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SEPTEMBER 2013 | Volume 5 Issue 9

COMMANDER'S CORNER
MESSAGE FROM COL. ALAN DODD

REDUCING RISK FOR FLORIDIANS REQUIRES DIFFICULT DECISIONS

This year, we have witnessed the wettest April through July period on record in south Florida since 1932. The entire south Florida watershed has been saturated and all available water storage areas are filled to capacity, creating complex water management issues. There has been a lot of attention on our water management practices and I'd like to take this opportunity to explain to all of you how and why we make the decisions we do to release water from Lake Okeechobee.

In 2008, the Lake Okeechobee Regulation Schedule (LORS) was developed through a rigorous stakeholder and public involvement process to balance competing water needs – including lake and estuary ecology, navigation, the Everglades, water supply and public safety. It's a comprehensive plan that takes into consideration the needs of the entire system.

Using LORS as our guide, we have released massive amounts of water from Lake Okeechobee in order to prevent widespread damage to property and possible loss of life should rising water levels cause the aging Herbert Hoover Dike (HHD) to fail. Recent weeks have brought some relief, as rain and the lake level have decreased. But as we all know, mid-September is the height of hurricane season and water comes into the lake six times faster than we can release it, so we must be ever on guard. The lake today is three feet higher than at this point in 2012 and a tropical system could easily drive it past 18 feet, significantly increasing risk of failure.

We are actively working with our partnering agencies to develop alternative means to move water out of the lake, but there are no short term options to handle the water we have faced this year or allow us to stop releases. Ultimately, our Everglades restoration projects will aid in the conveyance and storage of water. Integral to restoration is the need to increase water storage throughout the system, including north of the lake, and the ability to move water south of the lake rather than to the east and west coasts.

It is important to understand that in a saturated system, outflows to the coastal estuaries are not solely from lake discharges. We estimate that 52 percent of the fresh water entering the estuaries since May has been from local basin runoff. Water quantity is an issue, but water quality – which is a state of Florida issue – is equally important.

Since 2007 we have made great progress on a massive, multimillion dollar rehabilitation project to strengthen HHD by installing 21.4 miles of concrete cutoff wall in its most vulnerable areas and removing and replacing 32 culverts. We are also making progress on completing a Dam Safety Modification Study. Make no mistake about it, we are actively reducing risk to Floridians, but that will take more time and money.

There are no quick or easy solutions. I cannot state emphatically enough that public safety is our top priority and for the near term, releasing water east and west from the lake is our only viable option.

With every choice we make, we must be cognizant of the impacts that may result elsewhere in the system. Every decision is evaluated within the context of the entire Central and South Florida system, rather than what immediate benefits may be achieved on an individual, localized basis. We are focused on long-term, sustainable solutions, but they are costly and will take years to realize benefits. The Corps' authorities and budget are determined by Congress, and we are committed to doing everything within our authorities to move these long term goals toward completion.

As public servants, we must make decisions based on the overall situation and good, and cannot be arbitrary by prioritizing one area or issue over another. That is what LORS does, and what we do every day. We will make it through these difficult days, and your work will improve the flexibility and responsiveness of the entire system to serve Florida and the people better. Thanks again for all you do.

Army Strong. BUILDING STRONG®. JaxStrong.

Alan M. Dodd
Colonel, U.S. Army
District Commander

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JaxStrong is a monthly electronic publication of the U.S. Army Corps of Engineers, Jacksonville District providing information about the people, activities and projects of the district. *JaxStrong* is distributed in accordance with Army Regulation 360-1. Questions about, or submissions to, *JaxStrong* should be directed to the Corporate Communications Office. The editor can be contacted by telephone at 904-232-1667 or by email to JaxStrongEditor@usace.army.mil. Content in this publication does not necessarily reflect the official view of the U.S. Army Corps of Engineers, the Department of the Army or the Department of Defense.

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Lake Okeechobee is the second largest freshwater lake within the continental United States. Jacksonville District manages lake levels to ensure public safety and balance a variety of needs. (Photo by Paula Bratschi)

Lake Okeechobee: Following the flow

BY ERICA SKOLTE

The historic Kissimmee River floodplain, north of Lake Okeechobee, is about 1-3 miles wide. This photo from May 7, 2013 is a view looking north in the Central Phase 1 Kissimmee River restoration area during late dry season conditions. The uplands start at the edge of the floodplain and the boundary is marked by Live Oaks, which show up as dark green areas at the top of the picture. The floodplain here is about 1.5 miles wide, and the water that collects here eventually flows into Lake Okeechobee. (Photo by Brent Anderson, South Florida Water Management District)

Pictured here is the same section and same view of the Kissimmee River floodplain in the early wet season, two months later, on July 16. The floodplain is already inundated with water, and the water that collects here eventually flows into Lake Okeechobee. The edge of the floodplain, about 1.5 miles wide at this point, is marked by a line of dark green Live Oaks. (Photo by Brent Anderson, South Florida Water Management District)

A diagram of Lake Okeechobee, with arrows that show water flowing into the lake from the north and flowing out of the lake to the east, west and south may look simple; however, the reality is much more complex.

Many think that water naturally flows south. Though that is sometimes true, there are exceptions to the rule. For example, the St. Johns River flows north, and then turns east toward the Atlantic Ocean. The Caloosahatchee River flows west, and the south fork of the St. Lucie River flows north. In natural systems, water flows "downhill," from areas of higher elevation to areas of lower elevation.

Lake Okeechobee is part of the highly-managed Central and Southern Florida system that makes it possible for people to live in south Florida. Around Lake Okeechobee, on any given day, the direction that the water flows depends on what is happening in south Florida.

Lake Okeechobee is the second largest freshwater lake completely within the continental United States, second only to Lake Michigan. It is approximately 37 miles long and 30 miles wide and covers 730 square miles. At an elevation of 15 feet, it holds four million acre-feet of water. It is surprisingly shallow for its size, with an average depth of only nine feet. Historically, it was larger in area than it is today, and during high water stages, it flowed freely over the south rim of the lake, into the Everglades. Today, the depth varies, depending upon the weather and the time of year, and the water must be managed to accommodate both. Lake levels are managed according to the Lake Okeechobee Regulation Schedule, and to maintain the integrity of Herbert Hoover Dike (HHD), constructed around the lake in the 1930s.

It is often said that HHD "surrounds" Lake Okeechobee, but it is not a completely closed, water-tight system. The current configuration of HHD was completed in the 1960s, with 143 miles of 35-foot high embankment around the entire lake, except a small area around Fisheating Creek where there is an open area with long tie-back levees on the north and south sides of the creek. Another reason that the dike is not "watertight" is that some water normally seeps through and under the dike, in the same way that groundwater moves naturally underground.

Additionally, there are 32 federal culverts and 28 other structures along the dike, including nine pump stations, ten spillways and nine navigation locks. These structures are operated by or the responsibility of the U.S. Army Corps of Engineers or the South Florida Water Management District. The operation of these structures, including the direction and volume of the flow of water, changes depending upon the closely monitored conditions in the lake and south Florida.

