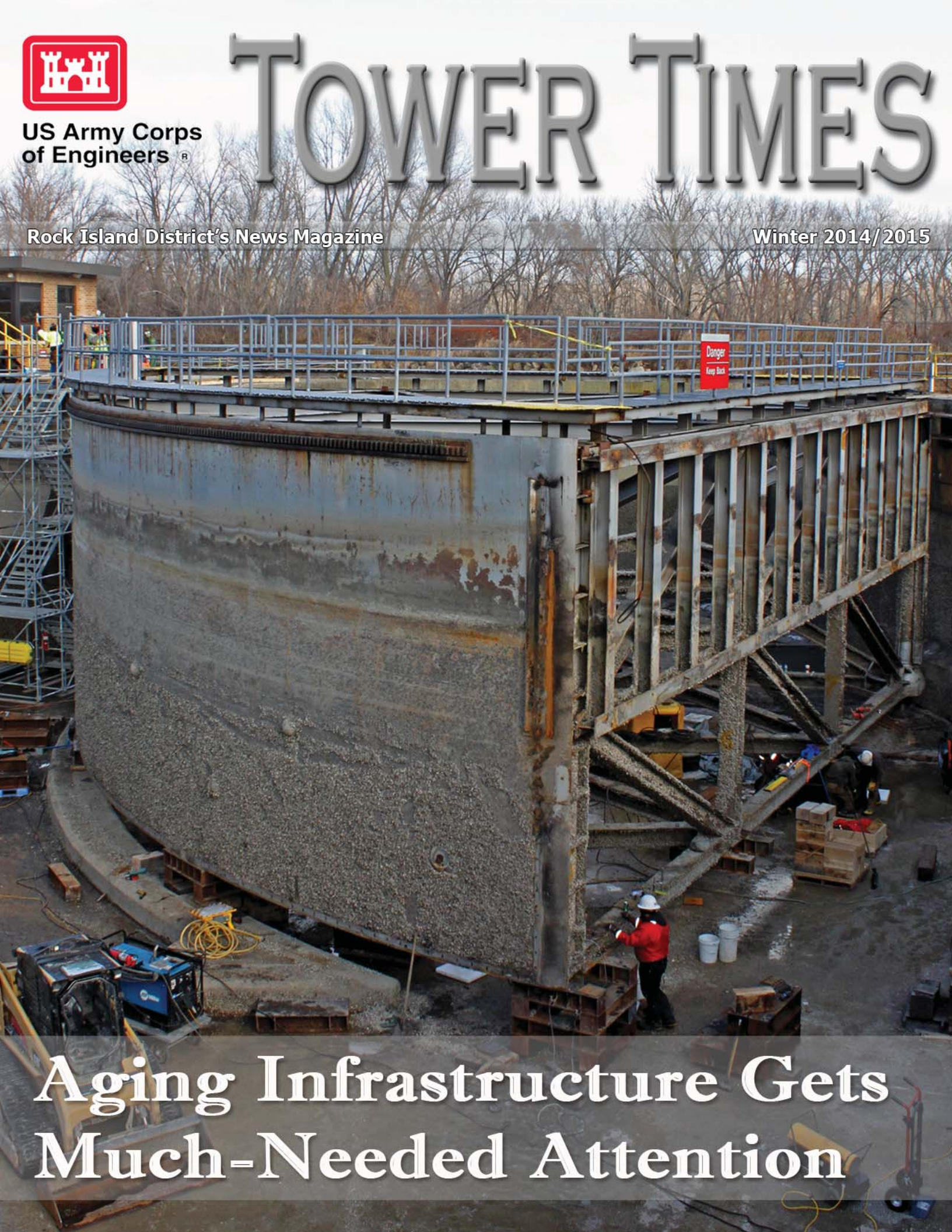
US Army Corps of Engineers ®

TOWER TIMES

Rock Island District's News Magazine

Winter 2014/2015



Aging Infrastructure Gets Much-Needed Attention

US Army Corps of Engineers ®
Rock Island District

TOWER TIMES

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On the Cover

For the first time in 35 years, the Illinois Waterway Maintenance Section has dewatered the gate bay and is raising and repairing the sector gates at the Thomas J. O'Brien Lock and Dam in Chicago.

Photo by Samantha Heilig

Tower Times
Rock Island District, Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004
E-mail: cemvr-cc@usace.army.mil
Phone: (309) 794-4200

Commander: Col. Mark J. Deschenes
Deputy Commander: Lt. Col. Todd S. Reed
Chief, Corporate Communications: Ron Fournier
Editor: Samantha Heilig

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A message from....

Colonel Mark Deschenes, District Commander

Land Management Delivers Value to the Nation

Recently I had the honor of representing our District as the host of the USACE District Commander's Course. This annual course is designed to expose incoming commanders to the nuances of the civil works mission carried out by the U.S. Army Corps of Engineers. For one week at the beginning of December, colonels preparing to take command of Districts throughout the Corps gather to learn about what their pending assignment may entail.

My role as facilitator, was to encourage discussions and share experiences I have garnered over the past two and half years as the Rock Island District commander. I attended this course when I was preparing for my command here and found it very helpful in preparing me for the upcoming assignment. I believe the new incoming commanders found the material presented at this year's class to be eye opening and interesting. What I didn't expect as the course's host was that I too would gain valuable insight. Unexpectedly, facilitating the varying discussions gave me an opportunity to step back and reevaluate the wide array of value Districts like ours provide to the nation.

The missions of the Rock Island District are far reaching and truly diverse. During discussions at the Commander's Course I was reminded of the vast responsibilities we have in the areas of natural resources and land management. It is easy to think of our District's area of responsibility as 78,000 square miles in five states. Although that does represent a snapshot of our boundaries, so much more is involved.

