

# Flagship

SEATTLE DISTRICT



**Corps biologists survey  
what's hanging around**

Volume XXXV  
No. 1

# Flagship

SEATTLE DISTRICT

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Around the District



Cover:

Biologist Rhonda Lucas holds a Yuma myotis (*M. yumanensis*) bat at Libby Dam.

Although the Corps regularly conducts wildlife surveys on its lands to help inform wildlife management decisions, recent bat surveys have additional relevance due to the spread of *Pseudogymnoascus destructans*, a fungus that causes white-nose syndrome.

Photo by Alana Mesenbrink

## Flagship

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## Jennifer Brito:

### *This Flagship is for you*

Jennifer Brito is a key member of the Emergency Operations Center and responsible for supporting and tracking our emergency responders. Jennifer's deployment team experience led Savannah District to request her as an ENGLINK Strike Team lead, coordinating Hurricane Michael deployments. Jennifer also assisted Northwestern Division with managing deployments for Hurricane Maria. Besides deployments, Jennifer is part of the Emergency Management construction team and takes the lead on processing contractor invoices. Thank you, Jennifer!



# Individuals Matter: The Core of our District's Strength & Resiliency

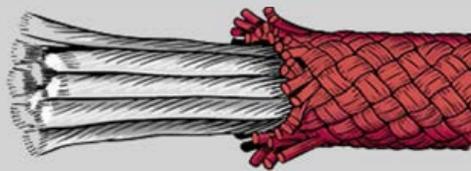
In the past few months I've enjoyed meeting with employees over lunch and holding book discussion groups. You've shared your ideas with me about how you think we can perform better as a district and how I and other leaders can enable each of you to excel in what you do every day.

A few team members have raised a concern to me that some of their peers don't see how their individual job fits into achieving our overall district mission or vision.

In the daily grind, it can be easy to lose sight of how what we do matters. However, each and every job in our district is important even if it may not be easy to see it in the moment when you are filling out forms, sitting in a meeting or repetitively executing a routine task.

Some of you have heard a mountaineering analogy or two from me – how our various divisions work together like a rope team to reach our goal, for example. Bear with me while I share another one with you – this one about the important role that each of you plays in accomplishing our mission and achieving our vision.

Modern climbing ropes, known as kernmantle ropes, are constructed to optimize strength, durability, and flexibility. Kernmantle ropes are made up of a core (kern) of individual nylon filaments braided together into larger strands that are then encased in a smooth, woven sheath of nylon (mantle). Likewise, the core of Seattle District with each individual team member joined together with other team members into PDTs and support groups, is what allows our district as a whole to deliver strong. Held together and protected by the sheath of shared District



Values and our Strategic Vision, our district workforce is strong, flexible and durable, able to sustain the strain of heavy loads.

What if a timekeeper didn't run their group's time? Or a credit card holder didn't purchase an important part? Or a design didn't get reviewed with a critical eye? The strand would unravel and the rope would be weaker at its very core.

Ask any climber which



**Seattle District Commander  
Col. Mark A. Gerald**

strand in a rope they could do without, and the answer will invariably be, "None, I need all of them!"

What if our district had no foundational values or strategic vision? Old style ropes without sheaths were inflexible and susceptible to cuts and abrasions – without our values lived on

a daily basis or lacking a strategic vision to focus our energies for the long haul, our district cannot pull its weight for long.

Thanks to the strength and resiliency provided by our kernmantle rope here in our district, we've been lifting some heavy weights together that have enhanced our reputation at the national level: Mud Mountain Dam Fish Passage met its construction start deadline, Tacoma Harbor major milestones are on schedule, critical repair work has been completed at our operating projects, important contracting tools have been awarded, we've contributed to tremendous national disaster recovery efforts; and the list goes on.

Our continued success as a district to excel in a dynamic environment and deliver strong for the Pacific Northwest, relies on EACH of you, who together comprise our kern/core as a team of teams, and it also relies on the protective mantle of our shared District Values and Strategic Vision that keeps us focused on our mission first and our people always.

