

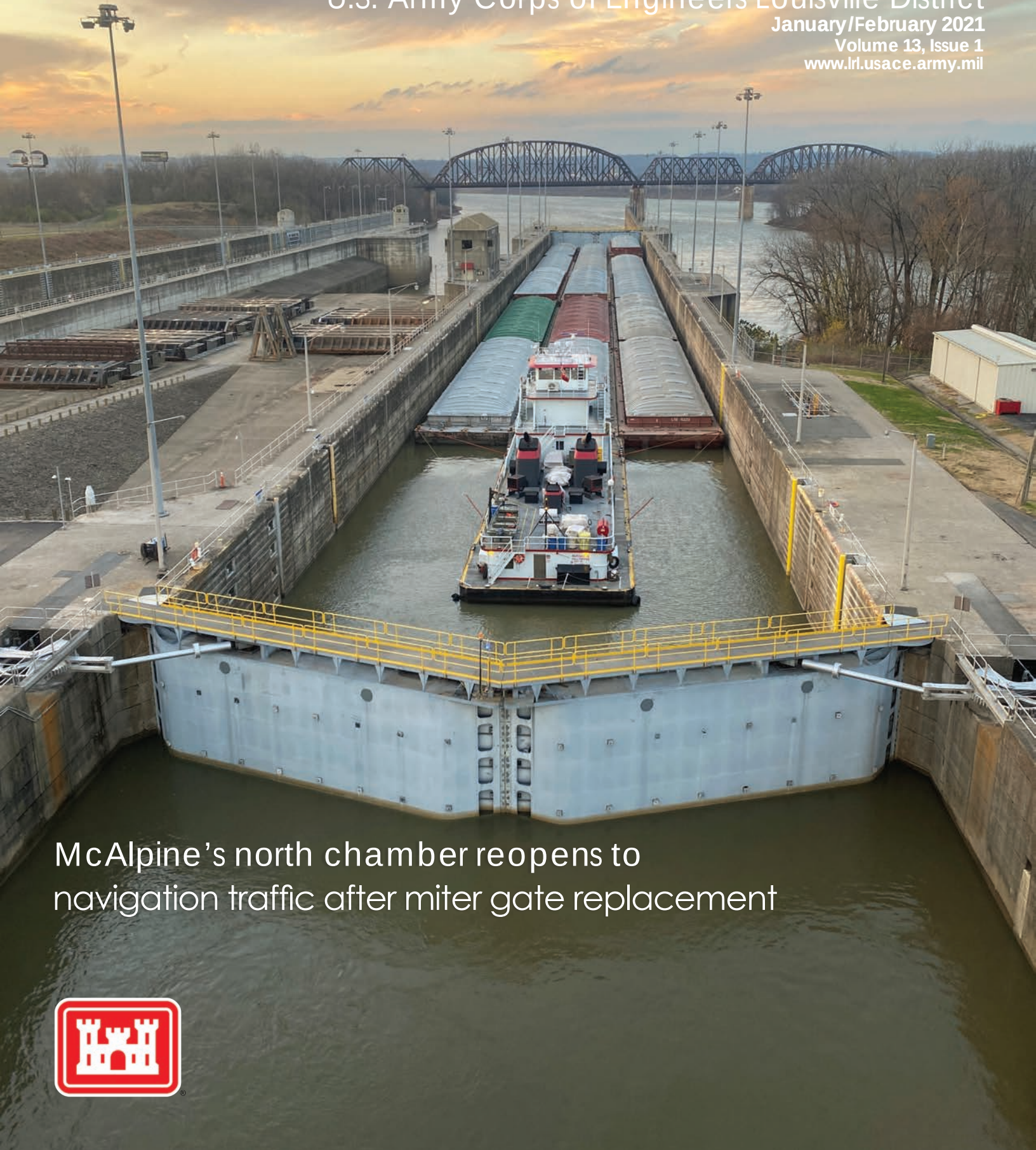
Falls City Engineer

U.S. Army Corps of Engineers Louisville District

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McAlpine's north chamber reopens to navigation traffic after miter gate replacement





Falls City Engineer

Vol. 13, Issue 1

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On the cover: The first motor vessel locks through McAlpine's Locks and Dam north chamber on the Ohio River in Louisville, Ky., as it reopens to navigation traffic Dec. 11, 2020.
(USACE photo by Josh Saylor)

 **Please conserve:**
Think before you print.

Commander's Comments

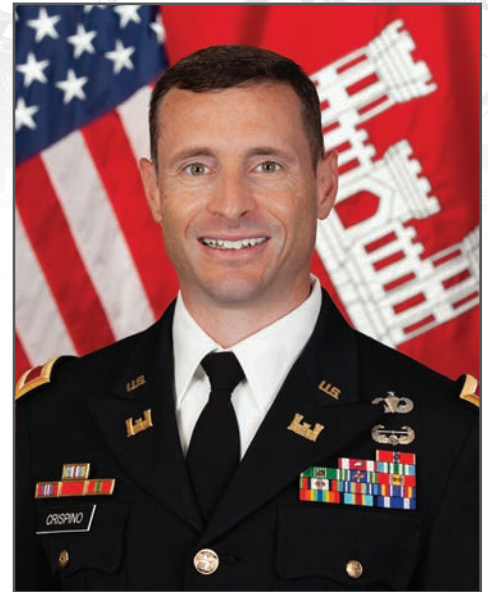
Team Louisville,

Happy New Year! I hope you all had an enjoyable and healthy holiday season. I look forward to starting this new calendar year and maybe some return to normalcy in a few months. COVID-19 still continues to be a major challenge to our nation, and many of us have experienced the personal loss of someone close as a result. I encourage everyone to please stay alert to the threats in our local region and take precautions to protect yourself. Wear a mask, practice social distancing, avoid crowded places, and maintain good hygiene.

We recently held our first virtual Louisville District Open House and had more than 400 online participants. Several former district commanders attended and provided positive feedback. Thank you to everyone who took the time to present, participate in the networking sessions and for all your hard work in making the event a success.

