Water Preserve Areas: Will reduce seepage loss from Water Conservation Area (WCA) 3A/3B to the C-11 and C-9 basins and capture, store and distribute surface water runoff from the western C-11 Basin that has been discharged into WCA 3A/3B.
- Biscayne Bay Coastal Wetlands Project: Will improve the ecology of Biscayne Bay, including the freshwater wetlands, tidal creeks and near-shore habitat by redirecting freshwater runoff that is currently being discharged through man-made canals directly into Biscayne Bay. ♦



Pictured here is a test cell for the Caloosahatchee River (C-43) West Basin Storage Reservoir Project. The project will capture and store basin stormwater runoff, along with a portion of water discharged from Lake Okeechobee, before release into the Caloosahatchee River. (Photo by Patrick Lynch, South Florida Water Management District)



Jacksonville Harbor’s Mile Point Project will improve navigation safety by reducing the impacts of ebb tide crosscurrents at the confluence of the St. Johns River with the Intracoastal Waterway. (USACE file photo)

# How will you spend your summer vacation?

Jacksonville District's recreation areas always ready to welcome visitors

BY NANCY J. STICHT



Biking is one of several activities available on the Lake Okeechobee Scenic Trail. (Photo by Bill Schell)

July may be designated as National Parks and Recreation Month, but every year, all year, millions of people travel to south Florida to enjoy the U.S. Army Corps of Engineers, Jacksonville District's recreation areas at Lake Okeechobee and the Okeechobee Waterway. The district's campgrounds and day use areas offer a host of recreational opportunities for all ages.

## Campgrounds

The Ortona South campground, on the Caloosahatchee River near Moore Haven, Florida, boasts 51 tent or recreational vehicle (RV) campsites with electric and water hookups. Additional amenities include hot showers, restrooms, washers and dryers and fishing piers.



Sunrise at the St. Lucie South Campground in Stuart, Florida, one of three campgrounds and recreation areas along the Okeechobee Waterway managed by the U.S. Army Corps of Engineers, Jacksonville District. (Photo by Brad Keshlear)

Also located on the Caloosahatchee River about a 15-minute drive from the Gulf of Mexico, the W.P. Franklin North campground provides 30 Class A tent/RV sites and eight boat-in sites, all with electric and water hookups. Amenities include hot showers, restrooms, a boat ramp and courtesy dock and a fishing pier.

The St. Lucie South campground, located on the St. Lucie Canal ten minutes from Stuart, Florida, has three tent and nine RV campsites with electric and water hookups and eight boat-in sites. Amenities include hot showers, restrooms, a playground, a boat ramp and courtesy dock and fishing piers.

At all three campgrounds, campfires are permitted in grills

and fire rings and pets are welcome. Pets must be penned or leashed, and pet owners are responsible for cleaning up after their pets.

Additional information, including directions, hours and days of operation, fees and more is available on Jacksonville District's website at: <http://www.saj.usace.army.mil/Missions/CivilWorks/Recreation/Camping.aspx>. Reservations may also be made at [www.recreation.gov](http://www.recreation.gov) or by calling toll free 1-877-444-6777.

## Day use areas

W.P. Franklin South facilities include a swimming beach, picnic tables, two picnic shelters, a boat ramp, playground, horseshoe pit, sand volleyball court and restrooms.

St. Lucie South features a boat ramp, fishing area, picnic tables, picnic shelter, horseshoe pit, playground and restroom.

St. Lucie North facilities include a fishing pier, group area, picnic tables, picnic shelter, nature trail and restroom.

Ortona North amenities include picnic tables, two picnic shelters, a boat ramp and restroom.

Picnic shelters at each day use area have electric and water facilities and grills, and are located close to restrooms. They may be reserved for group or special occasions. In some areas, day use fees are charged for some amenities; an annual pass is also available.

W.P. Franklin and St. Lucie South each have a newly renovated visitor center featuring local information and fun, interactive displays.



