

SNOHOMISH COUNTY MARINE RESOURCES ADVISORY COMMITTEE



2014 ANNUAL REPORT & RECOMMENDATIONS



Snohomish County MRC Annual Report March 2015

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Snohomish County Marine Resources Advisory Committee (MRC)

Background / Introduction

This report outlines the Snohomish County Marine Resources Advisory Committee's (MRC) accomplishments between January and December 2014. It includes a description of current projects and provides recommendations for the Snohomish County Executive and Council.

The MRC was established in 1999 to advise Snohomish County on approaches to conserve the local marine environment. Authorized by Chapter 2.800 of the Snohomish County Code, the MRC advises the County Council and Executive on marine resource issues.

MRC members represent a diverse group of environmental, recreational. conservation, economic, local and tribal government interests. The MRC is part of the Northwest Straits Marine Conservation Initiative (NWSI), guided by the Northwest Straits Commission (NWSC) and the Northwest Straits Foundation (NWSF). Together these entities comprise a non-partisan regional effort to protect and restore marine resources in northern Puget Sound and the Strait of Juan de Fuca. Snohomish County Public Works Surface Water Management Division (SWM) provides staff support for the MRC.



Snohomish MRC Members, Staff and families at summer potluck in Port Susan

Since its inception, the MRC has developed an effective citizen-based process for examining local marine resource issues, engaging and educating the public and initiating efforts to address established priorities. These priorities are guided by the MRC Strategic Plan (2011-2016) and the NWSC Benchmarks.

NWSC Benchmarks

The NWSC benchmarks include the following:

- ✓ marine habitat
- ✓ marine life
- ✓ marine water quality
- √ science
- ✓ education and outreach

Throughout this annual report, the NWSC benchmarks achieved through MRC activities are listed in inset boxes.

The MRC continues to develop a variety of partnerships with government agencies, non-profit organizations and citizen groups to share resources and improve its long-term success. An integral part of the MRC's work is public education and involvement, which includes the training and use of volunteers. Without the help of volunteers, the MRC would not be able to successfully complete many of its important projects.

With a strong emphasis on accountability, the MRC strives to maximize results, build stakeholder confidence, and leverage external funds and partnerships. The MRC is now implementing a number of marine conservation research. outreach. and on-the-ground restoration projects throughout the county. The MRC members are proud of accomplishments over the past year and look forward to facilitating continued support and improvements for the marine resources in Puget Sound.

Summary of Accomplishments

2014 Metrics

The table below summarizes performance metrics for the MRC during 2014.

Committee members	12
MRC volunteer hours	1,624
Beach Watcher volunteer hours	6,316
Value of volunteer time	\$212,156.80
Training events attended	16
Media releases	4
Advisory committees participated in	45
Restoration projects in progress	2
Outreach event participation	14



View of Port Susan from Kayak Point County Park

MRC Sunset Date Removed

Snohomish County MRC members and staff met with Snohomish County Councilmembers to discuss the removal of the sunset clause from County Code. The MRC was set to sunset in September 2014. After meeting with the Councilmembers, a resolution was passed eliminating the sunset clause from County Code. As a result, the MRC is authorized as a committee without a time limit. This saves time and gives the committee the same status afforded other volunteer committees of the County.

Port Susan Resolution

In May 2014, the Snohomish County Council designated Port Susan as a Voluntary Marine Stewardship Area. The Island County Council, Tulalip Tribes, and Stillaguamish Tribe passed similar measures in recent years. A Marine Stewardship Area gives local authorities and marine users a framework for conservation of the natural, economic and scenic environments.

Public Education and Outreach

2014 Accomplishments

Port Susan Tour – In October, Snohomish MRC staff hosted a tour of Port Susan for University of Washington graduate students in the School of Marine and Environmental Affairs. Highlights included a tour of the Klesick Family Farm and a walk through the restored Port Susan Bay Preserve completed by The Nature Conservancy.

Ocean Health Forum – In May, the MRC cohosted a Community Forum with the NWSC on Ocean Health to provide local information on ocean acidification. Presenters included Dr. Terrie Klinger, Simon Geerlofs, and Betsy Peabody. Despite being a sunny spring day, the event was attended by over 45 people.

Starlight Beach Walk – MRC Members, staff, and WSU Snohomish County Extension Beach Watchers hosted two Starlight Beach Walks in 2014: one in Edmonds and the other in Mukilteo. During the evening low tide, people of all ages combed the beach to find starfish, anemones, limpets, crabs, and other intertidal organisms.

