

Dan Roper: This Flagship is for you

Dan Roper serves as the project engineer and contracting officer's representative on the District's top priority project, the \$112 million Mud Mountain Dam Fish Passage Facility. The project's success is vital to the District's reputation for Delivering the Program and affects important stakeholders across the region. He consistently displays accountability, flexibility, adaptability and responsiveness. Dan's extensive knowledge and history of the project allowed him to seamlessly transition into the post-award construction phase in a fantastic manner and really set the project delivery team up for success. Thank you Dan!





Cover:

JoAnn Walls, Lisa Scott, Katie Garon and Brian Stenehjem visit the Mud Mountain Dam 9-foot tunnel November 30, 2017. The contractor had recently patched holes in the steel liner and poured a test section of the permeable concrete base leveling layer for the granite blocks used to line the tunnel. Mud Mountain Dam is a flood control dam protecting the lower White and Puyallup River valleys from flooding by holding back water from heavy rains and melting snow in its reservoir.

Photo by Richard Smith

<u>Flagship</u>

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Delivering Strong: Our Duty to the Pacific Northwest

As we march into a new fiscal year I want to thank you and highlight some of the significant accomplishments you achieved in fiscal 2018. Every day in Fiscal Year 2018 I saw you embody the Army and District value of Duty - you fulfilled your obligations.

As USACE Commander Lt. Gen. Todd T. Semonite says, "The most strategic thing each of us can do every day is DELIVER THE PROGRAM!" and you certainly delivered.

In addition to the unprecedented accomplishment of standing up and staffing a construction field office in Aguadilla, Puerto Rico, and restoring power to thousands, those here in the district area of responsibility reached milestones and knocked down targets one after another.

To support the key mission of disaster response at home, we fought fall flooding on the west side and record spring snowmelt on the eastside, then completed 12 levee repair projects and 95 levee inspections along with restoring 2.5 miles of Shoalwater erosion protection.

In terms of sheer numbers, the District awarded 1,016 contract actions worth \$321 million in FY18. We also increased our scale of awards by 65 percent from FY17 (\$193 million) and simultaneously worked key FY19 actions (to include MILCON awards and additional contracting tools) in parallel to year-end execution in order to set conditions for improved program delivery for FY19. Additionally, you awarded 100 percent of all Lewis and Clark Project Office (LACPO) contracts and all but two of all of our other program contracts by early evening of September 28—two full days before end of year close-out!

Even with a flurry of year-end activity, we maintained our focus on MOVING DIRT, achieving the beneficial occupancy date early on the MEDEVAC Hangar project at Yakima Training Center in September. In all, the district oversaw \$210 million in construction placement across four states for civil/IIS/military customers.

For the hydropower Large Cap Program, our combined year-end expenditures were 111 percent of the target and we executed eight of eight total planned awards. Our operating projects saw huge undertakings completed or in progress in FY18.

The turbine runner replacement project at Chief Joseph Dam wrapped up, the culmination of 10 years of effort. We awarded the replacement of the Stoney Gate Valves at the Chittenden Locks. Construction is well underway and on schedule for the 9-foot Tunnel project at Mud Mountain Dam, and the Fish Passage Facility team met deadlines for contract award. construction start and in-water work start.



Seattle District Commander Col. Mark A. Geraldi

As a direct reflection of our ability to deliver, the District received \$76 million in the FY18 Civil Works work plan, including funds to move forward with the Seattle Harbor and Skokomish General Investigations and Puget Sound restoration work. In addition, our District saw one of the nation's scarce new starts for the Tacoma Harbor study, quickly signed a feasibility cost sharing agreement with Northwest Seaport Alliance, and executed the charrette in September.

I could go on and on about permitting 749 aquaculture farms in 12 months (94 percent of all applications), resolving a dozen legal challenges, and providing technical and project management expertise for environmental cleanup at installations, former installations and other contaminated sites around the Northwest.

In projects large and small and in your daily service, you clearly exemplified our Seattle District value of Duty. You worked together to meet mission needs, supported others, quickly adapted when friction points developed, and offered to help without waiting to be asked.

