

The Snohomish County Marine Resources Advisory Committee (MRC) 2002 Annual Report

Background

This annual report presents the Snohomish County Marine Resources Advisory Committee's 2002 accomplishments, 2003 activities, recommendations to Snohomish County, acknowledgements and a brief financial summary. The recommendations define specific actions that the MRC thinks Snohomish County should take in the near future to improve local marine resource stewardship.

The Snohomish County MRC was established by Ordinance 99-080 to advise Snohomish County on how to conserve the local marine environment. The Snohomish County MRC is composed of eleven volunteer citizen members who represent a broad range of interests. Staff support for the MRC is provided by Will Hall, Sean Edwards and others in the Surface Water Management Division of the Public Works Department.

The MRC participates 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. A 13-person Northwest Straits Commission coordinates the efforts of the seven participating counties, which include Snohomish, Skagit, Whatcom, San Juan, Island, Jefferson, and Clallam. Each MRC has one representative on the Northwest Straits Commission. The Northwest Straits Commission strives to complement, rather than duplicate, efforts of existing agencies and organizations.

Since its first meeting in January 2000, the Snohomish County MRC has met at least monthly to address local marine resource issues. In its first year, the MRC focused on educating itself on a wide range of topics. In its second year, the MRC focused on setting priorities to guide its work. In 2002, the MRC began implementing local initiatives to address its top priorities, which include Dungeness crab, forage fish, and nearshore habitat. In 2003, the MRC is implementing two new projects to restore nearshore habitat. Details on the MRC's recent accomplishments, current activities, recommendations to Snohomish County, acknowledgements, and a financial summary are presented below.

2002 Accomplishments

The year 2002 was the busiest and most productive yet for the MRC. The committee implemented several new local initiatives to address priority marine resources and continued successful programs from previous years. Here are the major accomplishments for 2002.

Education and Public Involvement

- Provided marine education to more than 400 people at MRC-sponsored Beach Expos conducted at Brackett's Landing in Edmonds, Mukilteo State Park, and Jetty Island
- Presented six educational presentations to local interest groups
- Organized a boat tour of Snohomish County shorelines for elected officials
- Created an easy-to-use collection of marine educational resources and tools
- Incorporated marine issues into the Snohomish County Watershed Keeper course
- Maintained the MRC web site and library
- Participated in the Northwest Straits Commission's annual MRC Training Workshop

Dungeness Crab Stewardship Plan

- Compiled and reviewed existing information on Dungeness crab biology and management
- Developed a *Proposed Dungeness Crab Stewardship Plan for Snohomish County*, which describes the biology and management of Dungeness crab and recommends a course of action along parallel tracks of monitoring, outreach, regulation, and restoration
- Defined specific recommendations for actions to improve the sustainability of the Dungeness crab resource in Snohomish County

Forage Fish Spawning Habitat Survey

- Recruited 40 community volunteers for survey fieldwork
- Completed winter forage fish spawning habitat survey along approximately 50% of the Snohomish County marine shoreline.
- Coordinated survey field work with the Regional Forage Fish Survey Program

Data Compilation and Analysis

- Produced the following maps incorporating existing data from various sources: (1) shoreline types; (2) eelgrass; (3) other marine vegetation; (4) forage fish spawning areas; (5) Dungeness crab recreational fishing effort; and (6) shoreline modifications
- Compiled and integrated six existing marine resources data sets into the Snohomish County Geographic Information System (GIS)

Marine Shore Inventory

- Identified nearly 1,500 shoreline property owners and provided them with information about the MRC and the marine shore inventory project
- Requested and tracked permission from shoreline property owners to access the shoreline for the survey field work
- Produced maps for the survey crew showing the access status of nearly 2,000 shoreline parcels
- Hired a local consulting firm to conduct a ground-based Global Positioning System (GPS) survey of physical and biological conditions along the entire Snohomish County marine shoreline
- Completed a statistical analysis of the quality of the data that was collected
- Completed a preliminary analysis of the data to identify candidate sites for protection or restoration

Stewardship Project Planning

- Identified eight potential pilot project sites for nearshore habitat protection or restoration
- Developed a successful proposal for grant funding of nearshore restoration pilot projects to be completed in 2003
- Developed a project plan with the Parks and Recreation Department for nearshore revegetation and educational signage at Kayak Point County Park
- Developed a project plan with the Planning and Development Services Department for a private property cost-sharing program to promote alternatives to bulkheads

2003 Work Plan

In 2003, the MRC is continuing successful programs to address Dungeness crab, forage fish, and other priority resources. The work plan for the year includes two new initiatives: a nearshore habitat restoration pilot project and marine and nearshore data compilation and analysis. The objective of the latter project is to identify candidate sites for protection and restoration.