Where does the water that comes into Lake Okeechobee originate? Ultimately, the entire freshwater system is driven by rain, or the lack thereof. Rain may fall directly on Lake Okeechobee, or collect in a variety of basins that flow into Lake Okeechobee.

Water generally flows into Lake Okeechobee from several sources, including the Kissimmee River, Fisheating Creek, Lake Istokpoga, Taylor Creek and smaller sources such as Nubbin Slough and Nicodemus Slough. The Kissimmee River is the largest source, providing more than 60 percent of the water flowing into Lake Okeechobee. Fisheating Creek is the second largest source for the lake, with about nine percent of the total inflow.

The "headwaters," or main source of water, in addition to rain, for Lake Okeechobee and the Everglades, is the 3,000-square mile Kissimmee Basin north of the lake. It begins near Orlando, Fla. with tributaries such as Reedy Creek, Shingle Creek and Boggy Creek, and includes more than two dozen lakes in the Kissimmee Chain of Lakes, their tributary streams and associated marshes and the Kissimmee River and floodplain.

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This map of Lake Okeechobee illustrates the many structures and potential locations for inflows and outflows that are managed along the Herbert Hoover Dike. (U.S. Army Corps of Engineers file graphic)

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LAKE OKEECHOBEE (continued from PAGE 4)

The Kissimmee River floodplain was already full during the early part of the wet season on July 17. Live Oaks on the left mark the uplands at the edge of the floodplain. (Photo by Brent Anderson, South Florida Water Management District)

Many of the lakes in the chain of lakes are connected by canals that are easy to trace using the satellite view in programs such as Google maps. Beginning at East Lake Tohopekaliga (known as East Lake "Toho"), move south through several canals and lakes into the Kissimmee River, and finally, Lake Okeechobee. Along the way are sections of Kissimmee River that were channelized (the C-38 canal is straight) and remnant oxbows of the historic river, as well as the 43-mile long Kissimmee River Restoration area, where 40 square miles of historic river floodplain has been successfully restored.

Historically, the Kissimmee River meandered for 134 miles and the floodplain was up to three miles wide. Bounded by Live Oaks, this vast floodplain was filled annually by seasonal rains. Today, the Kissimmee Basin is highly managed, but it continues to contribute a significant amount of flow into Lake Okeechobee.

Additional water collects in the 850-square mile Fisheating Creek watershed before flowing into the western part of Lake Okeechobee. It includes Fisheating Creek, the C-41 and C-41A canals, and Indian Prairie between Lakes Istokpoga and Okeechobee.

Significant amounts of rainwater can collect over the 5,600 square mile watershed that drains into the lake from the Kissimmee and other large basins. Three inches of rain over the watershed can result in a one-foot rise in the elevation of Lake Okeechobee. Since many of the water bodies are connected, the water does not stay in one place. It moves from lake to lake via the canals, carrying along whatever it encounters, including urban, agricultural and industrial runoff.

Agriculture is the major land use in the Kissimmee River and Fisheating Creek watersheds, occupying about 45 percent and 70 percent of each basin, respectively. Citrus production occurs throughout both basins, and cattle ranching and dairy farming are also extremely important. Cattle and dairy farms are significant sources of nitrogen, and fertilizers may be the source of both phosphorus and nitrogen in agricultural runoff.

During a weather event, water coming into the lake from direct rainfall, large basins and other sources could result in water levels that rise six times faster than water can be discharged from the lake. Just one foot of rainfall in the Kissimmee River Basin can cause the lake to rise as much as four feet within a few days. During hurricane season, June 1 through November 30, even a slow-moving tropical depression can drop a lot of rain over south Florida. Year-round, professionals predict weather trends and monitor lake levels to protect HHD as well as the rest of south Florida. During the dry season, water levels in the lake must also be monitored. The lake is part of the Okeechobee Waterway, and water levels must be maintained for navigation as well as the natural system, and water supply for urban areas and agricultural interests.

As for outflows, historically, Lake Okeechobee was not originally connected to either the east coast or the west coast. The first canal between Lake Okeechobee and the Caloosahatchee River was dug in 1883 by Hamilton Disston. The St. Lucie River was not connected to Lake Okeechobee until the St. Lucie Canal was constructed in the 1920s. Under the current system, if water must be released from Lake Okeechobee in order to reduce lake levels to protect HHD and the surrounding communities, the Caloosahatchee River and St. Lucie Canal serve as the primary outlets.

The 700,000-acre Everglades Agricultural Area (EAA) south of Lake Okeechobee was originally a wetland. Water spilled periodically over the banks of the lake, inundating the custard apple forest and sawgrass plains. Wetland plants decayed over time, forming the rich black soil that attracted sugar cane farmers and others to the area in the 1800s. Over-drainage, muck fires, oxidation and other factors have resulted in soil subsidence of more than six feet in some locations, making an already low-lying area into somewhat of a "sink." The large canals that were dug to drain the area for agricultural use in the early 1900s must still be used to drain the area today. Water is moved out of the EAA and towards the coast in the West Palm Beach Canal, Hillsboro Canal, North New River Canal and Miami Canal. Since the EAA is fairly low in elevation, relatively little water is directly discharged into these canals from Lake Okeechobee. Under the current system, when south Florida is already saturated due to recent rains, discharges from the lake into the EAA would quickly raise the stages in the canals and groundwater levels in the towns and farms south of the lake.

As an emergency flood-control measure, water is sometimes discharged north into Lake Okeechobee, against the direction of flow that would occur naturally due to gravity. A Florida Department of Environmental Protection permit allows the pumping of water from the EAA into the lake when canal levels reach 12.5 feet. The South Florida Water Management District owns and operates three pumping stations at the north end of each of the large canals in the EAA, which can be used for these emergency operations: the S-2 (at the north end of the intersection of the Hillsboro Canal and the North New River Canal), S-3 (at the north end of the Miami Canal) and S-4 (in Clewiston), which are built into HHD.

There are other constraints on the amount of water that can be moved south through the large canals and into the Everglades. Several stormwater treatment areas (STAs) naturally cleanse the water before it enters the Everglades ecosystem, which is

