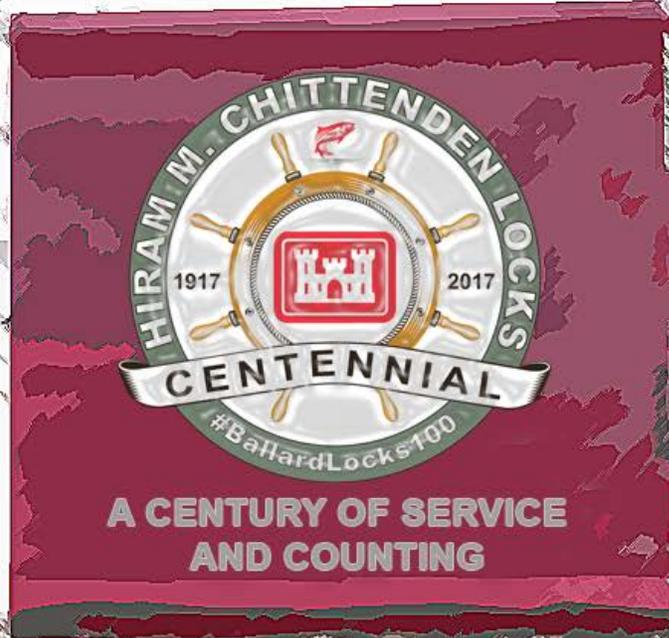


Flagship

SEATTLE DISTRICT



Chittenden Locks turn 100

Volume XXXIII
No. 2

Flagship

SEATTLE DISTRICT

What's Inside

4

Challenging Journey

6

Siri Nelson retires

8

Legacy of the English Garden

10

Commerce at the Locks

12

**A brief history of the Lake Washington
Ship Canal**

14

Protecting the Puget Sound



Cover: The Hiram M. Chittenden Locks in Ballard officially opened July 4, 1917. The 100-year-old Locks are the busiest in the nation, locking through about 50,000 vessels annually. The 28th Annual Free Summer Concerts and Events series will help commemorate this year's Centennial Anniversary. There is a schedule of events on page 15. Please visit <http://www.nws.usace.army.mil/Locks100> for more information.

Flagship

Col. John G. Buck,
Commander
Patricia Graesser, Chief,
Public Affairs
Dallas Edwards, Editor
Contributors
Bill Dowell
Scott Lawrence

Flagship is an unofficial publication authorized under AR 360-I, 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.

Steve Mayfield:

This Flagship is for you

We dedicate this Flagship to Steve Mayfield who works on the lock wall at the 100-year-old Hiram M. Chittenden Locks. With nearly 50,000 lockages a year, the locks are the busiest in the nation, and Steve's positive, can-do attitude represents the U.S. Army Corps of Engineers in an extremely positive manner to every vessel he assists. He's always wearing a smile and warmly greets everyone, making locking through the historic Seattle icon a pleasant experience.

Steve, thank you and this Flagship is for you!



Seattle District: My time at the Cavanaugh House

Shortly after taking command, a member of our staff promptly informed me that I would be the Centennial Commander of the Hiram M. Chittenden Locks. While July 4th, 2017 seemed a long way off at the time, that date is rapidly approaching and our District will celebrate a significant milestone for one of our operating projects.

Nearly one hundred years ago, on July 4th, 1917, the SS Roosevelt led a parade of boats into the locks and a brief ceremony commenced. The Seattle Post-Intelligencer reported that more than half the city's population of 360,000 gathered for the ship canal's grand opening and Lieutenant Colonel James B. Cavanaugh, who oversaw the construction of the project, proclaimed that "the canal... is the greatest asset of the Northwest."ⁱ One hundred years later, the Hiram M. Chittenden Locks and the Lake Washington Ship Canal remain a jewel in the City of Seattle and continue to serve as a vital link between Lake Washington, Lake Union, and Puget Sound.

One of the more unique aspects of our locks is that the Cavanaugh House serves as the District Engineer's residence. The Cavanaugh House and the Locks has certainly been the most remarkable and beautiful place my family and I have lived in over the course of 26 years in the Army. Every so often I think back to the first morning when my children woke up in the house. Groggy, my son asked if the lock gate bells always ring all night. After laughing at him, I explained to him that how those bells were the sound of economic development and progress for our region.

The ringing bells of the night were quickly forgotten as my children raced for the locks and the fish ladder to watch both boats and fish transit the facility. Like 1.3 million visitors discover each year, every day is different at the Ballard Locks and brings a new experience. My family and I have witnessed some amazing things journey through the locks. We have seen a Washington State ferry, Navy and Coast Guard vessels, pontoons for the 520 bridge, a house on a barge, the Alaskan fishing fleet, sea lions and even a small grey whale. That is in addition to the thousands of recreational vessels. We have also watched chinook, sockeye, and coho salmon travel up the fish ladder and smolts rocketing out of the flumes in the spring. And living in the midst of the Corps of Engineers only botanical gardens with something blooming year round is

truly a special experience.

Personally, my favorite time at the locks is late evenings after the project has locked the gates and the crowds are all gone. It is during that quiet time, I'm able to walk around the project and appreciate the deep and rich history of our project. It also affords me the opportunity to reflect on the role that the Corps and our District has and continues to play in the Northwest. A



Seattle District Commander
Col. John G. Buck

If you haven't visited the Locks lately – this is the year. Centennial events started in February and will continue all year. We will commemorate this historic moment in our District's history on July 4th.

lot has changed over the past 100 years since the Locks were dedicated, but they endure as a great economic, recreational, and environmental asset for the region.

