

Port of Seattle

2025 - 2026 Washington Sea Grant Hershman Fellowship Description

Host Organization

Port of Seattle

2711 Alaskan Way, Seattle, WA 98121

Fellowship Location

The Fellow will primarily work in an office environment at the Port's Pier 69 Headquarters. Some remote work may be available with Mentor approval. The Fellow will also be expected to occasionally work in the field at habitat restoration sites and other off-site locations. Some tasks and tours may take place on water via the Port's work boat or other vessel. The Fellow will be expected to wear appropriate clothing and safety gear

Fellowship Mentor/Co-mentor information

Primary:

Danielle Butsick, Sr. Environmental Program Manager, Port of Seattle
Maritime Environment and Sustainability (ME&S)

Secondary:

Laura Wolfe, Sr. Environmental Program Manager;
Kathleen Hurley, Sr. Environmental Program Manager;
Ryann Child, Sr. Environmental Program Manager;
Mike Desota, Sr. Environmental Program Manager;
Jon Sloan, Sr. Manager, Environmental Programs

Project Title

Underwater Noise Mitigation and Management Plan - Update and Implementation

Project Description

The 2025-2026 Port of Seattle SeaGrant Hershman Fellow will play a key role in updating the Port's Underwater Noise Mitigation and Management Plan (UNMMP) and implementing its recommendations. The Fellow will

also support the Maritime Environment and Sustainability's Habitat team on work related to its Quiet Sound membership, Sustainable Shorelines program, and other habitat-related initiatives. They may also participate in Sustainability initiatives, including the Port's Green Corridor program and other clean energy and emissions reduction projects and initiatives.

Underwater Noise Mitigation and Management Plan (40%)

Background

The UNMMP describes the Port's approach to reduce potential adverse effects of underwater noise on marine mammals and other sensitive species. It focuses on two main port-related sources of underwater noise: vessel movement and in-water construction. The UNMMP is based on the Green Marine underwater noise environmental indicator framework, and has the following key objectives:

Increase the Port's knowledge of underwater noise sources, levels, and impacts in and around the Port from construction, terminal operations, and near-port vessel movement

Raise awareness among Port users and tenants of the effects of underwater noise on marine mammals.

Identify and implement opportunities for underwater noise reduction within Port, tenant, and user operations.

Collaborate with regional ports, agencies, tribes, industry, and other organizations as a member of the Quiet Sound program to reduce impacts of underwater noise from commercial vessels on marine mammals in Puget Sound.

Develop recommendations for future actions, including an underwater noise assessment program to inform development of noise reduction targets.

UNMMP Update

The UNMMP is intended to be updated bi-annually to reflect progress on key recommendations and initiatives, update noise reduction goals and targets, and practice adaptive management and continuous improvement by evaluating the efficacy of ongoing actions and developing new strategies as needed. The Fellow would be responsible for updating the UNMMP over

the course of the year, including updates to existing strategies or new Port of Seattle 2025 - 2026 Washington Sea Grant Hershman Fellowship Description strategy recommendations; updating timelines, and proposing an updated implementation plan.

The plan update will require coordination with key partners and collaborators, including Green Marine staff, Quiet Sound staff and Leadership Committee, Marine Exchange of Puget Sound, Northwest Seaport Alliance, Washington State Ferries, and internal Port of Seattle staff across departments. Internal Port of Seattle departments may include Maritime Sustainability, Maritime Operations, Real Estate and Property Management, Compliance, and Habitat, among others.

UNMMP Implementation

Underwater noise reduction, mitigation, and management recommendations in the UNMMP include exploring feasibility of financial and non-financial incentives for vessel owners to reduce underwater noise via vessel design or operations, and exploring expansion of the proposed “Green Corridor” — a zero-emissions cruise operation zone — to include underwater noise reduction. They also include communicating about impacts of underwater noise via blogs, social media, and web posts; and hosting a one-day voluntary event offering measurement of underwater noise levels to recreational boaters.

Depending on interests, the Hershman Fellow would help design and implement projects to deliver on the UNMMP recommendations. This could include developing blog posts and web content, establishing a voluntary underwater noise measuring event for recreational boaters, working with Maritime Operations and across Port departments to define an incentive program for vessel operators consistent with Port policies and Washington State regulations, and partnering with Sustainability staff to propose incorporating underwater noise as a component of the Green Corridor program.

