# INTERCOM!

U.S. Army Corps of Engineers, Walla Walla District Vol. 39 No. 4 Sept. - Oct. 2012

Geotech depths

## From Where I Sit

## DE: My First 100 Days

About 100 days since Change of Command, I want to thank everyone for welcoming Sheila and me to the Walla Walla District family. This is one of the best

transitions we've ever had. The job is fantastic. People here are even better.

I've visited nearly all our offices and projects. I've spoken with our District family and regional partners, and engaged diverse stakeholders on issues. This taught me several things. First, the District is very well respected for its challenging work and exceeding expectations.

Most common words I've heard about District employees are "professional, great to work with, and very helpful." It's clear we take pride in our relationships. Second, our team comes from varied backgrounds and professional disciplines. We leverage this well during team efforts. A previous Chief of Engineers referred to Corps employees as "solutioneers." The Walla Walla District team embodies that idea. We harness the right talents to solve problems.

Finally, and perhaps most importantly, this District has an awesome identity. Everybody I meet in our area of operations sees themselves as part of the larger District family. I'm very impressed with the pride everyone takes in our District, collective accomplishments, and ability to get things done! In short, this is an

excellent District with a great reputation and committed, talented professionals.

This District is well-situated as the Corps transforms civil works, defends and protects

our nation, and prepares USACE for the future. Right now, HQ USACE is finalizing its campaign plan to guide us toward 2020. Division is also working on its Command Implementation Plan. In August, the District Corporate Board met off site for about a week and reviewed our current OPLAN. As higher headquarters roll out their strategic plans, we'll

continue to refine our OPLAN and share it with you.

From where I sit, we're well-aligned and already driving forward. We're leading the Corps in System Wide Implementation Framework process for Milton-Freewater Levees; implementing new feasibility study guidance for the Boise River with a planning Charrette soon; successfully synchronizing long-term navigation outages with other Columbia River assets; and innovating ways to systematically identify and program infrastructure repairs and improvements. I look forward to deeper conversations about where we're headed.

Keep checking the "Commanders Corner" on our website. You can post your comments there, or send them straight to me.

District Commander Drew Kelly

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#### On the cover



Lower Monumental worker looks down the draft tube of unit 4 Kaplan turbine.

photo by Matthew Reeves

## Corps helps Hanford celebrate 70th anniversary of Manhattan Project

#### story by Bruce Henrickson

One of the best-kept secrets of World War II was America's significant effort to build the atomic bomb.

The Corps of Engineers played a key role in both building the bomb, and in keeping the effort necessarily secret.

District Deputy Commander Maj. Rodney Baker helped tell that story at an Aug. 13 ceremony in Richland, Wash., commemorating the 70th Anniversary of the Manhattan Project and B Reactor at the Hanford Works in the present-day Richland area, which is within the Walla Walla District.

The event was sponsored by the B Reactor Museum Association, Hanford Communities, Tri-City Development Council (TRIDEC), and Tri-Cities Visitor and Convention Bureau. It featured speeches by U.S. Rep. Doc Hastings, U.S. Department of Energy Richland Operations Office Manager Matt Mc-Cormick, and other speakers.

Shortly after the Pearl Harbor attack the Nation embarked upon building an atomic bomb. On June 17, 1942, President Roosevelt decided to turn over the Manhattan Project to the Army because this large-scale project required

a governmental group accustomed to managing large projects, and the project and its large funding needed to be kept secret. Also, the Corps' construction expertise made it the logical choice to build production facilities

After the Corps was selected to manage the project, most of the development and assembly work for the bomb took place during the war at the three primary Manhattan Project sites—Oak Ridge, Tenn.; Hanford, Wash.; and Los Alamos, N.M.—though important work took place in many places around the country.

Hanford was selected because Bonneville and Grand Coulee Dams offered substantial hydroelectric power. Also:

- o The flat-but-rocky terrain would provide excellent support for the massive plutonium production buildings.
- o The expansive and isolated site was far enough inland to meet security requirements.
  - o Existing transportation facilities could quickly be improved.
  - o Labor was readily available.

However, Manhattan was the location of key early work, including the organization of the Manhattan Project.

The project office was at 270 Broadway, which was also then the location of the Corps' North Atlantic Division. There were additional offices in the Woolworth Building at 233 Broadway. A front company established to purchase uranium secretly for the project was also in the Woolworth Building. At these two addresses, employees conducted much of the early research, performed administrative duties, and procured materials for the Manhattan Project.



B Reactor was the first reactor built on the Hanford Site and was also the first full-scale reactor in the world (pictured above, "T" plant building).

The first batch of uranium ore purchased by the Corps was actually stored in Manhattan, as well as on Staten Island. The Manhattan District purchased the ore, mined in the Belgian Congo, from the Union Minière Company, which had an office at 25 Broadway in the Cunard Building.

Columbia University, on the northwest end of Manhattan Island, also played a part in the efforts of the Manhattan Project. Scientists in the physics department, before and during the war, conducted experiments that helped unlock the secrets of practical nuclear fission. Even as some of Columbia's scientists left the university to work on the Manhattan Project, research continued throughout the war.

Though the Manhattan District office in New York remained open until the end of the war, the Manhattan Project headquarters moved to Oak Ridge in August 1943, and Brigadier General Leslie Groves, appointed to command the Manhattan Project in 1942, established his office in Washington, D.C.

