INTERCOM

U.S. Army Corps of Engineers, Walla Walla District
Vol. 40 No. 1 January - March 2013

Best in USACE 2012

12 District power team members respond to 'Winter Storm Nemo'


U.S. Army Corps of Engineers photo

Twelve U.S. Army Corps of Engineers Walla Walla District employees departed for Pittsburgh, Penn., Feb. 9, in response to the Federal Emergency Management Agency's request to provide support to areas impacted by a northeastern severe weather system, nicknamed "Winter Storm Nemo," according to District emergency management officials here.

Deployed District emergency power team members assisted FEMA - Region I emergency operations across the northeastern United States.

The team worked with Pittsburgh District Readiness Chief T.J. Fichera who thanked each of the power team member's "flexibility, patience and efforts associated with the Northeast Winter Storm Response for FEMA Region I."

"Please return home knowing that I have full confidence in and would enjoy and request your District's PRT support and response to any power mission I was associated to include those in my own District," he added.

The Walla Walla District maintains one of the Corps' eight power teams, ready to deploy as part of the Corps' Emergency Support Function (ESF) #3, public works and engineering-related support.

The all-volunteer teams can provide backup electrical power generation anywhere an emergency makes the service needed.

Team members agree to be in an on-call status, ready to deploy on short-notice when disaster strikes. Power team members directly support FEMA emergency management staging areas and operations centers.


U.S. Army Corps of Engineers photo

District Power Team (top photo, from left): George Peck, quality assurance inspector; Rick Beauchesne, mission liaison; Katie Goodwin, mission specialist; Jean DesJarlais, mission specialist; Richard Hilt, action officer; James Lyerly, quality assurance inspector; James Wade, logistics specialist; Julie Morris, contract specialist; Deanne Lingo, mission specialist; Gary Humphreys, quality assurance inspector; Danielle Stephens, mission manager; Carl Knaak, action officer. (Above) District Power Team huddles during "Winter Storm Nemo" in January 2013.

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Commander
Lt. Col. Drew Kelly

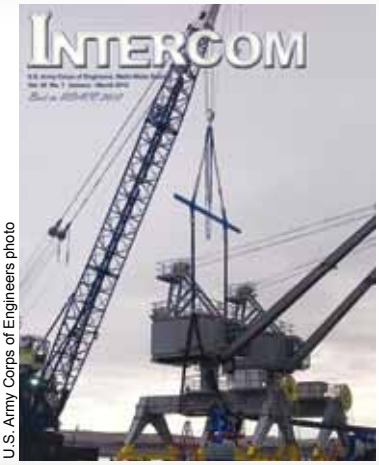
PA Chief Joe Saxon
PA Specialist Bruce Henrickson

Editor Terri A. Rorke
PA Specialist Stephen Doherty

PA Specialist Gina Baltrusch
Student Aide Sandra Hickethier

For more information, contact:
Public Affairs Office
U.S. Army Corps of Engineers
201 N. 3rd Avenue
Walla Walla, WA 99362
Phone: 509-527-7020
E-mail: cenww-pa@usace.army.mil
website: www.nww.usace.army.mil

On the cover



U.S. Army Corps of Engineers photo

Two newly designed and fabricated cranes were installed at McNary Lock and dam in Umatilla, Ore., in January.

photo by Terri A. Rorke

District holds public meeting on sediment management environmental impact study

District Hydraulic Engineer Gene Spangrude answers questions at a Jan. 24 open house and public information meeting regarding a draft the Environmental Impact Statement (EIS) for the Lower Snake River Programmatic Sediment Management Plan (PSMP) held at Lewis-Clark State College in Lewiston, Idaho. The public comment period deadline was extended to Mar. 26, 2013.

story by Bruce Henrickson

The Walla Walla District of the U.S. Army Corps of Engineers hosted an open house and public information meeting in Lewiston, Idaho in January to facilitate public comments on a draft Lower Snake River Programmatic Sediment Management Plan (PSMP) environmental impact statement (EIS) to March 26, 2013 from the original Feb. 8 comment deadline.

"We extended the public comment period to allow for more complete public input," said District Commander Lt. Col. Drew Kelly.

"The draft Environmental Impact Statement is fairly lengthy and complex because we took a very broad look at sediment management options. This is about potential long-term options beyond just dredging."

A Corps' mission is to maintain the lower Snake River navigation channel to Congressionally established dimensions of 14 feet deep and 250 feet wide.

The EIS took several years to prepare, and the Corps took a broad and detailed look at sediment management alternatives while conducting extensive analyses of problem sediment sources, transport and deposits.

The EIS evaluated numerous measures in developing alternatives for managing sediment, including future studies of in-water structures, modifying flows or pool levels, and more. The EIS also evaluates a proposed "immediate need action" of dredging during a winter "in-water work window" from Dec. 15 to March 1.

Maintenance dredging in the navigation channel has not been performed since the winter of 2005-2006.

In the draft EIS, the Corps is proposing to implement a long-term plan to manage, and prevent if possible, river sediment accumulation or "depositions" that are interfering with "authorized project purposes" of the Corps' Lower Snake River Projects (LSRP) dams and reservoirs in southeastern Washington and north central Idaho. Those projects are Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Locks and Dams.

Authorized project purposes potentially affected by sediment include commercial navigation, recreation, and fish and wildlife conservation and mitigation.

Comments on the PSMP EIS were due to the Corps by March 26.

Another opportunity for public comments was granted March 11.

The Corps invited comments on Clean Water Act (CWA) "Section 404" requirements for proposed dredging and disposal of dredged materials. Comments are due April 11.

At the same time, the Washington Dept. of Ecology is accepting CWA "Section 404" comments regarding proposed dredging no later than April 11.

From Where I Sit

special

photo by Joe Saxon

Reflecting upon the Escape from the U.S. Embassy in Iran and the Iranian Revolution

story by Joe Saxon

It's been 33 years since I stood next to Col. Archer Durham and watched as a plane carrying six diplomats from the U.S. Embassy in Iran touch down upon American soil. We were two solitary figures, he the wing commander and I the deputy public affairs officer, standing on the runway at Dover AFB in February., 1980, unaware of the trauma these courageous people had endured en route to freedom.

After recently viewing the movie "Argo" about their ordeal following the U.S. Embassy takeover in 1979, those early memories came flooding back. In addition, it reminded me of how two childhood friends could touch upon separate sides of an incident like the Iranian Revolution.

Their journey began with the overthrow of the Shah of Iran by Ayatollah Khomeini, who then proceeded to establish an Islamist state in Iran.

On Nov. 4, 1979 Iranian students stormed the U.S. Embassy in Tehran and took 66 American hostages. The hostages were subject to beatings, sleep deprivation and long periods of painful bindings.

