

Stolen artifacts
returned to
Navajo Nation

Big Bend Dam Project
rebounds from
2011 Flood

Omaha District plays
role in climate change
impact assessment



Omaha Outlook



**Power house bridge and
gates among many items
inspected at Big Bend as it
rebounds from 2011 flood.**



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On the cover: Kathlene (Katie) Shook, Omaha District structural engineer and certified bridge inspector, gets a close-up view of the Power house bridge at Big Bend during a required inspection. Photo by Cheryl Moore



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MESSAGE FROM THE COMMANDER

Focus is on building the most capable, innovative team

Team, thank you all. It has been a great first year back with the District. I'm not sure where the time went, but it flew by. One of my initial goals, which isn't changing, was to get out and see everyone in the District once a year. We missed a few locations so for those locations, be prepared, we will just have to visit you more often this year.

One of the other goals we added to the OPLAN was figuring out how to improve our leader development and offer more opportunities for broadening experiences. I am glad to be able to report back to you that the Corporate Board in coordination with the Human Capital Board has developed and implemented part of the solution. The solution is captured in a recent policy letter on the deliberate creation of developmental positions.

Managers have been asked to create positions with promotion potential, where practicable, in order to provide upward mobility opportunities for employees in administrative and technical positions. The District will also create "permanent" developmental 'special project' positions at grades 12-14 that will allow the leadership to competitively select interested individuals to fill for temporary periods of up to a year. Managers can also consider 'job swaps' between employees of equal grade. This temporary trade of duties will allow employees to broaden their skills and allow employees to become more familiar with the mission of the District and how each of our Divisions (RE/OD/CD/ED/PM, etc.) work together cooperatively to ensure success. Offering these career-broadening experiences will help build a more diverse, capable, knowledgeable and innovative team. We will publish a list of the upcoming opportunities in the near future.

This has been a great year! And yes, I admit there are challenges. I believe there always will be... what's important is how we handle those challenges. That's what makes me so proud to serve with you, how well you handle the tough stuff. From furlough, to massive paperwork for authorizing overtime, to too much craziness with added bureaucracy, you and your teams persevere and always make the best of it. One amazing example is handling all the new changes and processes in the acquisition process. It's no secret all the new reviews, paperwork and reduced authority don't make the process more efficient or arguably more effective. Nonetheless, even as we fight the implementation of these numerous items, you go out and become the first District in the Corps to pass the Procurement Management Review. This is a tremendous team effort and I salute you!

I think John Quincy Adams may have described the District best when he said, "Courage and perseverance have a magical talisman, before which difficulties disappear and obstacles vanish into air." I think it is only fair with your superb performance that your leadership remain committed to removing obstacles from your path!

This year, we believe the District will accomplish a \$925 million program. Last week we had employees working in Japan, Greece, Turkey, Afghanistan and Italy, not to mention handling a thousand projects right here in the U.S.A. Most recently we had employees deployed to help Colorado's response and recovery effort from the recent and ongoing flooding. We are an incredible organization, and it is you, each and every one of you, who come to work every day and strive to be the best you can be.

In this edition of the Omaha Outlook, the articles highlight the diversity of our people and projects. It focuses on our working together with Sovereign Tribal nations, and effective use of volunteers to help make us cost-efficient so project offices can operate on tight budgets. Another story explains our commitment and work in dealing with the effects of climate change, which certainly impacts our reservoir and dam operations.

Thanks again for all you do to make our Nation safe, healthy and proud for many future generations.



Joel R. Cross

Colonel

Omaha District Commander

Essayons!

A handwritten signature in black ink that reads "Joel R. Cross".

Joel R. Cross



Stolen artifacts returned to Navajo Nation

On July 9, the Corps of Engineers repatriated a large cache of sacred artifacts to the Navajo Nation.

This is the first time in the history of the Omaha District, with some assistance from the Albuquerque District, that artifacts have been returned to any tribal nation in accordance with the Archaeological Resources Protection Act (ARPA). The artifacts were looted from Corps of Engineers-managed land and Navajo tribal lands. A total of 710 artifacts were recovered from lands managed both by the Corps of Engineers and the Navajo Nation. Out of these, 425 were determined to be the property of the Navajo Nation, and were returned.

The looter, Donald B. Yellow, was working for Indian Health Service in Chinle, Ariz., when he stole the sacred artifacts. According to Ronald Maldonado, supervisory archaeologist for the

Navajo Nation Historic Preservation Department, many of the artifacts, including burial items, were looted from the Chuska Mountains, a mountain range located within the Navajo Nation just north of Gallup, N.M. Yellow continued looting along the Missouri River Basin as he moved north.