**-Delivering Strong for the  
Pacific Northwest!**



# NOAA issues Howard Hanson Dam BiOp

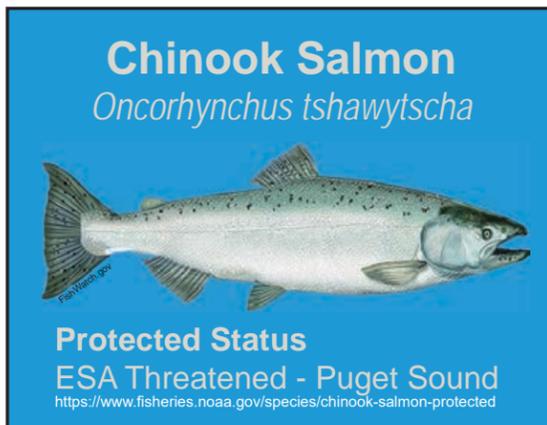
By Bill Dowell  
Public Affairs

Upstream of Howard A. Hanson Dam and its reservoir are about 100 river and stream miles of salmon spawning and rearing habitat. (Courtesy Photo by Parker Miles Blohm/KNKX Public Radio)

**NOAA** Fisheries officials issued a Biological Opinion (BiOp) February 15, requiring the U.S. Army Corps of Engineers to complete a downstream fish passage facility at Howard A. Hanson Dam (HAHD) on the Green River, 21 miles east of Auburn, Washington.

Completing the project will provide critical habitat for Endangered Species Act (ESA)-listed Puget Sound Chinook salmon and steelhead. The BiOp also addresses ESA-listed southern resident killer whales, the only endangered killer whale population in the United States. Chinook salmon are their primary food source, and reduced spawning and rearing habitat is a limiting factor for Puget Sound Chinook salmon.

Almost half of the Green River's suitable and historical Chinook salmon spawning and rearing habitat, about 100 river and stream miles, is above Tacoma Water's Headworks diversion dam and HAHD in the Upper Green River basin. Tacoma's diversion dam was built 50 years before HAHD.



A downstream fish passage and additional water storage project for Tacoma Water were congressionally authorized in 1999. The Green River serves as Tacoma Water's primary water supply. Construction began in 2003 on the fish passage which is authorized as an ecosystem restoration feature. Work stopped on the passage project in 2011 because costs were projected to exceed congressionally authorized funding limits and require reauthorization to attain more funding.

"Improving fish passage at Howard Hanson Dam is a priority for the Corps," said Seattle District Commander Col. Mark Gerald.

"This is a project we've been working on. NOAA Fisheries' BiOp provides us crucial guidance and design criteria to follow as we forge ahead."

Under Section 7 of the ESA, federal agencies must consult with NOAA Fisheries on activities that may affect ESA-listed species. These inter-agency consultations are designed to help federal agencies in fulfilling their duty and ensure their ac-

tions do not jeopardize the continued existence of a species, or destroy or adversely modify designated critical habitat. NOAA Fisheries' Office of Protected Resources issues Biological Opinions.

HAHD missions include flood risk management, fish conservation, water supply and ecosystem restoration. The last three missions are balanced while its pool elevation fluctuates about 100 feet spring through fall. Juvenile Chinook salmon tend to stay in the surface water during outmigration, so a downstream fish passage facility will have to collect fish at a variety of elevations as the reservoir changes.

"This creates a number of challenges when designing and constructing a fish passage project," said Gerald. "Science has progressed and there are now projects with similar, though not exact, conditions we can study. We'll take full advantage of the latest science as we reevaluate the previous design and move forward."

Seattle District finished HAHD construction in 1961 and operates the earthen, rock-filled dam, controlling reservoir water levels and regulating Green River flow for flood risk reduction in the winter and flow-augmentation, releasing additional water, during low-flow periods.

