

Crosscurrents

Serving the St. Paul District since 1977
Summer 2022 No. 3

Swenson assumes
command of the Corps
of Engineers, St. Paul
District
-Page 4

In alignment with Department of Defense Instruction 5400.17 and recent Executive Orders issued by the President and orders from the U.S. Army, this content has been redacted.



US Army Corps
of Engineers ®
St. Paul District

(cover) Col. Eric Swenson receives the unit colors from Maj. Gen. Diana Holland, Mississippi Valley Division commander, and becomes the district's 67th commander and district engineer. USACE St. Paul District photo by Patrick Moes



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Articles and photography submissions are welcome. Submissions may be mailed or emailed. Submissions should be in Microsoft Word format. Photos should be at least 5 in. x 7 in. at 300 dpi.

The mission of *Crosscurrents* is to support the commander's internal information program for the St. Paul District and its stakeholders. *Crosscurrents* also serves as the commander's primary communication tool for accurately transmitting policies and command philosophy to the St. Paul District community and its customers.

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Coming soon!

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Comments From The Top: A message from Col. Eric Swenson

Teammates,

It's a great honor to serve you as the 67th district engineer for the St. Paul District. Since taking command on July 28, I have been on a whirlwind tour of the district meeting many of you, touring your office space and work environments, locking boats through, and even taking a few scoops of sand from the Great River. I've truly had the pleasure of meeting you, and for those I haven't, I look forward to meeting you soon and learning about how you support our great mission.

After many long months, we're finally making the transition back into the district office for those employees that work there. Our workplace transformation will include a hybrid approach that helps work-life balance, while also promoting camaraderie and teamwork among employees. Thank you to everyone who helped make this building move a success, it was the result of a lot of hours and hard work. In the end, this new space will promote

further collaboration as we continue to deliver our program to the nation.

We recently recognized the Fargo-Moorhead Metro Area project delivery team for being recognized as the USACE 2022 Project Delivery Team of the Year for Excellence. This is a BIG DEAL!!! You can read more about this accomplishment in this issue. For a few more years, the Fargo Moorhead Metro Diversion will continue to be an important project in our portfolio.

I've had the opportunity to recognize many of our teammates as I've traveled throughout the district from our hardworking lock and dam operators who have continued to serve throughout the pandemic, to Mark Buringa, who showed his commitment to selfless service while off-duty, and to our park rangers, who are often the face that the public sees, just to name a few.

We've had the opportunity to host several senior leaders at our

district, including Maj. Gen. Diana Holland, Command Sgt. Maj. Patrickson Toussaint, Principle Deputy to the Assistant Secretary of the Army, Jaime Pinkham, and the Assistant Secretary of the Army for Civil Works Michael Connor. Every time a senior official visits the district, they express to me how impressed they are with your commitment to your work and your extreme dedication.

One of my top priorities is recruitment, outreach and retention. As we continue to bring on new staff, please take an opportunity to welcome new faces.

If you know someone is a new hire or new since the start of COVID, please do not assume that they know their way around the in-person setting. Take them under your wing and introduce them to your contacts across the district.



Please do not assume that our newest teammates have this place figured out.

We just participated in a nationwide regulatory recruitment event, and we'll continue to ramp up our recruitment efforts through partnerships, community relationships and career fairs.

We'll continue our tradition of

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selfless service as members of our district help those that were affected by Hurricanes Fiona and Ian. If you are interested in deploying, contact our readiness operations center to get your name on the list.

Finally, we received unprecedented funding from the Bipartisan Infrastructure Act, and we will need everyone's help to deliver a quality program, on time, within budget, and SAFELY. I look forward to continuing the great work you all do every day and continuing our record of EXCELLENCE.

Thanks for all you do!

Col. Swenson

P.S. We just completed our Corps of Engineers Safety and Occupational Health Management System, or CE-SOHMS, Phase II and are making good progress on Phase III. Keep up the good work. Safety is paramount to everything we do.



Col. Eric Swenson (center), meets with Pokegama park rangers, near Grand Rapids, Minnesota, Aug. 5. USACE St. Paul District photo by Randy Urich.

Swenson assumes command of the Corps of Engineers, St. Paul District

Story by Elizabeth Stoeckmann

The U.S. Army Corps of Engineers, St. Paul District, hosted a change of command ceremony at the historic Landmark Center in St. Paul, Minnesota, July 28.

Col. Eric R. Swenson assumed command of the St. Paul District from Col. Karl D. Jansen and became the district's 67th commander and district engineer.

Prior to assuming this command, Swenson most recently served as battalion commander of the 1-345th Brigade Engineer Battalion and as an assistant professor at the United States Military Academy, West Point, New York.