The original proposed code name of the Manhattan Project was "Laboratory for the Development of Substitute Materials." Instead, the Corps established the "Manhattan District" as camouflage, though it was not just a name. Much of the early work leading to the development of the atomic bomb occurred in Manhattan. While the name "Manhattan District" does not evoke the sense of exotic intrigue that an unusual code word or phrase might, it helped to keep secret one of the most important scientific developments of the twentieth century, which was one of the Corps' greatest accomplishments.

## District natural resources team achieved 'good news'

story by Bruce Henrickson



photo by Chris Lor

It started as a bad news story after thousands of pounds of trash were left behind at Illia Dunes on the Lower Snake River by an unexpected group of more than 3,000 college-age visitors on Aug. 25-26. It ended as a good news story about college student volunteers and Corps staff successfully cleaning up the mess and re-opening the Dunes to visitors.

The District had no choice but to close Illia Dunes near Lower Granite Lock and Dam on Monday, Aug. 27, after a weekend crowd of visitors left enormous amounts of broken bottles and beer cans on the beach and in the water, refuse was strewn about parking lots, and litter was discarded along three miles of roadway. The weekend's 3,000-person crowd was the largest seen at the Dunes since 2001. Hundreds of Styrofoam coolers were left behind, and a folding table littered with trash was left standing in shallow water offshore. The closure decision was based on health and safety hazards.

"It was a mess," said Darren Opp, park manager at Lower Gran-

ite Natural Resources Management. Opp led the first Corps staff and grounds maintenance contractor cleanup efforts on Aug. 27-29, which focused first on the beach and parking lots. Until water samples were tested and the Corps could confirm it was safe, cleanup crews couldn't enter the river to retrieve broken bottles and beer cans under water.

KLEW-TV in Lewiston initially covered the story and interviewed District Natural Resources Manager Joe Maxwell and Park Ranger Connie Grant-Howell.

"Usually, folks are pretty responsible and pick up after themselves," Maxwell told reporter Whitney Hise. "It was certainly disappointing."

Media coverage was the heaviest the District had seen in at least seven years, both regionally and nationally. Two of the three District news releases issued that week were carried on the nationwide Associated Press news wire. Even the New Orleans Times-Picayune carried the story in the midst of dealing with Hurricane Isaac.

As project staff handled the first on-site interviews, District Public Affairs also handled 10 initial media phone interviews after the first news release was sent on Aug. 27. Public Affairs provided downloadable

photos shot by Park Ranger Chris Lorz on Aug. 25-26 on the District website, and several photos were widely used.

"A picture is still worth 10,000 words," said Joe Saxon, District Public Affairs Chief. "Photos by project staff really helped media and the public understand the scope and size of the problem. And the efforts by the Lower Granite Natural Resources staff helped turn the tide in this story."

Maxwell, Opp, Grant-Howell, Lorz and Public Affairs Specialist Bruce Henrickson worked together on media relations throughout the week and encouraged visitors to 'pack it in, pack it out' regarding their trash.

As word of the Illia Dunes story spread and Corps staff cleanup continued, dozens of volunteer from area residents and nearby university students offered to help with cleanup. Fraternities, sororities and students from both Washington State University (WSU) in Pullman



## ending for dunes cleanup

and the University of Idaho in Moscow expressed their disappointment with fellow students and offered to help.

By mid-week, more than 3,000 pounds of trash from beach and parking lots had been removed by Corps personnel, but there were still three miles of roadside ditch and the underwater portion of the beach yet to be cleaned.

After considering the number of volunteer offers and the amount of trash remaining, Lower Granite Operating Project Manager Marty Mendiola decided the District would use volunteer help. It was an opportunity to work with Corps visitors, and possibly turn a bad news story into a good news story.

Since managing a large group of volunteers presented new challenges, Maxwell and Opp decided to work with a single group of volunteers with a single point of contact. The WSU Center for Civic Engagement (CCE), working with the Associated Students of WSU and the WSU Center for Fraternity & Sorority Life, organized a volunteer group to pick up the remaining litter Saturday, Sept. 1. ASWSU provided a bus for 64 students who finished the cleanup. The WSU Interfraternity Council paid for final trash removal of another dumpster full of garbage.

At least 25 news outlets initially carried the story, many with photos. Public Affairs coordinated Saturday's student cleanup coverage by four media outlets while Lower Granite project staff successfully handled five more media interviews on site that day.

On Sunday, Sept. 2, thanks to the efforts of a lot of people, Illia Dunes re-opened. A third news release about final cleanup and reopening Illia Dunes was distributed. It indicated that the Corps would be monitoring visitor actions with an eye towards future usage of the Dunes. Cleanup photos by Lorz and Grant-Howell were provided.

Follow-up news stories appeared in at least 42 news outlets from Aug. 27 through Sept. 5, with significant additional individual comments and letters to the editor. A Sept. 2 Seattle Times article garnered 49 reader comments. Bruce Henrickson handled 26 media phone interviews during the week.

None of the Illia Dunes closure and cleanup media coverage was negative toward the Corps, and all of it was either positive or neutral. Three editorials were supportive of the Corps. Neutral or positive coverage is a public affairs success.

In the end, this was good news.









An organized group of student volunteers from Washington State University helped remove trash from part of the Illia Dunes recreation area near Lower Granite Lock and Dam. The area had been closed since Aug. 27 due for health and safety reasons after an Aug. 25-26 weekend crowd of about 3,000 visitors left more than 3,000 pounds of trash along and in a three-mile stretch of the Lower Snake River.

## Geotech

#### story by Terri A. Rorke

The District's geotechnical design section team is not your average engineering group.

From exploring the depths through draft tubes via a boson's chair, designing wetland ponds, roads and earth retaining walls, to drilling and investigating foundations—it's all just another day at the office for the 'geotech' team.