HAHD flood risk reduction operations have helped avoid an estimated \$21 billion in flood damages in the heavily-populated Green River Valley. Augmentation, releasing water when the river historically ran dry, typically happens summer through fall and is primarily for fish conservation, ensuring enough water is flowing for aquatic resources, including spawning and rearing salmon.

For more than 90 years, Tacoma Water has managed the Green River watershed. HAHD is three miles upstream from Tacoma Water's Headworks diversion dam, where water from the Green River is diverted by Tacoma Water. Tacoma Water has the requirement to transport fish upstream past both dams.

For its part on the Green River, Tacoma Water has already completed an upstream fish passage facility and is poised for the Corps to complete the downstream passage facility. Both organizations have also been working together, completing fish habitat projects upstream in anticipation of salmon being returned to the

watershed Tacoma Water oversees above HAHD.

"We know from experience that reopening upstream access to important spawning and rearing habitat makes a world of difference for fish," said Kim Kratz, assistant regional administrator of the Oregon/Washington Coastal Office in NOAA Fisheries' West Coast Region. "We're optimistic that new fish passage at Howard Hanson Dam,

with continued habitat restoration in the more developed lower and middle Green River, will boost fish populations toward recovery. That will in turn support tribal treaty fishing rights, and benefit critically endangered southern resident killer whales."

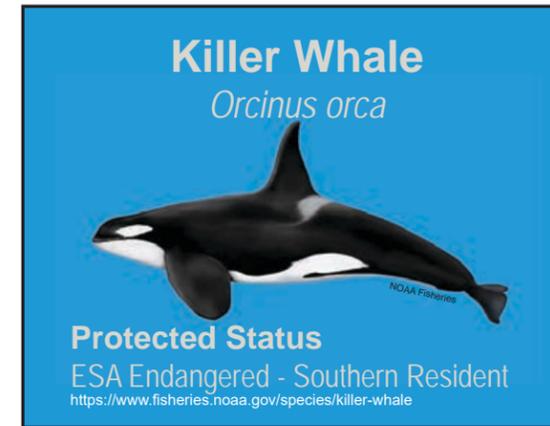
NOAA Fisheries also issued a BiOp in October 2014 for the Seattle District's Mud Mountain Dam (MMD) on the White River near Enumclaw, Washington.

Among NOAA Fisheries' recommended improvements for MMD was installing an effective upstream fish passage to replace one built in the 1940s that was outdated and undersized for current fish runs.

"We received funding for the Mud Mountain Dam Fish Passage Facility and then began construction in 2018 on a new \$112 million trap and haul facility," said Gerald. "The Corps' regional design team for this massive project included more than 150 employees from three Corps districts and two architecture and engineering firms. We will use that knowledge to address passage at Howard. However, completing a Howard Hanson facility will also require funding to start again and additional congressional authorization to begin construction."

For more than 15 years, the Corps has also been supporting fish habitat by placing woody debris and gravel into the Green River downstream of Tacoma Water's facility. Corps employees collect large logs and other woody debris as it floats downstream before it can enter and possibly damage the dam's intake or tunnels. This debris is transported downstream and reintroduced into the river for salmon habitat. The wood is carried by

the river and has improved river habitat as far downstream as Auburn. Adding the gravel has increased suitable spawning habitat from the Tacoma diversion dam to the Green River Gorge, an area heavily used by spawning Chinook salmon.



# BAT Patrol



Biologist Rhonda Lucas holds a Yuma myotis (*M. yumanensis*) bat at Libby Dam. (Courtesy Photo)

## District conducts bat surveys as white-nose syndrome moves westward

By Scott Lawrence  
Public Affairs

Working against time and the inevitable spread of a disease threatening bat populations across the country, Seattle District team members are conducting wildlife surveys to determine which species live on USACE lands and if they are healthy.

Although the Corps regularly conducts wildlife surveys on its lands to help inform wildlife management decisions, recent bat surveys have additional relevance because of the spread of *Pseudogymnosascus destructans*, which is a fungus. It causes white-nose syndrome, a fatal

disease that has devastated bat populations in the U.S. and Canada.