Whether it's forestry management, shoreline management or recreation, the Rock Island District has many people working behind the scenes. It's tireless work but it enhances our ability to provide value to the nation.

For example, the Mississippi River Project is responsible for 96,000 acres which includes managing 53,000 acres of forested land. As part of that land management role, the Mississippi River Project collaborates regionally to implement the Upper Mississippi River Systemic Forest Stewardship Plan which was developed to provide a guide for the sustainable management of Upper Mississippi River System forests, and helps to maintain its recognition as a nationally treasured ecological resource.

The systemic plan is relatively new but it is another outstanding example of our collaboration with our sister Districts in St. Paul and St. Louis and partners at the various departments of natural resources and U.S. Fish and Wildlife Service. It's a collaboration providing extensive value to the nation.

The work we do on the Mississippi River represents only a fraction of our efforts across the District. Our projects at Coralville Lake, Saylorville Lake and Lake Red Rock carry out similar types of land management.

At Coralville Lake, our staff manages nearly 25,000 acres of land and water, including forestry efforts on 130 acres. Coralville Lake is our only project that allows public development on private lands and has a shoreline management plan to manage those activities.

Lake Red Rock is over 50,000 acres and is the largest contiguous tract of public land in the state of Iowa. At Saylorville Lake our folks manage nearly 26,000 acres of land and water and the lake's master plan was recently revised to provide guidance on protecting and preserving the area's natural resources.

The Illinois Waterway Project carries out much of the same work on the Illinois River at our two dry reservoirs, Farmdale and Fondulac, managing 965 acres of land and 300 miles of river.

The other distinct, ancillary value of all I have outlined above is the recreation component. Our recreation projects host millions of visitors each year who benefit from the lands we manage and the habitats we work to preserve. Tourism dollars spent at our dozens of recreation areas may represent a monetary value but I believe that value is considerably more than just dollars and cents.

The Rock Island District's official mission statement is: "provides engineering and leadership to the Area of Responsibility (AOR), Region and Nation in order to improve the security, prosperity and overall quality of life for the American People." I believe our land management and recreation efforts represent the epitome of that mission.

On a final note, as I write this many of you are preparing for the holidays. From my family to yours -- happy holidays. Please enjoy the season safely and responsibly. I look forward to having you all back at work ready to take on a new year and CONTINUE BUILDING STRONG.

Flood Preparation Improved at Lock and Dam 16

By Lt. Col. Todd Reed, Deputy Commander

Preparing for a flood on the Mississippi River can be a daunting task with tremendous amounts of time, labor and materials involved. This process, as well as others throughout the District, are currently under review using a program called Lean Six Sigma to see how and where improvements can be made to increase the effectiveness of our organization. This management approach for problem solving and process improvement is just one of the tools being used by the U.S. Army Corps of Engineers and the Rock Island District to improve the way the Corps does business.

The Army's Lean Six Sigma training program is designed to improve equipment management, recruitment and efficiency of the organization. The program offers multiple levels of certification including Green Belt, Black Belt and Master Black Belt. The Green Belt certification requires two weeks of training followed by a final project which includes a five-stage, step-by-step process to define, measure, analyze, improve and control the process. Currently the Rock Island District is leading the Mississippi Valley Division with four certified Lean Six Sigma Green Belts and another four who have received training and are working on projects to complete their certification. This helps the District by closing gaps, reducing costs, improving speed and providing better quality service to our customers.

Lt. Col. Todd Reed adds his finishing touch to the new flood storage building at Lock and Dam 16 in Muscatine, Iowa. *Photo by Nicole Lynch*

During a staff assistance visit to Lock and Dam 16 in Muscatine, Iowa, lockmaster, Nick Schnerre, pointed out that one of the biggest challenges they have at the facility is the process of preparing for a flood. For each flood event that occurs at Lock and Dam 16, which can be several times a year, it takes an average of 234 hours to prepare the site and get it ready for impacts of high water. This has been a long-standing concern at Lock and Dam 16, but like many other problems it is one not easily tackled.

"Ideas are great things and I love to come up with ways to make things better but I am finding out that getting the buy in, commitment, and having the fortitude to put things on the ground are the real challenges to making an improvement," said Schnerre. This presented the perfect opportunity to apply the Lean Six Sigma program and see where improvements could be made.

Preparing for a flood, like the one shown here at Lock and Dam 16, used to take an average of 234 hours. A new flood storage facility built on site this fall is anticipated to cut that time in half. *Photo by Nick Schnerre*

(Left) The site at Lock and Dam 16 was chosen for the construction of a new flood storage building. This site was very low and often held flood water in rather than allowing it to flow back out to the river. (Right) The completed storage building that will be used for storing lock equipment, pulled from the lock during flood events, and flood preparation equipment used by the staff to prevent further damage to the facility. *Photos by Nick Schnerre*

The first task in developing a plan to improve the flood preparation time was to gather a diverse team of people from Lock and Dam 16, other locks and dams along the Mississippi River and the District headquarters to evaluate the current process. This team then worked together to determine the unnecessary steps involved in the current flood preparation process. While brainstorming as a team, the group determined that having the current storage facility for flood preparation materials across the river from the lock was most impactful to the timing of the process. They also looked at ways to reduce the amount of reoccurring costs for things such as labor and supplies.

Together the team formulated a plan and presented it to District senior leaders as well as the Project Management Council for approval. This plan called for the construction of a new flood building closer to the lock and a new set of bulkheads which would be used for access to the lockhouse during high water events. The plan was approved and construction of the flood building began Aug. 12, 2014. The completed building now stands just 42 yards from the lockhouse and offers 1,500 square feet of space for storage of flood equipment and operating equipment that is pulled from the lock during a flood. Construction of the bulkheads will take place later this winter and are projected to be completed prior to any possible 2015 flood event.

