

Flagship

SEATTLE DISTRICT

Environmental Cleanup of Jack Waite Mine

U.S. Army Corps of Engineers

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BUILDING STRONG

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U.S. Army Corps of Engineers
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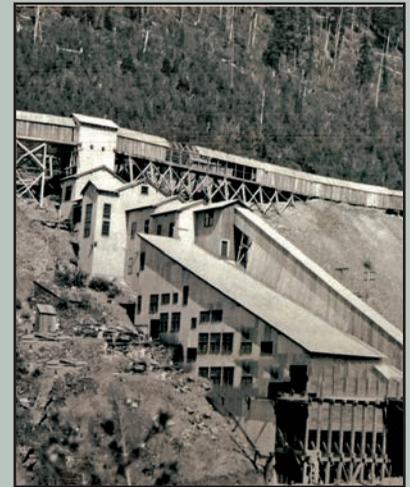
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Cover:

Jack Waite Mine (circa 1933)

This historic photo of the Jack Waite Mine shows what milling operations looked like 20 years after it had been in production. The remotely located mine closed in the 1960s. Despite its location, toxic heavy metals from the mine's past operations traveled downstream over time, creating sustainability problems for those living in the path. Hunters, small-business miners and recreation seekers also visited the site, potentially encountering contamination. Story and additional photos on pages 12-13. (courtesy photo)

Flagship

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Rieta Kauzlarich: This Flagship is for you



Senior Construction Representative at Joint Base Lewis-McChord **Rieta Kauzlarich** embodies a can-do attitude focused on effective project team relationships and results. A recent accomplishment includes completion and acceptance of the Warrior in Transition complex, directly supporting the Army's Wounded Warrior program at JBLM. The \$17.8 million building was delivered on time and under budget, and features a roof-mounted solar energy array and deep well water sources for efficient heating and cooling. She also teaches Construction Quality Management courses through the Association of General Contractors.

Rieta Kauzlarich, this *Flagship* is for you.

Forward Focus

commentary

This time of year we focus on awarding contracts, managing construction, repairing and maintaining our facilities and meeting key targets. The focus doesn't waver when we look forward strategically. In March, the Chief of Engineers finalized the U.S. Army Corps of Engineers Campaign Plan, which provides focus and direction as we serve the Northwest and our nation.

The plan includes four goals: support the warfighter, transform civil works, reduce disaster risk and prepare for tomorrow. The division and the district have parallel plans to help achieve these goals. I will focus on how we support the warfighter in this commentary using that goal's subordinate objectives as a framework, and will address the other three goals in future commentaries.

Seattle District supports the combatant commands to advance our nation's interests by providing trained, manned, and equipped teams to integrate USACE capabilities into both peacetime theater engagement exercises and overseas contingency operations. Chiefly, our Forward Engineer Support Team has deployed to Korea for training exercises and is currently preparing for a nine-month Afghanistan deployment. We routinely provide about 20 district members to the Afghanistan Engineer District. The district's Base Development Team provides reachback technical capability fielding requests for information, while we have also engaged in designing and contracting major construction projects such as the Saracha Bridge. Our Family Readiness activities are also important to this goal.

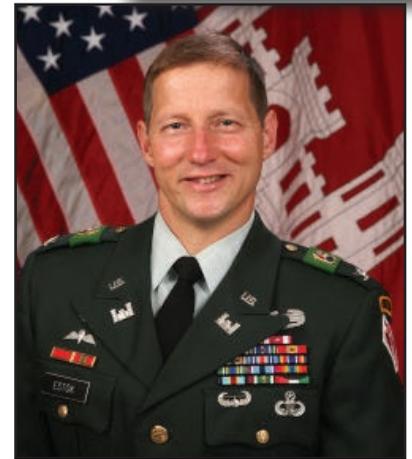
Seattle District partners with installation management communities to deliver and maintain enduring installations and contingency basing. District military missions include our major construction, facilities sustainment restoration and modernization, real estate, and environmental efforts for Joint Base Lewis-McChord, Air Force bases with diverse capabilities ranging from strategic ballistic missiles to aerial refueling, and to National

Guard and Reserve forces as well as other federal agencies. Collectively, this effort accounts for about 75 percent of our annual program. Beyond quantity, we have done high quality work – for example, our Fairchild Fitness Center design team received an Air Force Merit award. We also add value to where our military forces live, train, and recreate as evidenced by completing Malmstrom AFB's housing work and Real Estate actions to secure additional training lands and provide off-installation medical clinics.

The USACE goal to support the Army and nation in achieving energy security and sustainability goals directly aligns with a district core competency that is part of our culture and passion. Our project delivery teams work with customers and contractors to consistently deliver Leadership in Energy and Environmental Design silver-rated facilities, and in some case exceed this at no additional cost to the government. Our in-house PDTs developed an innovative eco-charette process where we create an installation micro-climate and perform early energy modeling making key design decisions resulting in significant life cycle cost savings. And as the Northwestern Division's regional Center for Sustainability Expertise, we seek to improve our own capital assets' energy performance.