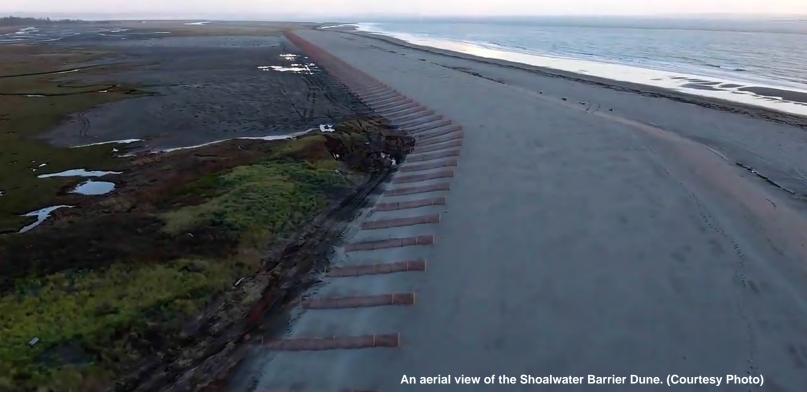
Your duty to USACE, our mission and our people is truly inspirational.

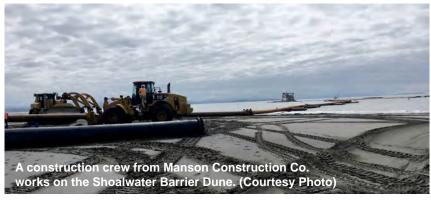
As we move forward this fiscal year, I look forward to your continued success as we face new milestones and challenges.

Thank you for all you do!

-Delivering Strong for the Pacific Northwest!

Shoalwater Barrier Dune Repair





A fter three storm events in December 2015 and October 2016 caused significant damage to the dune, Shoalwater Bay community was left with a significant decrease in protection from coastal storms.

Manson Construction Co. was awarded the \$19.9 million federally-funded dune repair project.

Repair work included dredging approximately 750,000 cubic yards of sand from a borrow site, which provided materials to rebuild the 12,500 foot-long protective berm. In addition, the project maintained habitat for the Pacific Coast western snowy plover and

streaked horned lark, two bird species federally listed as threatened under the Endangered Species Act.

The Shoalwater Bay Tribe welcomed Corps officials for a tribal blessing and a ribbon cutting ceremony, October 5 in Tokeland where Tribal Chairperson Charlene Nelson declared those who made the project possible heroes.

"A lot of people have worked very hard to preserve the berm and the protection it provides us," said Nelson in the tribe's newsletter. "We say Masi



Col. Geraldi, Charlene Nielson and staff representing elected officials pose for a photo with the "Heroes" cake. (Photo by Dallas Edwards)

(many thanks) to every one of them."

During his remarks at the ceremony, Seattle District Commander Col. Mark Geraldi highlighted the environmental aspects of the project and thanked the tribe for its continued partnership.

PROJECT INFORMATION:

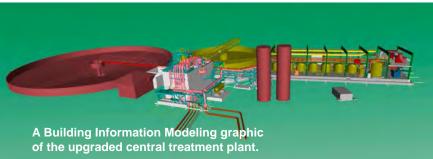
Name Shoalwater Dune Repair Project

Location: Tokeland, Washington

Project Cost: \$19.9 million Corps PM: Daryl Downing

Contractor: Manson Construction Co.





In an effort to remove heavy metals and provide cleaner water to Idaho's Coeur d'Alene River, U.S. Army Corps of Engineers officials are supervising the dismantling and corresponding upgrade of an existing central treatment plant in Kellogg, Idaho.

The plant, which currently treats two million gallons of wastewater issuing daily from the Bunker Hill Mine, is being upgraded as part of a \$48.6 million contract between the Corps and prime contractor Wood Environmental and Infrastructure Services.

The work will improve overall water quality by collecting and treating zinc-contaminated groundwater that flows through mine waste and contaminated sediments under the mine's central impoundment area before discharging into the Coeur d'Alene River's south fork. The plant removes zinc and other metals by precipitating them as hydroxides in a sludge that is sub-

sequently disposed in an impoundment area. The upgraded plant will produce high density

sludge, and the project includes construction of a new 110,000 cubic yard membrane lined sludge impoundment area designed to last 30 years.

"This project will provide reliable long-term treatment of contaminated mine waters and groundwater which will result in much cleaner waters flowing into the Coeur d'Alene River, Lake Coeur d'Alene and into the Spokane River," said Rodney Zion, Corps project engineer.