“When Yellow relocated to the Midwest, he took all of the artifacts with him,” Maldonado said.

“We still do not know how Yellow was able to move all of these items,” said Megan Maier, field archaeologist, Omaha District.

The looted artifacts were discovered in central South Dakota, when Yellow was trying to sell them on eBay.

Yellow went to trial in South Dakota, pled guilty to a misdemeanor in violation of the Archaeological Resources Protection Act (ARPA) and was sentenced

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Oct. 11, 2011. He was fined \$618.00. The judge also ordered all of the southwestern/Navajo artifacts be returned to the Navajo Nation and ordered Yellow to pay a restitution fee of \$4,382 to return them. However, Yellow received no jail time or probation for this violation.

According to Public Law 96-95, the purpose of ARPA, created in 1979, is “to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and Tribal lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals (Sec. 2(4)(b)). Statute (16 U.S.C. 470aa-470mm).”

Members of the Corps of Engineers, Omaha District, and the Albuquerque District, met with Maldonado at the airport in Gallup, N.M. There, Maldonado accepted the items on behalf of the Navajo Nation.

“These artifacts are sacred to the Navajo people and we are grateful to have them returned to their home,” said Maldonado. “Some of these artifacts were stolen from our peoples’ graves and burial sites,” he said.

Julie Price, cultural resources project manager, Omaha District, noted that the artifacts were found, and Yellow prosecuted, thanks to the dedicated efforts of Mr. Brad Merrill, a special agent with the U.S. Fish and Wildlife Service (FWS), Pierre, South Dakota.

“The Corps has a Scope of Work (SOW) Agreement with the U.S. Fish and Wildlife Service,” she said. “This is because of the different types of delegation authorities given to both agencies. The Corps is authorized to enforce the Archaeological Resources Protection Act of 1979 (ARPA); however the Corps does not have enforcement authority to prosecute offenders of ARPA, but FWS does.”

Since non-Navajo artifacts were found on Corps lands, and the Corps does not have the authority to detain, arrest and prosecute these offenders, the FWS does. Thanks to this excellent partnership



between these two agencies, Yellow was caught, tried and found guilty. The Omaha District is currently working with the courts to return the non-Navajo artifacts to their tribal homes.

“It is very rewarding to be a part of returning these artifacts to the rightful owners, said Maier. “Now these items are back where they should be. They do not belong in South Dakota,” she said. “Now they are back home in the southwest.”

“The Navajo Nation is one of South Pacific Division’s critical strategic partners,” said Ron Kneebone, tribal liaison, Albuquerque District. “Cooperation, such as this repatriation, helps strengthen our relationship into the future. All credit for the success of this effort is due to Omaha District’s dedicated cultural resources staff. Working cooperatively with our sister district has been a great experience and provides an excellent example of Corps’ teamwork,” he said.

Opposite: One of the complete bowls that was returned to the Navajo Nation in the Corps’ repatriation of 425 artifacts, July 9, 2013. Photo by Ronnie Schelby.

Above: Ronald Maldonado, supervisory archaeologist for the Navajo Nation Historic Preservation Department and Julie Price, cultural resources project manager, U.S. Army Corps of Engineers, Omaha District, complete the paperwork transferring 425 sacred relics to the Navajo Nation July 9, 2013. Photo by Ronnie Schelby.

Omaha District plays role in climate change impact assessment

The topic is constantly in the news, in our thoughts and spoken from political platforms—climate change. U.S. Army Corps of Engineers experts say its entire portfolio of existing and proposed civil works water resource infrastructure projects and programs could be affected by climate change.



A group of Omaha District workers have taken part in targeted pilot studies as part of the Corps Responses to Climate Change program that will help the Corps build a store of knowledge of how changing weather patterns will affect specific aspects of flood control, water supply and demand, water quality, storm water and wastewater infrastructure, coastal zone functioning and ecosystem functioning.

Hydraulic engineers Doug Clemetson, Ryan Larsen and Jennifer Gitt from Hydrologic Engineering Branch, along with Dan Pridal, sedimentation and channel stabilization section chief, were involved in a study of Garrison Dam and worked with staff from the U.S. Bureau of Reclamation and the Corps' Albuquerque District on the overall pilot study.

