crosscurrents

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Island building project in Pool 10 provides multiple benefits

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Contents

(cover) Raylene Hylland, project engineer, talks to a surveyor at the Lower Pool 10 restoration project in Guttenberg, Iowa, Sept. 19. USACE St. Paul District photo by Melanie Peterson

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Articles and photography submissions are welcome. Submissions may be 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.

District Commander | Col. Matthew Chase
Public Affairs Chief | Shannon Bauer
Crosscurrents editor | Melanie Peterson
Contributing authors | Renwick Martin
| Patrick Moes
| Elizabeth Stoeckmann
| Dean Zwiefel

Address all inquiries to:
Editor, *Crosscurrents*
U.S. Army Corps of Engineers
332 Minnesota St., Suite E 1500
St. Paul, MN 55101
(651) 290-5679 | cemvp-pa@usace.army.mil

Comments from the top: A message from Col. Matthew Chase

Team MVP,

As I reflect on my first few months at the St. Paul District, I am impressed by your ability to maintain a professional attitude in difficult circumstances. Each one of you has shown resilience and adaptability; a quiet strength as we carry forward supporting each other and embracing the opportunities within every challenge. This Crosscurrents represents the strength of our workforce in the missions we continue to pursue and lead with perseverance.

It all goes back to our core values of M (Mission) – V (Value) – P (People).

Mission. Dive into this issue to see how we protect our communities with routine inspections of our dams in Fergus Falls, Minnesota, and Park River, North Dakota; and how we maintain essential infrastructure by replacing the miter gates on our locks and dams and ensure continued navigation on the Mississippi River, which is vital to our economy.

Value. We improve our communities through environmental restoration projects like the Lower Pool 10 ecosystem restoration project in Guttenberg, Iowa. This island-building project will protect and preserve wildlife habitat for years to come. Another island-building project in Hastings, Minnesota, will protect the Pool 2 embankment. Both of these beneficial use projects utilize river sand taken from the Mississippi River to ensure navigation.

People. As always, people are our most important asset, whether we're celebrating our employees at a retirement ceremony to honor their years of experience and expertise, hosting a camping weekend to recognize veterans, or supporting our team with on-the-job training through a partnership with a local college.

These are just a few examples of how we accomplish our Mission, provide Value to the nation and recognize our People. As the weather starts to get cooler in the Midwest, let's remember the importance of prioritizing safety to protect our people. Both on the job and at home, safety is always our priority so that each person in our district can go home every day. Take it slow when there's snow and ice possible on the roads. Take extra precautions when shoveling to protect your back and even your fingers. Ensure you have emergency supplies in your car and at your home.

As the days get shorter, be sure to check in on your mental health as well as that of your coworkers. Take steps to reduce stress and remember that self-care is not selfish. If you or others are struggling, explore the resources available to you. I look forward to seeing many of you around the district.

-Col. Matt Chase

An island state of mind: Island building project provides multiple benefits

Story by Melanie Peterson

The U.S. Army Corps of Engineers, St. Paul District, is building islands upstream of Lock and Dam 10 in Guttenberg, Iowa, as part of the Lower Pool 10 Habitat Rehabilitation and Enhancement project. The overall project purpose is island restoration and preservation by placing sand, riprap (or rock) and topsoil on the islands to rebuild or save them from high water events and erosion along the river.

“This project is important because without this work, we’re seeing erosion of the islands and loss of trees and habitat for eagles and other birds,” said Raylene Hylland, project engineer and contracting officer representative.

There are multiple benefits including deepening overwintering habitat for fish, habitat for migratory and native birds, and island preservation from erosion. “The overall benefit is for the health of the river,” she said.

Beneficial use of river sand

The sand material used to create the islands is mostly taken from nearby McMillan Island in Pool 10, a river sand placement site. The river sand is regularly placed there when it is dredged from the Upper Mississippi River navigation channel.

In 2024, this maintenance of the channel made way for 10.9 million tons of commodities to be moved through Lock and Dam 10 by the shipping industry. When material from McMillan Island is depleted, the material for the island-building will be taken directly from the channel. In this way, the St. Paul District is beneficially using material that had to be removed anyway and giving it a new purpose.

Additionally, the topsoil will be taken out of nearby Bussey Lake. The topsoil is used to promote tree and vegetation growth on the islands. The deeper water in the Bussey Lake backwaters will provide an overwintering habitat to help fish survive cold winters.

Staged project

The overall project is split into three stages. Stage 1, which focuses on South Ferry Slough, was awarded in November 2024 and began construction in August 2025. With a budget of $11 million, stage 1 is projected to be completed by 2027.

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The contractor moves river sand from a barge to the island being constructed as part of the Lower Pool 10 restoration project in Guttenberg, Iowa, Sept. 19. USACE St. Paul District photo by Melanie Peterson

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This season, the contractor, Legacy Corporation of East Moline, Illinois, will finalize the construction of the largest island within the project.

“What I think is interesting, is that this first island has over a third of the sand for stage 1 and is a little over half a mile long and 120 feet wide. If the sand was placed on a football field, it would be 30 feet high,” Hylland said. “The project has 65,000 tons of rock, which would be more than 3,000 dump trucks full of rock. The topsoil is half of the quantity of the sand. The project is built with sand, rock and topsoil in that order. Then we seed it and plant trees, and we have a year for that to establish and it’s considered finished.”

