



Vol. XXVI No. 4
October-December
2011

Flagship

SEATTLE DISTRICT



**Mud Mountain Dam
workers transport
pink salmon in
record numbers**

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Flagship is your Seattle District news and feature magazine, published quarterly. If you have news, suggestions for articles or ideas you think would be useful for **Flagship**, we'd like to hear from you. Send your ideas to the editor or call the Public Affairs Office at 206-764-3750.



Cover: **Pink salmon**

Mud Mountain Dam personnel trapped and hauled approximately 622,000 pink salmon at the Buckley Fish Facility on the White River, Buckley, Wash. from Aug. 7 to Oct. 29. Other species of salmon were also transported, including Chinook, Steelhead, Coho, Sockeye and Char. Fourteen employees dedicated their efforts around the clock, using three trucks to ensure the fish arrived upriver to their final destination above Mud Mountain Dam. The fish trap and hauling facility is important because it allows the Corps to effectively move threatened and endangered salmon species above the dam where they can continue their migration upriver and finally to their spawning areas. (U.S. Army Corps of Engineers photo)



U.S. Army Corps of Engineers

Vol. XXVI No. 4

Impressions: Around the district in 100 days



Hi, Seattle District Team. In 1873 Jules Verne published "Around the World in 80 Days," an adventure novel about a London gentleman who takes a whirlwind world tour on a bet.

While the story's details differ greatly from my initial experience here, common threads are encountering the unexpected, dedicated people guiding the way and flexibility. In fact, without your help in transition, this article might be titled "Around the District in a Daze." Let me tell you what I've seen organized around the themes of Complex, Capable and Committed.

Among the Corps' 45 Districts there is an unofficial hierarchy based on program size and diversity, political issues and national priorities. While Seattle District doesn't lead the nation in these categories, the Complex-

ity of our operating environment makes our District a Corps flagship.

Colonel Wright told me this during our transition, but my initial experience, travel and interaction enabled me to appreciate how complex our mission set is.

First, we are unique working with three types of waterways: the Pacific Ocean, Puget Sound, and the upper Columbia. They present unique conditions, different customers and competing priorities, not to mention the international aspects. The intricate tapestry of environmental, tribal and endangered species considerations factor into our civil works, operations and regulatory missions.

For military construction, we support Joint Base Lewis-McChord, one of 12 joint installations nationwide, the largest on the West Coast, and a Defense Department leader in sustainability and environmental stewardship.

While smaller, our Air Force Bases fall under three different commands owing to their fighter, missile and air mobility missions, and we conduct environmental and interagency work for six agencies.

It takes a team of Capable professionals to accomplish our mission. The diversity and depth of experience here is amazing.

More than half our professional employees are registered, certified or accredited as architects, engineers, scientists, attorneys or contract specialists.

Our field construction managers and operations specialists lead field site teams with



This issue is dedicated to **Debbie Knickerbocker**, who works as the Agency/Organization Program Coordinator for the Government Purchase Card program, Contracting Division. She's known throughout the district as the nice lady with the tough job. At a time when the program is under close congressional scrutiny, she's adapted and tailored her approach to ensure compliance. Her patience and ability to explain the regulations to local users and managers is invaluable in promoting team spirit. During her time as the coordinator, Debbie has developed a quick reference guide that district GPC cardholders use when making purchases. Her professionalism and skills in managing the program have moved the Seattle District GPC program from good to great. This **Flagship** is for you.

Flagship

- Col. Bruce A. Estok, Commander**
- Patricia Graesser, Chief, Public Affairs**
- Tanya King, Editor**
- Elizabeth Townsell, Editorial Assistant**
- Scott Lawrence, Contributor**
- William Dowell, Contributor**
- Jaki Johnson, Contributor**

Flagship is an unofficial publication authorized under AR 360-1, published by the Public Affairs Office, Seattle District, U. S. Army Corps of Engineers, P. O. Box 3755, Seattle, WA 98124-3755. The views and opinions expressed are not necessarily those of the Department of the Army. Questions may be sent to the above address.

the right mix of talent and experience among construction inspectors, administrative staff, natural resource managers and crafts and trades workers.