"These pilot studies, which took place at Garrison Dam (N.D.) Cochita Dam (N. Mex.) and Yellowtail Dam (Wyo.) were conducted to help develop Corps guidance pertaining to changes necessitated by climate change. Nobody really knows what the future climate changes will be, but so far we have learned enough to know present conditions could change which would alter sediment yield and runoff. Our studies indicated that future climate change could cause an increase in runoff and change the timing of the runoff," stated Clemetson.

"Climate change is a factor to consider when evaluating future performance risk for Corps projects and is a challenge to evaluate," says Pridal.

Jennifer Gitt echoes Pridal: "It is difficult to model the impact of future climate change due to the high variability in the parameters. A similar change in temperature or precipitation at different times of the year can have significantly different impacts," she says.

"Not only are the climate parameters changing but these variables directly affect the vegetative cover, soil moisture content, and snowpack, to name a few, which directly affect the sediment yield and add complexity to the model," said Gitt. The climate of the Upper Missouri River Basin ranges from semi-arid on the plains to sub-humid in the mountains. The topography rises to over 8,000 feet beginning at the headwaters of the Missouri River in western Montana and falls to about 1,800 ft as the Missouri River enters the Lake Sakakawea headwaters, she said. Any climate changes would not likely be uniform across the basin or produce similar impacts.

So what was discovered? The following were key findings of the Corps study:

1. Changes in flow due to bias corrections in the models that were used are greater than changes due to future climates.
2. All climate-change scenarios resulted in an increase in sediment loading and inflows to Lake Sakakawea.
3. Climate-adjusted sediment rates have no impact on dam safety as long as the spillway design flood does not increase.



4. Climate-adjusted sediment rates have little impact on pool elevations but affect higher frequency releases.
5. Climate-adjusted flows have a large impact on pool elevations and releases for all climate scenarios.
6. The Missouri River main stem dams need to be modeled as a system.
7. Precipitation is the driving factor, but the timing plays an important role.

The climate scenarios with less precipitation can result in increased inflows due to timing changes in runoff, which can increase spring runoff says Clemetson. “We are attempting to accumulate knowledge in this area so we best know how future climate change could impact the operation of the six main stem dams and other reservoirs operated by the Corps.”

Experts say climate change could affect water resources in the Missouri River Basin through alterations in the hydrologic cycle. Warmer temperatures accompanied by more precipitation could lead to a larger snowpack and an earlier spring melting of snow. That would lead to an increase in runoff within the basin. Conversely, lower temperatures accompanied by less precipitation could decrease the snowpack and delay the spring snow melt, which could also lead to more runoff within the basin. A delay in melting of the mountain snowpack can result in an increase in runoff because of a more rapid warmup and quicker melt as the summer months approach.

Both scenarios, along with other climate-change scenarios, could alter the basin runoff, changing the sedimentation rate for the Missouri River reservoirs and the operation of the Missouri River dams.

Their study considers the potential impact of climate-induced hydrologic changes to the Missouri River at the Garrison Dam, the largest of the main stem reservoirs and located in the upper Missouri River Basin. The specific impact examined in this study is the relationship between changing climate and basin runoff that could change reservoir sedimentation or influence the flood control capabilities of the dam.

Five different climate scenarios: drier and cooler, drier and warmer, wetter and cooler, wetter and warmer, and a median future precipitation and temperature, were developed by the U.S. Bureau



of Reclamation from 112 downscaled climate projections. Each climate scenario contained two different periods: 2010-2039 (near future) and 2040-2069 (distant future).

The pilot projects, which will help inform future policy guidance, each have a central question because the Corps is trying to focus on just one particular aspect; once learned, that knowledge can be transferred elsewhere.

Jo Ellen Darcy, assistant secretary of the Army for civil works, released a policy statement two years ago that called for integrating climate change and adaptation into all the projects done by the Corps.

The Corps established a team and several committees dedicated to developing climate change strategies and adaptation plans.

For the Garrison Dam study, the modeling results showed an increase in pool elevations and releases for all climate scenarios with respect to the baseline pool elevations and releases; a majority of the affect was attributed to the increased inflows and not the increased sediment loads. More information on the Corps Responses to Climate Change program can be found at: www.corpsclimate.us.

Opposite, upper photo: Jennifer Gitt and Ryan Larsen discuss effects of climate change on sedimentation at Garrison Dam. Photo by Cheryl Moore.