Picnic tables are available at all day use areas. (Photo by Mark Claudio)

**RECREATION** (continued from PAGE 5)

The scenic vistas along the Lake Okeechobee Scenic Trail provide the perfect backdrop for walking, hiking, rollerblading, biking or horseback riding. (Photo by Bill Schell)

Additional information, including directions, hours and days of operation, fees and more is available on Jacksonville District's website at: <http://www.saj.usace.army.mil/Missions/CivilWorks/Recreation/DayUseAreas.aspx>.

**Boating and fishing**

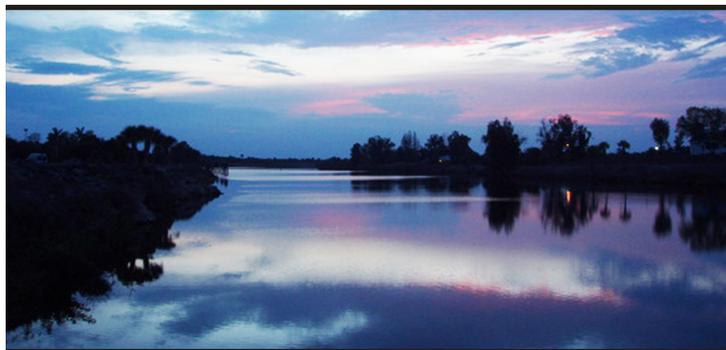
The 152-mile long Okeechobee Waterway stretches from the Gulf of Mexico to the Atlantic Ocean and is divided into three distinct sections: the Caloosahatchee River, Lake Okeechobee and the St. Lucie Canal. To cross Lake Okeechobee, choose between open-water crossing of 39 miles or travel along the shoreline before entering a tree-protected rim canal, along a 50-mile route.

Jacksonville District manages five navigation locks and five boat

ramps along the Okeechobee Waterway, at St. Lucie South Recreation Area, Ortona North Recreation Area, W.P. Franklin South and North Recreation Areas and at Port Mayaca. A \$3 fee is charged for boat ramp use for all except Port Mayaca, which is free. An annual pass is also available.

Lake Okeechobee and the Okeechobee Waterway provide excellent fishing with more than 60 species of fish, including largemouth bass, bluegill, Okeechobee catfish and black crappie. Saltwater species such as tarpon and snook may also be found near the W.P. Franklin and St. Lucie Locks.

Additional information about boating and fishing on Lake Okeechobee and the Okeechobee Waterway may be found at: <http://www.saj.usace.army.mil/Missions/CivilWorks/Recreation/BoatingFishing.aspx>.



The Ortona South offers 51 tent or recreational vehicle (RV) campsites as well as views like this one, captured by visitor Warren Bruen and posted on the [www.recreation.gov](http://www.recreation.gov) website, where reservations may be made for campsites at all U.S. Army Corps of Engineers' campgrounds. (Photo by Warren Bruen on [www.recreation.gov](http://www.recreation.gov) website)



Along with 30 Class A tent and recreational vehicle campsites, the W.P. Franklin North campground has eight boat-in sites, a boat ramp, courtesy dock and more. (Photo by Warren Bruen on [www.recreation.gov](http://www.recreation.gov) website)



Sunset from the fishing pier at the W.P. Franklin North campground on the Caloosahatchee River. (Photo by Warren Bruen on [www.recreation.gov](http://www.recreation.gov) website)

**Lake Okeechobee Scenic Trail**

The Lake Okeechobee Scenic Trail (LOST) is approximately 110 miles long and encircles Lake Okeechobee. More than half of the trail is paved, with the remainder a two-track gravel roadway on top of the 35-foot high Herbert Hoover Dike, providing scenic vistas. Visitors enjoy walking, hiking, rollerblading, biking and horseback riding on the LOST. Access is free and available from any of the recreation areas around the lake; however, some areas may be temporarily closed due to ongoing Herbert Hoover Dike rehabilitation.

Additional information about the LOST, including a map and the most current information about trail closures, may be found at: <http://www.saj.usace.army.mil/Missions/CivilWorks/Recreation/LakeOkeechobeeScenicTrail.aspx>. ♦

# Corps water safety volunteers save lives

BY ERICA SKOLTE



Ellen Smith, gym and wellness teacher at Gove Elementary School in Belle Glade, Florida welcomes Bobber the Water Safety Dog to her class. (Photo courtesy of Gove Elementary School)

This is the first year Bill and Jamie Wagner have volunteered in the U.S. Army Corps of Engineers' water safety program, but they put on a show that leaves a lasting impression.