This edition is packed with outstanding stories to spotlight our continued success of delivering the program, as well as highlights of the extraordinary contributions of others throughout the district. From completing the miter gate replacement project at McAlpine, using new methods to stabilize shorelines at Rough River Lake, to highlights of our dedicated employee's hard work and much more - this district continues to excel.

As a reminder, February 21-27 is National Engineers Week. It's a time to celebrate how engineers make a difference in our world. Be



Col. Eric Crispino
*Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers*

on the lookout as we spotlight some of our own on the district's social media sites.

Thank you again for your continued flexibility and resilience.

Building Strong! Louisville Proud!

Col. Crispino

Eric D Crispino

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BUILDING STRONG®

Volume 13, Issue 1 **2**

Civil Works

McAlpine's north chamber reopens to navigation traffic after miter gate replacement

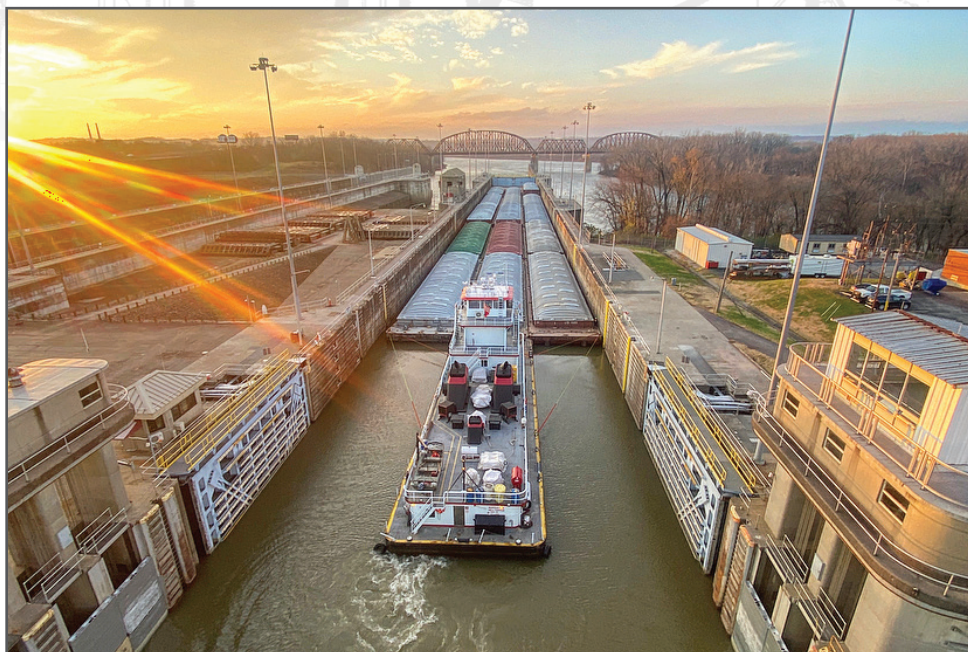
Abby Korfhage, public affairs

The 1,200 foot-north chamber at McAlpine Locks and Dam on the Ohio River in Louisville, Kentucky, officially reopened to navigation traffic, Dec. 11.

The north chamber closed in mid-June as part of the \$30 million miter gate replacement project, which also included scheduled maintenance and repairs. Nearly 100 fleet employees and laborers from across the region were onsite each day to ensure the project was completed on time.

"I cannot express how awesome and humbling it is to work with such a team of dedicated professionals," said Tim Fudge, Louisville District Operations Division chief. "The standard that has been set by the Regional Rivers Repair Fleet, McAlpine personnel and our Maintenance Section folks is one for others to chase and a huge success story for not just those involved locally, but also for the region."

The temporary six-month closure allowed the Regional Rivers Repair Fleet's heavy capacity fleet to replace the miter gates and related equipment on each end of the north chamber to increase reliability and efficiency on the inland waterways system. In addition, the floating mooring bitt tracks were replaced to increase safety for vessel traffic.



Josh Saylor

The first motor vessel locks through McAlpine's Locks and Dam north chamber on the Ohio River in Louisville, Ky., as it reopens to navigation traffic Dec. 11, 2020.

According to Fudge, major maintenance projects such as this are critical to ensure reliability and efficiency on the inland waterways system, which fuels America's economy. The aging gates were a growing concern, and with more than 54 million tons of commodities moving through McAlpine Locks and Dam annually, a

failure would have profound impacts.

"My sincere thanks to every single person who stepped foot on this project, endured the challenges that arose and overcame them as a unified team," Fudge said. "This was not an easy undertaking, and that is why it took the best team in the USACE to get it done."

Rough River Lake staff tests out new shoreline stabilization method



Diane Stratton

Rough River Lake staff works to lay shoreline stabilization mats along the shoreline at North Fork Beach in McDaniels, Ky., to help stop the erosion that has been taking place due to high water.

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District Rough River Lake staff is testing out new shoreline stabilization methods at the North Fork Beach in McDaniels, Kentucky.

The team is rolling out a newer product manufactured especially for erosion control to determine its effectiveness in reducing shoreline erosion.

On any waterway, one of the major environmental factors you can encounter is

erosion. When the environmental stressors are great enough to cause high amounts of erosion on the banks of a waterway, or reservoir, it is necessary to stabilize the bank to halt the erosion to save the land you are losing, according to Adam Taylor, Rough River Lake park ranger and shoreline stabilization project lead.

"In this particular location we have a beach and parking lot," Taylor said. "The erosion of the banks had been greatly increased in recent years due to high water and increased wave action at high water levels. This spot had to be addressed because we did not want to lose enough land to impact the integrity of our parking lot."

According to Taylor, last year Rough River Lake staff was introduced to the product from one of their partners with the Kentucky Department of Fish and Wildlife.

"Some of the other lakes have already used a couple of rolls to test it out; however, it has yet to be used on the

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shoreline,” Taylor said.

The product is a vegetated concrete block mat used for stabilizing slopes, channels, low water crossings, inlet/outlet protection and shorelines. It consists of concrete blocks locked together and embedded into a high-strength geogrid. There is spacing between the blocks that gives the mat flexibility and allows for optional vegetation growth.