Lower photo: Student engineer Alex Roth sets up the rover-rod and wades out onto submerged sandbars to take topographic measurements. Photo U.S. Army Corps of Engineers, Omaha District.

Above: Student engineers in Hydro Branch take a break from field work to pose—they are Traci Tylski, Josh Leyh, Ken Garrison, Alex Roth. Photo U.S. Army Corps of Engineers, Omaha District.

Recognizing volunteer's 10 years as Fort Peck fixture

Meet Duane Johnson. Of course, anyone camping at Fort Peck Lake in the last 10 years probably knows him. He has been the volunteer campground host at the Downstream and West End Campgrounds in Fort Peck, Mont., since 2003. Every year, for the last 10 years, April through October, he has been a mainstay.



"He is here from opening day until the gates close for the season, and is available to guests to answer questions, fill the brochure racks, report issues and provide entertainment," said Gail Plovanic, natural resource specialist. "When I first started here, he knew my job as well as anyone else and was able to 'remind' me when I'd forget something, which just makes me better at what I do."

Johnson retired from his 44-year career with the Burlington Northern Santa Fe railroad in 1998 where he served as a fire fighter, a brakeman and later a conductor. Following his retirement, he and his wife, who was fighting a losing battle with cancer, took time to travel. He fought his own battle with cancer during this time but beat the odds.

Johnson says he was listening to the radio one day and heard an advertisement that Fort Peck was looking for volunteers, so he applied.

And that was that.

He says he was out fishing on Fort Peck Lake when he got the call from Ranger Mark Calamar to tell him he was "hired" to volunteer at the campground.

Having grown up in Glasgow, Mont., and graduating from Glasgow High School in 1954, Johnson knows the area well.

Johnson has two daughters and two sons. His sons, Dean "Dino" and Steve, claim when they were growing up, they were at Fort Peck Lake almost every weekend through the summer. Their family would fish, swim, play games and make memories.

Dino recalled a family outing in the late 1960's when they drove to one of the dredge cuts to swim and fish. After a few hours, it began to pour rain. Where the car was parked was sandy and the rainfall caused the car to sink into the sand and become stuck. A dog from another camp site had crawled under the car to cool off and became pinned under the sinking car. Johnson walked more than a mile in pouring rain to a pay phone to hire a tow truck to rescue the car and the dog.

According to Dino, his dad saved the dog and that was the first time he realized his dad was a hero.

Steve told the story of an outing at Fort Peck Lake where he and his dad realized shortly after launching the boat that they had forgotten to put in the plug. They loaded the boat back on the trailer, Steve began pulling the boat from the water and Duane stepped behind the boat to replace the plug. The boat, which had not been hooked to the trailer, began sliding onto the boat ramp. They struggled to reload the boat, assess the damages and then took it for repairs.

The next day, high winds forced all the boaters in the fall salmon tournament to fish in the Marina Bay. Steve, feeling challenged by Duane to set his down riggers better than his brother-in-law Louie, accidentally hooked one to the marina's boat dock cables. The back of their boat was nearly pulled under water from the tension and the down rigger cable snapped. Steve said they didn't catch a fish all weekend but after \$1,500 in fuel and boat repairs, fishing with his dad was priceless.

Johnson's four children have blessed him with 19 grandchildren and 30 great grandchildren and they all know where to find him every summer. And they all join him from time to time. In fact, for his 70th birthday, they threw a surprise birthday party at his brother's place in Duck Creek, which is a recreation area on Fort Peck Lake.

"It ain't the money," says Johnson with a laugh when asked about what keeps him coming back

to Fort Peck each year. “It’s probably the people I work with and the campers. That would include you, wouldn’t it?” he asked Plovanic.

The real secret that’s no secret is Johnson is there for the fishing. He says his spare time is spent fishing and smoking fish, which of course implies that he manages to catch a few.

When visitors ask where his favorite fishing spots are, he sends them to the shafts, Duck Creek and behind the Interpretive Center.

“Two years ago, when the lake was up, we were ‘ladder fishing’ at the bottom of the spillway when all the gates were open. They were biting fast and furious down there!” said Johnson.

What brings campers back may also be attributed to Johnson. His entertainment value varies from reciting poetry, a local favorite is Edgar Allen Poe’s “The Raven”, to his storytelling, to his frequent fish fries.

One of Johnson’s stories involves a rather humorous campground tale involving four motorcyclers who had camped across the street from his camper. As the story goes, “One gal woke up, walked over to take a shower and came back to change her clothes behind a tree.” He said she looked around in every direction to make sure nobody was looking and then stripped down completely naked, right in front of the big window of his camper. Fortunately, she didn’t see him.

