



Marine Resources Committee 2021 Annual Report

Restore, Conserve, Educate



Snohomish County
Marine Resources
Committee



Snohomish County
Conservation &
Natural Resources
Surface Water Management

Snohomish County Marine Resources Committee

2021 Annual Report

Snohomish County
Marine Resources Advisory Committee
3000 Rockefeller Avenue, M/S-303
Everett, WA 98201

The Snohomish MRC is a service provided by the
Snohomish County Surface Water Management Division

Questions or comments about the MRC can be directed to:

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Cover photo: Elisa Dawson

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Message from Chair, Mike Ehlebracht



With all of the climate and development pressures impacting our precious Salish Sea, the Snohomish County Marine Resources Committee (MRC) has completed an extensive list of actions to improve the health of our marine ecosystem for our local citizens and the beloved wildlife who depend on it. As you read through our annual report, you'll see how our team of dedicated volunteers, Snohomish County Surface Water Management (SWM) staff, and our many partners have worked together to complete habitat restoration, marine conservation, and education projects that benefit critical marine wildlife as well as enhancing the quality of life for our community!

Over this past year, we completed the following actions:

- Assisted SWM staff with removing derelict vessels from the Snohomish River Estuary and local marine waters.
- Met with public agencies and tribal stakeholders to help facilitate removal of toxic creosote pilings in the Snohomish River estuary.
- Completed scientific studies to evaluate the health of our marine ecosystem.
- Worked with state and county agencies to prepare for potential oil spills.
- Conducted community beach cleanups.
- Provided education and outreach to shoreline landowners, recreational fisherman, and other interested citizens.
- Began an evaluation of the Port Susan Marine Stewardship Area Conservation Action Plan in preparation for its 10-year anniversary in 2022.

While this report celebrates our accomplishments of 2021, I encourage you to get involved and join our citizen scientists and volunteers to help protect and restore our Salish Sea for future generations. Please feel free to contact us at our [website](#) for volunteer opportunities, join us for our [monthly meetings](#), or [subscribe to the MRC's mailing list](#).

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MRC Members



Mike Ehlebracht,
Chair



Natasha Coumou,
Co-vice Chair, Tulalip
Tribes Representative



Tom Doerge,
Co-vice Chair



Kip Killebrew,
Stillaguamish Tribe
Representative



Laura Gurley



Tim Ellis



Sara Maxwell



Julie Schlenger



Andrew Gobin



Brie Townsend



Michael Kundu



Mike Sadler



Susan Tarpley,
Ex-Officio



David Bain,
Ex-Officio

Northwest Straits Marine Conservation Initiative

The MRC is guided by the Northwest Straits Marine Conservation Initiative (NWSI) Strategic Plan.

Together these entities comprise a nonpartisan regional effort to protect and restore marine resources in the northern Puget Sound and the Strait of Juan de Fuca.



The Northwest Straits Commission provides funding, training and support to seven county-based Marine Resources Committees. It facilitates regional coordination among the MRCs and connects the MRC work to regional planning efforts.



Established in 1999 and authorized by Chapter 2.800 of the Snohomish County Code; the Snohomish Marine Resources Committee members represent a diverse group of environmental, recreational, conservation, economic, and local and tribal government interests.

The Snohomish County MRC is a team of citizen volunteers who are appointed by the Snohomish County Council and congressionally authorized to represent diverse local interests. Advocating for communities, the MRC provides sound guidance to public officials as an advisory committee. The MRC is essential to the protection and restoration of Snohomish County's marine environment. Without the partnerships or funding support from native tribes, government, businesses, and non-profit organizations the MRC could not continue this crucial work.



The Northwest Straits Foundation is the nonprofit arm of the organization established to leverage additional financial resources to accomplish the work of the initiative.

