WER LINES March/April 2021

RECREATION RAMPING UP

CREWS PREPPING FOR NAVIGATION SEASON

NATIONAL RECOGNITION RECEIVED

> AROUND THE DISTRICT



US Army Corps of Engineers ® Rock Island District

Mission

The Rock Island District's mission is to deliver vital engineering and water resource solutions in collaboration with our partners to secure our Nation, reduce disaster risk and enhance quality of life, providing value to the region and Nation.

Vision

A premier public service, engineering organization of trusted, talented professionals delivering innovative and sustainable solutions to the region and Nation.

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On the Cover

In preparation for recreation season, Natural Resource Specialist, Zachary Scriver, ignites grass for a prescribed burn at Coralville Lake. This annual natural resource management method reduces fire hazards near campgrounds and returns valuable nutrients to the soil. *Photo by Coralville Lake Staff*

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COMMANDER'S COMMENTS

FY21 Work Plan Robust as District Moves Forward in Pandemic Environment

For more than a year, this District, like the nation and world, has been operating in the pandemic environment. Not surprisingly, the Rock Island District has not let COVID19 affect our ability to execute the mission; you all rose to the challenge and delivered! There has been no slowdown in the district's programs, and the recently released FY21 Work Plan indicates that tempo will continue if not increase for the foreseeable future.



Col. Steven M. Sattinger District Commander

Our District will execute a \$275 Million program this fiscal year – there will be no rest for the weary. The work plan includes funding to advance the Navigation and Ecosystem Sustainability Program (NESP), the Cedar Rapids Flood Risk management project, the Upper Mississippi River Restoration Program, PL 84-99 flood repairs, 2023 Illinois Waterway lock closures and, of course, money for regular operations and maintenance of our river and reservoir projects.

Of note, the Brandon Road project to stop the spread of aquatic nuisance species into the Great Lakes received \$3.8 million to get planning, engineering and design (PED) initiated. This was critical funding after the long-awaited design agreement was signed in December, bringing the state of Illinois in as our project sponsor and partner.

The work plan funding for NESP includes \$5 million to continue PED on navigation and ecosystem projects. Although no funding for construction was provided, this marks the second consecutive year NESP has been funded for PED and there will be nearly \$23.5 million in construction ready projects awaiting appropriations by the end of the fiscal year. NESP continues to receive wide-spread congressional and stakeholder support, and this continued funding bodes very well for the future.

One of our highest-profile projects is the flood risk management project in Cedar Rapids. Funding allocations this FY are helping our District move forward with design work and getting construction contracts awarded. For this project, 85 percent of the design work is complete and about 10 percent of

construction is either underway or complete. There is still much to get done to help protect Cedar Rapids from catastrophic flooding, but this year's allocations will go a long way towards completing the system.

Other highlights of the FY21 work plan include nearly \$20 million for the Illinois Waterway consolidated lock closures, almost \$14 million for dredging on the Mississippi and \$6 million to produce major rehabilitation reports for four of our locks and dams. All critical, welcomed funding that will help Rock Island District deliver on its promises.

Although a District rarely receives a work plan that includes all the funding requested,

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I view the FY21 Work Plan as great news for the Rock Island District. It includes a large percentage of the critical funding we need to keep delivering value to the nation and move forward with projects in the works. Now, it's time to continuing executing in typical Rock Island District fashion as we move toward the summer months and the fiscal year's last quarter.

On the topic of summer, I will conclude with a District-wide safety plea. COVID19 restrictions are still in effect but have been trending toward less stringent which means there has been and will be

Continued on page 5

55th CHIEF OF ENGINEERS MAKES FIRST VISIT TO **ROCK ISLAND DISTRICT**

By Jim Finn, Public Affairs Specialist

t. Gen. Scott Spellmon recently made his first visit to the Rock Island District as the 55th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers. Although it was a quick trip, Spellmon was able to get an idea of the hard work and dedication Rock Island District employees and leadership put into their roles day-in and day-out.