"We have the best section in the District," Geotech Section Chief Yvonne Gibbons said.

And it's no wonder why Gibbons feels this way. Her team carries out a diverse mission that includes leading the dam and levee safety-programs, working partly in the headquarters building and outdoors at the projects. They also work for others both by helping in national emergency situations and as technical experts who educate sister districts.

#### SNAPSHOT OF GEOTECH

#### **Inspections**

The section performs both Levee and Dam Safety inspections. With the levee safety program, the team inspects about 85 levee systems annually, primarily in Idaho. They meet with the sponsor and provide a detail analysis of the levee's condition, ensuring that the project meets Corps standards and will provide the flood damage reduction for which, it was originally constructed. Under the Dam Safety program they are responsible for the Periodic Inspection of two dams per year and perform many small inspections of draft tubes, conduits and outlet tunnels.

#### Design and Analysis

The section performs design and analysis for all things geotechnical, civil and geological for the Walla Walla District. This essentially covers any design or construction project that is in the earth, on the earth or is made of earthen materials, to include concrete (it has rocks in it).

#### Support

The Geotech team supports the District and the nation in a number of areas to include flood fighting and performing emergency repair to damaged structures; Federal Columbia River Power System support;



## explores

cultural resources; planning; studies; geotech design. Their customers include the operating projects, local communities and other districts.

#### Team

The Geotech team includes a unique mix of professionals: geologists, geotechnical



engineers, civil technicians, and civil engineers, including one civil engineer in Boise, Idaho.

As Gibbons reflected on 13 years of service with her section, she said her role allows her to learn a lot about the Corps since her team works within many of the District's missions.

As a unique engineering group, the team must be ready for distinctive challenges. They work across many of the division lines at the District and need to understand the mission of those they work with. For example, a streambank protection project will involve understanding the hydrology and engineering to design the job, but will also need to incorporate the operations and maintenance perspective, environmental compliance needs and the sensitivities of cultural protection into the design. The team also must be ready to work with a range of personalities in a people-centric mission (and culturally sensitive projects), while incorporating vital requirements of projects.

"We dive into all aspects of the District and have a lot of fun doing it. We also get the satisfaction of seeing the fruition of products both large and small," Gibbons said.

"Geotech is not simply about engineering; there's also an art to what we do. We make things work with select groups on unique problems." Gibbons said.

One of the team's geologists, Dan Tucker, said he enjoys the mix of field and office work. "The combination helps to keep my job interesting. I also like the opportunity to travel and to work on large dams. I've spent a lot of time at and learned about Dworshak Dam, which is a very impressive structure," he said.

"My job changes every day. I'll design a sewer system using 3-D modeling in the office, or perform site development, and then I'll inspect intake in a draft tube 50 feet underground," Geotech Section Civil Engineer Joy Hartl said.

"With this section, you have to be open-minded and ready for the daily variety of challenges. A lot of what I do, I've never done before, but that is the nature of the job," she added.

Since the nature of the Geotech Section is to take a unique approach to problem solving, it's no surprise that the team is taking initiatives with safety challenges.

"People say, 'It's dirt. How hard can that be?' "Hartl said. But she knows how important preventive measures are for saving lives. "Our main mission is to protect people," she said.

She just concluded a dam safety education course for personnel at the dams to recognize potential failure indicators and warn the public of possible dam failures. This training was so popular, she was asked to present to a group in New England District.

Continued on page 8...





U.S. Army Corps of Engineers photos

...continued from page 6

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Hartl said she begins each work day asking, "How can I serve?" She understands her job is about keeping people safe.

"It's about educating employees to save lives," she said.

She recalled how a Corps natural resources employee in Utah was the first person to identify an imminent dam seepage issue. He quickly reported the issue and warned people to evacuate.

"You've got to have an open-mind and be open to challenges."

She said she is fortunate to have a boss who is open to her team's growth.

"There's no limit to what you can do in this career field," Hartl said.

(Top) A drill rig samples the depths. (Right) Geotech Section Chief Yvonne Gibbons and Civil Engineer Michael Schaffer inspect ground material excavated during a piezometer installation at Rooks Park near Walla Walla, Wash., in September.









My job is to facilitate your success ))

(Right) Northwestern Division Commander Col. Anthony Funkhouser conducts a town hall meeting in the Walla Walla District headquarters building. (Top) Col. Funkhouser, Brian Miller and Herb Bessey view the levee drop structure in Milton-Freewater. (Above) Bessey briefs Col. Funkhouser and Lt. Col. Kelly on levee vegetation. (Bottom-right) Mill Creek Project staff display their new office. (Bottom-left) Rob Lustig highlights activities at Lower Granite Dam.







#### story by Gina Baltrusch

Steelhead and bull trout swimming in the U.S. Army Corps of Engineers-built Mill Creek Channel will find their journey upstream a bit easier, despite the seasonal lack of rainfall.

Three concrete weirs in the Walla Walla District-managed area of the channel were modified to improve passage for fish during low-flow conditions. The prototype structures consist of two double-drop and one single-drop weir located about 200 yards upstream of the Corps' Mill Creek Office. They were built from July 15 to Sept. 15, a time period when these Endangered Species Act (ESA) listed fish in Mill Creek are least likely to be affected.

TML Construction of Hayden, Idaho, was awarded the \$231,000 contract to build the weir modifications. First, they had to dry out the work area in the creek bed. Workers configured a coffer dam using concrete barriers and channeled the natural water flow through a large, corrugated metal pipe past the worksite where water was again allowed to freely flow downstream.