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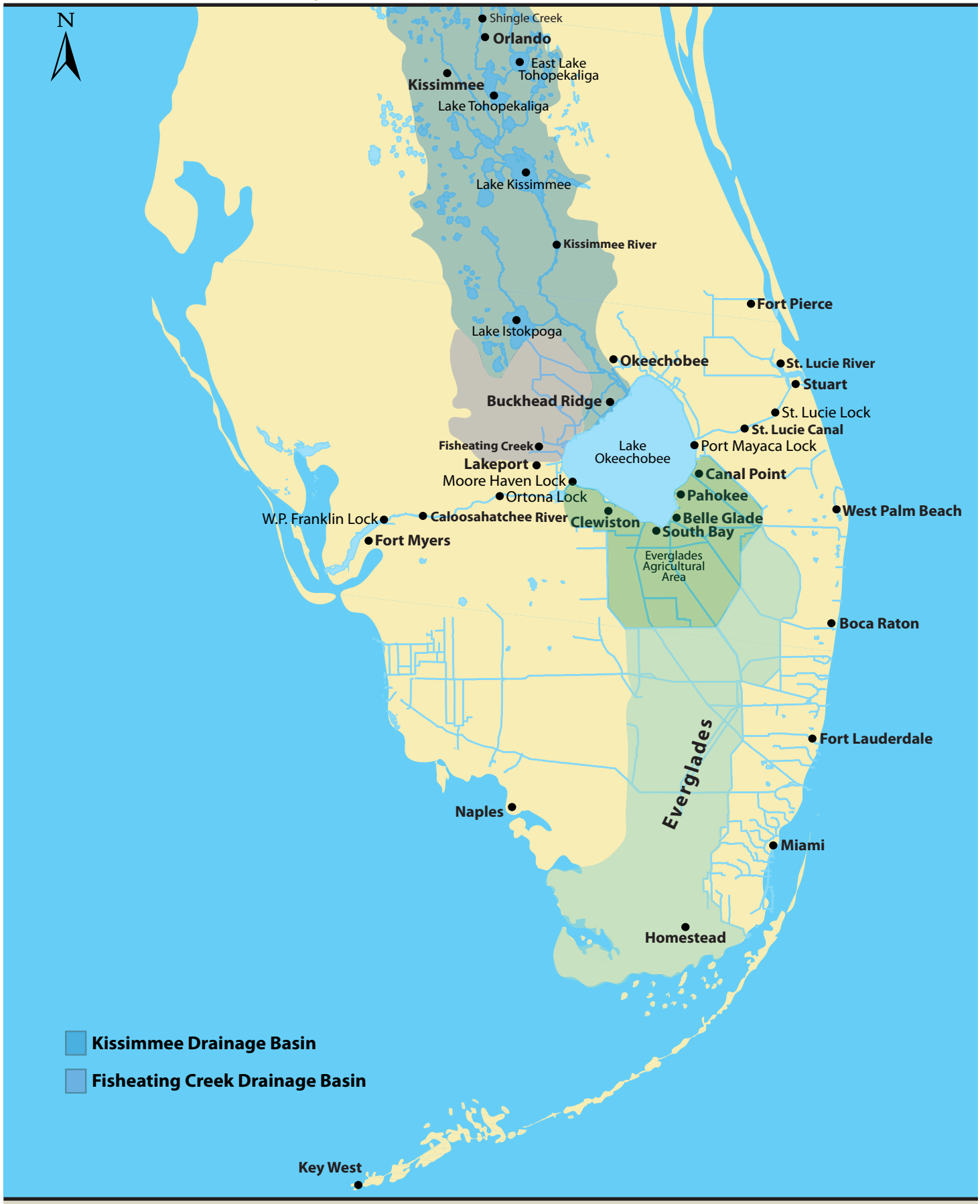
LAKE OKEECHOBEE (continued from PAGE 5)



This map of south Florida shows the location of the Kissimmee and Fisheating Creek Drainage Basins, the Okeechobee Waterway and the Everglades in relation to Lake Okeechobee. (U.S. Army Corps of Engineers file graphic)

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LAKE OKEECHOBEE (continued from PAGE 6)

naturally low in nutrients. These huge man-made filter marshes use submerged and emergent aquatic vegetation to pull nutrients such as phosphorus out of the water. However, the amount of water that can be moved south into the shallow STAs is limited, creating a bit of a bottleneck. If large amounts of water are pushed very quickly into the STAs, it "blows out" the treatment cells. It takes some time for the natural system to take up and hold the nutrients, and the process cannot be rushed.

In 1924, this nine-foot concrete post was driven to bedrock at the Everglades Research and Education Center in Belle Glade. This photo shows about 69 inches of soil subsidence had already occurred in the Everglades Agricultural Area by 1998, an average of about 0.93 inches per year. (Photo courtesy Everglades Research and Education Center, Belle Glade)

There are other times when water flows in the opposite direction than expected. As lake levels have been high this summer, water has sometimes been moved north (not south) through the S-191 spillway structure on the north side of the lake, towards Nubbin Slough.

At culvert C-10A on the east side of the lake, water flow has been even more interesting this summer - water has flowed both into and out of the lake at various times. When residential areas in western Palm Beach County received heavy rain, water flowed out of the L-8 Canal and into the lake. Likewise, when the local basin is not as wet, water flows out of the lake and into the L-8 Canal.

The Corps manages the Okeechobee Waterway, on which a boat can cruise across the state of Florida. It is another part of the Central and South Florida system, and includes the St. Lucie Lock on the St. Lucie Canal in Stuart, the Port Mayaca Lock on the east side of Lake Okeechobee, the Moore Haven Lock on the west side of the lake, and the Ortona Lock near Moore Haven and the W.P. Franklin Lock in Alva, both on the Caloosahatchee River. With all of the locks and dams, water levels are different in each section along the waterway. Sometimes, when water is higher in the Caloosahatchee River or the St. Lucie Canal than it is in the lake, water may be allowed to backflow (upstream) into the lake. This may occur at Moore Haven during a low water event, such as when the lake level drops to 10 feet after an extended dry period. At Port Mayaca, when the canal is a certain level higher than the lake, water may be allowed to backflow into the lake to provide additional water for the lake or to take some water off of the local basin if necessary.

Water also moves into and out of the lake via groundwater and seepage. The floor of the lake is a porous limestone basin, full of holes, much like Swiss cheese, that is highly transmissive.

Another significant way that water leaves the lake is through evapotranspiration, a combination of evaporation and plant transpiration. The amount of evapotranspiration changes daily, but the big lake's 730-square-mile surface area allows up to one-half inch a day of water to evaporate on a hot, cloudless day. During the dry season, and especially during periods of drought, evaporation alone can reduce lake levels significantly.

The south Florida water management system is complex, and water managers at the U.S. Army Corps of Engineers, Jacksonville District and its partners are committed to meeting its many varied yet interconnected needs. ♦

Progress continues on Tamiami Trail

Progress continues to be made on the Tamiami Trail Modifications Project, which once completed, will allow additional water to flow into Everglades National Park. Construction of the one-mile bridge was completed in March and is open for traffic. Currently, the old roadway is being removed an additional 9.7 miles of roadway is being modified as part of the project, which is scheduled to be completed by the end of the year. (Photo by Jenn Miller)

Search for sand under way for Miami-Dade beaches

BY AMANDA ELLISON

Beach nourishment projects provide storm damage reduction to infrastructure as well as incidental recreational opportunities for local, national and international visitors. Faced with depleted sand sources in Miami-Dade County, the Corps recently conducted a series of scoping meetings to discuss potential alternative sources. (USACE file photo)

Florida's coastline is one of the largest in the nation, and its beaches are plentiful. The average person would think that sand is an endless resource and would never run out. However, for Miami-Dade County, sand that is dependable, economical and environmentally practicable is nearly depleted.

In August, Jacksonville District held a series of five public scoping meetings across the southeast Florida region to talk with the public about potential borrow sources for sand for Miami.

The southeast Florida region encompasses five counties (St. Lucie, Martin, Palm Beach, Broward, and Miami-Dade) and approximately 200 miles of Florida shoreline.

Throughout the region, 24 federal and non-federal beach nourishment projects provide storm damage reduction to infrastructure as well as incidental recreational opportunities for local, national and international visitors.