Finally, I'd be remiss if I didn't take this opportunity to thank the dedicated men and woman who work at the Lake Washington Ship Canal. For 100 years, they have ensured

the locks run efficiently and effectively while making the project a distinctive place for the people of Seattle. And for the past three years, they have taken care of my family and made it an amazing home for us filled with great memories.

If you haven't visited the Locks lately – this is the year. Centennial events started in February and will continue all year. We will commemorate this historic moment in our District's history on July 4th. You can find information about events on our website at: <http://www.nws.usace.army.mil/Locks100/>. Come see for yourself, why I'm proud to call the Hiram M. Chittenden Locks my home.

Hope to see you there!

ⁱ"SS Roosevelt leads a marine parade through the Ballard Locks to dedicate the Lake Washington Ship Canal on July 4, 1917," History Link.Org, accessed April 24, 2017, <http://www.historylink.org/File/1422>.

Challenging Journey

Story by Bill Dowell
Public Affairs

Photos by Nate Malmborg
Army Intern, Biologist



Above, Young coho with inflatable balloon tags. After their trip down the slide the balloons inflate, bringing the fish to the surface where boat teams recovered and inspected them. Right, a team completes installation of the prototype slide.

Studies have shown it's no easy task for juvenile salmon to make it through the Lake Washington basin to Puget Sound and one of the obstacles they must pass is the Hiram M. Chittenden Locks in Ballard.

Although salmon have been navigating the 100-year-old Locks for as long as it's been operating, studies in the 1990s indicated they were having a difficult time. The Lock's primary passage routes were deep in the water column, not easily found by juvenile salmon which stay closer to the surface.

The large lock filling culverts were a main route and contain sharp bends, fast moving water and barnacles. Together, these three hurdles likely injured salmon. To help them navigate the Locks, the U.S. Army Corps of Engineers began installing smolt flumes on the Locks dam spillway each year since 2000.

The Muckleshoot Indian Tribe and King County partnered with the Corps to develop and build the flumes.



Prototypes were first installed in 1995.

The flumes are stainless steel troughs with white metal tubes on the end that contain antennas, monitoring tagged salmon passing through. Mounted in the dam's spillway, they provide a surface passage route readily found by the salmon. This limits the number going through the filling culverts.

"Water conservation is also an important benefit of the flumes," said Dr. Scott Pozarycki, who oversees salmon migration and survival at the Locks. "Surface passage could be provided by simply opening a spillway gate, but that would use too much water during the spring and drop Lake Washington to unacceptable levels in summer and fall. The flumes use significantly less water allowing them to run for the duration of the juvenile migration season in most years."

The current flumes are showing their age and monitoring equipment on the flumes is failing, according to Pozarycki. The Corps partnered with King County and West Fork Environmental to design a new prototype – a fiberglass smolt slide. It looks just like the name implies, a slide, with the small 4- to 6-inch fish gliding down from Lake Washington to Puget Sound. The slide's integrated monitoring antennas are better, and the slide is easier and cheaper for the Corps to install and remove each year during the salmon out-migration.

The Corps conducted survival and injury testing of the prototype slide in April. Several hundred yearling coho salmon from the Issaquah Salmon Hatchery were used for the tests. The young coho were fitted with two inflatable balloon tags. One at a time, the tagged salmon were sent through a pipe which routed them into the slide.

"A couple minutes after their trip down the slide, the balloons inflated bringing the fish to the surface where three boat teams recovered and inspected them for injury," Pozarycki said.

The recaptured fish were then transferred to 600 gallon pools and held for 48 hours to look for any delayed effects.



Clockwise, above right, A tagged coho heads down the pipe that routes them into the slide. One of the team nets a coho after the balloons inflate. Boat teams downstream recover smolt after going over the prototype slide and inspect them for injury.



"The test indicates the new slide is safe for juvenile salmon," said Pozarycki. The successful testing means the Corps will likely build two more of the slides to replace the remaining older flumes.

Even with the smolt flumes and slides, some will still end up going through the large lock filling culverts. To decrease possible salmon injury, each year during the annual maintenance pump out in November, Corps employees scrape the barnacles growing on the filling tunnel walls.

Slowing water velocity in the culverts would further reduce and possibly eliminate injury to salmon using that route, according to Pozarycki. The original, 100-year-old valves controlling water through the culverts need replacing and a nearly-complete new design will allow for much slower water velocities. Once design is complete, getting funding is the next step before the new valves can be installed.

"The new valves and smolt slides together, should allow safe passage to the vast majority of juvenile salmon transiting the Locks from the Lake Washington basin to Puget Sound," said Pozarycki.

Siri Nelson says farewell

By Patricia Graesser
Public Affairs

“This’ll be fun,” Siri Nelson would earnestly tell an employee before tackling a new issue.

“Siri believes in facing challenges head-on and without reservation,” according to Sue Leong, Office of Counsel employee. “This expression of hers is telling: ‘No guts, no glory.’”

After working 38 years for Seattle District, Siri Nelson retired as the District’s chief counsel April 1. Known regionally as an expert in Native American legal issues and awarded three times at the national level of the Army Corps of Engineers, her departure leaves a gap that will be felt widely.

“Siri’s engagement and leadership have been instrumental to the District’s success,” said Damon Lilly, Deputy District Engineer for Project Management.

She began her legal career at Seattle District in the 1970s while still a student. Her brother Eric Nelson was already working at the District, so she knew about the Corps and found it paid relatively well for students. She came aboard permanently in 1979.