Pending funding, the goal is for all three stages to be completed by 2030 and to target North Ferry Slough and the McMillan Island complexes in additional construction contracts.

Challenges and coordination

A project of this magnitude presents its own challenges, Hylland explained. The contractor must follow various special use permits, which includes the Eagle Exclusion Zone. This states that you cannot work within 660 feet of an active eagle’s nest from Jan. 15 until the young eaglets fledge, which is typically mid-June but can be later. There are several active eagle’s nests within the construction zone.

The contractor must also avoid mussel beds containing federally listed Higgins’ eye pearly mussels, abide by northern long-eared bat restrictions, and stop work by Oct. 15 for the migratory bird restrictions in the area.

“Planning and staging for the contractor is critical,” Hylland said.

The project was planned in coordination with the U.S. Fish and Wildlife Service, the Iowa and Wisconsin departments of natural resources, and input from the local community.

This project is part of the Upper Mississippi River Restoration program. The program ensures the coordinated development and enhancement of the Upper Mississippi River system with a primary emphasis on habitat restoration projects and resource monitoring. In the 39-year history of the program, more than 60 habitat projects benefiting approximately 100,000 acres from Minneapolis to St. Louis, have been completed.

Photo taken before Lower Pool 10 island construction in Guttenberg, Iowa, June 27. USACE St. Paul District courtesy photo

Photo taken after island construction in Lower Pool 10, in Guttenberg, Iowa, Sept. 30. USACE St. Paul District courtesy photo

Major milestone reached in flood risk management project

Story by Liz Stoeckmann

In August, yet another major milestone was reached for the Fargo, North Dakota/Moorhead, Minnesota Metropolitan Area Flood Risk Management Project. This time it was at the Red River Structure, the largest of the three gated structures being constructed by the Corps of Engineers.

After more than three years of construction, the Red River of the North was permanently diverted 2,000 feet to the west through the recently completed gated structure. In addition to taming this mighty flooding source, it allowed completion of the dam embankment across the existing river channel.

"The magnitude of this accomplishment and its profound impact on safeguarding lives and critical infrastructure underscores the importance of our mission and the enduring commitment to protecting our communities," said St. Paul District Commander Colonel Matthew Chase. "It's remarkable to think that 16 years have passed since the devastating 2009 flood of record."

The Corps of Engineers awarded a $115 million contract to Ames Construction, Inc., of Burnsville, Minnesota, March 16, 2022, to build this structure. It is one of three major structures, and 22 miles of embankment and over four miles of interstate grade raise associated with the Southern Embankment part of the Fargo-Moorhead Metro Area flood risk management project.

The Red River Structure is the largest of the three gated structures (Diversion Inlet, Wild Rice River Structure and the Red River Structure) that comprise the Southern Embankment that is being built by USACE. The structure is supported on 2,888 steel H-piles which total 22 miles of driven pile. To date there has been 47,000 cubic yards of concrete placed and three Tainter gates which are 50-foot wide by 52-foot tall Tainter gates, each weighing nearly 300,000 pounds.

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Maj. Kyle Volk, western area office resident engineer, inspects the Red River structure near Horace, North Dakota, Aug. 6. USACE St. Paul District photo by Patrick Moes

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The Tainter gates were ceremoniously elevated during the milestone event. Each gated structure will be used to control flooding when the entire diversion project is complete and approved for operation.

Once the structure is operational, water levels of the Red River, which flow north through the Red River Structure, will be monitored using several upstream gages. “This information is critical for the proper operation of the Tainter gates during flood events,” said Cindy Ward, project manager.

“This project showcases combined efforts of military personnel, civilians, and contractors who have worked tirelessly to bring this project to life. Their dedication and expertise ensure the safety and resilience of our communities,” said Resident Engineer Major Kyle Volk.

The Red River of the North gated structure is a major component of the Fargo-Moorhead Metropolitan Area Flood Risk Management Project. “Upon completion in 2026, it will provide flood risk management for about 260,000 people in the Fargo – Moorhead Metro Area communities,” said Terry Williams, program manager.

“This milestone is a testament to the power of collaboration—an innovative P3 partnership, unwavering support from our senators and governor, and the dedication of teams who have worked tirelessly for years. Together, we are achieving what once seemed impossible,” said Ryan Fischer, then acting director of civil works for the U.S. Army Corps of Engineers.

The Metro Flood Diversion Authority posted a video highlighting the event here.

The Red River structure near Horace, North Dakota, Aug. 7. USACE St. Paul District photo by Liz Stoeckmann

Out with the old and in with the new at two locks and dams

Story by Patrick Moes

The St. Paul District, with support from the Rock Island District, completed two projects this summer on the Mississippi River that were nearly 90 years in the making.

Maintenance and repair teams from both districts successfully replaced the miter gates at Lock and Dam 6, near Trempealeau, Wisconsin; and Lock and Dam 7, near La Crescent, Minnesota. The gates were originally installed in the 1930s. The cost to replace the gates was around $5 million at each site.