Our employees also have strong relationships with whom they work and serve. I've been told how much our partners appreciate our efforts, even when our position or message wasn't

positive. Our ability to make relationships more important than any issue will allow us to work through challenges ahead.

Our staff's level of engagement and action is also impressive; events considered command-level elsewhere are capably handled here at program and project team level.

The District's Commitment is the third factor

shaping my impression of our team. Beyond everyone's hard work to achieve solid Fiscal Year 11 program execution, I routinely learn of activities, both near and long term, where persistence will make the difference.

Among the issues I'm personally involved in are levee vegetation policy; operations at Albeni Falls Dam in partnership with the Bonneville Power Administration; and the collective efforts of local, state, federal

and tribal entities to recover salmon and Puget Sound. If these things were easy, they'd be resolved by now. Together we'll move forward with our Project Delivery Teams working to achieve synergy and vertical alignment between our efforts here and with Corps' policy. There's also a myriad of people and teams whose commitment builds our reputation daily as they execute projects and provide services.

I've learned much in my first 100 days traveling around the Seattle District. Jules Verne's protagonist won 20,000 pounds for his journey, a considerable sum then.

My reward is greater: the privilege to lead capable and committed people

who perform a complex mission and serve the Northwest and the nation.

A District member epitomizing this for more than 30 years was George Huff of Chief Joseph Dam. He passed away Nov. 12; please keep his family in your thoughts.

Soon the holidays will be upon us – please enjoy them safely with family and friends.

Essays! — Col. Bruce Estok, District Commander

“My initial experience, travel and interaction enabled me to appreciate how complex our mission set really is.”
—Col. Bruce Estok

Readers see a new feature in the Flagship, QR codes, which can be easily scanned by any smartphone with a QR code reader. These applications can be downloaded for free through any smartphone application store. By scanning the code, the phone's browser is routed to a website with video, more information or fact sheets on a subject.



www.nws.usace.army.mil

Corps partners up with EPA for massive environmental cleanup in Ruston, Tacoma

By A. Scott Lawrence
Public Affairs Office

In the latest phase of a multi-year effort to clean soil contamination from industrial smelting operations, the U.S. Army Corps of Engineers, Seattle District, brought its expertise to an environmental cleanup in Ruston and Tacoma, Wash.

The contamination stems from operations at the Asarco Tacoma Smelter, which opened in 1890, smelting lead and later, copper. Although the smelter closed in 1985, significant quantities of arsenic and lead particulates were released into the environment through the plant's smokestack and fugitive emissions, resulting in soil contamination affecting thousands of properties.

As the responsible party, Asarco initiated cleanup activities in 1993 with oversight from the Environmental Protection Agency, Region 10, but went bankrupt before completing yard remediation.

After years of litigation with Asarco, in 2009 the EPA announced the largest Superfund settlement in history under the Comprehensive Environmental Response, Compensation and Liability Act. The company paid \$1.79 billion to state and federal governments to settle its liabilities for contamination in 19 states, of which \$27 million was

designated for cleanup work in Ruston and Tacoma.

The EPA also received American Recovery and Reinvestment Act funds, time-sensitive economic stimulus money made available for shovel-ready projects. Total cost for this phase of the cleanup was approximately \$6.9 million, of which ARRA funds covered 75 percent and Asarco settlement funds covered 25 percent.

"This was the first time the Corps was involved in the cleanup of Ruston and Tacoma properties because circumstances had changed," said Harald Ehlers, Ruston Yard Cleanup project manager for the Corps of Engineers, Seattle District. "Up to this point, the EPA was in an oversight role. The responsible party executes the cleanup while EPA monitors, provides oversight and tells them when a property meets the cleanup standard."

Without a responsible party, the EPA assumed the role of executing the cleanup and chose the Corps to implement it.

Planning for this phase of the cleanup, covering 266 individual properties, began fall 2009. By spring 2010, the Corps contracted an engineering firm to sample each property and determine what areas needed to be cleaned.

Though the cleanup was technically one project, each

of the 266 properties were unique and individual projects. The EPA reached out to individual owners, letting them know their property was potentially contaminated. The Corps then sought rights of entry to each property so sampling could commence.

"This was the hardest part," said Ehlers. "Every property was a separate project to get all the paperwork and approvals in place to allow each individual property to be sampled and cleaned."