Nelson served as the District Counsel for Seattle District since October 2003. Prior to 2003 she served as the Deputy District Counsel beginning in 1987. She was a member of Seattle’s District’s inaugural Management Intern class in 1987-88, now renamed the Leadership Intern Program or LDP. Many District functions, like the LDP program, technology and the reach and pace of communication, have changed over the years, but Nelson noted that her appreciation of the District’s people was steadfast.

Nelson worked to hear people out and support the District team. “You never get all the information you need

from talking to one person or the first conversation. You need to talk to people in person,” she said. You need to “include people when decisions affect them.”

“Lawyers, in the Corps and elsewhere, sometimes hold themselves apart from the rest of the organization,” said former District Commander retired colonel Ralph Graves. “Siri always identified with the District, connected with engineers and other employees and provided advice that served the broader goals of the Corps and the Army. Each of us brings something useful to the game, but Siri recognized that it’s a team effort.”

Former District



Siri talks with Maj. Rachel Honderd at a social event, 2014.



CLASS OF 1988
(Front Row - left to right) Ernie Manjares, Siri Nelson, Dr. Morford. (Middle Row) John Haddick, Gary Rice, Sandy Simmons, John Welch, Betty Konarski. (Back Row) Sam Casne, Tom Mueller, Dr. Harriet Stephenson, Dwight Burns, Larry Merkle.

Commander retired colonel Mike McCormick echoes the sentiment, “A good counsel needs to understand that successfully executing USACE’s many complex and time sensitive programs is a team sport where everyone (including the legal staff) needs to constructively participate. Siri and her team of skilled attorneys were invaluable in successfully enabling all aspects of program execution.”

McCormick recalled, “Siri was particularly helpful enabling a large number of levee repairs while sustaining environmental compliance following a series of severe storms in 2006-2007. The District had to quickly shift direction and resources to meet public safety needs. Siri’s ability to balance this need within the law was particularly helpful.”

Among the most notable experiences during Nelson’s tenure was the

Navy Homeport permit litigation and settlement talks during which Nelson and former Regulatory Branch Chief Tom Mueller played an important role. “The settlement agreement coming out of the Navy Home Port litigation to allow sediment placement at the Port Gardner site gave weight to our material testing criteria,” said Nelson.

That the Dredged Material Management Program continues to enable placement of dredged material in the Puget Sound disposal sites is a testament to the success of the Navy Home Port settlement agreement.

“Siri truly leads by example. She also likes to mix things up. When you feel you’re proficient in one area of practice, she’ll assign you a case in another area so to broaden your horizon,” said Leong.

“Siri trains everybody in her office to take her job,” and that’s admirable,

said McCormick.

“I would not be the attorney I am, if not for Siri’s unwavering faith in my (and not just me, but everyone in our office) ability to do the job, and the many, many hours she invested in resources and time to ensure that she mentored and trained us about every facet of the Corps unique and diverse missions,” said attorney Tristan Brown.

“The most important thing about good counsel is trust, and I had complete trust and confidence in Siri at all times, said former District Commander colonel Mike Rigsby. “I always felt like she had my back and I relied on that.”

Nelson said her hopes for the District’s future is that we can continue using common courtesy. She is looking forward to spending more time reading the newspaper, finishing book club books, and getting outdoors more.



(Top Left) Siri attends a Corps Picnic with Cheryl Anderson.

(Top Left) Class photo from from the 1988 Management Intern Program.

(Bottom Left) Siri poses with employees from Office of Council during her retirement ceremony, March 2017.

(Bottom Right) Siri and John Hicks poses for a Christmas photo, Dec. 2014.

Legacy of the English Garden:

A sense of place, dedication of people, passage of time

By Stephen Munro
Gardener

The Lake Washington Ship Canal, which includes the Hiram M. Chittenden Locks commemorates its Centennial July, 4, 2017.

A key element, giving this a sense of place, is the Carl S. English Jr. Botanical Garden. It is unlikely anyone will describe the work and garden of Carl S. English Jr., any better than University of Washington botany professor and Carl's friend, the late Dr. Arthur Kruckeberg.

"Conjure up a mental image of this popular and familiar landmark. Then, in your mind's eye, erase the vision of

the broad sweeps of lawn, the stately trees and the colorful plantings in the many spacious drifts and you have lost the elusive but significant aesthetic quality that is the Locks," Kruckeberg wrote in Volume 22 of the 1959 Arboretum Bulletin "To be sure, the average visitor enters the grounds bent on viewing the activity of boats and people at the lock sides.

"Yet, once entering the north gate one senses the change from the clutter and crowding of city life to the serenity and expansive beauty of a park. To the knowing eye, the plantings are not at all typical of just any park or estate. The keen gardener, horticulturalist or botanist is at once convinced that he

has stepped into a botanical sanctuary — a true arboretum."

Dr. Kruckeberg's deftly describes the Locks' exceptional qualities. The lock chambers and buildings represent a functional, working, engineering marvel personifying the U.S. Army Corps of Engineers' mission of providing civil works projects for the nation and its citizens.

There may be nowhere else the public can have a more personal and intimate experience at a Corps project. The garden intensifies the experience. This is influenced by the people who have made it so, an inheritance of vision sustained these grounds since Construction Supervisor Arthur

Sargent submitted plans for them to Lt. Col. James Cavanaugh in November 1915. Subsequent employees stayed true to and enhanced this original vision.

Henry S. McCarty was the first dedicated gardener, hired in 1920. Before that, lock wall employees mowed the lawn and trimmed shrubbery and trees. Then Gustaf Julius Eckerstrom led the garden from 1925 to 1941. Carl S. English Jr. was hired in 1931, spending 43 years tending the grounds, even dying on them two years after his retirement in 1976.