With the new changes to the flood preparation process at Lock and Dam 16 it is now estimated that the number of hours to prepare for a flood are reduced to 104. That is a 55 percent reduction in time with cost avoidance of $25,450 annually for the District. The actual amount of hours to prepare for a flood and cost avoidance are yet to be determined and will likely be tested in the spring when the typical flood season occurs.

This project has made an impact not only on the Rock Island District but also the Mississippi Valley Division by creating an example for other sites to follow. The project was showcased at this year's R5 workshop which is an annual gathering in which the Regional Command Council, Regional Management Board, Regional Program Review Board, Regional Program Budget Advisory Committee, and Regional Acquisition Strategy Board come together to review key management functions including the development and implementation of business strategies and operation plans.

Now that the project is nearly complete at Lock and Dam 16, the District is looking to use this improvement process at other locks and dams along the river. Improving the quality of work we do is extremely important; it will not only benefit our customers and taxpayers it will also assist in our everyday work lives.

As I depart the District as your Deputy Commander, I challenge each of you to look for continuous improvement opportunities. Incremental changes over time can improve the efficiency and effectiveness of the District, ultimately adding value to this great nation through cost savings, cost avoidance, and opportunity cost indicatives.
- Deputy Commander, Lt. Col. Todd Reed

Interceptor Sewer Prepares to be Flushed

By Samantha Heilig, Editor

Earlier this year the Rock Island District began a $2 million project to remove a sediment blockage in the north barrel of the government interceptor sewer which lies beneath the ground along the Davenport, Iowa, riverfront.

While working on the Davenport Flood Risk Management Project at the Iowa American Water Company, it was determined that the north barrel of the double-barrel government interceptor sewer system had been completely blocked by sediment. Despite the fact that the south barrel was still clear, the buildup in the north barrel significantly restricted the function of the system by reducing its carrying capacity and impacting the ability of stormwater to flow out to the river during heavy rainfall events.

The interceptor sewer, which collects stormwater rather than sanitary sewer runoff, collects drainage from a distance of nearly six miles. Built by the District in 1934, it was added to the Davenport, Iowa, seawall at the same time as Locks and Dam 15 were built to offset the increased river level above the dam. The double-barrel system was designed to collect runoff from the upstream side of the Locks and Dam, which would normally have gone directly into the river, and divert it to the lower portion of the river on the downstream side of the dam. The interceptor system provided both an alternate outlet for the city's sewer system and a way for the system to be flushed by including several sluice gates which could be opened periodically to remove sediment from the system.

For 80 years, the interceptor sewer has been working as part of the city's stormwater system, but in 2011 a lengthy duration of high water on the Mississippi River caused backwater to fill into the system allowing water to sit, and sand and silt to settle to the bottom of the north barrel.

"It is believed that the 2011 high-water event coupled with large amounts of stormwater runoff that year created the collection of sediment," said Jim Homann, project manager for the Interceptor Sewer Project. "The blockage went undetected due to a lack of access to the north barrel which is the clogged portion of the system."

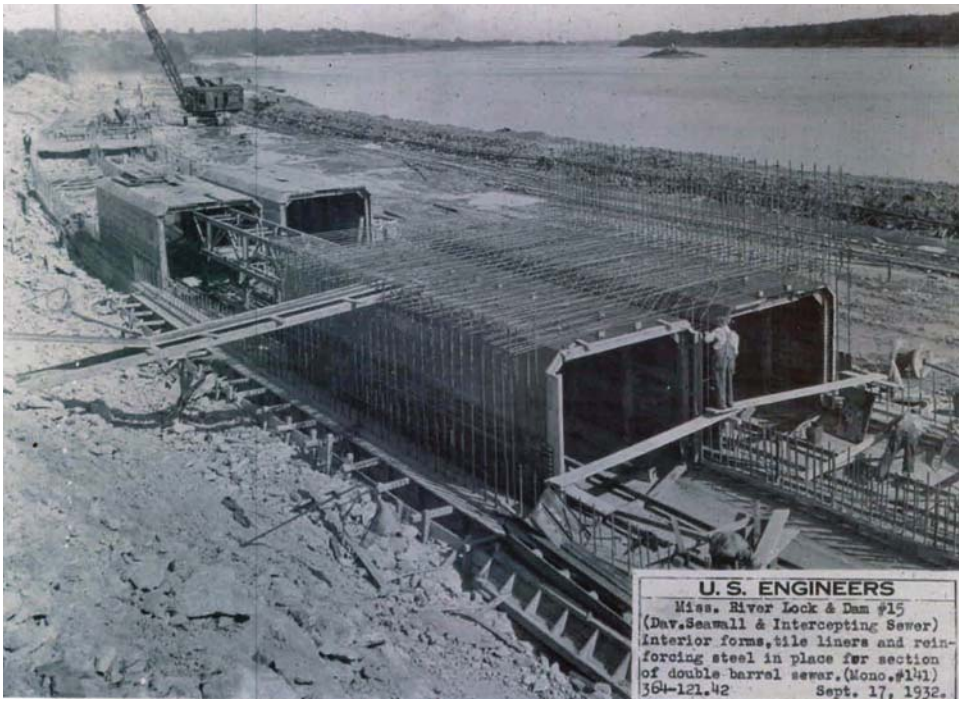
After the blockage was found, the District conducted an inspection of both the north and south barrels and repaired several broken sluice gates, damaged in a previous flood event, in order to resume flushing of the interceptor pipe barrels. It was determined at that time that the blockage was too extensive and could not be cleared with normal flushing operation and the opening of the sluice gates.