As soon as the crisis broke, Antonio Mendez, "the chief of the CIA's worldwide disguise operations in the Office of Technical Services… began working night and day preparing disguises, false documents and cover stories that would be needed to get an advance team into Iran should a rescue be attempted," he said.

Unbeknown to the rest of the world, six American diplomats had escaped and were hiding out at the residences of the Canadian ambassador, Ken Taylor, and his senior immigration officer, John Sheardown.

Mendez concocted a cover story to get the diplomats out of Iran. They were to be members of a Canadian film production company scouting locations in Iran. They bought a script, renamed the film Argo and placed ads in trade publications.

After receiving approval to proceed with their mission from President Jimmy Carter, Mendez and a companion who was a "superb document officer and gifted linguist" departed Frankfurt, Germany for Tehran. They met the diplomats, provided them their cover stories and documents and returned the next night to rehearse their scripts. The group departed for the airport the following morning. After a delay for mechanical problems, they boarded a Swissair plane and departed Iran.

My office was alerted that the six diplomats were coming to Dover AFB when we received a news query from an Associated Press (AP) reporter. After informing Col. Durham of the AP call, he issued a few choice words, said "That information is classified," told me the plane was en-route and said "Let's welcome them home."

We drove to a remote part of the base. As the plane motored to a stop and the cabin door opened, two carloads of U.S. State Department staff arrived to supplement our two man greeting party.

The diplomats seemed to be generally grateful to be back in America and they spent the next three days secluded on base, soaking in freedom and reuniting with their families before departing for their homes. With the help of some brave people, they had escaped from Iran and Ayatollah Khomeini's grip.

In reflecting upon this incident I see continuous threads weaving throughout this episode – especially the intent to not leave fallen comrades. That rescue effort permeated throughout not just our Nation, but included our neighbor to the north as well, and reflected much of what is contained in today's Army Values. Duty, honor, selfless service, personal courage, all were represented in the men and women who tirelessly worked to bring these six home, exemplified by Antonio Mendez who flew into the lions' den and did the heavy lifting.

When I saw those diplomats depart their plane, I had no idea what they endured, but I sure appreciate their journey today, and understand that what they do is hard, extremely dangerous work. Unfortunately, we are not able to always save everyone, and some of their embassy team remained captive for 444 days. But eventually, they too were freed, thanks to a Nation that did not forget its captured comrades.

As Ayatollah Khomeini consolidated his grip on power his government sent out assassination squads to silence their Iranian critics around the globe. One such critic was Ali Akbar Tabatabai, the Iranian Embassy's Press Attache in Washington D.C.

On July 22, 1980, four months after the diplomats' escape from Tehran, David Belfield, a security guard at the Algerian Embassy, visited Tabatabai's residence, dressed as postman. Belfield, also known as Dawud Salahuddin, was a member of the Islamic Guerillas of America. When Tabatabai answered his door, Belfield shot him three times. Forty-five minutes after the shooting, Tabatabai died.

Accompanying Belfield that day was an accomplice named Al, who was one of my childhood friends. Al and I grew up less than 100 yards apart in S.E. Washington D.C. We played ball together, were in the Boy Scouts and were classmates in junior high and high school.

Following Tabatabai's assassination, Al drove Belfield to Montreal, where Belfield boarded a flight to Geneva and then into Tehran, where he lives today. Upon his return to America, Al was arrested, convicted of previous charges, including bank robbery, weapons charges and armed burglary and sentenced from six to 18 years in prison.

I was stunned when I heard what had occurred – astounded to learn that one of my friends and I had touched the Iranian Revolution from two different sides.

At one time Al was a starting offensive lineman on what turned out to be the city championship football team. But Al did not play that year, his senior year. Earlier that summer he broke his leg when a horse he was riding drove him into a tree. So while his teammates received scholarships to various schools, his football days were over.

Al attended the University of Maryland but he ended up going down a dark path, and what began with a summer horseback ride ended a few years later with Al cooperating with authorities and going into the Witness Protection Program.

I often wonder how Al's life may have turned out had he not taken that horse ride that fateful summer. I sometimes wonder why people like Antonio Mendez, Ken Taylor, and John Sheardown voluntarily walk into the valley of the shadow of death for the sake of others.

What they have in common are choices, those big and small, that we make everyday. Choices have consequences, positive and negative, and ripples that we may never know how they end. Chance impacts all, but to a large extent, choice determines destiny.

Joe Saxon is the Public Affairs chief for the Walla Walla District


U.S. Air Force photo


U.S. Air Force photo


U.S. Air Force photo

(Photo, opposite page) Joseph Stafford, left, one of six American diplomats ushered out of Iran, is greeted by State Department representatives upon arrival at Dover Air Force Base in Dover, Del. Two other arriving diplomats included Mark Lijek, back left, and Harry Schatz, second from left. (Top) Diplomats board an aircraft heading for home. (Middle) Former Delaware Governor Pierre DuPont, center right, poses with the diplomats. From left to right: Joseph Stafford, Kathleen Stafford, Mark Lijek, Harry Schatz, Governor DuPont, Robert Anders, Cora Lijek. (Bottom) Dover Air Force Base Wing Commander Archer Durham bids farewell to the diplomats and their families.

Corps celebrates E-Week with Walla Walla-area students

story and photos by Stephen Doherty

The Walla Walla District, U.S. Army Corps of Engineers, helped seven Walla Walla-area schools celebrate National Engineers Week Feb. 17-23 by sponsoring engineering design contests. This year the contest was the "tallest tower construction."

"This year's contest was an object lesson in what we do every day at the Corps of Engineers," E-Week coordinator Jeffrey Lyon said.