Studies have been under way to identify alternative sand sources. In addition to non-domestic, the studies included domestic sources such as upland sources, sources in deeper offshore waters, sources offshore of other counties in southeast Florida in federal and state waters and even domestic sources from as far away as the Apalachicola River.

In 2007, the Assistant Secretary of the Army for Civil Works directed that all remaining sand offshore of Miami-Dade County be used for beach renourishment in the county, to investigate the viability of non-domestic sand sources and to investigate a regional management plan for use of domestic sources.

Subsequently, in 2009, a Regional Sediment Management (RSM) Plan for southeast Florida indicated there was just enough domestic offshore sand in the region to support federal and non-federal projects for 50 years. Further economic analysis and discussion with the dredging industry indicated that domestic sources were more dependable and economically viable than non-domestic sources.

In 2012, a collaborative effort between the Florida Department of Environmental Protection (FDEP), the five southeast Florida counties and the Corps sought to update the 2009 RSM Plan with improved data.

The FDEP led the study effort with technical input from the Corps and data provided by southeast Florida counties. Each county determined its sand need for federal and non-federal nourishment projects for the next 50 years.

With a 55 percent contingency added to these needs, it was found that more than 1.7 million cubic yards of sediment are needed to support placement of planned, full-sized beach nourishment projects through 2062.

The FDEP and the Corps conducted geotechnical investigations to locate additional beach quality sand sources. With contingencies applied, it was found that more than 2.8 million cubic yards of sand that meet the criteria for this study exist offshore of southeast Florida. Therefore, currently known sediment resources in St. Lucie, Martin, Palm Beach, Broward and Dade Counties exceed 50-year sediment needs by one million cubic yards.

The National Environmental Policy Act (NEPA) requires that all projects that are federally funded, federally authorized or federally permitted be analyzed to determine the effects on the human environment. The NEPA process begins with scoping, an effort to work with the public to identify specific resources that may or may not be impacted by the proposed project.

The Corps must now complete a Limited Re-evaluation Report and subsequent NEPA documentation to evaluate alternative sand sources. It's anticipated that the report will be approved October 2014. From that point, subject to appropriations, the Corps will begin permit application and detailed design processes, with construction contracts expected to be awarded in 2015. ♦

"River of Interests" is first Corps publication honored by American Library Association

BY ANNIE CHAMBERS

Kissimmee River oxbow near Phase IV-A. (Photo courtesy of South Florida Water Management District)

In June 2013, Jacksonville District's "River of Interests: Water Management in South Florida and the Everglades, 1948-2010" became the first U.S. Army Corps of Engineers publication to be placed on the American Library Association's (ALA) 2012 Notable Documents list. It was one of 20 federal publications to be so honored.

The honor was bestowed by the ALA's Government Documents Roundtable panel. The panel includes representatives of 10 universities, including Northwestern University, University of San Francisco, University of Florida, Stanford University, University of Illinois at Urbana-Champaign and others. The Roundtable provides a forum for the exchange of ideas by librarians who work with government documents and increases communication between documents librarians and other information professionals. Its "Notable Documents List" was initiated in 1982, with a goal to promote awareness and acquisition and use of government publications by libraries and patrons. The list also recognizes the individuals and agencies involved in producing such information sources. If one is not versed in library terminology, it may help to equate this notable award to winning the Pulitzer Prize of government documents.

Oriana Armstrong, district librarian, and a host of team members, including Jim Vearil and Daniel J. Hayes of Jacksonville District, Dr. Marty Reuss, headquarters Office of History retiree (and the first contracting officer's representative for the project) and Susan Sylvester of the South Florida Water Management District, spent nearly seven years collectively, under three different initiatives, compiling historical photos, archiving documents and peer reviewing literature for consideration in the scholarly work. The team worked countless hours with authors Matthew Godfrey and Ted Catton to help pull together what Armstrong said is a "masterful work of science and scholarship."

"A librarian, similar to an engineer, is professionally certified and trained in the structured technical knowledge found in American National Standards and International Standards. Librarians take pride in putting their 'stamp' on finished products that meet the accuracy of these specifications," said Armstrong. "It is very important to document the history properly, since events put in writing have a tendency to have a forever impact on legitimate history. History based on imaginative inaccuracies can have a very long life of misinformed assumptions, an anomaly that has sometimes occurred in the annals of our written histories.

"The research process was taken very seriously. Engineers have building standards; so do librarians," Armstrong explained. "'River of Interests' was not built with our hands, but rather with our minds. The authors visited south Florida, both the urban and agricultural sides, and their visits around the area helped to paint a picture of an ongoing water management struggle."

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RIVER OF INTERESTS (continued from **PAGE 9)**

In fact, in addition to south Florida, the authors traveled to archives in Atlanta and Washington, D.C. in their search for material. "Library Journal" described the book as a "thoroughly researched and footnoted report, which describes the historical conflict between environmentalists and economic interests in the Everglades, Lake Okeechobee and the Kissimmee River region in south Florida. There are dozens of maps, some dating back to the mid-19th century, and color photographs familiarize the reader with this fascinating ecosystem."

Everglades National Park in the 1950s. (Photo courtesy of the Florida Memory Project, State Library and Archives of Florida)

The book chronicles how, in response to deadly flooding in south Florida in the early 1900s, Congress authorized the Central and Southern Florida (C&SF) Project in 1948. Together with the state of Florida, the U.S. Army Corps of Engineers, Jacksonville District constructed and managed an elaborate water management system consisting of 1,000 miles of canals, 720 miles of levees and more than 1,500 water control structures – the largest civil works project of its time.

The Arthur R. Marshall Loxahatchee National Wildlife Refuge. (Photo courtesy of the Online Digital Collection of the Everglades National Park Office)

Unfortunately, these alterations also had unintended adverse environmental consequences for much of the south Florida ecosystem, and with the Water Resources Development Act (WRDA) of 2000, Congress authorized the Comprehensive Everglades Restoration Plan (CERP), a holistic program to restore and sustain hydrological and biological characteristics that defined the original pre-drainage Everglades. The need to restore more natural water flow to Everglades National Park is a paramount goal and a key driver of the restoration efforts.

Cattle wading through the Kissimmee River. (Photo courtesy of South Florida Water Management District)

The Corps and its partners have pioneered new work in environmental science throughout the restoration effort. Much has been learned through rigorous research, applied science, extensive monitoring and the development and refinement of computer models.

"Nathaniel Reed, former assistant secretary, Department of the Interior, played a key role in providing insight for the book," said Armstrong. "He added to the push and pull of the dilemma of the Everglades, the real analytical drama of Everglades saving or Everglades perishing."

"I teach a humanities class on the interactions between people and society, and I have been working along on how to include some of this material in that class," said Dr. Kenneth Walsh, San Diego State University professor. "I find it a really interesting look at the whole problem, and it fits nicely into material I use to talk about the impacts of the hurricanes in the Everglades in the 1920s."

Closer to home, Professor Richard G. Hamann, University of Florida's Levin College of Law, said that he will use "River of Interests" in his "Everglades Field Course," adding that "the Corps is to be commended for sponsoring such a publication."