A Pennsylvania native, Swenson earned his commission from the United States Military Academy in 1998 and is an Army Corps of Engineers officer with more than 24 years of service specializing in leadership, engineering, process improvement and education. He holds both a Doctor of Philosophy and Master of Science in Industrial Engineering and Operations Research from Penn State University; a Master of Arts in National Security and Strategic Studies from the Naval War College; a

Master of Arts in Strategic Studies from the Army War College, and a Bachelor of Science in Systems Engineering from the United States Military Academy.

The St. Paul District covers most of Minnesota, the western half of Wisconsin, the northeastern half of North Dakota and small portions of northeastern South Dakota and northeastern Iowa. It has missions in the area of flood risk management, navigation, environmental management, regulation, disaster response and recreation.

The district traces its origins to 1866, when Congress authorized the Corps of Engineers to establish a 4-foot navigation channel on the Upper Mississippi River. Maj. Gouverneur K. Warren, a West Point graduate widely acclaimed for his leadership at the Battle of Gettysburg, was tasked with establishing the district and conducting preliminary surveys of the Mississippi river and its tributaries. Warren arrived in St. Paul and opened the first district office in August 1866.



Col. Eric Swenson assumes command of the St. Paul District at a change of command ceremony at the Landmark Center in St. Paul, Minnesota, July 28. USACE St. Paul District photo by Patrick Moes

Fargo-Moorhead project team receives national award

Story by Elizabeth Stoeckmann

The U.S. Army Corps of Engineers Headquarters, in Washington, D.C., recently named the St. Paul District Fargo-Moorhead Metropolitan Area Flood Risk Management Project Delivery Team as its “USACE 2022 Project Delivery Team of the Year for Excellence.”

The Fargo-Moorhead diversion project is a 30-mile-long diversion channel in North Dakota with upstream staging of flood waters.

The plan includes constructing a 20-mile-long southern embankment, 19 highway bridges, three railroad bridges, three gated structures and two aqueduct structures. It also includes levees and floodwalls in Fargo and Moorhead which safely allows additional flows through the metro area.

“I take great pride in the teams’ commitment to innovation and overcoming challenges to accom-

plish the mission - providing permanent flood risk management to the Fargo-Moorhead region,” said the Fargo-Moorhead Metro project Program Manager Terry Williams.

The project is being implemented using a public private partnership, or P3, with split delivery. This is a first, and an innovative approach for the Corps of Engineers, and is already applying best practices to improve the delivery of other federal projects.

The 16-person team, from 2019-2021, played a vital role in taking the Corps’ first P3 project from concept to reality. The project is currently on schedule for operation in the spring of 2027. The construction framework will safeguard 235,000 people, provide construction savings of \$330 million and shorten construction time by 10 years when compared to traditional delivery, and help to transform the nation’s civil works project execution.

“The project is distinctive in numerous ways, ranging from alternative financing to split delivery

implementation across multiple states, counties and cities,” Williams said. “Not only is it the first P3 civil works project in the Corps of Engineers’ history but it is also the inaugural pilot project for the innovative funding concept.”

The teams’ exemplary service earned praise and notes of thanks from the highest levels in the Corps.

“The team’s consistent application of project delivery business processes resulted in achieving the stakeholder’s expectations and the ultimate goal in setting an example of accelerating successful project delivery to the American people,” said Mississippi Valley Division commander Maj. Gen. Diana Holland.

The diversion project is one of the top priorities for the U.S. Army Corps of Engineers.

The USACE 2022 Project Delivery Team of the Year for Excellence award will be presented at the 2022 National Awards Ceremony.



(left center) Program Manager Terry Williams stands with (right center) Mississippi Valley Division Commander Maj. Gen. Diana Holland, as she presents the project delivery team a certificate of appreciation award in Fargo, North Dakota, Aug. 8. USACE photo by Shannon Bauer

Fargo-Moorhead project celebrates another major milestone

Story by Patrick Moes

U.S. Army Corps of Engineers leaders witnessed yet another major milestone Aug. 9, near Fargo, North Dakota, as the Metro Flood Diversion Authority broke ground on their portion of a project that includes a 30-mile diversion channel.

In a field with construction equipment near the site where the diversion channel will tie back into the Red River of the North, elected officials from North Dakota and Minnesota, as well as senior leaders within the Corps of Engineers to include Jaime Pinkham, Principal Deputy for Assistant Secretary of the Army for Civil Works; Stacey Brown, Deputy Assistant Secretary of the Army for Civil Works (Management and Budget); Maj. Gen. Holland, Mississippi Valley Division commander; and Col. Eric Swenson, St. Paul District commander, gathered to provide some perspective on this milestone, which was years in the making.

"The communities of Fargo and Moorhead and the Army Corps of Engineers have a long history



Corps senior leaders and elected officials shovel dirt at the P3 groundbreaking in Fargo, North Dakota, Aug 9. USACE St. Paul District photo by Shannon Bauer.

dating back to the early 1950s working side-by-side to manage flood events," said Swenson. "Today we are taking a small step, or scoop of dirt, which symbolizes the earthwork that will soon define a large step forward – a step that will shift our efforts from flood fighting to flood prevention."