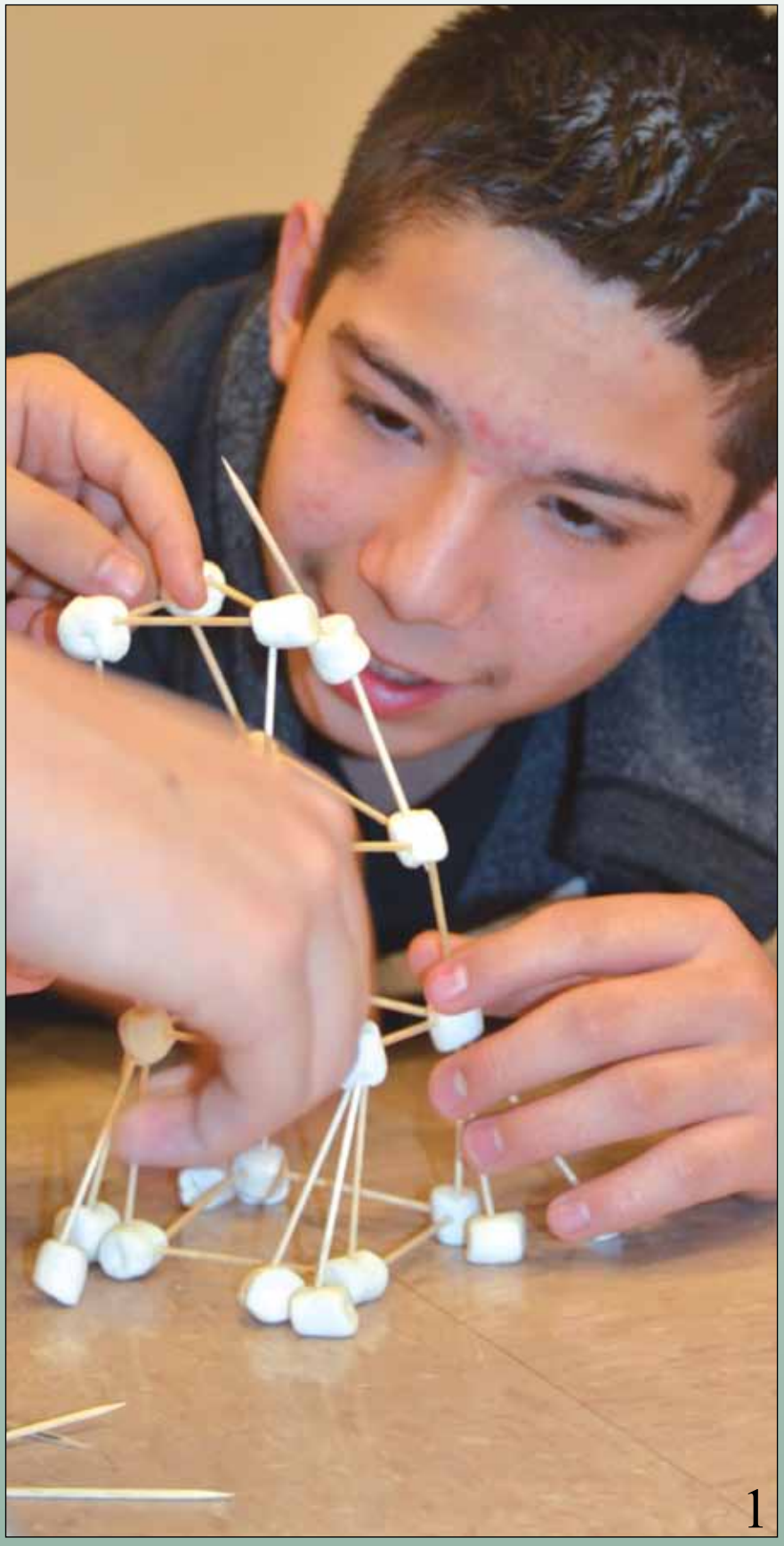
"We have time to plan and design projects, then with limited time and materials we must construct the facilities to meet the needs of our customers and society. All this work is done in teams, and one person cannot succeed by themselves. We enjoyed seeing the students experience the team dynamics of the engineering world."

Students were given 200 toothpicks and 100 mini-marshmallows, then had just 20 minutes to construct their tower.

Each tower needed to be freestanding for two minutes before its height could be measured.

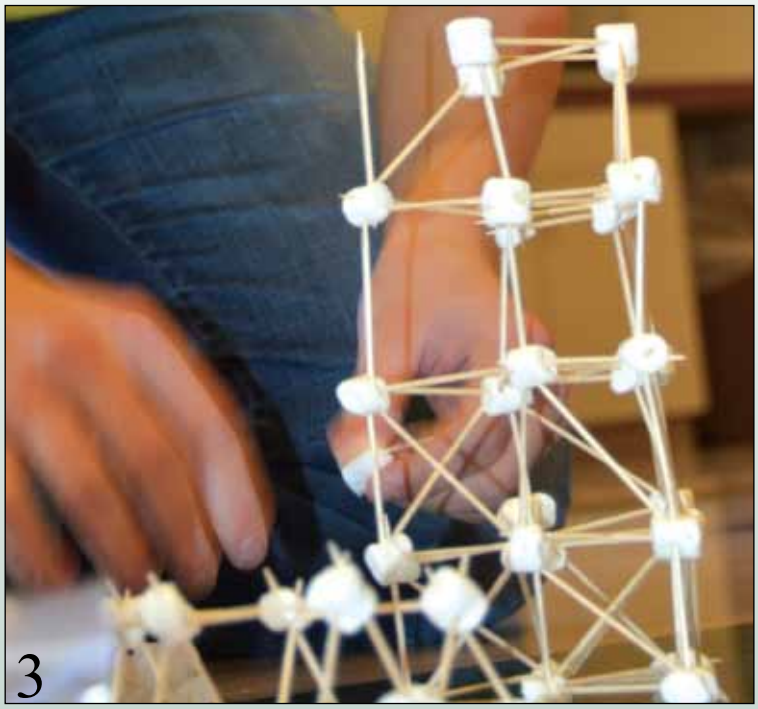
National Engineers Week was founded in 1951 by the National Society of Professional Engineers. It's always celebrated at the time of George Washington's birthday. Our nation's first president was a military engineer and a land surveyor.

Every year, the nation's engineers take a week to highlight the practice and accomplishments of engineers to show what can be done with a little science and imagination.



1. Ariel makes finishing touches to his marshmallow tower Feb. 20 in a tower construction contest at Rogers Adventist School in College Place, Wash., to celebrate E-Week. 2. District Electrical Engineer Carolina Andes calculates scores for a student's tower. 3. This year's contest challenged students to build a tower of marshmallows and toothpicks within 20 minutes. 4. Rogers students work together to beat the clock. 5. Three students work together on their tower. 6. Logan, Bryar and Ethan decide how they will make their next move.


2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District, Tribes continue lamprey progress

story by Greg Moody

Lamprey passage through Corps dams is progressing well.

Federal agencies have been working with Native American Tribes and other agencies since the 2008 Columbia Basin Fish Accords to study and promote actions that benefit Pacific lamprey, a resource of great significance and importance to Tribes in the Pacific Northwest.

Historical, long-term agreements like those with the Fish Accord partners are key to successful planning and implementation of actions under the Biological Opinion (BiOp). These partnerships help accomplish "on-the-ground" implementation of actions that are beneficial to Endangered Species Act-listed fish and lamprey.

Lamprey migrate differently than fish. The Walla Walla District has taken action to improve juvenile and adult lamprey passage both upstream and downstream. The District works in collaboration with regional Tribes on improvements. Tribes provide collaborative input to designs for improvement and monitoring of lamprey passage.