Education and Outreach Events

The MRC booth is displayed at community events to promote awareness of the MRC and information on a variety of marine stewardship topics. During the year, the booth was displayed at the following events:

- Sound Waters
- ORCA Marine Debris Event
- Snohomish County Beach Watchers Open House
- Nearshore Public Information Meeting
- Community Forum on Ocean Health
- Puget Sound Speed Crabbing Derby
- Sound Living
- NOAA Nite
- NWSC Conference



Port Susan Tour: Tristan Klesick talking to UW grad students about sustainable farming



Ocean Health Forum: Dr. Terrie Klinger presenting at the community forum

Washington State University Snohomish County Extension Beach Watchers

The MRC continued partnership and support for the WSU Snohomish County Extension Beach Watchers program

Fifteen Beach Watchers graduated from the 2014 training program and became involved in MRC projects and other local efforts. WSU Beach Watcher volunteers contributed 6,316 hours of service for the community.

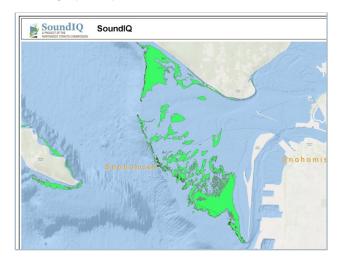
NWSC Benchmarks Achieved:

✓ Education and Outreach

Communicating Science

Sound IQ

Snohomish County MRC worked with SWM and NWSC staff to make MRC GIS data available on Sound IQ. Sound IQ is an online database that currently displays nearshore data from Island, San Juan, and Jefferson MRCs. Snohomish data will be available for public viewing by early 2015.



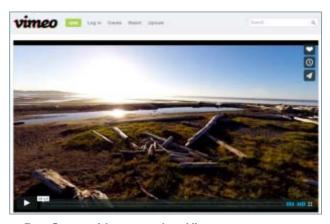
Sound IQ map displaying Snohomish County eelgrass data

Salish Sea Conference

Kathleen Herrmann presented at the Salish Sea Ecosystem Conference in Seattle on April 30, 2014. Kathleen's presentation "Large-Scale Shoreline Restoration along the Railroad Corridor of Puget Sound: An Example in Snohomish County Forged by Creating Partnerships" described the Nearshore Beach Restoration Project that include rip-rap removal and sediment nourishment along the nearshore south of Everett.



2014 Salish Sea Ecosystem Conference



Port Susan video posted on Vimeo

New Videos Released

The MRC contracted with Transect Films to create two videos focused on MRC projects.

The first, "Ghost Pots of Puget Sound," features the MRC's work to remove derelict crab pots from Port Gardner each year. Filming took place during the December 2013 removal of 92 crab pots.

"Port Susan The second video, Marine Stewardship Area," features interviews with region stakeholders including in the Stillaguamish tribe staff, MRC staff, and local farmers. The five minute video premiered at the Focus on Farming Conference attended by over 500 people and was also shown at the annual MRC Conference in Port Townsend. The video has received over 600 views on Vimeo since it was released.

Both videos can be viewed on the MRC website: www.snocomrc.org.

NWSC Benchmarks Achieved:

✓ Education and Outreach

Dungeness Crab

2014 Accomplishments

Puget Sound Speed Crabbing Derby

MRC members and staff attended the daylong event held on the Everett waterfront. Event organizers and MRC members distributed packets of education materials including copies of the "Keep Your Crab Pot, Eat More Crab" nautical chart which features best management practices to reduce the number of lost crab pots. The MRC also provided assistance at the weigh station, measuring crabs and testing shell hardness, and educating participants on local regulations and best practices.



MRC member, Brent Hackney, measures Dungeness crabs at the Speed Crabbing Derby



Dungeness crab being collected for the Crab Pot Escapement Study

NWSC Benchmarks Achieved:

- ✓ Education & Outreach
- ✓ Marine Life
- ✓ Marine Habitat

2014 Workplan Highlights

Dungeness Crabber Education

The MRC began developing a social marketing campaign with the goal of reducing crab pot loss in Snohomish County waters.

In December, the MRC hosted a focus group with experienced recreational crabbers to gather information on best management practices as well as understand the barriers to behavior change. The MRC developed a list of potential projects to influence behavior and promote proper crabbing techniques. This project will continue into 2015 with the implementation of the social marketing strategy.

Crab Pot Escapement Study Advisory Committee

MRC members and staff served on the advisory committee for a study being conducted by the NWSF. The study will determine which of several commonly used recreational crab pot designs used in the Puget Sound are most effective, after becoming disabled, in allowing Dungeness crabs to escape.

Did you know?

