



Snohomish County
Marine Resources
Advisory Committee

2005 ANNUAL REPORT
& RECOMMENDATIONS

August 17, 2005



Snohomish County Marine Resource Advisory Committee
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**Snohomish County
Marine Resources Advisory Committee (MRC)
August 17, 2005**

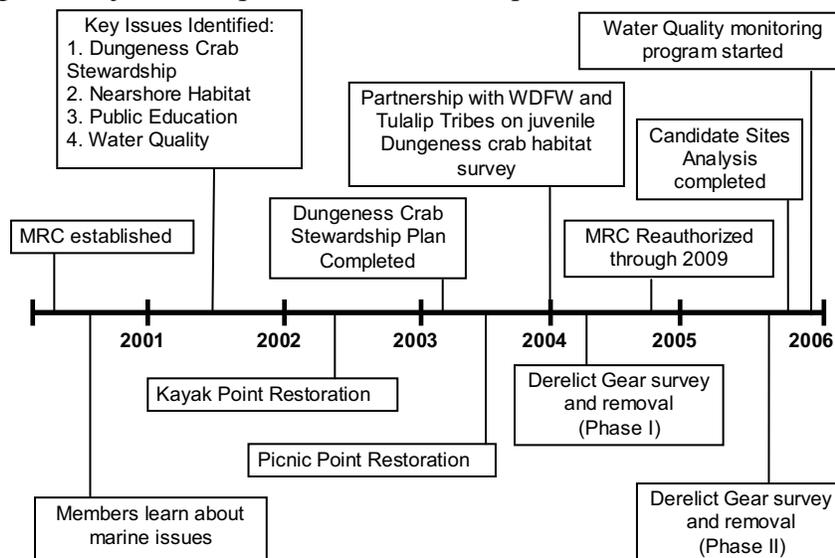
The Snohomish County Marine Resource Advisory Committee (MRC) was established in 1999 to advise Snohomish County on approaches to conserve the local marine environment. The MRC is authorized by Ordinance 04-091 of Chapter 2.800 of the Snohomish County Code to advise the County Council and Executive on marine resource issues. This report outlines the MRC’s accomplishments for the period of July 2004 – June 2005, and includes a description of current projects and recommendations for the Snohomish County Executive and Council.



The MRC is composed of eleven citizen members who represent a broad range of interests. We participate in the Northwest Straits Marine Conservation Initiative, a non-partisan regional effort to protect and restore marine resources in northern Puget Sound and the Strait of Juan de Fuca. Staff support for the Snohomish County MRC is provided by the Surface Water Management Division of the Public Works Department.

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 small-scale efforts to address established priorities. Additionally, the MRC has developed a wide variety of partnerships with agencies, non-profit organizations and citizen groups to share resources and improve our chances for long-term success.

Our initial efforts have provided a strong foundation of tools and knowledge to fulfill our mission. Our strong emphasis on accountability has enabled us to maximize results, build stakeholder confidence and leverage external funds and partnerships. Below is a timeline of the MRC’s highlighted major accomplishments since inception.



Accomplishments 7/2004 – 6/2005

Public Involvement and Education

1. Organized Beach Expos with guided beach walks at Kayak Point, Mukilteo, and Jetty Island parks.
2. Maintained the MRC website and library.
3. Generated 3 newspaper articles featuring MRC projects.
4. Participated in the independent five-year evaluation of the Northwest Straits Marine Conservation Initiative.
5. Led a marine debris beach survey and clean-up projects with University of Washington students at Meadowdale, Picnic Point, and Mukilteo parks.
6. Participated in the Northwest Straits Conference, hosted in Everett, summer 2004.
7. Worked with Everett High School students to produce a MRC video featuring footage from an educational Boat Tour.
8. Provided marine resource presentations to interested groups.



Above: MRC Beach Expo



Above: Adult Dungeness crab

Dungeness Crab Stewardship

1. Posted crab stewardship information at beaches in Edmonds and Mukilteo.
2. Coordinated with WDFW to acquire and analyze WDFW's 2003-04 crab harvest data.
3. Cooperated with WDFW, Tulalip Tribes and WSU Beach Watchers for design and implementation of the juvenile Dungeness crab habitat survey and productivity assessment.
4. Coordinated with the Northwest Straits Commission for derelict fishing gear survey and removal efforts in Port Gardner.