Each spring, Johnson takes up residence in his camp host spot nicknamed “two tarps” by local



residents referring to the tarps he puts up on both sides of his picnic shelter. If he isn’t found at “two tarps”, all anyone has to do is look for his bright orange “pumpkin” of a car, which is probably orange in honor of his favorite football team, the Denver Broncos.

Jim Henzie, a frequent camper at the West End Campground and an avid fisherman described Johnson. “He is the best Campground host I’ve ever come across. I have never met anyone who doesn’t like Duane. He is easy going, gets along with everyone and I’ve never seen him mad.”

So, for visitors headed to Fort Peck, Johnson can be found at “two tarps” every night from April to October, and he’s ready to welcome you.

Above: Duane Johnson relaxes at “two tarps”, his camp host spot, nicknamed by local residents in reference to the tarps he places at the sides of his picnic shelter. Photo by Tim VanAken.

Opposite: Johnson was a mentor to Natural Resource Specialist, Gail Plovanic who credits Johnson for making her better at her job. Photo by Tim VanAken.

Right: Proof that he can catch a few fish, Johnson’s favorite fishing spots are the shafts, Duck Creek and behind the Interpretive Center. He says his spare time is spent fishing and smoking fish; Johnson in his camp host spot nicknamed “two tarps” with his bright orange “pumpkin” of a car, which is probably orange in honor of his favorite football team, the Denver Broncos. Photos by Tim VanAken.





Big Bend Dam Project rebounds from 2011 Flood

She's called the "Jewel on the Missouri River".

Located at Fort Thompson, S.D., the Big Bend Dam Project and the employees who maintain this pristine real estate, have bragging rights to some of the most picturesque landscapes available.

However, a lady called "Mother Nature" wreaked havoc on Big Bend and other landscapes during the Missouri Flood of 2011. Extensive damage was sustained throughout the Big Bend compound. One of the areas hit hardest was the Left Tailrace Campground, and that hit hard with recreationalists in the area.

This popular family campground was unusable for the summer months of 2011 and throughout 2012.

Repairs began in late 2012, funded as a result of the Disaster Relief Appropriations Act. Flood-related repair work to the campgrounds included roads, camp pads and the site's electrical system. Beyond this recreational site, other repairs included the Right Tailrace, Spillway Dike, Old Fort Thompson and North Shore Beach recreation areas.

May 3, 2013, the Left Tailrace Campground at Big Bend Dam reopened to the public with the majority of repairs complete and smaller projects continuing through the summer. One of those projects was fixing a broken sewer line. As Engineering Equipment Operator Rory Bishop helped to dig up the trench, Heavy Mobile Equipment Mechanic Matt Eymer and



summer hire Josh Valandra, climbed deep down into the trenches to unveil and repair the broken line.

Keith Fink, Operations Project Manager at the Big Bend Dam Project office said, “The outside maintenance crew has done an outstanding job preparing our Class A campground.” It is their hard work and total dedication that has allowed business to resume as usual at one of South Dakota’s premiere family friendly campgrounds.

Summer hires squeeze time with the Corps among demanding college schedules

It’s no surprise to see a couple summer hires down at the campground cleaning the exterior of the comfort stations. The short time these students, James Lien, Sammi Jo Gourneau-Janis or Landon Hall participate in the summer hire program, a lot of progress is achieved for the benefit of the Big Bend project.

Weston Bich, stayed his course, as he manicured the campgrounds on a riding lawnmower. “As a summer hire under the Student Pathways Program,

this is my third straight year with the Corps,” Bich said. A 2012 Chamberlain High School graduate, Bich will continue to pursue his college aspirations this fall in Nebraska.

Curb appeal at Left Tailrace campground allures visitors each year

Ranger Bob Karlen was present when one such visitor, Bob Ridder entered the campground through the newly constructed welcome shack. This shack is where Al Gray greets incoming campers as the campground host. In fact, Gray and the campground

Opposite: DRAA Spillway Gate contractors prepare spillway gate for power washing. All photos by Cheryl Moore

Above clockwise from left: Corps Ranger Bob Karlen checks in camper Bob Ritter at the Left Tailrace campground at Big Bend; Matt Eymmer, heavy mobile equipment mechanic and Josh Valandra, laborer, clean shovels after digging up and fixing a broken sewer line; Kathlene (Katie) Shook, Omaha District structural engineer and certified bridge inspector, documents bridge wear and tear on her camera during a required bridge inspection at Big Bend Dam.



made news when a fourth of July parade was hosted and families celebrated.