Prior to upgrades, the plant's water treatment capacity was approximately 2,500 gallons per minute, or gpm. While that amount may



Workers install a geomembrane liner system within one of the triple cells at the newly constructed 110,000 cubic yard sludge impoundment area. (Photo by Greg Zoeller)

seem adequate, Zion explained that heavy precipitation and spring snowmelt events infiltrate the mine and the corresponding increase in mine water discharge can approach the plant's previous maximum treatment capacity. Capacity is also being expanded to accommodate the treatment of contaminated groundwaters. The upgraded facility will be able to treat 5,000 gpm and is designed to accommodate future expansion to 10,000 gpm.

PROJECT INFORMATION:

Name Bunker Hill Mine Project

Location: Kellogg, Idaho
Project Cost: \$48.6 million
Corps PE: Rodney Zion

Contractor: Wood Environmental and Infrastructure



attle District successfully responded to local request for flood fighting assistance throughout eastern Washington, northern Idaho and Montana. More than 25 team members deployed while the emergency operations center remained activated in the District office from May 4 until June 5.

District flood teams were heavily engaged in five different river basins throughout most of May. District teams completed 21 requests for direct assistance. The Corps provided about 1,460,500 sandbags, 2,800 Super Sacks and five pumps with 1,400 lineal feet of hose and delivered 2,340 lineal feet of Hescos to local governments and Tribes.

Direct assistance requests were spread from the Okanogan River basin in Washington, the Clark Fork River basin in Montana and in the Pend Oreille River basin in Idaho and Washington. The District also provided technical assistance throughout the area to Tribes, counties and cities.

USACE Seattle District Flood Response Spring 2018

- 21 Requests for Direct Assistance Completed Counties 13 Okanogan, 3 Sanders , 1 Pend Oreille, 2 Bonnel 1 Missoula; Colville Tribes
- 9 Communities Received Technical Assistance Okanogan Co., Colville Tribe, Missoula Co., Benewah Co., Yaki County, Kalispel Tribe, Stevens County, Twisp, Pend Oreille Co.
- 4 River Basin Flood Teams Deployed
- 50 USACE Team Members Deployed



5 pumps with 1,400 lineal feet of



1,480,500 sandbags delivered



2,800 Super Sacks delivered



2,340 Lineal feet of Hesco



Upper Clark Fork

4 Direct Assistance Missions completed

Okanogan

✓ 14 Direct Assistance Missions completed

Pend Oreille and Lower Clark Fork ✓ 3 Direct Assistance Mission completed









The Corps identified a need for the ▲ Aguadilla Area Office and chose Seattle District to set up and lead it in support of power and restoration efforts in the western part of the island. This initial team consisted of Seattle District Deputy Commander Lt. Col. Andrew Olson, Quality Assurance Representative Jim Lampman and Joint Base Lewis McChord Area Engineer Steve Kelley, who were tasked with setting up the office and beginning power restoration in the area. The desire to help the local population drove their efforts to turn the power on quickly. They were surprised by how patient, resilient and appreciative the Puerto Rican people were.

The team wanted to make sure communication with the contractor was strong and so the goal was to co-locate the Corps office with the contractor's area office. They set up shop at Rafael Hernandez Airport, which operated as

Ramey Air Force Base up until 1974.

There were other organizations already in place at the site, includ-

ing Federal Emergency Management Agency and several military units that focused on providing emergency food, water and medical care to the local population.

Olson was very proud of the team's desire to come together to help the Puerto Rican people.

"As far as the team goes, I was always impressed with everyone's willingness to adapt," said Olson. "As part of this emergency response mission we had individuals with various levels of experience and everyone had an outstanding 'can-do' attitude and I was happy to see everyone come together to get the job done. I was honored to be part of the team."

Some estimates put the damages



(Left) Members of the Corps, PREPA and contractors meet the first morning after contractor crews arrived, November 7, 2017. (Right) The Aguadilla Area Office staff hold an evening meeting. (Courtesy Photos)

from the hurricanes in Puerto Rico at nearly \$100 billion.

"I'm not sure anyone understood the actual scope of the damage from the hurricane or the condition of the power system before it hit," said Lampman.

Lampman noted the Puerto Rican people's positive attitude and kindness towards the team and that made him proud to be there.

At the end of March, in order to better service the last 4 percent of customers on the island, the Aguadilla office relocated to the eastern mountains of the island in Caguas and was renamed the Montaña Area Office. In mid-April, the office leadership began to transition from Seattle District to Jacksonville District.

FY18 in Review

Col. Geraldi and Damon Lilly with Santa John Hicks during the 2017 holiday reception at the Chittenden Locks.