The visit, March 16 focused on Cedar Rapids, lowa, and the largescale \$117 million flood risk management (FRM) the city. This complex

project is the largest FRM project in the District's history.

During a "window tour" of the city, Project Manager Andrew Goodall showed Spellmon many features of the project and discussed orientation of the project sites and features.

"During the tour, we were able to show him the project while also highlighting the strong partnership the Rock Island District has developed with the city," Goodall said. "We also discussed the project's challenges for the Chief's



55th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers Lt. Gen. Scott Spellmon, Project Manager Andrew Goodall, Project Engineer 1st Lt. Christian Gray and Rock Island District Commander Col. Steve Sattinger discuss the Cedar Rapids, Iowa, Flood Risk Management project near the city's 16th Ave. closure project ongoing throughout structure. Photo by Jim Finn



Project Engineer 1st Lt. Christian Gray stands with the 55th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers Lt. Gen. Scott Spellmon after receiving a "helmet sticker" for his continuing work on the Cedar Rapids Flood Risk Management project. Photo by Jim Finn

awareness."

Some challenges discussed during the visit included the complexity of building a flood risk management project of this scale in the middle of a city and how this project differs from building a levee in a less congested area.

"Obviously this project is different than building a levee on farmland," Goodall said. "There are very tight working spaces for construction contractors, coordination is needed with multiple landowners during construction and real estate acquisition and there is very high visibility as the general public can see the project or



55th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers Lt. Gen. Scott Spellmon discussing the Cedar Rapids Flood Risk Management project with leaders from the Rock Island District and the city of Cedar Rapids, Iowa. *Photo by Jim Finn*

public can see the project on a daily basis."

While challenges exist, having Spellmon visit the project and see how the District has worked to overcome these obstacles gives project team members a chance to showcase Rock Island District's strengths.

"To have the Chief visit the Cedar Rapids project highlights the very important and critical work we do here in the Rock Island District," Goodall said. "The District can bring issues to his attention and with his guidance, these items ultimately help us deliver the project more efficiently."

During the visit, Rock Island District Commander Col. Steve Sattinger was alongside Spellmon as he toured the city and explained just how important visits like this are for the District.

"Nothing compares to a visit from the Chief of Engineers to demonstrate to our partners and stakeholders how important their projects are to the District," Sattinger said. "Putting boots on the ground and understanding the scope and complexity of a project like Cedar Rapids is invaluable to ensuring that the entire vertical team prioritizes delivery and execution."

COMMANDER'S COMMENTS (Cont.)

reopenings that will bring about opportunities to recreate and enjoy the great outdoors. Whether at home barbecuing, or out boating on a lake, we all need to be cognizant of the risks brought on by the summer months. I know many of us having been itching to get back to normalcy and summer certainly brings that opportunity. Keep safety in mind. At work, we have many measures in place to ensure a safe workplace. I want everyone to take that safety culture home. A safe workplace means nothing if we lose teammates to injury, or worse, due to off-work mishaps. The successes this District enjoys are dependent on each and every one of you. Thank you all for what you do every day to make this District great and CONTINUE BUILDING STRONG!

t M Datw STEVEN M. SATTING

COL, EN Commanding

LOCK AND DAM CREWS BUSY PREPPING FOR NAVIGATION SEASON

By Jim Finn, Public Affairs Specialist

Now that spring has arrived in the Rock Island District, the busy part of the navigation season has arrived as well. While the 18 locks within the District on the Mississippi River and Illinois Waterway do not technically close for winter, the colder months of late December through mid-March are much slower for commercial and recreational traffic. Lock crews and maintenance crews take advantage of these slower times to ensure the locks, dams and associated sites are in the best shape possible when traffic picks up again.

From time-to-time, a lock will close completely for winter maintenance, as was the case with locks 13, 14, 15 and 19 on the Mississippi River this past winter.

"While the Mississippi River Project Maintenance

Team completes much of the work, lock and dam crews at each site help however they can," said Bob Castro, Chief of the Lock and Dam Section for the Mississippi River. "Full closure of a lock also gives lock and dam crews a chance to focus on work that's difficult to complete during regular operations."