As recently as 2011, an estimated 12,000 crab pots were lost each year in Puget Sound! Education efforts by the MRC, WSU Beach Watchers and others throughout Puget Sound are focused on reducing that number.

Nearshore Habitat Protection & Restoration

2014 Accomplishments

Nearshore Public Meeting

Snohomish County held a public information meeting in April to brief interested local residents on details of the marine shoreline restoration project that includes sediment nourishment at three locations and beach restoration at Howarth Park. MRC Program Manager and Lead Staff Kathleen Herrmann presented the overview to approximately 43 people in attendance. The project team answered questions following the presentation. Overall attendees were interested and highly supportive of the project, and even offered to volunteer if needed.

Cultural Resources Assessment

In early 2014, AMEC Environmental and Infrastructure, Inc. conducted a cultural resources assessment at Howarth Park, site of the Snohomish County Nearshore Beach Restoration project. No historic properties were found at that time.



AMEC Cultural Resources Assessment at Howarth Park





Howarth Park at present (above) and artist's rendering of the restoration project (below)

2014 Workplan Highlights

Nearshore Beach Restoration Project –

This project will advance restoration in the nearshore area of the Snohomish River mouth, along the railroad-impounded shoreline between Mukilteo and Everett by removing armoring at Howarth Park and placing additional beach material at three locations. In 2014, the final designs prepared by Anchor QEA were approved by the project team. A three way interlocal agreement between Snohomish County, City of Everett, and the Port of Everett was signed.

The project team obtained grant funding for construction which is planned for late summer/fall 2015. Grants have been awarded by the Salmon Recovery Funding Board, US Fish and Wildlife Service and the US EPA.

Project partners include the Port of Everett, Snohomish County, the USACE, the City of Everett and the Tulalip Tribes.

Nearshore Habitat Protection & Restoration



Lund's Gulch Creek entering Possession Sound at Meadowdale Beach Park

2014 Workplan Highlights

Meadowdale Feasibility Study

Fresh off the success of the restoration design project at Howarth Park, the MRC is working with SWM and the Snohomish County Parks Department, to develop alternatives to a culvert at the mouth of Lund's Gulch Creek. The culvert creates problems for park users, park maintenance, and salmon trying to access the creek. Currently, beach access for park visitors is limited due to high creek water and sediment flows downstream. These winter conditions also cause maintenance issues because sediment piles up in park areas due to the creek overflowing its banks at the culvert. Additionally, fish passage into the creek is limited by a walking grate for people to access the beach. This affects natal and nonnatal juvenile salmonids, including non-natal Chinook salmon, who use this stream. The goal of the project is to improve fish habitat and public access to Puget Sound.

In 2014, Anchor QEA was hired as the consultant. Stakeholder and community meetings were held in December of 2014 to discuss evaluation criteria for the restoration alternatives. The community meeting had over 50 local residents in attendance showing strong support for the County to continue to work to address this problem.

Forage Fish Spawning Surveys

The MRC continued to conduct pre-restoration monitoring of potential forage fish spawning within the Nearshore Restoration Project reach. MRC members, SWM staff and WSU Beach Watchers collected samples between October 2013 and February 2014 to look for the presence or absence of surf smelt and sand lance eggs. Surveys were conducted again beginning in August 2014 and will continue through February 2015. The results of the surveys will provide baseline data for the Nearshore Restoration Project.

Forage Fish Spawning Survey Training

MRC members and staff attended training in June hosted by Washington Department of Fish and Wildlife (WDFW) biologists. WSU Beach Watchers who assist with the project also attended. Participants were trained on how to sample and winnow for forage fish eggs in the nearshore.

Key partners include WSU Snohomish County Extension Beach Watchers and forage fish expert, Dan Penttila.



Volunteer Craig Wollam collecting sediment to look for forage fish eggs

NWSC Benchmarks Achieved:

- ✓ Science
- Marine Habitat

Port Susan Marine Stewardship Area



Aerial photo of Port Susan from Cavalero Point (Credit: Christopher Krembs)

2014 Accomplishments

Port Susan Resolution

In May, the Snohomish County Council designated Port Susan as a Voluntary Marine Stewardship Area. The Island County Council, Tulalip Tribes, and Stillaguamish Tribe passed similar measures in recent years. A Marine Stewardship Area gives local authorities and marine users a framework for conservation of the natural, economic and scenic environments.

Port Susan Report Card

The MRC contracted with Hook Knauer, LLC to review the strategies identified in the Port Susan Marine Stewardship Area Conservation Action Plan (CAP) and identify progress made since 2012. Project partners were interviewed to create a report card to document progress made towards each of the six targets: embedded invertebrates, Dungeness crab, beaches and forage fish, deltas, shorebirds, and Chinook salmon. A final graphic version of the report card will be distributed to project partners in early 2015.

