

PORT OF SEATTLE'S 2019 MARITIME ENVIRONMENTAL SUCCESSES

The Port of Seattle employs a diverse group of scientists, planners, engineers and natural resource managers to lead its maritime environmental efforts. Their combined talents have built innovative programs that go above and beyond what is required while ensuring compliance with the most stringent environmental regulations. Our award-winning stormwater program, innovative habitat restoration projects, remediation efforts and leading edge clean air and energy initiatives are just a few examples of the Port's proactive, outside-the-box work to protect our region's natural environment.

A YEAR IN REVIEW: MARITIME ENVIRONMENTAL HIGHLIGHTS

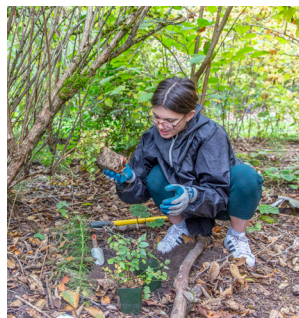
- 1 | Received an international American Association of Port Authorities Award of Excellence for our Innovations in Stormwater.
- 2 | Prohibited discharge of exhaust gas cleaning system wash water from cruise ships at berth to help maintain the water quality of Puget Sound.
- 3 | Collaborated on the Northwest Ports Clean Air Strategy, continuing a strong international partnership to reduce greenhouse gases.
- 4 | Hosted workshop and led process on reducing the impacts from vessel underwater noise on Orcas.
- 5 | Expanded cruise partnerships and environmental agreements to improve data sharing and coordination.
- 6 | Finalized the East Waterway Feasibility Study, with EPA approval, marking significant milestone in clean-up negotiations.
- 7 | Provided critical permitting and environmental review for 50 development and maintenance projects worth over \$300 Million.
- 8 | Maintained Green Marine and Salmon-safe Certifications.
- 9 | Completed the multi-year activated carbon pilot study in the Lower Duwamish Superfund Site to determine effectiveness as a clean-up tool.
- 10 | Hosted two college and six high school internships, offering training and critical work experience.

ENVIRONMENT AND SUSTAINABILITY PROGRAMS: WHAT WE DO



STORMWATER

We are the only Port in North America with a stormwater utility, allowing us to directly invest in stormwater infrastructure, maintenance and best management practices to protect water quality and the Puget Sound.



HABITAT

With 15 miles of shoreline, we are restoring habitat to support Chinook salmon and Orca recovery. At the same time we provide valuable shoreline public access to our near-port communities.



PLANNING AND PERMITTING

We conduct robust environmental permitting and compliance to ensure Port development projects meet and exceed local, state and federal requirements.



CLIMATE/AIR/ENERGY

The Port has set an ambitious goal to be carbon neutral by 2050. Our air quality, carbon reduction, and energy efficiency programs help protect community health and address climate change.



REMEDATION

Historic unregulated industrial activity has left legacy contamination in our waterways. Our team focuses on investigating and cleaning up contamination on Port properties.



WASTE DIVERSION

Our team knows how to handle waste. We ensure proper solid waste reduction and recycling at Port operations. We manage hazardous waste disposal and protect water quality by handling derelict vessels.

FEATURED PROJECTS OF 2019

RENEWABLE ENERGY AND EFFICIENT BUILDINGS

In 2019, the Port completed installation of a solar array on its Pier 69 headquarters, designed to produce 120,000 kWh of power annually. That's the equivalent annual energy needed to power about 10 average American homes. The Port also continued investments in high efficiency lighting and heating and cooling systems throughout its buildings and facilities.



INNOVATIONS IN HABITAT RESTORATION

Oyster, eelgrass, and kelp were planted on 25 acres in Smith Cove area of Elliott Bay. The Smith Cove Blue Carbon project, along with another project to build and test floating wetlands, is part of the Port's voluntary efforts to learn how we can help restore habitat in urban areas of Puget Sound. After years of work, we also received approval to create a habitat mitigation bank at Terminal 117 in the lower Duwamish, allowing us to start the process to build 13 acres of high functioning nearshore habitat.



REDUCING EMISSIONS AT THE PIER

For the first time ever at Terminal 91, all of the cruise ships from Princess Cruises and Holland America Line were equipped with a shore power plug and a record number of ships connected. Use of clean shore power avoided about 2,900 metric tons of CO2 from entering the atmosphere. The Port also kicked off plans to bring shore power to its 3rd cruise berth at Pier 66.



THE RACE TO CARBON NEUTRAL WITH STRATEGIC CLEAN ENERGY PLANNING

In 2019 we launched an ambitious planning effort to bring 100% clean energy to maritime uses on Seattle's waterfront. In cooperation with Seattle City light, this effort will be the foundation for meeting our Port goals of carbon neutral Port operations and 80% carbon reduction for vessels and tenant operations by 2050.



CLEANING UP HISTORIC CONTAMINATION TAKES TIME AND PERSEVERANCE

We achieved a major milestone - the Port completed construction of the remediation system at Terminal 30. T30 was the first contaminated site cleanup order issued by the Washington Department of Ecology - it was also the site of the first gas station in Washington State - back in the early 1900s. The site was dirty but has been through many phases of clean up and this recent construction brings to close almost 30 years of work.



2019 BY THE NUMBERS

100%

compliance for all Port properties subject to stormwater and environmental permits as well as energy benchmarking requirements.

2,900

tons of CO2 was NOT emitted from cruise ships that plugged in to shore power at Terminal 91.

89%

of shore power capable cruise ships plugged in at Terminal 91.

2,280

people engaged in shoreline restoration and maritime outreach events.

17%

reduction of carbon since 2005 – meeting a NW Port Clean Air Strategy 2020 milestone

20

environmental compliance assessments at Port facilities.

~5,000

trees identified on 940 acres of Port maritime property as part of the Port effort to identify actions for management of trees and tree coverage.

71

miles or 100% of the stormwater system was assessed.

\$5,915,000

recovered from grants, rebates, insurance, and agreements.

PORT OF SEATTLE IS KNOWN FOR OUR ENVIRONMENTAL FIRSTS

The Port of Seattle has been on the leading edge of many environmental initiatives. We channel the strong environmental value that defines the Seattle region and pair it with innovation and action.

**1ST
PORT**

- In the world to have two cruise homeport berths with shore power
- In North America to establish and operate its own Stormwater Utility
- To establish an agreement with cruise industry to prohibit waste water discharge -- And in the PNW to prohibit discharge of exhaust gas cleaning system washwater at berth
- On the U.S. west coast to be certified Green Marine
- To pass a Community Benefits Commitment with a near port community to pledge resources for environment, public health and jobs.
- To use crushed oyster shells in stormwater catch basins and downspout barrels for removing pollutants



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View more of the maritime environmental work at www.portseattle.org/environment