Michael Weigley and Darim Yi work together to construct a popsicle stick bridge during an Engineers Week activity.



The largest known cruise ship to transit Lake Washington Ship Canal, the Star Legend, locks through.

Natural Resource Specialist Kyle Mundy leads a hands-on activity in celebration of Earth Day at Chief Joseph Dam.



June 27

Ground is broken for the 205th Regional Training Institute Barracks, designed and built by Army Corps at Yakima Training Center.





August 21

August 17 December 16 February 21 April 18

November 3

Biologist Peter Gibson participates in hurricane relief efforts in Puerto Rico.



January 25

A crane hoists finished sections of roof onto the newly constructed USACE barracks project at Joint Base Lewis-McChord.

March 21



Natural Resource Management employees attend visitor assistance training at Chief Joseph Dam.



June 20

Biologists Craig Theriot and Danielle D'Amato conduct an Engineer Research and **Development Center** (ERDC) herpetological survey below Mud Mountain Dam.

Seattle District employees pause for a fun photo during 2018 Corps Day.



June 28

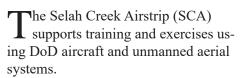


Col. Geraldi and NWSA CEO John Wolfe sign a Feasibility Cost-Sharing Agreement (FCSA) to initiate a study at Tacoma Harbor.

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A primary objective of this project was to repair the existing airstrip's failing and undersized paved surfaces to support C-17 Globemaster III aircraft operations. Before this project, the airstrip could not support this aircraft. This project will enable the Yakima Training Center to expand training capabilities.

"Repairing SCA to current standards provides a multitude of training opportunities, including Air Force short field landings and strategic air operations in order to deliver troops and equipment directly to the adjacent convoy live fire ranges," said Alan Manville, USACE

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project manager. "In addition to a multitude of Air Force crew tasks, SCA will also support launch/recovery operations for the Army's Unmanned Aerial Systems."

The project repaired the airstrip using current design standards including aggregate base improvements and asphalt surface placement. Airstrip sur-

faces included landing zone, taxiways, two turn-a-rounds, clear zone grading and pavement markings.

All paving work was completed on October 27 and a ribbon cutting ceremony is planned for November 15 at the project site.



(Left and right) Crews work on the Selah Creek Airstrip at the Yakima Training Center. (Courtesy photos)

"The USACE/Alutiiq construction team has done a superb job completing this project on schedule in the face of adversity that included union strikes, natural gas shortages and weather delays," said Manville.

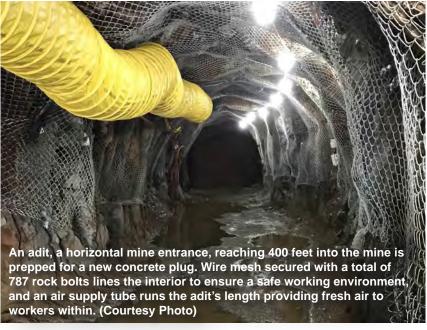
PROJECT INFORMATION:

Name Selah Creek Airstrip Location: Yakima Training Center

Project Cost: \$21 million Corps PM: Alan Manville

Contractor: Alutiiq General Contractors, LLC







Seattle District and the Bureau of Land Management are working together to repair an aging adit plug and deteriorated acid mine conveyance system at the Formosa Mine in Riddle, Oregon. Together these features prevent uncontrolled release of acid mine drainage into the watershed. As part of our partnership with BLM, Seattle District

negotiated and awarded a \$4.2 million cost reimbursable construction contract to North Wind Services to repair the adit plug and acid mine conveyance system.

Recently, we have successfully opened the portal August 11 and completed placement of the new concrete plug October 15.

PROJECT INFORMATION:

Name Formosa Mine Project Location: Riddle, Oregon

Project Cost: \$4.2 million
Corps PM: Robert Yust
Contractor: North Wind Services



(Top) Aerial view of Mud Mountain Dam **Fish Passage Facility construction** on the White River. (Courtesy Photo) (Right) Puyallup Tribal Fisheries' Blake Smith with a Chinook salmon during biological inventory and hatchery stock collection operations at the current trap and haul facility. The 1941-built facility was designed to move 20,000 fish annually. The new facility is designed to transport 60,000 fish a day, upwards of 1.2 million fish per year, during pink run years. (Photo by Bill Dowell)

contract to build the largest trap and haul facility in the nation was awarded by Seattle District officials March 14, 2018.