What is a Marine Stewardship Area?

A Marine Stewardship Area (MSA) is a non-regulatory conservation designation that works to generate responsibility within relevant authorities and users of marine environments for the conservation of natural, cultural, and scenic values.

Shoreline Armoring Reduction Incentives Project

The MRC worked with Futurewise to develop recommendations for shoreline incentives programs that will improve nearshore habitat.

A Port Susan Incentives Workshop was held in July. Key stakeholders attended and provided insight into the most effective shoreline protection incentives for Snohomish County. As a result of the workshop and stakeholder interviews, four incentives rose to the top of the list for consideration for a pilot project:

- Establishing a Beach Management District
- Creating a Shoreline Education and Technical Assistance Program
- Offering focused shoreline grants or costshare awards to landowners
- Adding a shoreline component to Snohomish Conservation District's Program.

Work with stakeholders suggested that multiple incentives could be combined to create a program that includes three key elements: funding, permitting/technical assistance, and education/demonstration.

NWSC Benchmarks Achieved:

- ✓ Education & Outreach
- ✓ Science
- ✓ Marine Habitat
- ✓ Marine Life
- ✓ Marine Water Quality

Marine Water Quality

2014 Accomplishments

Derelict Vessel Removal - MRC Staff and members worked with the Washington Department of Natural Resources (WDNR) to support removal of seven derelict vessels in the Snohomish River Estuary September. This is a great partnership between Snohomish County Public Works, the MRC, Snohomish County Sheriff's Department and WDNR. This partnership provided almost \$400,000 in state funds to Snohomish County to help address pollution and habitat concerns that have affected the estuary for a number of years.



Train travelling along the nearshore south of Everett

Did you know?

In Washington State, oil transport by rail has increased from zero shipments of oil in 2011 to 700 million gallons in 2013. Currently, 10 oil trains per week travel through Snohomish County.

Source: Washington Department of Ecology



One of seven derelict vessels removed from Steamboat Slough

2014 Workplan Highlights

Oil Spill Preparedness

The MRC formed a subcommittee to review the 2011 Oil Spill Preparedness and Response report written by University of Washington students and take action on the recommended steps in the report.

After reviewing the report, the subcommittee met with Snohomish County Department of Emergency Management (DEM) and Washington Department of Ecology on separate occasions to explore gaps in oil spill preparedness in Snohomish County and where the expertise of the MRC would be beneficial. The MRC plans to continue to work with DEM on this project and work to begin filling some of the gaps in County oil spill preparedness in the coming year.

NWSC Benchmarks Achieved:

- ✓ Science
- ✓ Education and Outreach
- ✓ Marine Water Quality

Administrative Tasks

MRC Staffing

MRC staff received support from the Snohomish County Public Works and the Surface Water Management Division for the Marine Resources Program. Beyond the MRC Program Manager and Lead Staff, Kathleen Herrmann, and WCC Individual Placement, Alyson Rae, many SWM employees have contributed time and expertise to MRC projects this year.

MRC Meetings and Communication

MRC staff organized MRC meetings, facilitated meeting and training logistics, and transcribed meeting minutes. Staff maintained phone and email contact with MRC members, MRC subcommittees, County staff, contractors, local community groups, volunteers and the public.

The MRC's Northwest Straits Commission (NWSC) Representative and/or the Designated Alternate attended NWSC meetings on January 31, February 21, March 20-21, April 25, May 30, June 27, July 25, August 22, September 26, and October 24, 2014. Ten Snohomish County MRC members and two MRC staff attended the NWSC conference in Port Townsend, WA on December 5-6, 2014.



Tom Hoban accepts award recognizing the MRC for derelict vessel removal project (Credit: Holly Faulstich)

MRC Subcommittees

The MRC maintains an Executive subcommittee and several ad-hoc committees including Mussel Watch, Port Susan, Crabber Education, Derelict Gear, Sound IQ, and Oil Spill Preparedness.

Strategic Plan

The MRC functions under the framework of the 2011-2016 Strategic Plan. The plan guides current and future MRC projects and efforts.

Grant Administration

MRC staff submitted progress reports, provided detailed deliverable task reports and included all associated pictures and hardcopies to the Northwest Straits Commission. Staff also developed and tracked the MRC budget.

The current NWSC Grant also provides funding to conduct the Port Susan Phase I Bulkhead Removal Assessment which got underway in 2014 and will be completed in 2015.