"I've always wanted to make a positive impact. It's a great opportunity to go into the schools and meet the little ones," said Jamie. "One of the benefits of teaching is being a part of the synergy and student interaction during the class."

Jamie demonstrates how to wear a life vest correctly. She teaches students how to choose the right size personal flotation device, how to ensure it's an approved life vest, and how to inspect it for damage such as rips, tears or mildew. First, she tries on a life vest that's child-sized and too small. The children yell, "Too small!" When she tries to put on Bobber the Water Safety Dog's life vest, the children yell out, "Too big!" Finally, she finds one that fits "just right."

"We were coming out of Walmart one day, and three little girls who were there with their moms, recognized us," said Jamie. One of the girls, a first-grader, approached the Wagners and said "I know Bobber's first water safety tip." "What is it?" they asked. "Learn to swim!" the little girl responded. The Wagners were thrilled that their water safety presentation made a lasting impression.

"If we can prevent one child from drowning, we've done our job," said Bill.

"Bill and Jamie Wagner have done a superb job and have developed an upbeat program using water safety based songs, Bobber costume and their own enthusiasm," said Arthur Ruebenson, park ranger at the St. Lucie Lock and Dam. "All program evaluation forms from the schools rate them very highly. They have reached 8,396 school students in 20 schools already this year, and in July, will conduct programs in the St. Lucie County libraries."

## Corps water safety volunteers teach seven of the most important fundamental water safety tips:

1. Learn to swim
2. Wear your life jacket
3. Swim in a safe designated area
4. Make sure an adult is watching you
5. Swim with a buddy
6. Diving can be a paralyzing experience
7. Reach or throw, but don't go

(CONTINUES ON PAGE 11)

**WATER SAFETY** (continued from PAGE 10)

"Our volunteers go out to the schools and teach water safety to children from kindergarten to fifth grade. This year, our volunteers will teach more than 49,000 children about water safety, saving thousands of dollars and staff-hours; but more importantly, saving the lives of our children," said Phillip Hart, park ranger at W.P. Franklin Lock and Dam, and volunteer and water safety coordinator for Jacksonville District. "These folks are up at five a.m., drive through rush hour traffic, do as many as six presentations in one day at each school, and put hundreds of miles on their personal vehicles to ensure the children of South Florida are safe in and around the water."



Jamie Wagner, a volunteer with the Army Corps of Engineers' water safety program, teaches students to "Throw, don't go!" (Photo by Bill Wagner)

Dan and Karen Silverwood volunteered at Ortona Lock and Dam in 2009 and have returned to volunteer at W.P. Franklin Lock and Dam every year since. As seasoned veterans, they teach students and train new volunteers as well.



Dan and Karen Silverwood are one of several volunteer couples who educate children about water safety at the W.P. Franklin Lock and Dam campground. One former student told the couple that their presentation helped her save her cousin's life. (Photo courtesy Phillip Hart)

During one of their presentations, the Silverwoods received the ultimate reward. A little girl came up and said, "Mr. Silverwood, after you taught us how to save someone with a plastic jug with a screw top and a rope last year, I told my dad about it and we made a couple of them and put them on the fence by the pool. We had a family reunion, and no one realized that my cousin, who couldn't swim, had gotten into the pool. When I saw him, I remembered what you taught me: 'Throw, don't go!' I held onto the rope and threw the jug. I pulled him to safety and saved his life!"

"That was a real miracle," said Karen Silverwood, who taught elementary school for 33 years in Ohio. "There is so much water everywhere in Florida; not just in pools, beaches and rivers, but also canals and retention ponds. Our job is so important. We teach water safety to the kids, and they teach it to their families. We love our job."

Julie Begley and Yvonne "Bis" Bisbee recently retired after serving in the U.S. Air Force for many years. Begley was a military training instructor for 23 years before retiring in 2013. Bisbee, a military analyst, retired in 1999 after 20 years of service and worked as an analyst in the private sector for 10 years. This year, they were both first-time water safety volunteers at the W.P. Franklin Lock and Dam near Alva on the Caloosahatchee River.