Finally, we support the larger engineer regiment to meet Army and joint force needs in three key ways. First, the district has four junior officers working in construction and project management. These developmental experiences provide a solid understanding of what the Corps brings to the team and benefit the Army as they progress in their careers. Second, Seattle District enjoys a partnership with JBLM's 555th Engineer Brigade that is lauded as a model across the engineer community. We have provided professional development and training opportunities to the brigade's Soldiers, while the brigade has integrated our FEST team into pre-deployment training exercises. We also create win-win opportunities for our nation's Wounded Warriors with two alumni and four currently serving to advance our missions and gain professional experience for their post-military careers.

As you can see we are doing plenty in our daily work to support USACE's campaign plan while propelling the district forward toward greater mission success. Take a minute to ask yourself how you are contributing to USACE's Goal 1 of supporting the warfighter — everyone has a piece of the mission. You are doing great work out there. Keep it going as we head into the second half of the fiscal year.



Seattle District Commander
Col. Bruce A. Estok



U.S. Army photo by Spc. Kimberly Hackbarth

Soldiers with Company C, 4th Battalion, 9th Infantry Regiment, mount a CH-47 Chinook after completing an air assault mission Jan. 27 at the Rogers Drop Zone in Washington State.

—*Essayons!*



Restoring critical fish habitat

By Scott Lawrence
Public Affairs Office

Restoration of critical eelgrass fish habitat near Bainbridge Island is one step closer to reality as U.S. Army Corps of Engineers' officials finish filling a large sub-tidal depression just outside the mouth of Eagle Harbor.

The depression was one of two seabed cavities originally dredged to form navigation channels and improve ship access to Cresote's Milwaukee Dock. Although the dock was removed more than a decade ago, the unused navigation channels remained. That is, until the Corps was called upon by the National Oceanographic and Atmospheric Administration to manage the construction portion for the Elliott Bay Trustee Council's eelgrass restoration project.

"Eelgrass provides critical habitat for migratory fish, but it's also a valuable component to restoring the Puget Sound nearshore," said John Kern, a NOAA restoration specialist and project coordinator.

In-water construction work concluded Feb. 12, when workers from Jansen Inc., based in Ferndale, finished depositing approximately 14,000 cubic yards of fill material into the southern depression. Fill materials came from a quarry near Shelton and were analyzed for grain size and

organic content to match materials to the project site and support eelgrass restoration.

"The primary reason eelgrass would not grow in these depressions is light didn't get that deep into the water column," said Mark Murphy, Corps' project manager for the restoration. "So we filled the depression with suitable material, brought it up to grade where light can reach the bottom and eelgrass has the conditions to reestablish itself."

After allowing time for new materials to settle, NOAA will coordinate re-planting work this spring by the Pacific Northwest National Laboratory, eventually restoring approximately 1.4 acres of subtidal eelgrass habitat for migratory fish.

This is the third Eagle Harbor restoration project put forward by the Elliott Bay Trustee Council, a group of government and tribal representatives responsible for dispersing Superfund settlement funds from the Wyckoff creosote plant for environmental restoration. Other entities involved in the restoration effort include: The U.S. Department of the Interior; the Muckleshoot and Suquamish tribes; and Washington Departments of Natural Resources, Fish and Wildlife, and Ecology.



Awarding Excellence



By Tanya King
Public Affairs Office



Courtesy Photo

Olton Swanson received a career achievement award at the 2013 Black Engineer of the Year Award Conference held in Washington, D.C., in February.

Olton Swanson, U.S. Army Corps of Engineers, Seattle District, deputy district engineer and chief of Planning, Programs, and Project Management Division, recently received a career achievement award at the 2013 Black Engineer of the Year Award Conference held in Washington D.C.

Swanson was specifically recognized for his achievements related to his active community involvement encouraging students to take an interest in science, technology, mathematics and engineering. He has been a STEM program board member at Seattle's Evergreen High School.

He's made multiple presentations,

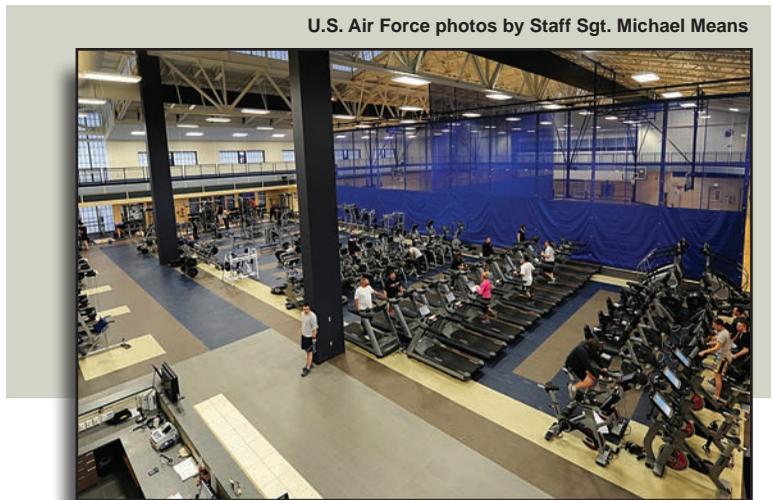
sponsored several students and organized a Shadow Day for local high school students to spend the day at Seattle District's headquarters learning about various STEM jobs.