MRC Website

The MRC website features a user-friendly interface and individual project pages. It is regularly updated with events, project progress and interesting marine-related information. In 2014, the site received over 4,000 visits.



MRC Website: www.snocomrc.org

MRC Members

In January, Paul Schlenger was elected to serve as the MRC Chair. Lincoln Loehr was elected as the MRC representative to the NWSC, with Tom Hoban and Kathleen Herrmann as alternates.

Simon Geerlofs was re-appointed to serve as MRC Co-Vice Chair and Franchesca Perez was appointed as Co-Vice Chair. Simon is a marine science and policy analyst with Pacific Northwest National Laboratory. Franchesca is the Shellfish Program Manager at the Stillaguamish Tribe.

MRC Member Training

See Attachment A for details.

Opportunities for 2015

Continuation of Existing Projects:

Derelict Gear Prevention Education

In addition to the 12,000 crab pots lost annually in Puget Sound, derelict nets can also negatively impact marine life and habitat. Over 240 different species have been found in derelict nets. As the MRC has partnered with WSU Beach Watchers to share practices to minimize crab pot loss, the NWSI has worked to remove derelict fishing nets throughout the Salish Sea. As of September 2014, the NWSI has removed 5,150 derelict fishing nets and 3.695 crab pots from the Puget Sound, restoring 732 acres of critical marine habitat. Over 380,000 animals have been removed from derelict gear since the program began in 2002. The NWSI estimates a cost of \$190 to remove a single derelict crab pot. This high cost emphasizes the value of prevention.

In 2015, the MRC will continue outreach efforts with project partners. The outreach will promote best management practices to prevent crab pot loss and reduce derelict gear within Snohomish County waters and throughout the Salish Sea.

Oil Spill Preparedness and Response

The MRC convened a subcommittee to revisit the 2011 Oil Spill Preparedness and Response Report to assist in ensuring Snohomish County is prepared for a marine oil spill. The MRC created a focused list of potential projects to assist in accomplishing this goal including:

- observing a tabletop exercise,
- recruiting volunteers for a vessel of opportunity program,
- joining a Northwest Area Contingency Plan (NWACP) task force, and
- reviewing existing information to identify species at risk.

In 2015, the subcommittee will select and pursue implementation of projects that will have the greatest impact on Snohomish County's oil spill preparedness.

Meadowdale Beach Restoration Feasibility

Meadowdale Beach Park consistently experiences fish barrier, public access and maintenances issues at the Lund's Gulch Creek culvert. The culvert the runs under the BNSF railroad, provides the only public access to the beach from this location. Gravels transported and deposited by the creek upstream, within and downstream of the culvert have significantly increased over the last few years creating negative impacts at the park.

Snohomish County Parks and SWM are working with consultant Anchor QEA to evaluate long term solutions. Goals of the project include enhancing recreational and education uses of the park, improving fish habitat, and reducing maintenance on the current culvert. MRC and SWM staff will continue working with Snohomish County Parks to select the best alternative for this site.

New Project Ideas:

- Kelp Monitoring Project
- Coastal Streams Initiative
- Ocean Acidification Outreach



Kelp monitoring via sea kayak

Recommendations to the Snohomish County Executive & Council

The Snohomish County Marine Resources Advisory Committee presents the following recommendations for consideration by the Snohomish County Council and Executive. These include actions that Council and/or the Executive could take, in addition to general support of the current MRC work program. The MRC welcomes further discussion of these recommendations.

Primary Recommendations

- Support an increase funding in staff support for the MRC. MRC has requested that SWM that a second full time staff member is hired to support the MRC. MRC involvement in additional projects is constrained by limits to the available support from MRC staff.
- Maintain dedicated, stable funding sources and staff for the Marine Resources Advisory Committee.
- Support the completion and restructuring of the rate district reassessment study to include nearshore and tidelands to provide additional funds to expand the MRC's ability to work throughout the marine shorelines of the County.
- 4. Engage with MRC Members in relevant marine conservation issues in which they can provide expertise.
- 5. Authorize the County and MRC to implement an incentives program as described in the Futurewise report (described on page 8) to reduce shoreline armoring in the County.
- 6. Encourage implementation of the strategies developed in the Port Susan Marine Stewardship Area Conservation Action Plan.
- Support the efforts of the Northwest Straits Marine Conservation Initiative and encourage the continuation of federal funding for this nationally recognized, locally driven program.
- 8. Support, encourage, and fund nearshore habitat restoration capital projects, especially softshore protection demonstration projects.
- 9. Support the Nearshore Beach Restoration Project for enhancement of the marine

- nearshore between the Cities of Mukilteo and Everett. Continue partnership with the City of Everett, the Port of Everett, and other landowners to implement project.
- 10. Support and fund the efforts of the Parks Department and the MRC to restore nearshore habitat at Meadowdale Park.
- Support and fund the full restoration of the Snohomish County Smith Island Tidal Marsh Restoration Project.