Documenting the history of Everglades restoration started in the early 2000s under the watchful eyes of several consecutive district commanders. In January 2009, responsibility for the project changed hands from project management to the district library. Then commander Col. Alfred Pantano was integral in making the final work a reality, giving the authors direct access to subject matter experts. "River of Interests" was bound and ready for distribution by July 2012, when Pantano left on deployment to Afghanistan.

"The readability of "River Of Interests" is phenomenal, providing readers with all they need to know about the history of the Everglades – from mankind's initial intervention in nature to the restoration efforts conducted through 2010," said Pantano. "Read it to understand the past, for the good of the future."

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RIVER OF INTERESTS (continued from PAGE 10)

The Frog Pond agricultural area. (USACE file photo)

Since work began on "River of Interests," the $53 million Picayune Strand Restoration Project became the first CERP project to break ground in January 2010. With construction of the Merritt Canal Pump Station in Collier County, removal of 95 miles of roads and installation of 55 plugs in the Merritt Canal, the project will restore water flow across the landscape, rehydrate drained wetlands, improve estuarine waters and return habitat to threatened wildlife communities.

Progress also continues to be made on the Tamiami Trail Modifications Project, which once completed, will allow additional water to flow into Everglades National Park. Construction of the one-mile bridge was completed in March 2013 and is open for traffic. Currently, the old roadway is being removed and an additional 9.7 miles of roadway is being modified as part of the project, which is scheduled to be completed by the end of 2013.

"'River of Interests' is a very impressive book and a tribute to the outstanding effort of your staff," said Christopher D. Barth, U.S. Military Academy librarian. "It will be a worthy addition to our research collection. We are pleased to add this to the library collection for the benefit of cadets and faculty."

"The book is a tremendous accomplishment," said John Lonnquest, chief, Office of History at U.S. Army Corps of Engineers headquarters. "It is a wonderful contribution to the literature on the Everglades, chronicles the federal government's changing role in water resources management policy, and highlights the significant contributions of the U.S. Army Corps of Engineers in shaping south Florida." ♦

The book may be viewed online at: http://www.evergladesplan.org/about/river_interest_history.aspx

Florida Bay mangrove islands near Fakahatchee Pass. (Photo courtesy of the online Digital Collection of South Florida Water Management District)

PowerCorps caps perfect season with eighth championship

BY MICHAEL A. ORNELLA, SR.

PowerCorps, led by coach Mike Ornella, Sr. (far left) defeated Going Coastal, led by coach Marty Durkin (fourth from right, kneeling) in an all-Corps championship tournament of the Federal Fun League. PowerCorps had a perfect season, capped by their eighth championship in 10 years. (Photo by Marianne Gruber)

The Federal Fun League wrapped up their 41st softball season Wednesday, July 31 with their annual championship tournament at Willowbranch Park. The 2013 league included teams from the Department of Housing and Urban Development (HUD); Jax Federal Credit Union, Naval Facilities Engineering (NAVFAC); U.S. Attorney's Office/U.S. Probation Office, two teams from the Internal Revenue Service (IRS); and three teams from U.S. Army Corps of Engineers, Jacksonville District – Better-By-Design, Going Coastal and PowerCorps.

The three teams fielded by the Corps all enjoyed great seasons. Better-By-Design, coached by Gerald Deloach, Engineering Division finished the year with one win, with Kurt Thomas, Engineering Division and Erika Lauderdale voted by their teammates as the team's Most Valuable Players (MVP). Their "Ron Hamm" team sportsmanship award went to Malton Prifti, intern in the Engineering Division.

Going Coastal, coached by Marty Durkin, Engineering Division finished with 13-5 and earned a spot in the 2013 championship game, with Derek Copeland, husband of Felecia Copeland, Engineering Division and Stacie Auvenshine, Planning Division earning their team's MVP honors and Stacey Nolan, Logistics Management honored with their "Ron Hamm" team sportsmanship award.

PowerCorps, coached by Mike Ornella Sr., Programs & Project Management Division and Brad Tarr, Planning Division, had an undefeated, 19-0 record, winning their eighth championship in the past 10 years of league play. Michelle Campbell and Michael Gray, Department of Justice, resident in Office of Counsel, took home the PowerCorps 2013 MVP honors and Jim Vearil, Corps retiree, was recognized by his team with their "Ron Hamm" team sportsmanship award.

Eight teams competed in the championship tournament between June 12 and July 31. PowerCorps, the regular season league champions, made it through preliminary tournament play and earned a shot at the tournament championship. Going Coastal battled through their bracket and defeated very strong teams, including NAVFAC, the regular season runner-up, setting the stage for an all-Corps championship game.

PowerCorps took a 3-2 lead before the game was suspended due to rain on July 11. When play resumed on a wet July 31 afternoon, the teams battled in the "winner takes all" last game of the tournament. Both squads hit and defended well throughout the on-and-off, rain-soaked game. In the end, PowerCorps prevailed, 10-6, to secure the 2013 Federal Fun League Tournament Championship. The best part of the evening came after the game when both teams joined together to relive the great fun league season and the typical player and spectator "rehydrating" after a well-played game.

"It was a great to be able to play the championship game against our brothers and sisters from Going Coastal, and a great ending to a magical season for PowerCorps," said Tarr following the game. PowerCorps averaged more than 16 runs per game while only allowing three in the 19 wins on their way to their second consecutive Federal Fun League title and their eighth in 10 seasons.

Federal Fun League softball began in 1972 and continues to promote an opportunity for Corps employees to socialize after hours and foster and strengthen relationships between local federal agencies. More than 40 current Jacksonville District employees enjoy the social time and team-building outside the confines of the office. In addition, the teams also allowed family members and former employees an opportunity to connect with the Corps through this recreation experience.

Tim Gysan, Engineering Division, has been the Federal Fun League Commissioner for the past ten years. "This year's league was again a great success," he said. Gysan is one in a long line of Jacksonville District employees that have served as league commissioner, providing leadership in this socially-oriented, fun, yet competitive softball league for more than four decades. ♦

Operation Warfighter program benefits local Soldier, Jacksonville District

BY ANNIE CHAMBERS

A 15-month deployment, especially a first deployment, does not typically involve tours in three different countries. For Staff Sgt. Travis Barnett, a Soldier from Callahan, Fla., deployment to conduct general aircraft maintenance took him to Iraq just before the drawdown. He then moved on to Kuwait, and finally to Afghanistan last year to fill a critical maintenance gap caused by contractor issues.

While in Taji, Iraq during his first few months of deployment, Barnett suffered a spinal injury. He visited doctors, chiropractors and physical therapists, all of whom deemed the injury nothing more than a pulled muscle. The pulled muscle persisted throughout Barnett's entire deployment, landing him in a warrior transition unit (WTU) at Fort Stewart, Ga. WTUs are located at major military treatment facilities around the world and provide support to those who require at least six months of rehabilitative care and complex medical management.

WTU doctors thoroughly examined Barnett, and the results showed two herniated discs and an impinged nerve. He eventually transferred to a community-based warrior transition unit (CBWTU) in Jacksonville, the unit closest to his home. The CBWTU functions as a WTU for Soldiers, providing primarily outpatient care management in their community.