The annual BEYA Conference is a diverse event designed to create a talent-rich environment for recruitment, networking and professional development among college representatives, professionals and students. Participants represent the elite among STEM disciplines and career fields.

This year, USACE had 18 award winners representing a wide cross section of the Corps in categories such as Modern-Day Technology Leader, Science Spectrum Trailblazer, Most Promising Engineer, and other special recognition awards.



(Left) A Lydig construction worker prepares a pipe for the Fairchild Air Force Base, Wash., fitness center swimming pool Sept. 8, 2012. (Right) Airmen work out in the state-of-the-art facility (below).



U.S. Air Force photos by Staff Sgt. Michael Means

The Fairchild Air Force Base Fitness Center received the 2012 Air Force Facility Design Merit Award. The U.S. Army Corps of Engineers, Seattle District, awarded the design-build contract to Lydig Construction teamed with design firm ALSC architects, both out of Spokane, Wash. Judging was based on aesthetic merits, cost control, energy efficiency, functionality and sustainability. The \$19.7 million project was necessary because the original fitness center was constructed as an unheated, wood warehouse in 1943; it wasted energy and was very costly to maintain.



balancing

ACT

Leah Wickstrom loves the balance of being a technically-minded engineer and the **crazy, flamboyant** life of performing in musical theater.

By Bill Dowell
Public Affairs Office

Living a double life is typically considered scandalous, often full of tabloid headlines and paparazzi. For Leah Wickstrom it means a reserved environment full of engineers and scientists by day. By night -- it's dress rehearsals, dazzling costumes, opening nights and her name in lights.

It's a balance. Something she uses a color-coded calendar to keep track of. She does it with realtive ease, having more than 25 years to perfect her system. Since she was 5 years old, Wickstrom has been singing, dancing and acting in the theater.

She has an Elle Woods-esque way about her, being blonde, bubbly and super smart, similar to the 2001 film "Legally Blonde" character. This may have played a part in her earning the lead "Legally Blonde: The Musical" at the Tacoma Musical Playhouse, April 5-28.

"I was always singing and dancing around the house when I was little and my mom decided 'maybe we should try her in theater,'" Wickstrom said.

A kindergarten friend's mother ran a theater group and Wickstrom's mother got her involved. "My first show was 'Peter Rabbit' and I was Mr. McGregor," she said.

Wickstrom continued with that theater troupe until fifth grade when she saw "Beauty and the Beast" and her mother recommended she take dance classes if she wanted to continue in musical theater. At first Wickstrom didn't care for the dancing but said she grew to love it, taking ballet, tap and jazz. Al-

though, singing is her favorite, "... then dancing, then acting," she said.

While singing, dancing and acting in musicals played large roles in her life growing up, it was her love of math that pushed her towards engineering. An obvious influence in her life, it was her mother who convinced Wickstrom she loved math.

After a rough school day, Wickstrom came home exclaiming "I hate math!" To which her mother replied, "Oh, no, math is SO fun!"

"She loved math and always helped me and I ended up really liking math and science," she said.

In high school Wickstrom was involved in a marine chemistry program all four years and took the hardest math classes she could. It was the logical thinker in her that she says pushed her towards engineering and getting a solid job.

"I figured that if I ever wanted to pursue theater

I could do that at my own pace and didn't necessarily need to have a degree in theater. It was a struggle though, I did a lot of thinking," she admitted.

So, she decided to go the engineering route at the University of Southern California, earning her Bachelor of Science in Industrial and Systems Engineering. As it turned out USC also had a musical theater minor which she applied for. It was during her time there that she

Annie



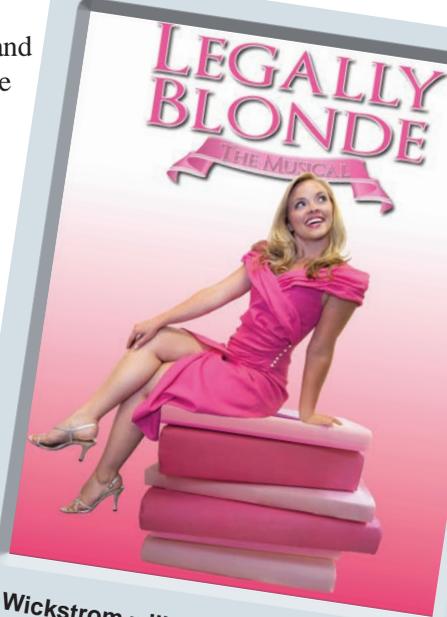
Playing "Annie" at age 7.

took her first acting classes.

"I took musical theater acting," she said. "The strict acting is very different. Musical theater is this in-between group. It's not strictly vocal performance, but it's not strictly theater, it was an interesting program."

After college Wickstrom "floundered about" working at a coffee shop for a while. She knew about the Corps because her grandfather worked here 25 years. But a family friend who worked at Joint Base Lewis-McChord helped her navigate the federal employment maze. She ended up getting what she wanted, a project management job.