Joel Hermann, Lock and Dam 6 lockmaster, said the project was a 5-year process that started with identifying need, designing the new gates and then finding a contractor to build them. Once that was complete, The team coordinated with the Rock Island District to determine when they could help with the replacement project, as well as bringing their crane to lift the gates that weigh around 238,000 pounds or about 70% heavier than the original gates. He added the crane, the "Quad Cities," is the biggest crane on the Mississippi River and the only crane capable of safely lifting the new miter gates.

Joel Hermann, Lock and Dam 6 lockmaster, discusses the replacement of a 90-year-old miter gate on the Mississippi River, near Trempealeau, Wisconsin, Aug. 26. USACE St. Paul District photo by Patrick Moes

Hermann said having the new gates installed ensures the navigation system will remain safe and reliable well into the future. "The 9-foot navigation channel is critical to the nation's economy through its ability to facilitate trade through agricultural and other types of products," Hermann said. "It's the most environmentally friendly, cost effect and efficient way of moving commodities."

At nearly 10.1 million tons of commodities that pass-through Lock and Dam 6 on a 10-year average, Hermann added that the navigation system keeps a lot of semis off of the roads, which also helps keep more money in farmers pockets with cheaper shipping costs ultimately makes the entire logistical chain more competitive.

Jim Cook, St. Paul District project manager, said the importance of the navigation channel goes beyond efficiencies and cost savings to shippers and producers. "There is a huge recreation component to the navigation channel, and more importantly, a 15-barge tow is equivalent to around 1,050 semis or 200 rail cars, so having the navigation channel reduces wear and tear on other transportation methods."

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A team of St. Paul and Rock Island District employees replace a 90-year-old miter gate at Lock and Dam 6, on the Mississippi River, near Trempealeau, Wisconsin, Aug. 26. USACE St. Paul District photo by Patrick Moes

A team of St. Paul and Rock Island District employees replace a 90-year-old miter gate at Lock and Dam 6, on the Mississippi River, near Trempealeau, Wisconsin, Aug. 26. USACE

The old miter gate next to the new miter gate at Lock and Dam 7, in La Crescent, Minnesota, July 29. USACE St. Paul District photo by Liz Stoeckmann

Orwell Dam undergoes major upgrades

Story by Liz Stoeckmann

The Orwell Dam is making waves with its latest improvements, including the installation of bulkheads to facilitate the replacement of its Tainter gate chains. These upgrades are designed to ensure the dam continues to operate smoothly and efficiently for years to come.

In mid-August, the pool at Orwell Dam, near Fergus Falls, Minnesota, was drawn down 14 feet over the course of 30 days to facilitate repairs and critical inspections in mid-September.

To safely complete the repairs and inspections, bulkheads were used to stop the normal flow of water through the spillway.

Orwell Dam, near Fergus Falls, Minnesota, Sept. 16. USACE St. Paul District photo by Melanie Peterson

"Using a crane, the district's maintenance and repair crew lifted and inserted five bulkheads weighing roughly 25,000 pounds each into slots upstream of the dam gate to block the flow and allow for schedule work to be completed," said Billy Thomson, project manager.

While the bulkheads were in place, the two low water control pipes in the abutment walls maintained the minimum required flow of 80 cubic feet per second downstream into the Otter Tail River. After the repairs and inspections were complete and the bulkheads were removed, river levels gradually returned to normal within three to four weeks.

Another key component of the project was the replacement of the heat shield on the dam gate, Thomson explained. The heat shield is critical for preventing ice buildup during the winter months when the dam is elevated from the water to mitigate operability issues.

The dive team also played a vital role in the project, inspecting the dam's underwater features using a remotely operated vehicle. Once the chain replacement was complete, divers rehabilitated the floor drains in the stilling basin, a critical component for the dam's structural stability.

"The dive team used pneumatic tools, a hammer drill, air jet, and air lift to remove compacted aggregate from 48 floor drains," said Kraig Berberich, dive coordinator. "Divers worked at depths of 4 to 8 feet, inspecting each drain with a camera before filling it with fresh aggregate."

Divers completed the repair work while managing water flows from 20,000 to 130,000 cubic feet per second through the low-flow control pipes, he explained.

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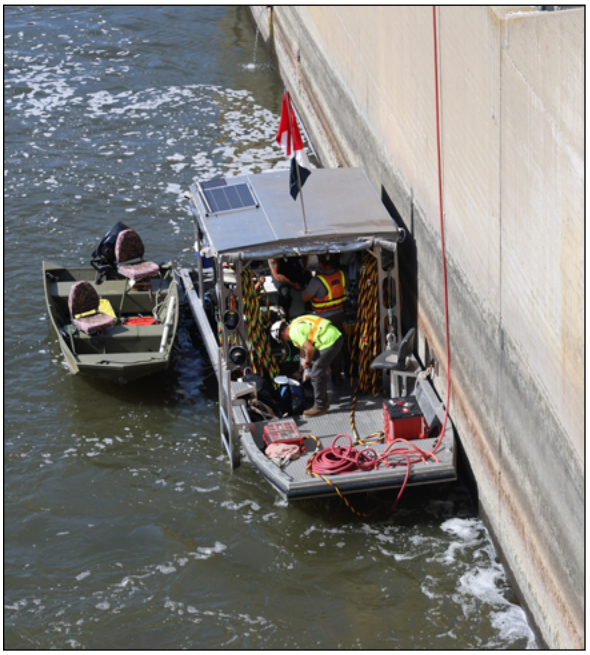
"It's impressive to see the various disciplines across the district coming together on site to execute the project after more than a year of planning," Thomson said. "The maintenance and repair section; dam safety experts; divers; civil, mechanical and structural engineers; safety personnel; and Orwell Dam site staff. These inspections are essential to ensure the dam performs as designed for years to come and inform future maintenance needs."