“We chose this product (to test) because it seemed to be easy to install and would allow for vegetation growth back on the area,” Taylor said. “Natural vegetation is the best erosion control method we can use; however, it’s very hard to establish. The low profile of the mat will allow for mowing over the top, which our traditional rip-rap method will not.”

To test the new method and to get an accurate representation, the team had to find the best location, according to Taylor.

“Once we had chosen a location, our maintenance crew graded and prepped the site,” Taylor said. “We then hauled out materials, seeded and fertilized the land, installed mats and strawed affected areas.”

The project took two days to complete. It took a team of four employees to physically set the mat; one equipment operator, one spotter, and two individuals to help control the rolling of the mat as it was rolled out with the skid steer, according to Taylor.



Adam Taylor

A skid steer moves the mats to place them in the chosen location. The product is a vegetated concrete block mat weighing approximately 10 pounds per square foot.

“After the first mat is placed, the second is overlapped and rolled out,” Taylor said. “Once they are overlapped, the mats are tied together to help keep them in place. Each mat is fairly heavy as the product weighs about 10 pounds per square foot.”

The Rough River Lake staff hopes to see how well the product works and holds up before opting to do a larger scale project.

“Our goal is to test the product and see if it works,” Taylor said. “If it does, we would like to expand the use in some of our recreation areas to address problem sections of shoreline – mainly inside our campgrounds.”

By the end of the summer season, the team should have a good idea of its success.



Adam Taylor

Rough River Lake completes new shoreline stabilization project in two days at North Fork Beach in Kentucky.

District commander tours Miami River Area lakes



Stephanie Ison, Brookville Lake and West Fork Lake project manager, talks with Louisville District Commander Col. Eric Crispino on top of Brookville Lake's dam in Brookville, Ind., Feb. 4.

Abby Korfhage, public affairs

Amid the cold temperatures, Louisville District Commander Col. Eric Crispino visited the Miami River Area lakes to tour the flood risk management projects and meet with district staff, Feb. 4 and 5.

The trip included stops at Brookville Lake in Brookville, Indiana; West Fork Lake in Cincinnati, Ohio; William H. Harsha Lake in Batavia, Ohio; Caesar Creek Lake in Waynesville, Ohio and C.J. Brown Dam and Reservoir in Springfield, Ohio.

"It was wonderful to visit the Miami River Area projects and meet the staff

at those sites," Crispino said. "I was energized by the passion our employees have for their projects."

District commander's visits are important to the field team, according to Operations Division. These visits show command-level interest in their day-to-day work activities and provide field staff the chance to show off their projects, share stories of their successes and the challenges they overcome to push the mission forward.

"It truly is nice to have an in-person visit and to see him not just via WebEx or virtually," said Stephanie Ison, Brookville Lake and West Fork Lake project manager.

"I think it is important for the staff to meet the commander. He really seemed to want to listen and make sure we were heard on some of hard topics like the vaccine, teleworking in the future and how we see our workforce changing."

During the visits, Crispino walked the grounds at the lakes, went inside the dam's control towers, toured some of the newer constructed facilities and saw ongoing work at the project sites to better understand what is going on behind the scenes.

The commander also used this time to personally recognize employees. During his stop at Caesar Creek Lake, Crispino presented Louisville District Natural Resources Management Specialist Matthew Palmer with a commander's coin for his assistance at the division, district and project levels with fiscal year 2023 budget development.

Crispino intends to visit all the project field offices during his assignment with the Louisville District and has already visited several sites in his eight months as the commander.

"From the maintenance workers to the park rangers, it is evident they love their work; they have an incredible depth of knowledge and experience, and they love to be the face of the Corps to the public," Crispino said. "Visits like this are critical for me to build understanding of the full breadth of our programs in the Louisville District."

New sandbox serves as educational tool for Harsha Lake visitors

Katie Newton, public affairs

The visitor center at William H. Harsha Lake in Batavia, Ohio, now boasts an interactive augmented reality sandbox -the first of its kind in the Louisville District.

The newly installed sandbox is a hands-on educational tool, which demonstrates mapping, topograph and watersheds. Visitors will be able to play in the sandbox, where they can simulate flood events and mimic rainfall by simply waving their hands.

"You are interacting with it, but it is also interacting with you," said Samantha Ferrarelli, William H. Harsha Lake project manager.

Ferrarelli says that type of interaction is a key principle in a successful interpretive program. The Harsha Lake staff is working to grow the number of interactive pieces in the facility, which welcomes more than 8,000 visitors annually.



Louisville District Commander Col. Eric Crispino tests out the new interactive augmented reality sandbox in William H. Harsha Lake's visitor center in Batavia, Ohio.

District completes drainage repair project for Rock Island Arsenal family housing

Shatara Riis, public affairs

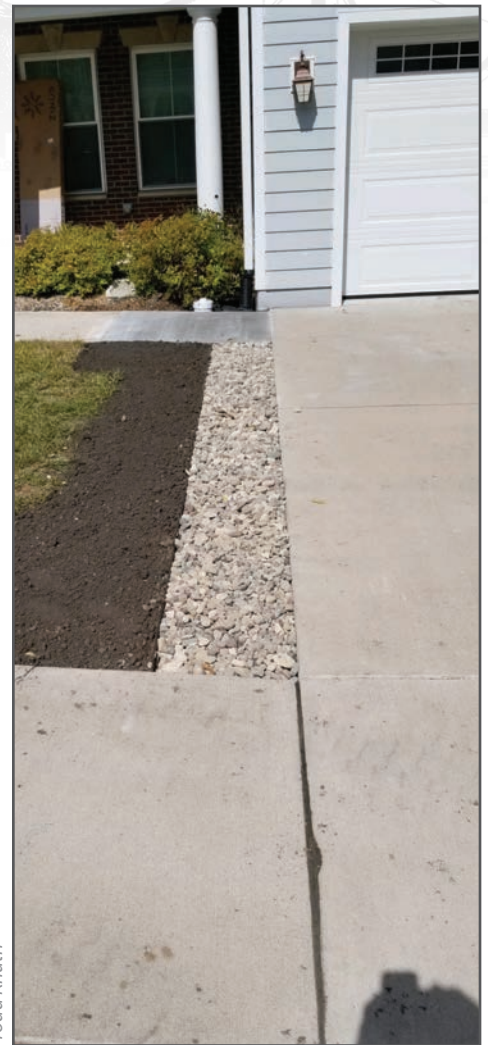
The 2019 winter season at Rock Island Arsenal, Illinois, revealed drainage issues in the family housing area. Driveways and sidewalks saw heaving from the frozen grounds and ponding of water accumulating from rainwater downspouts.