In February 2013, Barnett's platoon sergeant told him about Operation Warfighter (OWF), a Department of Defense program that places active duty service members in internships with federal agencies during their recovery. It provides opportunities for those service members to build their resumes, develop job skills, explore employment interests and gain federal government work experience. In addition to the DoD-sponsored OWF program, non-governmental organizations in the Jacksonville area, such as the non-profit Wounded Warrior Project, provide support to wounded veterans including career, marriage, education and other types of counseling as well as activities such as fishing trips. Local allied veterans' outposts also provide wounded service members with support groups.

Barnett immediately applied for OWF. Several agencies showed interest in Barnett, but he must remain in Florida until his medical issues are resolved. The Corps was one of two agencies in Jacksonville that wanted to hire Barnett, and Operations Division's Unmanned Aerial Vehicle (UAV) program was the first to interview and offer him a job.

While deployed, Barnett's job had involved repairing Blackhawks and Chinooks. These large military helicopters have almost no similarities to the 11-pound Unmanned Aerial Vehicle (UAV) the Corps operates. However, Barnett's fabrication skills and ability to understand small electronics gave him skills that were instrumental in upgrading the UAV payload, according to Larry Taylor, program manager.

"I assist the UAV team, working on ground stations, and have begun flight trainings," said Barnett. "I am learning a lot about digital mapping and the technical side of what the U.S. Army Corps of Engineers does."

The UAV program provides high-resolution aerial imagery that is much higher resolution than traditional aerial photography. The UAV can accurately repeat flights over a specific area, which allows users to monitor change over time. It can be used to monitor environmental conditions such as flooding, beach erosion and restoration and changes in vegetation or wildlife utilization. The high-resolution images allow scientists to conduct biological monitoring.

Barnett has traveled to Gainesville, Fla. to visit Altavian, where the district's UAVs are made, and he saw the UAV in action at the SJ-1 site near St. Augustine, Fla.

"Travis integrated well with our team, which is important when there are only three of us," said Taylor. "His experience extends far beyond his formal resume. We hope to keep him on board permanently."

Barnett makes quarterly visits to his regional CBWTU in Orlando to keep his training current. While deployed, Barnett and several other Soldiers were given the opportunity to re-enlist. He reaffirmed his commitment to the U.S. Army by joining the Florida National Guard. Currently, he is attending prerequisite classes at Florida State College of Jacksonville, with a goal of completing an engineering degree at the University of North Florida and working for the Corps full time. ♦

OVERSEAS CONTINGENCY OPERATIONS

WELCOMEHOME

JUAN RODRIGUEZ

COLLEEN SHANKLIN

CARLOS ESTRELLA

HADI HORRI

FRANK FISCHER

STEPHEN SULLIVAN

Regulatory rolls out revised setback guidance

BY NANCY J. STICHT

The Palm Valley Reach of the Intracoastal Waterway, where structures along the federal channel are plentiful. (USACE file photo)

In the interest of navigation safety and waterway accessibility, Regulatory Division rolled out its revised setback guidance for structures placed along certain federal channels at a series of public meetings, held in Deerfield Beach, Palm Beach Gardens and Palm Valley, Fla. in August.

The setback guidance was established to provide the criteria by which structures proposed to be constructed along certain federal channels are evaluated. The guidance applies to federal channels including the Atlantic Intracoastal Waterway/ Intracoastal Waterway (AIWW/IWW), from the Florida state line to Miami on the east coast of Florida, the Gulf Intracoastal Waterway on the west coast of Florida from the Caloosahatchee River to the Anclote River, and the Okeechobee Waterway from the W. P. Franklin Lock west to Punta Rassa and from the St. Lucie Lock east to the intersection with the IWW.

"We have 280,000 registered vessels in the state of Florida, and thousands of visiting vessels," said Mark Crosley, pending executive director of the Florida Inland Navigation District, local sponsor for the IWW. "The IWW provides $15 billion in economic input, $5 billion in personal wages and 110,000 jobs – without maintaining the waterway, these numbers would be cut in half."

Shelley Trulock, IWW project manager, explained the process for maintaining the waterway, which has seen a growing number of fixed shoreline structures, including docks, dock pilings, bulkheads, boatlifts and rock revetments, creating potentially dangerous situations.

"On the IWW, dredging is accomplished with a cutter suction dredge rather than a hopper dredge," said Trulock. "The dredge is propelled forward by spuds at the rear of the dredge, and anchor booms allow the dredge to turn and maneuver. When there are no structures along the waterway, this type of dredge can operate for 115 feet before repositioning; but the closer structures are placed to the edge of the federal channel, the more frequently the dredge has to reposition. It can be as inefficient as dredging only 19 feet before repositioning – the more frequently the dredge must be repositioned, the longer dredging takes and the more it costs."

Placing structures along federal navigation waterways requires a Department of the Army permit, in accordance with the Rivers and Harbors Act of 1899. Proposed projects must also meet the setback criteria and obtain consent to easement if the structure is to be placed within the federal right-of-way. Basic variance may be granted from 62.5 feet to 100 feet from the near design edge of the federal channel; justification is required to place structures closer than 62.5 feet from the channel.

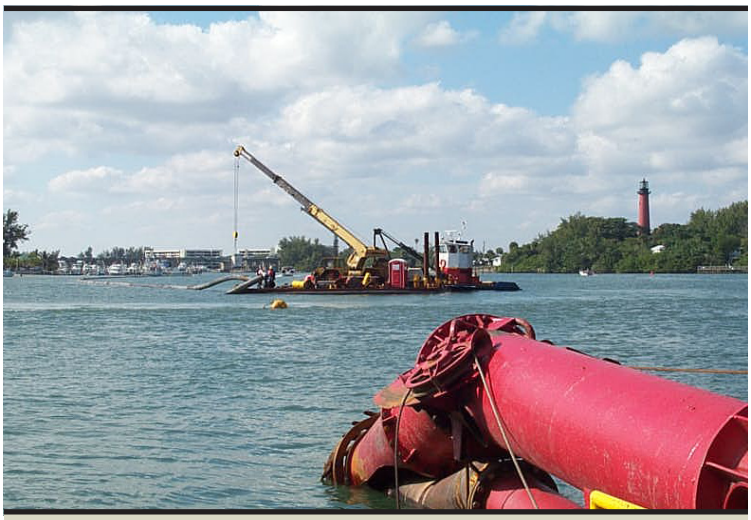
The current revision supersedes the 1998 setback guidance, expanding terms and definitions, adding a width restriction

(CONTINUES ON **PAGE 15**)

REGULATORY (continued from **PAGE 14)**

for structures located less than 62.5 feet from the channel and clarifying how the criteria is applied to existing structures.

"If a property owner has a valid Department of the Army permit for an existing structure, they may repair or replace that structure as long as the basic purpose of the structure does not change," said Tori White, deputy chief of the Regulatory Division. "Should the use of the structure change, it is subject to the current setback criteria.