Begley and Bisbee lived at W.P. Franklin Lock and Dam for five and a half months, working as water safety volunteers in local schools during the school year. Now, they are taking what they learned at W.P. Franklin to the Ice Harbor Lock and Dam in the Corps' Walla Walla District in Washington, where they plan to revive the water safety program on site.



Water safety volunteer Bill Wagner teaches students how to "Wear it tight and wear it right!" (Photo by Jamie Wagner)

"We're really excited about taking [what] we've learned this year at W.P. Franklin Lock and Dam up to Ice Harbor, to get their water safety program back up and running. Of course, we have to adapt the program to include cold water safety also," said Bisbee. "It's near the confluence of the Columbia and Snake Rivers, so there's a lot of water nearby, and it's of paramount importance to teach people about water safety. This time of year, the campgrounds and beaches are full of kids and families. We want to use what we learned to keep everybody safe." ♦

## Morey's ability to communicate through graphics provides invaluable service

BY JENN MILLER



Eric Bush, chief of the Planning and Policy Division (left) and Col. Alan Dodd, district commander (right) present Patrice Morey with the 2014 Professional Analytical Employee of the Year award. "Patrice demonstrates the highest personal standards of quality and integrity," said Bush. (Photo by Jenn Miller)

*Do what's right, legally and morally. Integrity is a quality you develop by adhering to moral principles. It requires that you do and say nothing that deceives others. As your integrity grows, so does the trust others place in you. The more choices you make based on integrity, the more this highly prized value will affect your relationships with family and friends, and, finally, the fundamental acceptance of yourself. – U.S. Army website, [www.army.mil/values/](http://www.army.mil/values/)*

Behind the scenes at the U.S. Army Corps of Engineers, Jacksonville District, technical writer/editor Patrice Morey is busy working with her teammates to effectively communicate intricate plans through the informational products and graphics she creates and the edits she provides to technical reports.

"Patrice's skill of transforming ideas, concepts, report documents, and complex briefing information into graphical and user-friendly products is a difference-making capability that has garnered national attention for Jacksonville District and enhanced our reputation across the south Atlantic region and the nation," said Eric Bush, chief of Jacksonville District's Planning and Policy Division.

Although she usually works behind the scenes, Morey was front and center when Jacksonville District Commander Col. Alan Dodd announced that she had been selected as the district's Professional Analytical Employee of the Year during a June 20 award ceremony.

Morey's dedication to ensuring that accurate, concise information is conveyed and understood by a broad audience is one of her key attributes in upholding the Army value of integrity. Integrity is a quality that is developed by adhering to moral principles. It requires that nothing is said or done that will deceive others. As a person's integrity grows, so does the trust others place in them.

"She fully embodies all of the Army values," said Bush. "She collaborates across all organizational lines to ensure that our work products are accurate, precise, clear and compelling. And she demonstrates the highest personal standards of quality and integrity, unquestioningly providing extra effort to ensure that the works she performs meets her own standards and those of everyone else involved."

Even though Morey technically resides in the district's Planning and Policy Division, she still

## ARMY VALUES

L *Loyalty*

D *Duty*

R *Respect*

S *Selfless Service*

H *Honor*

I *Integrity*

P *Personal Courage*



ARMY VALUES: INTEGRITY (continued from PAGE 12)

works for the entire district, providing support to all mission areas. Some of her recent products were in support of the district's Lake Worth Inlet, Jacksonville Harbor Deepening, Central Everglades and Herbert Hoover Dike Dam Safety Modification studies. Her work doesn't stop there, as she also provides assistance and support for other districts as well, including the Middle East District's work for the Kingdom of Bahrain.

Fifteen years ago, Morey joined Jacksonville District as a visual information co-op. From there she became a visual information specialist and later served as the congressional liaison prior to becoming the district's technical writer/editor.