Nearshore Habitat Protection & Restoration

1. Completed the Kayak Point Nearshore Pilot Project, including development and installation of six interpretive signs.
2. Completed the Picnic Point Nearshore Restoration Project.
3. Monitored restoration plantings at Kayak Point.

Right: Volunteers remove English Ivy from Picnic Point



Data Compilation and Analysis

1. Contributed nearshore candidate site methodology and analysis to the Stillaguamish, Snohomish and Cedar-Sammamish salmon recovery plans, as well as identified project opportunities through committee participation and document submittal.
2. Completed a Nearshore Candidate Site Analysis for Snohomish County. Compiled marine and nearshore data for integration with Snohomish County's Geographic Information System (GIS).



Marine Water Quality

1. Secured grant funding for marine water quality monitoring.
2. Initiated synthesis of marine water quality data compilation from a range of sources.

Administration

1. Formed sub-committees to focus on 3 priority work areas: Dungeness Crab, Nearshore Habitat, and Marine Water Quality.
2. Successfully concluded previous administrative and action grant requirements.
3. Developed and submitted 2005-2007 work plan to the Northwest Straits Commission (NWSC).

Work Plan 2005-2007

The MRC's Work Plan for the period of July 2005 – June 2007 defines strategic goals and projects to achieve on-the-ground results in each of the target areas:

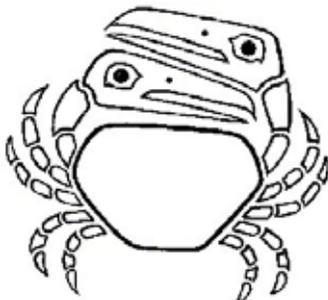


Image courtesy of Bill Neat

- Public Education and Outreach
- Dungeness Crab Stewardship
- Nearshore Habitat Protection
- Marine Water Quality

This Work Plan will improve the MRC's ability to make science-based recommendations to the County Executive and Council. The targeted priorities are supported by a subcommittee structure which was formed this year to increase public awareness, improve the best available science, and further the MRC's understanding of marine issues to make recommendations and implement successful on-the-ground restoration and protection projects.

Below are highlights from the MRC's 2005-2007 Work Plan. A Work Plan & Funding Source Summary Chart is included under the Attachments portion of this report.

Public Education & Outreach

Subcommittee Outreach- Each subcommittee has prioritized public outreach and education to ensure that County residents benefit from the MRC's work.

MRC Beach Expos

Since 2000, the MRC has reached over 4,000 local residents at public beaches to educate them about marine life and conservation issues of the Puget Sound. The Beach Expo program, offered in partnership with WSU Beach Watchers, will continue to host summer events at Kayak Point, Mukilteo State Park, and Jetty Island.



Above: Chrys Bertolotto, WSU Beach Watcher Project Coordinator, educates public at a Beach Expo with the MRC



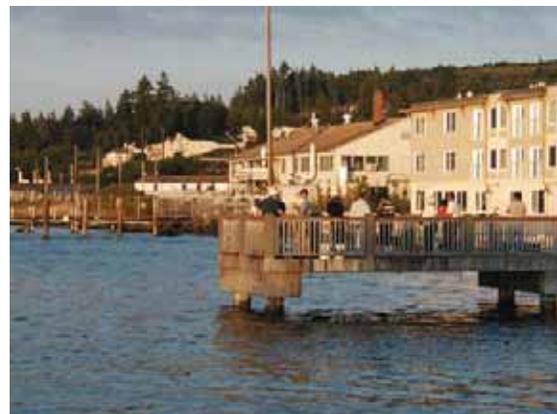
Above: Improper rot cord with non-biodegradable nylon core

Dungeness Crab Derelict Gear Disablement

Washington State regulations require crabbers to attach rot-cord to traps, although many fail to use it. Rot-cord is a biodegradable cord that will disintegrate over time and allow captured crabs to escape from a lost trap. The MRC is partnering with Washington Department of Fish & Wildlife to spearhead a campaign to increase use of rot-cord to help protect our crab resource.

Technical Assistance to Shoreline Property Owners

Shoreline property owners have a great deal of interest in our marine resources and high potential to ensure stewardship through best management practices. We are partnering with Puget Sound Action Team to provide workshops and technical assistance to this key audience to help them better understand, protect and manage their interface with Snohomish County's marine environment.