Snohomish County Beach Watchers assist with forage fish spawning surveys at Howarth Park

Additional Recommendations

Public Involvement and Education

- 1. Continue to encourage citizen involvement in marine resource monitoring and protection opportunities. .
- 2. Promote and expand partnerships with agencies, tribes, municipalities, universities, community colleges, non-profit organizations and citizen groups.

Dungeness Crab Stewardship/Derelict Gear Removal

- Support the efforts of the NWSI to complete the removal of derelict fishing gear in local waters including participation in the NWSF Strategic Crab Pot Advisory Committee.
- Support efforts of the MRC to implement education and outreach projects to reduce recreational crab pot loss in Snohomish County waters using social marketing concepts.
- 3. Encourage and facilitate partnerships with agencies, tribes, municipalities, universities, community colleges, non-profit organizations and citizen groups to protect and restore Dungeness crab habitat.



Dungeness crab

Nearshore Habitat Protection and Restoration

1. Acknowledge and begin to address the impact of climate change and anticipated sea level rise on marine resources.

- Support restoration projects being conducted by project partners in Snohomish County such as Mukilteo Tank Farm, Qwuloolt, Mid-Spencer, Blue Heron Slough, and Edmonds Marsh.
- Support partnerships targeted to protect and restore marine shoreline habitat, and encourage private ownership participation in these activities.
- Ensure marine shoreline development projects in Snohomish County are coordinated with respect to mitigation of comprehensive and cumulative effects on our shoreline and marine resources.

Marine Water Quality

- Support the recommendations of the 2011
 Oil Spill Preparedness and Response report
 and MRC implementation of projects which
 will improve Snohomish County oil spill
 preparedness and response.
- Monitor and support legislation that promotes a study of the risks associated with the increased transport of oil by rail along the Snohomish County shoreline.
- 3. Support continued mussel watch monitoring efforts through WDFW.

Regional Puget Sound Conservation Efforts

1. Continue to participate in the Puget Sound Partnership's Local Integrating Organization Implementation Team to select Near-Term Actions for the 2015 PSP Action Agenda Update to improve the health of Puget Sound and enhance the quality of life for Snohomish County citizens.

Acknowledgements

The accomplishments and current activities of the Snohomish County MRC depend on contributions from volunteers, Snohomish County staff members, and individuals from other organizations. Many of our MRC partners are listed below. Their interest and participation in MRC activities is greatly appreciated. We apologize for any omissions.

Snohomish County MRC Members

Paul Schlenger, Chair, Confluence Environmental Company, Fish Biologist and Marine Ecologist, Environmental Interest

Simon Geerlofs, Co-Vice Chair, Pacific Northwest National Laboratory, Marine Science and Policy Analyst, Conservation/Environmental Interest

Franchesca Perez, Co-Vice Chair, Stillaguamish Tribe, Marine Stewardship and Shellfish Program Manager, Local Tribal Government

Thomas Hoban, Coast Commercial Properties, Real Estate Broker, **Economic Interest**

Keeley O'Connell, EarthCorps, Senior Restoration Ecologist, Conservation/Environmental Interest

Brent Hackney, Brent Hackney Designs, Inc., Owner, Economic Interest

Lincoln Loehr, Environmental Consultant, Conservation/ Environmental Interest

Cathy Stanley, Tulalip Tribes, Shellfish Biologist, Local Tribal Government

Susan Tarpley, City of Edmonds Discovery Programs, Ranger-Naturalist, Environmental

Bob Hillmann, City of Everett, Parks Department. Project Coordinator, Local Government

Mike Ehlebracht, Hart Crowser, Geochemist, **Economic Interest**

Mike Montanari, Coastal Tourism Research, **Economic Interest**

Snohomish County Marine Resources Program Staff

Kathleen Herrmann, Lead Staff Alyson Rae, Program Assistant

Port Susan Marine Stewardship Area

Abby Hook, formerly with Tulalip Tribes, Hook-Knauer LLC

Brett de Vries. Snohomish Conservation District

Kathleen Herrmann, Snohomish MRC Staff Caroline Gibson, NWSC

Chrys Bertolotto, WSU Snohomish County Extension

Franchesca Perez, Stillaguamish Tribe Gina Gray, Stillaguamish Tribe

Karen Stewart, Island County Kat Morgan, Nature Conservancy Kate Litle. Washington Sea Grant Monte Marti. Snohomish Conservation District Sasha Horst, NWSC Scott Chase, Island County Shore Stewards Simon Geerlofs, Snohomish MRC