The Fellow may also implement new recommendations identified during the UNMMP update, potentially including new strategies they have developed themselves.

Habitat Initiatives (20%)

Quiet Sound

The Hershman Fellow may participate in Quiet Sound meetings, providing

the opportunity to network with partners across western Washington State and the Salish Sea. Quiet Sound partners include Maritime Blue, National Oceanic and Atmospheric Administration (NOAA), Marine Exchange of Puget Sound, Pacific Merchant Shipping Association, and Oceanwise, among others. The Fellow may be asked to support preparation or review of materials in advance of meetings.

Sustainable Shorelines

The Port's Habitat team manages the Sustainable Shorelines program, which promotes a range of projects that support a healthy Puget Sound, including kelp and seagrass research, design and installation of green shorelines, and habitat monitoring with the goal of improving fish and wildlife habitat conditions.

The Sustainable Shorelines program includes identification of bankline softening opportunities via systematic bankline inspection and condition reports for all 15 miles of Port-controlled shorelines. The Fellow may support bankline inspections and report development, and depending on interest may also support design and permitting for bankline projects. There will also be opportunities for hands-on stewardship and management of Port habitat restoration sites.

The Habitat team also engages in habitat restoration and ecosystem recovery pilot studies. Past studies have included placement and evaluation of octopus dens to promote kelp crab predation and support kelp forest recovery, oyster shell and cultch placement to support oyster propagation and development, and pilot studies to support herring spawning. The Fellow may participate in habitat pilot studies, including through project development, hands-on deployment of equipment, and data collection and reporting.

Sustainability Program (20%)

The Port of Seattle ME&S Sustainability team engages in a diverse body of work related to climate change, air quality, and energy. Depending on interest and capacity, the Fellow will have the opportunity to support a variety of Sustainability initiatives, such as greenhouse gas emissions accounting, community engagement, and research related to emission reduction strategies, new maritime fuels, and the energy transition.

Marine Debris Mapping and Removal (10%)

The ME&S Compliance and Data Management team recently initiated a program using GPS-guided submersible remotely operated vehicles (ROV) to map submerged marine debris that presents hazards to tribal fishing and other maritime operations. The team will also undertake removal of identified debris with the support of maritime salvage contractors. The Fellow will have the opportunity to support the mapping and identification of marine debris, learning ROV and survey techniques. They may also work with the salvage contractors, obtaining valuable contract and project management skills.

General Mentorship and Learning Opportunities (10%)

Other opportunities available to the Fellow include:

- o Learn about Port of Seattle, its lines of business, priorities, opportunities, and its role in Seattle and Washington State.
- o Develop a performance and professional development plan.
- o Participate in ME&S Department and Maritime Permitting and Planning team meetings.
- o Conduct informational interviews with staff across the ME&S department and in other departments of the Port.
- o Participate in Port-sponsored training, tours, conferences, and events as opportunities arise.
- o Meet with Port leadership to showcase work and learn about a career at the Port or in the Maritime/Aviation industry.
- o Present to ME&S staff and/or more about Fellowship work and publish a blog post highlighting Fellowship work.
- o Enhance understanding of topics related to ports, maritime industries; underwater noise impacts, mitigation and management; environmental review; endangered species protection and habitat restoration; sustainability; environmental justice.
- o Hone professional skills in project management, stakeholder collaboration, meeting facilitation, agenda setting, writing, research, initiative planning and implementation, and project budgeting.
- o Practice hands-on habitat stewardship, data collection, and reporting.

Organizational Values

Every role at the Port of Seattle is vital to our thriving community. We are a leader in moving people and cargo across the country and around the world. With facilities and property ranging in scope from a half-acre park to one of the largest airports and container terminals on the West Coast, we maximize the public assets in our portfolio with an eye toward best uses and environmental sustainability. Find out more here.

Our vision is to create a Port that mirrors – throughout its breadth of operations and services and within its leadership – the diversity of our communities, instill principles of equity into its culture, and ensures a fair and intentional distribution of opportunities to expand economic development and quality of life for all in our region. Find out more here.

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