## Marine Resources Committee 2016 Annual Report

Restore, Conserve, Educate



Snohomish County Marine Resources Committee Snohomish County Public Works Surface Water Management



### Snohomish County Marine Resources Committee

#### 2016 Annual Report

Snohomish County Marine Resources Advisory Committee 3000 Rockefeller Avenue, M/S-607 Everett, WA 98201

#### Questions and/or comments about this report should be directed to:

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Message from Chair, Franchesca Perez

What an amazing year for the Snohomish Marine Resources Committee! Through the passion and expertise of this dedicated group of volunteers, we have completed a long list of actions to improve the health of Puget Sound via science, education, and restoration. The marine waters of Snohomish County add priceless value to those who live and visit here. Yet the stewardship of our marine

ecosystem encompasses so many issues that we cannot expect local agencies to prioritize and address them without citizen support. The Snohomish MRC continually leverages the capacity of local, state and federal tax dollars to support regional priorities with the work of citizen scientists and volunteers who give their time and energy for the benefit of our marine environment.

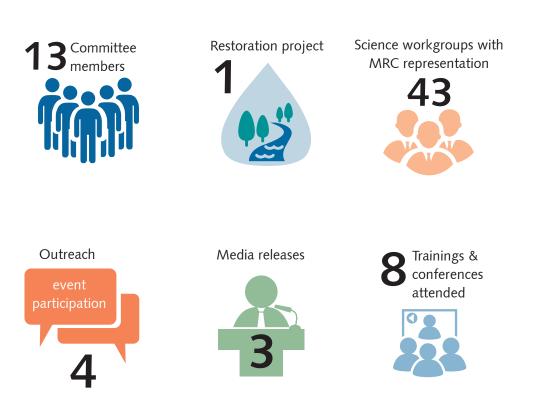
### **OVERVIEW**



The Snohomish County Marine Resources Committee (MRC) is a team of citizen volunteers dedicated to promoting effective stewardship of Snohomish County's marine waters, habitats, species, and shorelines. The MRC seeks out the best available scientific information and uses it to evaluate, prioritize and implement strategies for achieving and sustaining a healthy Puget Sound.

Committee members are united by a dedication to managing natural resources for the benefit of all. MRC Members 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.

## "Dedicated to the marine environment."



### About the MRC

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

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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 <u>Northwest Straits</u> <u>Marine Conservation Initiative (NWSI) Strategic Plan</u>

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

### Northwest Straits Marine Conservation Initiative



### FINANCE



### **Program Support**

1,037 professional hours donated in 2016 to implement MRC's 2016 work plan and related activities which:

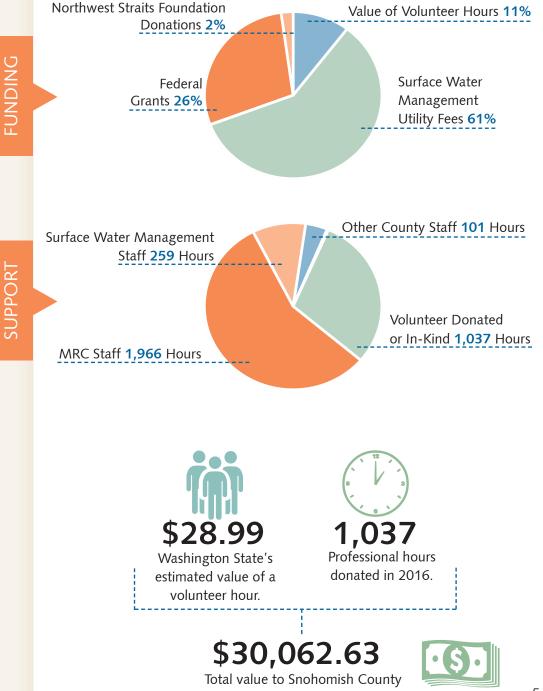
- o Provided a forum to mobilize citizen support the marine conservation.
- o Generated and implemented practical, on-theground projects that benefit the ecosystem and the economy of our region.

# Did you know?

"The value of the commercial and recreational fishing industries in Washington State provides over \$7 billion dollars in sales, over \$2 billion dollars in income and over \$3 billion in value added to the economy. Over 65,000 jobs in Washington State come from the commercial and recreational fishing industries."