Orwell Dam, owned and operated by the Corps of Engineers, is a 72-year-old structure built in 1953. Standing 60 feet tall and stretching 1,344 feet at its crest, the dam plays a vital role in water supply for municipalities and agricultural needs. It also supports recreational activities such as for hunting, boating, fishing and other outdoor activities around the lake.

Randy Urich (left) recreation and natural resources chief, talks with Kraig Berberich (right) district dive coordinator, at Orwell Dam, near Fergus Falls, Minnesota, Sept. 16. USACE St. Paul District photo by Melanie Peterson

(below) The divers' boat at Orwell Dam near Fergus Falls, Minnesota, Sept. 16. USACE St. Paul District photo by Melanie Peterson



Upstream of Orwell Dam in Fergus Falls, Minnesota, Sept. 16. USACE St. Paul District photo by Melanie Peterson

(below) Billy Thomson, project manager, points at the new Tainter gate chain at Orwell Dam, near Fergus Falls, Minnesota, Sept. 16. USACE St. Paul District photo by Melanie Peterson

Fechter recognized for planning excellence

Story by Renwick Martin

The U.S. Army Corps of Engineers, Mississippi Valley Division, selected Katy Fechter, St. Paul District senior plan formulator and St. Louis resident, for USACE's 2024 Planning Excellence Award.

The Planning Excellence Award recognizes USACE planners exhibiting exceptional job performance. Fechter received this nomination in part for her work on the Tangipahoa Parish, Louisiana, Flood Risk Management Feasibility Study.

Fechter began her career with USACE in 1997. Since 2022, Fechter has served as the lead plan formulator for the Tangipahoa Parish feasibility study, where she was coauthor of the feasibility report and integrated environmental assessment. During the project, Fechter showed a great ability to anticipate challenges and develop effective strategies to keep the team moving forward.

Katy Fechter, senior plan formulator. USACE courtesy photo

"Katy is a highly skilled and innovative senior planner who consistently demonstrates exceptional leadership and planning abilities," said Elisa Royce, Fechter's supervisor.

Fechter sits in the St. Louis District office as part of Regional Planning and Environmental Division North. She was also recognized as the RPEDN planner of the year in 2024.

St. Paul District completes inspection at Homme Dam

Story by Ren Martin

On a breezy summer day near Park River, North Dakota, St. Paul District employees worked hard to complete their periodic inspection of Homme Dam. The inspection, conducted every five years, was done by a team consisting of various multi-disciplinary engineers and operations employees. “We look at all the different components that make up the dam,” said Scott Tichy, North Dakota section supervisor. “Including the control structure, the embankments, and the spillways.”

Part of the inspection included releasing water to lower the reservoir below the spillway crest. This allowed Sam Helgeson, structural engineer, to inspect the concrete on the spillway and assess its condition. Also on hand were geotechnical engineers, a geologist, hydraulic engineer, electrical engineer and mechanical engineer, who inspected the embankments of the dam.“The inspection is to see what kind of things have changed in the last five years, what kind of things might need some maintenance and whether we need an increase in funding to make sure the dam maintains its integrity and functionality,” Tichy said.

Homme Dam is a high hazard potential dam; this classification is given when there is probable loss of life in the event of a dam failure or mis-operation of the dam. Because of this, Homme Dam is subject to a more rigorous assessment every ten years.

“Annual inspections, which do not involve dewatering the stilling basin or a risk assessment, are completed by our engineering division at all of our high hazard dams and many of our low and significant hazard dams each year,” said Ryan Price, dam safety program manager. The hazard potential classification does not reflect in any way on the current condition of the dam.

The U.S. Army Corps of Engineers Dam Safety Program uses a risk-informed approach to manage its portfolio of 694 dams, 32 of which are located in the St. Paul District boundaries. Of these, seven are considered high hazard.

Critical to an effective Dam Safety Program is the focus on public safety, but it also requires continuous and periodic project inspections and evaluations. The Dam Safety Program seeks to ensure that USACE-owned and operated dams do not present unacceptable risks to people, property or the environment.

Scott Tichy, North Dakota site supervisor, discusses the Homme Dam periodic inspection, Aug. 7. USACE St. Paul District photo by Ren Martin

Homme Dam at the periodic inspection, near Park River, North Dakota, Aug. 7. USACE St. Paul District photo by Ren Martin

New Island built to protect and preserve

Story by Liz Stoeckmann

The Mississippi River's newest addition is making positive waves. A man-made island is being constructed to protect and preserve critical habitats while enhancing resilience along the waterway.