Thomas Hoban, Snohomish MRC Tracie Johannessen, formerly with NWSF

Dungeness Crab

Brent Hackney, Snohomish MRC Cathy Stanley, Tulalip Tribes Franchesca Perez, Stillaguamish Tribe Don Rothaus, Washington Department of Fish and Wildlife

Don Velasquez, Washington Department of Fish and Wildlife

Tom Hoban, Snohomish MRC Bob Hillmann, City of Everett Joan Drinkwin, NWSF **Natural Resources Consultants** Suzi Wong Swint, Snohomish County WSU Snohomish County Extension Beach Watchers

Public Involvement and Education

Francesca Perez, Stillaguamish Tribe Tristan Klesick, Klesick Family Farms Kat Morgan, The Nature Conservancy Kit Crump, Snohomish County SWM Dr. Terrie Klinger, University of Washington Betsy Peabody, Puget Sound Restoration

Fund
Faith Haney, Transect Films
Casey Rice, NOAA
Ginny Broadhurst, NWSC
Caroline Gibson, NWSC
Tom Hoban, Snohomish MRC

Lincoln Loehr, Snohomish MRC
Paul Schlenger, Snohomish MRC
Simon Geerlofs, Snohomish MRC
Susan Tarpley, Snohomish MRC
Bob Hillmann, Snohomish MRC, City of Everett
Sally Lider, City of Edmonds
Suzi Wong-Swint, Snohomish County
Stef Frenzl, Snohomish County
Chrys Bertolotto and the WSU Snohomish County
Extension Beach Watchers

Nearshore Habitat Protection and Restoration

Coastal Geologic Services
Curtis Tanner, U.S. Fish and Wildlife
Service

Dan Penttila, Salish Sea Biological
Dave Lucas, Snohomish County SWM
Debbie Terwilleger, Snohomish County
SWM

Alyson Rae, Snohomish MRC Staff Frank Leonetti, Snohomish County SWM Scott Moore, Snohomish County SWM Hugh Shipman, Washington Department of Ecology

Kathleen Herrmann, Snohomish MRC Staff

Kathy Ketteridge, Anchor QEA
Kollin Higgins, King County
Lincoln Loehr, Snohomish MRC
Lisa Kaufman, NWSF
Mark Harrison, Port of Everett
Mary Cunningham, City of Everett
Mike Rustay, Snohomish County
Morgan Ruff, Tulalip Tribes
Paul Schlenger, Confluence Environmental Company
Bob Hillmann, City of Everett
Sean Callahan, NOAA
Todd Zackey, Tulalip Tribes

WSU Snohomish County Extension Beach Watchers

Marine Water Quality

Franchesca Perez, Stillaguamish Tribe, Snohomish MRC Mike Ehlebracht, Snohomish MRC Lincoln Loehr, Snohomish MRC Kathleen Herrmann, Snohomish MRC Staff Susan Tarpley, Snohomish MRC Rodney Rochon, Snohomish County Sheriff's Department Snohomish County Department of Emergency
Management
Washington Department of Ecology
Brenda Treadwell, Washington Department of Natural
Resources
Alyson Rae, Snohomish MRC Staff

Forage Fish Spawning Surveys

Frank Leonetti, Snohomish County SWM
Mike Rustay, Snohomish County SWM
Kathleen Herrmann, Snohomish MRC Staff
Franchesca Perez, Stillaguamish Tribe,
Snohomish MRC
WSU Snohomish County Extension Beach

WSU Snohomish County Extension Beach Watchers

Craig Wollam, WSU Beach Watcher Alyson Rae, Snohomish MRC Staff Dan Penttila, Salish Sea Biological Lincoln Loehr, Snohomish MRC

Snohomish County Staff Members & Elected Officials

Public Works Department, Surface Water Management Division

Debbie Terwilleger, Director Ann Bylin, Planning Supervisor Grego Farris, SWM-SPA Supervisor Kathleen Herrmann, MRC Lead Staff

Alyson Rae, WCC IP

Sean Edwards, Senior Planner Allison Sanders, GIS Analyst

Scott Moore. Native Plant Steward Suzi Wong Swint, Senior Planner

Frank Leonetti, Senior Habitat Specialist Mike Rustay, Senior Habitat Specialist

David Lucas, Engineer

Stef Frenzl, Communications Specialist

Department of Parks and Recreation

Tom Teigen, Parks Director Chris Mueller, Senior Planner Sharon Swan, Senior Planner Logan Daniels, Engineer