Source: - <u>National Marine Fisheries Service.</u> 2014. Fisheries Economics of the United States, 2012. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-F/SPO-137, 175p.



## **RESTORE**

The Snohomish County MRC is committed to restoring our marine and nearshore habitat and striving for net gains in the quality of habitat and resources, while improving public access to shoreline.



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### RESTORE



Spotlight:

#### **Nearshore Restoration Project**

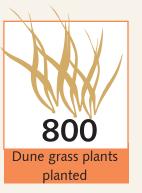
In the late 1800s, railroad construction along the shoreline began disrupting natural beach and habitat formation processes that resulted in degraded shorelines and reduced beach area. Extensive loss of beach habitat impact both salmon and forage fish. Forage fish need sand and gravel to spawn while juvenile salmon rely on shallow water areas to avoid predators. Without this type of habitat, the food source for orcas, seals, birds, and other marine organisms deteriorates.

To address this problem of shoreline erosion, Snohomish County started a beach nourishment project between Mukilteo and Everett to place 22,156 tons of sediment at five locations. The County also worked with the City of Everett and the Port of Everett to remove a bulkhead at Howarth Park and increase the useable beach area for both people and juvenile Chinook Salmon.

Over time, the sand will naturally distribute along the shoreline. In addition to fish habitat, this project has given the community increased beach area to enjoy. At Howarth Park, the beach has been increased by more than 120 feet from the pedestrian tower. Construction for this <u>project</u> was completed in the fall of 2016.

#### Howarth Park Volunteer Planting Day

Special thank you to the 18 Olympic View Middle School Students from National Junior Honors Society who helped with Community Planting Day last November!

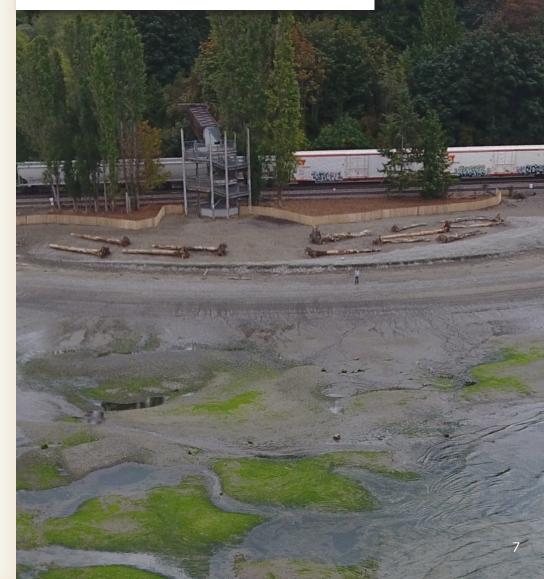


Sediment and sand was barged to the shore for fish habitat creation and beach.



Loads of sand





### RESTORE

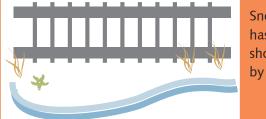


#### Long-Term Nearshore Beach Restoration Maintenance and Management Study

Beach nourishment should occur every 7-10 years to remain effective. Gradually the waves erode the sand and nourishment must be repeated to maintain the beach habitat. The Long-Term Nearshore Beach Restoration Maintenance and Management Study provides recommendations on funding level and mechanisms to continue this program. In September, the MRC hosted a community and stakeholder workshop to discuss funding opportunities for long-term maintenance of the nearshore restoration sties and how to continue stewardship of the beaches.

#### **Nearshore Marine Culverts Assessment**

The MRC is collaborating with the National Oceanic Atmospheric Administration (NOAA) to develop a preliminary assessment of marine culverts within the railroad-impounded nearshore of Snohomish County. This work will identify potential beach nourishment locations along Snohomish County's nearshore areas south of Everett and will result in a ranked list of marine culverts that Burlington Northern Santa Fe Railway (BNSF) could upgrade along the county's portion of the shoreline.



Snohomish County has over 23 miles of shoreline impacted by the railroad. Did you know?

## CONSERVE

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.

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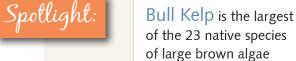
### CONSERVE



### **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 entire southern portion of the Snohomish County Nearshore from the Snohomish/King county border to the Snohomish River Delta.

• Watch the Kelp Monitoring Video to learn more







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



2016 monitoring found: 10 Bull Kelp beds covering 13 acres.