"We are involved with safety and construction meetings with crew and contractors," said Gary Kilburg, Lockmaster at Lock and Dam 12 in Bellevue, Iowa. "In the winter of 2018/2019, when our lock was dewatered for relief well installation, the lock crew took advantage of the chamber being empty and did work on our bubbler pipe system, replaced the sprinkler pump in the filling tunnel, added two rows of timbers to the upper gates and inspected anything that would normally be under water."



(Top, left) Lock and Dam Operator Jason Smith welds a bubbler pipe for Lock 14 in LeClaire, lowa, during the recent winter maintenance closure. Photo by Jim Finn



Once a closure is wrapped up, lock crews work on putting all the pieces back together.

"Normally after a maintenance closure there is a fair amount of cleanup around the lock site," Kilburg said. "Whenever there is a lot of activity, equipment and personnel on site, it's good practice to ensure

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all safety equipment and machinery is put back in place and operational."

The work doesn't stop there as much needs to be done to get ready to move traffic again." Typically, the crew has a day or two set aside for annual training purposes so they can get refreshed on training requirements, the Lock Performance Maintenance System, tow haulage units, accident/incident forms and Full closure of a lock also gives lock and dam crews a chance to focus on work that's difficult to complete during regular operations.

standard operating procedures for locking vessels. "Once the training items are done, we start up the bubbler system to break up any ice that remains around the miter gates and get ready to pass traffic," Kilburg said. "After that, we ensure that all the machinery is greased, serviced and ready to operate." During a typical winter season, when there is not a maintenance closure, the lock crew goes through a to-do list which is compiled during the busy navigation season. These tasks vary from year to year, but include replacing and cleaning cam switches in the miter gate machinery, replacing pumps in the

> basement and crossover pits, repainting inside the lock house and shop, performing maintenance on boats and other equipment used at the lock, snow and ice removal and a host of other tasks.

"The weather in the winter months determines what we can work on each day," Kilburg said. "We try to have inside and outside work lined up and, depending on the weather conditions, we adjust what we are working on that

day. With our lock located in the northern part of the District, we tend to have a longer non-locking season due to ice buildup on the river. This can give us an advantage to get more done, but at the same time can have a negative impact as we are subject to more inclement weather."

(Right) Crew members of Lock and Dam 12 in Bellevue, Iowa, replace timbers on a miter gate during a winter closure period. Photo by Jim Finn

(Bottom, left) Lock and Dam 16 crew members work in harsh winter conditions to support maintenance and repair efforts at Lock 14 this past winter. Photo by Jim Finn



Recreation Ramps Up in the Rock Island District

The U.S. Army Corps of Engineers is the largest provider of water-based outdoor recreation in the nation and the Rock Island District operates and maintains nearly 100 recreation areas, in five states, to support this mission. Visitors of all ages can enjoy activities like hiking, biking, boating, swimming, fishing, camping and hunting in the wide variety of recreational spaces managed by the District.

Advanced reservations are required for most Rock Island District campgrounds and reservable picnic shelters. Reservations can be made up to 180 days in advance at <u>www.recreation.</u> <u>gov</u> or by calling 1-877-444-6777. Starting April 1, recreational day use fees of \$5 per day, per vehicle are required for use of Corps-managed boat ramps and \$2 per person, \$5 per vehicle for attendance at Corps beaches.

The U.S. Army Corps of Engineers offers an annual pass for \$40 which provides unlimited access to boat ramps and beaches, for one calendar year, at all USACE recreation areas nationwide. America the Beautiful Interagency Passes (Senior, Access, Military, Annual and Volunteer) are also accepted. For more information visit: www.mvr.usace.army.mil/Missions/Recreation/.





Illinois Waterway Recreation Areas – Ottawa and Peoria, Illinois

Currently Open

• Farm Creek Project Trails (Closed during and 24 hours after any rainfall)

Opening May 1

• Illinois Waterway Visitor Center (Hours: Mon.-Sun. 9 am.-5 p.m.)