Patrice Morey, technical writer/editor, collaborates with Marty Durkin, project manager, on an information product that will explain the Flagler Beach Hurricane and Storm Damage Reduction Project to the public. Morey enjoys working with many district teams in developing products that "make a difference." (Photo by Jenn Miller)

"Here at the Corps, I have been very fortunate to work with almost everyone in the building in one way or another. I just want to help people communicate better and more efficiently to capture the audience's attention and better ensure their comprehension of our message – all in an effort to facilitate better decision-making," said Morey. "In all our jobs, we are constantly teaching, facilitating and communicating through our interactions. People learn in different ways, so we have to be able create a product that will be easily understood by as many people as possible. I believe sound public service is based on full participation at all levels—you can't participate effectively if the information isn't available and understandable."

Not only does Morey work to ensure she is developing products that the entire team can stand behind, but she is also willing to take time out of her own schedule to ensure this is achieved; often working long hours and weekends to ensure deadlines are met.

"If I have to work 8, 10, 12 hours a day, I want it to be something towards the greater good," said Morey. "And that's why we do what we do here at the [Army] Corps of Engineers; we want to make a difference and we work hard to do that."

Prior to her time with the district, the Seattle/Baltimore native worked as a banker, lending officer and project manager/planner for a bank, an emergency management planner and a city planner, where she learned the value of communication through her many public engagements in this position.

"You can have the best intentions, but without communicating them properly, you can just forget it," said Morey. "I recognized that we needed to find a better way to communicate with people and knew that graphics would be that equalizer. Even if the graphics weren't perfect, they would facilitate discussion and take the decision making out of the personal realm."

With this realization, Morey decided that she needed to devote herself full-time to art school. She had previously received degrees in economics and planning/community design, and was expanding her toolkit to get a degree in graphic design. Shortly before completing this degree, she was offered a job with Jacksonville District, where she has been working with teams for the past 15 years.

"I am very fortunate to work with team members and an organization that cares about communication," said Morey.

Crediting her urban planning background, Morey is able to streamline complex information into a single graphic, presentation, poster or handout.

"Urban planning is all about finding connections and making a whole. I can usually see the big picture pretty quickly," said Morey. "I can look at all the fine points and figure out how they are all connected and that's what I try to do here."

With her involvement in so many products over the years, the ones that stick out to her are the ones that get to the heart of what she has aimed to achieve during the span of her career—getting to the essence of the message.

"Out of all the public meetings, reports, conferences, posters, town halls I've worked on, what really stands out in my mind are the numerous Civil Works Review Boards (CWRB) I have worked on with teams," said Morey. "The beauty of those CWRBs is that you really have to get to essence of the project and the essence of the message you want to convey."

Whereas many artists often try to retain the original graphics to ensure that they are not modified, Morey's transformed the way she has done graphics to do just the opposite. She creates graphics in basic programs that all employees have on their computers to better ensure that any of her teammates can access the original files and modify them to meet their needs.

"I like efficiency and I like things to make sense," said Morey. "People are often multi-tasking to the max and with all the work that is going on, [they] can't wait for someone to make small changes to their product."

With the time that Morey devotes to extracting key pieces of information into products, she is able to help ensure that it is succinct and that the products she creates are valuable takeaways at any meeting, whether it's a public, interagency or internal meeting.

"Patrice is one of the most valuable employees any organization could have and we are so very fortunate to have her on our team," said Bush. "Her kindness, exceptionally brilliant work and mission-first selfless attitude have helped make Jacksonville District great and have set us as a benchmark for the Corps." ♦

## Water managers prepare for wet season

STORY AND PHOTOS BY JOHN H. CAMPBELL



Water flows from Lake Okeechobee into the Caloosahatchee River at the Moore Haven lock and dam. Flows during 2014 have been much closer to normal following heavy precipitation at the beginning of the 2013 wet season.

“The lake finally dropped below 12.6.”

That’s some of the best news being reported by Jacksonville District Water Management Section Chief Jorge Tous as he looks at the past 12 months, which saw Lake Okeechobee rise as high as 16.05 feet Aug. 10, 2013 and drop to a 20-month low of 12.30 feet June 12, 2014.

“The lower level is healthy for the lake, from an ecology standpoint, and from a water management standpoint,” said Tous. “It helps to have the extra storage capacity this year that we didn’t have in 2013.”