"In the past, inspectors walked and rafted down the interceptor sewer for the purpose of inspections but OSHA regulations have changed and this is no longer an option," said Homann.

To alleviate the problem of little to no direct access into the blocked north barrel, the District began construction on a series of large manholes as part of the $2 million project. These new manholes will improve the Corps' ability to inspect and maintain the north barrel.

"The goal is to add enough manholes to create access at critical locations along the north barrel where we could use District pumps and use the bulkheads to direct water flows so that Operation's will be able to clear the blockage themselves," said Alaena Ensey, project engineer for the Interceptor Sewer Project. "Once we are able to flush we will be able to quickly determine if other methods outside of our District capabilities will still be needed to clear the blockage."

In addition to the manholes, the project also calls for two slots to be added to the south barrel so that large bulkheads can be installed during



Sept. 17, 1932. The interior forms, tile liners and reinforcing steel in place for a section of the Davenport Interceptor Sewer.
Rock Island District Photo

flushing operations to divert water flows to the north barrel. The use of the bulkheads during flushing operations along with the additional direct manhole access for other jetting operations with pumps is hoped to remove the blockage in the north barrel and restore its function.

"The installation of temporary bulkheads in the south barrel will force water into the north barrel where it is needed to flush the sediment from the system," said Ensey. "This prevents the water from flowing directly to the river via only the south barrel."

The work on the Interceptor Sewer Project will not be complete until next year. However, the work will be put on hold soon due to the cold weather. In all, the Corps has authorized the construction of 13 new manholes for the system but it is possible that not all will be needed.

"By the time the contractor stops for the season, there will hopefully be five manholes and two bulkhead slots completed," said Ensey. "This gives us a good start on the project and allows us to begin flushing the system to try to get rid of the blockage next spring."

Since high water and stormwater runoff are major factors in the success of the project, the real test could come in the spring when the Mississippi River typically floods into the interceptor sewer system.

Ensey says the Corps will continue to work on the system next year and hopes to have the project completed by July 2015 with all the functionality of the interceptor sewer restored. For more information and historical photos of the Interceptor Sewer Project check out http://www.mvr.usace.army.mil/Portals/48/docs/CC/FactSheets/Government%20Interceptor%20Sewer.pdf

Manholes added to the north barrel of the Davenport Interceptor Sewer provide access for flushing sediment out to the Mississippi River. Members of the Mississippi River Maintenance Section use an eight-inch pump to bring water from the river into the sewer system for test flushing. *Photos by Samantha Heilig*

Training Tidbits

Did you know... Civilian Education System courses are a primary focus for USACE in regard to leadership development training. At a minimum, employees should consider completing the online portion of their target grade class. Contact your supervisor and office training coordinator to determining what class is right for you and visit http://www.civiliantraining.army.mil/Pages/Homepage.aspx for information on getting registered.

Have you ever... thought about obtaining a Project Management Professional (PMP) certification? A PMP credential is the most recognized certification for project managers and demonstrates a project manager's experience, education and competency to lead and direct projects. Speak with your supervisor or office training coordinator to learn more.

Would you like to... receive retirement training but have not been able to attend a class within the past five years? Contact your supervisor and office training coordinator to add your name to the list for the next local retirement class.

Did you know... the District Leadership Development Program Level 1 (LDP1) class is scheduled to conclude in March 2015. Another LDP1 class will begin shortly thereafter. Consider enhancing your leadership skills with this self-paced yearlong program.

Did you know... the District Leadership Development Program Level 2 (LDP2) is scheduled to launch in mid January and will run through November 2015.

Sector Gates Raised After 35 Years

By Samantha Heilig, Editor

For the first time in 35 years, the 255,000-pound sector gates at the Thomas J. (T.J.) O'Brien Lock and Dam are being raised and repaired as part of a critical maintenance project designed to rehabilitate the 54-year-old facility. T.J. O'Brien Lock and Dam is a unit of the Illinois Waterway Navigation System and is located at the entrance to Lake Michigan in Chicago, Illinois.

According to Mike Zerbonia, Illinois Waterway Project Operations Manager, T.J. O' Brien is unlike many of the other locks and dams in the District. It is unique in that it is designed to maintain navigation but also serves as flood control, for waterway flushing and is part of a diversion control system. With the T.J. O'Brien lock sitting just outside of Lake Michigan, the design of the lock had to differ from those of other locks in the District. On occasion the water level on the downstream side of the dam becomes higher than the lake side and therefore a miter gate or lift gate used by other locks would not be able to function. Instead, a type of gate called a sector gate was used to allow water to move both directions through the T.J. O'Brien Lock.

Sector gates are shaped like a slice of pie with a triangular framework making up the majority of the gate and a solid skin plate that wraps around the outer curved edge. Although the T.J. O'Brien Lock is the only facility in the District that uses sector gates, the design is not unique. Several other locks throughout the country use these types of gates, particularly in coastal areas.

The last time the T.J. O'Brien Lock was dewatered was in 1979 and included the dewatering of the entire lock chamber which took a total of 60 days to complete. This type of extended closure to the Illinois Waterway was not favored by commercial industry that depends on navigation on the Illinois Waterway remaining open even through the winter months. To reduce the impact to the industry, Zerbonia worked with the Maintenance Section, the Illinois River Carriers' Association and the U.S. Coast Guard to develop a plan for two separate dewatering projects each lasting 47 days with a 30-day open navigation window between the two closures.