Constructing the low-flow weirs involved removing sections of the existing concrete weirs that run perpendicular to the Mill Creek channel and replacing those sections with box-shaped, poured-in-place concrete notches.

"Two of the weirs we modified were the most difficult for fish to pass over," said Corps Project Manager Mark Smith. "The notches will lower the weir and give fish an easier way to move upstream."

Notching weirs to improve fish passage is not a new idea, Smith noted. Last year, Walla Walla County and Tri-State Steelheaders installed a number of notches in weirs on the county's section of the Mill Creek Channel, four of which can be seen at the Tausick Way Bridge over Mill Creek.

The Corps' notched prototype weirs will be tested for effective passage during summer low-flow conditions, when water is flowing below 90 cubic feet per second.

"We'll make sure all the hydraulics work, and that it's what the fish need. If these work, we'll do more of them as funding becomes available," Smith said.

The weir modifications are a fish passage improvement action included in the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions for ESA-listed species in Mill Creek.



(Above) Natural Resource Specialist Chris Alford shows Northwestern Division Commander Col. Anthony Funkhouser the new low-flow fish weirs in the Mill Creek Channel during his initial visit to the District. (Top-left) concrete ecology blocks, sandbags and plastic sheeting help divert water through a 3-foot-wide pipe around the work area. (Top-middle) Water resumes flowing down Mill Creek after the low-flow weirs are completed. (Top-right) A newly constructed double-drop low-flow weir creates easier passage for fish swimming in Mill Creek. (Far-right-middle) A notch cut in an existing weir awaits concrete form work. (Right) Construction workers pour concrete into wooden forms that will create a new low-flow fish weir.





photo by Jeremy Nauver







## District member makes finals in DoD and

U.S. Army Corps of Engineers Walla Walla District Public Affairs Specialist Terri A. Rorke is one of 89 finalists chosen in the collaborative photography project "Serving Abroad... Through their Eyes"—a U.S. Department of State and the U.S. Department of Defense competition to celebrate the 50th anniversary of the office of Art in Embassies. There were 3,267 submitted images by active or former members of the U.S. military, Foreign Service and Civil Service taken overseas since 2000. The 12 Best in Show honorees will be announced this fall and recognized in Washington D.C. with images crafted into video artwork by renowned artist Lincoln Schatz that will be displayed at a private reception on Nov. 30 at the Smithsonian American Art Museum. The exhibit will then travel to the Pentagon, the U.S. Embassy in Kabul, and other prominent national and international locations.

District Mechanical Engineer Carl Knaak also submitted photos from his Afghanistan deployments and, although he was not chosen as a finalist, both he and Rorke's photos were selected for the final exhibit.

The final jury panelists included Madeleine Albright, former U.S. Secretary of State; Adm. Mike Mullen, U.S. Navy; Gen. Richard Myers, U.S. Air Force; Gen. Peter Pace, U.S. Marines; Gen. Colin Powell, U.S. Army, former U.S. Secretary of State. For more information, visit http://art.state.gov/Anniversary.aspx?tab=images&tid=106248.

(Main photo) "This was taken at Camp Bastion/Leatherneck in Afghanistan on Christmas morning 2009. I was the Division chief for the 900 Division (Aviation Ground Support Equipment) and these were the Marines from the day crew.
They asked if they could get a photo that
morning to send back home to family for Christmas. You can see they are wearing Santa hats. It was a very tight group and they all did some amazing things with regards to the deployment. Since then, I retired and all of us have gone separate ways, but we plan to get together for a reunion in the future. It was a very long and tough year for this group because they were only half the size of a normal **Ground Support Equipment shop, so they** literally made history." — James Hardy





## State Dept. 'Serving Abroad' salute

(Above left and center photo) These photos were taken when I was U.S. Army private serving as a photojournalist at Bagram Air Base, Afghanistan in 2003. (Above left) A group of service members carry one of six Airmen to a C-17 aircraft at Bagram Air Base, Afghanistan on Mar. 25, 2003. The fallen Airmen were flying in a HH-60G Pave Hawk helicopter that crashed on Mar. 23, 2003, while on a medical evacuation mission 18 miles north of Ghazni, Afghanistan. The weather was poor across Afghanistan when the aircrew was on its way to pick up two Afghan children.

(Center photo) A chaplain gives final blessings to the six Airmen aboard a C-17 destined to Dover Air Force Base, Del.

"As the only photographer permitted to document a group of six airmen being carried aboard a C-17 for their final journey home, I had a heightened responsibility to put my emotions aside and respectfully capture the event."

– Terri A. Rorke

(Above right photo) A Soldier assigned to the 2nd Battalion 19th Special Forces Group (Airborne) W.Va. Army National Guard mans his 50-caliber during an eight-day mission in the Helgal Valley, Shakail Shatel District, Kunar province in Afghanistan in May 2009. Afghan Commandos with the 201st Corps, advised by Coalition forces, killed 19 militants during overnight operations in Helgal Valley. The Afghan-led force was conducting a combat reconnaissance patrol

about 150 miles east of Kabul when they were attacked by several armed militants with small-arms fire from a wooded area. The combined force identified the enemy's position and, after ensuring there were no non-combatants in the area, returned fire on the militants and called for closeair support, killing seven militants. The remaining militants attempted to reposition themselves on a ridgeline, but the Commandos maintained positive identification of their location. The force engaged the militants again with close-air support, killing 12 militants.

"I remember being wet and cold and wandering around warming up after another sleepless night."