Since first documented in 2006, the disease has mostly impacted states east of the Rockies, but that changed in 2016 when the first case was confirmed

in Washington State.

“It’s not a matter of if the disease will spread to our areas, but when,” said Rhonda Lucas, a terrestrial wildlife biologist for Seattle District. “It’s important that we establish baseline



Rhonda Lucas and Ranger Katie McGillvray program bat monitoring equipment to record bat calls at Lake Washington Ship Canal. (Photo by Scott Lawrence)

information such as what species we have, where and whether or not they’ve been exposed.”

While bats have been historically demonized in movies, folk tales and popular culture, Lucas says they are vital parts of the ecosystems where they live.

The winged mammals serve as plant pollinators in some areas of the country and bat guano is considered excellent fertilizer, but the biggest benefit bats provide in the Pacific Northwest is pest control. In a single evening, these nocturnal predators can consume twice their body weight in insects, helping agricultural crops by eating pests and constraining the spread of insect-borne disease.

Since bats use echolocation calls and sonar to hunt, Lucas enlisted the help of natural resource staff to help install specialized recording equipment at district operating projects. These highly sensitive acoustic monitors record ultrasonic bat calls that are beyond the range of human hearing.

The recordings are then processed through ultrasonic signal analysis software which isolates bat calls from other extraneous sounds, such as those from insects, and produces a graphic illustration of what the calls look like and at

what frequency. Armed with this information, Lucas is able to determine which calls correspond to a particular bat species.

In addition to passive monitoring, Lucas worked with members of the Engineer Research and Development Center from Vicksburg, Mississippi, to capture and test bats for white-nose syndrome at Libby Dam in 2017.

“The bats at Libby Dam represent the district’s only known breeding colony,” Lucas said. “So we set up nets to capture some which we measured and swabbed, and then sent materials off for lab testing. Thankfully, all of our Libby bats came up negative so we didn’t have to worry about if the colony had been exposed.”

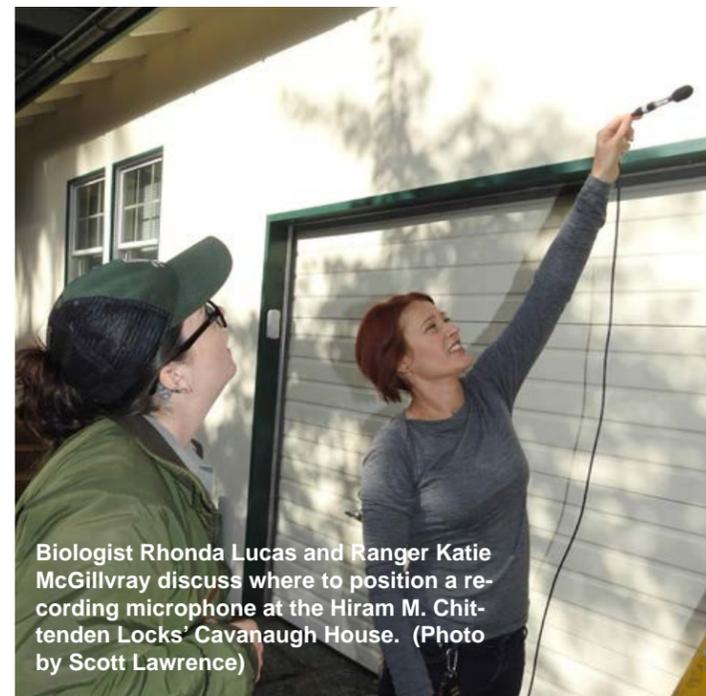
Thus far, Lucas has conducted bat surveys at four of the district’s six operating projects and has identified 11 distinct bat spe-

cies residing on Corps lands. As reports are completed, results are uploaded to a national bat database run by the U.S. Fish and Wildlife service.

“This could be one of the biggest extinction events we’ve known in modern time,” Lucas said. “So while there are currently no known treatments, we need to be proactive and gather information on the bats we have and continue monitoring them until best practices or decontamination protocols are developed.”