"It's been interesting and rewarding working at the Corps," Wickstrom said. "I like the challenge of navigating the government processes and schedules, but theater is a whole different world that provides a different outlet. I love it because it's a nice balance. I get to work with people who are technically minded and people who have crazy, flamboyant personalities. Both have drive and depth that come from opposite ends of the personality spectrum."



Wickstrom will play the lead Elle Woods in "Legally Blonde: The Musical" at the Tacoma Musical Playhouse, April 5-28. For information about the show, go to: <http://www.tmp.org/mainstage.aspx>.

in the field

Regulatory survives the

By Patricia Graesser
Public Affairs Office

With an annual value of more than \$107 million, Washington leads the country in farmed shellfish production. Washington shellfish growers directly and indirectly employ more than 3,200 people with a \$270 million economic impact.

“People don’t know how big this industry is for Washington State,” said Regulatory Branch Section Chief Matt Bennett.

The size of the industry hit Seattle District hard when the Army Corps of Engineers reissued Nationwide permits in 2007, with Nationwide Permit 48 clarifying that every shellfish farm

in Washington state was required to notify the Corps of its activities in waters of the U.S. in order to be permitted by the Corps. While the Corps has historically regulated aquaculture, preconstruction notifications (PCNs) weren’t required for existing operations prior to 2007.

This clarification meant all state shellfish farms simultaneously needed to submit preconstruction notices, which the district would need to review and use to make permit decisions.

No other state has so many shellfish farms on private lands. In other states most farms are on state land, and the state is the main permittee. In Washington more than 1,000 farms on about 30,000 acres of property needed to be

verified. The District would need to evaluate each farm’s potential impact on listed threatened and endangered species, essential fish habitat, cultural resources, tribal treaty rights and navigation.

Clearly, evaluating each individual farm with regard to potential endangered species impacts wasn’t going to be practical on a case-by-case basis.

Given the similar types of operation and the similar environment and locations, the district set to work beginning in 2007 to conduct programmatic consultation with the U.S. Fish & Wildlife and National Marine Fisheries services.

Even with ESA requirements met on a programmatic level, the Regulatory Branch would still need to evaluate each farm’s preconstruction notification to ensure it was complete, accurate and met the requirements to allow the farm to be permitted under Nationwide Permit 48.

In 2011 with programmatic consultation complete, but with new Nationwide permits (and changed requirements for NWP 48) on the horizon for 2012, the district faced a choice: process the 900+ PCNs then and then again with 2012 NWP 48, or process them all in 2012. The district opted to lay all the ground work and use the 2012 permits.

The branch initially established the “A” team – A is for Aquaculture – a

“People don’t know how big this industry is for Washington State.”
—Regulatory Branch Section Chief Matt Bennett



Courtesy photo

A local shellfish grower at Stratford-Meyer Geoduck Farm offers Corps regulators a tour of the geoduck farm near Vaughn, Wash. Recently, all the state’s shellfish farms simultaneously needed to submit preconstruction notices, which the Seattle District would need to review and use to make permit decisions.

Tidal wave of permit actions

group of half a dozen project managers in Regulatory (Suzanne Anderson, Darren Habel, Erin Legg, Lori Lull, Jacalen Printz, Karen Urelus and Ron Wilcox) working with program lead Pam Sanguinetti to develop standard procedures for PCN verification. They set up templates and tools to make the process efficient and consistent for all applicants.

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**Branch Section
Bennett**

Shellfish has been grown commercially in Washington for more than 150 years, and many farmers are the fourth and fifth generation in their families to grow shellfish. Even some of the largest shellfish companies are family-owned and operated.

In 2011, the district provided an informational workshop for growers and local jurisdictions to make sure the PCN requirements and the permitting process were clear to the hundreds affected. "Often these family-owned farms don't have agents," said Sanguinetti. They have to make their way through the process on their own.

The A team then set up training for all district regulators – the "B" team – so that each PM in the branch could contribute by verifying PCNs in addition to his or her normal workload. "It was an all-hands-on-deck effort," according to Bennett.

Regulatory had dedicated aquaculture days when all employees concentrated on NWP 48s. "We had parties, costumes, food," said Bennett. "We tried to keep it fun."

Even with all the Seattle District regulators (including those in the Van-



Courtesy photo

Mussels farmed in coastal areas and in the open ocean are one of the most promising sectors of the U.S. marine aquaculture industry. In this photo, workers from Taylor Shellfish Farms in Shelton, Wash., harvest a mussel raft.

couver and Bellingham field offices) processing NWP 48 applications, the Regulatory Branch was facing an additional workload equal to a year's worth of actions. The Regulatory Branch annually processes between 800 and 1,000 applications, and they have seen 1,066 NWP 48 PCNs.

The Branch brought in a full-time detailed employee from Sacramento District to work on only NWP 48 actions. However, they soon "determined that the level of effort was higher than one detail and the A plus B teams could reasonably accomplish," said Bennett. "We used the initial detail as a model to form a team of detailees."

With a detailed team of six employees from around the Corps, a rehired annuitant and a Workforce Recruitment Program student

administrative assistant, the NWP 48 processing kicked into high gear. "We assigned a PM to a set of growers so each grower had a consistent point of contact and the PM got to know those growers and their operations," said Sanguinetti.