The symbolic groundbreaking is another step toward protecting more than 235,000 residents and 70 square miles of infrastructure within the greater Fargo, North Dakota - Moorhead, Minnesota, Metro Area, said Terry Williams, St. Paul District program manager in charge of the Corps of Engineers' portion of the flood diversion project. She added that this

project is one of the top priorities for the U.S. Army Corps of Engineers, and her team is working together with the local partners to reduce flood risk to the area, which includes implementation using an alternative financing/split delivery approach.

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The financing and delivery concept, also known as a public private partnership, or P3, is the first of its kind within the Corps of Engineers' civil works program. "Utilizing the P3/split delivery approach enables us to provide flood risk management benefits 10 years sooner when compared to traditional delivery methods," said Williams, a North Dakota native. She added that the project is expected to provide benefits to the region as soon as 2027.

Williams said the split delivery includes the sponsor using a 30-year public private partnership delivery to finance, design, build, operate and maintain the diversion channel and associated features. She added that the Corps of Engineers efforts include designing and constructing the Diversion Inlet Structure, the Wild Rice and Red River structures, 20 miles of dam embankments and associated road raises to include a 4-mile raise of Interstate 29. "We currently have more than \$300 million under construction to include seven of the 13 planned federal contracts," said Williams.

While the Fargo/Moorhead Metro Area is on its way to significantly reducing future flood risks, the P3

funding concept is growing as a delivery solution within the Corps of Engineers as communities look to create resilient infrastructure against future flood threats. "The implementation of this project using public, private partnership provides proof of concept and represents a new era in community-based infrastructure investment," said Lt. Gen. Scott Spellmon, U.S Army Corps of Engineers 55th chief of engineers and commanding general of the U.S. Army Corps of Engineers.

Williams said the need to innovate and to find solutions that work for everyone, is just one of the reasons that the Corps of Engineers Fargo-Moorhead team supporting the P3 effort was recently selected as the Corps of Engineers Project Delivery Team of the Year for Excellence. "This team was able to accelerate the delivery of this critical project and met every challenge associated with doing something technically and procedurally complex for the very first time," said Williams.



Capt. Kyle Volk, construction manager, speaks at the P3 groundbreaking, near Fargo, North Dakota, Aug. 9. USACE St. Paul District photo by Shannon Bauer.

Long awaited ribbon cutting ceremony becomes a reality at Marsh Lake

Story by Melanie Peterson

Speakers and guests gathered for a ribbon cutting ceremony at Marsh Lake, near Appleton, Minnesota, on a perfectly clear, summer day, July 14.

“Holding this dedication took five times, but I’m glad that journey was hard because nothing worth doing in life is easy, it takes a lot of hard work and effort,” said Dave Trauba, Regional Wildlife manager, Southern Region, with the Minnesota Department of Natural Resources, or MNDNR, at the ribbon cutting. “But I’m glad it took a long time to get to where we’re at today because it’s a much better project today than it would have been.”

Speakers included Trauba; Col. Karl Jansen, former St. Paul District commander; Sarah Strommen, MNDNR commissioner; Amber Doschadis, Upper Minnesota River Watershed District administrator; Jon Schneider, Conservation Programs manager, Minnesota Ducks Unlimited; and Win Mitchell, former Ducks Unlimited State chairman and local resident.

“We have a win here at Marsh Lake, but it was a tough win. In 2019, mother nature gave us a run for our money with high water flooding that challenged site conditions, but the whole team persevered,” Jansen

said. “We win as a team, a combined team with our partnerships across this region. It’s our unified mission to restore, sustain and enhance the natural environment...and it’s the beauty of this project that will endure for generations and pay wonderful dividends for nature and our society.”

The Marsh Lake project involved habitat enhancement by improving conditions for waterfowl and fish in the area. The project included rerouting the Pomme de Terre River to its historic channel and constructing a drawdown structure and a fish passage at the Marsh Lake Dam. Less than 5% of the average cost for a habitat restoration project of this size, this project is expected to provide significant returns in environmental and habitat enhancement benefits. The total cost was \$13.4 million.

Resilience is key to the success of this project.

“We’ve all learned a lot about resilience over the past couple years and really resilience is at the heart of what we do in our restoration work, and we can see the resilience in natural resources,” Strommen said. These efforts today will yield

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Col. Karl Jansen, former St. Paul District commander, Commissioner Sarah Strommen of the Minnesota Department of Natural Resources, and Amber Doschadis, Upper Minnesota River Watershed District administrator, cut the ceremonial ribbon at Marsh Lake, near Appleton, Minnesota, July 14. USACE St. Paul District photo by Melanie Peterson

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tremendous results preserving the river channels back to their historic conditions.”