The U.S. Army Corps of Engineers Louisville District resolved the drainage issues by designing a modification for a new underdrain system installation.

“The modification removes runoff collecting near the house and driveway, which contributed to persistent pavement or foundation damage due to water infiltration and freeze/thaw action,” said Capt. Jeffery O’Loughlin, Military Support Section project manager. “Because of this repair project, the residents of these houses are now safer.”

The Louisville District Civil Section team, led by Steve Thibaudeau, Engineering Division, Civil Section chief, developed a sufficient drainage resolution by assessing the drainage system, brainstorming and creating the design drawings, according to O’Loughlin.

The Louisville District team worked closely with the RIA Garrison Command and Directorate of Public Works to finish the project in October of 2020, almost two months ahead of the contracted schedule, which was slated for December 2020. The project cost a little more than \$266,000 to complete.



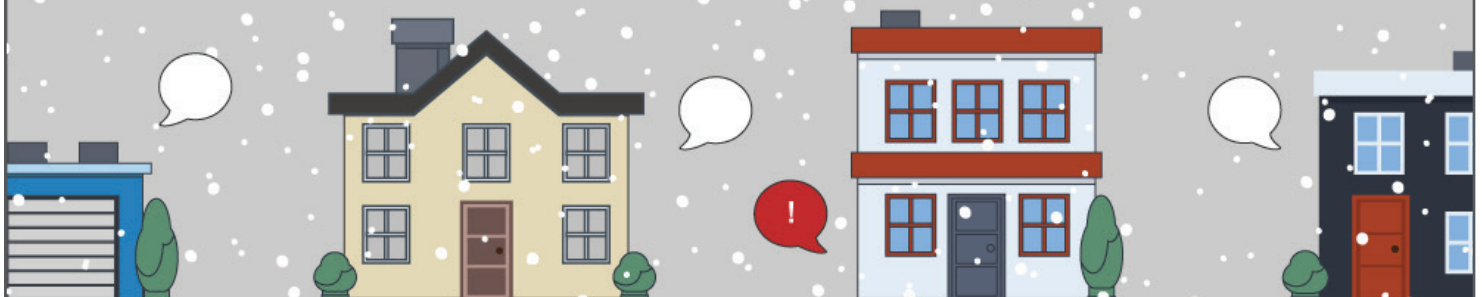
The Louisville District resolves the drainage issues at Rock Island Arsenal family housing area by designing a modification for a new underdrain system installation. The two photos above shows the work in progress (left) and then the completed project (right).

NEIGHBOR CHECK

Ready.

CHECK ON YOUR NEIGHBORS IN AN EMERGENCY

For more tips visit
www.ready.gov



Benge named 2020 District Project Manager of the Year for managing \$175 million border wall infrastructure project

Shatara Riis, public affairs

While managing a \$175 million design-build border wall infrastructure project (RGV-07) in Starr County, Texas between fiscal years 19 and 20, Jamie Benge had no idea her work would be recognized as an outstanding accomplishment.

The Louisville District named the Air Force Reserve Section chief as the 2020 District Project Manager of the Year for her work with the border wall.

A native of Harrodsburg, Kentucky, Benge serves as a program manager for the Air Force Reserve Program and has worked almost 13 years for the U.S. Army Corps of Engineers, Louisville District.

According to Reserve Support Programs Branch Chief Cristie Mitchell, Jamie was recognized as a star performer for her contributions in 2019 to the project management career field while working on the high-profile border infrastructure program in partnership with the U.S. Army Corps of Engineers, Fort Worth District.

“Jamie managed the RGV-07 design-build project in the Rio Grande Valley of Texas,” Mitchell said. “This project consisted of construction of approximately 15 miles of new 30-foot bollard fence along the cities of Salineño, Roma, Rio Grande City and LaGrulla. The approximate cost of the project is \$175,000,000.”

A project manager is responsible for managing the scope, schedule and budget of a project by working collaboratively with other functional areas within USACE, along with the stakeholders, Mitchell said.

“I directed the PDT (project delivery team) in this high-profile program with efficiency in delivery time by awarding RGV-07, 20 days ahead of schedule, which exceeded the customer’s expectations,” Benge said.

One of the most challenging aspects of the project was the development of the project schedule.

“The stakeholders’ expectation was to solicit and award the Request for Proposal as quickly as possible,” Mitchell said. “Ms. Benge coordinated with the PDT and developed a schedule in which the reviews were completed on time, and all milestones were met. Ms. Benge stayed on top of the schedule and proactively managed upcoming milestones and activities.”



Louisville District Commander Col. Eric Crispino presents Air Force Reserve Section Chief Jamie Benge with the 2020 Project Manager of the Year Award for exceptional performance as a project manager for the Border Infrastructure Program in the Fort Worth District from April 1, 2019, to May 15, 2020.

According to Benge, she received exceptional, positive feedback from the stakeholders associated with her communication, continuous improvement, accountability and performance skills.

“Trust was established, and interpersonal relationships were developed with the Fort Worth District to work jointly as ‘one team’ to accomplish the project objectives,” she added.

The Louisville District Project Management Division’s senior leadership nominated Jamie after discussing all project managers’ accomplishments during the past year, according to Mitchell.

“Ms. Benge’s accomplishments were so significant that she became the choice as PM of the Year,” Mitchell said. “Jamie’s willingness to volunteer for a tough project with team members from all across the country shows what kind of person she is. She is very deserving of any accolades she receives.”

Louisville District Commander Col. Eric Crispino presented Jamie with the Project Manager of the Year Award during a virtual ceremony held in the fall of 2020.