The team worked for four months straight to tackle the reams of PCNs. The district has processed 998 to date with 139 left to go as PCNs continue to trickle in.

"Pam led this effort, providing oversight," said Bennett. "They all did an outstanding job."

Now all permits that have been verified are good for five years, and although the tidal wave of PCNs will hit again in 2017, "It will be much easier next time" with the initial documentation done and all the tools and processes in place, said Bennett.

on base

Corps photo by Tanya King



building a Strong foundation



Corps photo by Jeff Halvorson



Corps photo by Tanya King

by Tanya King
Public Affairs Office

Originally it was a Salvation Army Inn with 155 rooms. During World War I, this Salvation Army war project provided hotels near Army camps where families could stay and visit Soldiers in the hospital. These hotels were built in a few other Washington locations but this is believed to be the only one in the country to survive. Now it's a museum and state-of-the art training facility for Soldiers. But just as renovations began, workers discovered the building was missing a very important part: an adequate foundation. The Corps helped build one to last for years to come.



The Lewis Arm families visitin
 It underwent e
 National Regis

It's known now as Lewis Army Museum and houses artifacts including the late Gens. Norman Schwarzkopf's Jeep and George Custer's undergarments. From 1919 to 1972, the historic structure served as a guest house and temporary housing for newly-arrived officers. It's been called the Red Shield Inn, Fort Lewis Inn, and briefly Camp Lewis Apartments when Joint Base Lewis-McChord was still called Camp Lewis. And shortly after Fort Lewis Lodge opened in 1972, it became Fort Lewis Military Museum.

Though it's now listed on the National Register of Historic Places, time took its toll on the structure and its future was uncertain. Numerous restoration challenges were identified, including funding the project.

When money from the American Recovery and Reinvestment Act came through in 2009, the scope was revised to include adding a 15,000 square-foot training facility on the vacant third floor, according to Jeff Halvorson, U.S. Army Corps of Engineers, Seattle District, project engineer.

Adding classrooms helped solve the lack of training space on base, helping build a strong foundation of knowledge Soldiers need, according to Myles Grant, Lewis Army Museum director.

Once the funding issue was resolved, other problems surfaced.

"When I joined the project, the initial design didn't take asbestos into consideration and contract modifications had to be done," Halvorson said. "With any major upgrade, especially on a building like this, there are a number of things you can't see until you start taking the walls apart. Because the building was on the National Historic Register, we had to be able to restore everything to its original condition."

With Building Strong being the U.S. Army Corps of Engineers motto, they were the right people for the job, according to Duane Denfeld, architectural historian for JBLM's cultural resource program.

"It can be difficult to even find craftsmen who can replicate 1920s work," said Denfeld. "Today we don't usually plaster anymore—the hardest thing is finding people with skills like stonework and masonry work. The Corps works with contractors to find people who have the right skills."

Many things needed upgrading to meet current codes, including electrical power; heating, ventilation and air conditioning; and sprinkler systems. Each item posed unique challenges.

"We had to upgrade to meet the

seismic code and found virtually no foundation," said Halvorson. "We found large cantilever timbers, which we wouldn't use today, so we had to pour a concrete foundation."

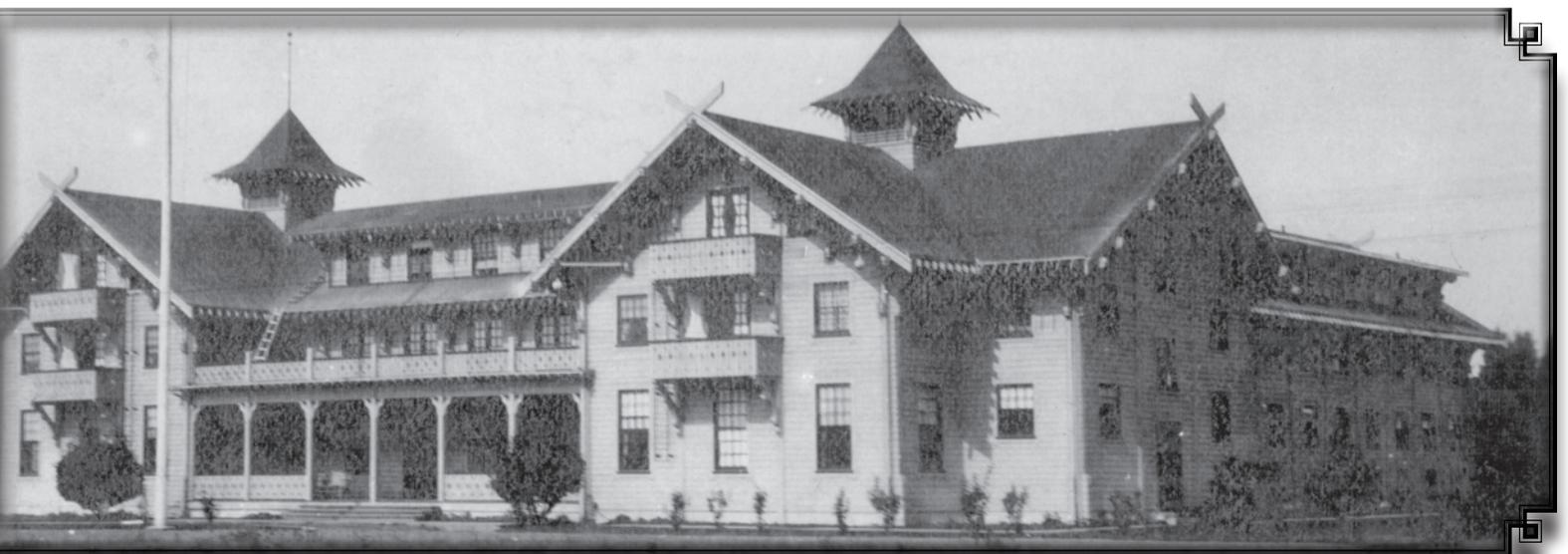
"On almost every one of these (historic renovation) projects, there is some big surprise the Corps has to solve," Denfeld said. "Years ago, the contractor might have put something on the architectural drawings that didn't actually exist. That's why the Corps is great—they never say they can't proceed; they say there has got to be a way to solve the problem."