Marsh Lake lies within the Lac qui Parle Wildlife Management Area, managed by the MNDNR. In the fall, as many as 150,000 Canada geese use the management area at one

time. Marsh Lake is also home to Minnesota’s largest breeding colony of American white pelicans and several species of fish. The variability associated with natural flooding and drying cycles will promote growth of emergent and submersed aquatic vegetation, increasing waterfowl habitat and reducing sediment re-suspension.

“Resilience is at the heart of what we do in our restoration work and we can see resilience in nature when we give it a little bit of help.”



–Commissioner Sarah Strommen
Minnesota Department of Natural Resources



Dave Trauba, Regional Wildlife manager, Southern Region, Minnesota Department of Natural Resources, gives remarks at the Marsh Lake ribbon cutting ceremony, near Appleton, Minnesota, July 14. USACE St. Paul District photo by Dave Elmstrom



The Marsh Lake fish passage at Marsh Lake, near Appleton, Minnesota, July 14. USACE St. Paul District photo by Melanie Peterson

Corps partners with agencies on restoration project

Story by Melanie Peterson

The St. Paul District is partnering with the U.S. Fish and Wildlife Service, the Minnesota Department of Natural Resources and the Wisconsin Department of Natural Resources to plan a Habitat Rehabilitation and Enhancement Project, or HREP, for Lower Pool 4 Big Lake, near Wabasha, Minnesota.

Located within the Upper Mississippi River National Wildlife and Fish Refuge, the project area consists of open backwater, meandered side channels, main channel border and island formations.

According to Project Manager Ben Nelson, Big Lake has lost much of its island complex and forest to wind and wave erosion and sedimentation of the backwaters is an ongoing issue in the study area. The proposed project goal is to maintain, enhance and create habitat suitable for native and desirable aquatic and terrestrial plants and animals.

“We’re in the feasibility study phase of the project,” Nelson said. “We’re looking at the backwater sloughs and existing habi-

tat to get ideas on island building and other habitat features to consider as part of the project.”

During a recent site visit with agency partners, Nelson said they hope to have a recommended plan by spring 2023.

The study includes the feasibility of enhancing and restoring habitats by building islands, planting trees, managing invasive species, dredging for fish habitat and stabilizing banks. The project seeks to improve bottomland forest habitat for birds and backwater and channel habitats for fish and muskel populations. The construction, enhancement and protection of island features could provide for opportunistic use of main channel river sand placement. The construction may also use river sand from overwintering fish habitat dredging and access dredging.

The project sponsor is the U.S. Fish and Wildlife Service, and the project is 100% federally funded.

The project is part of the Upper Mississippi River Restoration, or UMRR, program, which ensures the coordinated development and

enhancement of the Upper Mississippi River system with primary emphasis on habitat restoration projects and resource monitoring. In the more than 30-year history of the program, more than 55 habitat projects benefiting more than 100,000 acres on the Upper Mississippi River, from Minneapolis to St. Louis, have been completed.

“The fact that UMRR is still going strong since it was established in 1986 is a huge credit to everybody’s commitment and the partnership, it’s one thing that the public and all the agencies should be proud of,” said Jeff Janvrin, Mississippi River habitat specialist with the Wisconsin Department of Natural Resources, during the site visit.



Corps and agency partners conduct a site visit at Big Lake in Lower Pool 4 near Wabasha, Minnesota, July 29. USACE St. Paul District photo by Melanie Peterson

Making progress at McGregor Lake restoration project

Story by Melanie Peterson

Construction is underway at the McGregor Lake Habitat Rehabilitation and Enhancement Project, or HREP, near Prairie du Chien, Wisconsin, and Marquette, Iowa.

Through partnerships with the Upper Mississippi River National Wildlife and Fish Refuge and the Wisconsin, Minnesota and Iowa departments of Natural Resources, the St. Paul District is creating

islands to restore floodplain forest habitat for wildlife.

"The goal of this project is to increase island heights to decrease tree die-off due to recent flooding and increase fishery habitat by dredging those areas deeper," said John Henderson, district project engineer.

It wouldn't be possible without the partnerships according to Hen-

derson. "Our partners are key to everything we do, we all have the same common goal. We all want to do the most with the money we have," Henderson said.

More than 57 million pounds of rock have been used in addition to the beneficial use of over 300,000 cubic yards of channel maintenance material that was taken from the river and would have otherwise been taken off site, he explained.

This fall, construction workers will dredge another 200,000 cubic yards of channel maintenance material, bringing the total project usage to nearly half a million cubic yards of material from four different dredging sites.

"The contracts are based on specialized construction," Henderson said. "They are using heavy construction equipment such as floating excavators, tract haul trucks, hydraulic dredges and barges with multiple excavators operating them."

All that construction will be worth it for future generations according to Megan McGuire, project biologist.