“Jamie’s organization and attention to

detail contribute to the success she has seen as a project manager. Her technical background and ability to know what questions to ask to further the project help ensure her projects go as planned,” Mitchell said. “Her proactive communication is outstanding as well. Jamie is one of the most dedicated employees I’ve had the honor of working with.”

As the Air Force Reserve Section chief, Jamie manages 14 personnel, including project managers, program analysts and management information specialists. The Air Force Reserve Program consists of approximately 120 projects in design and construction.

Benge earned a Bachelor of Science in Civil Engineering from the University of Kentucky. She is a registered professional engineer in Kentucky and a Project Management Professional.

“I (am) very honored and proud to be a recipient of this prestigious award; I am grateful for receiving it,” Benge said. “I cannot forget the support that has been offered to me by my peers and leadership. It felt great to be recognized for my hard work.”



US Army Corps
of Engineers®
Louisville District

Jacobsville Environmental Cleanup Project

January

28

This infographic
summarizes 2021
progress made at the
site as of the date above.

The U.S. Army Corps of Engineers Louisville District, on the behalf of the U.S. Environmental Protection Agency, is remediating lead and arsenic-contaminated soil from residential properties at the Jacobsville Neighborhood Soil Contamination Superfund Site in Evansville, Vanderburgh County, Indiana. In general, remedial action includes excavation of contaminated soil per EPA-provided remedial designs, backfill/restoration of disturbed areas, transportation and disposal of contaminated soil, and completion of remediation reports documenting cleanup. USACE's highest priorities during cleanup activities at the site are to be protective of human health and the environment, ensure that work is conducted in a safe and efficient manner, and prevent the spread of contamination.

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2020 efforts

Properties Targeted

188

Properties Restored

188

2020 Field Season

Contaminated Soil Excavated & Disposed:

13,178
cubic yards



or

=

1,647
truckloads



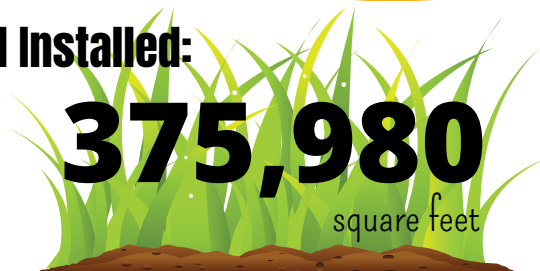
Clean Soil Replaced:

14,118
cubic yards



Sod Installed:

375,980
square feet



2019 Field Season

Properties Restored:

262

15,440

tons
of contaminated
soils removed

14,135

cubic yards
of clean soil
replaced

482,000

square feet
of sod
installed

Louisville District hosts first ever virtual Open House



Crystal Harbin, Louisville District Small Business deputy and Jack Sweeney, Visual Information specialist work behind the scenes during the Louisville District's first ever virtual Open House event.

Abby Korfhage, public affairs

The Louisville District hosted its annual open house Jan. 28, but this year's event looked a little different.

In lieu of canceling the annual in-person event due to the COVID-19 pandemic, the Louisville District decided to improvise with a safe alternative by making the entire event virtual through a web videoconferencing application.

"While it is tough to truly recreate the in-person experience using Webex, it is our goal with this agenda to provide you with as much information as possible to enable everyone to deliver quality projects on time and within budget," said Louisville District Commander Col. Eric Crispino to the online audience of more than 400 participants.

Like years past, the event was open to all businesses, both large and small, interested in working with the Louisville District. The event included briefings from Louisville District staff in the morning and opportunities to network through Webex with district staff in the afternoon.

"The open house is a great opportunity for firms to learn about the projects within the Louisville District," said Crystal Harbin, Louisville District Small Business deputy. "We focused the event on providing the forecast for the remainder of the current fiscal year, along with early FY22 projects. This gave firms an opportunity to hear more about the projects, ask questions and make informed business decisions going forward."

Last fiscal year the Louisville District executed 2,242 contract actions, which

accounted for about \$1.5 billion in contract obligations. Small business awards comprised about 37 percent of the district's overall program last year, according to Crispino.

"The outlook for our district's programs in 2021 is favorable, and I anticipate a workload very similar to 2020," Crispino said. "We work hard to keep our forecasts as accurate as possible because we acknowledge how important it is for all of you to see what is coming and to prepare. Good open communication is critical for you to be successful, and we hope this session enables you to form relationships and understand the opportunities we are projecting for the year."

Approximately 462 contractors registered for the virtual event, representing

states from all over the country to include Kentucky, Indiana, Tennessee, Colorado, Oklahoma, Ohio, Georgia, Florida, South Carolina, Maryland and Michigan. With attendees not having to physically travel into Louisville to attend, it was much easier for contractors to participate.

"I was expecting attendance to be a little low this year given we're working in a virtual environment and networking can be difficult when you're not face-to-face, but to my surprise registrations just kept coming," Harbin said.

Crispino was very happy with the event and received good feedback during his open networking session.

"A lot of former district commanders joined to chat with us and provided feedback," Crispino said. "They offered high praise for the professionalism and format of the event and specifically praised the Louisville District Deputy for Small Business, Crystal Harbin."

According to Harbin, she was pleasantly surprised with the success of the event this year.

"Everything seems to be a little tougher in the COVID environment, but we have all adapted well, and we're all willing to go the extra mile to ensure we're not missing key events like this one," Harbin said. "I believe we're learning new ways to do business, and this gave us an opportunity to reach firms, especially small businesses, that may not have been able to expend resources to attend in person. I'm eager to see what future events hold as we gain valuable lessons moving forward."



Matt Lowe, Veteran Affairs Division chief, discusses upcoming contracting opportunities available within the Veteran Affairs Division during the Louisville District Open House event.

Innovative technology helps Louisville District engineers imagine tomorrow



Former commander of USACE Detroit District, Lt. Col. Greg Turner uses the Louisville District's virtual reality headset at the Soo Locks to view the design model created by the project delivery team.

mechanical components can include installation dates and serial numbers; structural components can include loads and strengths, along with a plethora of further details can be included in the overall model."

According to Tucker, 3D printing is the process of bringing a three-dimensional object modeled in software, such as Inventor or Revit, and bringing it into the physical world.