Education and Outreach

- Conduct summer Beach Expos at Picnic Point County Park, Mukilteo Lighthouse Park, and Jetty Island
- Continue presentations to local interest groups
- Organize an exploratory field trip to view deep water marine habitat using a Remotely Operated Vehicle (ROV) provided by the University of Washington
- Maintain MRC web site and library

Dungeness Crab Stewardship

- Produce Dungeness Crab Stewardship Handbook

- Identify potential priority sites for Dungeness crab nursery and gravid female habitat
- Coordinate with Northwest Straits Commission for derelict fishing gear removal

Forage Fish Spawning Survey

- Coordinate volunteers for spring/summer forage fish spawning survey field work
- Continue coordinating with the Regional Forage Fish Survey Program to survey spring/summer forage fish spawning habitat
- Share forage fish survey data with other local jurisdictions

Nearshore Habitat Restoration

- Implement Kayak Point Nearshore Pilot Project
- Implement Shoreline Enhancement Incentive Program

Marine and Nearshore Data Compilation and Analysis

- Conduct MRC data analysis workshops
- Improve the marine shore inventory by creating new data for piers and docks
- Integrate new forage fish spawning habitat data into Snohomish County GIS
- Continue identifying candidate sites for protection or restoration
- Produce CD with new data sets
- Develop stewardship project proposals for 2004

Findings and Recommendations for 2003 and Beyond

The following recommendations are based on information the MRC has gathered so far and on input received from residents of Snohomish County. As the MRC gathers more information and systematically reviews data on nearshore conditions and issues, these recommendations will be further refined and prioritized.

Dungeness Crab

1. Implement Stewardship Plan

Finding: Harvesting of Dungeness crab in Snohomish County has increased by a factor of five over the past decade, but co-managers (state and tribes) do not know what level of harvest is sustainable nor the ecological role of Dungeness crab in the marine ecosystem.

Recommendation: Support the MRC's proactive response to these uncertainties by implementing the *Proposed Dungeness Crab Stewardship Plan for Snohomish County*, including the production of a Dungeness crab stewardship handbook.

2. Map Gravid Female and Nursery Habitat

Finding: Gravid (egg-carrying) female crabs aggregate in specific areas during the winter months. In Snohomish County, we know that the outer shelf of the Snohomish River delta is heavily utilized by gravid female crabs. The amount of nearshore nursery habitat may limit Dungeness crab abundance. First-year crabs settle and reside in intertidal eelgrass beds and mid-intertidal gravel substrate. These habitats provide food and shelter for juvenile crabs until they are large enough to survive in the offshore environment. The extent and condition of gravid female and juvenile crab nursery habitat is not known. This information is needed for effective local stewardship of Dungeness crab.

Recommendation: Assess and map the extent and condition of Dungeness crab gravid female and juvenile nursery habitats.

3. Locate and Remove Derelict Fishing Gear

Finding: The extent and impact of unmarked and derelict fishing gear on local Dungeness crab stocks is not known. Derelict crab pots may cause significant losses of Dungeness crab. Lost gill nets have been shown to be damaging to crabs because they trap crabs that are attracted to dead fish ensnared in the nets.

Recommendation: Investigate the extent and impact of derelict fishing gear on local Dungeness crab stocks and participate in the Northwest Straits regional derelict fishing gear removal program.

4. Increase Public Awareness

Finding: Throughout Snohomish County there is little or no information on recreational harvesting of crab and shellfish posted at public shoreline access locations.

Recommendation: Increase public awareness of crab and shellfish harvesting issues by posting new or existing public education materials at public shoreline access locations.

Nearshore Habitat and Shoreline Modifications

1. Enhance Kayak Point Nearshore Habitat

Finding: Kayak Point provides important marine nearshore habitat and public access to the shoreline, but it has been modified by a low cement and steel bulkhead that may decrease the ecological function of the beach and may not provide effective protection of park facilities. A perimeter asphalt road also closely parallels the shoreline, which limits the amount of available beach area and results in periodic maintenance problems due to beach logs and sediment that are washed up during winter storms.

Recommendation: Investigate the potential benefits and feasibility of relocating the access road to expand the beach and backshore profile and/or removing or replacing some or all of the bulkhead with softer materials.

2. Map Submerged Aquatic Vegetation

Finding: Eelgrass and other types of submerged aquatic vegetation are key elements of nearshore habitat, providing essential refuge and rearing areas for many marine species. From past surveys, we know the geographic extent of eelgrass and other submerged aquatic vegetation from Picnic Point south to the county line. To prioritize candidate sites for protection or restoration, additional data is needed for the rest of the shoreline north of Picnic Point, including Hat Island and Port Susan.

Recommendation: Map the locations and extent of submerged aquatic vegetation north of Picnic Point, including Hat Island and Port Susan.

