

Protect and restore the marine waters, habitat and species of the Northwest Straits region to achieve ecosystem health and sustainable resource use.

# NORTHWEST STRAITS INITIATIVE Annual Report 2011

## **Table of Contents:**

- 2 Message from the Director
- 3 Introduction
- 4 Highlights
- 5 Economic and Social Benefits
- 6 Volunteer Spotlight
- 7 Regional Accomplishments
- 11 Local Accomplishments: Marine Resources Committees
- 15 Financial Summary
- 16 Who We Are
- 16 Contact Northwest Straits Initiative





Our annual conference during a sunny December 2011 weekend drew more than 140 enthusiastic Marine Resources Committee (MRC) members and project partners to Port Townsend. The energy and interest of everyone who attended was fabulous. We celebrated the hard work of MRC members from seven counties to protect and restore the region's marine resources, and renewed our commitment to working together. Local stewardship is a strong element of our culture, and the fabric of our work. As we move forward in 2012, we are grateful for the ability to partner with the Puget Sound Partnership and focus our energies on mutual

Ginny Broadhurst
Director, Northwest Straits Commission

## The Northwest Straits Initiative

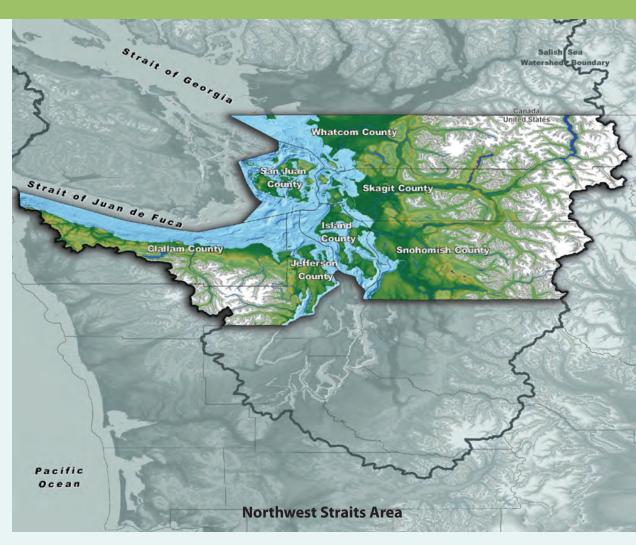
Local efforts to protect and restore Puget Sound's nearshore environment are core functions of the Northwest Straits Marine Conservation Initiative (Northwest Straits Initiative). Authorized by the United States Congress in 1998, the organization represents a multitude of restoration interests, cultural perspectives, and expertise. The direct relationship with local governments in the seven counties of the Northwest Straits is a distinguishing feature. Conservation and restoration activities are locally-driven, and are carried out by three discrete branches of the organization:

#### **Marine Resources Committees**

(MRC): Seven county MRCs, comprised of local volunteers elected by county council or commission, are central to the organization.



Simon Geerlofs



## **Northwest Straits Commission**

(Commission): The Commission serves as the board of directors for the Initiative, providing base funding and technical support to the MRCs, as well as managing regional projects. Commissioners represent the seven MRCs, as well as regional and national expertise, the Puget Sound Partnership, and Tribal government.

#### **Northwest Straits Foundation**

(Foundation): The non-profit
Foundation leverages public and
private funds in support for
local and regional projects of the
Northwest Straits Initiative.

, funded by the Commission, was completed and is generating publications and new research by members of the international project team.



The transboundary Derelict Fishing Gear Remove project successfully removed a derelict purse seine net and 218 derelict crab pots from British Columbia waters.



joint vote.

2011 was a landmark year for the Northwest Straits Initiative. Widely-recognized as a model for engaging diverse interests and strong community involvement, the organization carried out more than 30 restoration, research, and outreach projects despite reduced budgets.