The project will transport Endangered Species Act-listed and other fish around Mud Mountain Dam near Buckley, Washington. Kiewit Infrastructure West Company's \$112 million bid and construction plan for project completion by December 2020 earned it the contract award.

"The contractor's ability to quickly construct an operational facility was one of the primary evaluation criteria," said Seattle District Senior Project Manager Leah Hauenstein.

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The Corps is pursuing an aggressive

schedule to minimize risk to ESA-listed species. The past three years have seen the best returns in 71 years of the White River Chinook run records. The 2016 count was 9,347, 2017 was 16,271 and 2018 is above 8,350.

With historical lows of only a few dozen Chinook 20 years ago, officials believe recent rebounds are results of collaborative efforts in managing ESA-listed fish and designated critical habitat by officials from the Corps, NOAA Fisheries, Muckleshoot and Puyallup Indian Tribes, and Washington Department of Fish and Wildlife.

The Corps' regional design team for this massive project included more than 150 employees from three Corps districts and two architecture and engineering firms. Several regional stakeholders also collaborated in the design, including the Muckleshoot Indian Tribe, Cascade Water Alliance and National Marine Fisheries Service.

PROJECT INFORMATION:

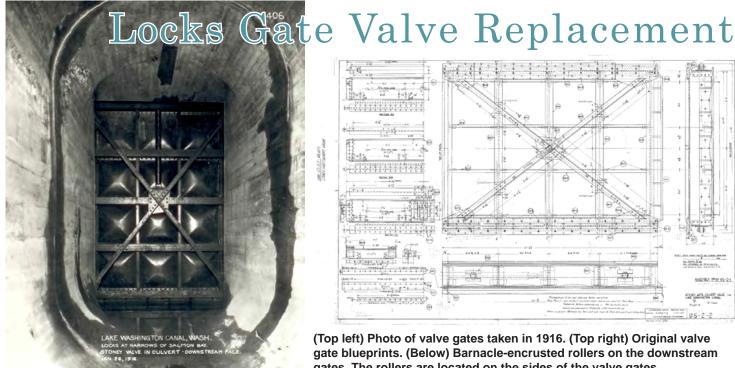
Mud Mountain Dam Fish Name

Passage Facility Location: **Buckley, Washington**

Project Cost: \$112 million Corps PM: Leah Hauenstein

Contractor:

Kiewit Infrastructure West Co.



(Top left) Photo of valve gates taken in 1916. (Top right) Original valve gate blueprints. (Below) Barnacle-encrusted rollers on the downstream gates. The rollers are located on the sides of the valve gates.

contract to replace the original Alarge lock chamber's 100-yearold filling culvert gates at the Hiram M. Chittenden Locks was awarded by Seattle District officials September 10, 2018.

Ferndale, Washington headquartered IMCO received the contract award for their \$10.5 million bid. The project will replace the original valves, called Stoney Gate Valves, designed and originally used during the Panama Canal construction.

President Theodore Roosevelt initially appointed seasoned railroad builders to lead the canal construction project along the Panamanian Isthmus in 1904. However, in April of 1907, he transferred supervision to a group of U.S. Army Corps of Engineers officers and civilians. In 1910, about the time Seattle Corps of Engineers received funding to build the Chittenden Locks, installation of the Stoney Gate Valves began in Panama. The same system made its way into Seattle's project. The Panama Canals gate valves were replaced several years ago.

"The valves have been well maintained over the last 100 years," said Operations Project Manager Jon Hofstra. "Although, it's time. They're past the



life expectance of this type of equipment and the salt-water environment has taken its toll as well."

This is a major component of the Locks and to replace those means lengthy outages, according to Hofstra.

"Beginning in 2019 we'll start the first of four 45-day outages to replace the gates," said Hofstra. "We know this

will affect our commercial users quite a bit, but in the long run it means a more reliable lock system and less chance of an extended outage."

The current extended outage schedule is:

2019 - October 12

through November 30

2020 – February 12 through April 2, and October 12 through November 30

2021 – February 12 through April 2

The regular annual lock maintenance closure is expected to return in fall 2021, currently set for November 9 through 24.

PROJECT INFORMATION:

Name **Stoney Gate Valve Replacement**

Location: Seattle, Washington

Project Cost: \$10.5 million **David Cook** Corps PM:

Contractor: **IMCO**



The VA American Lake Seismic Corrections project provides a renovation and seismic upgrade to existing facilities on the Department of Veterans Affairs American Lake campus near Tacoma, Washington. It also consists of building a new 76,000 square foot outpatient facility, improving traffic circulation, expanding parking capacity, and demolishing ancillary building.