The third floor wasn't without problems either as it was blocked off after a fire and was later overrun by three bat species.

"A specialist had to come in and relocate the bats and clean up the waste," Halvorson said. "It was really an amazing transformation to a fully functioning facility with modern training classrooms and full internet connectivity."

Some people might wonder why they didn't just tear the building down. According to Denfeld it's about sustainability.

"We had a really shabby building and people are really surprised to see this great building we have," he said.



Courtesy photo

Army Museum at Joint Base Lewis-McChord has been known by many names and served many functions. It's been a hotel, refuge for ailing hospitalized Soldiers and an officer's club (above). Now it's a museum and a state-of-the-art training facility (top and bottom left). Underwent extensive renovation (middle left) to meet current safety codes, but still retains the historic features as required by being listed on the National Register of Historic Places. Though many artifacts can be viewed here today, the building itself is also an exhibit.

in the field

Cleaning up the JACK WAITE MINE

By Tanya King
Public Affairs Office



Out of sight isn't always out of mind, much like contamination from decades of mining in the Coeur D'Alene Mountains at Jack Waite Mine on the Montana-Idaho border.

Despite its remote location, toxic heavy metals from the mine's past operations traveled downstream over time, creating sustainability problems for those living in the path. Hunters, small-business miners and recreation seekers also visited the site, potentially encountering contamination.

The mine tailings, or toxic remains when miners extracted valuable minerals and metals, included zinc, mercury, arsenic and lead. And since miners used the river system between 1911 and the 1960s to flush them out, it left nearby Tributary Creek sterile while affecting other water bodies.

The project's goals mirrored the USACE sustainability mission to create and maintain conditions where humans and nature can exist in productive harmony.

"Once metals such as zinc enter the water, it can potentially decimate aquatic life," said Rod Zion, U.S. Army

Corps of Engineers, Seattle District, project engineer. "A major goal for the project was to restore the stream in hopes the aquatic life will move back into the area."

From 2007 to 2012, Seattle District officials worked to complete the multi-contract three-phase project to collect and contain onsite tailings and materials that contributed to the spreading contamination, said Zion.

Most people now understand the environmental consequences of these former practices and dangers sometimes present in abandoned mine sites.

However, some people are attracted to them for gold mining prospects while others used them as a "playground" for off-road vehicles, according to Zion. "People would stir up the tailings where they became more susceptible to transportation by wind and water."

Despite the need to clean up the remote location, Zion said there were numerous challenges, such as working with multiple agencies. The Corps worked closely with multiple contractors and stakeholders, the U.S. Forest Service and the Environmental Protection Agency.

Another challenge was the limited access and remoteness of the site. The Forest Service played a crucial role in helping the team develop access to the site, said Zion.

“The 15 miles of unimproved Forest Route roads leading to the site was overgrown with vegetation,” said Zion, who said they worked closely with the USFS to fix the roads. “We needed a lot of heavy equipment on site and weren’t sure what road improvements were necessary for the multi-year project.”

In addition, the mine is high in the mountains with a short construction season due to snow and ice accumula-

tions. The Phase 3 contractor took full advantage of the available construction season by spending three weeks clearing nearly 15-foot deep snow from 15 miles of road along steep hills that bordered the road system.

They also faced challenges during contract execution.

At one point, an excavator sank into a slime-like material that had not been previously identified beneath the tailings when the contract was written.

“It’s a byproduct of the milling operation—it looked like blue clay in an undisturbed state, but as the excavator got to it, the vibration turned it to liquid, like a cornstarch slurry,” said Zion. “We realized we had a significant issue that wasn’t part of the contract. You couldn’t just pick it up and move it because it would liquefy and spill on the roads.”

The necessary modifications delayed progress, adding to complications to an already short construction season.

Coordinating with the public was another challenge.

“The high volumes of massive articulated haul trucks are an enormous safety concern for people in the area,” said Zion. “We coordinated with the USFS and installed an elaborate system of signage, gates, and vehicle escorts with prescribed times for the contractor’s safety officer to escort them through job site using mile markers while communicating via radio.”