Ralph Follestad wasn't a gardener, but was project engineer from 1941 to 1973. He was also an ardent supporter and patron of Carl's whom was singularly instrumental in recognizing and preserving Carl's work. Walter Lyon the able successor to Carl worked from the 1960s to 1978. Michael Fleming

was hired in 1974 to replace Carl and retired in 2004. Johnny Martin was worked with Fleming from 1980 to 1993. These notable employees provided dedicated service to the grounds and Locks, along with many other permanent and temporary employees, students, interns, and volunteers that also contributed numerous hours, days, and years to the garden's stewardship over the last century.

The seasons of germination, growth, life and death become wrapped in years, folded in decades, until eventually the garden reaches its current existence.

It stands today is a solid expression of place, people and time. Through this passage of time dedicated employees provided dutiful stewardship. English and his garden have inspired countless people with the natural world's beauty. His idea the garden would be "a joyous



Steve Munro, Gardener, Carl S. English Jr., Botanical Garden

sight to see...but also a garden worthy of serious interest and study" has come true. His work inspired nurseryman, students, employees, botanists, gardeners, visitors, artists, weddings and the list goes on and on.

The inspiration lives on in current and future employees to labor in and enjoy with visitors this special place. The vision for the grounds at the Locks, the now Carl S. English Jr. Botanical Garden, endures.

Part 4 of 4 on the
Carl S. English Jr., Botanical Garden



Commerce on the Lake Washington Ship Canal

By Patricia Graesser
Public Affairs

Nearly one hundred years ago, on July 4, 1917, the SS Roosevelt led a parade of boats into the newly constructed government locks in Seattle and a brief ceremony commenced. “The Seattle Post-Intelligencer reported that more than half the city’s population of 360,000 gathered for the ship canal’s grand opening.” and Lieutenant Colonel James B. Cavanaugh who oversaw the construction of the project proclaimed that “the canal... is the greatest asset of the Northwest.”¹

Saltwater bays, freshwater lakes and heavily timbered forests surrounded Seattle when the first European settlers arrived in 1851 and transportation of natural resources was extremely difficult. In 1890 Congress authorized a survey to select the most feasible location to construct a ship canal and give an estimate of expense.

Former Seattle District Commander Maj. Hiram M. Chittenden’s message

to the Seattle Chamber of Commerce promoting the locks prior to construction foretold, “At least 50 cents per cubic yard will be saved on the cost of delivering gravel, sand, coal and other material.” Additionally, “The saving to our people in having commodities brought almost to their doors by water will exceed each year \$750,000 the amount of the proposed bond issue to excavate the canal.”

The River and Harbor Act of 1910 authorized construction, operations and maintenance of Lake Washington Ship Canal with a double lock. The U.S. Army Corps of Engineers began construction in 1911, and the first ship passed August 3, 1916, with an official dedication July 4, 1917.

Today the ship canal and locks connecting the waters of Lake Washington, Lake Union, and Salmon Bay to the tidal waters of

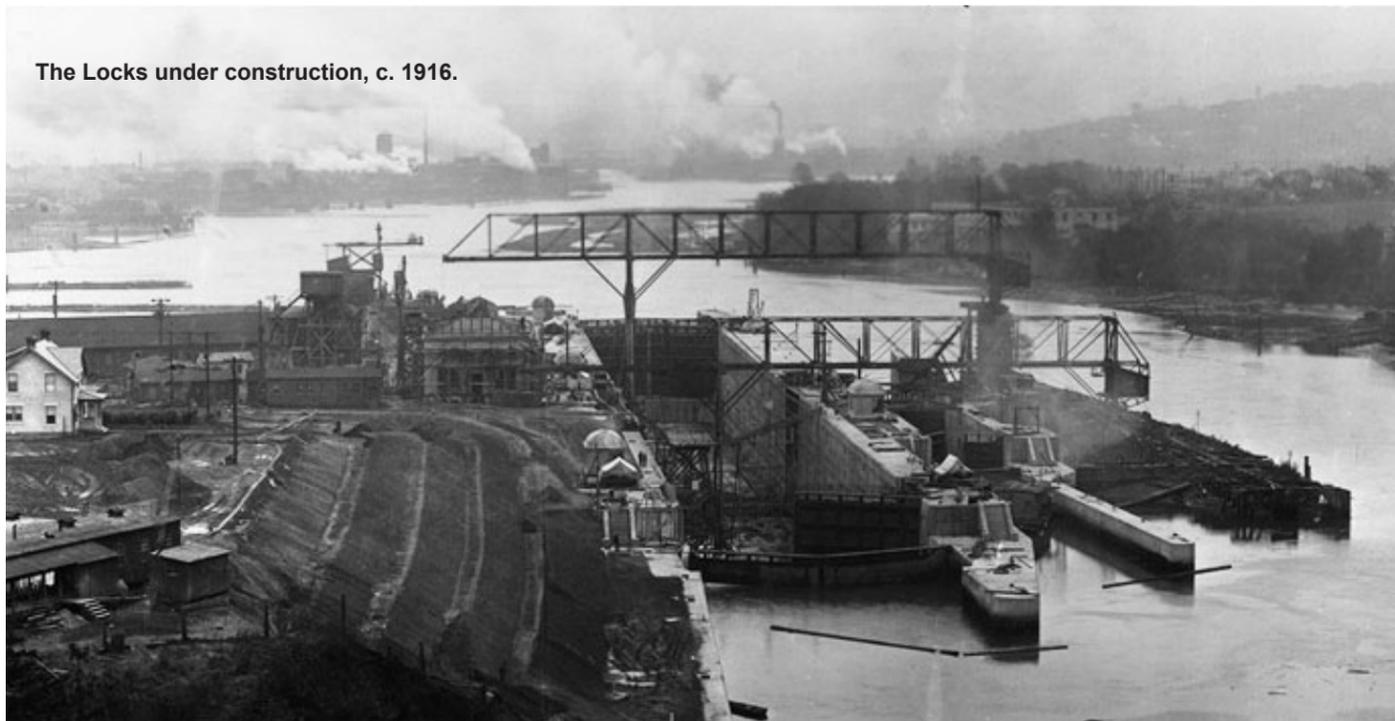
Halibut Schooners depart Fishermen’s Terminal headed for the Locks, March 2010. Port of Seattle image by Don Wilson.