Saylorville Lake Recreation Areas – Johnston, Iowa

Currently Open

- Cherry Glen Lower and High-Water Boat Ramps
- Lakeview Main and High-Water Boat Ramps
- Lincoln Access Boat Ramp
- Sandpiper Boat Ramp
- All Saylorville Lake Recreational Trails

Opening April 15

- Cherry Glen Campground and Day Use Area
- Cottonwood Day Use Area
- Walnut Ridge Day Use Area

Opening May 1

- Bob Shetler Campground and Day Use Area
- Acorn Valley Campground
- Prairie Flower Campground
- Sandpiper Day Use Area

Opening May 29

• Oak Grove Beach and Day Use Area

Savlorville Lake Visitor Center – Opening Date Yet to be Determined

Coralville Lake Recreations Areas – Iowa City, Iowa

Currently Open

- Curtis Bridge Boat Ramp
- Mehaffey Bridge Boat Ramp
- Sandy Beach Boat Ramp
- Tailwater East Boat Ramp
- West Overlook Day Use Area and Boat Ramp
- East Overlook Day Use Area
- Linder Point Day Use Area
- Sugar Bottom Day Use Area
- Squire Point Day Use Area
- Tailwater West Day Use Area
- Turkey Creek Day Use Area
- All Coralville Lake Recreational Trails
- Devonian Fossil Gorge
- Turkey Creek and Coralville Dam Disc Golf Courses

Opening May 1

- West Overlook Boat Ramp interior
- Linder Point
- Tailwater East
- Tailwater West
- Sugar Bottom Campground and Boat Ramp
- Sandy Beach Campground
- Opening May 28
 - Cottonwood Campground
 - Sugar Bottom Day Use and Campground Beaches
 - West Overlook Day Use Beach

Coralville Lake Visitor Center – Opening Date Yet to be Determined

Lake Red Rock Recreation Areas --Knoxville, Iowa

Currently Open

- Howell Station Boat Ramp
- South Overlook Boat Ramp
- Marina Cover Boat Ramp
- Whitebreast Boat Ramp
- North and South Tailwater Recreation Areas
- All Red Rock Recreational Trails
- Red Rock Archery Range
- Hickory Ridge Wilderness Campground

Mississippi River Recreation Areas Potosi, Wisconsin, to New London, Missouri

Currently Open

- Andalusia Slough Day Use Area and Boat Ramp
- Kilpeck Landing Day Use Area and Boat Ramp
- Ferry Landing Day Use Area and Boat Ramp
- Bear Creek Day Use Area and Boat Ramp
- John Hay Day Use Area and Boat Ramp
- Big Slough Boat Ramp
- Cattail Slough Boat Ramp
- · Fenway Landing Boat Ramp
- Canton Chute Boat Ramp
- Park-N-Fish Day Use Area
- · Lock and Dam 11 Day Use Area
- · Lock and Dam 13 Overlook and Boat Ramp
- · Locks and Dam 14 Day Use Area
- Lock and Dam 16 Day Use Area
- · Lock and Dam 21 Day Use Area
- Lock and Dam 22 Boat Ramp

Opening May 1

- Grant River Campground
- Thomson Causeway Campground
- Fisherman's Corner North Campground
- · Clark's Ferry Campground
- Shady Creek Campground

Opening May 15

- Blanchard Island Campground
- Blanding Landing Campground
- · Bulger's Hallow Campground
- Pleasant Creek Campground

Mississippi River Visitor Center at Locks and Dam 15 – Opening Date Yet to be Determined

Opening April 15

- Howell Station Campground
- · Fifield Day Use Area
- South Overlook Day Use

Opening April 22

- Whitebreast Campground and Day Use Area
- North Overlook Campground and Day Use Area
- Wallashuck Campground
- Ivans Campground
- · Miner's Retreat Day Use

Opening May 1

• Lake Red Rock Visitor Center (Hours: Mon.-Fri. 7:30 a.m.-4 p.m.; Sat.-Sun. Noon-4 p.m.)