Nick Castellane, project manager, shared insights into the Pool 2 protective island and collaborative efforts between the Corps and its contractors to build the island upstream of Lock and Dam 2 in Hastings, Minnesota.

"The goal of the protective island is to shield the existing embankment from wind, wave erosion and ice buildup in the spring melts, while also protecting the river's ecosystem," Castellane said.

The protective island project is critical to safeguarding the 3,250-foot-long earthen embankment on the upstream side of the river. Originally constructed in 1930, the embankment has experienced erosion over time due to harsh weather conditions, lack of vegetation and high-water events. The new island will act as a buffer, reducing the impact of wind and waves while supporting the river's ecological health.

Nick Castellane, project manager, at Lock and Dam 2 in Hastings, Minnesota, Sept. 17. USACE St. Paul District photo by Melanie Peterson

The mile long island will use over 300,000 cubic yards of dredged material, or river sand, out of the Mississippi River maintaining the crucial channel for the navigation industry.

"The contractor mechanically dredges sediment and transports it to a transfer site," Castellane said. "From there, the material is loaded onto a barge, placed in a hopper, and piped over to the island. Once it's expelled, the contractor uses an excavator and bulldozer level and compact the material to shape the island."

One of the standout features of the project is its sustainable approach, Castellane said. "We're utilizing material directly from the Mississippi River channel," he said. The island will include a variety of features, such as areas at different elevations above the typical pool level to provide habitat benefits. These features include tall grasses, tree plantings, wetlands, rock structures, and an overwintering fish habitat.

"Another outgrowth of this project is creating new habitats with nearly 16 acres of vegetation on top of the island and an aquatic overwintering area," said Thomas Reinhardt, construction engineer.

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Due to the material being taken directly from the river to its destination on the island, the contractor maintains consistent communication with Corps officials, working efficiently 24 hours a day while keeping safety a top priority, he explained.

“This project is vital to navigation because we need to maintain the pool elevation,” Castellane said. “The embankment structure is critical to our core mission of maintaining the 9-foot navigation channel. By using material from the channel, we’re not only building the island but also ensuring the navigation channel remains at the required depth to support the transportation industry.”

In order for these benefits to come to fruition by 2027, partnership and coordination across multiple entities is essential.

“The project’s success depends on the combined efforts of engineers, environmental experts, and local stakeholders working together to ensure the island fulfills its protective and restorative goals,” Reinhardt said.

The Mississippi River plays a key role in commerce, with approximately 10 million tons of cargo passing through the lock and dam annually. “Materials like soybeans, corn, petroleum products, concrete, and more are transported up and down the river,” Castellane said. “This project ensures that the river remains a reliable resource for both navigation and the environment.”

Work continues on the Pool 2 protective island in Hastings, Minnesota, Sept. 17. USACE St. Paul District photo by Melanie Peterson

Sand is removed from the Mississippi River to be used on the Pool 2 protective island in Hastings, Minnesota, Sept. 17. USACE St. Paul District photo by Melanie Peterson

Partnerships advance research in groundbreaking study

Story by Melanie Peterson

In a first-of-its-kind study, the U.S. Army Corps of Engineers, St. Paul District, and the Engineer Research and Development Center, in Vicksburg, Mississippi, are partnering to make informed decisions about river sand removed from the Mississippi River using it for ecosystem restoration projects.

Each year, the St. Paul District removes around 1 million cubic yards of dredged material, or river sand, from the Upper Mississippi River to maintain the 9-foot navigation channel and allow barge traffic to safely move up and down the river. This is enough material to fill U.S. Bank Stadium.

The 3-year research project with ERDC will be used to make better data-driven decisions about beneficially using sand for ecosystem restoration in the future, Lewis Wiechmann, St. Paul District forester, said.

The partnership with ERDC began in 2020 when St. Paul District Biologist Aaron McFarlane, completed a 6-month detail with ERDC-U. He developed relationships which turned into research studies. He received grants for smaller studies and eventually began the current study which is in year 2 of 3 and is funded by the Ecosystem Management Restoration Research Program.

The first year of research focused on site selection and on-the-ground visits to confirm site boundaries developed using geospatial data were accurate, McFarlane said. This year, the team conducted field visits to collect samples and data about the vegetation and soil conditions at each site. The third year will consist of data analysis and a final report of the results.

The research resulted in a database of over 400 sites between the St. Paul District and the St. Louis District where river sand was originally placed in the 1920s through the 1970s to develop and maintain the 9-foot channel. Over the last 40 years, USACE has

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Jillian Harms (left), Rock Island District natural resources specialist, and Lewis Wiechmann (right), St. Paul District forester, collect data on forest regeneration at a soil sampling plot near Keithsburg, Illinois, Sept. 9. USACE St. Paul District courtesy photo

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created more than 130 islands through restoration efforts in this same region. The team sampled over 100 locations within these areas and in natural floodplain areas to compare the current soil conditions and what is growing there.

“This study will help us improve future restoration projects and refine what materials we use for forest restoration or island construction. Using this study, with this large dataset across sites, we can take the data, analyze it, and determine what is a good substrate and material for islands based on what goals we have in mind, like forest and native grassland,” Wiechmann said. “The soil samples will be analyzed by ERDC for microbes, bacteria and fungi and combined with forestry data to create a complete picture of the ecosystem.”