A bird’s eye view of Fishermen’s Terminal and the city of Seattle, Port of Seattle image by Don Wilson.



The Locks under construction, c. 1916.



Puget Sound, the canal and locks allow recreational and commercial vessels to travel to the docks and warehouses of Seattle’s busy fresh water harbor.

Many local people consider the Locks first and foremost as a place to bring out-of-town visitors. In fact the Hiram M. Chittenden Locks site is among the most visited tourist sites in Seattle and receives about 1.3 million visitors per year. A USACE calculation estimates that 1,266,000 in total visitors brings \$38,000 in visitor spending in the vicinity, \$15,000 in sales in the vicinity and more than 240 jobs in the vicinity. Therefore the benefit to the area from recreation is substantial.

However, the impacts to the region go beyond tourism. The project materially contributes to the industrial, municipal, commercial, environmental and recreational development of the area while serving multiple functions.

Controlling the elevation of Lake Washington within a narrow range allows for east-west highway traffic Interstate 90/Washington State Highway 520, which is key to commerce for Ports of Seattle and Tacoma and the entire region.

The Chittenden Locks is the busiest navigation lock in terms of number of lockages in the United States. Since 1995, an average of 16,181 lockings, 44,000 boats and over 1.5 million tons of cargo has passed through the locks annually.

Construction of the locks allowed the Port of Seattle to develop Fisherman’s Terminal, where the Alaska fishing fleet is home ported in Lake Union. Currently Fisherman’s Terminal provides 3,309 direct jobs and a total of 6,419, according to a 2016 Port of Seattle report.

Cavanaugh’s and Chittenden’s opti-

mistic claims of the economic benefits of the Locks may have turned out differently than forecast, but they have nevertheless contributed greatly to the economy of the region.

In honor of their designer and advocate the locks were named after Hiram Martin Chittenden, the Seattle District Engineer for the Corps of Engineers from April 1906 to September 1908. They were added to the National Register of Historic Places in 1978.

As the District marks the centennial, we also look to the future of the Locks. Seattle District engineers, mechanics and electricians are working to maintain and update this facility to ensure continued performance into its next century of service to the region.

¹“SS Roosevelt leads a marine parade through the Ballard Locks to dedicate the Lake Washington Ship Canal on July 4, 1917.” History Link Org. accessed April 24, 2017, <http://www.historylink.org/File/1422>.



Thomas Mercer



Hiram M. Chittenden



The temporary dam at Montlake is breached, Aug. 2016.



The Lake Washington Ship Canal under construction.



Nearly 50,000 attended the grand opening celebration, July 4th, 1917.



Carl S. English Jr.



People attend the 50th anniversary celebration, July 4th, 1967.

A brief history of the Locks

Thomas Mercer is thought to have the original idea of the canal. He publicly proposed the idea during a July 4th picnic in 1854. Before the ship canal was constructed, Seattle's port facilities consisted of only four and a half miles of waterfront on Elliott Bay, compared with other ports, such as New York with its 45 miles of first-class frontage.

In 1871, the United States government began its first investigations into the possibility of a canal, which would enable naval vessels to dock in Lake Washington's less damaging fresh water.

In 1905, Maj. Hiram M. Chittenden was appointed as the District Engineer for Seattle District of the U.S. Army Corps of Engineers. With vision and purpose, he became the champion for a canal and locks that would connect Lake Washington to the Puget Sound.

Chittenden, in his address to the Seattle Chamber of Commerce in 1910, made several persuasive arguments for the canal. In the end, Chittenden's logic prevailed, helped along by a massive federal appropriation. Thrown in for good measure was the promise that

after completion, the community would not have any further costs – the federal government would take over the canal and operate it at federal government expense.

Chittenden's vision and innovative design concepts were realized by his successor, Col. James B. Cavanaugh, who oversaw construction. Arthur W. Sargent was the Assistant Engineer in charge of construction of the canal and locks. Actual design and specification was done by Charles A.D. Young. Charles Herbert Bebb and Carl F. Gould were the architects for the project support buildings.

Construction began on the locks in September of 1911 and the first concrete

was poured in 1913. The project costed \$3.5 million with the federal government paying \$2.5 million. Local government paid the remaining \$1 million.

In August of 1916 a temporary dam at Montlake was breached, which began the 3-month process of lowering Lake Washington's water level by almost 9 feet. This action dried up the Black River, which used to flow from Renton to the Duwamish.

On July 4, 1917, crowds of people attended the grand opening celebration, which included a carnival, fireworks and a boat parade. The SS Roosevelt, the ship Robert Peary used on his expedition to the North Pole in 1909, lead

the parade.

In 1922 an emergency closure system was installed on the large lock chamber.