— Russell L. Klika



# REGION SALUTES POW/MIA DAY

(Left) Lt. Col. Andrew Kelly was the keynote speaker at the Jonathon M. Wainwright Memorial VA Medical Center's POW/MIA Recognition Day. (Below) Honor guard from the Washington State Department of Corrections lower the flag to attach a POW/MIA flag. (Bottom-left) Bikeriders from the Combat Veterans International Chapter #10 joined in the salute. (Bottom-right) Crowd in attendance.







photos by Joe Saxon

## USACE employees reach out to future Hispanic engineers

#### by Andrew Dankel-Ibáñez

Each year from Sept. 15 to Oct. 15, our Nation celebrates the invaluable contributions and rich history of Spain, Mexico, the Caribbean, and Central and South America by designating the period Hispanic/Latino Heritage Month.

This year, the national theme is "Diversity United, **Building America's Future** Today."

In reflecting on this year's national theme, it is rather fitting that several district employees again shared their knowledge and expertise with local Latino high school students this summer during the Hispanic Youth Exploring Engineering and Sciences (HYEES) Camp, July 30 through Aug. 3 at Walla Walla University's Edward F. Cross School of Engineering.

Several guest speakers size the need to keep studying

and striving to educate themselves for the future. The general message from every speaker was the same: every student attending HYEES can get their education and make a real difference in their communities.

One USACE employee, Carolina Andes, an electrical engineer who was joined in a panel discussion by Ricardo Guzman and Jordan Fink (also district electrical engineers), spoke about the career path she took as a student growing up in Peru and eventually becoming a design engineer at the Corps after graduating from Washington State University with a degree in electrical engineering. Carolina also spent time mentoring and discussing her experiences during lunch one-onone with several of the young women at the camp.





(Above) During his "Kids in the Creek" presentation, BPA mechanical engineer Tom Osborn shows, (L-R) Selene Reyes, Cynthia Mora-Pulido, and Ana Andrade the precipitate that is formed during the oxygen testing phase of the demonstration. (Below, right) Electrical Engineers Caroline Andes, Ricardo Guzman and Jordan Fink participate in a panel discussion. (Below, left) from left: Maira Ambriz, Juan spoke to the students to empha- Angel, and Jaime Martinez take samples to analyze.

"When Carolina sat with us at lunch, she seemed like a very interesting person," stated Ana Andrade, a junior at Walla Walla High School. "As she spoke to us in Spanish, I realized that we had a lot of things in common. I understood what it was to be an engineer. The more she talked, engineering seemed more like a career that I would be interested in. She told us that by following your dreams, you can do something new and exciting every single day."

Students also received an inspiring keynote presentation from Ms. Deborah Foley, Chief of PPPMD, who addressed the many challenges she faced as the first female engineering student at her college as well as the struggles she has faced throughout her career in the male-dominated profession of engineering.

Several activities highlighted the camp's impact of illustrating engineering and sciences. Among the many projects they took part in, the students were given the materials to build sound-sensitive bumpand-go robots, model rockets, and balsa bridges. Other workshops included sessions on leadership, character building, time management and basic engineering.





## District embraces Sustainability

First in a 5-part series

#### **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 agencyfleet; and
  - 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.

#### story by Joe Saxon

We've heard a lot about sustainability, but what is it and what does that mean for you?

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. The Corps is a steward for some of the Nation's most valuable natural resources, and we must ensure our customers receive products and services that provide for sustainable solutions that address short and long-term environmental, social and economic considerations.

Ruthann Haider leads the District's newly developed Sustainability committee. In defining sustainability, she quoted a former NWD Division commander who succinctly put it this way, "At its core, sustainability is about reducing waste and increasing efficiency. By reducing wasted water, energy, landfill space, and other resources, we increase our efficiency and assure our ability to meet current and future military and civil works missions and deliver quality projects."

Whether working on an environmental remediation project, maintaining equipment at a Corps operating project, designing a new construction project, or printing an e-mail we just received, we all play a role in sustainability.

"You too can strive to make sustainability an outcome of your activities," Haider added. "You can conserve energy and reduce pollution by making small changes to things you do in the office, at home and while traveling.

"For example, at home you can turn your refrigerator down or set your washer to use only warm or cold water. At the office you can purchase recycled office products, and ensure lights not in use are turned off. On the road you can carpool with office colleagues, avoid hard accelerations, reduce time spent idling, unload unnecessary items in your trunk to reduce your vehicle's weight, or drive smart by going easy on the brakes and gas pedal," she said.

Damian Walter, District POC for Environmental Compliance in Sustainability, illustrated the power of compounding saying "When I worked for the Park Service they had an issue where visitors could not take a pine cone off the Jewel Cave National Monument near Custer South Dakota. Why not? Because we got 1.3 million visitors every year. If everyone took a pine cone there wouldn't be any trees. Point is, even a penny saved eventually can add up to millions of dollars."

#### **USACE Environmental Operating Principles**

- Foster sustainability as a way of life throughout the organization.
- Proactively consider environmental consequences of all Corps activities and act accordingly.
- Create mutually supporting economic and environmental solutions.
- Continue to meet our corporate responsibility and accountability under the law for activities undertaken by the Corps, which may impact human and natural environments.
- Consider the environment in employing a risk management and systems approach throughout the life cycles of projects and programs.
- Leverage scientific, economic, and social knowledge to understand the environmental context and effects of Corps actions in a collaborative manner.
- Employ an open, transparent process that respects views of individuals and groups interested in Corps activities.



## Mill Creek project office taking shape







To-date construction includes not only the structure, but systems like solar tubes, skylights, gray water systems, and photovoltaic solar panels that will create electricity. Workers added rock facade and installed windows above, while Chris Alfred looks to invite quests inside.