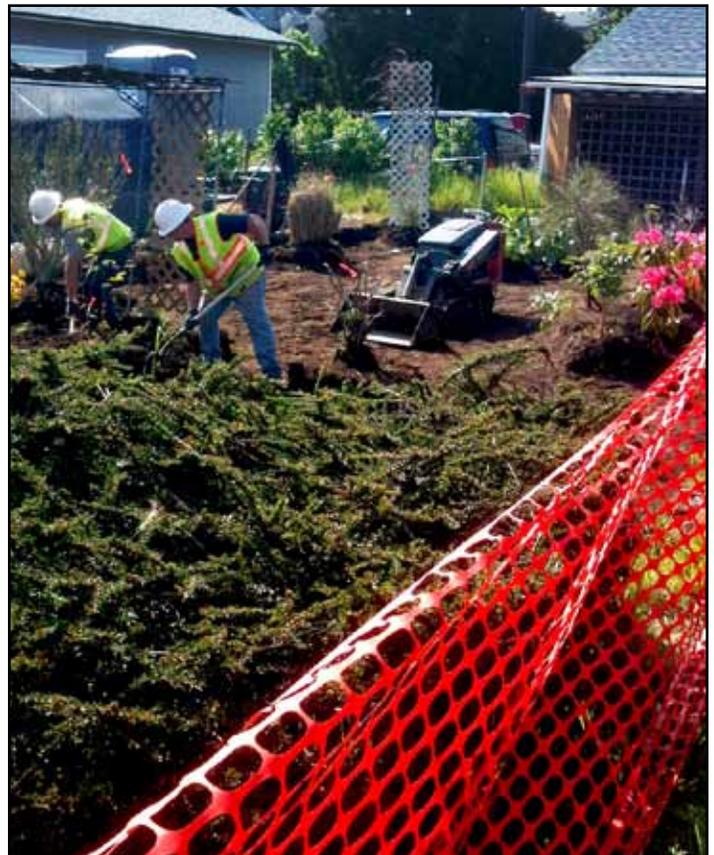
The Corps contacted owners by mail, phone or

in person, telling them their property might be contaminated, seeking permission to test the soil and clean each property.

"After explaining what the project was all about, most people were happy we were coming in to investigate and that we had the means to deal with contaminated soil," said Jayson Osborne, a Corps biologist who went door to door explaining the project and gaining rights of entry.

However, not everyone immediately consented.

Continued on page 8, see 'cleanup'



Workers excavate a property in Ruston, removing contaminated soil. (U.S. Army Corps of Engineers photo)

Green Duwamish gets ecosystem restoration

By Patricia Graesser
Public Affairs Office

For more than 100 years, the Green/Duwamish River system was altered in a way that degraded its ability to function as clean, productive habitat for fish and wildlife.

The Green/Duwamish Ecosystem Restoration Project is a comprehensive restoration program for the entire ecosystem, spanning the tidal estuaries to the spawning and wildlife habitat areas in the upper basin.

The Lake Meridian Outlet and Upper Springbrook Creek projects, nearing completion now, are two of 45 separate projects identified for restoration of critical habitat in the Green/Duwamish River watershed.

The Seattle District started construction in May of the Lake Meridian Outlet ERP, a \$2.3 million project to build about 2,500 feet of new stream channel. Sponsored by Kent, Wash., the project extends from the outlet of Lake Meridian at Lake Meridian Park to the confluence with Soos Creek.

"We are pleased to move ahead with this project that will ultimately reduce flooding in the surrounding neighborhoods before the next rainy season," said Beth Tan, City of Kent senior environmental engineer. "We appreciate the partnership between the city and the U.S. Army Corps of Engineers that have made this im-



A crew excavates the new channel for Upper Springbrook Creek in challenging muddy conditions. (U.S. Army Corps of Engineers photo)

provement possible."

U.S. Veterans Construction and Management, Corp., of Buffalo, N.Y., is building the project, which should be completed in April 2012.

"This is part of a phased project," said Gordon Thomson, Green/Duwamish program manager. "Phase one, completed in 2007, consisted of building an outlet control structure at the lake to regulate and release flows longer into the summer months into the new channel system."