In 1931, Carl S. English, Jr. began his career with the US Army Corps of Engineers designing, planting, and maintaining the garden surrounding the Chittenden Locks. When he retired in 1974, he was one of the Northwest's leading horticulturists. He left behind a world-renowned botanical garden and a long list of other contributions.

In 1932 and 1933, the gate operating systems were reengineered and installed.

On July 24, 1956 Congress approved

the measure renaming the Government Locks to the Hiram M. Chittenden Locks.

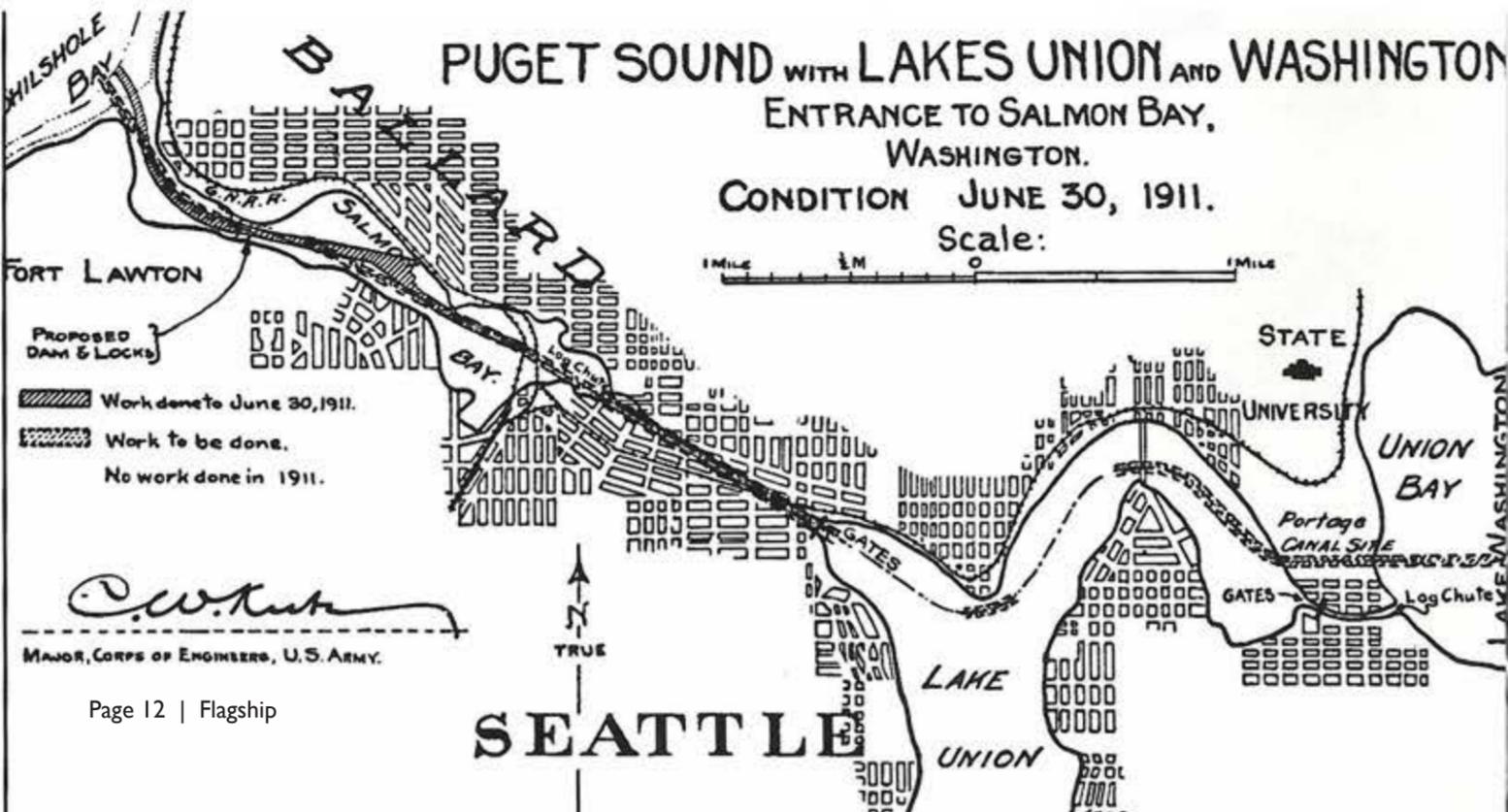
In 1966 and 1967, the Corps designed and installed a new saltwater barrier that works more efficiently. In 1976 the fish ladder was redesigned and built.

In 1978 the Locks were added to the National Register of Historic Places.

Between 1999 and 2001 the large lock gate opening system was reengineered and installed.

In 2014 the original spillway gates were replaced.

In 2017 the original pump plant was updated.



Protecting the Puget Sound

**By Mass Communication Spec.
2nd Class Vaughan Dill**
Navy Public Affairs Support Element



Corps and Coast Guard personnel deploy a fuel containment boom. Photo by Dallas Edwards.

Vessels belonging to the Navy (USN), the Army Corps of Engineers (USACE) and the Coast Guard (USCG) responded to calls as fuel from an unknown source poured into Puget Sound.

The current of the water put the large fuel spill on a northeastern trajectory and on a direct collision course with Blake Island and Tillicum Village, June 6.

This was the scenario that played out during a mock fuel spill known as the joint Boom Deployment and Spill Response Exercise, threatening wildlife, aquatic species, shoreline habitat and nearby infrastructure.