Ranger Katie McGillvray programs recording equipment to record bat calls at Lake Washington Ship Canal. (Photo by Scott Lawrence)



Biologist Rhonda Lucas and Ranger Katie McGillvray discuss where to position a recording microphone at the Hiram M. Chittenden Locks’ Cavanaugh House. (Photo by Scott Lawrence)



Biologist Rhonda Lucas holds a Yuma myotis (*M. yumanensis*) bat at Libby Dam. (Courtesy photo)

# Christmas Ship at the Locks



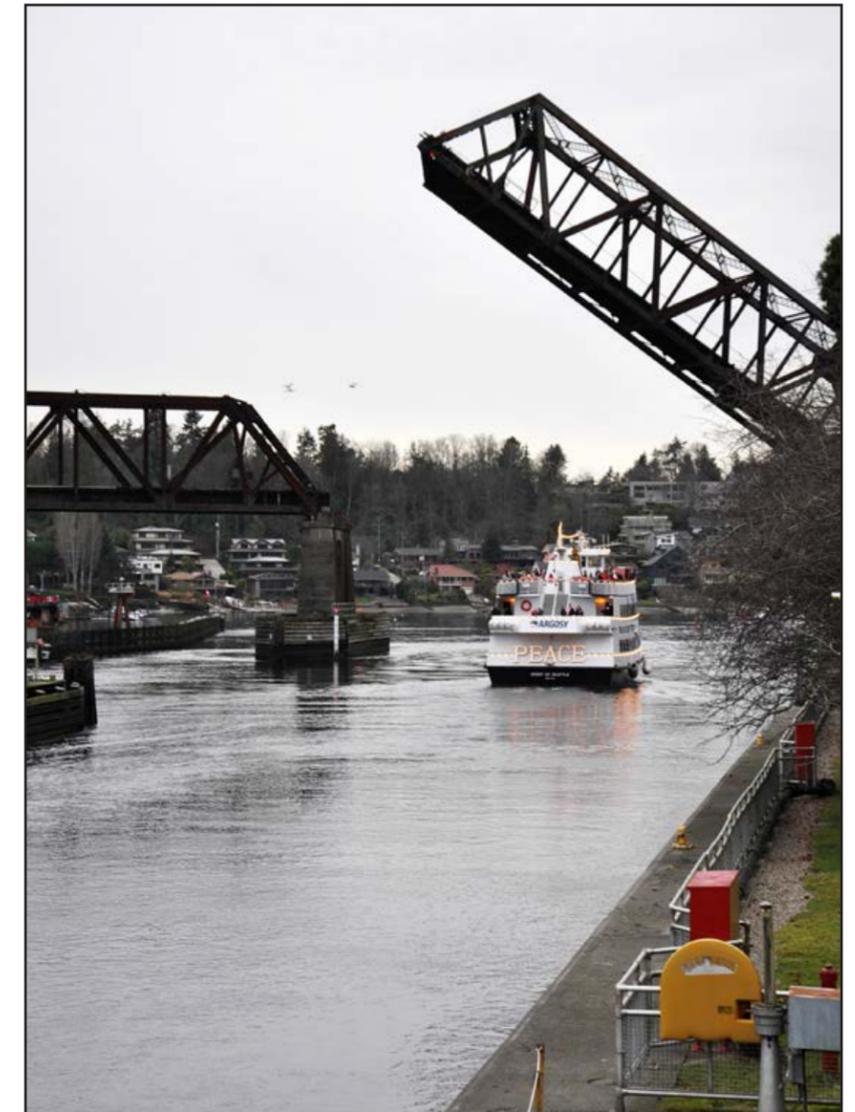
**Left:** The Spirit of Seattle makes a stop in front of the Hiram M. Chittenden Locks Administration Building during its annual holiday celebration cruise.  
**Below:** A Locks visitor takes part in the holiday festivities.



**Above:** Christmas Ship crew and Santa wave at the group of onlookers gathered alongside the large lock.  
**Right:** As the Christmas Ship departs the Locks, its message of 'Peace' shines bright.