Juvenile fish facilities, which collect juvenile fish for barging downstream, have implemented lamprey-friendly raceway tailscreens that allow juvenile lamprey inadvertently diverted to the fishways to return to the river, rather than be transported. Lower Monumental Dam now is now testing an "oblong perforated plate" tailrace screen that can be cleaned with brushes without entangling lamprey.

Adult lamprey headed upstream that inadvertently fall back into the juvenile fish facilities at Lower Monumental, Little Goose and Lower Granite dams are collected and released above the dams, rather than being sent back below the dam in the fish bypass outfall.

Lamprey-friendly operations and maintenance at McNary Lock and Dam include raking turbine unit trash racks prior to Jan. 15. This minimizes potential lamprey entanglement in debris built up in the forebay when the river flow discharge increases.


photo by Bruce Henrickson

Also, McNary water velocities are reduced to assist adult lamprey migrating upstream into the fish ladder entrances. This is done only at night (9 p.m. to 4 a.m.) during the peak of the adult lamprey passage season June 15 – Sept. 30.

Other McNary efforts include placing fish screens at McNary into operation two weeks later than other District projects. This allows juvenile lamprey passage directly through turbines without being diverted to bypass system collection. Normally, screens are installed by April 1. McNary delays the installation to no later than April 16.

Because adult lamprey don't move through fish ladders as easily as salmon, new lamprey passage ports were installed at floor level in concrete weirs at McNary's Oregon-side fish ladder. This helps lamprey travel through a level pathway while swimming against the high velocity current. Horizontal steel plating was also installed near the walls of the fish ladder on the diffuser gratings to create solid attachment points for lamprey, which use solid surfaces as resting points.

Ice Harbor Dam adult lamprey passage was also improved by installing lamprey passage ports in new horizontal slots in fish ladders at floor level. Steel plate ramps were also installed on both the south and north shore ladders. These ramps lead to lamprey passage ports, helping adult lamprey attach to a smooth level pathway while swimming against high velocity flows.

Adult lamprey passage improvements were made to both upper fish ladders at Lower Monumental Dam. Lamprey passage ports at floor level allow adult lamprey to attach to a smooth, level pathway through the weirs. In addition, steel inclines were installed to ease adult lamprey passage through vertical slots on the upper reaches of the ladder.

The same method of fish ladder weir modifications, including lamprey passage ports, steel plates, and ramps for improved adult lamprey passage, are being constructed at Lower Granite and Little Goose dams. At Little Goose, all diffusers in the ladder received new metal plates attached to the aluminum grating to help lamprey attach and rest. Lower Granite is also replacing diffuser gratings and adding attachment points for a more lamprey-friendly adult fish ladder.


photo by Bruce Henrickson

Corps' passage modifications made in collaboration with the Tribes during the past several years are expected to help sustain Pacific lamprey migration for years to come. Continued monitoring of current and past improvements while identifying new potential problems and locations will lead to new lamprey passage refinements and improve passage at Corps hydropower dams.

(Top photo) Walla Walla District Commander Lt. Col. Drew Kelly visits with N. Kathryn Brigham, who serves as the Board of Trustees secretary for the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). CTUIR members met with Walla Walla District members in January at the Ice Harbor Lock and Dam to view lamprey improvements at the facility's north shore fish ladder. Representatives from the Warm Springs, Nez Perce and Yakama were also present. (Above) Lamprey passage ports were installed at McNary Lock and Dam to improve adult lamprey passage in Umatilla, Ore. (Left) Fish ladder at Little Goose Lock and Dam near Starbuck, Wash.

District, LDP marching toward a more sustainable future

story by Joe Saxon

Members of Walla Walla's Leadership Development Program (LDP) are helping the District march toward a more sustainable future.

Curtis Been, Dean Holecek, Scott Hall and John Lomeland are devising plans to address the District's water, vehicle and electricity use.

"We focused on areas where data is available," said Dean Holecek. "While these green initiatives all have a feel good component, it was very clear to us early on that we need to be able to quantify where we are and where we need to go. We've come up with the focus on water, power, fuel and a general sustainability focus to tie up the loose ends."

Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance, states that sustainability "means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations."

The EO emphasizes that sustainability should not only be a natural part of all the Corps' decision processes, but should also be part of our organizational culture.

Been, a civil engineer in Geotechnical Design, is helping determine if the District is over-applying water faster than the soil can absorb it. He worked for the Natural Resource Conservation Service in the past and "half my job was doing irrigation water management plans for farmers and irrigators," he said.

"The District Headquarters uses 70,000 gallons per month through the year and up to a million gallons per month in summer," he said, "but it appears that the irrigation use is high, so modifying our procedures may save two million gallons per year."

Regarding fuel, "the District fleet used over 100,000 gallons of petroleum this last fiscal year," Holecek said. "That equates to about $425,000 at $4 per gallon. Reducing that use is going to require a District wide effort."

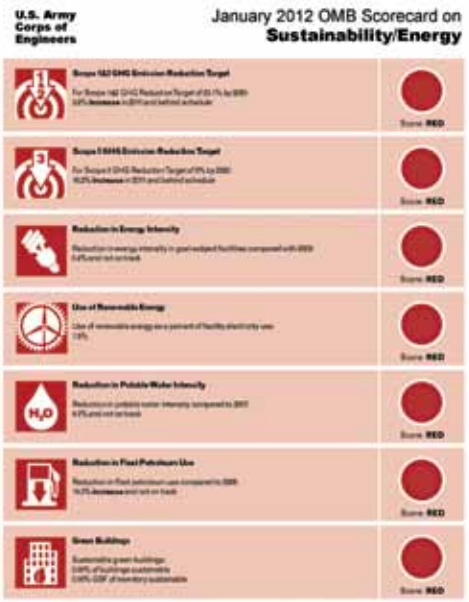
"We want everyone to think about the most efficient vehicle they can use and the most efficient ways to meet their missions in respect to travel," he said.

"For instance, making sure we're not sending four or five partially filled vehicles to the same meeting is a good place to start. Also, do we have the most efficient fleet composition to meet our needs? We'll be working with the Vehicle Fleet dispatch system to help us meet our goals. But we'll need help from a lot of people and organizations to achieve our goals," he added.

Jon Lomeland said the Headquarters Building used nearly two million kilowatt hours of electricity in fiscal year 2012, costing $147,385. He encourages building residents to try and do their part with the little things such as "turn off their individual space heaters, lights when there not needed, and for coffee-users with their own coffee pots, consider using collective coffee pots instead of having an individual one. As public stewards we should pick up the baton and move this forward."

"We're just a small group in LDP, but there are many interested people around the District who are making a difference," said Scott Hall. "It takes everyone's effort to buy in. This is critical because it requires a process change for our employees to take hold. We want this to carry forward so everyone can see the benefits."

Anyone wishing to join the District's Sustainability efforts should contact Been, Holecek, Hall or Lomeland.