The large sector gates found at the T.J. O'Brien Lock in Chicago are different than other gates used throughout the District. These unique gates have the ability to move water both directions through the lock. *Photo by Samantha Heilig*

It has been 35 years since the T.J. O'Brien Lock was last dewatered. During that time, invasive species like zebra mussels have had plenty of time to cover nearly every surface of the sector gates.
Photo by Samantha Heilig

"It is important for the Corps to make the necessary repairs to keep the lock at T.J. O'Brien operational," said Zerbonia. "At the same time we wanted to do our best to work with the industry to lessen the impact made on navigation in a heavily used waterway system."

The first closure began on Nov. 3 when a set of bulkheads were put into place above and below the downstream sector gates. Once the bulkheads were in place, large submersible pumps were used to remove the water from the gate bay and work could begin on raising the first sector gates using a unique jacking system to raise

the 255,000-pound structure. When repairs are needed at the other locks and dams in the District it is common for the Maintenance Section to lift the gates from each lock using a crane and take them to an off-site location for repairs. Due to limited access to the location of the T.J. O'Brien Lock and Dam, this lift process using a crane was not possible due to bridge clearance issues and the overall structure of the gates.

The primary purpose for dewatering the gate bays is to address alignment issues that are preventing proper gate operations. To fix this problem, each gate is being raised which will allow for replacement of the pintle ball, bushings and pins that the gate swings on. The sector gate seals and timbers will also be replaced and the gates will be sandblasted and painted before the project is complete.

"Since it has been 35 years since this lock was last inspected the process of jacking and raising the gates is unlike any project that our current work crew has ever performed," said Brady Beckman, general foreman for the Illinois Waterway Maintenance Section.

To get a better handle on what the project would entail, Beckman traveled to a lock with a sector gate lift in progress in the New Orleans District, prior to completing the work plan for the T.J. O'Brien project.

"The visit to New Orleans District was very helpful in preparing for the lift here at T.J. O'Brien," said Beckman. "There were many parts of the process that could easily be overlooked by someone who had not seen the work performed before."

Safety Officer, Troy Larson (left), Crane Supervisor, Jeff Griffin (right) and Crane Operator, Cary Hahn (lower right) watch closely as one of the jacks used to raise the T.J. O'Brien sector gates, pushes the 255,000-pound gate into the air. *Photo by Samantha Heilig*

Illinois Waterway Maintenance Crew members, Craig Williams, Cory Bowen and Mark Hanson remove the pintle ball and bushing from the lower right sector gate. *Photo by Brady Beckman*

The lifting of the sector gates is a complex task and involves a team of about 30 people. At the top of the lock wall there are three pins that must first be removed to release the gate from the wall. Then at seven different locations at the bottom of the gate's framework, crews use hydraulic jacks to move the gate up a few inches at a time, eventually reaching a height of more than four feet. Lifting the gate is a slow process. Every movement must be monitored to ensure that the gate does not move to one side or the other.

To assist in keeping this project on budget, all of the work associated with the dewatering effort is being performed by District maintenance crews. It has been a collaborative effort with the Illinois Waterway Maintenance Section taking the lead, but many other areas of the District are providing support. Project Management has assisted with scheduling and logistics while Engineering and Construction aided in providing geotechnical monitoring to ensure the process of dewatering the lock would not cause hydrostatic problems. The Mississippi River Project provided additional equipment and staff while the District Safety Office keeps tabs on processes and working conditions.

The downstream set of gates were finished Dec. 21 and the lock was reopened for navigation. It will now remain open until Jan. 21 when the second closure is scheduled. The same process that was performed on the downstream gates will then be done for the upstream set.

Zerbonia said additional maintenance scheduled to take place during the two dewatering periods includes repairs to the bubbler system, inspection of the gate machinery, replacement of the gate track bolts and other minor repairs normally made difficult during regular operations.

Regional Flood Risk Management Strategy Would Improve Upper Mississippi River System

By Michael Tarpey, PE, PMP - Senior Project Manager

A sand levee "push-up" used during the flood of 2008 to increase levee height. *Rock Island District Photo*

In recent years, the Upper Mississippi River watershed has experienced more frequent flooding with higher stages, particularly in the last ten years with major floods occurring in 2008, 2010, 2011, 2013 and 2014. In Quincy, Illinois, alone, four of the top five record crests have happened in the last twenty years. In addition to the challenges of increased flooding, the Upper Mississippi River watershed also lacks a regional flood risk management strategy comparable to the Mississippi River and Tributaries project on the Lower Mississippi River. As a result, the Upper Mississippi River Comprehensive Plan (UMRCP) team, a joint effort by the U.S. Army Corps of Engineers, St. Paul, Rock Island, and St. Louis Districts, is working collaboratively with the states and local communities to develop a systemic and sustainable strategy that would reduce the risks and consequences of flooding.

The Upper Mississippi River System (UMRS) is defined as the Upper Mississippi River Basin drainage area above Cairo, Illinois, at the confluence of the Mississippi and Ohio rivers exclusive of the Missouri River Basin, and encompasses approximately 185,000 square miles. It includes the states of Minnesota, Wisconsin, Iowa, Illinois and Missouri and covers approximately 1,200 miles of navigable river on the Upper Mississippi and Illinois rivers. The UMRS and associated environments have a rich record of human history spanning more than 12,000 years and is one of the most archeologically and historically significant regions in the country. In modern times, the UMRS has assumed a significant role in the development and prosperity of the Midwestern economy and way of life. The river system is both a source of prosperity and challenges. The waters of the UMRS create a nationally significant ecosystem and a nationally significant transportation system but also bring flooding.