**Left:** Cruise participants and Santa say hello to Ballard Locks visitors gathered outside the Administration Building.  
**Below, left:** Lock and Dam Operator Osman Huseny unties the vessel's line, preparing it to exit the large lock chamber.  
**Below:** A crowd gathers to greet the Christmas Ship as it locks through, returning to Puget Sound.



# Investigating Improvements in Tacoma Harbor

**By Patricia Graesser**  
Public Affairs

The U.S. Army Corps of Engineers and Port of Tacoma are rapidly moving through the planning process, evaluating potential navigation improvements to the Blair Waterway to provide transportation cost savings for larger vessels calling at the Port of Tacoma.

The Port and Corps signed a feasibility cost-share study agreement in August 2018. This was a first step to deepen the federal channels serving the Port of Tacoma, allowing them to handle the largest ships calling ports in North America.

In November, the parties identified the alternatives to evaluate and moved forward to the alternatives evaluation and identification of a Tentatively Selected Plan.

On January 17, the Port of Tacoma and Corps held a public informational meeting attended by dozens of interested parties and local and Tribal officials. The Corps described the feasibility study and environmental assessment for potential

Blair Waterway improvements and sought feedback on issues the public would like analyzed during the alternatives evaluation process.

The Blair Waterway is authorized to 51 feet below sea level. Larger vessels have draft requirements deeper than 51 feet below sea level when fully laden, and face tidal delays and other transportation inefficiencies when arriving and departing. By accommodating more fully loaded vessels, transportation costs could decrease, ultimately leading to a more cost-efficient and competitive transportation system.

The Corps-Port general investigation feasibility study will determine whether there is a federal interest in participating in a cost-shared improvement of the existing Blair Waterway in the interest of navigation improvements and water resource development opportunities.

“The Port of Tacoma is a



A ship is docked at the Port of Tacoma. (Courtesy photo)



Tugboats position a cargo ship at the Port of Tacoma. (Photo courtesy of The Northwest Seaport Alliance)



(Left to Right) David Cook, Don Kramer, Tony Warfield, Kristen Kerns and Kristine Ceragioli conduct a site visit at Tacoma Harbor. (Photo by Laura Boerner)



Nancy Gleason answers environmental review questions at a scoping meeting in Tacoma January 17. (Courtesy Photo)

rapidly expanding major port,” said Seattle District Commander Col. Mark Gerald. “Deepening the Blair Waterway may result in cost and time savings, potentially lowering project operations and maintenance costs, as well as potentially allowing for the removal of draft restrictions for certain vessels.”

The Port of Tacoma ranks as the 25th largest U.S. port by tonnage (2016 total tonnage), and as part of The Northwest Seaport Alliance (NWSA) along with Seattle Harbor, is the fourth largest container gateway in North America. In the past decade, ships

calling at the Port have increased in size and draft at a dramatic pace.

“We truly value our partnership with the Army Corps. It is vital for building a stronger trade gateway and keeping ship calls and the jobs they support in the Pacific Northwest and in the U.S.,” said NWSA Chief Executive Officer John Wolfe.

The study team expects to issue a draft feasibility report and environmental assessment by the end of this year and a final in 2020, with the objective of a signed chief’s report in summer 2021.

A similar study at the Port of Seattle concluded in 2018, recommending deepening the Duwamish East and West Waterways to 57 feet below sea level, paving the way to make it the deepest port in the nation.



A dredging vessel seen at Grays Harbor. (Courtesy Photo)

## Seattle District, Port of Grays Harbor celebrate milestone

By Dallas Edwards  
Public Affairs

Seattle District and the Port of Grays Harbor held a ribbon cutting celebration February 13 honoring the Deeper Draft Dredging Project Phase II completion.

Held as part of the port's annual business review in Aberdeen, Washington, District Commander Col. Mark Gerald, Navigation Section Chief John Hicks and Port Executive Director Gary Nelson all spoke at the event.