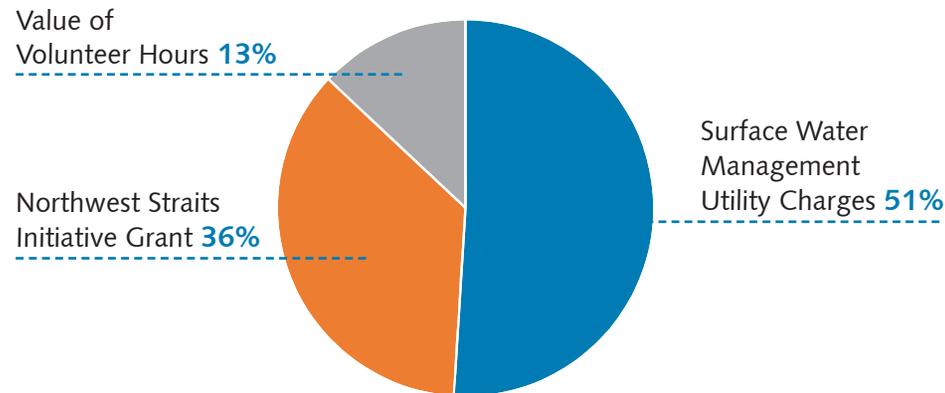
The Northwest Straits Foundation raises private and public funds and also manages large regional projects such as the removal of derelict fishing gear.

Program Support

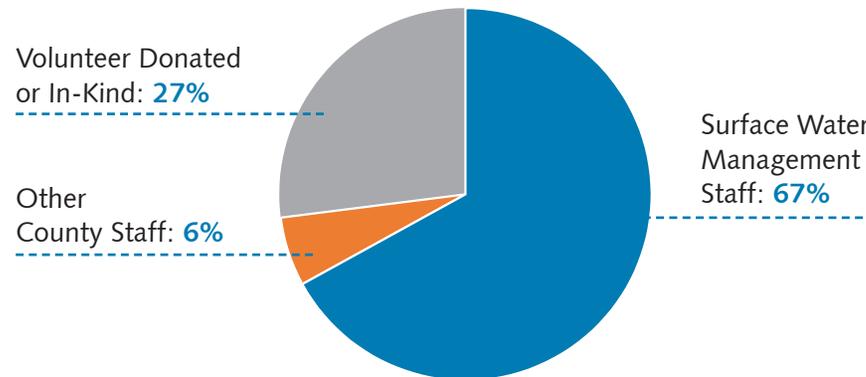
There were 1,016 volunteer hours donated by 12 MRC members in 2021 to implement the MRC's annual work plan and related activities which:

- o Provided a forum to mobilize citizen support of marine conservation.
- o Generated and implemented practical, on-the-ground projects that benefit the ecosystem and the economy of our region.

FUNDING



SUPPORT



Spotlight:

SWM's utility charges provided 51% of the MRC's annual budget. The remaining was from grants and in-kind volunteer time. By leveraging county funds with significant grants and volunteer time, the MRC implemented cost-effective projects across Snohomish County.



MRC volunteers conducting a beach cleanup.



\$33.02
Washington State's estimated value of a volunteer hour.



1,016
Volunteer hours donated in 2021.

\$33,548

Total value to Snohomish County



Snohomish Estuary Pilings Project

In 2019, the MRC began a Snohomish Estuary Pilings project to develop a prioritized list of derelict pilings in the Snohomish River estuary and engage stakeholders about potential removal.

The first phase was completed in 2020, and included the completion of the [Snohomish Estuary Creosote Piling Prioritization Plan](#), developed by the MRC and project consultant Environmental Science Associates (ESA). This report identified 15,564 independent pilings, of which 2,456 are creosote-treated and 6,982 are high priority for removal.

In 2021, the MRC turned its focus to the second phase of this project, meeting with public agencies and tribal partners to discuss the removal of unused pilings they own. Due to the complex nature of property ownership in this area, the MRC convened a committee consisting of representatives from the Washington State Department of Natural Resources (DNR), Snohomish County, Tulalip Tribes, City of Everett, Port of Everett, and City of Marysville.

The effort resulted in the development of the [Snohomish River Estuary Piling Removal Prioritization and Implementation Planning Report](#), which outlines opportunities and considerations for potential piling removal projects into the future.