Of the 21 federal agencies with accessible scorecards on the OMB website, USACE was the only agency to be red in every category in 2012.

USACE Goals

(1) Reduce energy intensity in USACE buildings

(2) Increase the Corps' use of renewable energy and implement renewable energy generation projects on agency property

(3) Reduce the Corps' use of fossil fuels by:

a. using low greenhouse gas emitting vehicles, including alternative fuel vehicles

b. optimizing the number of vehicles in the agency fleet

c. reducing the USACE fleet's total consumption of petroleum products by a minimum of 2 percent annually through the end of fiscal year 2020, relative to a baseline of fiscal year 2005.

Public Affairs garners 10 awards in USACE Kassner Journalism Awards competition

Walla Walla District Public Affairs staff won 10 awards in the 2012 U.S. Army Corps of Engineers Herbert A. Kassner Public Affairs competition.

The 2012 competition had 319 entries from 44 USACE Divisions and Districts competing in 31 categories ranging from broadcast, radio and print to photography. A panel of 16 judges from outside of USACE reviewed each entry and selected the winners.

Each first place winner will be forwarded to the U.S. Army Office of the Chief of Public Affairs to compete in the Army's Major General Keith L. Ware Public Affairs Competition. The USACE first place winners will also receive the Golden Quill award and a letter signed by the Chief of Engineers.

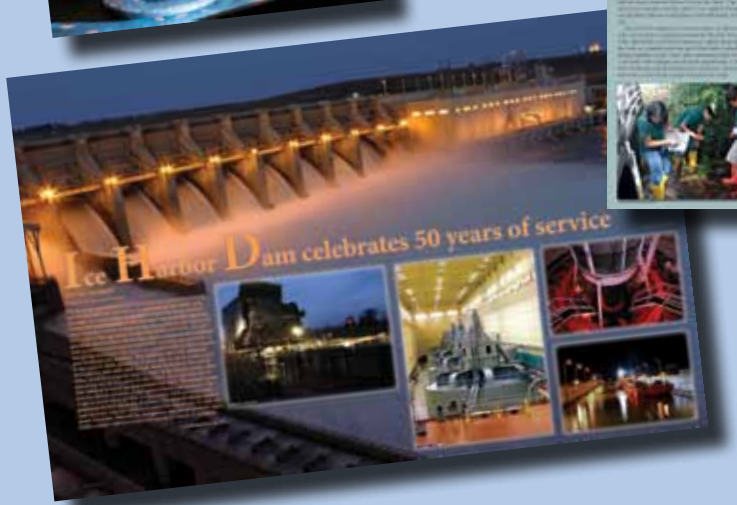
Herbert Kassner was a Public Affairs Officer of the former Lower Mississippi River Division for many years. He was highly respected in the USACE public affairs field, and the USACE competition was named for him in the late 1980s after he lost a long battle with cancer.

The District has won 67 Kassner awards during the past 10 years.

1st INTERCOM - Magazine
1st - Picture Page - Terri Rorke
1st - Television Information Program - Stephen Doherty, Bruce Henrickson
1st - Contribution by a Stringer (Photojournalism) - Rick Beauchesne

2nd - Story Series - Joe Saxon
2nd - Contribution by a Stringer (Photojournalism) - Keith Hyde
2nd - Contribution by a Stringer (Writer) - Andrew Dankel-Ibáñez

3rd - Civilian Journalist of the Year - Terri Rorke
3rd - Picture Page - Stephen Doherty
3rd - Community Relations Special Event - Ice Harbor Lock and Dam 50th Anniversary
project delivery team: Roger M. Golladay, Operating Project Manager, Ice Harbor
Lanell L. Adams, Natural Resources Manager, Ice Harbor
Bruce E. Henrickson, Public Affairs Specialist, Walla Walla District
Anthony P. Ames, Natural Resource Specialist, Ice Harbor
Kye S. Carpenter, Natural Resource Specialist, Ice Harbor



District wins 2012 Chief of Engineers Award for Excellence

The Walla Walla and Portland Districts won the 2012 Chief of Engineers Award of Excellence for replacing the downstream navigation lock gates at Lower Monumental, John Day and The Dalles dams.

Specifically, they won the Design Merit Award for Engineering. The award noted:

"Over the past 20 years, those downstream navigation lock gates became high-risks structures requiring higher than usual maintenance. Ultimately, replacement was the only viable solution. An unprecedented four-month long system-wide navigation outage to support these major repairs was required.

The gates at Lower Monumental and John Day Dam, both vertical lift gates, are among the largest in the world and incorporate the latest advances in fracture and fatigue engineering. And these massive, precision structures – 88 to 98 feet wide and 84 to 120 feet tall, and weighing between 1.5 to 1.8 million pounds – seal like valves to safely lock commercial and pleasure craft through the system.

The large-scale and highly successful projects reflect extraordinary vision, coordination and innovation."

photo by Gina Baltrusch

photo by Terri A. Rorke

U.S. Army Corps of Engineers photo

Photos of downstream navigation gate construction at Lower Monumental Lock and Dam near Kahlotus, Wash., in 2011. (Middle) Project Manager Steve Hartman displays the mechanics and wire ropes used to lift the 1.5 million pound gate.

photo by Terri A. Rorke

Women's History Month highlight

Dani Stephe

Built-strong

story by Terri A. Rorke

It's no accident that Dani Stephens picked a career centered on structures. She naturally builds opportunity and success.

In February, Stephens was promoted as District Structural Design Section chief.

But her road to promotion was established years ago with choices she made in her college days.

The structural engineer first set her future's "concrete" foundation when she chose civil engineering as her college major, encouraged by her father's suggestion.

"I said, 'I want to be a teacher'," Stephens recalled.

"And he said maybe I should try engineering my first year and have teaching as a fallback."

Stephens quickly realized that engineering was a great fit because she was good at math and science.

After graduating from Oregon State University in 2003, she started her career with the U.S. Army Corps of Engineers Walla Walla District in an engineering internship position. From that, she continued to build her career—opportunity by opportunity.

Stephens said the Corps' unique volunteer culture provided multiple career-building opportunities, which first began with a deployment to Iraq.

She took on the challenge knowing it wasn't going to be easy.

"The reality is that there is a lot of work to do in a deployed environment, but there are a limited number of people to do the work," she said.

"But once people get to know you and what you are capable of, they assign you to new challenges. Deployments have been invaluable to me."

Stephens went on to serve in a variety of engineering and leadership roles in emergency support missions (Hurricane Katrina, 2006; Superstorm Sandy, 2012; Northeast Winter Storm, 2012) and contingency operations missions (Afghanistan, 2009-2010; Afghanistan, 2010-2011).