"We are creating islands to restore floodplain forest habitat for wildlife, including migratory birds," McGuire said. "The Upper Mississippi River is a critical flyway for hundreds of bird species, many of which use the green ribbon of forest and wetland to migrate from the Gulf of Mexico to their breeding grounds in the Midwest and further north. Forests take decades to mature, so we need to plan now so our children can watch the birds make their epic journey north."

The project is part of the Upper Mississippi River Restoration, or UMR, program, which ensures the coordinated development and enhancement of the Upper Mississippi River system with primary emphasis on habitat restoration projects and resource monitoring. In the more than 30-year history of the program, more than 55 habitat projects benefiting more than 100,000 acres on the Upper Mississippi River, from Minneapolis to St. Louis, have been completed.

"I think we're really moving into a new era of work on the Mississippi River," Henderson said.



Megan McGuire, project biologist, gestures at McGregor Lake at a site visit to construction near Prairie du Chien, Wisconsin, July 5. USACE St. Paul District photo by Melanie Peterson

River sand provides a foundation to a cleaner tomorrow

Story by Patrick Moes

A stone's throw away from downtown St. Paul, Minnesota, along a Mississippi River backwater area lies a somewhat hidden area that is brimming with construction activity this summer.

Pigs Eye Lake, a 500-acre backwater lake created by the Mississippi River locks and dams, is ground zero for an environmental enhancement project that is innovating the way the Corps

of Engineers manages dredged material, or river sand, removed from the 9-foot navigation channel, said Nate Campbell, St. Paul District project manager. "This is a win-win-win project for the U.S. Army Corps of Engineers; our partner, the Ramsey County Parks and Recreation; and the environment," said Campbell. "This project allows the Corps to beneficially reuse its dredged material in a way that enhances the local environment."

Aaron McFarlane, St. Paul District biologist for the project, said the Pigs Eye Lake plan includes building six islands to create bird and fish habitat while reducing erosion caused by waves. He said the material to construct the six islands is river sand that is coming from a few miles downstream of the project within an area of the river known as Pool 2. McFarlane said the project began in June and progress is already visible within the area. He said he anticipates the contractor completing the base for the islands this year, followed by the placement of fine materials in 2023 and vegetation planting in 2024.

As the islands rise above the water, birds can already be seen landing on the newly placed sand. LS Marine, from Inver Grove Heights, Minnesota, is the contractor in charge of implementing the years of planning efforts between the Corps of Engineers and its project partner. The contractor is creating the islands by hydraulically placing material at each island because this method requires less boat traffic and is more efficient than mechanically transporting it to the islands.

This is all a part of the plan, according to Campbell. He said the Corps and Ramsey County Parks and Recreation began studying this project in 2015. He added that the team has coordinated with other partners throughout the entire process to include working with the city of St. Paul, Ramsey County, Ramsey-Washington Metro Watershed District, Metropolitan Council, Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, National Park Service, and the U.S. Fish and Wildlife Service. In addition to the partners, Campbell said the team has also



Construction operations at Pigs Eye Lake, near St. Paul, Minnesota, July 19. USACE St. Paul District photo by Melanie Peterson

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coordinated with the Friends of the Mississippi River and Friends of Pool 2.

From concept to implementation, the vision for this project has been two-fold, said Campbell. “The focus has always been about improving the environment and seeking opportunities to beneficially reuse river sand,” he said. “This is an innovative solution to the Corps’ channel maintenance requirements in the fact that we are finding opportunities for the beneficial reuse of river sand rather than simply placing it at a location and walking away.”

Campbell said the innovation is helping save tax dollars, too. He said the project is saving money by not needing to purchase material to build the islands. Historically, a project like this would require a contract to provide material for the construction, which creates additional costs toward project completion. He said the cost savings for this project are considerable as the team estimates needing around 400,000 cubic yards of material to build the islands.

In addition to the project savings from reusing the river sand for environmental enhancement projects, Campbell said it also creates more immediate storage capacity for the placement sites

along the river when dredging is required to maintain the navigation channel. He added that this project, also known as a Continuing Authorities Program Section 204 project, is the first of its kind within the St. Paul District. Section 204 projects are ecosystem restoration projects that make beneficial use of Corps’ dredged materials. Campbell added that while the Pigs Eye Lake project is the first Section 204, there is another project nearing construction at Upper Lake Pepin near Red Wing, Minnesota.

Campbell said that while the Pigs Eye Lake project was developed under a new program, it builds on years ecosystem restoration projects the Corps has constructed through the Upper Mississippi River Restoration Program. “We are drawing on our 35-plus years of experience creating islands for successful habitat enhancement within the Upper Mississippi River to ensure the project’s success at Pigs Eye Lake.”