"3D printing is a very effective way of producing scaled models and prototypes, primarily due to the speeds at which a model can be produced," Tucker said.

Using 3D printing, the Louisville District has been able to provide customers with a tangible and scaled representation of the product USACE is designing.

"Currently we've been working on the New Lock at the Soo, and we have printed various 1:1000 models of the entire lock chamber for various meetings and discussions," Tucker said. "Similar to virtual reality, 3D printing allows a perspective on a project, or feature, that is hard to grasp when looking at a set of drawings or even a 3D model on a 2D screen."

The Louisville District design team is currently using virtual reality on the new lock at the Soo project. Primarily, it was used for clash detection in their 3D Revit model. Clash detection is the process for finding discrepancies, or clashes, between design features like HVAC ductwork interfering with structural framing, according to Gary Grunwald, Louisville District structural engineer.

"One major advantage that virtual reality has over traditional clash detection is that it allows the user to naturally find clashes by "walking" through the site rather than trying to interpret output from a computer," Grunwald said. "Fixing these clashes during the design phase will ultimately save the project millions of dollars in construction change orders."

In addition, virtual reality (VR) was also used to elicit feedback from the customer and other design team members.

"On several occasions the VR system was brought to the Soo Locks to get feedback from site leadership, maintenance workers and lock operators," Grunwald said. "The feedback was not only extremely valuable but will also save the project money."

Grunwald added that an example is

Continued on next page

Abby Korfhage, public affairs

"Imagining Tomorrow" is the theme of this year's National Engineers Week, which is celebrated Feb. 21-27. Through innovative technologies such as Building Information Modeling, 3D printing and virtual reality, Louisville District engineers can "imagine tomorrow" as they design world-class facilities.

Sharing that technology and passion with students fulfills the goal of National Engineers Week as it is designed to promote careers in engineering.

During the annual Engineers Week, the Louisville District highlights employees, who represent all the disciplines within the engineering field and the innovative technology they use when delivering the district's programs.

"It is a busy time," said Ray Frye, Engineering Division deputy chief. "This year, we have recruiting events set up for University of Louisville, University of Kentucky, University of Cincinnati and Purdue University."

In the past and pre-pandemic, representatives from the district would travel to several local schools to talk to students about the U.S. Army Corps of Engineers and the career fields available to them. Although it is a little different this year, the team is still making it a priority to share information.

"I'm giving a presentation at the University of Cincinnati's SAME chapter meeting about USACE and our co-op and recent graduate job opportunities," said Lauren Alexander, Louisville District hydraulic engineer.

The outreach events planned during National Engineer's Week are designed to promote engineering as a career. Sometimes that means sharing about the benefits of working as a USACE engineer to help recruit talent, and sometimes they are designed to inspire students about the engineering profession. This is often done by showing how engineers are using advanced technology, like Building Information Modeling, 3D printing, and even virtual reality, to help design projects and complete district missions.

Building Information Modeling, or BIM, takes 3D modeling to the next level by allowing users to assign a 3D object with these various details, according to Sean Tucker, Navigation Design Section structural engineer.

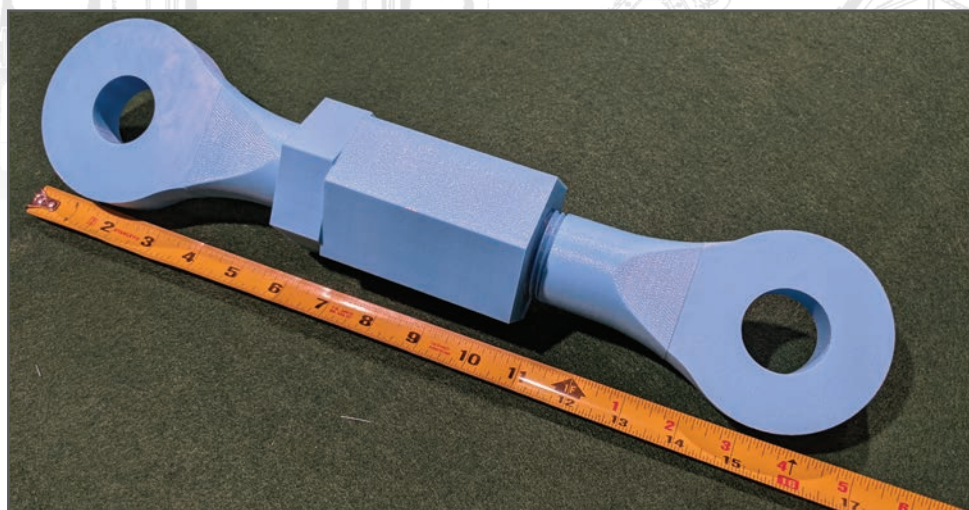
"The floating 3D object can now be assigned a material, and a weight can be calculated through the software, and this is just scratching the surface of BIM capabilities," Tucker said. "BIM has been a huge factor in our collaboration efforts with other districts for the New Lock at the Soo project. Concrete models can include rebar clearances and compressive strengths;

Continued from previous page

in the lock control shelters, where lock operators control the lock gates and valves. Standing in the “virtual” control room, lock operators commented that they could not see the miter point of the gates at lower pool – something that was possible on their existing locks, according to Grunwald.

“The design team took this feedback and raised the floor of the control room to allow for a better vantage point. A change this personal would likely not have been possible with traditional 3D models on a 2D screen,” Grunwald said. “Virtual reality provides a natural interaction with our BIM projects that is unmatched with traditional 3D models on a 2D screen.”

The Louisville District also uses the virtual reality headset for educational purposes. According to Grunwald, when new employees are hired and are unfamiliar with locks and dams, Navigation Design Section uses the headset to showcase projects and streamline the process of acquainting new employees with the



Gary Grunwald

The 3D print shows the standardized design for a miter gate anchor arm in 1/5 scale. It is designed to have the same thread pitch ratios so that the model adjusts the same way it would adjust in the field.

Navigation Design Section projects.

Recently, engineers have used the new technologies like the virtual reality headset or BIM for recruitment purposes and STEM events to inspire students to think about a career in engineering.