Opening May 20

- Whitebreast Beach
- North Overlook Beach

MANAGING ILLINOIS WATERWAY Dredged Material in 40 Pound Bags

By Chuck Theiling, Research Ecologist USACE, Engineer Research and Development Center, Environmental Lab and **Ray Lees,** Beneficial Use of Dredge Material Initiative, Regional Manager Planning Program Manager, Tri-County Regional Planning Commission

Ilinois River and Peoria Lakes sediment and sedimentation are important natural resource management challenges government agencies and citizens have been concerned with for decades. More recent focus on these issues by the U.S. Army Corps of Engineers, Rock Island District, collaborating with the Tri-County Regional Planning Commission and Peoria Lakes Basin Alliance members, including The Nature Conservancy, was documented in the 2018

Peoria Lakes Comprehensive Conservation Plan funded through the USACE Planning Assistance to States program.

Early research by the Illinois Natural History Survey and Illinois State Water Survey documented the loss of depth in Illinois River backwater lakes and especially Peoria Lakes. A large river-marsh was converted to a river-lake by Peoria Lock and Dam in 1939. Since that time. excessive sedimentation from decades of watershed development and altered hydrology filled the lakes with glacial sand and nutrientrich prairie soil. The deepest areas of the lake have filled



Patrick Kirchhofer, Peoria Farm Bureau Manager, stands next to a clamshell bucket filled with material dredged from the Illinois Waterway. *Photo provided by Ray Lees*

in with up to nine feet of sediment deposition creating the uniform shallow basin seen today.

Different types of sediment including sand, silt, clay and peat are sorted by river currents and deposited into different parts of the Peoria Lakes. Detailed mapping is still needed but initial surveys show sand is deposited near the river channel and in tributary deltas coming from the bluffs, clay is located where pre-dam islands and seasonal floodplains

> naturally occurred, silt has accumulated in the deepest areas of the lake, and peat is found in the former marshes. Most of the Peoria Lakes have a silt layer which is easily resuspended by wind- or boat-generated waves and can block sunlight penetration through water, prohibiting aquatic plant growth. Reduced water clarity can also limit growth of sight-feeding sportfish like bluegills, crappie and largemouth bass. Loss of depth from sedimentation in backwater lakes is also a concern because it reduces fish overwintering habitat and can lead to winter fish kills. Navigation channel maintenance is another

sediment management challenge for USACE and it has created a chronic dredging need at the mouth of the Mackinaw River. Mackinaw River floods deliver large sand and gravel sediment loads which the Illinois River current can't efficiently move downstream. Annual maintenance dredging

is required to remove sand shoals and place the sand in containment areas behind the adjacent levee. The existing storage sites are reaching capacity so the USACE Rock Island District has been seeking "beneficial use" alternatives since 2015 to use the sand for construction, topsoil. agriculture and especially export to larger urban markets. Sustainable use of existing sand stockpiles can replace mined-out quarries around Peoria Lakes and augment established aggregate markets.

Dredge material from the Illinois Waterway is loaded into a semi trailer to be used in manufactured soil products for commercial sale. *Photo provided by Chuck Theiling*

yard waste compost. The soil manufacturing process blends a variety of materials, in various proportions, to achieved desired end-use specifications. Once created, Better Earth Compost sells the soil to a distributor who bags the product for the retail market which not only support river sustainability but also economic development objectives along the Illinois River. The company also supplies large loads to the city of

Peoria and to regional contractor projects.

purchase in Central Illinois big-box stores. Paul

Rosenbohm, Better Earth Compost owner, made the

sand from the USACE Mackinaw River stockpile, fine

sediment from ADM/ARTCO barge fleeting dry dock

maintenance dredging, and Peoria area municipal

first large batches of manufactured soil using river

Throughout the Peoria area, there is broad and growing support for the use of river-derived soils. Peoria's Combined Sewer Overflow mitigation projects, which encourage rainwater infiltration, are a prime example. These projects will ultimately create an integrated water resource management beneficial loop by using sustainably sourced river-soils to build green infrastructure stormwater management projects to reduce pollution and sedimentation impacts on river water quality.