The project will help the VA better serve their patients and ensure their facilities are better prepared for future seismic events.

"Almost 90 percent of patients visiting the American Lake campus receive primary and specialty care services in Building 81 and 81AC. In its current condition Building 81 would be rendered non-occupiable in a major earthquake," said Alan Manville, USACE project manager. "The new building will provide a safe, modern facility that addresses the seismic concerns, and 20% projected increase in demand for specialty care, primary care, mental health care, pathology, radiology and

audiology services."

This ongoing, multi-phased project has a total project

cost of \$161.7 million and required extensive cooperation between the VA and the Corps.

"The VA/USACE construction team are co-located in a project trailer onsite," said Manville. "This close working environment has been instrumental in developing good lines of communication and fostering the partnership with VA."

PROJECT INFORMATION:

Name VA American Lake Seismic Corrections

Location: Tacoma, Washington
Project Cost: \$161.7 million
Corps PM: Alan Manville

Contractor (Phase 1): Advanced Technology Construction

FY18 4th Quarter Awards



Megan Hayes Up to GS-9



Elizabeth Chien GS-10 and above



Patricia Fatherree Supervisor

Out and About:

Laura Robinson, park ranger at Mud Mountain Dam, received a Special Appreciation Award for her work with an annual car show event at MMD for over the last 20 years.

Jon Hofstra accepted the Excellence in Concrete Construction Award for the Chittenden Locks, recognized as a legacy project. The award was presented by the Washington Aggregates & Concrete Association and the Washington Chapter of the American Concrete Institute.



Retired/Moving On:

Brian Nelson Cliff Johnson Tim Grube John Maciejewski Steven Marchand Shelia Welsh **Victor Mattice Ben Long** Mark Davis **Anitra Chew** Pat Macdonald Patricia Ortiz

Hurricane Florence:

Charles Ifft Doug Weber Tim Warren

Hurricane Michael:

Maj. Ryan Baum **Rodney Plant** Capt. Ryan Alarcon Michael Baldaia Franchesca Gilbert Seth Klein Susan Newby **Kenneth Davis**

Jennifer Brito

Deployed:

Lt. Col. Andrew Olson **James Lyon Bruce Okomura** Mamie Brouwer **Steven Kelley Teresa Boggs** John Solomon Susan Murphy Will Rackcliff **Christopher Brooks** Maria Selck

Condolences:

Gerald (Gerry) Keller, former chief of Project Operations Branch, passed away Oct. 18. Gerry retired in the early 1990s after 33 years of federal service.



Donald Baney Maintenance Worker Libby Dam







Heather Baxter Civil Engineer Hydraulics & Hydrology



Kristine Ceragioli Project Manager Civil Works Branch



Jason Chang Civil Engineer Hydraulics & Hydrology Branch



Jeff Clark Chief of Security/LE Security/LE Office



Rodolfo Forde Contract Specialist
Ops & Civil Proj. Branch



John Haygood Contract Specialist Ops & Civil Proj. Branch



Emily Higa Civil Éngineer Soils Section



John Hill Realty Specialist Realty Sérvices Branch



Sailesh Koirala Civil Engineer Soils Section



Tobie LaRoy Biologist Énv. & Cultural Resources Branch



Lead Project Manager Project Support Branch



Courtney Moore Hydraulic Engineer Hydraulic Eng. Section



Jet Summers Office Support Asst. PPPMD Planning Branch



Zachary Weed Laborer Libby Dam



Dianne Wilson Civil Engineer Military Branch

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

Better Know a Section

The LWSC Locks Operations Section



Lock Operations Section at the Hiram M. Chittenden Locks in Seattle locks vessels through 24 hours a day, seven days a week. They safely pass more vessels than any other in the country and conduct the most lockings in the nation.

The Lock Operations Section team includes: Larry Meyer, Manuel Pampo, Stephen Fisher, Chris Toney, Mike Hand (pictured) and Jason Bergerson, Scott Brake, Joseph Cavallaro, Russell Colburn, Matthew Cooke, Raymond (Scott) Diehl, Kirby Espiritu, Joe Gahan, Osman Huseny, Stephen Mayfield, Jason Preston, Victoria Shepard, Joshua Shockey, Leo Stull, Harrison Vicente and James Wilcox (not pictured).