

# CHITTENDEN LOCKS – LAKE WASHINGTON CANAL

## Background

The U.S. Army Corps of Engineers (Corps) completed construction of the Chittenden canal and locks in 1917. The intent of the project was to maintain Lake Washington and Lake Union water levels at 20 to 22 feet above sea level, prevent saltwater from the Puget Sound from infiltrating the freshwater lakes, and assist vessels navigating from the lakes to the Puget Sound, and back. The system includes one small and one large lock, a spillway with six gates, and a fish ladder for adult anadromous fish to return to their spawning grounds. The facility provides a range of benefits to the Pacific Northwest region, including:



- **Navigation** – The Chittenden Locks are the busiest locks in the nation, in terms of vessel traffic. They are used by the Alaskan Fishing Fleet, which passes through the locks to moor in the freshwater at Fishermen's Terminal and utilizes shipyards along Lake Washington Ship Canal for repairs in the off season. In addition, nearly 50,000 recreational boats pass through the locks each year and the locks ensure that public safety vessels can respond quickly between Lake Washington, Lake Union, and the Puget Sound.
- **Protects Freight Infrastructure** – The locks control water levels in Lake Washington and Lake Union and protect the Washington State Route 520 and the Interstate 90 floating bridges. Maintaining the water levels also protects other municipal, residential, and commercial infrastructure.
- **Fish Passage** – The locks protect salmon habitat restoration work previously completed to benefit the Sockeye, Chinook (King), and Coho (Silver) salmon that pass through the locks each year and ensures treaty trust responsibilities are met for two federally recognized Tribes.

## Current Status and Funding Needs

Annual maintenance is performed to keep the locks in working order. In a typical year, the large lock is closed for approximately three weeks in November and the small lock is closed for approximately two weeks in the early spring. In 2024, an extended lock closure for gate installation was completed. The small chamber will be closed to vessel traffic for maintenance, final installations, and commissioning from May 19, 2025, to June 18, 2025.



In the FY2022 omnibus appropriations package, the Lake Washington Ship Canal project received \$11.199 million. The project also received \$10.8 million in FY2022 Infrastructure Investment and Jobs Act (IIJA) funding for long overdue deferred maintenance projects. In FY2023 omnibus appropriations, the project received \$11.634 million which included regular and additional maintenance work, generator and electrical upgrades, implementation of the Biological Opinion for the project, and an ArcFlash update for safety purposes.



For FY2024, the project received a total of \$16.163 million which included \$5.2 million from the FY2024 Infrastructure Investment and Jobs Act (IIJA) spend plan for the replacement of the small lock machinery and controls. The project received \$13.980 million in FY2025 for routine maintenance, repairing the maintenance building roof, and supervisory and administration work on the Large Lock gate construction project. For FY2026, the project received \$16.284 million for O&M work including assessments. Funds will also be used for specific work activities including purchasing dump trailer, inflatable pipe plugs, utility tractor, skid steer loader, spydercrane, replacing large lock center gate and small lock machinery, adult salmon exclusion structure study, and modeling.

**For FY2027, PNWA is working with the U.S. Army Corps of Engineers Seattle District to understand the FY2027 project needs at the Chittenden Locks.**