Nate Campbell, project manager, discusses the progress at Pigs Eye Lake with Cindy Ward, project engineer, on Pigs Eye Lake, in St. Paul, Minnesota, July 19. USACE St. Paul District photo by Melanie Peterson

Corps replaces nearly century old miter gates

Story by Melanie Peterson

The St. Paul District, with the help of its sister district, Rock Island, replaced nearly 90-year-old miter gates at Lock and Dam 5A near Fountain City, Wisconsin, and 85-year-old miter gates at Lock and Dam 8, in Genoa, Wisconsin.

The gates at Lock and Dam 8 were replaced over the course of two weeks in June with five 12-hour closures. The new upstream gates at Lock and Dam 8 are 27 feet tall, 100 feet wide and weigh 114 tons. The new downstream gates are 30 feet tall, 100 feet wide and weigh 121 tons.

The gates at Lock and Dam 5A were replaced over 1.5 weeks in July with four 12-hour closures. The old 90-ton gates were replaced with thicker and heavier 114-ton gates. Both the upper and lower gates are 27 feet high and 100 feet wide.

The increase in weight of the gates required newly upgraded anchorages, which serve to provide support of the new gates while also allowing them to pivot, said Troy Frank, acting lockmaster at Lock and Dam 8. The

anchorages were installed over the winter season.

All eight of the gates were assembled at Newt Marine Services – a subcontractor of Johnson Machine Works, Inc. – in Dubuque, Iowa, before coming up the river to their new location. The gates were installed with the help of the ‘Quad Cities’ floating crane from Rock Island District, which is a 500-ton crane.

The project delivery team included multiple structural, mechanical, electrical and civil engineers, in addition to operations and lock personnel. The experience and bulk of the install is credited to the maintenance and repair crews from both the St. Paul and Rock Island Districts.

“Lock and dams are vital to our economy,” Frank said. “Transferring goods from St. Paul to the Gulf of Mexico through locks keeps our economy moving.”

In addition to being the more economical means to transport

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Maintenance and repair crews from the St. Paul and Rock Island Districts install a new 121-ton miter gate at Lock and Dam 8 near Genoa, Wisconsin, June 16. USACE St. Paul District photo by Melanie Peterson

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commodities down the river, locks and dams also offer the greenest option for moving goods, said Mike Holzer, project engineer. “There are 90% less greenhouse gases produced by a towboat than a semi-truck. A 15-boat tow is equivalent to 200 box cars on a train, or 1,000 semi-trucks.”

Operationally, it’s mission critical to perform routine maintenance on the locks and dams. Most minor maintenance is performed annually during the winter when it’s outside of navigation season.

“Every 20 years, the lock chambers are dewatered, and we make sure the wear of structures under the water line is not excessive and will sustain another 20 years,” Frank said. “It’s a rare glimpse of the infrastructure at the bottom of the Mississippi.”

Replacing the miter gates is one step in ensuring smooth navigation on the river. Last summer, the gates at Lock and Dam 2, near Hastings, Minnesota, were replaced. The team is already looking to the future for additional miter gate replacements. “Each time we go through this process, we gain efficiency,” said Jim Cook, project manager.

St. Paul District at the forefront of innovation with research and development

Story by the St. Paul District Research and Development Team

St. Paul District planners, engineers and scientists are working to effectively utilize the civil works research and development capabilities with additional opportunities for more projects to use research and development resources. Current projects utilizing research and development include:

- The physical models and computer simulation for the Fargo Moorhead Metropolitan Area Flood Risk Management project
- The Upper Mississippi River Restoration program along with Engineer Research and Developmental Center, or ERDC, scientists are using research and development to test different soil depths to assess tree survival and growth
- The St. Paul District was authorized to lead the recent Minnesota River Basin Interagency study with multiple federal, state and university partners in a complex basin-wide model study

Headquarters established a civil works research development area to support the Corps' communities of practice and business lines (navigation, flood risk management and ecosystem restoration) after recognizing the need for innovation in all mission areas.

There are also Technical Assistance Programs that offer smaller amounts of funding for ERDC experts to visit district staff for site visits and short reconnaissance visits to explore project research needs and opportunities.

More recently St. Paul District has developed a project delivery team to assist district personnel in identifying and developing research needs, matching those needs with research and development programs, and communicating the benefits of the research topics across Corps districts and divisions to increase support during proposal review.

If you have a research need that would support one of the district's missions and would like to discuss collaboration opportunities that may be available, please reach out to a member of the St. Paul District's research and development team:

Aaron McFarlane, St. Paul regional planning and environment division north

Bob Edstrom, St. Paul District project management;

Chuck Theiling, ERDC Environmental Laboratory

You can also sign up to receive updates on the research and development Microsoft Teams site through Dan DeVaney



(left) Eric Hanson, ecologist, and (right) Aaron McFarlane, biologist, examine and document soils near Brownsville, Minnesota, July 22, 2020. USACE St. Paul District photo by Melanie Peterson

Buringa jumps to the rescue during off-duty hours

Story by Melanie Peterson

Mark Buringa, a civil engineering intern in the Eastern Area Office, was fishing with his dad when an unexpected emergency arose, and he stepped in to help.