Manufactured topsoil, made from Illinois Waterway dredge material, compost and other ingredients, is now being sold commercially in a number of stores. *Photo provided by Ray Lees*

Peoria Lakes sediment beneficial use was pioneered by Dr. John Marlin, the Illinois Sustainable Technology Center and the "Mud to Parks" project, which demonstrated that river sediment was highly suitable for brownfield reclamation to parkland on the Chicago industrial lakefront. Tri-County Regional Planning Commission has been the most recent proponent assembling and leading a regional beneficial use stakeholder group. The Commission hosted a Beneficial Use of Dredged Material Workshop for regional experts to share information in August 2019. The concept for commercial soil markets was presented at the workshop and practitioners from Minnesota and Ohio shared their experience with state representatives from the Upper Mississippi River Basin. An early pilot study soil product, produced by Caterpillar at their Mapleton, Illinois, foundry, was presented at the workshop and further studies are ongoing. Dr. Steve Vaughn, Research Plant Physiologist, U.S. Department of Agriculture's Agricultural Research Service Laboratory in Peoria, Illinois, is also studying the performance of manufactured soils in laboratory turf grass experiments.

As a result of these cooperative efforts and beneficial use studies, bagged Illinois River sediment is now an ingredient in some manufactured soil products available for



By Kelcy Hanson, Editor

SCOTT UHL Illinois Waterway Operations Project Manager



hen Scott Uhl started working for the U.S. Army Corps of Engineers in 1997, as a temporary deckhand on the maintenance crew in St. Paul District, he had no idea it would eventually lead him to overseeing operations on the Illinois Waterway.

Recently, Uhl accepted the Illinois Waterway Operations Project Manager position and will now be responsible for managing operation of six lock and dam sites and maintenance of eight lock and dam sites on the Illinois Waterway. In addition, he will oversee two dry reservoirs which protect the city of East Peoria, Illinois, from flooding when big rain events occur.

Uhl has worked for USACE for 24 years, spending the first 18 in the St. Paul District at the Fountain City Service Base in Fountain City, Wisconsin, before he transferred to the Rock Island District in 2015 where he has worked for the past six years as part of the Illinois Waterway Maintenance Section. Shortly after graduating from Galesville-Ettrick-Trempealeau High School,

located in Trempealeau, Wisconsin, Uhl enlisted in the United States Army. While stationed at Ft. Riley, Kansas, he was deployed to Saudi Arabia for Operation Desert Storm. He was also stationed in Hanau, Germany, for three years and during his time there, was deployed to Croatia for Operation Joint Endeavour.

After departing from the Army, Uhl returned home to Wisconsin where Lock and Dam 6 was located just 10 blocks away from his house. He was very familiar with the Corps of Engineers and employees at the lock so it seemed like a great fit to look for a job with the Corps. He eventually landed a job as a crane operator and absolutely loved it. He could have seen himself being a crane operator the rest of his life, but opportunities kept coming his way.

"The amount of opportunities the Corps has offered me have been plentiful," said Uhl. "And I have been very fortunate to have had life experiences which enabled me to get to where I am today."

Uhl and his wife recently celebrated their 30th wedding anniversary in September 2020. They have two children, a daughter who works for the Transportation Security Administration in Madison, Wisconsin, and a son who works for USACE on the Heavy Capacity Fleet based in Louisville, Kentucky.

When asked what Uhl likes most about his job, he says, "The people. There are a lot of great people on the Illinois Waterway, in the Rock Island District and in USACE who are doing great things daily to keep navigation flowing."

Uhl enjoys going into the office and talking with all the employees and building relationships with each of them. He is also very interested in the mission of keeping the locks and dams operational.

"With 24 years of maintenance experience, I have been able to work with our cranes and towboats to do some exceptional work," said Uhl.

Outside of the daily work routine, Uhl enjoys anything that gets him outside when the weather is nice. You will find him riding ATV's, camping, hiking or simply, doing yardwork. If the weather is less than desirable, he turns to playing video games inside.