Opportunities for piling removal includes:

- Stand-Alone Restoration Projects
- Removing Pilings as a Component of a Larger Project
- Piling Removal for Compensatory Mitigation

The MRC plans to continue collaborating with local agencies and partners to support the removal of high-priority pilings.

Spotlight:

Non-creosote pilings can have negative impacts when they impact habitat function and landscape connectivity.

Creosote pilings can also leach throughout their lifetime and pose a threat to human and environmental health.



Spotlight:

Explore the Snohomish Estuary Pilings

To facilitate ongoing collaboration, the MRC has produced an interactive web map to allow stakeholders direct access to information about pilings under their ownership. Check out the [MRC Pilings Inventory Web Map!](#)

Meadowdale Beach and Estuary Restoration Project

After a decade of planning, construction began on the 1.3-acre estuary restoration project at Meadowdale Beach Park in June 2021. Pocket estuaries like Meadowdale are important rest stops for salmon, where they can safely rest and grow bigger.

Senator Maria Cantwell and other political advocates visited the site on July 9 to check on the progress. The total cost of the project is expected to be \$15 million, with nearly half of the funding coming from grants, including a Federal Rail Safety Improvement grant and several salmon habitat restoration grants.

A critical piece of the renovation is a new bridge for the railroad that will create a 90-foot opening for the creek to flow through. The bridge is expected to be complete in 2022.



Senator Maria Cantwell and other advocates visited the site during construction to see the progress on the project.

In 2022, this culvert will be replaced with a bridge span to provide a 90-foot opening for the creek to flow through and a fully ADA accessible path to the beach.



Restoration of a 1.3 acre pocket estuary began in 2021.



► Derelict Vessel Removal

The Snohomish estuary and Everett shoreline improved during 2021 due to Snohomish County and the City of Everett's collaboration to remove six owner-abandoned derelict vessels. The County removed four vessels from the Snohomish estuary, while the City of Everett removed two vessels from Howarth Park. The removals totaled more than 100 cubic yards of marine debris, which helped eliminate pollutants while also improving boater safety. Funding for the County's removal work was provided by the Washington Department of Natural Resources and Snohomish County Surface Water Management.

All derelict vessels were recycled or destroyed following a process to identify and work with the last known owners in accordance with Revised Code of Washington. For more information on this project, visit the MRC's [webpage](#).

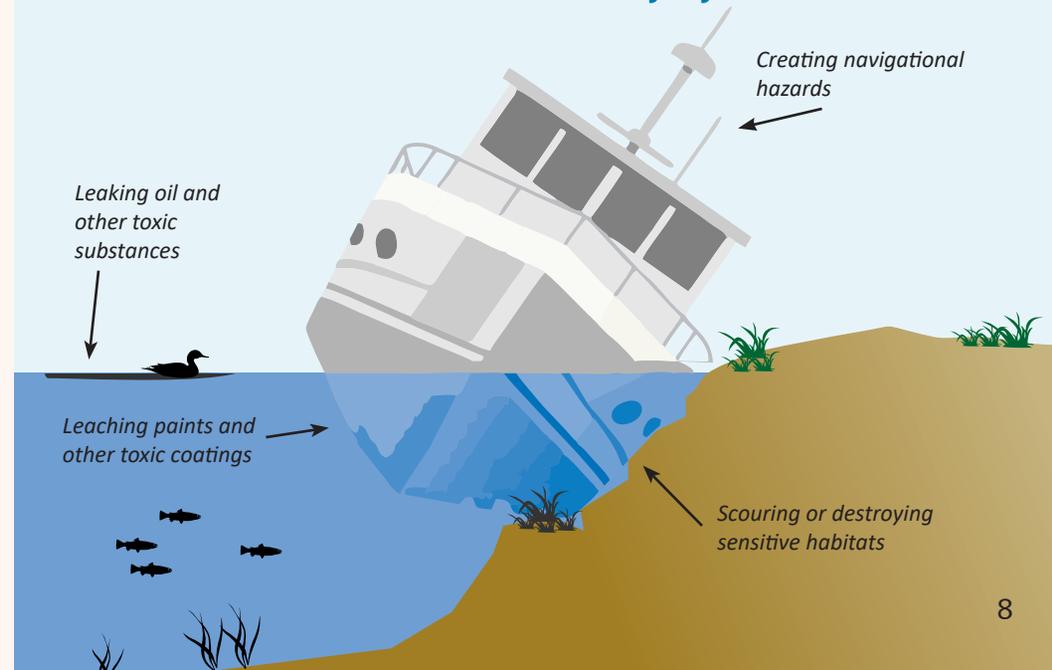
Spotlight:

Snohomish County's efforts to remove harmful derelict vessels from our waterways were bolstered in 2021 by a generous private donation from Phil and Kelly Johnson of Everett. To support the removal of more derelict boats from the Snohomish estuary, the Johnsons donated \$50,000 to the Northwest Straits Foundation, a non-profit conservation and funding partner of the Snohomish MRC.



One of four vessels removed from the Snohomish estuary in 2022.

Derelict vessels impact aquatic habitat and threaten human safety by:



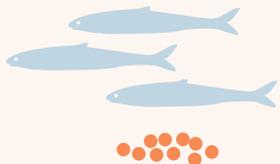
▶ Forage Fish Spawning Surveys

The MRC has been monitoring forage fish spawning in Snohomish County for over a decade. MRC forage fish spawning surveys use [Washington Department of Fish and Wildlife's](#) (WDFW) protocols focusing on surf smelt and Pacific sand lance. These species depend on the [nearshore](#) area for laying eggs on the sand-gravel beaches, spawning and rearing. Continued forage fish monitoring is necessary to determine the effectiveness of restoration projects. The MRC currently takes monthly samples at Howarth Park, Meadowdale, and Picnic Point.

Spotlights:



Forage fish species, including Pacific sand lance and surf smelt play a vital role in the marine food web by providing food for salmon as well as other birds, mammals, and fish. Their presence is a good indicator of a healthy marine ecosystem.



The MRC took 64 **forage fish samples** along the Snohomish County shoreline in 2021.



On top is an adult surf smelt; below is an adult Pacific sand lance.



MRC volunteers collect forage fish samples each month at Picnic Point, Meadowdale, and Howarth Park.

Sometimes the easiest way to conserve vulnerable habitat is to protect it. This involves knowing how much habitat you have in order to measure its decline or recovery. The Snohomish County MRC assists state and federal agencies by helping collect baseline and monitoring data for species or habitats of concern.

Kelp Monitoring

In response to concerns about declining bull kelp populations in some parts of the Puget Sound, and mounting interest in kelp restoration, the MRC gathered data for the Northwest Straits Commission's regional kelp monitoring project. The [MRC kayak surveys](#) cover the Snohomish County nearshore between Everett and Edmonds and around Hat Island.

- Watch the [Kelp Monitoring Video](#) on the MRC website to learn more.
- Read the [Puget Sound Kelp Conservation and Recovery Plan](#), which includes kelp data from around the Puget Sound.
- Explore Puget Sound's Kelp Forests with this [interactive storymap](#) highlighting the Puget Sound Restoration Fund's 2021 Kelp Expedition.



MRC members use kayaks to monitor kelp by taking notes, photos and adding GPS tracking details.

Spotlight:

Bull Kelp is the largest of the 23 native species of large brown algae reaching 60' or more.

The kelp monitoring done by MRC volunteers and staff show an important trend in kelp canopy and beds over time. This information can help lead to science-based decisions on how to manage this resource, and has been used to inform regional kelp planning and conservation efforts. It is important to continue this monitoring effort annually.

Bull kelp forests provide **food and shelter** to dozens of species in our marine ecosystem, including rockfish.



Caged Mussel Water Quality Study

Since 2011, every other year Washington Department of Fish and Wildlife (WDFW) partners with local groups to conduct a monitoring study of toxins released into Puget Sound from stormwater runoff. Mussels are used in this study because of their ability to pick up toxins and filter water efficiently.