"It was a pretty nice evening down in our area in southeastern Minnesota, and my dad and I are pretty avid fishermen, so we took the boat down to West Newton boat landing just outside of Kellogg, Minnesota, and fished until sundown," Buringa recounted the story.

When it was time to pull the boat out of the water, there was an elderly man pulling out his aluminum boat.

Buringa noticed that the man started backing down the ramp and backed in a little deeper than what was normal. "All of a sudden his back tires were in the water and the bed of the truck was in the water," recalls Buringa.

Quick to act, Buringa hopped out of his truck and jumped in the water. When he got there, the cab was half full of water. He was able to grab the man by the waist and swim with him to shore. By the time he got to shore and turned around, the truck was fully submerged.

"Him and his wife were very appreciative," Buringa said. "I found out that the man had been battling cancer and wasn't in the best physical state. He hadn't realized his truck was still in reverse." The couple sat in Buringa's truck away from the bugs while the sheriff and tow truck were called.

"Growing up on the [Mississippi] River, you know how dangerous the river is and you learn to identify emergencies as they're happening and quickly spring in to action," Buringa said. "You think of certain situations that could happen, but I saw firsthand that a vehicle can go down in the water much further and faster with a lot more pressure than you would ever expect."

"Matt saved this man's life and helped him recover his truck. He showed bravery and selfless service," Col. Eric Swenson, district commander, said.

Buringa is a student at North Dakota State University studying civil engineering. He has been with the St. Paul District since May 2022 and has one year left at the university.



Col. Eric Swenson, district commander, presents Mark Buringa, civil engineering intern, with a commander's coin at the Eastern Area Office in Winona, Minnesota, Aug. 12. USACE St. Paul District photo by William Grinde

Recognizing our Employees of the Month: The MVPs of MVP



June
Coralys Núñez-Orta
*Engineering and
Construction*



July
April McCann
*Engineering and
Construction*



August
Wade Carr
*Engineering and
Construction*



Around the District



Scott Hendrix (left center), contracting specialist, was selected as the North Hudson 2023 Pepper Fest King for his prior work on the festival and volunteer efforts in the community. USACE St. Paul District courtesy photo



(above) Hunter Simonson, park ranger, teaches water safety to a child at Sandy Lake Recreation Area, USACE St. Paul District courtesy photo



Barb Wall (center), head lock and dam operator, explains the mechanics of lock and dam operations to the public, at the Lock and Dam 10 open house in Guttenberg, Iowa, Sept. 24. USACE St. Paul District photo by Elizabeth Stoeckmann

News and Notes

New employees

Keith Barta, program analyst, regional planning and environment division north, St. Paul, Minnesota

August Bear, park ranger, operations, Brainerd, Minnesota

Jessica Bechtol, lock and dam operator, operations, La Crescent, Minnesota

Dirk Dezeuw, administrative support assistant, operations, La Crescent, Minnesota

Haley Djock, civil engineer, engineering and construction, St. Paul, Minnesota

John Farone, lock and dam operator, operations, Hastings, Minnesota

Josie Fitzwater, park ranger, operations, Crosslake, Minnesota

Clarence Fredericks, civil engineer (structural), engineering and construction, Fargo, North Dakota

Joseph Gassen, survey technician, operations, Fountain City, Wisconsin

Brandon Gates, deckhand, operations, Fountain City, Wisconsin

Edward Glimme, lock and dam operator, operations, Genoa, Wisconsin

Quentin Glueckert, park ranger, operations Valley City, North Dakota

Tyler Hammond, lock and dam operator, operations, Trempealeau, Wisconsin

Mason Huth, lock and dam operator, operations, Alma, Wisconsin

Joseph Jandrich, lock and dam operator, operations, Hastings, Minnesota

Carnot Joseph, mechanical engineer, engineering and construction, Fargo, North Dakota

Heather Kern, cabin attendant, operations, Fountain City, Wisconsin

Andrew Linder, lock and dam operator, operations, Minnesota City, Minnesota

Brady Louks, park ranger, operations, Federal Dam, Minnesota

Wake Madsen, deckhand, operations, Fountain City, Wisconsin

Michael Mattson, park ranger, operations, Valley City, North Dakota

Samuel Meyer, park ranger, operations, Spring Valley, Wisconsin

Jacob Moser, civil engineer, engineering and construction, St. Paul, Minnesota

Kambili Nkem-Ossai, student trainee (civil engineering), engineering and construction, Fargo, North Dakota

Timothy Orlowski, biologist, regulatory, Green Bay, Wisconsin

Elisabeth Payne, student trainee (civil engineering), engineering and construction, St. Paul, Minnesota