When the levees and reservoirs of the UMRS were built, using both federal and non-federal resources, they were not constructed in accordance with any overall systemic strategy or consistent design basis. These facilities have a wide variety of structural integrity, and provide varying levels of flood risk management for similar land uses. The majority of the structures were federally constructed or improved. Most were planned, designed and built incrementally rather than systemically, under various authorities resulting in differing levels of risk reduction. The average age of the agriculture systems on the Upper Mississippi and Illinois rivers is 75 years. Additionally, in accordance with the project authorizations, these structures are operated and maintained by the local sponsor.

The risks, due to a lack of regional flood risk management strategy, remain high and the Flood of 1993 provided a vivid demonstration of the vulnerabilities from a lack of regional strategy. Forty-seven deaths were attributed to the Flood of 1993 as well as nearly $15 billion of damage. The social disruption was beyond measure,

with more than 70,000 homes damaged or destroyed and approximately 74,000 people evacuated.

In response to the Flood of 1993, the UMRCP was authorized by the Water Resources Development Act of 1999, Section 459, to collaboratively evaluate a broad range of flood risk reduction alternatives. This legislation directed the development of a plan to reduce flood damages and requested recommendations on management plans and actions to be carried out by the responsible federal and non-federal entities. It also requested recommendations to authorize construction of a systemic flood control project for the Upper Mississippi River and include recommendations for federal action where appropriate, and recommendations for follow-on studies for problem areas for which data or current technology does not allow immediate solutions.

In 2008, a report from the UMRCP determined that a system of federal levee raises would not be economically justifiable, but it did recommend federal, state, and local actions that would greatly improve the preparedness, performance and resiliency of flood risk management structures and communities. Since that time, the UMRCP regional team has sought to continue working on this forward looking, watershed authority in order to develop a collaborative, integrated regional strategy that includes a risk decision making framework that will be adaptively managed to adjust to changing events and uncertainties.

The frequent floods experienced on the UMRS require extraordinary measures and exorbitant federal, state and local resources to ensure the safety and security of lives and businesses. Currently, during flood events, the flood fighting activities are conducted without a complete understanding to the impact the actions have on adjacent communities. One measure that many agricultural levee systems use to prevent levee overtopping is "pushing up" the backside of their sand levees to increase the levee height. While "pushing up" often prevents levees from overtopping, it increases the risk of levee failure and transfers the risk to other areas. Citizens remain concerned about future flooding and continue to call for federal action to develop a comprehensive regional flood risk management strategy.

The UMRCP team's next step is the development of a geo-referenced hydraulic model for the Mississippi and Illinois rivers. The UMRS lacks a unified hydraulic model – each agency currently uses its own model. The UMRCP model will be collaboratively developed by the Corps of Engineers and states and will become the 'backbone' for building a regional risk management strategy. The UMRCP-developed model will replace the multiple models currently in use, lowering costs for all agencies, while improving floodplain management and increasing consistency in regulatory actions. The model will support flood fighting activities by allowing real-time river forecasting and inundation mapping.

For the UMRCP team to be successful in creating a regional flood risk management strategy to protect human safety and reduce escalating economic losses, federal collaborative leadership will need to work with the states and local governments involved in the UMRS. The strategy would be a long term, iterative effort to break the cycle of flood-respond-repair and would provide guidance on structural and non-structural measures, a risk-making decision framework, and policy change recommendations. Ultimately, the federal investment in regional flood risk management strategy development would be leveraged by state and local implementation of the strategy.

Once sand is pushed up on top of the levee to increase its height, the sand is wrapped in plastic and held down by additional sandbags to reduce the risk of failure.
Rock Island District Photo.

Spotlight on the District

Faces of the District Mailroom

By Samantha Heilig, Editor

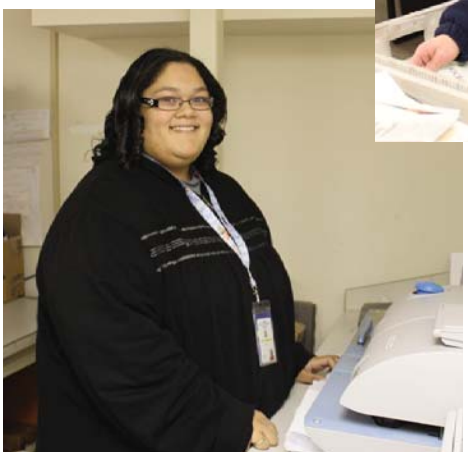
Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds. Although this is a slight exaggeration of the working conditions endured by the staff of the Rock Island District mailroom, this unofficial motto of the U.S. Postal Service applies quite well to the dedication of the people who provide mail services throughout the District on a daily basis.

With approximately 300 people working at the District headquarters, hundreds of pieces of mail and packages need to be delivered and sent out every day. Providing mail services including U.S. Postal Service, FedEx and UPS, is no small task but when taken on by a small team of committed staff it becomes manageable. The team at the Rock Island District mailroom is made up of six people employed by a contractor, The Arc of the Quad Cities. For more than 20 years The Arc has maintained the contract for the operations of the mailroom in the basement of the Clock Tower building.

The Arc of the Quad Cities is an independent non-profit organization that promotes living and working in partnership with the community and supports individuals with developmental and other disabilities. Lee Matherly, program lead for the mailroom, has been working in the District office for 17 years, and says she is glad to see the government supporting the type of work that The Arc has to offer.

Martina Lopez, program trainer, and Lee Matherly, program lead, work as Direct Support Professionals in the District mailroom and assist the mailroom staff with performing their daily tasks. *Photo by Samantha Heilig*

Martina Sangster (below) has been working for the mailroom since March of this year and says she really enjoys working with the people of the Rock Island District. *Photo by Samantha Heilig*



Kate Holsen (above) has six years with the mailroom and says she loves coming to work. Kate also loves to sing and can often be found humming a tune as she makes her rounds through the Clock Tower. *Photo by Samantha Heilig*

"It fills an important need in our community," said Matherly. "The individuals who really want to work and be a part of their community have the opportunity to do so with this program."