These volunteer experiences afforded Stephens the chance to build her engineering expertise by learning about other Districts' challenges and opportunities while serving in various

photos courtesy of Danielle Stephens

ns engineer

deployed positions: civil engineer; structural engineer; structural design chief; project manager; project engineer; and resident engineer.

"Having the chance to work in all these different places and see how others approach similar challenges allows me to learn and apply lessons for our District," she said.

Those past opportunities continue to pay dividends for Stephens and others.

"I attribute a lot of the opportunities and successes that I've had to the mentors and leaders who have helped me develop in my career field."

Mentoring others is another opportunity Stephens is currently pursuing.

She said that during the decade she's been with the Corps, one of her long-known interests—teaching—is the highlight of her career.

"It's really rewarding to watch others learn and grow in the profession both here in the District and in deployments," she said.

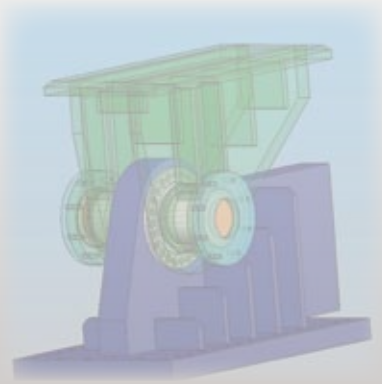
Stephens said she hopes to inspire up-and-coming engineers to take advantage of many opportunities the Corps offers around the world. They just have to start building.

(Top photo, left) Stephens works as a mission manager during Superstorm Sandy in November 2012. (Left, center) Stephens speaks at a Joint Business Conference February 2010 in Kabul. (Left) Stephens celebrates the groundbreaking of an Afghanistan National Army 3rd Special Forces camp in 2011. (Right) Stephens looks over Baghdad during her deployment there in 2004.

Mechanical Design

1st in a three-part series

story by Joe Saxon



When you think of the Mechanical Design Section, think movement.

"We deal with motion," said Kyle DeSomber, chief of Mechanical Design Section. "We want water to pass through dams and airflow through buildings. We want gates to move up and down, spillways to open and close and we want fish to pass through dams as well."

He and his experienced 12-person team make that possible for the Walla Walla District by designing effective systems.

"We have one of the most experienced sections in the District. A third of the section is approaching 25 years of experience, with another third having over 10 years experience. They are all very cohesive and self-motivated," he said.

According to DeSomber, their biggest day-to-day challenge is balancing schedules, ensuring the right person with the right expertise is on a project at the right time.

"Each person is probably working four projects at any one time," he said. "It's always changing and never the same problem twice in a row. There is always a challenge needing resolution."

Some of their bigger projects deal with replacing navigational gates like the Lower Monumental Lock gate. Today, they work with wire ropes so the gates can move and place guides on gates to move them in a controlled manner. They also are doing a "redesign at Lower Monumental Dam for brakes and gearboxes, which includes replacing mechanical components and hydraulics with electrical components," he said.

"And we're helping the Corps' Hydroelectric Design Center with digital governor upgrades, which balance water flow through the unit with power requirements at Ice Harbor. It's under design at 90 percent," he said.

"Our section also is helping replace the controls in HVAC and heat pumps at McNary Dam because in order to keep the generators at full efficiency you need to keep the components at certain temperatures, and the same applies to the human element."

U.S. Army Corps of Engineers photos

Mechanical Design Section

Phil Auth, PE	**David Kloewer, PE**
Carl Brenneise, PE	**Chuck Palmer, PE**
Wes Brown	**Ryan Pestes, PE**
Kyle DeSomber, PE	**Kevin Renshaw, PE**
Jared Frank	**Ernie Rogers**
Jim Haugen	**David Salgado**

Water and Fish

The movement and control of water throughout District facilities includes all pumps, pipelines, gate operating systems and cranes.

"By controlling the movement of water our District is able to generate power, pass freight, and reduce instances of flooding," he said.

Unique to this region is their section specializing in the movement of fish.

"We assist in maintaining the infrastructure necessary to create attraction flows allowing fish to locate fish ladders. More recent designs have provided fish a means to circumnavigate the power houses when migrating downstream in the forms of specialized Spillway Weirs. In addition, juvenile fish facilities provide a great example of moving water and fish. To ensure the safest journey possible, our designs consist of creating the pathways necessary to collect, sort, hold and load fish into the barging system which will take juvenile fish to the Pacific Ocean," DeSomber said.

Chuck Palmer, a 23-year veteran of the Mechanical Design Section said, "Technically the biggest challenges are the one-of-a-kind designs we need to dream up in support of the fish program. Biologists and Hydraulic Engineers are always coming up with new concepts to control flow and route fish, so it's our job to put those on paper and get them bid and built."

The Mechanical Design team is designing the alternate spillway weir (ASW) – the next step in the spillway weir evolution.

"We are trying to spill water off the top of the reservoir where fish reside while minimizing the amount of water flowing downstream. Some spillway weirs are roughly adjustable, and take a lot of manpower to adjust them," he said.

"The ASW concept is to make it infinitely more adjustable and self-adjusting so that it is tied to the water surface and can also stop the flow without a crane or manpower. We are trying to figure out how to balance mechanical adjustments within space constraints. We are at the beginning design phase right now, and it is moving forward."

Using a similar concept, he said, the orifice weir project at Lower Granite allows fish into the fishway channel, enabling them to move through with less contact with their surroundings.

"Our Mechanical Design Section does a lot," said Design Branch Chief Bob Hollenbeck. "It's a combination of electrical and power. You need electrical controls to allow gates to move. You can't get to the gates without un-watering the navigational lock, and you need pumps for that. It takes a considerable amount of creativity and knowledge of engineering science in conjunction with the laws of nature."

"We get good support from the District," DeSomber said.

"I would like to think that people have confidence in us and know that they can reach out to us, that we have the experience to make good decisions. Everybody is there for the right reasons and is willing to help other groups that we interact with daily."

"They solve problems before I hear about it. They are willing to share lessons learned and take great pride in all they do. They are good at everything from air, to water flows to movement of heavy loads and cranes. The whole is greater than the sum of its parts. It's an easy group to take care of. I just have to stay out of the way and let them work," he added.

Left page, main photo: Navigation lock safety inspection at Little Goose Lock and Dam near Starbuck, Wash., in 2012. Right page, top photo: An impeller sits ready for maintenance and paint work in 2007. Right page, below photo: This spaghetti pipe is located at the Dworshak National Fish Hatchery near Ahsahka, Idaho. These tube and shell heat exchangers provide heated water for building heat and egg incubation water. Above: Construction crews set up an expansion joint for the juvenile bypass system at McNary Lock and Dam.

Bob Hollenbeck

Dean of Design

story by Joe Saxon

Some affectionately call Bob Hollenbeck, the Dean of Design.