An early start to the wet season in 2013 kept the lake from dropping below 13 feet – its lowest point last year was 13.29 feet on May 27. The loss of water storage capacity became evident when the lake started rising, and the district was left with little choice but to discharge the water in case a tropical system developed that would result in additional heavy rains.

“In 2012, Tropical Storm Isaac caused the lake to rise three-and-a-half feet in a span of six weeks,” said Tous. “We have to constantly maintain storage for the lake during the wet season, because the water level can rise much faster than our ability to lower it.”

The district bases its water control operations on the 2008 Lake Okeechobee Regulation Schedule (LORS). The schedule calls for gradual lowering of levels during the dry season, generating additional storage capacity for heavy rains in the wet season. The water retained in the wet season can be used to supplement the water needs of various stakeholders.

“One of the big challenges in managing this system is attempting to balance the multiple purposes of water in the lake, some of which compete with each other,” said Tous. “Sometimes, it puts the district in a tough position, but the guidance provided by LORS helps ensure consistency in our water management decisions.”

Early forecasts have called for a below-average hurricane season in the Atlantic. However, forecasters continue to monitor the Pacific for the development of El Niño this summer and fall.

“The below average hurricane forecast comes with a price,” said Tous. “El Niño could result in a dry season that has precipitation that is much greater than normal. We are thinking about that and getting prepared.”

If anything can be said about water management, it’s that one storm can completely change the tone of the conversation, as was evidenced with heavy rain events in 2011 and 2012.

“In 2011, we were looking at finishing the wet season with the lake just above 11 feet, which is very low,” said Tous. “Then we had the big rain event over Columbus Day weekend that moved the lake to a level just under 14 feet, allowing us to supplement water supplies on a limited basis for the rest of the year. Tropical Storm Isaac took us from a water shortage conversation to a discussion on keeping the lake from getting too high – all in the span of just a few weeks.”

Over the past year, the water management section has developed a map that illustrates flows throughout the Central & Southern Florida project, which includes Lake Okeechobee. That map can be found at the Water Management webpage at: <http://www.saj.usace.army.mil/Missions/CivilWorks/WaterManagement.aspx>, then click on the “current conditions” button on the right side of the page. ♦

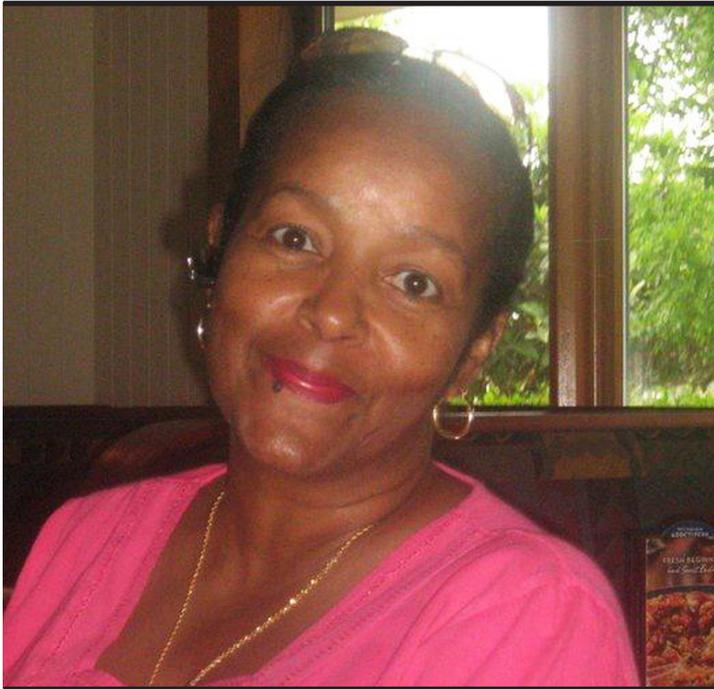


The water in Lake Okeechobee dropped to its lowest level in almost two years in the middle of June, when it hit 12.30 feet. The lower level means more storage to handle summer rains than in 2013, when an early start to the wet season kept the lake from receding to typical levels.