High performance sustainable design adapts a building to its climate zone and community, maximizing energy and water efficiency while achieving mission requirements. Additionally, the principles of sustainability create a healthy indoor environments for occupants and promote sustainable and energy efficient maintenance practices. Finally, sustainable construction practices reduce the negative impacts on the environment during the construction process and assure quality construction practices are utilized.

Since 2008, the US Army has required a Silver minimum rating from the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System of the U.S. Green Building Council. As a privately developed tool for evaluating and measuring achievements in sustainable design, LEED® ensures that sustainable strategies are considered in the development of all Army building projects.

#### LEED-silver standards sustainable elements included in Mill Creek project

- ground loop heat exchanger, which uses natural, underground heat as a source to help heat and cool the new building
- building position orientation, skylights and solar tubes to allow maximum access to direct sunlight
- gray water reuse system, which treats used water from restroom faucets, showers and water fountain and uses it for flushing toilets
- many building materials will be composed of or contain recycled material
- · low-flow faucets and toilets

- solar collection panels projected to provide AC energy up to 10,034 kilowatt hours per vear
- building waste material, both during construction and when occupied, will be separated for disposal and/or recycling, diverting

• low-consumption lighting control, which automatically adjusts interior electrical lighting output based on the amount of sunlight entering a room and occupancy sensors that turn lights off when detecting a vacant

waste from landfills

room

• selection and placement of landscaping trees, shrubs and rocks minimize water consumption—no permanent irrigation will be installed because native drought-tolerant planting will be utilized



## DAYINYIIINAATOO OF A PARK RANGER

Park rangers have one of the most versatile jobs in the U.S. Army Corps of Engineers. From educating visitors to responding to emergencies and installing recreation equipment, every day is different for a ranger. Park Rangers are stewards of Federal lands, waters, and park resources at Corps-operated and Corpsmaintained water resources projects. They operate vehicles, boats and ATVs, with public safety as their number one priority. Lucky Peak rangers interact with many of the 790,000 visitors who visit the lake each year. There are 4,288 acres of public lands surrounding Lucky Peak Lake. There are 4,079 acres of Corps-managed lands that are used for public recreation, wildlife habitat and operations purposes. The state of Idaho operates Lucky Peak State Park at three locations on Lucky Peak Lake.

The rangers educate swimmers and boaters about injury prevention, lead interpretive programs about threatened and endangered species, and develop partnerships with groups who focus on environmental stewardship.

Lucky Peak Lake recreation facilities consist of 20 day-use areas, four boat launch ramps and three swimming areas.

Dutíes range from park management; natural, hístorícal, and cultural resource management; watershed management; endangered and/or special status species management; flood risk management; real property and shoreline management; environmental compliance practices; asset management;

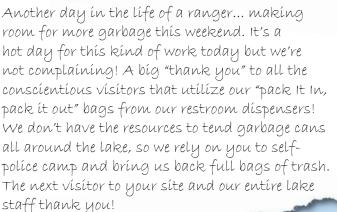
visitor assistance; safety; infrastructure surveillance and protection; and the development of interpretive and recreational programs for the benefit of the public.

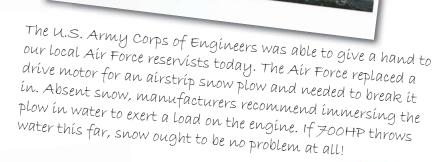
Park Rangers are leaders in both emergency response and community outreach. Park Rangers are said to be the Corps' face to the nation and may be the only contact some public have with the agency.

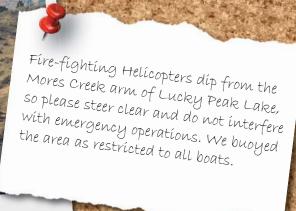


Volunteers contributed more than 4,750 hours to Lucky Peak Lake between Oct. 1, 2011 and Sept. 30, 2012!!! Each volunteer hour is valued by the Department of Labor at \$21.79 for the year 2012; therefore, Lucky Peak Lake was the honored recipient of more than \$103,500.00 in valuable









## Corps rides defense in repeating as Corporate Challenge champs



Rebounding, team play also keys to victory

The U.S. Army Corps of Engineers Walla Walla District team used tough defense, rebounding and unselfish ball distribution to defend their title at the Peach Basket Classic Corporate Challenge 3-on-3 basketball tourney in Walla Walla on Aug. 5.