#### Noteworthy accomplishments include:

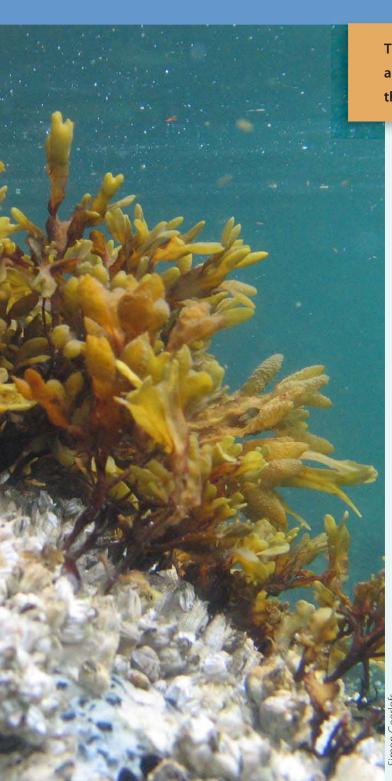
Sean Rooney

The 13th Annual Northwest Straits MRC conference, hailed as the most successful to date. A keynote lecture by rockfish expert Dr. Milton Love, and emphasis on topics of import to MRCs, provided valuable training for everyone. The Commission honored Phil Johnson, Jefferson County Commissioner and MRC member, with an Environmental Leadership Award for his commitment to protecting Puget Sound.



- Excellent representation by all seven MRCs, the Commission, and the Foundation at the Salish Sea Ecosystem Conference in Vancouver, BC; showcasing a variety of Northwest Straits Initiative projects.
- The San Juan MRC launched a public demonstration project with the Town of Friday Harbor; installing a rain garden to determine whether this technology can effectively filter stormwater from the paved core of town.
- Island County MRC launched SoundIQ, an online storehouse for locally-collected nearshore data; and is evaluating the uptake of contaminants from stormwater through phytoremediation on Ebey's Landing Reserve.
- The Whatcom MRC cleared the last remaining beach of creosoted logs and debris, partnering with Washington Department of Natural Resources, the Cliffside Community, and the City of Bellingham. This completes a decade of creosote removal projects by the MRC on Whatcom County shorelines.





The Northwest Straits Initiative engages hundreds of citizens in stewardship, research, education, and policy; stimulating local communities and economies in a variety of ways. By coordinating with the Puget Sound Partnership, we fulfill local priorities identified in the agency's Action Agenda.

## **Throughout 2011 the organization:**

- Leveraged funds for local and regional marine resources projects.
- Created jobs through habitat and wildlife restoration projects.
- Increased volunteer capacity to protect Puget Sound.
- Reduced costs for restoration projects, through in-kind support and volunteers.
- Increased public awareness through workshops, conferences, and community events.
- Supported local businesses, school programs, and county governments.
- Supported local ecosystem services by improving water quality and restoring nearshore habitats.
- Worked with Puget Sound Partnership to identify and prioritize local and regional projects for inclusion in the Puget Sound Action Agenda.



This work would not be possible without the extraordinary people who volunteer with the Northwest Straits Initiative. These three individuals illustrate the diversity of interests and expertise among our members.



SHANNON DAVIS, Jefferson MRC, holds bragging rights to Northwest Straits Initiative preparedness. Earning her Master's degree with a thesis on the San Juan MRC as a case study in local level natural resource management, she became the first person to staff the San Juan MRC and helped initiate the San Juan Marine Stewardship Area process. Fast forward to life in Port Townsend: Shannon now serves on the Jefferson MRC and is its representative on the Commission. She maintains her longtime staff position



with FRIENDS of the San Juans, enjoying every opportunity to be on or near the water with her family.



LINCOLN LOEHR, Snohomish MRC, holds a lifelong passion for the sea, and studied oceanography before joining the Navy as a submariner. In later years, he earned a respected reputation for policy efforts aimed at upholding the federal Clean Water Act, ultimately finding his current niche as an environmental compliance analyst with Stoel Rives, a national law firm with offices in Seattle. Lincoln is an avid birder and outdoorsman, and champion of the MRC's Mussel Watch Project.

BARBARA MARRETT, San Juan MRC, is in her second term as Port Commissioner in Friday Harbor and was a driving force on the MRC behind revival of the county's Derelict Vessel Program. She holds a 100-ton Coast Guard Captain's license, and is both skipper and teacher on a local charter boat. A contributing editor for "Cruising World" magazine, author, and lecturer, Barbara also manages the Arctic Raven Gallery. Her ocean voyages have fostered a deep concern for the plight of marine ecosystems and a desire to protect them.