"Here in Grays Harbor, the Corps has been ensuring safe navigation since 1893," said Gerald. "Today's event is yet another milestone in our century-old partnership with the Port."

The U.S. Army Corps of Engineers deepened the federal navigation deep-draft channel in Grays Harbor from the previously maintained depth of 36 feet below Mean Lower Low Water

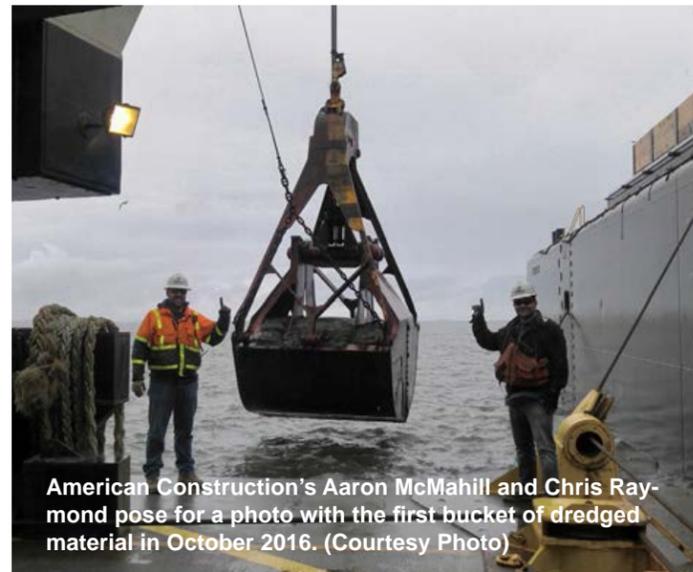
(MLLW) to the fully authorized depth of 38 feet below MLLW. The deepening occurred from the South Reach upstream to Cow Point Reach where the Port of Grays Harbor Terminal 4 is located. The overall project was completed at a cost of \$27.1 million.

The contract was awarded to American Construction Company in 2016 and they dredged nearly 3.5 million cubic yards of materials.

"Every \$1 spent on the USACE Civil Works infrastructure program generates \$16 in economic benefits and \$5 in revenues

to the U.S. Treasury," explained Gerald. "This is a great investment for Grays Harbor and the nation."

Corps work in the Grays Harbor area pre-dates the establishment of Seattle



American Construction's Aaron McMahon and Chris Raymond pose for a photo with the first bucket of dredged material in October 2016. (Courtesy Photo)



Port of Grays Harbor Executive Director Gary Nelson shakes hands with Seattle District Commander Mark Gerald after the ribbon cutting ceremony. (Courtesy photo)



Port of Grays Harbor Executive Director Gary Nelson speaks during the ribbon cutting ceremony. (Photo by Patricia Graesser)

District in 1896.

"The Corps initiated work to improve Grays Harbor navigation in 1893," said Hicks. "Dikes were built in an attempt to train Chehalis flows to scour shoals and we began dredging in 1895."

Nelson highlighted the benefits of the harbor to the community.

"Our customers and tenants are able to utilize the buildings, docks, waterways, roadways, rail and utilities that we have invested in to support and grow

their businesses, employ our neighbors and generate solid economic impacts for our community," said Nelson.

Gerald praised district team members for their hard work executing the project.

"I want to thank Elizabeth Chien for her leadership to get this project to a successful award and who also oversaw the contract execution," said Gerald. "I also want to recognize Leah Hauenstein, who oversaw the study that led to the favorable decision to fund and dredge the navigation channel to its authorized depth."

Nelson also had words of gratitude for the Corps.

"We truly value the partnership with the Corps and I am pleased to announce we have already seen the benefits of the project with an increase in the average tonnage of vessels calling Grays Harbor," said Nelson.

Gerald also thanked the Port of Grays Harbor for continued partnership.

"I appreciate our partners at the Port, and Gary Nelson in particular, for working collaboratively with our project delivery team, Headquarters staff, and the Seattle District Navigation Section leading up to this point," said Gerald. "I'm looking forward to the continuation of our positive partnerships as we all move ahead to maintain safe and efficient navigation in Grays Harbor, thereby promoting the regional and national economy."