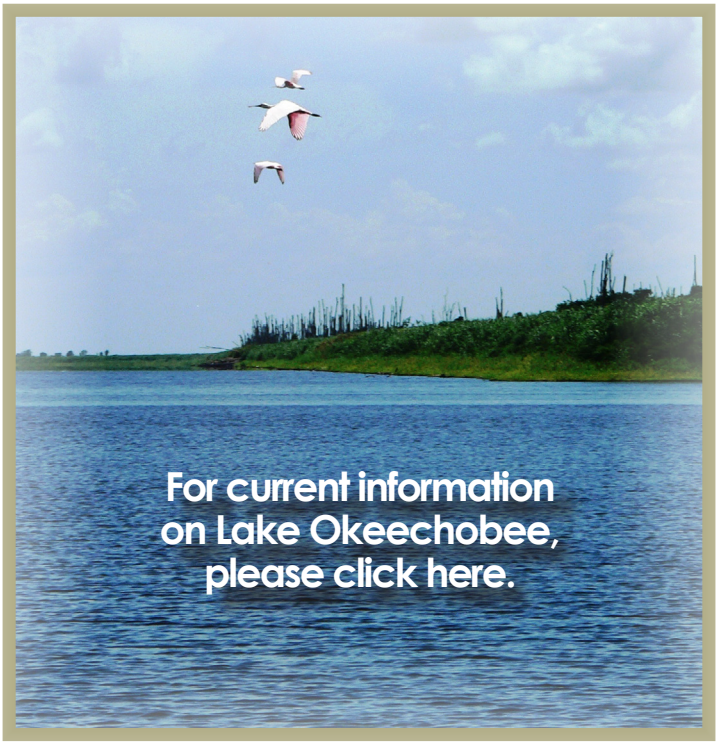


Dredging of the Intracoastal Waterway is accomplished with a cutter suction dredge, which is propelled forward by spuds at the rear of the dredge. Anchor booms allow the dredge to turn and maneuver. (USACE file photo)

"Though the revisions to the setback criteria are relatively minor, they are necessary to ensure that we keep pace with changing conditions on these busy public waterways," added White.

"Our roadways and railways are operating at capacity," said Crosley. "Our waterways are the only places that have capacity to support commerce, tourism and recreation, and with vessels increasing in size and number, we need assurance of the width and depth necessary for safe navigation."

A fourth and final public meeting to discuss the revised setback guidance is scheduled for Sept. 10 in Clearwater. ♦



USACE participates in senator's St. Lucie River roundtable event

Lt. Col. Thomas Greco, deputy commander for south Florida, participated in a roundtable discussion hosted by U.S. Sen. Bill Nelson to discuss the health of the St. Lucie River and Indian River Lagoon Aug. 15 in Stuart, Fla. Nelson was joined by leading researchers from the Harbor Point Oceanographic Institute at Florida Atlantic University, the Everglades Foundation, the Florida Oceanographic Society, St. Johns River Water Management District & Indian River Lagoon National Estuary Program, the National Oceanic and Atmospheric Administration, the U.S. Environmental Protection Agency, the Florida Department of Environmental Protection and other local and community officials. (Photo by Jenn Miller)

Postcard from Afghanistan

I took part in `sling load' training with a Blackhawk helicopter.

Left: This photo is from our barbeque for the Wounded Warriors, who live right next door to our "castle" compound.

Right: I lucked out and was given access to see the drones up close.

Commentary by Jacqueline Verwers, Administrative Support Assistant

When I first told my family I had accepted a deployment in Afghanistan, they all thought I was truly nuts. And on those first few weeks in-country, the thought ran through my mind that maybe my family was right after all. However, it turns out that my deployment has been something that I'll never forget.

Despite working seven days a week with one afternoon off, the occasional rocket attack that wakes you in the middle of the night and makes you head to the bunker, the 115 degree days in the summer, and most of all, the nights spent missing your family and those special things that happen back home... it is STILL a once in a lifetime experience!!!

Being an "admin" in Afghanistan, I take care of more than just timekeeping. I handle the vehicle maintenance and registration, all facility maintenance, generator maintenance, air and ground movement requests for our personnel going on missions, daily personnel accountability and room assignments.

Even though there is enough work to keep everyone busy here all day, every day, we all still need a break. In my short hours off work, I play pool. I've taken second and third place in the tournaments. I listen to karaoke, meet new people, and go salsa dancing. My favorite thing is sitting at the flight-line watching the Chinooks practice.

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Patriot Day and National Day of Service and Remembrance - September 11

Every year on September 11, the American flag is flown at half-staff and Americans are asked to observe a moment of silence beginning at 8:46 a.m., the time that the first plane struck the North Tower of the World Trade Center Sept. 11, 2001. Americans are also encouraged to volunteer for service opportunities in remembrance of the nearly 3,000 lives lost on that day. Here, a look at the memorials that ensure "We will never forget."

New York City

One of two fountains, named "Reflecting Absence," that are now located within the site of the World Trade Center. More than 2,700 people lost their lives Sept. 11, 2011 – including passengers and crew members on board American Airlines Flight 11 and United Airlines flight 175, those inside the Twin Towers and first responders. Additionally, New York Magazine reported that more than 2,000 U.S. troops were killed in the resulting Operation Enduring Freedom. (Photo from commons.wikimedia.org website)

Shanksville

United Airlines Flight 93 crashed near Shanksville, Pa., killing 37 passengers and seven crew members. It was the only hijacked plane that did not reach its intended target, believed to be the U.S. Capitol. The memorial, "Crescent of Embrace," was dedicated Sept. 10, 2011 and features a large crescent pathway with red maples and sugar maples along the outer arc and benches carved with the victims' names. (Photo from commons.wikimedia.org website)

The Pentagon

The memorial honoring the 184 people killed at the Pentagon and on American Airlines flight 77, which was flown into the building, was dedicated at a ceremony held Sept. 11, 2008. It was the first official monument to the victims of the terrorist attacks of Sept. 11, 2001. (Photo by Mass Communication Specialist 1st Class Brien Aho, U.S. Navy, posted to commons.wikimedia.org website)

Jax Facts: How well do you know Jacksonville District?

BY NANCY J. STICHT

Congratulations to **William Wigner**, Engineering Division, the first district team member to submit the correct answers to all ten of the below questions, based on stories that appeared in the August issue of JaxStrong. (Photo by Annie Chambers)

1. **What does SHARP stand for?**

   A: Sexual Harassment/Assault Response and Prevention (COL Dodd's column, pg. 2)

2. **Which two Jacksonville District ports were included in President Obama's "We Can't Wait" initiative?**

   A: Jacksonville and Miami (Obama stresses importance of ports during visit to Jacksonville, pg. 3)

3. **How long has the Unmanned Aerial Vehicle (UAV) program been operational and approximately how many missions has it flown?**

   A: 2011, 200 missions (Unmanned Aircraft Systems working group examines capabilities, future opportunities, pg. 19)

4. **What public land is directly east of the Picayune Strand Restoration project area and benefits from its restoration?**

   A: Fakahatchee Strand Preserve State Park (It's a girl! Kitten born to rescued and released Florida panther, pg. 9)

5. **What two requirements must an operator of a Corps vessel less than 26 feet in length meet prior to official operation of the vessel?**