There are 96 locations monitored within the Puget Sound, and seven are within Snohomish County. Volunteers and partner organizations placed mussel cages at all locations within Snohomish County on November 5, 2021. After a few months in the water, the mussels will be retrieved in early 2022 and taken to Olympia where they are analyzed for toxins.



MRC volunteers deployed mussel cages at 7 locations in Snohomish County to monitor water quality in Puget Sound.

Marine Vegetation Monitoring

In 2021, Snohomish County signed an agreement with the Washington State Department of Natural Resources (DNR) to conduct a comprehensive study of marine vegetation along the shoreline of Snohomish County between Edmonds and Everett. The area was monitored using towed underwater videography for marine vegetation species, including eelgrass, submerged kelp, and other macroalgae.

Key findings from the 2021 monitoring include the following:

- The study area was colonized by a variety of marine vegetation types, including nearly 500 acres of eelgrass, nearly 700 acres of green algae, approximately 250 acres of red/brown algae, and approximately 200 acres of understory kelp.
- The depth distribution of marine vegetation in the study area was similar to other sites in the Central Basin of Puget Sound.
- Compared with previous data for portions of the study area, there appeared to be very little change in eelgrass area over time. Seven of the eight sites showed no significant trend and at one site there was a small increase over time.

Marine vegetation data were collected using towed underwater videography.



Earth Day

For Earth Day, the MRC hosted a County-wide shoreline cleanup with Washington State University (WSU) Beach Watchers on April 22. A total of 554 pounds of trash was picked up on Earth Day and brought to one of our five sorting locations. Another 360 pounds of litter was collected by volunteers and the Washington State Department of Natural Resources Washington Conservation Crew!

- **Twin Rivers Park:** 234 pounds
- **Esperance Park:** 104 pounds
- **County Campus:** 53 pounds
- **McCollum Park:** 56 pounds
- **Fairfield Park:** 107 pounds

Much of what was picked up was plastic bottles and aluminum cans. Food packaging, dog poop bags, and face masks were also documented. The data collected by the MRC will be shared with local partners in an effort to document the types of debris impacting our waterways.



International Coastal Cleanup Day

For International Coastal Cleanup Day, the MRC hosted a beach cleanup and citizen science event at Kayak Point County Park on September 18. This event was put on collaboratively by the Snohomish County MRC with WSU Beach Watchers, WSU Waste Warriors, and Zero Waste Washington. For cleaning up and assessing the impact of trash on the beach, the organizations utilized the Escaped Trash Assessment Protocol developed by the EPA. Snohomish County Council Member Nate Nehring and Snohomish County Department of Conservation and Natural Resources Director Tom Teigen attended the event.



Volunteer citizen scientists carefully scanned the beach for marine debris and primarily collected small plastic fragments, cigarette butts, bottles and containers, charcoal from firepits, and fishing gear. Using the protocol, the site was given a "C" and determined to be littered, due to there being trash evenly distributed throughout the site and the small accumulations of trash that were visible.

- **40** Volunteer Citizen Scientists
- **68,000** Square Feet of Beach Cleaned and Assessed
- **1,388** Marine Debris Objects Found
- **56** Pounds of Trash Collected

The citizen science data collected will be used for a region-wide effort to better understand trash loading and how trash is impacting the Puget Sound. For more information about how trash is impacting our waterways, check out the [Plastic Free Salish Sea Campaign](#) and [EPA's Trash Free Waters](#).



Social Media Ads

Volunteers with the MRC and WSU Beach Watchers conducted recreational crabber outreach at the 10th Street Boat Launch in Everett.



Crabber Education and Outreach

Beginning on opening crabbing weekend, the Snohomish County MRC worked with WSU Beach Watchers staff and volunteers to connect with approximately 800 crabbers. Volunteers conducted outreach at the 10th Street boat launch in Everett on the mornings of July 1st, 3rd, and 10th. They provided crabbers with the information and products to support sustainable fishing and crabbing practices in an effort to reduce both marine debris and wildlife loss.