“In this exercise, we’re leveraging our joint force to bring different capabilities from the different military services, to respond to any potential event that could happen here in Puget Sound,” said Col. John Buck, Seattle District commander. “The Motor Vessel Puget brings the capability to deploy booms to contain a spill in the event there is one here in the sound. It’s certainly a very environmentally sensitive area, so training events like this are a great opportunity to rehearse, so in the event that there is something, we’re prepared to respond.”

Vessels responded to the mock fuel spill, departing from the Navy’s

Manchester Fuel Depot, the largest single-site Department of Defense fuel terminal in the continental United States.

“We have this shared waterway out here with beautiful natural resources, a beautiful environment, and having to protect that is key,” said Coast Guard Capt. Sean Cross, chief of response, Coast Guard 13th District. “It’s great to see so many participants out here.”

During the exercise, responders from USACE deployed two sections of containment boom from the M/V Puget while the USCG 13th District Response and Advisory Team (DRAT) looked on and instructed as needed in order to contain and isolate the spill in accordance with the Northwest Area Contingency and Geographic Response Plans.

“The last several years we have been working on trying to bolster up our capabilities to respond to spills, and historically we have provided successful support to the Coast Guard when it comes to spill response, using our motor vessel Puget,” said Brian Wilson, spill response program manager, USACE Seattle District.

“Over the course of the past six months or so, we’ve been coordinating this exercise to come together today.

Meanwhile, the Navy operated a skimmer, performing open water skimming operations to recover the spilled fuel, while protecting Tillicum Village and the cove just south of it, enabling Puget Sound to re-open to unrestricted traffic.

“It’s about interoperability and making sure we all work together. I’m excited to hear the lessons learned

about today, I know they will be important,” said Navy Capt. Philippe Grandjean, commanding officer, Naval Supply Systems Command, Fleet Logistics Center Puget Sound. “Spill response is something that we don’t take lightly.”

The Navy owns and maintains a large supply of spill response equipment throughout their facilities in the Puget Sound area, and has a well-trained full-time staff that can rapidly respond to a spill, regardless of its source. The Navy is a spill response resource in Puget Sound that can support other agencies as needed during oil spills in this area.

“The military components here in this area are an asset, and we can help with any spill,” said Heather Parker, on-scene coordinator and Navy Region Northwest oil spill program manager. “We’re trying to show how we can come together and help in the event of some kind of an incident, the more we can learn to work together, it’s really important.”

Responders practiced roles and tested their response capabilities, while learning new techniques and identifying areas for improvement.

Welcome



TO THE DISTRICT

		
Tilak Gamage Engineer Hydraulic Eng. Section	Nathan Malmberg Biologist Env & Cultural Resources	Craig Williams Pwr Plant Mechanic Chief Joseph Dam



2017 Centennial Concerts & Events



Dates and times are subject to change without notice!
For more information visit www.nws.usace.army.mil/locks100 or other organization's events visit www.makingthecut100.org.

May - National History Month

- Water Safety Day**
5th Friday, May 5 @ 11 a.m.-3:30 p.m.
Great info for Opening Day of Boating Season
- Friends of the Ballard Locks, History Month**
6th Saturday, May 6 @ 1-3 p.m.
Chat with a Historian, Good/Bad Fish Kid's Game
- Friends of the Ballard Locks, History Month**
7th Sunday, May 7 @ 10 a.m.-3 p.m.
Children's Build a Toy Boat 10 a.m.-2 p.m.
Meet the SS Roosevelt model builder and Chat with a Historian 1-3 p.m.
- Discover Your Northwest Centennial 5K, Kids Dash**
7th Sunday, May 7 @ 9 a.m.
5K run and 10 & Under Kids Dash
- Friends of the Ballard Locks, History Month**
20th Saturday, May 20 @ 1-3 p.m.
Chat with a Historian
- Celebrating 100 Years of Community Gardening**
21st Sunday, May 21 @ Noon-4 p.m.
Gardening displays, information from Carl S. English Botanical Garden, local gardens & clubs
- Friends of the Ballard Locks, History Month**
21st Sunday, May 21 @ Noon-3 p.m.
Chat with a Historian 1-3 p.m.
Children learn to play ukulele w/STRUM Noon-2 p.m.
- Boeing Employees Concert Band**
28th Sunday, May 28 @ 2 p.m.
Lively Marches, Show Tunes and Classics

June

- Barneleikarringen**
4th Sunday, June 4 @ 2 p.m.
Children's Scandinavian Dance
- Tango at the Locks**
4th Sunday, June 4 @ 3:30-7 p.m.
Tea dance, watch and learn to Tango
- Highline Community Symphonic Band**
11th Sunday, June 11 @ 2 p.m.
Variety of Classical Concert Music
- Fisheries Day**
17th Saturday, June 17 @ 11 a.m.-3:30 p.m.
Highlight Fisheries and Salmon
- Cascadia Big Band**
17th Saturday, June 17 @ 2 p.m.
Post-swing Big Band
- Classic Car Show**
18th Father's Day - Sunday, June 18 @ 10 a.m.-3 p.m.
Cars of the 20s, 30s and 40s
- Sound & Fury Morris and Sword**
18th Father's Day - Sunday, June 18 @ Noon
Street Dance Performance Tradition
- Elliott Bay Pipe Band**
18th Father's Day - Sunday, June 18 @ 2 p.m.
Traditional Pipe and Drum Music
- Eastside Modern Jazz**
24th Saturday, June 24 @ 2 p.m.
Latin, Funk, Jazz-Rock fusion & Cont. Jazz
- Kirkland Civic Orchestra**
25th Sunday, June 25 @ 2 p.m.
Classical and Pop Music
- Military & First Responder Appreciation Day**
30th Friday, June, 30 @ 11 a.m.-3 p.m.
Celebration of U.S. Military and Veterans