Above: Shoreline properties such as these could benefit from marine workshops

Dungeness Crab Projects

Port Gardner Derelict Gear Removal Project

842 derelict crab traps and numerous gill nets have been identified to-date in Port Gardner in depths up to 100ft. The MRC is working with the Northwest Straits Commission to expand this inventory and locate traps in 100-250ft depths from Mukilteo to Tulalip Bay. We will also conduct derelict fishing gear removal, expecting to remove approximately 1.5 tons of gear by the end of summer, 2005. We have targeted additional grant funds to continue removal efforts in 2006.

Right: Recovering a derelict gill net along the shoreline



Juvenile Crab Habitat Study

The MRC is partnering with Tulalip Tribes, Washington Department of Fish & Wildlife and WSU Beach Watchers to develop a comprehensive understanding of Dungeness crab habitat and needs here in Snohomish County. This information is essential when developing specific plans to ensure long-term sustainability of the crab resource.

Left: Volunteers sift for small juvenile crab at Kayak Point

Understanding Crab Trap Mortality

Derelict fishing gear may unnecessarily kill thousands of crabs annually in Snohomish County, and may be a significant factor in reducing the number of crabs available for commercial and recreational harvest. However, no studies have quantitatively focused on this to-date. This effort is in partnership with Washington Department of Fish & Wildlife and has three components:

- 1) Evaluating the impact of derelict gear on crab mortality,
- 2) Understanding rot cord function and degradation rates in local conditions, and
- 3) A campaign to encourage recreational crabbers to follow harvest regulations.



Above: A crabber pulls up a crab trap

Nearshore Projects



Removing Mobile Creosote Logs

Creosote is a highly toxic substance used to waterproof piers, that may cause site specific losses in valuable forage fish eggs (pacific herring, sand lance, surf smelt). The MRC is cooperating with the Department of Natural Resources and WSU Beach Watchers to locate and remove mobile creosote logs along the County shoreline.

Left: Creosote-treated log along the shoreline

Eelgrass Mapping and Protection

Eelgrass habitat along the County shoreline has many wildlife benefits. Salmon and juvenile Dungeness crab predominantly use eelgrass as habitat, and protecting eelgrass is essential to salmon's survival. The MRC will generate eelgrass distribution data along the County shoreline to better understand the current extent of this important resource.



Above: Researchers standing in an eelgrass bed along the shoreline

Marine Water Quality Projects

Data Compilation

The MRC will identify existing marine water quality monitoring programs throughout Snohomish County, and will also update the County's marine outfall inventory. We will use this data to assess local marine water quality conditions by compiling and evaluating existing data. This evaluation will help the MRC identify water quality data gaps and begin to identify local marine water quality trends.

Water Quality Monitoring - The MRC is partnering with the Department of Ecology (DOE) to monitor marine water quality at seven public saltwater beaches in Snohomish County as part of DOE's Beach Environmental Assessment, Communication and Health (BEACH) Program. County residents can view latest monitoring results via the web.



Right: Researchers collecting marine water quality samples

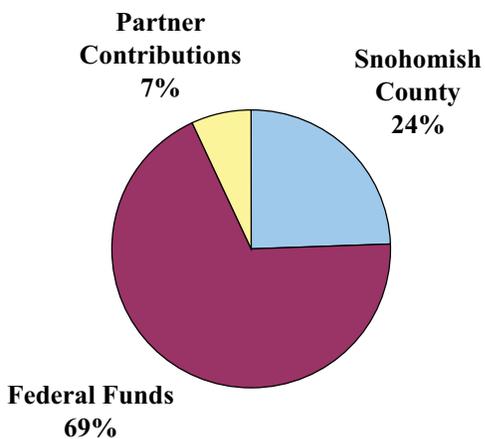
Financial Summary

MRC activities are funded in large part by non-competitive grants from the Northwest Straits Commission. The source of these grants is Coastal Zone Management 310 funds administered by the Washington Department of Ecology. MRC administration grants have consistently been \$10,000 per year. MRC action grants have varied from \$30,000 to \$70,000 per year since 2001 with an average of \$50,000 per year. In 2005, the Northwest Straits Commission consolidated administration and action grants, and extended the grant period from one year to two years.

From 1999 through 2005 Snohomish County received \$330,000 in third-party support for the MRC. In July, 2005, the MRC received another \$160,000 grant from the Northwest Straits Commission to help fund the MRC's 2005-2007 Work Plan.