# **Regional Accomplishments**

The Northwest Straits Commission, as the coordinating body for seven MRCs, seeks opportunities to expand local projects of priority into regional projects. The following efforts evolved from MRC projects and ideas that expanded beyond one county, often in partnership with the Northwest Straits Foundation.

Caroline Gibson

## Forage Fish Protection

Supporting and inspiring research, new collaboration, and education around prey species that are vital to marine wildlife, we made significant progress in 2011:

- MRCs conducted beach surveys, documenting spawning habitat in San Juan, Snohomish, Island, and Clallam counties. This action is necessary step toward forage fish protection by the Washington Department of Fish and Wildlife.
- MRCs partnered with county and state agencies, tribes, and non-profit groups in education and outreach around forage fish habitat protection.
- MRCs are restoring intertidal habitat for spawning surf smelt and Pacific sand lance, in ongoing projects at Cornet Bay, Discovery Bay, and Fidalgo Bay.
- ★ The Commission convened an international Forage Fish Needs
   Assessment Workshop, bringing together 25 experts in support for conservation and recovery of key species in the Salish Sea.
- → The Commission co-convened the Global Symposium on Forage Fishes at the 141st American Fisheries Society meeting, featuring keynote speaker Dr. Ellen Pikitch, Chair of the Lenfest Forage Fish Task Force.



Whatcom MRC

## **Shoreline Habitat Restoration**

- MRCs are engaged in local projects in which the removal of concrete rip rap and bulkheads, and the restoration of forage fish spawning beaches, are key components. In partnership with state and county parks, natural resources agencies, non-profit organizations, and local volunteers, MRC habitat restoration projects are underway at Cornet Bay State Park, Island County; Maynard Beach, Jefferson County; and March's Point, Skagit County.
- MRCs conducted an array of education and outreach activities, and engaged in a variety of processes to update local Shoreline Master Plans. In Jefferson, San Juan, Clallam and Island counties, outreach focused on softshore stabilization as an alternative to hard armoring; and engaging landowners in decision-making around buffer zones, setbacks and other shoreline planning issues.

## Deepwater Sand Lance Habitat Project



A multidisciplinary research project led by Drs. Gary Greene and Tina Wyllie-Echeverria has generated new information about the association of Pacific sand lance with sand wave fields, as well as on this species' impressive ability to quickly burrow into the seafloor. The researchers developed a model for use in predicting where sand lance may be found, using innovative technologies including an acoustic multibeam echosounder and an 'eyeball' sediment camera.

# **Regional Accomplishments**

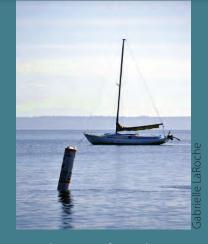
"Not only does the Northwest Straits Initiative produce relevant and important science, it also uses science to guide decisions on ecosystem restoration and protection."

-Joseph Gaydos, Ph.D., SeaDoc Society; Science Panel Chair, Puget Sound Partnership; and Northwest Straits Commissioner

# **Eelgrass Protection and Restoration**

The protection and restoration of native eelgrass habitat is a priority of the Northwest Straits Initiative. All seven MRCs have undertaken mapping and monitoring projects, promoting eelgrass protection through Washington State University Beach Watchers and other volunteer training, educational displays and interpretive signs.

- ♦ MRCs in Island, Jefferson, Clallam and San Juan counties conducted systematic mapping of local eelgrass beds in 2011. Information is provided to the Department of Natural Resources and county governments.
- In Jefferson County, the MRC is recognized for its success in protecting eelgrass beds from anchor damage along the busy Port Townsend waterfront. Through the seasonal installation of eelgrass marker buoys bolted to the seabed, and targeted outreach to recreational boaters, the MRC achieved a 99% compliance rate with boaters anchoring outside of the eelgrass in 2011.