He's worked for the Walla Walla District since 1979, including 21 years as the chief of Structures, and even though he's witnessed numerous changes through the years, he has "enjoyed every minute of it."

As chief of the Design Branch, which includes the Structures, Mechanical, General, Electrical and Geotechnical design sections, he and his team are responsible for preparing all technical plans and specifications, reports, and analyses for special studies for the District.

"We're challenged in many ways," he said. "Infrastructure is aging. We maintain systems for which they don't make parts anymore. What happens to the environment with NEPA? How we do things in the river has changed even over the past 10 years, and we're challenged with what time of year we can work in the river."

He credits his team's skills and flexibility in keeping the District abreast of the bow wave of change.

"We have a lot of talent in our branch that includes varied skillsets and different personalities. Each offers something special to the organization, and together they make up one great organization," he said.

One of the keys to being successful, he added, is being patient.

U.S. Army Corps of Engineers photos

"I've learned you need to be patient and know when to turn it on. I don't always get it right. It's not instant gratification. It takes a certain amount of passion and endurance to understand you are not going to win the race in the first 100 meters, but that gratification does come eventually," he said.

As for motivation he says, "I like getting the job done in a professional way. At the end of the day, that's the instant gratification, knowing that we are moving forward and that we're adding to the professional integrity of the District as a whole."

For new staff, he said "I would encourage new people to look at the organization and at what you're doing. Be patient, and learn as much

as you can and, eventually your knowledge will be incorporated in the organization. Technical projects will follow, and good things will happen. Also, find someone you can confide in for career and technical advice – that's as important as the degree you have in your hand."

McNary Lock and Dam crane fabrication work photos. The new 10-ton cranes were designed and fabricated by COH Inc. through an awarded $4.3 million contract. The cranes were installed in January.

Crane ahoy

McNary Lock and Dam employees welcomed two new 10-ton cranes in January that will help improve maintenance operations and fishway needs on both of the dam's Oregon and Washington shores near Umatilla, Ore.

The new cranes were designed and fabricated by COH Inc. at its Montreal location through an awarded $4.3 million-contract.

The new cranes are needed on a daily basis to remove trash and debris in the counting station and exit areas of the fishway as well as for required preventive maintenance on fish passage equipment.

Unlike the original 1950s-era cranes, the new cranes handle heavier loads, extend farther, reach the lowest elevation in a single action, and comply with current Endangered Species Act requirements.

"The McNary Fishway Exit Crane [Project Delivery Team] did a phenomenal job of shaving five months off a 16-month design and procurement process in order to utilize available funds," District Project Manager Kathy Spillane said.

"This significant investment is expected to have a performance life as long as the original cranes and may reduce fish ladder maintenance and operating costs by as much as 25 percent by reducing the manpower and time required to perform several standard tasks," she added.

The contract also included $282,000 of electrical upgrades to the Washington and Oregon fish ladders.

story and photos by Terri A. Rorke

Fishway Crane Uses

- *Dewater fishways for maintenance purposes*
- *Install bulkheads for dewatering the fishway, diffuser and valve chambers*
- *Clean picketed leads, trash screens and trash racks of trash and floating debris*
- *Provide hoisting to remove all picketed leads, trash screens, trash racks, weirs, tainter valves, water pumps*
- *Hoist personnel into valve and equipment chambers for repairs, replacements and periodic inspections and preventive maintenance*
- *Inspect and maintain an irrigation canal*

(Left) One of the newly installed cranes stands ready for use in January at McNary Lock and Dam near Umatilla, Ore. (Main photo) A towboat transfers the replaced crane. (Above) A towboat worker prepares to dock the boat in place.

Scan your smartphone to see video of the crane removal.

safety corner

Labeling hazardous chemicals

story by Barry Wright, Safety and Occupational Health Chief

If you are a U.S. Army civilian who handle hazardous chemicals as part of your job, you will soon begin training about changes to labeling and classifying chemicals in the workplace.

As maintenance operations require the use of various hazardous chemicals in our workplaces, this is one of the serious hazards we face at our operating projects. Occupational Safety and Health Administration's Hazard Communication Standards are being revised to harmonize with global standards and improve the quality and consistency of hazard information, making it safer for workers to do their jobs.

The Globally Harmonized System (GHS), a United Nations initiative recently adopted by the OSHA, will standardize the way chemical-based hazards are communicated to workers, primarily through labeling and safety data sheets.

Integration of the GHS at Army locations will be completed through several phases, with training as the first step. Leaders and managers will have until Dec. 1, 2013, to ensure their soldiers and employees are trained on new label elements and safety data sheet format. Implementation of alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards must be completed by June 1, 2016.

"The GHS enhances hazard communication and will ultimately make the workplace safer," said Rachel Baccigalopi, a Civilian Injury Prevention Directorate employee for the U.S. Army Combat Readiness/Safety Center (USACR).

"Standardization will allow our soldiers and civilians to more accurately identify risks and take necessary precautions, especially when working with hazardous chemicals overseas or with chemicals that come from international manufacturers," Baccigalopi said.

The USACR/Safety Center has developed several GHS awareness tools, including a training support package, to assist with the transition. The package contains training and reference materials for use in GHS training sessions. It and other GHS resources are available at https://safety.army.mil/ghs.

Whether you are working with heavy equipment, handling hazardous materials or even sitting or standing for long periods, keep safety in mind.

photo by Terri A. Rorke

Workers approach NFFE 181 with hands on the 'nails'

photo by Terri A. Rorke

story by Terri A. Rorke

What comes to Jim Bramell's mind when he thinks about the National Federation of Federal Employees?

Nails.

But why nails?

As vice president of Local 181 of the NFFE, Bramell is referring to the proverbial phrase, "for want of a nail," about how small actions can create large undesirable consequences. And to account for all the organization's needed nails, District NFFE 181 representatives signed a labor-management agreement in December prompted by presidential executive order 13522. The new agreement marks the union's commitment to foster organizational communication, mission effectiveness, partnership, problem-solving, and trust for District NFFE employees.

Bramell said the NFFE's goals are to help the commander and his team to be informed; positive-minded; and aware (safe).

The labor-management forums facilitate employees "saying what needs to be said and listening to what needs to be heard on both sides of the 'table'," Bramell said.

Executive Order 13522's purpose is to establish a cooperative and productive form of labor-management relations throughout the executive branch. The executive order aims to improve the delivery of high-quality government services to the American people by establishing:

- a cooperative and productive form of labor-management relations
- agency labor-management forums to identify problems and propose solutions to better serve the public, improve employee work life and labor-management relations
- pre-decisional involvement for employees and their union representatives in all workplace matters to the fullest extent practicable

"A lot of great ideas come from the workforce, but we have to get them talking, which is why the forum is important," District Operations Division Chief Rick Werner said.