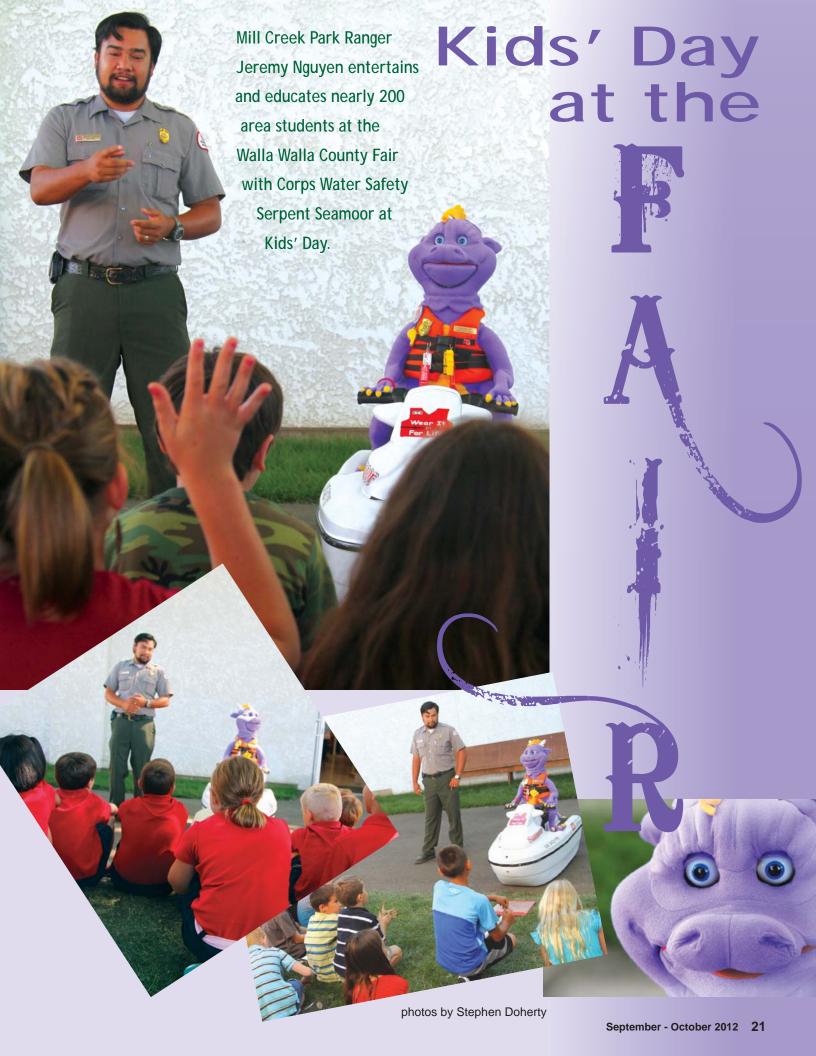
They challenged virtually every shot in sweeping their opponents 4-0 enoute to the title.







(Above) John Renholds set an early defensive tone with this blocked shot. (Top-right) Members of the winning team, Jordon Fink, Jeff Lyons, Andrew Dankel-Ibáñez, and Renholds. (Center) Lt. Col. Andrew Kelly gives a half-time pep talk. (Bottom-right) Fink and Renholds cut off an opponent's route through the lane.



## Medical Response

#### story by Carolyn Kloewer

A mechanic working in a turbine pit falls from a ladder and severely injures his leg. He can't get up and is in extreme pain. Who does he call for help? Fortunately, Little Goose Dam emergency medical responder volunteers can render assistance. The remoteness of Walla Walla District projects make it difficult for outside emergency services to provide prompt response. Most rural fire and ambulance departments are run by volunteers, which could take up to an hour to respond. The nearest hospital in Dayton, Wash., is more than a half hour away. Life Flight would be called for



U.S. Army Corps of Engineers photo

Workers at Little Goose Lock and Dam attend an "accident victim" during a medical response exercise. Around the



victim care and provide basic life support until professional medical assistance arrives. Statistics show that patients who receive emergency care before they reach the hospital have a better chance of surviving a major accident or sudden illness.

Scenarios were designed to replicate real powerhouse-related accidents and included responses to an electrocution, a severe fall, heart attack, and an employee crushed by heavy equipment. However, the first lesson every responder learns is what not to do. They must first "size-up" the accident scene to determine the extent of the incident, the possible number of persons injured, and any hazards they face getting to the victim. If an employee is injured in a confined space, other volunteers may be called to deal with the dangers of entering the space. We are not heroes, and the last thing we need are responders getting seriously injured, creating a situation where an additional person would require treatment. It will do the victim no good if a responder gets injured, or worse, even killed trying to get to the victim. We have to consider our ability to manage the hazards and whether to call for additional outside assistance such as a rescue service.

As with professional outside paramedic or ambulatory services, the key to success requires a lot of practice and keeping familiar with equipment. It can't be emphasized enough. Operational projects are busy places, and the biggest challenge is scheduling practice time. These hard working, dedicated employees are the ones at the forefront of saving a life when minutes count.

serious and life threatening incidents, but even they can take up to an hour to respond, based on availability. Both OSHA and EM 385-1-1 require prompt medical response, which means within 3-15 minutes. That's where the Little Goose responders come in. They are the "front line" responders.

Employee volunteers recently completed a challenging 40-hour Emergency Medical Responder training. Training included both classroom and, most importantly, rigorous accident scenarios to practice their skills. The goal of the training was to teach employees to manage

## afety corner: taking home risks?

There are many safety issues that arise daily when you work at one of Walla Walla District's eight hydropower facilities.

One of the lesser addressed issues is what is generally referred to as "take-home exposures". This term describes second-hand exposures of family members by workers who are exposed to chemicals, heavy metals (such as lead and hexavalent chromium), or other hazardous substances (asbestos) at work, and are transporting them home on their work clothes, work boots, tools, and vehicles.

Studies by the Center for Disease Control and Prevention showed that these substances have also been found on hands, faces, beards and in hair of workers who work around said substances.

Exposure occurs during work activities such as routine maintenance of generators, painting, cleaning of parts with solvents or other toxic solutions, welding applications, turbine blade repair, abrasive blasting and electrical work.

Due to the age of the dams, there are many remnants of lead paint, asbestos materials, and other hazards that are encountered as part of routine work.

Lack of proper hygiene is the biggest contributor to take-home exposures but work practices also contribute to the contamination of work spaces, eating areas, and eventually family and home.