Matherly and her coworker Martina Lopez, both work as Direct Support Professionals (DSPs) for the Arc and have been assigned to the District mailroom to fulfill the needs of the contract. DSPs work directly with people who have physical and/or intellectual disabilities with the goal of assisting these individuals in becoming more integrated into their community. As DSPs, Matherly and Lopez provide training and guidance to the other individuals who work in the mailroom and help them to perform their daily tasks around the District.

Lopez, who is a program trainer for The Arc, sees the mailroom program as one

Courtney Buchanan (above) has been working in the mailroom for six years and is very involved in the community. Eric Moritz (right) has four years with the mailroom and is always ready to talk baseball. *Photos by Samantha Heilig*

that truly helps the individuals in developing a variety of skills including time management, organization and communication and helps them build a positive work ethic. Each of the four individuals working under Matherly and Lopez work an average of 15 to 20 hours per week and stay very busy outside of work with other personal interests and hobbies.

"Martina Sangster loves to create things and is really into crafts," said Lopez. "Kate loves to sing, Eric loves his baseball, and Courtney is very involved in the community through a self-advocacy group called Speak Out."

Earlier this fall, the staff of the District mailroom caught the eye of a local news station which featured them in a series called *Inside the Gates*. These video clips can be viewed online at http://www.ourquadcities.com/story/d/story/inside-the-gates-gifted-employees-in-the-mailroom/30638/R7fARl1MpEOZobzyChxQVg and http://www.ourquadcities.com/story/d/story/inside-the-gates-striking-the-right-chord/31214/GZSER4jMxUyGBjFyIgbacw

The mailroom program with The Arc of the Quad Cities is just one of the many ways the District supports the needs of the community by providing equal employment opportunities for individuals looking to work in a professional environment. With the time and experience the mailroom staff brings to the District, The Arc of the Quad Cities looks to continue to provide quality mail services for many years to come.

USACE News

Fiscal Year 2014 Budget Execution

Fiscal Year 2014 was another banner year for the U.S. Army Corps of Engineers, executing nearly $29 billion under Civil Works and Military Missions. USACE completed more than 63,000 contract actions which is nearly 21 percent of the Department of the Army's contract actions.

Civil Works Highlights from 2014

- USACE obligated $6.77 billion to maintain more than 12,000 miles of inland navigable waterways, 900 ports and harbors, 14,000 miles of levees, more than 700 dams, more than 240 lock chambers, 75 hydropower plants and 4,000 recreation areas.
- USACE projects prevent an estimated $48.5 billion in damages annually from storms and severe weather.
- USACE hydropower projects produce an annual average of 71.6 billion kilowatt-hours of clean energy, and about $5 billion in revenue.
- USACE recreation projects have more than 370 million visitors a year who spend an estimated $18 billion.
- Each dollar invested on Civil Works generates about $16 in economic benefits and $5 in U.S. Treasury revenues.
- Under the Disaster Relief Appropriations Act of 2013, in 2014 USACE obligated almost $1 billion in recovery and risk reduction in areas affected by Hurricane Sandy and has completed 120 of 177 repair and recovery projects within its authorities.
- USACE is nearing completion of its $14.45 billion New Orleans Hurricane & Storm Damage Risk Reduction System, with current work on the $615 million Permanent Canal Closures & Pumps project. The American Society of Civil Engineers awarded the Inner Harbor Navigation Canal Surge Barrier the 2014 Outstanding Civil Engineering Achievement Award for 2014, the first USACE project winner in the award's 54-year history.
- USACE delivered aquatic ecosystem restoration across the nation -- the Florida Everglades, the Chesapeake Bay, the Great Lakes, the San Francisco Bay and the Upper Mississippi River. USACE also administered a regulatory program under the Rivers & Harbors Act of 1899 and the Clean Water Act, making decisions on more than 80,000 permits.

Around the District

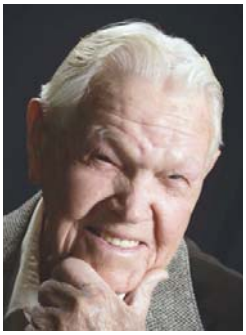
Retirements ...

Charles Caldwell, lock and dam operator at Lock and Dam 16, retired Nov. 29, after dedicating more than 16 years of service to the federal government.

Douglas Vercautren, civil engineering technician for the Illinois Waterway Project, retired Nov. 29, after dedicating seven years of service to the federal government.

Dean Ritzmann, lock and dam operator from Brandon Road Lock and Dam, retired Nov. 30, after dedicating more than 25 years of service to the federal government.

Sympathy ...



Andy "Hap" M. Fuller, 93, of Lexington, Mo., passed away Nov. 6.

Fuller worked as a crane operator at Lock and Dam 17 and 18 with the Mississippi River Project. He also served in the U.S. Navy during World War II.

Averill (Tex) Holloway, 92, of Orion, Ill., passed away Dec. 2.

Fuller worked as an electrical engineer at Locks and Dam 15 with the Mississippi River Project until he retired. He also served in the Army Air Corps during World War II.

William Gallup, 72, of Utica, Ill., passed away Nov. 6.