Nationally, USACE removes over 200 million cubic yards of material from navigation channels. In light of the amount of dredging and understanding that the material is a resource, USACE established a goal of using 70% of the material removed from navigation channels for beneficial use by 2030. Beneficial use is defined by USACE as “productive and positive uses of dredged material, which cover broad use categories ranging from fish and wildlife habitat development to human recreation, to industrial/commercial uses.”

“We’re managing a large river system and we’re trying to do the best we can with our dredged material management, taking care of existing sites along the river and informing management decisions to make better restoration projects,” McFarlane said. “We can help other agencies do their job and manage land on the river to make it a better overall resource for the public and to protect it for generations to come.”

Madelyn Roesch (left), ERDC intern, and Nia Hurst (right), ERDC research biologist, collect a soil sample at a historical dredged material placement site, July 24. USACE St. Paul District courtesy photo

Carina Jung, Ph.D., ERDC research microbiologist, labels soil samples collected for microbial analysis, Sept. 10. Results will indicate the bacteria and fungal communities in natural and modified floodplain soils. USACE St. Paul District courtesy photo

Several agencies use muscles to relocate mussels, fish in Red River of the North

Story by Patrick Moes

Building a flood risk management system is challenging. Building one that incorporates a 30-mile diversion, 22 miles of embankments, multiple highway and railroad bridges, three gated structures, two states, and two aqueduct structures is daunting but currently on pace to be completed in 2027.

While the project will ultimately help to protect nearly 260,000 people and 70 square miles of infrastructure within the greater Fargo, North Dakota Moorhead, Minnesota Metro Area, building it does create some environmental concerns that are being addressed by the St. Paul District.

Derek Ingvalson, St. Paul District biologist and Fargo Moorhead project environmental manager, said the mitigation efforts completed thus far, or in the process of being completed, are the largest in the district's history. He said the team has primarily focused on forest, wetland and aquatic mitigation.

"There is a lot of value within these resources," said Ingvalson. "The reason that we go through all of the efforts and complete mitigation is to try and maintain the integrity within the human environment. We know that a project of this size will have some impacts. Many of the organisms and habitats effected by building this project provide us with a tremendous amount of benefit whether people realize it or not. "

Ingvalson said some of the benefits of these natural resources help with carbon sequestration, air and water filtration and even recreation. "Our goal with all of the mitigation efforts is to replace those lost benefits while we also reduce the flood risk to the communities," he said.

In an effort to continue mitigation efforts within the great Fargo / Moorhead metro area, a team of teams worked together to relocate fish and mussels from a cutoff area of the Red River of the North. Ingvalson said the week-long relocation effort in early September could not have been accomplished without partners with the Metro Flood Diversion Authority, U.S. Geological Survey, Minnesota Department of Natural Resources, North Dakota Game and Fish and North Dakota Department of Environmental Quality. In all, the team caught and relocated 2,048 fish from 32 species and over 5,000 mussels from 10 species. "These numbers greatly exceeded my expectations," said Ingvalson, as he thanked all of the agencies for their participation in the relocation efforts.

A team of biologists conduct a fish and mussel relocation project on the Red River of the North, near Horace, North Dakota, Sept. 4. USACE St. Paul District photo by Patrick Moes

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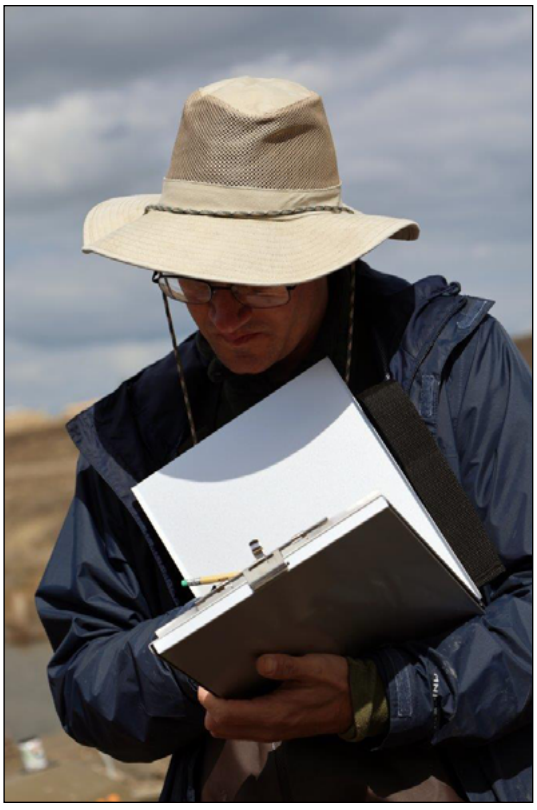
Dave Potter, biologist, conducts a fish and mussel relocation project on the Red River of the North, near Horace, North Dakota, Sept. 4. USACE St. Paul District photo by Patrick Moes

(below) Blake Hollingsworth, project engineer, monitors mussel and fish relocation efforts near Horace, North Dakota, Sept. 4. USACE St. Paul District photo by Patrick Moes



Dan Meden, biologist, monitors a fish and mussel relocation project near Horace, North Dakota, Sept. 4. USACE St. Paul District photo by Patrick Moes

(below) Zachary Day, biologist, monitors a fish and mussel relocation project near Horace, North Dakota, Sept. 4. USACE St. Paul District photo by Patrick Moes

Bringing veterans together: Cross Lake hosts annual camping weekend

Story by Ren Martin

The idea started at Gull Lake in 2016, as Corrine Hodapp, operations manager at the district's Cross Lake Dam and Recreation Area, worked the recreation area's veteran fishing event.