Daniel Piel, lock and dam operator, operations, Minnesota City, Minnesota

Joel Porterfield, geographer, regional planning and environment division north, St. Paul, Minnesota

Jason Robinson, lock and dam operator, operations, La Crescent, Minnesota

Sara Rother, forester, operations, La Crescent, Minnesota

Trace Strahle, regulatory specialist, regulatory, Stevens Point, Wisconsin

Jonathan Stumm, lock and dam operator, operations, Red Wing, Minnesota

John Swanson, lock and dam operator, operations, Eastman, Wisconsin

Joseph Toth, student trainee, regulatory, St. Paul, Minnesota

Morgan Vinyard, regulatory specialist, regulatory, St. Paul, Minnesota

Danial Williams, park ranger, operations, Crosslake, Minnesota

Promotions

Kelly Ammerman, lock and dam operator, operations, Minneapolis, Minnesota

Trevor Blake, lock and dam operator, operations, Alma, Wisconsin

Jarrod Brown, civil engineer, engineering and construction, Fountain City, Wisconsin

Amy Dessner, civil engineer, engineering and construction, St. Paul, Minnesota

Samantha Fink, lock and dam operator, operations, La Crescent, Minnesota

Lindsey Gatzow, accountant, resource management, St. Paul, Minnesota

Grant Halvorson, civil engineer (hydraulics) engineering and construction, St. Paul, Minnesota

Austin Hegenbarth, lock and dam operator, operations, Alma, Wisconsin

Landon Hill, park ranger, operations, Valley City, North Dakota

Logan Hoffmann, engineering equipment operator, operations, Fountain City, Wisconsin

News and Notes continued

Michael Hvidhyld, lock and dam operator, operations, Red Wing, Minnesota

John Incha, civil engineer, engineering and construction, St. Paul, Minnesota

Denise Julson, program analyst, programs and project management, St. Paul, Minnesota

Chad Klein, equipment repairman, operations, Trempealeau, Wisconsin

Mitchell Knegendorf, civil engineer, engineering and construction, St. Paul, Minnesota

Paul Leffler, supervisory biologist, regulatory, St. Paul, Minnesota

Nicholas Lorenz, project scheduler, operations, Fountain City, Wisconsin

Megan McGuire, biologist, regional planning and environment division north, St. Paul, Minnesota

Meghan McKinney, regulatory system administrator, regulatory, St. Paul, Minnesota

David Palme, biologist, regulatory, Stevens Point, Wisconsin

Loren Soma, supervisory mechanical engineer, engineering and construction, St. Paul, Minnesota

Peter Tellin, lock and dam operator, operations, Minneapolis, Minnesota

James Ulrick, supervisory civil engineer, engineering and construction, St. Paul, Minnesota

Alex Wallingford, lock and dam operator, operations, Minnesota City, Minnesota

Richard Weitzel, lock and dam equipment repairer supervisor, operations, Minneapolis, Minnesota

Sean Wentworth, mechanical engineer, engineering and construction, St. Paul, Minnesota

Morgan Wirth-Murray, regulatory specialist, regulatory, Brookfield, Wisconsin

See Xiong, civil engineer, engineering and construction, St. Paul, Minnesota

Congratulations



Kevin Denn, engineering and construction, and family welcomed a baby girl on June 12. Lilyann Marie Denn was born at 6 lb 14 oz and 20.5 inches long.



Tony Horacek, engineering and construction, welcomed Jack P. Horacek on Sept. 1.



Mitch Serjogins, operations, and his wife welcomed Auden Jack Serjogins, June 27.



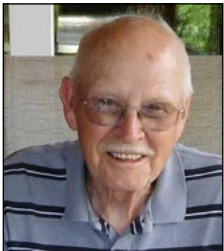
Chanel Mueller, engineering and construction, and family welcomed a baby boy early in the morning on June 3. Paul Jan was born at 7 lb 15 oz and 20 inches long.

News and Notes continued

Taps



Bruce Ario, mail room supervisor, worked in the mail room for 27 years. He passed away Aug. 6.



Wilbert Christian passed away Aug. 25. He served as a campground host at Lake Winnibigoshish with his wife Marvis.



Jim Kursu passed away July 14. He worked for the U.S. Army Corps of Engineers for 45 years and retired as the chief of programs.



Terry Ladd passed away June 30. He worked his entire 30-year career at Sandy Lake Recreation Area. He started as a maintenance man/sewage treatment plant operator and then as a park ranger.

Sally Lunsford passed away Sept. 19. She retired as Office of Counsel's secretary.



James Mueller passed away July 30. He retired from the Corps as a civil engineer technician with geotech and geology in 2004.



Terry Schneider passed away Jan. 14. He worked at Upper St. Anthony Falls Lock and Dam for 25 years and retired as head lock and dam operator.



William Wolfe passed away July 29. He retired from the Corps as the lockmaster at Lock and Dam 10 in Guttenberg, Iowa.