Also in May, Seattle District began construction of the Upper Springbrook Creek ERP, a project funded by the American Recovery and Reinvestment Act. It restored a 900-foot stream that was running through a roadside ditch along the North side of South 55th Street in Renton, Wash. By building a new channel, the habitat and spawning potential for this section of stream is maximized.

The project included a new box culvert under South 55th Street for fish passage. The Upper Springbrook Creek is one of a few remaining spawning areas for coho salmon in the Green/Duwamish River watershed.

Performance Systems Inc., a small business based in Fruitland, Idaho, built the \$685,000 project, which was sponsored by the City of Renton.

The team completed project con-

struction in November.

"Within 24 hours of the team diverting water into the new channel, there were salmon moving up it," said project manager Lynn Wetzler.

Since the Green/Duwamish ERP was authorized in 2000, the district has built five projects, including Upper Springbrook and Lake Meridian Outlet. An additional five are in the works, with a contract awarded for Riverview Park construction and design underway for a project on the Enumclaw plateau at Big Spring Creek.

"The ERP is unique in the Corps I think. With its 45 elements we are attempting to have a comprehensive approach to restoring a system," said Thomson.

The program has continued support from local communities. "The projects provide ecosystem restoration, but also reduce flood risk. By giving the water more room to move around, in a more defined channel there will be less flooding," said Thomson. "Neighboring residents have said they are very happy with the projects."



Fish rescue operations at Upper Springbrook Creek safely move fish out of the construction zone. (U.S. Army Corps of Engineers photo)

*You can see video of salmon spawning: <http://bit.ly/vXVLwY> or by scanning the image with a QR code reader on your smartphone.



Full capacity:

Engineers, scientists give go-ahead for ma

By Patricia Graesser
Public Affairs Office

On Sept. 16 Col. Bruce Estok, Seattle District Commander, announced that he is confident that he can operate Howard Hanson Dam to its full flood storage capacity as designed now that important risk reduction measures are nearing completion.

Seattle District engineers and scientists concluded that the Corps could operate the dam this season to hold its design full pool – an elevation of 1,206 feet above sea level – with low risk to the dam.

“All indications are that the new measures will perform as intended to full flood storage capacity,” said Col. Estok. “However, until the dam experiences a flood above summer pool level [1,167 feet] there isn’t 100 percent certainty of how the new measures will perform.”

Engineering, Operations and Construction all worked to develop a monitoring plan to ensure effectiveness of the corrective measures, especially during high flow events.

Drainage improvement work was completed and a final inspection made Oct. 28. Drains through the area of highest concern, known as the short path seepage area, were

completed and tested by September.

The reservoir at Howard Hanson Dam reached a summer elevation of 1,167 feet above sea level in June, allowing engineers, geologists and other scientists to run a battery of tests to gather more data on the right abutment drainage improvements that are completed and underway.

The Corps of Engineers constructed a seepage barrier (grout curtain) in November 2009 to reduce seepage and improve the drainage collection system of the right abutment by installing drains that more effectively direct seepage into the drainage tunnel.

Last flood season the Corps had confidence that we could safely store water to at least elevation 1,170 feet. Testing showed the work was successful, however, the 2009 grout curtain is not considered a permanent repair.

Along with controlling seepage in the right abutment by installing additional vertical and horizontal filtered drains this year, the Corps is pursuing projects to increase confidence that the dam can safely operate during extreme flood events that involve spillway use. These measures, to be completed in 2012, include:

- Installation of additional log booms to prevent debris from blocking the spillway
- Further stabilizing the spillway by improving how it is anchored to bedrock
- Placing additional rock along the upstream face of the dam to protect it against erosion from fast-moving water in the event the spillway is used



Geologists oversee large diameter borings as part of the dam's safety program (Army Corps of Engineers)



Crews drill 50 feet down through the bottom of the drainage tunnel for new under-drain installation.

Maximum storage at Howard Hanson Dam



Part of the drainage improvement work at Howard Hanson Dam. (photos by U.S.

The Corps is also making good progress on a detailed dam safety study to ensure all significant and credible risks have been evaluated. The study is scheduled to be completed by the end of 2013.

Corps leaders have provided updates to local and state officials on the situation in which the message is about residual risk to those in the Kent Valley.