## **Anchor Out for Eelgrass**

The 2011 boating season was the 8th in which these brightly painted marker buoys delineated a voluntary "No Anchor Zone" along the Port Townsend waterfront. In concert with effective outreach to the boating community, this project has successfully reduced the number of boats anchoring in the eelgrass; and minimized the risk of dangerous and costly vessel groundings due to poor anchor holding in the loose sediments that harbor eelgrass. The annual installation and removal of buoys is made possible through partnership with the Washington **Departments of Natural Resources** and Fish and Wildlife, City of Port Townsend, Port Townsend Fire Department, and local volunteers.

"Our San Juan County MRC brings together islanders with diverse skills and a common interest in protecting the marine ecosystem that defines our county. They debate difficult issues and provide invaluable advice to the Council which helps us reach decisions that benefit people and the environment. I have tremendous respect and appreciation for their work."

-Lovel Pratt, San Juan County Council Member

# **Regional Accomplishments**



Paul Dinnel

#### Shellfish Protection and Restoration

Shellfish enhancement projects by the Skagit and Jefferson MRCs were the impetus for an integrated strategy to restore remnant populations of native Olympia oysters in decline. In collaboration with Puget Sound Restoration Found, several MRCs are working toward a goal to restore 10 acres of Olympia oysters to northern Puget Sound in 10 years. In other efforts to protect shellfish and improve harvest opportunities:

- → The Clallam MRC conducted routine sampling of shellfish for Paralytic Shellfish Poisoning on Strait of Juan de Fuca beaches, with analysis done by the Washington Department of Health.
- → The Whatcom MRC sampled freshwater coastal drainages for fecal coliform bacteria, calculating bacterial loadings to nearby shellfish beds that are closed or jeopardized by poor water quality.
- ❖ Building on the success of its Anchor Out for Eelgrass project, the Jefferson MRC worked with Mystery Bay State Park and the Washington Department of Health to establish a voluntary Shellfish Protection Zone. Local oyster harvest was threatened by pollution resulting from too many boaters anchoring in this small bay.

"The Northwest Straits Initiative is a great partner in our efforts to restore Olympia oysters in the North Sound. Thanks to leadership from Washington Department of Fish and Wildlife, and support from public and private funders, the on-the-beach work we are doing now will result in healthy populations of native shellfish and improved habitat."

-Betsy Peabody, Puget Sound Restoration Fund

#### Rain Gardens/Stormwater Prevention

Several Low Impact Development (LID) and other strategies have been employed by MRCs in an effort to filter, divert, and prevent the flow of polluted runoff into local marine environments.

- ❖ In Friday Harbor, the San Juan MRC partnered in a rain garden demonstration project on a busy street corner in Friday Harbor. Test results in coming seasons will determine whether this affordable technology should be expanded to other island locations.
- The Skagit MRC partnered with local governments to install an LID demonstration site on City of Anacortes property, with a rain garden, interpretive signage and pervious pavers.



- ❖ In a project designed to test the efficacy of Smart Sponge® Paks in removing fecal coliform bacteria from stormwater entering Padilla Bay, the Skagit MRC conducted a demonstration project in partnership with Padilla Bay National Estuarine Research Reserve. Due to clogging from the influx of sediments, it was determined that this technology is not the most effective for this site.
- ❖ Building on the successful deployment of Car Wash kits developed by the Skagit MRC, the Jefferson MRC began identification of suitable sites for using these inserts at storm drain locations in Port Townsend and neighboring jurisdictions.
- ♦ The Jefferson MRC partnered with the Jefferson County Community Development Department in an interpretive display on a new local rain garden for the Watershed Stewardship Resource Center.



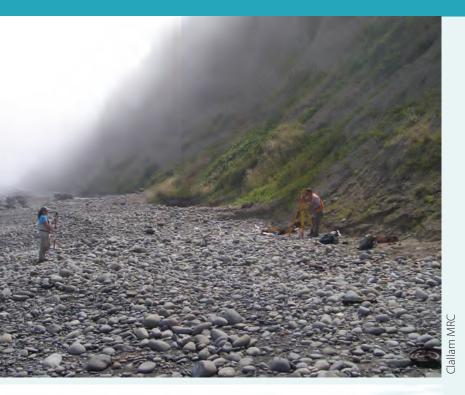
"Our Snohomish Marine Resources Committee is an amazing volunteer group that carries out vital projects at little cost, such as retrieving derelict fishing gear and restoring marine shorelines. They are a model of efficiency, effectiveness, and dedication helping to restore our marine environment. We here at Snohomish County are very proud of the work they do." -Dave Somers, Snohomish County Council District 5 and Chair of the Puget Sound Partnership's Ecosystem