July

- The Professor Gadget Sax Quartet**
1st Saturday, July 1 @ 2 p.m.
An ad-hoc collection of saxophone players
- 85th Street Big Band**
2nd Sunday, July 2 @ 2 p.m.
30s, 40s and 50s Swing Favorites
- KNKX, Discover Your Northwest Jazz Festival**
3rd Monday, July 3 @ 1-5 p.m.
Live-Music Jazz Festival
- Discover Your Northwest 'Dance for a View'**
3rd Monday, July 3 @ 5-9 p.m.
1900 to the 1920s theme
- Hiram M. Chittenden Locks Centennial Ceremony**
4th of July - Tuesday, July 4 @ 10 a.m.
Official Centennial Ceremony
- Seattle Civic Band**
4th of July - Tuesday, July 4 @ 2 p.m.
Rousing Selection of Patriotic Music
- High Class Brass Quintet**
5th Wednesday, July 5 @ 6 p.m.
Patriotic Marches and Pop Music
- The Jazz Pearls**
6th Thursday, July 6 @ 2 p.m.
Lively Jazz
- Ballard Sedentary Sousa Band**
7th Friday, July 7 @ 2 p.m.
Greatest Marching Band Hits
- Greenwood Concert Band**
8th Saturday, July 8 @ 2 p.m.
Marches and Music for Bands
- Puget Sound Daylily Club Flower Show**
9th Sunday, July 9 @ 9 a.m.-4 p.m.
- Historic Boat Parade**
9th Sunday, July 9 @ 11 a.m.-2 p.m.
Historic Boat Parade from Locks to Lake Union
- The Thornton Creek Clarinet Choir**
9th Sunday, July 9 @ 2 p.m.
Classic and pop music by clarinetists of all ages
- The MoodSwings**
15th Saturday, July 15 @ 2 p.m.
All-female Big Band Jazz ensemble
- West Seattle Big Band**
16th Sunday, July 16 @ 2 p.m.
Big Band Swing and Jazz
- Musica Molida**
22nd Saturday, July 22 @ 2 p.m.
Street Organ Music
- Making the Cut Songwriting Contest**
22nd Saturday, July 22 @ 4:30 p.m.
CD Release concert from contest
- Greenwood Concert Band**
23rd Sunday, July 23 @ 2 p.m.
Marches and Music for Bands
- Sound & Fury Morris and Sword**
24th Monday, July 24 @ 7 p.m.
Street Dance Performance Tradition
- Greater Seattle Fuchsia Society Show**
29th Saturday, July 29 @ 9 a.m.-4 p.m.
- Letter Carriers & FOE Band**
29th Saturday, July 29 @ 2 p.m.
Concert Music
- Coal Creek Jazz Band**
30th Sunday, July 30 @ 2 p.m.
Traditional Dixieland Jazz

August

- Batucada**
5th Saturday, August 5 @ 2 p.m.
Brazilian Samba, Chorus and Forro
- Ballard Sedentary Sousa Band**
6th Sunday, August 6 @ 6 p.m.
Greatest Marching Band Hits
- Horseless Carriage Car Show**
12th Saturday, August 12 @ 10 a.m. to 3 p.m.
Pre-1950s automobiles
- Pacific Cascade Big Band**
12th Saturday, August 12 @ 2 p.m.
Swing Era Jazz, early 1930s to late 1950s
- MachOne Jazz Orchestra**
13th Sunday, August 13 @ 2 p.m.
Big Band to Contemporary Jazz
- Splash! Art at the Locks**
17th Thursday, August 17 @ 6-8 p.m.
Discover Your Northwest Art Exhibit
- Microsoft Jumpin' Jive Orchestra**
19th Saturday, August 19 @ 2 p.m.
Jazz Music
- Around the Sound Band**
20th Sunday, August 20 @ 2 p.m.
Famous Marches, Movies and Show Tunes
- Lynnwood Community Band**
26th Saturday, August 26 @ 2 p.m.
Non-profit Community Band
- The Tempos**
27th Sunday, August 27 @ 2 p.m.
Lively Big Band Music

September

- STRUM**
2nd Saturday, September 2 @ 2 p.m.
Seattle's Totally Relaxed Ukulele Musicians
- Michael Clune & Sleep till Noon Band**
4th Monday, September 4 @ 2 p.m.
Contemporary Blues & Rock
- Ballard Civic Orchestra**
16th Saturday, September 16 @ 2 p.m.
Celebrating Hispanic Cultural Heritage

October

- Seattle Thrillers**
21st Saturday, October 21 @ 2 p.m.
Zombies at the Locks!

Better Know a Section

Hiram M. Chittenden Locks Maintenance Section



The Hiram M. Chittenden Locks Maintenance Section keeps the 100-year-old locks humming along. This is no easy task since the locks are also the busiest in the nation, locking through 50,000 vessels annually. A lot of the equipment is original and when a part breaks, they can't run to the local hardware store for a replacement. Some parts need to be made quickly and it's done in their machine shop, where the equipment is older than most of the crew.

The Locks Maintenance Section includes: (Left to Right)

Locks and Dam Equipment Mechanic Herman "Buddy" Long, Lock and Dam Equipment Mechanic Leaders Steve Hansen and Pat MacDonald, Lock and Dam Equipment Mechanic Supervisor Paul Francois, Electrician Jacob Marcus, and Lock and Dam Equipment Mechanic Jeff Stander. Not pictured is Lock and Dam Equipment Mechanic Andrew Mclean.