"I began walking around and asking members of the Minnesota Wounded Warrior Guide Service if they'd ever done a camping event," she recalled.

They hadn't.

A few months later, Veteran's Camping Weekend, sponsored by the Minnesota Wounded Warrior Guide Service, was born at Cross Lake. This year's edition of the annual event included pontoon rides, fishing demonstrations, t-shirt making and even an outdoor movie.

These events typically only include veterans and their immediate family, allowing for a more intimate atmosphere. The community breakfast, however, is a different story.

"This year we served over 270 people," said Hodapp. The breakfast, made entirely by volunteers, is offered for free to the whole Crosslake community. "This breakfast is a meaningful way for our community to come together, share a meal, and show appreciation to our veterans and their families," said Ellen Tabako, a park ranger at Cross Lake. Donations from the breakfast totaled over $1,000, all of which went directly back to the Minnesota Wounded Warrior Guide Service.

A weekend this big can't be handled alone. Natural resources specialists Les McCoy, Aaron Springer and Ellen Tabako each played a crucial role in supporting this gigantic mission. "They all stand out because we can't do it without each and every one of them," Hodapp said.

For Hodapp, hosting these events has been "a big learning experience, just on what those that served have done for our country." Offering them "something as simple as a campsite and an opportunity to gather with their fellow service members is awesome to do," she said.

"Many of the families we host return year after year, sharing how much they look forward to this event and how grateful they are for the lasting friendships and sense of belonging it provides," Tabako said.

In addition to Veteran's Camping Weekend, Cross Lake holds several different events each year, including Spooktacular, Cross Lake Days and Winterfest.

Participants at the 2025 Veteran's Camping Weekend at Cross Lake Recreation Area in Crosslake, Minnesota. USACE St. Paul District courtesy photo

St. Paul District expands repair training opportunities

Story by Ren Martin

For the first time in its history, the St. Paul District has introduced a formal, structured training specifically designed for the district's repair personnel.

"By offering targeted training," said Steve Heidbrider, lockmaster at Lock and Dam 2 in Hastings, Minnesota, "we aim to develop and enhance our equipment repairers' skill sets across multiple disciplines, benefiting both USACE and our employees."

The program, a partnership with St. Paul College that began in 2024, offers courses in a variety of key areas that "allows us to coordinate and focus the training in areas we feel would benefit our people," Heidbrider said. "This year the focus is on hydraulics and basic plumbing training."

The courses being offered includes safety and communication, basic electricity and electrical measurements, capacitance and circuit application, troubleshooting three-phase induction motors and motor controls. The classes are online with hands-on training completed on the job.

The program is also open to current employees that have shown interest in becoming an equipment repairer. The overall goal of the program is to "expose our maintenance personnel to as many skills as we can," Heidbrider said.

Around THE DISTRICT

Joel Moser, lock operator, talks to the public at the Lock and Dam 10 open house in Guttenberg, Iowa, Sept. 20. USACE St. Paul District photo by Melanie Peterson

Calvin Aulwes (right), lock operator, talks to the public at the Lock and Dam 10 open house in Guttenberg, Iowa, Sept. 20. USACE St. Paul District photo by Melanie Peterson

Randy Urich (left) recreation and natural resources chief, and Jim Rand (right), readiness operations center chief, interview with Minnesota Military Radio, in St. Louis Park, Minnesota, Aug. 8. USACE St. Paul District photo by Melanie Peterson

Judy Denzer, lockmaster, briefs site safety to Minnesota Department of Natural Resources staff at a fish tagging even at Lock and Dam 5, near Minnesota City, Minnesota, Oct. 6. USACE St. Paul District photo by Liz Stoeckmann

John Henderson (left) and Raylene Hylland (right) Winona resident engineer, tour the Lower Pool 10 restoration project in Guttenberg, Iowa, Sept. 19. USACE St. Paul District photo by Melanie Peterson

Jay Grimsled, lockmaster, talks to the public at the Lock and Dam 10 open house in Guttenberg, Iowa, Sept. 20. USACE St. Paul District photo by Melanie Peterson

St. Paul District hosts delayed retirement program ceremony

St. Paul District employees at a retirement ceremony, Sept. 30. USACE St. Paul District photo by Patrick Moes
(back row, left to right) *Karl Jansen, Priscilla Dimbo, Col. Matthew Chase, Lisa Cheever, Kimberly Bahls, Chad Konickson, Kevin Casserly, Marv Hrdlicka, Jeff Steere, Doug Crum*
(front row, left to right) *Theresa Thury, Kristen Fairbanks, Denise Julson, Dawn Polensky, Cheryl Paulson, Chris Erickson, Brett Coleman, Jeff Kirkey, Brian Johnson, Jim Sentz, Lt. Col. Josh Rud*