The out-of-sight project gained visibility when district leadership made the long trek to see how the finished product, despite all the obstacles, turned into an extreme success story for the Corps sustainability mission and for those affected by the mine’s toxins, Zion said.

“The excellent team work among stakeholders, contractors, and USACE enabled us to solve issues at the lowest levels. We appreciated their visit because it gave us a chance to showcase how we successfully managed a large, logistically complex project,” he said. “On a project like this, I measure our success in two ways: if we achieve what our customer wanted and if we can meet the clean-up goals established for the project from an environmental perspective. This project did both.”



This QR Code links to a video taken during construction <http://bit.ly/XABfg5>

Courtesy photos

(Above) The newly aligned and constructed channel for Tributary Creek is a work in progress. The area in the center is roughly where the old mill foundation was located as compared with the historic photo on the front cover of the Flagship. **(Bottom right)** Construction equipment moves contaminated tailings to prepare the area before a geomembrane cover encloses the piles. This perspective shows work as it’s being done prior to the progress made in the panoramic photo above. **(Bottom left)** Ten to 15 feet deep snow had to be removed from roads before the site could even be accessed.



Healthy eating for active lifestyles

Adapted from
www.eatright.org

Many Americans dine out frequently and often look for fast, easy and good-tasting foods to fit busy lifestyles. Whether it's carry-out, food court, office cafeteria or sit-down restaurant, there are smart choices everywhere. Here are 30 tips to eat healthy when eating out.

1. Think ahead and plan where to eat. Consider what meal options are available. Look for restaurants or carry-out with a wide range of menu items.
2. Take time to look over the menu and make careful selections. Some restaurant menus may have a special section for healthier choices.
3. Read restaurant menus for clues to fat and calorie content. Menu terms that can mean less fat and calories: baked, braised, broiled, grilled, poached, roasted, steamed.
4. Menu terms that can mean more fat and calories: batter-fried, pan-fried, buttered, creamed, crispy, breaded. Choose these foods only occasionally and in small portions.
5. Order the regular or child-size portion. Mega-sized servings are probably more than you need. For a lighter meal, order an appetizer in place of a main course.
6. It's fine to make special requests, just keep them simple. For example, ask for a baked potato or side salad in place of French fries, no mayonnaise or bacon on your sandwich, and sauces served on the side.
7. Hunger drives people to eat too much bread before the meal arrives; forgo bread or chips until it does.
8. Think about your food choices for the entire day. When planning a special restaurant meal in the evening, have a light breakfast and lunch.
9. Limit the amount of alcohol you drink. No more than one drink for women and two for men. Alcohol increases appetite and provides calories without any nutrients.
10. Tempted by sweet, creamy desserts? Order one dessert with enough forks for everyone at the table.
11. Split an order. Share an extra large sandwich or main course with a friend or take half home for later.

12. Boost the nutrition in all types of sandwiches by adding tomato, lettuce, peppers or other vegetables.

13. A baked potato offers more fiber, fewer calories and less fat than fries if the sour cream and butter is omitted. Top a potato with broccoli and a sprinkle of cheese or salsa.

14. At the sandwich shop, choose lean beef, ham, turkey or chicken on whole grain bread. Ask for mustard, ketchup, salsa or lowfat spreads topped with extra veggies.

15. In place of fries or chips, choose a side salad, fruit or baked potato. Or, share an order of fries with a friend.

16. Enjoy ethnic foods such as Chinese stirfry, vegetable-stuffed pita or Mexican fajitas. Go easy on the sour cream, cheese and guacamole.

17. At the salad bar, pile on the dark leafy greens, carrots, peppers and other fresh vegetables. Lighten up on mayonnaise-based salads and high-fat toppings. Enjoy fresh fruit as your dessert.

18. Eat your lower-calorie food first. Soup or salad is a good choice. Follow up with a light main course.

19. Ask for sauces, dressings and toppings to be served "on the side." Then you control how much you eat.

20. Pass up all-you-can-eat specials, buffets and unlimited salad bars if you tend to eat too much.

21. If you do choose the buffet, fill up on salads and vegetables first. Take no more than two trips and use the small plate that holds less food.

22. Load your pizza with vegetable toppings. If you add meat, make it lean ham, chicken or shrimp.

23. Look for a sandwich wrap in a soft tortilla. Fillings such as rice mixed with seafood, chicken, or grilled vegetables are usually lower in fat and calories.

24. Build a better breakfast sandwich: replace bacon or sausage with Canadian bacon or ham and order your sandwich on a whole grain English muffin or bagel.

25. Be size-wise about muffins, bagels, croissants and biscuits. A jumbo muffin has more than twice the fat and calories of the regular size.

26. Try a smoothie made with juice, fruit and yogurt.

27. Refrigerate carry-out or leftovers if the food won't be eaten right away. Toss foods kept at room temperature for more than two hours.

28. Grabbing dinner at the supermarket deli? Select rotisserie chicken, salad-in-a-bag and freshly baked bread. Or, try sliced lean roast beef, onion rolls, potato salad and fruit.