“Educating students about these innovative technologies is so beneficial for recruitment,” Frye said. “Engineering really can be fun, and we hope to be able to bring students closer to imagining their tomorrow and a future career in engineering.”

Chaney, Miami River Area team continues to revolutionize USACE



USACE

Louisville District Maintenance Mechanic Keith Chaney and team prepare for a prescribed burn at Clarence J. Brown Dam and Reservoir in Ohio. Prescribed burns help promote native plant growth.

Todd Hornback, public affairs

Upgrades to lakes in the Miami River Area in the last five years have provided safety, cost and health benefits which have been recognized by other agencies and the community.

After Keith Chaney’s selection as the national recipient of the FY2016 Operations and Maintenance Castle Award, he and his co-workers continue to revolutionize the Corps.

The Castle Award recognizes USACE wage grade employees who consistently

demonstrate excellence in specific contributions over a career, provide superior customer service, safe work ethic, and technical innovation.

“Mr. Chaney has continued to demonstrate these attributes to this day, both in his professional life as well as his personal life,” said Matthew Palmer, former C.J. Brown Dam and Reservoir manager. “Mr. Chaney’s drive and pursuit of excellence are the qualities that make everyone around him better employees.”

An example of the work includes patches on two bypasses in the C.J. Brown

Dam and Reservoir control tower. The work required painting and fumes in the work area caused a safety and health hazard for workers. Chaney coordinated with Kate Brandner, currently the acting dam section chief, to install T-flange access in bypass air vents which could be used to serve as natural ventilation when needed.

Referencing a diagram of intricate duct work, Brandner said, “We went through the specifications, tracked down the piping on that floor to make sure we were accessing the correct pipe. The endplate is on the flange. When the plate is removed, it allows ventilation.” Ventilation work included adding an exhaust fan, like those at Caesar Creek and Harsha lakes, at C.J. Brown as an additional safety factor for employees.

Chaney’s suggestion for C.J. Brown to purchase a track loader allows employees to remove debris from a peninsula at the tail end of the dam. When the lake level lowers, employees can remove debris as part of dam maintenance. In winter, the track loader is used to clear trails, which Chaney stated has received praise from lake visitors.

According to Palmer, Chaney took the initiative to coordinate with Engineering Division Water Management and U.S. Geological Survey to have an automated tailwater gage installed. This allows

Continued on next page

instantaneous verification that the water releases from the dam are occurring as intended.

"We typically determine releases as a function of pool elevation and how much the conduit gates are open, and occasionally a gate will drift or doesn't get opened/closed as expected," said Adam Connelly, water management team leader. "The tailwater gage is a physical check on what we believe we are releasing at any time."

He added that the gage is a resource to the public for awareness of how much water is being released from the dam. The public has used the gage readings to see if conditions are good for kayaking.

"In this respect, the tailwater gage also assists with public safety for downstream recreation," Connelly added.

Chaney borrowed an idea from Caesar Creek when employees converted an old storage area into volunteer campsites. The Corps supplies campsite/lodging, water, electricity and sewer and, in exchange, volunteers work 20 hours per week for single volunteers and 30 hours per week per married couple. Volunteers support the visitor center, trail maintenance, painting projects and restroom checks among other duties during their 120-day volunteer commitment.

Lessons learned and ideas are shared across the Miami River Area and the district through safety meetings, visiting agencies and inspections.



Keith Chaney, maintenance mechanic, helps remove debris and transfer fish and wildlife to outside the work area during the Clarence J. Brown Dam and Reservoir stilling basin dewatering event.

During an inspection, USGS praised work at C.J. Brown after the team replaced the motor control center in the reservoir tower. The plexiglass cover on the float well eased the readings of lake levels during monitoring and inspections.

"I like to do improvements," Chaney said. "I get gratification when we do improvements, and the USGS folks say this is a great idea. It's what keeps me going." He added he also brings back ideas from other lakes including visits to other agencies such as Tennessee Valley Authority.

Chaney, who has worked at three district

lakes, relied on his experience at Harsha and Caesar Creek lakes to share benefits at C.J. Brown. Palmer stated Chaney has been a driving force behind the 2019 prescribed prairie burns at C.J. Brown and the control of phragmites on the dam. Phragmites, an invasive non-native perennial wetland plant, steals nutrients and space from fish, plants and wildlife.

"Mr. Chaney's drive and pursuit of excellence are the qualities that make everyone around him better employees," Palmer said. "He is an inveterate team player, a consummate professional, and an inspiration to work with."

Supervisory Training Sessions get underway with teaching roles, responsibilities

Shatara Riis, public affairs

The U.S. Army Corps of Engineers Louisville District kicked off a new supervisory training with its first session held Feb. 3, 2021.

This session covered the topic of supervisory training roles, responsibilities and the fiscal year 22 training survey.

These training sessions are not required but are recommended as they complement the Supervisory Development Course and Human Resources for Supervisors Course, said Michelle Haysley, Louisville District Workforce Development Program specialist.

"A competency gap was discovered throughout the region," Haysley said. "Supervisors receive training from Army (SDC) and from CPAC (HR for Supervisors Course), but they don't receive formal training on internal duties, such as how to build a budget, how to guide employees

to fill out Individual Development Plans, performance appraisal, how to perform timekeeping functions, and how to supervise employees in the current virtual environment."

The district's Supervisory Training Sessions provide just-in-time knowledge and information to supervisors, along with filling the gap between SDC and HR for Supervisors, according to Haysley.

"We deliver both technical and soft skills training to supervisors. We discuss topics applicable to our internal needs," Haysley said. "This is a Louisville District training that provides Louisville District-specific topics/information."

The training is open to all supervisors, and they each have an opportunity to participate in any session.

"We did not want to deem this as a 'program' that requires mandatory participation and tracking. We wanted to make the topics available to all supervisors

and allow them the option to attend if that topic is applicable and not attend if they are already familiar with the topic," Haysley said.

With the workforce constantly changing, it's important for even the most seasoned supervisors to acquire the knowledge and skills presently available to efficiently supervise in this changing environment, Haysley said. If supervisors and managers are not spun up on the latest processes, they will not have the tools to lead as effectively, she added.