The return of full operational capacity of Howard Hanson Dam, in partnership with a functioning levee system downstream does not eliminate all risks of flooding.

The dam and levees only reduce the risk of flooding. Emergency Management continues to work with the County and local communities to prepare for the risk of flooding to downstream areas using the best available information.



New well heads line the top of the short path seepage area at Howard Hanson Dam.



A drill makes its way 170 feet down through the abutment and into the drainage tunnel, making a hole for a new vertical filtered drain.

Puyallup Basin flood team volunteers come prepared



C.J. Klocow, Civil Programs and Projects Branch project manager, (left) drives a screw into a staff gauge along the White River with Steve Miller, Puyallup Basin Flood team lead. Dana Ballard, Operations Division, stripes a tree with spray paint at a lookout point along the river. These efforts enable the Corps to relay accurate river level information to water managers in the district to minimize flood damage. (U.S. Army Corps of Engineers photos by Tanya King)

'Cleanup' continued from page 4

"There are still a lot of (Asarco) retirees in the area who worked in the plant and they don't feel like what they were doing was dangerous," said Osborne, who also was responsible for sample quality assurance. "People who had been living with the contamination every day didn't believe it was a problem. They were more concerned about having their lawns or gardens disturbed as part of the cleanup."

To stay on schedule, the Corps identified contaminated areas and executed cleanup almost simultaneously. They attained rights of entry for some properties while others were sampled, determining what areas needed cleaning and to what depth.

"Traditionally we would have done this type of project by sampling all the properties first and making determinations of what's clean and what's dirty," Ehlers said. "Then we would build packages for each property where cleanup work is necessary and put a construction contract

in place to do that work. However, because ARRA funding required immediate construction execution, we actually had both tracks going simultaneously."

By August 2010, a contract was in place to start cleanup construction activities based upon estimated quantities since sampling was still ongoing. Once completed, it revealed about half the properties required remediation. They were then segmented to indicate which portions needed to be excavated, to what depth and if any special considerations needed to be made.

Soil exceeding more than 230 parts per million for arsenic, or 500 ppm for lead, was taken to a permitted landfill. Next, confirmations samples were taken to ensure properties met EPA standards before workers brought in clean soil and restored lawns with sod or hydroseed.

By September 2011, the Corps cleaned up and restored 123 properties. The owners received letters stating their property complied with EPA requirements for protection of human health. The letters are part of

a package including supporting documentation, chronologically covering all work on the property from sampling to final restoration – indicating work completed, to what depth and contaminates left in the soil.

This is important because extensive redevelopment or digging without considering what remains at depth, property owners risk recontamination

"Even when a yard is cleaned, lead and arsenic are still present," Ehlers said. "The property is clean to a certain depth, usually not more than 18 to 36 inches, and clean materials we placed on top are a protective barrier from exposure to deeper materials that may still contain heavy metals, but at levels below the cleanup criteria."

As the Corps wraps up cleanup, the EPA continues gathering information on other potentially affected properties. It's likely there'll be more sampling and cleanups, but the EPA and the Corps' successful partnering is another step toward completing the cleanup and protecting the community into the future.

Hawk Education Center complete

Medal of Honor recipient and former educator John Druse “Bud” Hawk’s family was on hand for the dedication ceremony of a new education center honoring him on Joint Base Lewis-McChord’s North Fort, Aug. 19.

The building was dedicated to Hawk, who joined the Army in Bremerton, Wash., in 1943 and earned multiple purple hearts and numerous other awards for his service during World War II. After his service, he became a teacher and principal in Central Kitsap School District.

“This education center will offer opportunities to continue lifelong learning,” Garrison Commander Col. Thomas Brittain said in a Northwest Guardian article. “It will be inspiring to new generations of service members and family (members) through his example — both in his military service and in his service to his community as a professional educator.”

The Seattle District oversaw construction of the \$13.9 million facility, a design-build project contracted to Doyon Project Services and designed by Burgess & Niple.

Customer Kathleen Connolly, Education Services Officer at JBLM, was very engaged in the project, “which contributed to the success

of the project,” according to Project Manager Ken Weaver. He said Connolly helped answer questions about optimum space configuration because of her familiarity with how the spaces would be used by the schools going into the spaces.