### Did you know?

Just north of the Mukilteo Ferry Landing grows a kelp bed over a mile long.

### CONSERVE

#### Forage Fish Spawning Surveys

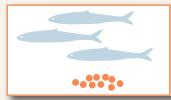
The MRC Forage Fish Spawning Survey project works in partnership with University of Washington's <u>Megan Dethier</u> and her team. The monitoring is focused on two species: surf smelt and pacific sand lance, which lay eggs on intertidal sand-gravel beaches.

MRC volunteers collected sediment samples, which were winnowed, processed, and examined to look for eggs. This information is used to quantify spawning abundance and for scientific evaluations of spawning sites.

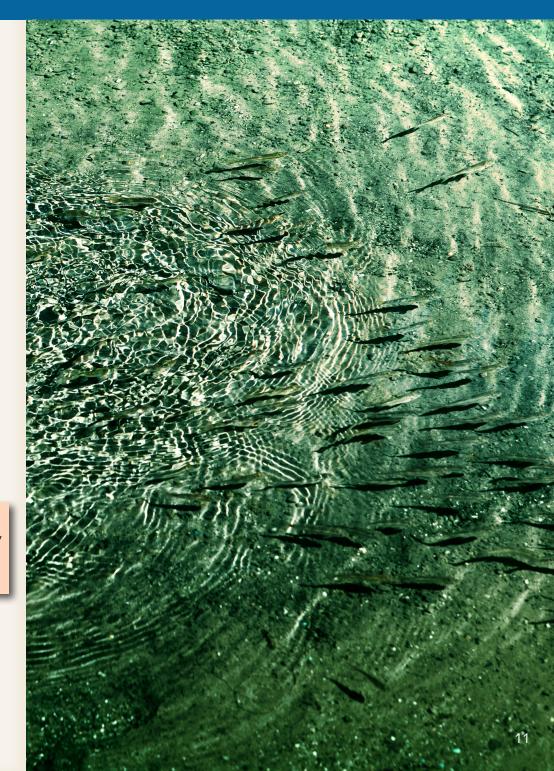


#### Caged Mussel Study, Feb. 2-5, 2016

Washington Department of Fish and Wildlife (WDFW) biologists are using cages filled with Penn Cove mussels to track the levels of stormwater pollution entering Puget Sound. The MRC sponsored three locations including: Brackett's Landing, Meadowdale Beach Park, and Nakeeta Beach. Members deployed one cage at each location and assisted in their retrieval approximately three months later.



11 days of **forage fish** monitoring in Snohomish County at 17 locations; eggs found at 13 locations.



The Snohomish County MRC provides education on key issues relating to our 123 miles of shoreline, including best management practices for shoreline landowners, recreational fishermen, and other interested citizens. 

#### **Crabber Outreach**

On opening crabbing weekend, the Snohomish MRC connected with more than 600 fishermen and women through in-person and social media outreach. Volunteers provided the information and products to support sustainable fishing and crabbing practices in an effort to reduce both marine debris and wildlife loss.

### **Community Involvement**

The Snohomish MRC booth was displayed at three community events to promote awareness and information on a variety of marine stewardship topics:

- Warm Beach Summerfest
- Sound Waters
- Sound Living



- 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.





#### **Storm Surge Monitoring**

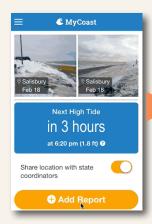
MRC members worked with <u>Eric Grossman</u> from the United States Geologic Survey (USGS) to measure storm surge in Snohomish County waters and to provide information to calibrate a wave prediction model for Puget Sound.



#### Volunteer Training, Oct. 21, 2016

The MRC hosted a citizen science training for the storm surge project at Kayak Point Park to teach the volunteers how to collect data and use the MyCoast Smart Phone App. The app provides a way for volunteers to document storm surge, derelict boats, and creosote logs. Additional monitoring information options are being added.

View the <u>Snohomish County MyCoast Website</u> for more information.



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Over 25 storm surge reports have been collected through the MyCoast Smart Phone App.



### **Oil Spill Preparedness**

The MRC Oil Spill Preparedness Subcommittee collaborated with the Snohomish County Department of Emergency Management (DEM) to explore gaps in oil spill preparedness within the county and where MRC's expertise would be beneficial.