3. Assess Puget Sound Tributary Stream Outfalls

Finding: The Snohomish County Marine Shore Inventory indicates that many Puget Sound tributaries are piped where they flow into the marine nearshore, but there is no information about the condition of these stream outfalls. It is important to know the condition of these stream outfalls because they are key elements of marine nearshore habitat.

Recommendation: Using the results of the Snohomish County Marine Shore Inventory, conduct a field assessment of Puget Sound tributary stream outfalls and use the findings to prioritize future restoration opportunities.

Forage Fish

1. Continue Volunteer Coordination.

Finding: Snohomish County's contribution to the regional forage fish spawning habitat survey has primarily been through recruitment and training of volunteers to assist WDFW staff with sampling in the field. The survey work is expected to continue through the summer of 2004.

Recommendation: Maintain staff support for forage fish survey volunteer coordination.

2. Share New Forage Fish Data

Finding: Data from the forage fish spawning habitat survey will be available in the fall of 2003.

Recommendation: Integrate the new data with the existing data for Snohomish County and make it available to local jurisdictions.

General Support and Direction

1. Continue Support for MRC Work

- Enable the MRC to fulfill its purpose by maintaining staff support, including scientific, outreach, and planning assistance
- Continue supporting the MRC in its development of recommendations for protecting and restoring priority marine resources
- Continue supporting MRC efforts to develop sound marine resource recommendations by providing technical assistance for gathering, analyzing, and mapping scientific information
- Continue successful MRC outreach efforts, such as the summer Beach Expos and presentations to community groups

Acknowledgements

Staffing for the MRC is provided by Will Hall, Sean Edwards and others in the Public Works Department Surface Water Management Division. The accomplishments and current activities of the MRC also depend on the support of many other people, listed below. Their contributions to marine resource conservation in Snohomish County deserve recognition.

Education and Outreach

Edmonds Beach Rangers
Kraig Hanson, City of Everett
David Meister, Washington Department of Fish and Wildlife
Paul Plesha, NOAA Mukilteo Field Station
Casey Rice, NOAA Mukilteo Field Station

Dungeness Crab Stewardship Planning

Liam Antrim, Olympic Coast National Marine Sanctuary
Ken Collins, Recreational Crabber/M.S. Marine Ecology
Paul Dinnel, Skagit MRC/Shannon Point Marine Center
Joan Drinkwin and Hilary Culverwell, Puget Sound Action Team
Michael Harding, Everett Steelhead and Salmon Club
Bruce Higgins, Edmonds Underwater Park
Norm Lemberg, Washington Department of Fish and Wildlife
Kelly Toy, Tulalip Tribes
Don Velasquez, Washington Department of Fish and Wildlife
Lisa Veneroso, Washington Department of Fish and Wildlife

Forage Fish Spawning Habitat Survey

Ted Parker, Survey Volunteer
Dan Penttila, Washington Department of Fish and Wildlife
Darren Syverson, Survey Volunteer
Paul Szewczykowski, Survey Volunteer
Gary Wood, Island County MRC/Regional Forage Fish Coordinator

Marine Resources Data Compilation and Analysis

Graham Anderson, Port of Everett
Helen Barry, Washington Department of Natural Resources
Betty Bookheim, Washington Department of Natural Resources
Cinde Donoghue, Washington Department of Ecology
Roberta Goodwill, City of Everett
Jon Houghton, Pentec Environmental
Randy Shuman, King County Department of Natural Resources
Dena Warman, City of Mukilteo
Todd Zackey, Tulalip Tribes

Nearshore Habitat Restoration Project Design

Jesse Allen, Stanwood Resident
Doug Kenfield, Stillaguamish Tribe
Doug Meyers, Puget Sound Action Team
Hugh Shipman, Washington Department of Ecology

Financial Summary

In 2002, the watershed planning/analysis program (activity 112) of the Public Works Department Surface Water Management Division spent a total of \$124,438 on the MRC and associated marine resource projects. Of this amount, \$54,843 was for the marine shore inventory, \$31,013 was for the Dungeness crab and forage fish work, and the remaining \$38,582 was for outreach, committee administration, technical support and data analysis. Five different grants and gifts provided a total of \$79,013, or 63% of the revenues. In other words, every county general fund dollar leveraged another \$1.74 in external funding. External grants will make up an even larger portion (approximately 68%) of the revenues in 2003. Continued county funding for the MRC is essential to satisfy match requirements for grants and to sustain the current level of staffing.

Questions about the Marine Resources Program?

Please contact:

Sean Edwards, Surface Water Management
(425) 388-3464, x 4669
mrc@co.snohomish.wa.us



A Local Approach to Protecting and Restoring Marine Resources and Habitats

NORTHWEST STRAITS
marine conservation initiative



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