"Because without communication, how can we work through issues that are out there or even know what the issues are?" Werner asked.

The labor-management forums facilitate pre-decisional involvement. For example, if a proposed policy potentially impacts working conditions, labor and management representatives can work toward an agreement that works best for everyone. The forum also stimulates discussion of good ideas in the field that can help streamline workflow and ultimately deliver better products in the field.

"This is about working together," Bramell said. "Because when we come together, anything is possible. We are here to help employees focus their hands on the 'nails' of the job so they can work smartly and safely."

Who is affected by the signed labor-management agreement? The NFFE 181 is a bargaining unit consisting of both General Schedule and Wage Grade personnel of various trades and crafts, technicians, office personnel, and maintenance workers in the Walla Walla District. NFFE does not represent managerial employees, professionally certified employees, United Power Trades Organization-represented employees, and a few other exempted employees.

NFFE 181 Mission statement: the NFFE Local 181 strives to promote favorable and safe working conditions, job security, and the economic well-being of federal employees so they can provide an efficient and productive service to America.

photo by Mark Wright

NFFE 181 Vice President Jim Bramell signs a labor-management agreement with Walla Walla District Commander Lt. Col. Drew Kelly at Lower Granite Lock and Dam near Pomeroy, Wash., in December.

Division Commander promoted to brigadier general

Brigadier General Anthony C. Funkhouser

U.S. Army Corps of Engineers Northwestern Division Commander Anthony C. Funkhouser was promoted to the rank of brigadier general in a formal ceremony Feb. 1 in Washington D.C. The Army's Chief of Engineers, Lt. Gen. Thomas P. Bostick, hosted the event.

In addition to numerous stateside and overseas assignments, including serving as Chief, Joint Capabilities Division (J8) on the Joint Staff in Washington D.C., Brig. Gen. Funkhouser also served as Commander, Afghanistan Engineer District – South where he oversaw a $4 billion program in support of the U.S. Forces-Afghanistan mission.

A civil engineering graduate of the U.S. Military Academy, Brig. Gen. Funkhouser also holds master's degrees in engineering management and strategic studies.

He is a licensed professional engineer in the Commonwealth of Virginia.

As commander of the Corps' Northwestern Division since July 2012, he oversees a 4,800-strong workforce and a combined $3.5 billion program in civil works, disaster response, military construction, and environmental restoration and cleanup carried out by five district offices located in Omaha, Neb., Kansas City, Mo., Seattle and Walla Walla, Wash., and Portland, Ore.

Photo awards 2013

The votes are in! You judged 32 entries in this year's photo contest. Winners received a commander's coin and a letter of appreciation. The winning pay calendar and peer award will be used throughout 2013.

Pay

1st Place

Jon Renholds (right)

2nd Place

Connie Grant-Howell (far right)

Peer

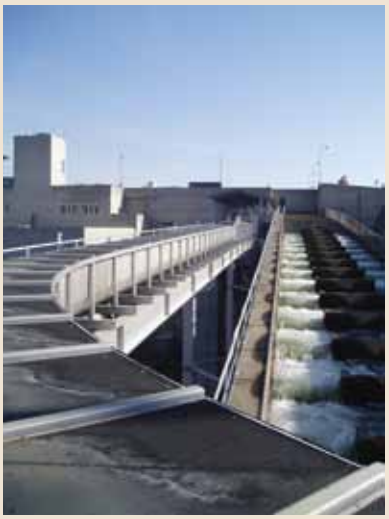
1st Place

Ben Swaner (below)

2nd Place

Scott Barnett (below, far right)

Pay calendar



Peer Award

historic recognition

U.S. Army Corps of Engineers Walla Walla District Commander Lt. Col. Andrew Kelly speaks at a January public event at Richland High School in Richland, Wash., to recognize the completion of Richland's historic street names project.

Richland streets were named after historic U.S. Army Corps of Engineers officers when the Corps led the Manhattan Project during World War II and local volunteers have installed more than 200 historic street markers.

The public ceremony featured a free concert featuring the high school's chamber choir and wind ensemble, area musical artists, and the 56th Army Band OF Joint Base Lewis-McChord near Tacoma, Wash.

Other speakers included Richland Mayor John Fox and City Manager Cindy Johnson, plus past state American Veterans (AMVETS) Commander Don Schack.

photo by Bruce Henrickson

employees of the quarter *Fiscal year 2013*

First Quarter

David Needham (far left)
safety and occupational health specialist

Scott Zangrilli (left)
maintenance management technician

Second Quarter

Margie McGill (far left)
project manager

Josh Dougan (left)
power plant electrician crew foreman

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Brian Miller

Position:
Chief of Engineering and Construction Division

Describe your job.

I am responsible for all the design, engineering, and construction activities in the District, with a staff of approximately 150 spread throughout four branches (Design, Construction, Cost Engineering and Hydraulics and Hydrology). I am also the District Dam safety officer, the Engineers' and Scientists' Career program manager, and the senior engineering advisor to the District commander.

What are some of the biggest challenges you've faced in your current position?

It has always been a challenge throughout my career to support Operations Division with small projects while being timely and cost effective. We still struggle with this and are determined to find a better way to serve our Operations customers. One of the biggest challenges we face is the sheer volume of e-mail. The electronic age has made it so easy to communicate that it is possible to send large documents for review or ask for anything at any level. It can be a real challenge to minimize the effects of irrelevant requests/information so that employees can focus on executing the mission. Trying to balance dam and levee safety obligations with customer desires can also be a challenge.

Describe a few accomplishments you've experienced with your job.

Early in my career I was lucky enough to be involved in a three-district acquisition for a CADD system which then progressed into me becoming the CADD manager for the District. This opportunity allowed me to work with a variety of mangers and individuals. During my 13 years as the Mechanical Design chief, I was able to manage and work with a great group of dedicated employees. As the BPA Large CAP program manager, I was able to develop a great working relationship with our partner, BPA. This program was very satisfying for me because we were able to upgrade or replace aging infrastructure at our hydropower projects that we weren't able to fund prior to our agreement with BPA. This led me to other opportunities as chief of both the Design Branch and Engineering and Construction Division. It has been an honor to serve a great professional workforce.

What is the most rewarding part of your job?

The most rewarding part of my job is working with the fantastic professional people here every day. Number two on the list is the variety of work. We do not work year after year on the same product. We are often involved in state-of-the-art or one-of-a-kind features at our operating projects. We also respond to emergencies (such as equipment failures) where we get to see how the assigned team pulls together and fixes things quickly through extraordinary efforts.

We spend a large part of our lives at work, so even though we have many serious things to address, we also have some fun. It has been rewarding to set an example of having fun at the office while staying focused on the work at hand.