Joseph Toth, regulatory specialist, attends the retirement ceremony, Sept. 30. USACE St. Paul District photo by Ren Martin

A.J. Kitchen, regulatory branch chief, and Ben Orne, acting regulatory deputy division chief, talk at the retirement ceremony, Sept. 30. USACE St. Paul District photo by Melanie Peterson

Rebecca Seal-Soileau, IJC specialist, attends the retirement ceremony, Sept. 30. USACE St. Paul District photo by Ren Martin

(left) Terry Zien, program manager, talks to (right) Kris Fairbanks, one of the retirees, at the retirement ceremony, Sept. 30. USACE St. Paul District photo by Ren Martin

Recognizing our Employees of the Month: The MVPs of MVP

July
Scott Rolbiecki
Operations

August
Rachel Gralnek
Regulatory

September
Dalyson Sorm
Operations

Congratulations

Lauren Allin, engineering and construction, passed the P.E. exam in June.

Janet Buchanan, regional planning and environment division north, and her husband Will, welcomed twin boys Henry and Neal at 5 pounds, 11 ounces and 4 pounds, 15 ounces.

Amy Dessner, engineering and construction, completed her Master of Engineering degree from Auburn University in May.

Kacie Grupa, engineering and construction, and her husband, Mitch, welcomed son Grayson Grupa, Sept. 21, at 8 pounds, 4 ounces and 20.7 inches.

Mitch Serjogins, operations, celebrated his last day at Lock and Dam 5A in October before starting as lockmaster at Lock and Dam 4, in Alma, Wisconsin.

Henry and Neal Buchanan

Grayson Grupa

Mitch Serjogins

Taps

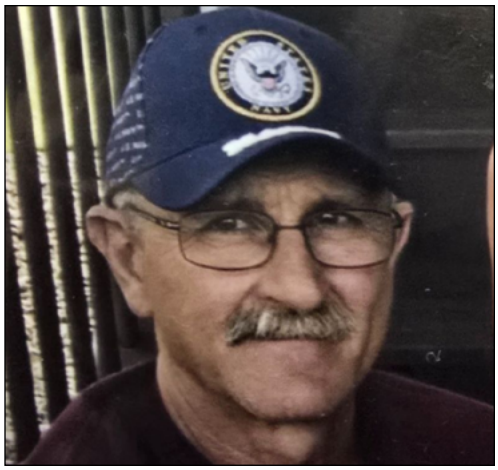
Maurice Munro Bowers passed away Oct. 7. He was an engineer for the St. Paul District. Much of his time from 1970-1995 involved working on several locks and dams located on the Mississippi River, as well as periodic onsite flood engineer work during river flooding events, often in the Red River Valley and in Minot, North Dakota.

Lonnie Earney passed away July 30. Earney worked out of Fountain City, Wisconsin, on the crane and derrick boat for three decades from 1978 until his retirement in 2010.

Brad Mussman passed away July 28. He joined the St. Paul District three years ago and worked as a lock operator at Lock and Dam 3 in Red Wing, Minnesota.

Loren Nishek passed away Oct. 18. He was a project engineer/contracting officer representative who worked for the St. Paul District three times over the course of his 30+ year career with USACE and worked for the Western Area Office Baldhill Dam and Devils Lake. He won the National Hard Hat of the Year Award in 2012.

Maurice Munro Bowers



Lonnie Earney

Brad Mussman

Loren Nishek

Retirements

Kimberly Bahls retired as a financial management specialist with 36 years of service
Tonya Baker retired as a program analyst with 21 years of service
Tamara Cameron retired as the chief of operations with 34 years of service
Lisa Cheever retired as an administrative assistant with 24 years of service
Brett Coleman retired as the executive assistant with 23 years of service

Jodi Creswell retired as chief of the environmental planning branch with 34 years of service
Christine Davis retired as a contracting specialist with 20 years of service
Kristen Fairbanks retired as an emergency management specialist with 36 years of service
Cynthia Hitchcock retired as a legal assistant with 16 years of service
Brian Johnson retired as a civil engineer with 39 years of service

Denise Julson retired as a program analyst with 37 years of service
Jeffrey Kirkey retired as the safety and occupational health chief with 22 years of service
Camie Knollenberg retired as a plan formulator with 31 years of service
Chad Konickson retired as the chief of regulatory division with 27 years of service
Marijo Mahoney retired as a secretary with 25 years of service

Desiree Morningstar retired as a regulatory branch chief with 25 years of service
Kenneth Peterson retired as a real estate specialist with 33 years of service
Dawn Polensky retired as a program manager with 16 years of service
Karen Randall retired as a lock and dam operator with 38 years of service
James Sentz retired as a civil engineer and design branch chief with 39 years of service

Jeffrey Steere retied as a natural resources supervisor with 42 years of service
Theresa Thury retired as a program analyst with 42 years of service
Denita Wesley retired as a real estate specialist with 5 years of service
Byron Williams retired as a cartographer with 26 years of service
Ryan Winn retired as a regulatory project manager with 32 years of service

Photo by Ren Martin