As summer activities come to a close, the campgrounds begin to reveal that look of an empty nest again. Summer hire students return to pursue their educational goals in college and the glistening waters of Lake Sharpe take on a calm sheen of silence as this “diamond in the rough” stills for the season.

Bridging the gap

Above the serenity of the campgrounds, more repairs for damage sustained during the 2011 flood takes place as two sets of contractors work on the Big Bend Spillway. Morris Inc. repaired the concrete slab and cleaned underwater debris below the concrete slab. According to Keith Fink, “Concrete repairs included concrete spalling repairs, crack sealing and drainage system repairs. The underwater debris



includes rock, concrete, rebar and handrails caught behind the underwater baffles.”

Meanwhile, J. F. Brennan, the Spillway Gate repair contractor, performs an extensive gate inspection, testing and modeling to ensure future safety. “This work,” says Ashley Matzke, “includes weld inspections and repairs, gate seal replacement, cable replacement and repainting the gates and trunnion arms.”

Kathlene (Katie) Shook, structural engineer and certified bridge inspector, from the Omaha District

Above left: Matt Eymer and Josh Valandra get down and dirty on the job as they uncover a broken sewer pipe at one of Big Bend’s campground sites. All photos by Cheryl Moore.

Above right: Landon Hall, ranger at Big Bend Dam spent his first year with the Corps under the Pathways Program, doing various outside maintenance jobs.



was also at Big Bend conducting bridge inspections on the Spillway Bridge, Powerhouse Bridge, Old Fort Thompson Bridge and the Handicapped Fishing Pier. “The purpose of the bridge inspections is to identify defects and/or changes in the bridge in order to maintain safe use and long life span of the bridge,” Shook said.

It is public law that all bridges open to the public are required to be inspected by a certified bridge inspector who has successfully completed the 80-

hour Federal Highway Administration FHWA Bridge inspection training course followed with refresher training every five years in order for a bridge inspector to keep their certification.

Shook said a bridge inspection and report is required every two years for each bridge that is open to public use. For bridges that are closed to public use, an inspection and report is required every four years, assuming the bridge is in good condition.

The bridge inspection process starts with bridge inspectors reviewing previous bridge inspection reports and planning the inspection. Inspectors identify areas where defects were found in previous inspections. This allows the bridge inspector to determine if previously identified defects have been repaired or have increased in size and severity. Inspectors coordinate traffic control and access equipment.

Above clockwise from left: With the Big Bend Project office and Powerhouse in the background, Rory Bishop, engineering equipment operator, maintains the foregrounds near the Left Tailrace campground; Weston Bich, a summer hire in his third year with the Corps mows one of 81 pads for campers at the Class A Left Tailrace campground; Rory Bishop, engineering equipment operator, fixes broken pipes in the outdoor facilities as part of campground repair work. All photos by Cheryl Moore.



When inspectors arrive at the bridge site, they observe the bridge from a distance, typically taking photographs and making notes about the overall look of the bridge. Some major problems may be indicated if the profile of the bridge is not smooth, “in other words the bridge will not look right to the experienced bridge inspector,” Shook said. Inspectors will then concentrate on discovering the cause and extent of the problem. Depending on the exact nature of the problem, emergency repair or immediate closure of the bridge may be required in severe and rare cases.

The inspectors use a systematic method to inspect bridges, to ensure the entire bridge is inspected. The exact order of the inspection will vary depending on the type of bridge being inspected and the individual conducting it.

Shook earned her Bachelor of Science in Civil Engineering from the University of Nebraska at Omaha in 2010. She has been a Corps employee with the Omaha District for five years having spent two years as a student and two years as a Department of the Army Intern. Shook became a full-time employee in June 2012 and has since been responsible for the structural design and support of many military and civil works projects, as well as performing bridge inspections.

Above: Representing the Big Bend Project are, from left, John Payer, budget technician, Jennifer Winter, archeologist, Ashley Matzke, office automation assistant, Patty Lien, administrative officer, Jeff Williamson, chief technical support, Caroline Pheasant, purchasing technician, Keith Fink, Big Bend Project Manager, Jacki Bultsma, chief natural resources, Jamie Lowe, natural resources specialist, Bob Karlen, natural resource specialist, and Brandon Bacon, natural resource specialist. Photo by Cheryl Moore.