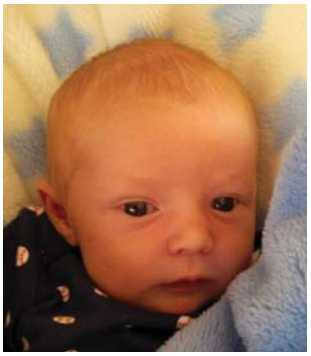
Fuller worked at Starved Rock Lock and Dam on the Illinois Waterway until he retired. He also served in the U.S. Marine Corps during the Vietnam War.

Have something you would like to share?

If you have something you would like to submit for the Around the District section of the Tower Times please send it to samantha.a.heilig@usace.army mil

Congrats ...

Congratulations to **Kelly Thomas** and his wife, Ellie, on the birth of twin baby girls on Nov. 21. Camille Faith weighed five pounds, five ounces and was 17½ inches long. Charlotte Hope weighed six pounds, seven ounces and was 18½ inches long.



Congratulations to **Jon Schultz** and his wife, Melissa, on the birth of a baby boy on Nov. 23. Jackson Jon weighed eight pounds, seven ounces and was 20½ inches long.

Can you name where this is? If so, send your answer to samantha.a.heilig@usace.army.mil. Correct answers will result in your name being entered to receive a special prize and be recognized in the next Tower Times.

November Answer:
Smith's Island at Locks and Dam 14

Winner: Wendy Frohlich

SAFETY CORNER

Avoiding Holiday Health Problems

By Patti Behr, Occupational Health Program Manager

The holiday season can be the perfect recipe for fun times and cherished memories. But too much food, alcohol and even time with the family can be hard on your health. Here are some ways to keep your fitness, diet and happiness intact through the holiday season.

Fitness Problems:

1. Holiday traveling and no gym in sight.
2. No time to work out during holiday commitments.
3. Hard to stay motivated with temptations everywhere.

- Solution 1: Weightless workouts can be an easy, gym-free way to improve balance, flexibility, and core strength and they carry a lower risk of injury than lifting heavy weights.
- Solution 2: Get into the habit of waking up earlier to exercise or divide exercise into five- or 10- minute blocks throughout the day to help fit it in.
- Solution 3: Set a fitness goal for yourself during the holiday season. Tell your friends about it so they can help keep you stay on track.

Diet Problems:

1. Holiday meals are gigantic.
2. Portion control is challenging.
3. Mindless grazing on leftovers and snacks.

- Solution1: Many people mistake thirst cues for hunger. Drinking a big glass of water ten minutes before a meal can help curb that hunger feeling.
- Solution 2: Try filling your plate only half way. This way if you go back for more you don't end up with more than you intended. Putting your fork down between bites also reminds you to slow down.
- Solution 3: Rather than consuming whatever crosses your path, try scheduling snacks ahead of time. Avoid eating in front of a TV or computer screen and try chewing gum or brushing your teeth after a meal to keep mindless nibbling at bay.

Happiness Problems:

1. Family members know just how to push your buttons.
2. Family fighting stresses you out.
3. No alone time to decompress.
4. Expectations run high and perfection runs low.

- Solution 1: Don't be afraid to make it clear (in a firm but polite tone) that you'd rather not discuss a certain topic. Being honest and polite with family members lets them know how you're feeling without starting an argument.
- Solution 2: A well-timed change of subject can often defuse a discussion that has gotten a little out of hand. Limiting alcohol intake can also decrease the potential for heated discussions and in the end prevent those who are driving from causing more than just a disagreement.
- Solution 3: Find ways to take a break from the family bonding by volunteering to run errands or bring a laptop to catch up on work.
- Solution 4: Let go of expectations. Take time to think of all the ways your family could be perfect, then recognize that they never will be. Knowing and accepting that fact will get you through the holidays and many more to come.

Alcohol Use Problems:

1. People drink more during the holidays.
2. Problem drinkers can be difficult to deal with.
3. Drinking and driving can be a deadly mix especially in winter road conditions.

- Solution 1: Resist the pressure to drink. Decide ahead of time how many drinks you will have and stick to it. Make sure if you are the host that you offer non-alcoholic beverages as an option.
- Solution 2: If you have individuals who tend to consume larger quantities at gatherings, limit what you have available and make non-alcoholic drinks more accessible.
- Solution 3: Holiday drinkers often underestimate their level of impairment. Make it understood from the beginning that no one will be allowed to drive if they are impaired. Designate a driver or plan to stay wherever you will be celebrating.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ROCK ISLAND
CLOCK TOWER BLDG. - P.O. BOX 2004
ROCK ISLAND, IL 61204-2004

Rock Island Retirees Reunion

The Retirees of the Rock Island District held their 22nd annual reunion on Sept. 3. Left to right, front: Karen Johnson, Fran Horton, Ray Horton, Dudley Hanson, Ardo Holmgrain, Robbie (Shoemaker) Heitzman, Hank Diedrich, Ruth Viktora, Suzanne Simmons, Lorraine Deaton and Donna (Willey) Lingafelter; second row: Mary Strassburger, Gerry Sue Bledsoe, Sharryn Jackson, John Gall, Jim Dixon, Sandy Dixon, Laveta Bear, Corrine Paaske, Joe Raoul, Bryan Goodrum, Colene Wilson and Pat Hague; third row: Pam (Dannacher) Zepeda, Scott Kool, Larry Jones, Dick Fleischman, Steve Russell, Jim Wadle, Greg Weist, Mike Smith, Florence Gupton and Jerry Moore; fourth row: Kenn Shoemaker, Bill Riebe, Bob Riebe, Dan Viktora, Sam Doak, Keith Wilson, Harry Galley, Dale Rossmiller, Mark Schroeder, Dave Varner, Bill McCutcheon (barely visible), Don Logsdon and Irv Olson. *Photo by Jan Hancks*