The biggest life advice Uhl could give is to 'never say never.' Had he never been open to the opportunities presented to him, he would still be living in his small hometown.

"Don't be afraid to peek inside when a door might open," said Uhl. "If you don't like what you see, you can usually just back up and close it, but it might be an opportunity of a lifetime on the other side of that door."

Uhl is very grateful for the opportunity to serve as the Operations Project Manager of the Illinois Waterway and wants his teammates to know they should not hesitate to contact him if they feel he could be of any assistance.

INLAND NAVIGATION DESIGN CENTER HAS SUCCESSFUL, YEAR SUPPORTING CRITICAL, INFRASTRUCTURE PROJECTS

By Kelcy Hanson, Editor

he Inland Navigation Design Center (INDC), which is the U.S. Army Corps of Engineer's national mandatory center of expertise for inland navigation projects, supported a wide variety of critical infrastructure projects in fiscal year 2020. Major project efforts included assisting with the LaGrange Major Rehabilitation project, designing a new lock for the Soo Complex, reestablishing the design process for elements of the Navigation Ecosystem Sustainability Project (NESP), and working new lock designs for the Upper Ohio, Emsworth Dashields and Montgomery locks. The INDC was also responsible for the engineering portion of major rehabilitation studies for the Winfield and David D. Terry lock and dam facilities.

The overall mission of the INDC is to provide engineering, design, analysis and review services for studies, new locks, new navigation dams, major rehabilitation of existing inland navigation locks and dams, as well as significant inland navigation lock and dam operations and maintenance projects. It promotes quality and consistency in design through commonality of components and technical competency.

The engineering skills and technical expertise of the INDC team, made up of 12 employees, located in six Districts across the Mississippi Valley and Great Lakes and Ohio River divisions, is critical to designing and renovating inland navigation lock and dam structures across the country and abroad. During the past year, while many USACE employees had to learning to work in the virtual world, the INDC was already comfortable with distanced teamwork but that didn't mean they didn't face challenges.

"The use of virtual teams is part of the INDC's business process and worked well. These teams were in place before the pandemic hit however, COVID-19 travel restrictions really put a strain on our lead engineers to keep everyone on the same path and to complete all the required consistency reviews" said Fred Joers, Director of INDC.

One of the INDC's biggest highlights for the year was watching the LaGrange Major Rehabilitation



Virtual rendering of projected control shelter at the new lock located at the Soo Complex. Image provided by Michael Tarpey

project as it progressed throughout the summer.

"It was great to finally see the LaGrange Lock rehabilitation completed as it has been a long time since the rehabilitation report was approved and funding was available for the construction," said Joers. "It was a huge achievement by the Rock Island District team to finish the work on schedule, open the lock on time, and limit our impacts to the navigation industry."

As with any project, there are lessons to be learned and LaGrange was no different.

"There was some unexpected deterioration found on the self-lubricating pintle bushing on the miter gate," said Joers. "We are now working with the U.S. Army Engineer Research and Development Center and USACE Headquarters to develop better guidance and standardization for pintle bushings."

Aside from LaGrange, another main accomplishment in fiscal year 2020 was the design of the new lock at the Soo Complex. This design has taken major steps towards providing standardization of navigation design by implementing as many possible components of the existing Poe locks in the new lock design. This not only helps the shipping industry and the operation staff, it also helps save project construction funds. Currently, 100 percent of

Continued on page 14

INLAND NAVIGATION (Cont.)

the design has been created virtually, by the INDC team.

In fiscal year 2021, the INDC is looking forward to finishing up design of the new lock at the Soo Complex and working on several other capital improvement MEGA projects including three new locks on the Upper Ohio River, the Brandon Road Interbasin Project and the Brazos River Project. Other significant efforts include support to NESP, six major rehabilitation reports, assisting Mobile District with lock projects in Brazil, and continuing to follow the Chief of Engineers' direction to drive for commonality of components (standardization) in the inland navigation system.