Above, clockwise from left: A DRAA Spillway gate contractor prepares to power wash one of the gates in preparation for inspecting and painting of the gate.; A DRAA contractor inspects and notates findings during a bridge inspection at Big Bend Dam power house; Kathlene (Katie) Shook, Omaha District structural engineer and certified bridge inspector, gets a close-up view of the Power house bridge at Big Bend during a required inspection. All photos by Cheryl Moore.



Reaching out to students as future engineers

For the Omaha District, reaching out to students as future engineers is a way of life. A recent sojourn to the Mormon bridge focused on students from Brownell-Talbot College Preparatory School—a safe, caring community dedicated to academic excellence and to preparing students for success in college and in life. Through experience in academics, activities, and the arts, students learn passionately, think critically, act responsibly, and lead with integrity.

More than 36 students, joined by three adult chaperones embarked upon the shoreline of the Missouri River Project to get a closer look at the Mormon bridge. With i-pads in hand, they all captured photographs of this bridge as part of a study of bridges they are conducting in their 8th grade class.

This trip was part of the 8th grade science class' unit on bridge engineering and design. During this class they talked about the various engineering fields and what it takes to design and build different types of structures. The photos each student took are for documentation in science and will be used as part of an assignment for their art class. Students were looking at bridges from the perspective of the scientist and the artist.



Above: Matt Krajewski, Missouri River Operations Project Manager, demonstrates how a suspension bridge works to students from Brownell-Talbot College Preparatory School. All photos by Cheryl Moore



Above: Matt Krajewski, Missouri River Operations Project Manager, briefs eighth grade students from Brownell Talbot on the mission of the Army Corps of Engineers, during a visit to the Missouri River Project office on Sept. 11, 2013.

Opposite: Future engineers from Brownell-Talbot College Preparatory School, use the latest technology, their school-provided iPads, to capture a photo of the Mormon bridge from the tip of the Missouri River Project office shoreline.



By TERESA ARMAGAN & DANNY MCLAUGHLIN, *Omaha District*

Toasting 30 years of success with enthusiasm, mirth

Capitol Avenue Toastmasters turned 30 on June 1, and they are not afraid of their age one bit. They celebrated in style in late June with food, fun, and a speech from the founder himself. Nick Stefero humorously told how he came to start the club, which was originally called FEDS- Federally Employed Downtown Speakers. He also talked of the transformative benefits of Toastmasters.

But the fun didn't end there. Toastmaster for that day was Bob Dworkin, a recently-returned former member who kept the party/meeting going with enthusiasm and props. Patrick Nowak, re-elected treasurer, was humorist for the day, regaling the group with a well-told joke. Former members gave impromptu speeches on 80's topics chosen by the day's table topics master, Dean Matuszewski.

The guest of honor was Mark White, the new Area Governor of Toastmaster's District 24, and a member of our neighbor club, the Union Pacific Rail Talkers. He recounted the Capitol Avenue Club's numerous awards and distinctions.

Toastmasters provides a supportive atmosphere to gain speaking and leadership skills. Meeting duties rotate among members on a weekly basis to give each person an introduction to all aspects of communication.

For those interested in checking out the Capitol Avenue Toastmasters Club, contact Hector Santiago, Vice President of Membership, at 402-995-2738.

Meetings are on Thursdays from 11:30 to noon, usually in the first floor conference room 160 in the Zorinsky Building on Capitol Avenue. (Identification is required to enter the building.)



Left: Capitol Avenue Toastmaster's founder Nick Stefero was present to celebrate the club's 30th anniversary.

Right: Toastmaster for the day, Bob Dworkin keeps the celebration alive through enthusiastic communication props. Photos by Teresa Armagan

Missouri River/Lake Sharpe Clean-up nets big catches

Tales weren't of the "one that got away" or the exaggerated size of a hooked walleye, but, more than 4,000 pounds, or two tons, of trash and debris was collected during the annual Missouri River/Lake Sharpe Clean-up in July. The event, the fourth in the last five years, had more than 40 volunteers working along the river in Pierre-Fort Pierre, S.D.

Volunteers worked out of boats or as ground based crews. Trash and debris collected was hauled

back to Down's Marina in Pierre, S.D., where it was properly disposed of by the city of Pierre.