## **Derelict Fishing Gear Removal**

Preventing and removing derelict fishing gear is a priority of the Northwest Straits Initiative. We set a goal to remove 90% of derelict fishing nets in the shallow waters of Puget Sound, which we are now close to accomplishing. Derelict fishing nets entangle and kill a variety of marine species, from scallops to dogfish, and even seals, seabirds, and porpoises. In 2011 we took new steps forward and:

- ♦ Partnered in derelict net removals in the Chehalis Watershed.
- ♦ Completed a project in British Columbia to remove a purse seine net and 218 crab pots.
- ♦ Partnered with NOAA Fisheries in a new study on impacts of derelict shrimp pots.





#### Clallam MRC

Biological monitoring of intertidal and estuarine communities remains a priority for the MRC. In 2011, they led a scientific study on the use of eelgrass and other habitats by forage

fishes in the Elwha and adjacent drift cells. Members are actively engaged in the process to update the county's Shoreline Management Plan; sponsoring educational workshops for landowners, and providing input on geological and biological attributes of local shorelines. The MRC co-sponsored two beach cleanups, removing 8,000 pounds of debris from 11 beaches, and three classes in oil spill response. They are an active member of the Strait Ecosystem Recovery Network (ERN), the Local Integrating Organization for the Strait of Juan de Fuca Action Area, Clallam MRC Website.



## Island MRC

Monitoring local wildlife and habitats, and educating residents on marine resource issues are top priorities in Island County. In 2011, the MRC focused on its innovative phytoremediation project, diverting and treating stormwater at Ebey's Landing Reserve. The MRC also took the lead in archiving its extensive collection of nearshore data, creating the Internet-based platform SoundIQ through a partnership with the City of

Bellingham. The MRC continues to advise county government and Local Integrating Organization processes, maintaining its longtime partnership with Washington State University Beach Watchers and Shore Stewards programs to carry out monitoring and public outreach projects. Island MRC Website.







## Jefferson MRC

The MRC has provided a productive forum for community debate around marine finfish

aquaculture during the county's Shoreline Master
Plan update, and is engaged in an ambitious
restoration project at Maynard Beach, formerly the
site of a pulp mill. Well recognized for its success in
protecting eelgrass habitat, the MRC celebrated the
8th successive boating season implementing a
voluntary no-anchor zone, resulting in a remarkable



rate of 99% compliance from recreational boaters. The MRC participates in the Strait ERN.

Jefferson MRC Website.



A principal player in the recently-established San Juan Local Integrating Organization, the MRC provides a strong voice for protecting shorelines and water quality in the

islands. They wholeheartedly engaged in prioritizing monitoring needs for the local Marine Stewardship Area Plan, hosted a Natural Resource Data Workshop for land use professionals, and held the 7th Marine Managers' Workshop. The recent installation of a rain garden in downtown Friday Harbor, a joint project involving the MRC, is effectively drawing island residents and visitors to learn about stormwater impacts and local means of prevention.

San Juan MRC Website.



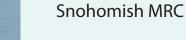




Habitat restoration and public outreach are high priorities for this MRC, and efforts focused in 2011 on analysis of habitat restoration at March's Point, surveying intertidal habitats for spawning forage fish and Olympia oyster populations, and training new volunteer kayakers to survey and identify the invasive cordgrass *Spartina*. In addition, the MRC partnered in stormwater prevention by installing a rain garden and pervious pavers on City of Anacortes property; trained volunteers in oceanographic sampling techniques; and co-sponsored the annual community celebration Fidalgo Bay Day.