The County's share of MRC funding is critical to ensure the fulfillment of the Work Plan. In total, the County has invested \$159,000 in the MRC over the past five years, averaging about \$32,000 per year from the General Fund. These funds are currently leveraged at a ratio of about 1:4 with external support from grants, gifts and in-kind support from MRC partners.

2000-2005 MRC Funding Sources



The 2005-2007 Work Plan is ambitious. In order to fulfill this plan, the MRC will require a greater level of effort, in terms of staffing and funding. Currently, MRC staff support is about 1.0 FTE. This staffing level supports administrative functions, committee operations and small-scale actions to implement MRC recommendations. These actions have been positive, but many of the MRC's recommendations are more ambitious and cannot be implemented without greater investment. For this reason the MRC has tried to maximize its efforts by seeking opportunities to dovetail marine resource conservation projects with other Snohomish County projects and/or the efforts of other organizations.

For example, the Picnic Point Restoration Project builds on Snohomish County's Drainage Needs Report by funding feasibility and design work that is needed for that site. The juvenile crab habitat survey coordinates with harvest management work of WDFW and the Tulalip Tribes. Similarly, the Snohomish County Beach Watchers Program begun this year by Washington State University (WSU) Extension. The MRC endorses this Program because trained volunteers could implement actions sponsored or recommended by the MRC.



Recommendations to Snohomish County Executive & Council

The following recommendations are presented 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

1. Sustain General Fund investment in the MRC, which is critical to the programs' success.
2. Provide continued staff support for the MRC.
3. Support current and future MRC work plans.
4. Prioritize marine resource stewardship in departmental work plans, budget development, and local and regional initiatives, such as transportation and economic development.
5. Ensure that marine shoreline development projects in Snohomish County are coordinated with respect to mitigation of comprehensive and cumulative effects on our shoreline and marine resources.
6. Support partner and agency efforts to protect and restore marine shoreline habitat.

Additional Recommendations

Public Involvement and Education

1. Encourage citizen involvement in marine resource monitoring and protection opportunities.
2. Expand partnerships with agencies, tribes, municipalities, universities, community colleges, non-profit organizations and citizen groups.

Dungeness Crab Stewardship

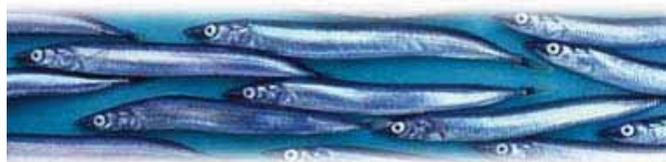
1. Adopt the *Proposed Dungeness Crab Stewardship Plan for Snohomish County*
2. Expand partnerships with agencies, tribes, municipalities, universities, community colleges, non-profit organizations and citizen groups to protect and restore Dungeness crab habitat and develop appropriate harvest regulations.

Nearshore Habitat Protection and Restoration

1. Ensure that marine shoreline development projects in Snohomish County are coordinated with respect to mitigation of comprehensive and cumulative effects on our shoreline and marine resources.
2. Support partner and agency efforts to protect and restore marine shoreline habitat.
3. Design and implement nearshore habitat restoration capital projects, especially soft shore protection demonstration projects.

Marine Water Quality

1. Examine the threat of oil spills to Snohomish County marine resources.
2. Monitor the development of Washington's administrative rules that will implement new legislation for on-water fuel spill prevention.



Acknowledgements

The accomplishments and current activities of the Snohomish County MRC depend on contributions from volunteers, Snohomish County staff members, and people 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

Dawn Lawrence, MRC Chair, Cascade High School, Biology Teacher
Kent Scudder, Ph.D., MRC Vice Chair, Real Estate Analyst
Karen Stewart, Snohomish County Planning and Development Services, Principal Planner
Mary Cunningham, City of Everett Planning and Community Development, Senior Planner
Jen Sevigny, Stillaguamish Tribe, Wildlife Biologist (Alternate: Francesca Perez, Conservation Biologist and Outreach Coordinator)
Kirby Johnson, Boeing Engineer
Charles LaNasa, Bestworth-Rommel, Manager
Heather McCartney, City of Mukilteo, Planning Director
Alan Mearns, Ph.D., National Oceanic and Atmospheric Administration, Marine Biologist
Chet Motekaitis, Recreational Boat Safety Consultant
Sally van Niel, Conservation Co-Chair
Daryl Williams, Tulalip Tribes Environmental Liaison