The sessions are slated to be held monthly for 2-3 hours and are intended to enhance supervisors' knowledge and skills to effectively lead the workforce.

"We are trying to schedule the topics for the first Wednesday of the month but will remain flexible based on our presenters," Haysley said. "All sessions are virtual and will be recorded and posted for those who are unable to attend."

Commentary: Safety Gram

Proceed with caution while driving, playing, working in wintery weather conditions

Shatara Riis, public affairs

While decorating the exterior of our home this past Christmas season, my husband quickly stopped me from stepping on an ice formation, which I didn't see.

The water from our gutters had drained and frozen on our blacktop driveway near the edge of our home. Whew! Talk about a close call from having an ice-slipping disaster.

Freezing temperatures, coupled with rain and snow, cause ice patches to form on bridges, roads, driveways and steps. These ice formations may be invisible to the eye. Therefore, it is important for individuals to pay attention and exercise caution when working, playing, driving and moving about in outside cold weather.

The U.S. Army Combat Readiness Center encourages individuals to:

- Walk slowly and carefully in appropriate footwear.
- Use special care when getting in and out of vehicles.
- Avoid walking with your hands in your pockets or carrying items in your hands. Try a backpack.
- Check potentially slick areas by tapping them with your foot.
- Walk as flat-footed as possible on very icy areas.
- Avoid uneven surfaces, like steps or curbs.
- Report any untreated public areas.
- Remember: "Ice and snow mean take it slow."
- Watch out for black ice.

According to the National Weather Service, black ice is patchy ice on roadways or other transportation surfaces that cannot easily be seen. It is often transparent with the black road surface visible underneath. It is most prevalent during the early morning hours, especially

after snow melts on roads and has a chance to refreeze over night when the temperature drops below freezing. Black ice can also form when roadways are slick from rain and temperatures drop below freezing overnight.

While we may be familiar with various areas and routes, don't allow familiarity over safe driving habits to cause an accident or injury.

With low temperatures still looming, along with the groundhog seeing his shadow and possible rain and snow in the forecast, this could be a formula for hazardous driving conditions and cold weather injuries. Some common cold weather injuries include hypothermia and frostbite.

The Army Public Health Center defines hypothermia as a body core temperature below 95 F. Hypothermia occurs when heat loss is greater than heat production. It can happen suddenly, over hours or days. Hypothermia may occur at temperatures above freezing, especially when a person's skin or clothing is wet.

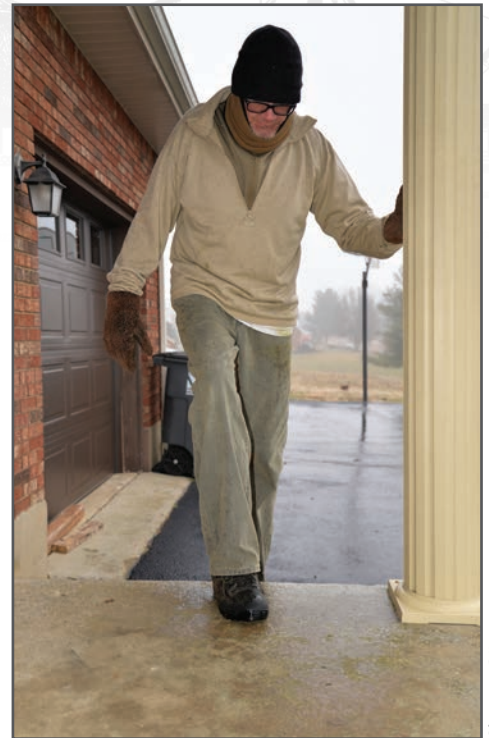
Symptoms include:

- Vigorous shivering
- Grumbles, mumbles, stumbles and fumbles that increase as cold affects muscle and nerve function
- Confusion, sleepiness, slurred speech, shallow breathing, weak pulse, low blood pressure, change in behavior and/or poor control over body movements – slow reactions

Frostbite accounts for the largest number of cold weather injuries each year and occurs when tissue temperature falls below 28-30 F. It is most common in exposed skin, such as hands, nose, ears and cheeks.

Symptoms include:

- Numbness in affected area



Shatara Riis

Be aware of ice that accumulates on steps, driveways and roads during winter weather. These slick spots can cause slips, trips and falls. Check potentially slick areas by tapping them with your foot, walk slowly and carefully in the appropriate footwear, walk as flat-footed as possible on very icy areas, and take it slow.

- Tingling, blistered, swollen or tender areas
 - Pale, yellowish, grayish, waxy-looking skin
 - Frozen tissue that feels wooden to the touch
 - Significant pain after rewarming
- While sunny skies and birds may be appearing, spring does not begin until March 20, and there are still cold days ahead.

Cold weather injury prevention is key. When out and about, make sure to dress for the weather by wearing clean, loose and dry clothing, avoid overheating, wear gloves, keep face and ears covered and dry, maintain clean and dry socks, and dress in layers.

Just because it's sunny and a beautiful day out, still be mindful of cold weather hazards. Like my 5-year-old son found out a few days ago while playing outside. He was running, having a grand ole time, and not paying attention when he slipped on ice on the blacktop and scraped his face. Fortunately, he only suffered scratches on his face with no crying or major injuries.

Stay healthy, safe and be smart when out and about.

An infographic titled "WINTER DRIVING KNOW BEFORE YOU GO" with a dark blue background and a house illustration. It includes four sections: "Get the weather forecast." (Change your travel plans if hazardous weather is expected.), "Check road conditions." (Call 511 or visit your state's DOT webpage to check on road conditions. Choose a different route or adjust your travel plans if road conditions are poor.), "Pack an emergency supply kit." (Stock your vehicle with a mobile phone, charger, batteries, blankets, flashlight, first-aid kit, high-calorie, non-perishable food, candle to melt snow for drinking water, sack of sand or cat litter for traction, shovel, scraper, and battery booster cables.), and "Ready your vehicle." (Check your battery, wipers, coolant, and other systems affected by cold temperature. Make sure your tires have good tread. Clear snow, ice or dirt from your windows, lights and camera.)

WINTER DRIVING KNOW BEFORE YOU GO

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