Skagit MRC website.



local oil spill preparedness efforts. Together they sponsored a Keystone Project through the University of Washington, generating a report to the county that details proactive pre-spill measures. Marine habitat restoration remains a high priority for the MRC, and two projects garnered support from NOAA for the use of clean sediments being dredged from the Snohomish River for local beach nourishment. The MRC continues to partner with NOAA in Mussel Watch, collecting specimens at four sites this year for

analysis of organic contaminants and trace metals. They

Organization. Snohomish MRC website.

participate, in cooperation with Snohomish and Stillaguamish watershed contributors, in the developing Local Integrating

The MRC and Snohomish County Surface Water Management are at the forefront of











## Whatcom MRC

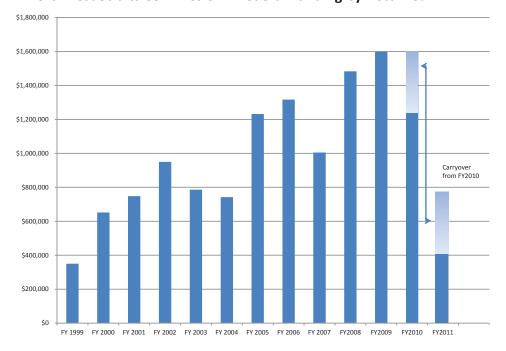
Water quality remains a top priority for the MRC, and monitoring continued throughout the year at coastal drainages in Drayton Harbor, Birch Bay, Lummi Island, and Chuckanut Bay. Results are provided to Whatcom County Public Works and the Washington State Department of Health to inform future sampling and recreational shellfish harvest opportunities. A Public Speaker Series, co-hosted by the MRC, featured three expert presentations between July-December. In a great demonstration of environmental stewardship, the MRC completed 10 years of work to remove creosoted debris from public beaches in Whatcom County. More than three tons of creosoted and treated logs were cleared from Cliffside Beach in 2011, in collaboration with the Department of Natural Resources and the City of Bellingham.



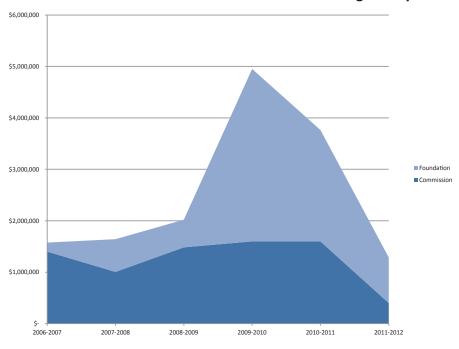
In 2011, more than 17,000 volunteer hours were contributed by MRC members and other community volunteers in support for MRC projects. Additional funds and in-kind services were leveraged for project support.

In 2011, the Northwest Straits Initiative received a \$400,000 award from the Environmental Protection Agency's National Estuary Program, through an interagency agreement with the Puget Sound Partnership. These funds, along with remaining funding awarded by NOAA in fiscal year 2010, sustained the Commission and Marine Resources Committees through December, 2011.

#### Northwest Straits Commission – Federal Funding by Fiscal Year



## **Northwest Straits Commission and Foundation Funding History**



#### Northwest Straits Commissioners 2011

#### **Marine Resources Committee Representatives**

Bob Cecile, Whatcom County
Lenny Corin (Vice Chair), Island County
Shannon Davis, Jefferson County
Tom Hoban, Snohomish County
Connie Thoman, Skagit County
Jonathan White, San Juan County
Bob Vreeland, Clallam County

#### **Governor's Appointees**

Tom Bancroft, People For Puget Sound
Joseph Gaydos, SeaDoc Society
Terrie Klinger, University of Washington/ School of Marine Affairs
Jerry Masters (Chair), Valley Supply Company
Gerry O'Keefe/ Duane Fagergren, Puget Sound Partnership

#### Secretary of the Interior Appointee

Terry Williams, Tulalip Tribes

## **Commission Staff/ Support**

Ginny Broadhurst, Director
Caroline Gibson, Marine Program Manager
Sasha Horst, Project Specialist
Connie Price, Office Manager

Terry Stevens, Administrator; Director of Padilla Bay National Estuarine Research Reserve

#### **Foundation Staff**

Joan Drinkwin, Programs Director Tracie Johannessen, Program Assistant



Jim Ramaglia



NORTHWEST STRAITS

marine conservation initiative