In addition to in-person outreach, the MRC posted information on social media, issued a press release, and hosted radio ads on Everett's Greatest Hits KRKO, and Classic Country KKXA. The social media campaign ad ran from July 1st – 4th and reached 2,988 people. Videos from the social media campaigns can be seen [here](#).

Spotlight:

- Researchers estimate that **12,000 crab pots are lost** each year in Puget Sound.
- Lost pots catch and **kill an estimated 129,000 crabs annually**.



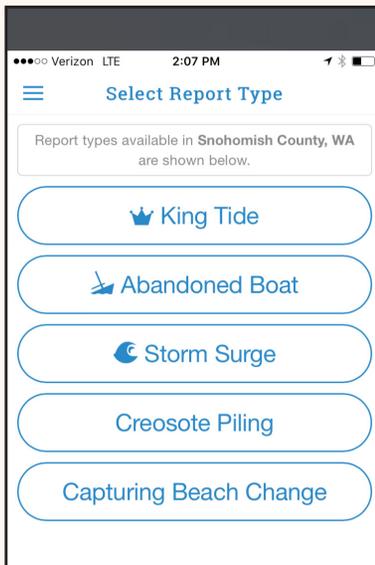
MyCoast

Citizen Science with the MyCoast App

The MyCoast App (mycoast.org) is a free smartphone app and webpage that can be downloaded by anyone who wants to participate in an MRC project. The MRC created “forms” which users can fill out to participate in MRC Projects.

These projects include:

- Storm Surge Monitoring Project
- Report derelict vessels
- Report creosote pilings
- Document king tides
- Capture beach change



Reports submitted on MyCoast are used both within Snohomish County and statewide to track environmental conditions and inform project work, including the MRC's derelict vessel removal efforts.

In 2021, **148 MyCoast reports** were generated in Snohomish County using the smartphone app.



Creosote logs on beach identified on MyCoast being removed by Washington Dept. of Natural Resources AmeriCorps Members.

▶ Thank You

The MRC receives support from the Northwest Straits Commission, Puget Sound Partnership, Snohomish County Council and Executive Somers, the United States Environmental Protection Agency, and Snohomish County Surface Water Management Division for the Marine Resources Program.

Thank you to our MRC Members. Your work and dedication to protecting and restoring the marine environment is making a difference in Snohomish County.

We would like to recognize the Tulalip Tribes and the Stillaguamish Tribe for providing staff support and coordination for MRC Projects. The MRC acknowledges that our work resides on the ancestral lands and waters of the Coast Salish people who have called this place home since time immemorial. We are grateful for our partnership with the Tulalip Tribes and the Stillaguamish Tribe.

A special thank you to the MRC Program Manager Elisa Dawson and MRC Planner Alex Pittman. Thank you to Surface Water Management staff Sheila Hagen, Brett Gaddis, Joycelyn Blue, Joseph Geigel, Frank Leonetti, Stuart Baker, Luke Hanna, and Adam Jackson; Communications staff Meghan Jordan, Sophia Hitsky, and Rebecca Lindahl and to the many other Snohomish County employees who have contributed time and expertise to the 2021 MRC projects.

The accomplishments and current activities of the Snohomish County MRC depend on contributions from MRC Members, volunteers, Snohomish County staff members and individuals from other organizations. Their interest and participation in MRC activities is greatly appreciated.

▶ How to reach us?

- www.snocomrc.org

How to become involved

- Attend monthly MRC [meetings](#)
- Volunteer on local projects
- Become a member of the Northwest Straits Foundation
- Sign up for [MRC email distribution list](#) and [Northwest Straits Initiative newsletter](#)

When/Where are meetings held?

- **When:** Third Wednesday of every month at 6:30 p.m.
- **Where:** MRC Meetings are currently held virtually. Contact Elisa.Dawson@snoco.org for the meeting link.

MRC Staff



Elisa Dawson
SWM Senior Planner



Alex Pittman
SWM Planner