   A: Operators of Corps boats and vessels less than 26 feet in length are required to successfully complete a 24-hour training course and be licensed. (Motorboat operator training provides certification and skills needed to perform a wide range of duties, pg. 10)

6. **What types of fish can be caught at the W.P. Franklin Lock Recreation Area – freshwater or saltwater?**

   A: Both types of fish can be caught at W.P. Franklin. (Independence Day on the Okeechobee Waterway, pg. 16)

7. **If you spot a tegu, what three steps should you take?**

   A: Take a picture, name the location and report the sighting. (South American lizards slither into south Florida, pg. 12)

8. **Which two ports recently reached critical milestones, and what were the milestones?**

   A: Jacksonville – release of tentatively selected plan Port Everglades – release of Feasibility Study/EIS (Port studies reach critical milestones, pg. 5)

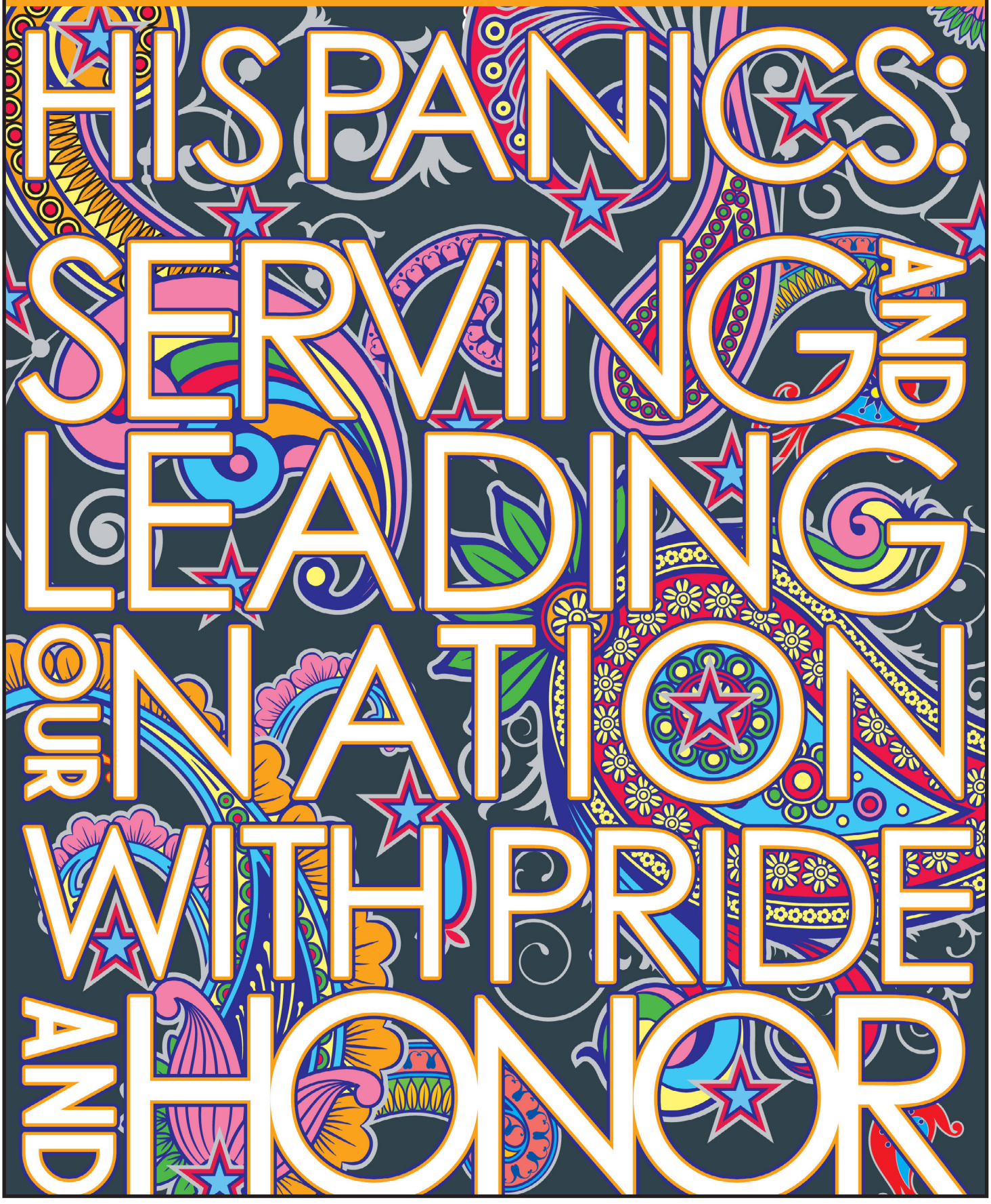
9. **What is the name of the congressionally authorized project that consists of Portugués Dam, Cerrillos Dam and other flood control works?**

   A: Portugués and Bucaná Rivers Flood Control Project (Portugués Dam nears completion, pg. 6)

10. **What is Real Estate Division's primary responsibility in supporting Corps projects?**

    A: Ensuring the federal government has sufficient real estate interests necessary to support the construction, operations and maintenance of Corps projects. (Real estate plays important role in civil works and military projects, pg. 14)

HISPANIC HERITAGE MONTH



Draft report for Central Everglades Planning Project available online

BY JENN MILLER

The draft report for CEPP is now available online for public review. (USACE file photo)

The Draft Integrated Project Implementation Report (PIR) and Environmental Impact Statement (EIS) for the Central Everglades Planning Project (CEPP) is now available online for public review at: http://bit.ly/CEPP_DPIR. Public comments on the draft report will be accepted through Oct. 15, 2013.

"The team has worked extremely hard to get this draft report formatted and ready to go," said Kim Taplin, chief, Central Everglades Branch. "Even though the target release date was August 30, we were determined to get this report out ahead of schedule and into the hands of our stakeholders who have remained dedicated and supportive throughout the duration of this planning effort. It is because of their dedication that we are where we are today."

Corporate Communications Office
U.S. Army Corps of Engineers, Jacksonville District

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Comments can be submitted electronically to: CEPPcomments@usace.army.mil or mailed to:

Dr. Gretchen Ehlinger
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Additionally, a series of evening public meetings will be held the week of September 16 throughout south Florida to discuss the draft report and give all interested individuals, groups and agencies an opportunity to comment and ask questions. The meeting locations are currently under development and additional details will be provided in a future notification and will also be posted on the project website: www.bit.ly/CentralEverglades_CEPP.

CEPP is part of the Corps' National Pilot Program for Feasibility Studies and will test principles aimed at streamlining the project planning process. This project will aid in setting the foundation for future restoration efforts in the central portion of the Everglades system and focuses on capturing water lost to tide and re-directing the water flow south to restore the central and southern Everglades ecosystem and Florida Bay.

The goal of the Central Everglades Planning Project is to capture water lost to tide and redirect the water flow south to restore the central and southern Everglades ecosystem and Florida Bay. The Corps is jointly conducting this planning effort with the South Florida Water Management District. Additional information is available online at www.bit.ly/CentralEverglades_CEPP. ♦