Snohomish County Executive

John Lovick

Snohomish County Council 2014

Ken Klein - District 1 Brian Sullivan - District 2 Stephanie Wright - District 3 Terry Ryan - District 4

Dave Somers, Chair - District 5

Lynn Lichtenberg

WSU Snohomish County Extension Beach Watchers

Alex Ho Annette Rosebrook Barbara Keithly Bea Wilson Bernie Busch Beverly Black Bill James Bill McLaughlin Bob McCort Bobbie Constantine Brian Cleveland Bruce Bennett Carol Forsberg Carol Winter Charlie Stewart Chris Betchley Christine Longdon Chuck LoPresti Craig Wollam Darla Gay Smith Dave Compton Deanna Stiles Diane Patterson

Donna Bennett

Donna Kinsey

Donna Maupin

Fred Benedetti Gary Harshman Georgeann Silverman Harlen Forsberg Heidi Smith Hugh Matheson lla Osburn Janet Loehr Jerry Anderson Joan Douglas Jourdan Keith Jov Lvnch Judy Atkins Judy Ness Karen Siebrass Kathy Konarzewski Kathy Traugott Larry Whatley Laurel Nyquist Lee Kimmelman Leslie Rafael Lincoln Loehr Linda Whatley Lisa Parkinson Liz Heisler Lucinda Diann

Lynn McCort Margarita Molina Mary Vanderway Mauricio Calderon Melanie Wyffels Melonique Riall Michael Kyte Nancy Engen Pat Smith Patrick Deagen Paul Granquist Sandy Evans Scott Montgomery Shelley Byington Shian Rashid Stefan Dittmar Susan Stewart Thomas Murphy Tom Hoban Trish Mayfield Ursula Gallagher Veda Rosier Wendy Oresik

ATTACHMENT A: SNOHOMISH COUNTY MRC SUMMARY OF TRAINING EVENTS

MRC members and staff participated in the following training sessions in 2014:

Sound Waters

February 1, 2014

Attendees: Lincoln Loehr and Alyson Rae

• Salish Sea Shoreline Forum

February 3, 2014

Attendee: Kathleen Herrmann

Sea Level Rise Class

February 27, 2014

Attendee: Kathleen Herrmann

Marine Shoreline Design Guidelines Workshop (Federal Way)

March 20, 2014

Attendees: Paul Schlenger and Keeley O'Connell

Marine Shoreline Design Guidelines Workshop (Mt. Vernon)

March 25, 2014

Attendees: Bob Hillmann, Franchesca Perez, Mike Montanari, Kathleen Herrmann, and Alyson Rae

WDFW Hazwoper Training

March 29, 2014

Attendees: Bob Hillmann, Mike Montanari, and Alyson Rae

Social Marketing Framework for Armoring Behaviors

April 24, 2014

Attendees: Tom Hoban, Kathleen Herrmann, and Alyson Rae

Salish Sea Conference

April 30-May 2, 2014

Attendees: Franchesca Perez, Paul Schlenger, Lincoln Loehr, Keeley O'Connell, Simon Geerlofs, Kathleen Herrmann, and Alyson Rae

Salish Sea Shoreline Forum

May 20, 2014

Attendees: Kathleen Herrmann

WDFW Forage Fish Spawning Survey Training

June 16, 2014

Attendees: Lincoln Loehr, Mike Ehlebracht, Mike Montanari, Paul Schlenger, Bob Hillmann, Kathleen Herrmann, and Alyson Rae

Social Marketing Training

July 15 and 29, 2014

Attendee: Alyson Rae

Shoreline Monitoring Toolbox Webinar

July 31, 2014

Attendees: Kathleen Herrmann and Alyson Rae

Marine Managers Workshop

September 10, 2014

Attendees: Kathleen Herrmann and Paul Schlenger

Sound Living: One Day Communiversity

October 25, 2014

Attendees: Bob Hillmann, Mike Ehlebracht, Franchesca Perez, Lincoln Loehr and Alyson Rae

• Focus on Farming Conference

November 20, 2014

Attendees: Kathleen Herrmann and Alyson Rae

NWSC Annual MRC Conference

December 5-6, 2014

Attendees: Cathy Stanley, Franchesca Perez, Kathleen Herrmann, Keeley O'Connell, Lincoln Loehr, Alyson Rae, Paul Schlenger, Bob Hillmann, Simon Geerlofs, Susan Tarpley, Mike Ehlebracht and Thomas Hoban