29. Always eating on the go? Bring along portable, nonperishable foods such as peanut butter and crackers, granola bars, a piece of fresh fruit, trail mix, single serve packages of whole grain cereal or crackers.

30. For desk-top dining, keep single-serve packages of crackers, fruit, peanut butter, soup, or tuna in your desk.





Congratulations:

John Reid is the new Spokane resident engineer.

Mark Slominski was promoted to Colonel in the Air Force Reserve.

Nowell Grothe is now a certified energy manager.

Michael Peele is a Leadership in Environmental and Energy Design green associate.

John Hicks was recognized with the 2012 Distinguished Service Award from Pacific Northwest Waterways Association.

Capt. **Sean Killeen** completed the Army's Explosive Ordnance Disposal School.

Second Lts. **Scott Long** and **Brian Nelson** completed Army Infantry Officer Basic Leadership Course.

Out and About:

Jeff Bowman, Washington State Department of Natural Resources led a brown bag session on, "Geothermal Exploration At Your Fingertips: Wash-

ington State Geological Survey's Contribution to the National Geothermal Data System."

Liz Bonner hosted sessions on the district's mission to support employees interested in deploying for the Overseas Contingency Operation while the district's Leadership Development Program held informational sessions brown bags for recruitment of the 2013-2014 program.

Larry Schick presented, "Worst-Case Scenario Event: Disturbing lessons from the severe flooding in Queensland, Australia January 2011."

In January, **Mamie Brouwer** facilitated a presentation by Dan Russell of the company TetraTech/INCA. The presentation's topic was "The Third Lock and Dam Expansion at the Panama Canal."

In his role as, Chairman, Washington State Commission on African American Affairs, **Oscar Eason Jr.** spoke at a 2013 Black History Month Observance held at Joint Base Lewis-McChord Co-Located Club. Eason speech was, "The Crossroads of Freedom and Equality: The Emancipation Proclamation and the March on Washington."

Moving On:

Team members leaving the district include:

- Carolyn Brown**
- Michelle Dewey**
- Gregg Gammon**
- Mandee Gondeiro**
- Rogelio Gonzalez**
- Caroline Hicks**
- Daniel Kinamon**
- Jamie Langsford**
- Steve Paylor**
- John Perkins**
- Robin Perkins**
- Kyle Vogel**
- Govorushkin**
- Vyacheslav**
- Rod Whiting**
- Arnold Winebar**
- Jared Woodard**
- Will Daniels**

Retirements:

- Rick Behrendt**
- Lisa Butler**
- Mel Caylor**
- Robert Gary Fischer**
- Al Gapasin**
- Jim Krogstad**
- Rocky Ralston**

Condolences:

- Gerri Christiansen**
- Lance Meyer**
- Gregory Schoewe**
- Gladys Strand**

NWS Employees, Families, Friends: Save the Date

When: April 29

What: Activity-filled day including

- Family Open House
- Bring Daughters and Sons to Work Day
- Time Capsule
- Wellness Area Grand Opening
- Miles Lost – Miles Gained Art Dedication

Where: Federal Center South's Building 1202: "Oxbow Building"

Why: Celebrate spring, spend time with family, and highlight the building's features

Welcome to the district



Elizabeth Hall
Electrical Engineer
Chief Joseph Dam



Rolla Queen
Supervisory
Archaeologist



Anthony Glass
Web Support
ACE-IT

Deployed:

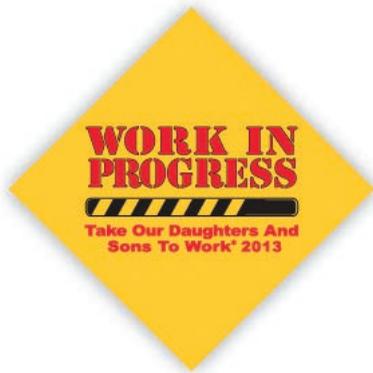
Not pictured:

Paul Bell



Edward Pena

Public Affairs Office
 Seattle District (CENWS-PA)
 U.S. Army Corps of Engineers
 4735 East Marginal Way South
 Seattle, WA 98134-2392



Bring children to work April 29 for annual event

Seattle District employees can participate in the annual Take Our Daughters And Sons To Work® Day by bringing a child, or by volunteering to assist with the day's events April 29. This year's theme is "Work in Progress."

Participating children should be between eight and 18 and may be a friend or relative of the employee. More activities are planned this year to engage high-school-aged children in science, technology, engineering and mathematics.

"Parent involvement is a key to a child's educational success. Take Our Daughters and Sons to Work Day is an opportunity for parents to share part of their work life with children and to show them that work is an integral part of everyone's life. This special day is also an opportunity for PTAs, schools, and communities to work together to provide a learning experience for our nation's children," said National PTA CEO Warlene Gary.



Courtesy photo

The event is scheduled to last from 8 a.m. to 3 p.m. Please contact Tanya King in the public affairs office at 206-764-6958 or tanya.m.king@usace.army.mil to volunteer or by April 22 to register children for the event. For more information about the program visit www.daughtersandsonstowork.org.