“It is going to serve a population that until now had been underserved,” said Connolly. The population on North Fort has grown significantly, and they had, until now, been relying on the Stone Education Center on the main post.

The new center is conveniently located in the middle of a troop area across from the dining hall, barracks and fitness center and is within walking distance to the Shopette.

“It is a testament to the Army’s dedication to lifelong learning for soldiers and their families,” said Connolly.

The facility provides a counseling area for education advisors to help Soldiers and family members understand and select the right education options to meet their needs.

It has a computer center with 60 computers hooked up to the commercial network, nine 30-seat classrooms and a 165-seat auditorium that will hold classes, training and after work events such as Family Readiness

Group meetings.

Smaller than Stone, it nevertheless offers key educational service plus special amenities. The space hosts five colleges and universities, including a showcase flagship location for Pierce College’s Emergency Medical Services training program.

Amenities include a student lounge with coffee; sandwich carts from the restaurant chain, Subway; wireless Internet service; library kiosk and common access card pin reset station.

The center had enough points to qualify as Leadership in Energy and Environmental Design silver, according to project engineer Michelle Dewey. The facility achieved 30 percent energy savings through use of use of high efficiency heating, ventilation and air conditioning equipment, light fixtures, and other means. The designers reduced water use through less irrigation and use of low-flow fixtures, including dual-flush toilets. Doyon used local/regional materials and materials with recycled content and more than 75 percent of construction waste was diverted from disposal (recycled), according to Dewey.

“It shows the commitment of the Army to provide the best facilities for our soldiers and their families,” said Connolly.



The Hawk Education Center opened at Joint Base Lewis-McChord Aug. 19, and was named after John Druse “bud” Hawk, a World War II veteran.

Safety Corner:

Winter driving season means more dangerous roads; It's time for drivers to prepare vehicles, use caution

by Seattle District Safety and Occupational Health Office

Since darker, colder and damper weather is upon us, it's a good time to review a few winter driving tips.

Before you drive:

- Check your battery as cold weather starts require one that's fully charged. Recharge or replace weak ones. Have your charging system checked, too.
- Check your ignition system since damaged ignition wires or a cracked distributor cap may cause a sudden breakdown.
- Regularly ensure lights function properly and headlights are properly aimed.
- Check the brakes and service them if needed.

- Make certain your snow tires or all-season radials are properly inflated and in good condition. Ensure all four tires have the same tread pattern for even traction.
- Have the exhaust system fully checked for leaks that could send carbon monoxide into your vehicle.
- Check your radiator and hoses for cracks and leaks. Make sure the radiator cap, water pump and thermostat work properly. Test the strength of the anti-freeze, and test the functioning of the heater and defroster.
- Make sure wipers are in good condition and fill up on winter washer fluid.

Once your vehicle is ready to go, remember these tips for safe driving:

- Clear your vehicle of ice and snow. Ensure windows are clear of ice and fog.
- Turn on your lights when driving. If visibility becomes poor while driving, pull over until it clears up.
- Watch out for black ice. Early morning and late evening is when

road icing is most likely to occur. Icy sections are most likely found on and under bridges, high sections of roads, tops of hills exposed to wind, in valleys and forest, and roads near rivers, lakes and along foggy areas. It's also likely that black ice may be on wet roads.

- Avoid driving while fatigued. Getting adequate rest before driving in winter weather reduces your risk.
- Never warm up a vehicle in an enclosed area.
- Keep your gas tank at least half full to avoid gas line freeze-up or stranding in unexpected traffic snarls.
- Do not use cruise control when driving on slippery surfaces.
- Always look and steer where you want to go.
- Use your seat belt every time you get into your vehicle

Even if you drive safely, prepare yourself and ensure that your vehicle is winter-ready, you could still meet up with another driver who is not as careful.

Should you end up in a collision in a government vehicle, please remember to follow the required reporting procedures.

You can see them on line at: <http://bit.ly/srk3Gu>. If you have questions, please talk to your supervisor or Logistics.

- AAA online provided some of these helpful tips.



Welcome to the district family



Alan Manville
Civil Engineer,
Environmental Branch



Lloyd "Buck" Bucholtz
General Maintenance



Charles Yusi
Power Plant operator



Jeremy Farrington
General Maintenance



Dustin Gordon
Contracting

Around the district

Congratulations:

Shelly Trulson has been hired as librarian under the Student Career Experience Program. She's pursuing a Master of Library and Information Science degree.