This year's clean-up netted 1,560 pounds of lumber and other rubble, 1,380 pounds of trash and litter, 540 pounds of scrap metal - including a refrigerator, a large plastic culvert weighing approximately 400 pounds and 180 pounds of tires.

The clean-up is a partnership between the Central South Dakota Chapter of Walleyes Unlimited, the Izaak Walton

League of America, the South Dakota Game, Fish and Parks Department, the U.S. Army Corps of Engineers, the City of Pierre, the U.S. Fish and Wildlife Service, the U.S. Forest Service and many businesses and organizations.

The Missouri River and Lake Sharpe are very important components to the quality of life in this region. The annual Missouri River clean-up event gives people who spend time on the river the opportunity to give something back to this precious resource.

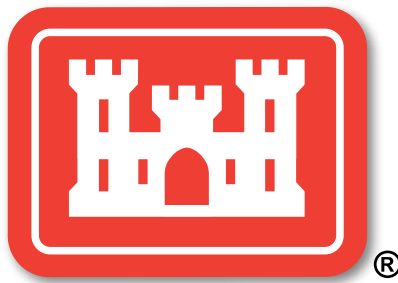
In what has become a tradition following the clean-up, volunteers were treated to a walleye fish fry by the members of Central South Dakota Chapter of Walleyes Unlimited and the Pierre Chapter of the Izaak Walton League in Griffin Park near Down's Marina.

Organizers of the clean-up appreciate all of the contributions and donations from area businesses, agencies and organizations that led to the success of this year's event.

Plans are underway for next year's Missouri River/Lake Sharpe Clean up. Those interested in volunteering, providing a boat, or donating items for the 2014 Missouri River/Lake Sharpe Clean up can contact Paul Lepisto of the Izaak Walton League of America at 605-224-1770, 605-220-1219 or email plepisto@iwla.org; Bret Afdahl with South Dakota Walleyes Unlimited at 605-222-2972 or email bafdahl@hotmail.com.



Above: More than 4,000 pounds, or two tons, of trash and debris was collected during the annual Missouri River/Lake Sharpe Clean up Wednesday, July 10, 2013. The event, the fourth in the last five years, had more than 40 volunteers working along the river in Pierre-Fort Pierre, S.D. Photos by Paul Lepisto, Regional Conservation Coordinator, Izaak Walton League of America.



Twelve things to know about the Army Corps of Engineers

You may know that the Army Corps is a mostly civilian agency, we're divided along watershed lines, and we do a mix of military construction and water resource management, but here are some things you might not know:

- 1** We own and operate many dams, bridges, and levees.
- 2** USACE Districts are funded by projects. All our non-military projects have to be cost-shared. And we can't just decide on our own what civil works projects to pursue nor can we advocate for projects. We simply salute and execute.
- 3** Our projects require both congressional 1) authorization and 2) appropriation. Without authorization, appropriated funds may be restricted or withheld unless there is specific appropriation language expressing congressional intent.
- 4** Studies and projects must re-compete for funding each budget year. And, as you know, budget priorities change every year too.
- 5** Under our International, Interagency and Environmental Services program, we can operate essentially as a government-owned engineering firm, providing specialized contracting support to government and international agencies.
- 6** Under Section 22, WRDA 1974, we can provide planning assistance to states. This could include water supply/demand, groundwater issues, recreation master plans, erosion and sedimentation, water quality, wetlands evaluation, and floodplain studies.
- 7** Under Section 216 of the 1970 Flood Control Act, we can review completed projects if conditions have significantly changed or to improve the quality of the environment in the public interest.
- 8** The Corps regulatory mission is limited to waters of the United States. We don't have jurisdiction on floodplains, just wetlands and waterways themselves.
- 9** Besides providing sandbags and technical assistance, direct Corps disaster assistance is limited to community (not individual) support. But only after all local and state resources have been exhausted and a written letter is received from the Governor.
- 10** For flooding/erosion assistance, we can evaluate sites, but since a sponsor is needed even to start a study to see if federal involvement is warranted, we insist that a local government representative attend.
- 11** We have no authority or ability to assist scouting groups, the Little League, or any other organization in grading a property, fixing a building, or anything similar. You can try the National Guard, though www.ng.mil.
- 12** Congress has provided the Corps with "Standing Authorities" to study and build specific water resource projects for specific purposes and with specified federal spending limits. This is our continuing authorities program or "CAP." Although CAP dollars are limited, it can certainly help with small issues with a federal interest.



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November is Native American Heritage Month. Photo by Harry Weddington.