Public Involvement and Education

Chrys Bertolotto, WSU Beach Watchers, Snohomish/Skagit County
Alice Blandin, Camano Island Beach Watchers
Michele Boyd, Westgate Elementary, Edmonds School District
Owen Caddy, City of Edmonds Beach Rangers
John Custer, Camano Island Beach Watchers
David Duggins, UW Friday Harbor Research Labs
Kraig Hansen, City of Everett Parks Department
Nancy Hasler, Totem Falls Elementary, Snohomish School District
Sally Lider, City of Edmonds Beach Rangers
Linda Lyshall, Puget Sound Action Team
Cynthia McIntyre, Everett High School
Curt Moulton, Snohomish County/WSU Extension
Kirby Schaufler, Cedarcrest Middle School, Marysville School District

Dungeness Crab Stewardship

Tom Cowan, Northwest Straits Foundation
Hilary Culverwell, Puget Sound Action Team
Paul Dinnel, Skagit MRC/Shannon Point Marine Center
Jennifer Hernandez, University of Washington
Bruce Higgins, Edmonds Underwater Park
Jeff June, Natural Resources Consultants
Mike McHugh, Tulalip Tribes
David Meister, WDFW
Don Velasquez, WDFW

Nearshore Habitat Protection and Restoration

Julie Langabeer, Priest Point Resident
Doug Meyers, Puget Sound Action Team
Hugh Shipman, Washington Department of Ecology

Data Compilation and Analysis

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Paul Crane, City of Everett
Cinde Donoghue, Washington Department of Ecology
Dennis Gregoire, Port of Everett
Jon Houghton, Pentec Environmental
Dan Mathias, City of Everett
Peter Namtvedt Best, City of Bainbridge Island
Dan Penttila, Washington Department of Fish and Wildlife
Allison Reak, Landau Associates
Darren Syverson, Survey Volunteer
Paul Szewczykowski, Survey Volunteer
Curtis Tanner, U.S. Fish and Wildlife Service
Chris Townsend, Sound Transit
Jacques White, The Nature Conservancy
Gary Wood, Island County MRC/Regional Forage Fish Coordinator
Todd Zackey, Tulalip Tribes

Snohomish County Staff Members

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Stef Frenzl, Marine Resource Steward/ MRC Lead Staff
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Jake Jacobson, Watershed Steward
Scott Moore, Native Plant Steward
Martha Neuman, Senior Planner
Ted Parker, Habitat Technician
Lynda Ransley, Stewardship, Planning and Analysis Supervisor
Robyn Redekopp, Marine Resource Intern
Suzi Wong Swint, Senior Planner
Tim Walls, Associate Planner

Parks and Recreation Department

Jeanne Blackburn, Park Ranger/Kayak Point
Jack Davidson, Senior Park Ranger/Kayak Point
Doug Dailer, Park Ranger/Meadowdale Beach
Pat Kenyon, Principal Park Planner
Dale Kolbe, Habitat Steward
Sharon Walker, Senior Park Planner

Attachments

2005-2007 MRC Work Plan & Funding Source Summary

Snohomish County Marine Resource Advisory Committee Work Plan & Funding Source Summary

Tasks & Activities	Northwest Straits Commission	Snohomish County General Fund*	Other
Category A- MRC Administration			
Task 1: MRC Administration	X	X	
Category B- MRC Outreach			
Task 1: Web site updating and maintenance	X	X	
Task 2: Volunteer Coordination	X	X	WSU Beach Watchers SSFETF
Task 3: Workshops	X	X	PSAT
Task 4: Assessment, monitoring, data compilation	X	X	NOAA, WDFW
Category C- MRC Projects			
Dungeness Crab Stewardship Projects			
Task 1: Derelict gear survey and recovery	X	X	Stillaguamish Tribe
Task 2: Assessment of Juvenile Abundance	X	X	Tulalip Tribes, MMSF, WDFW, Stillaguamish Tribe
Task 3: Gravid female habitat study:	X	X	Tulalip Tribes
Task 4: Understanding crab trap mortality	X	X	WDFW
Nearshore Habitat Projects			
Task 5: Eelgrass mapping and protection	X	X	
Task 6: Creosote log survey and removal	X	X	WDNR
Marine Water Quality Projects			
Task 7: Assess existing MWQ conditions	X	X	
Task 8: Implement DOE BEACH Program	X	X	WDOE BEACH Program Grant

* General Fund contributions requested in Public Works Departmental Budget Submittal