In October, **Col. Bruce Estok**, announced **Joe Summers** as the new Chief Joseph Dam operations project manager. "Joe's technical background, experience, and leadership distinguished him from the other quality candidates for this important leadership position," said Estok.

Deployed:

Vivian McGinty, Gary Heyer and **Leianna Perkins** recently deployed to Kabul, Afghanistan.



Vivian McGinty

Joe Lacanlale deployed to Kandahar, Afghanistan.



Joe Lacanlale

Transferring/ Moving On:

Chief Joseph Dam's **Gerry Johnson's** last day at work was Nov. 2, while **Stephen Fisher** left

Mud Mountain Dam the first week of November. **Brandon McMillen**, Mud Mountain Dam, left Seattle District Oct. 31.

In mid-November, rehired annuitants **Peter Simmons** and **Larry Merkle** completed their run of employment.

Out and About:

Richard Smith gave a presentation on Howard Hanson Dam's right abutment issues at the Association of Engineering Geologists' conference in Anchorage, Alaska, Sept. 22.

For National Public Lands Day, Sept. 24, a work party was held at Chief Joseph Dam, which helped grub out an interpretive birding/tree-viewing trail. Twenty community members gathered with their work gloves, hoes and shovels to carve a 1,400-foot trail on Columbia River's left bank, an area about 2,500 feet downstream from the dam. This project is a collaborative effort with the Corps and the community to beautify properties adjacent to the dam, making them accessible to the public.

Retiree **Noel Gilbrough** participated in the American Lung Associa-

Campaigning for charity



Seattle District volunteers participated in numerous fundraising and community service activities from Oct. 6 to Nov. 17, supporting the local community and charities. They raised awareness and money for the Combined Federal Campaign, nearly reaching their \$95,000 goal. (U.S. Army Corps of Engineers photo)

tion's "Big Ride Across America" His journey began June 20 in Seattle and ended in Washington D.C., Aug. 6. Averaging 83 miles per day, he rode a total of 100 days.

The Corps' regulatory program along with the state's Ecology and Health Departments participated in a presentation July 28 for shellfish and water quality certification. The focus was the permit process for commercial shellfish aquaculture activities.

At the Infrastructure Systems Conference in June, **Sharon Gelinas**, hydrogeologist, along with Li Ma, Shannon & Wilson Inc., presented a groundwater model used

to design the tunnel rehabilitation at Howard Hanson Dam.

Retired:

Retiring in November were **Rich Sanchez**, Chief Joseph Dam and **Lou Feller**, construction support branch electrical engineer.

Pat Guira retired from Seattle District's Joint Base Lewis-McChord office Oct. 31. Guira retired with more than 33 years of federal service, 27 of which were in Seattle District.

Gregory Segal, civil engineer, retired Sept. 30 after 36 years. He spent a majority of his career working military construction.



Joseph Hankins
Lake Washington Ship
Canal Machinist



Russell Korbel
Power Plant



Joshua Hilderbrand,
Military Branch, Office
Support Assistant



Dawn Morrow
Office Support
Assistant



Phillip Saint
Power Plant Mechanic



Tanya King
Public Affairs Office



Bill Dowell
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30 year anniversary: remembering the W. T. Preston



After serving the region more than 50 years, the U.S. Army Corps of Engineers retired the sternwheeler debris vessel W.T. Preston Oct. 31, 1981. Commissioned into service in 1929, the snag boat operated as far north as Blaine and south to Shelton and Olympia, Wash., according to retired vessel captain Virgil "Sandy" Welsh Jr. In a typical year the Preston operated 11 months of the year and removed an average of 3,500 cubic yards of debris annually.

It is now moored in Anacortes, Wash., and listed on the National Register of Historic places. The Preston serves as a maritime museum open to the public.

The debris clearing mission in the region dates back to 1885, 11 years before the establishment of the Seattle District, when the sternwheeler Skagit began clearing the Skagit River. Today, the debris boat Puget keeps the Puget Sound clear of hazards to navigation, collecting more than 2,000 tons of debris a year.