ROCK ISLAND DISTRICT EMPLOYEE RECEIVES NATIONAL RECOGNITION FOR WATER SAFETY OUTREACH



Natural resource specialist, Shawna Polen, poses with Dudley, a miniature toy prehistoric Dunkleoseus, she uses on social media to promote water safety initiatives and other recreational safety messages at Coralville Lake. Photo provided by Shawna Polen

By Sam Heilig, Public Affairs Specialist

or her work promoting water safety through innovative and tactful delivery methods during the 2020 recreation season, natural resource specialist, Shawna Polen, from the Rock Island District, Coralville Lake Project was selected as the recipient of the 2021 U.S. Army Corps of Engineers (USACE) National Water Safety Employee Award. This award recognizes a USACE employee who has contributed to boating and water safety in an effective manner and has made a difference in saving lives on our nation's waterways.

During her time at Coralville Lake, Polen has worked to develop key partnerships with local entities such as the Cedar Rapids Kernals baseball team and Friends of Coralville Lake, to promote water safety in the community. But when COVID-19 shut down the start of the 2020 recreation season, and in-person outreach and education efforts ceased, Polen knew things would have to change.

As soon as the notice came down from headquarters that campgrounds and recreation areas would not be opening for the season, Polen shifted gears and moved outreach efforts to virtual

platforms. This allowed the ranger staff at Coralville Lake and other Rock Island District projects to continue communications with important audiences while maintaining public safety. Throughout the pandemic, she worked with the District's Corporate Communications office to develop and distribute videos which featured Coralville Lake staff performing life jacket fittings for their entire family and a, popular at the time, online LEGO challenge showing a student completing a water safety boat inspection.

At the national level, Polen served as part of the innovative #USACEEducates team, which worked to promote water safety through a series of strategic social media campaigns.

"Shawna developed the first posts used for the #USACEEducates initiative and they received a skyrocketing number of views, likes and comments," said Jonathan Wuebker, supervisory natural resource specialist at Coralville Lake. "The accessible nature of the virtual platform made this a great tool to reach a large audience and cultivate water safety with the public, even when we couldn't reach them face-to-face."

In addition to shifting outreach efforts to virtual platforms and partnering with local entities for water safety education, Polen coordinated placement of a water safety billboard along a major highway and redesigned the Coralville Lake Visitor Center to better incorporate water safety.

"Her innovation, dedication, and personal drive to share the message of water safety and deliver the program are a true asset to USACE and all who visit Coralville Lake," said Wuebker.

ND THE DISTRICT

RETIREMENTS

Monte NcNall. Assistant Lockmaster at Dresden Island Lock and Dam, retired March 23, after dedicating over 36 years of service to the federal government.

Larry Garner, Head Lock Operator at Lock and Dam 13, retired March 31, after dedicating over 41 years of service to the federal government.

Alan Dickerson, Lockmaster at Lock and Dam 19, retired March 31, after dedicating over 32 years of service to the federal government.

SYMPATHY



Becki Holzgrafe, 78, of Geneseo, Illinois, passed away April 8. Holzgrafe retired from the Corps of Engineers and worked as a budget and program analyst.



Clifford Artis, 75, of Davenport, lowa, passed away May 24, 2020. Artis worked as an Electrical Engineer for the Corps of Engineers.



Last Month's Winner



Answer: Dresden Island Boilder Steam House Winner: Daniel Bennett

Can you name where this photo was taken? If so, send your answer to Kelcy.C.Hanson@usace.army.mil to be featured in the next issue of the Tower Times. DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, ROCK ISLAND CLOCK TOWER BLDG. – P.O. BOX 2004 ROCK ISLAND, IL 61204–2004

EMPLOYEE OF THE MONTH

FEBRUARY Laura Conrad



Laura is recognized for her extraordinary professional performance and innovation in problem solving relating to the Red Rock Dam and dam safety. MARCH Anthony Clarkin



Anthony has been an extraordinary contributor to the supplemental pump station construction project at Saylorville Lake.