Port of Grays Harbor and Seattle District officials prepare to cut the ribbon commemorating the completion of Phase II of the Deeper Draft Dredging Project. (Photo by Patricia Graesser)

# Seattle snow

The Puget Sound region was hit with a series of storms that brought an unusually high amount of snow in February.



(Top left) Snow falls at the Seattle District Headquarters building, Feb. 4. (Top right) Bill Boyle follows a snow blower across Howard Hanson Dam, which received 39 inches of accumulation over a 2-day period. (Middle left) Snow flies over the large lock at the Chittenden Locks. (Middle and bottom right) Carl S. English Jr. Botanical Garden at the Chittenden Locks is coated with snow Feb. 4. (Bottom left) Snow falls at Howard Hanson Dam's old maintenance and admin facility.



**Congratulations:**

**Deputy District Engineer Damon Lilly**

was selected for Senior Executive Service and will serve as the Division Programs Director, Pacific Ocean Division, effective February 3.

**Deputy Commander Lt. Col. Andrew Olson**, currently deployed to Iraq, was selected for command at the O-5 / LTC level.

**Tom Garity** and **Karry Kinared** were awarded Steel de Fleury Medals for their significant contributions to Army engineering.

FY19 1st Quarter Awards recipients were recognized at the Town Hall on January



**Gordon Thomson**  
**Marian Valentine**  
**Michael Weigley**  
**Michael Wellner**  
**Gregory Zoeller**

**Deployed:**

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

**Condolences:**

**Ken Graybeal**, former chief of Soils Section, passed away November 24.

17. **Shelley Schultz** was selected for the Up to GS-09 category, **Natanielle Little** was selected for the GS-10 and Above category, and the selected supervisor was **Belinda Diza-Saito**.

**Ian Pumo** was selected as the new chief of Cost Engineering Section and **Ray Koong** as the new lead in Cost Engineering.

**Cpts. Mike Filizetti, Joe Gambino, and Ian Jones** were selected for promotion to the rank of major.

**Retired/Moving On:**

**Paul Francois**  
**Joe Gahan**  
**Tom Garity**  
**Steven Hansen**  
**Daniel Katz**  
**Joshua Lauterbach**  
**Erin Legge**  
**Connie Mackay**  
**Elizabeth Marquell**  
**Madelyn Martinez**  
**Edward Payne**  
**Benjamin Peña**  
**Carol Perkins**  
**James Priest**  
**Michael Sangren**

*Welcome*



TO THE DISTRICT



Tauseef Badar  
Industrial Hygienist  
Safety Office



Daniel Bernal  
Coastal Engineer  
Hydraulics & Hydrology  
Branch



Bari Bookout  
Economist  
Civil Works Branch



Kim Grindrod  
HR Specialist  
CPAC



Breanna McBride  
Architect  
Design Branch



Justin McNabb  
Geologist  
Technical Services Branch



James Naismith  
Quality & Knowledge  
Manager  
Mission Support



Stephanie Neil  
Archaeologist  
Regulatory Branch



Pamela Theard  
Office Automation Asst.  
Design Branch

# Better Know a Section

## Contracting Business Oversight Branch (Branch B)



**Contracting Division's Business Oversight Branch (Branch B)** provides two elements - Oversight and Operations. Oversight includes contract monitoring, review, audit and policy implementation. Oversight ascertains compliance with procurement laws, regulations and policies; identifies the effectiveness of business processes and documents trends; establishes working instructions and provides the District Contracting Chief with an independent assessment of District contract-

ing. Operations includes extracting, developing and maintaining a variety of contracting documents and/or reports from systems to include analysis and recommendation, managing the Government Purchase Card program and minor administrative support.

**The Contracting B Branch includes** Leslie Markey, John Perez, Charlot Barney, Angelo Tiu, Sonia Frees and Natanielle Little (not pictured).