Safe work tips to prevent take-home exposures

1. Do not eat, drink or smoke in work areas that may be contaminated with hazardous substances.

- 2. Wash your hands before eating, smoking, or touching your face after working with hazardous substances.
- 3. Wear the appropriate personal protective equipment (tyvex suit, respirator, gloves, safety eyewear) over your clothing whenever

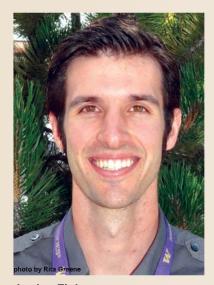
you work with hazardous substances.



- 4. Shower, wash your hair and change into clean clothes (including shoes) before leaving the workplace. Take home exposures can potentially harm your family, especially young children.
- 5. Store a change of clothes in a separate area from your work clothes.

Ensuring that workers have sufficient knowledge about the substance they are working with, proper personal protective equipment for the job at hand, and proper hygiene practices will help reduce the second-hand exposures of your families.

## mployees of the quarter



Jordan Fink **Electrical Engineer District Headquarters** 



Ellen Berggren **Project Manager** Boise, Idaho

According to their award submissions, Ellen Berggren and Jordan Fink exemplify the highest standards of professionalism within the Walla Walla District and have demonstrated a team oriented, get the mission accomplished attitude - especially in the last quarter.

The EOQ Award has been established to recognize individuals whose efforts and actions have made the District a better place to work. All permanent employees of the District are eligible, regardless of grade.

Jordan Fink went above and beyond his normal responsibilities while part of the cost engineering team, assisting with projects in multiple districts. In addition to his normal duties, Fink provided support to the NWW **Emergency Power Recovery Team and volunteered as the** District CP-18 intern coordinator for three months.

Ellen Berggren works tirelessly to support the District and its missions. When asked to do another task, support the District's Industry Day, she didn't hesitate to give it her best. She was able to not only support Contracting and the Small Business Office, but also supported the flood fight on the Boise River at the same time.

## 2012 Fiscal Year End results

Total **1,404** contracting actions awarded (broke last year's record of 1,364 actions)

\$92,322,332 Amount awarded

## Corps booth time



District Wildlife Biologist Mark Graves hands out water safety incentives at the Nez Perce County Fair in Lewiston, Idaho, in September. Lower Granite Natural Resource Management Office employees met with more than 1,000 members of the public at the annual fair. The Corps booth was very busy each day, according to the team. They displayed animal skulls and hides and educated people about invasive species using a quagga mussel-covered tennis shoe and PVC pipe.

Corps Mascot, Bobber the Water Safety Dog, also promoted water safety. The team also distributed hundreds of water safety items to booth visitors, schools and families.



Jame: Sue Walton

Design Branch and the operating projects. My job is to work with the operating projects. Then I to determine what activities will be needed from Sections to obtain resources for all the activities will be needed from Sections to obtain resources for all the activities will be needed from Sections to obtain resource providers from Design Sections to obtain the Design Section the Design Sectio I manage the Engineering Tech Support activities and work closely with the operating projects. My job is to work with the and manage the find the operating projects. My job is to work and manage the find the operating projects. The Design Sections and the operating projects are determine what activities will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the operations will be needed from the Design Branch and the Operations will be needed from the Design Branch and the Operations will be needed from the Design Branch and the Operations will be needed from the Operatio Engineering Technical Support Manager Describe your job.

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There also are situations where I fill the role of a project manager planning and everything in-between. What is the biggest challenge you've faced in your current position?

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Pipe contractors from working. With situations like this priorities.

On track and not be pushed aside by other important priorities.

All the small accomplishments that I have experienced have to do with keeping up with changes.

All the small accomplishments that I procedure, personel, resources, pDT, etc... For the last panges with process, standard operating procedure, personel, resources. Pipe contractors from working. With situations like this, it is a ching of the contractors and not be pushed aside by other important priorities. All the small accomplishments that I have experienced have to do with keeping up with change to do with keeping up with change possible. The last of t Describe a few accomplishments doing your job. Changes with process, standard operating procedure, personel, resources, pDT, etc... For the last engineering. Branch and section chiefs for Engineering chiefs for Engineering chiefs for Engineering. Branch and section chiefs for Engineering chief for Engineering chiefs for Engineering chief for Engineer few years there have been lots of changes in the Design Branch and section chiefs for Engineering. The Design Branch and section chiefs for Engineering. Branch and section chiefs and not everyone agrees on the done, and not everyone agrees on the things should be done, and not everyone agrees to establish the done, and not everyone agrees on the done, and the done agrees of the do person has their own thoughts of how things should be done, and not everyone agrees on the part things should be done, and team members to establish part things should be done, and team members to establish part things and team members to establish but everyone has different needs. Part everyone has different needs. Part everyone has different needs. Part everyone things their own thoughts of how things should be done, and not everyone agrees on the done, and not everyone has different needs. ne things. I have to constantly work with design chiefs and team members to establish a common work plan. Everyone likes process, but everyone has different needs. He things and tailoring each request to what the a common work plan. Everyone customizing and tailoring each request to what the of the changes involve customizing and tailoring each request to what the changes involve customizing and tailoring each request to establish part to e cnanges involve customizing and falloring each request to what the common projects there will be a change in the customer wants. About every two years there will be a change new, fills the customer wants. About every two projects Every time common per new the common projects of the common at the common projects. customer wants. About every two years there will be a change in the someone new fills the Tech section at the operating projects. Every time someone is all about and Tech section at them up to speed on what engineering is all about aget them up to speed on what engineering is all about and tech section at the operating to speed on what engineering is all about and the section at the operating to speed on what engineering is all about and the section at the operating to speed on what engineering is all about and the section at the operating the section at Tech section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects. Every time someone new tills the section at the operating projects at the section at the operating projects. Every time someone new till the section at the operation at

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to be in.



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