The MRC was instrumental in bringing the 2016 National Response Corporation's Washington State Covered Vessel Training and Tabletop Exercise to Snohomish County on November 9 and 10. The spill drill was designed to simulate the first 24-hour response activities to an oil tanker accident, in which thousands of gallons of crude oil were released, much of which would impact our local shorelines. The exercise involved more than 125 participants and was attended by federal, state, and local agencies/entities (United States Coast Guard, NOAA, United States Navy, Washington State Department of Ecology, Washington State Department of Fish & Wildlife, DEM, and the MRC).

The MRC, in the Community Liaison Role, provided valuable local, county-specific information and knowledge that added significantly to the success of the exercise. Overall, it was a tremendous opportunity to promote relationship building and information sharing amongst emergency responders and to advance emergency preparedness for Snohomish County.



## **MRC** in the Community

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# MRC Members Learn and Engage in the Community

Salish Sea Ecosystem Conference, Vancouver BC, April 15, 2016 The Salish Sea Ecosystem Conference is the largest, most comprehensive event of its kind in the region. Assembled scientists, First Nations and tribal government representatives, resource managers, community/business leaders, policy makers, educators and students present the latest scientific research on the state of the ecosystem, and guide future actions for protecting and restoring the Salish Sea Ecosystem. The conference was an incredible opportunity to link MRC volunteers and staff members to the latest scientific and policy information in our region and bring what they learned back to Snohomish County.

#### Annual MRC Retreat, Port Townsend, Nov. 4-5, 2016

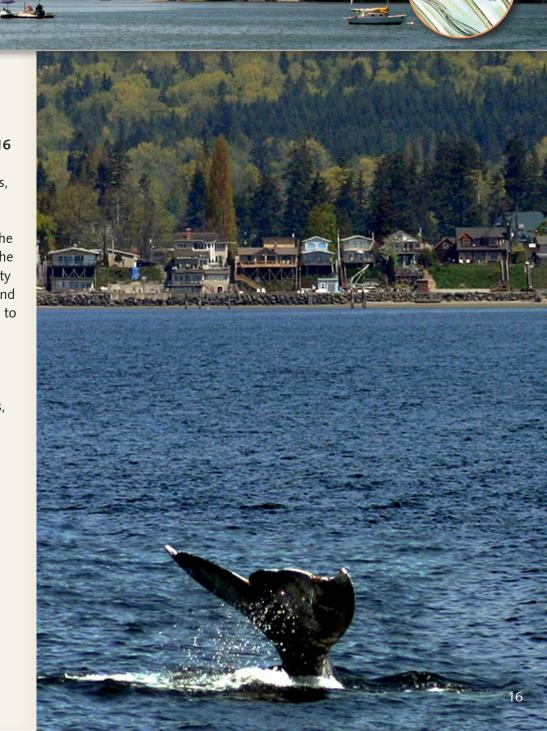
Ten Snohomish County MRC members joined in the opportunity to share project ideas and accomplishments through presentations, posters and facilitated discussions with over 40 organizations including all seven other County Marine Resource Committees, led by the Northwest Straits Initiative.

### MRC/Northwest Straits Foundation Celebration, Woodinville, Aug. 17, 2016

In partnership with the Northwest Straits Foundation, the MRC celebrated three committee members' lifetime contributions of community service to the program.

- Tom Hoban: 1,869 hours
- Paul Schlenger: 424 hours
- Simon Geerlofs: 425 hours





### **Contact Us**



#### How to reach us?

• <u>www.snocomrc.org</u>

#### How to become involved

- Attend monthly MRC meetings
- Volunteer on local projects
- Become a member of the Northwest Straits Foundation
- Sign up for <u>MRC email distribution list</u> and <u>Northwest Straits</u> <u>Initiative newsletter</u>

### When/Where are meetings held?

• Third Wednesday of every month 6:30 p.m. Snohomish County Administrative Building East on the 6th Floor

### **Credits and Resources**

# Thank You

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

A special thank you to the MRC Program Manager and Lead Staff Kathleen Pozarycki, MRC Planner Elisa Dawson, and Washington Conservation Corps Individual Placements, Hannah Spohn and Autumn Moore, and to the many Surface Water Management employees who have contributed time and expertise to the 2016 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.