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

BY NANCY J. STICHT



Congratulations to **Shelia Graham, Engineering 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 June issue of JaxStrong. (Photo courtesy of Shelia Graham)

**1. What was the name of the only hurricane to hit northeast Florida in the 20th century?**

A: Hurricane Dora (Dora: A look back, pg. 10)

**2. What is Jacksonville District doing in Haiti?**

A: Assisting in rehabilitating and improving more than 150 kilometers of feeder rural roads. (Corps of Engineers takes the road less traveled to assist in rebuilding Haiti, pg. 13)

**3. What two types of alternative energy did Antilles Elementary School students learn about on a field trip at Fort Buchanan?**

A: Solar and wind power (Antilles students learn about harnessing nature's power, pg. 12)

**4. The district's two Planning and Response Teams provide expertise in what types of missions?**

A: Housing and roofing (Jacksonville District prepares for hurricane season, pg. 3)

**5. How much water will the new three-bay flood control structure at Kissimmee River be able to discharge when it is completed?**

A: 12,000 cubic feet per second (Progress at Kissimmee River, pg. 11)

**6. What is the characteristic that indicates when a tropical storm has become a hurricane?**

A: When its winds reach 74 mph. (COL Dodd's column, pg. 2)

**7. June is National Safety Month. What is the special safety emphasis for Week 4?**

A: Put an end to distracted driving. (Safety: It takes all of us, pg. 21)

**8. What is the Army Corps of Engineers' preferred method of compensatory mitigation for unavoidable impacts to aquatic resources?**

A: Mitigation banking (Regulatory Division introduces new mitigation bank tools, pg. 9)

**9. What Army value is defined by carrying out, acting and living the values of respect, duty, loyalty, selfless service, integrity and personal courage?**

A: Honor (Corps team members live the Army Values, pg. 5)

**10. Following severe storms in the Florida Panhandle, Regulatory's Pensacola permit section processed emergency permits for what type of work?**

A: Bank stabilization and infrastructure repairs (District responds following Florida Panhandle storm, pg. 15) ♦



## Out and about



Lt. Col. Thomas Greco (right), deputy commander for south Florida, was welcomed by Nanette Camody, president of the Hialeah Miami Springs Rotary Club to their recent meeting, where he was the featured speaker. Greco discussed the U.S. Army Corps of Engineers' efforts in the Florida Everglades and provided an overview of the Comprehensive Everglades Restoration program. He emphasized the need for the program and described efforts to preserve the environment while restoration is under way. (Photo courtesy of the Rotary Club of Hialeah Miami Springs)



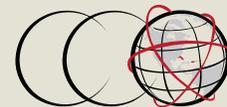
Jessica Spencer (right), biologist in the Invasive Species Management Branch, speaks with a community member at the city of St. Augustine Earth Day event at R.B. Hunt School on Anastasia Island. She teamed with Tina Gordon, co-chair of First Coast Invasive Working Group and biologist at Guana Tolomato Matanzas National Estuarine Research Reserve, to provide information to more than 100 people about recommended native alternatives to common invasive landscape plants. For information on native plant alternatives to invasive plants: <http://bit.ly/alt2invas>. (Photo by Tina Gordon) ♦

## Antilles team welcomes ICE team to new home



Capt. J.C. Cordon, deputy commander for the Antilles, recently welcomed the Border Enforcement Security Task Force from Immigration and Customs Enforcement (ICE) to their new home, renovated office space on a floor of the Antilles Office building in San Juan, Puerto Rico. The renovation was managed by the U.S. Army Corps of Engineers, Jacksonville District under the direction of Jose Mendez, project manager; John Penn, technical and engineering lead; and Mario Caraballo, engineering technician, working alongside Gabriela Coronado and Zuleika Rosario from ICE.

Participating in the June 13 ribbon cutting are, from left, Vito Guarino, director, Drug Enforcement Agency; Angel M. Melendez, Homeland Security Investigations San Juan Special Agent in Charge; Cordon; Carlos Cases, director, Federal Bureau of Investigation; Carmen Yulin Cruz, mayor of the city of San Juan; Cesar Miranda, secretary of Justice Department of Puerto Rico; and Daniel Ragsdale, deputy director, Immigration and Customs Enforcement. (Photo by Ramon Collazo-Negron) ♦



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