



NORTHWEST STRAITS
marine conservation initiative

Northwest Straits Initiative



Annual Report **2008**

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NORTHWEST STRAITS

marine conservation initiative

Northwest Straits
Marine Conservation Initiative
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2008 Northwest Straits Commission Members

Marine Resources Committee Representatives

Jim McEntire - Clallam County
Phyllis Kind - Island County
Tony Petrillo - Jefferson County
Jonathan White (vice chair) - San Juan County
Christine Woodward - Skagit County
Kirby Johnson - Snohomish County
Buck Meloy - Whatcom County

Governor's Appointees

Scott McCreery (chair) - BP
Terrie Klinger - University of Washington Friday Harbor Labs
David Dicks/Duane Fagergren - Puget Sound Partnership
Joe Gaydos - SeaDoc Society
Kathy Fletcher - People For Puget Sound

Secretary of the Interior Appointee

Terry Williams - Tulalip Tribes

Commission Staff/Support

Ginny Broadhurst, Director
Sasha Horst, Project Specialist
Simon Geerlofs, Marine Program Coordinator
Connie Price, Office Coordinator
Terry Stevens, Administrator, Director of Padilla Bay National
Estuary Research Reserve

Northwest Straits Foundation

Joan Drinkwin, Development Director

This report was written in January 2009 by Simon Geerlofs, Ginny Broadhurst, Sasha Horst, and Joan Drinkwin with input and editing assistance from Connie Price and each of the seven Marine Resources Committees.

Cover photo Clayton Beach, Maya Hunger

January 2009

About the Northwest Straits

The Northwest Straits region includes the marine waters, nearshore areas and shorelines of the San Juan Islands, the U.S. side of the Strait of Juan de Fuca and northern Puget Sound reaching from the southern border of Snohomish County to the Canadian border. This area makes up nearly 60% of Puget Sound's total shoreline. Seven counties, 15 tribes and dozens of other local governments have jurisdiction in the region.

Pacific salmon, Puget Sound southern resident orca whales, seabirds, rockfish and a wealth of other fish, bird and marine mammal species inhabit, breed, or feed in the Northwest Straits. These animals depend on the region's open waters, productive kelp forests, pocket estuaries and eelgrass beds. The beauty and ecological productivity of the Northwest Straits also contribute to a high quality of human life.

The Northwest Straits are the front door to the region's many busy ports and urban areas. Thousands of cargo and tank vessels call each year at large ports in Tacoma, Seattle and Vancouver, BC, as well as many smaller ports and marinas throughout Puget Sound and Georgia Basin.

People

- Population of seven Northwest Straits counties: 1.16 million people
- Number of Marine Resources Committee members in all seven counties: 112
- Volunteer hours contributed from MRC members: thousands
- Northwest Straits Commissioners: 13
- Northwest Straits Commission Staff: 4

Geography

- Shoreline miles in the Northwest Straits Region: 1,460 or 58% of Puget Sound's 2,500 total shoreline miles



For further information on the Initiative and its projects, please visit our Web site at www.nwstraits.org. Each Marine Resources Committee also maintains a Web site where annual reports and project information can be downloaded.



Northwest Straits Initiative

2008 Highlights

Financial Information

- Total 2008 federal appropriation: \$ 1,483,128
 - \$849,000 supports Marine Resources Committees and their projects
 - \$499,128 supports Commission staff, Marine Resources Committee training
 - \$135,000 supports tribal and regional ecosystem projects
- Total funds raised by the Northwest Straits Foundation in 2008: \$703,384

2008 Accomplishments

- Marine Resources Committees carried out more than 45 different projects in 2008, including restoration feasibility studies, sea level rise assessments, education and outreach, water quality monitoring, eelgrass mapping, research on marine species and many more subjects. All projects were guided by science, the Northwest Straits Initiative benchmarks and local priorities.
- In 2008, we removed 340 derelict fishing nets. Removal projects were concentrated around high priority areas in the San Juan Islands. We also pulled 372 derelict crab pots. 35% of pots recovered were still actively fishing. In all, the derelict gear program restored 66.5 acres of Puget Sound marine habitat in 2008.
- The Northwest Straits Commission partnered with the Governor's office on a transboundary derelict gear workshop to share information with managers from the Province of British Columbia and Canada's federal agencies. As a result, two derelict gear removal projects are now in the works in the Strait of Georgia and Boundary Bay.
- The Northwest Straits Foundation raised more than \$700,000 for Initiative projects. Foundation grants funded the derelict gear program and associated research, as well as escape cord outreach conducted by WSU Beach Watchers, directed stakeholder interviews in Port Susan Bay, Shore Stewards and creosote debris removal.
- The Foundation received \$125,000 in federal penalty money stemming from a case of illegal at sea dumping. These funds were committed by the US Department of Justice for derelict gear removal in Puget Sound.
- The Commission contributed \$25,000 to the tribal canoe journey to purchase water quality monitoring probes and train canoe families to use them. The probes were installed on four canoes making the journey through the Salish Sea of Washington and British Columbia.
- The Commission produced a new forage fish spawning suitability GIS database. The database is being used to examine forage fish protection strategies in the Northwest Straits.
- Senator Murray and Representative Larsen introduced new legislation to reauthorize the Northwest Straits Commission. Senator Cantwell, Representative Dicks and Representative Inslee also supported the bill.



Fidalgo Bay Day, Michele Pope

- MRC members, Commissioners and staff worked with the Puget Sound Partnership to shape the action agenda. Derelict fishing gear removal was recognized as a critical near-term restoration priority in the agenda. Local MRC priorities are critical components of the action area profiles.
- The Commission and MRCs adopted new strategic plans. To date three MRCs have completed plans and others are well underway. The Commission's strategic plan was adopted in July 2008.
- 2008 saw the expansion of the MRC model to Washington's outer coast. The Commission and MRCs worked with the Washington State Department of Fish and Wildlife to provide input on this process, devoting a working session to the subject at the Initiative's yearly Fall Conference. More than 120 MRC members, representatives from the outer coast, and other interested parties attended this year's Fall MRC Conference in Port Angeles.
- The Initiative stepped up its external communications efforts, with feature length stories on KIRO TV and newspapers throughout the region.
- To improve internal communications, Commission staff developed a monthly newsletter, beginning in April. The newsletter never missed a month and is distributed to all MRC members, Commissioners, and others at their request.
- The newsletter and frequent content updates led to increased traffic to the Commission's website.
- Commission staff developed a new tracking system for MRC reports and deliverables. An online database makes these materials easy to locate and share.
- The Commission took steps to develop a new Science Team to provide additional independent scientific review and guidance for our projects. The Science Team will be up and running in 2009.
- The Northwest Straits Marine Conservation Initiative was authorized by the United States Congress in 1998 to restore and protect the Northwest Straits' marine resources. The Initiative carries out projects and activities that are driven by sound science, local priorities, community-based decisions and the ability to measure results.



Derelict gear removal, Simon Geerlofs



Letter from the Chair

The Northwest Straits Marine Conservation Initiative experienced 2008 just as many of us did individually - it was a year marked by economic uncertainty, politicking, and the development of new ways of doing business in response to changing times. Thanks to the tremendous effort of Initiative staff, the deep commitment of Marine Resources Committee members, and steady guidance from the Commissioners and despite the turmoil, the Northwest Straits Initiative continues to exemplify how grass-roots protection and restoration of Puget Sound can be done effectively and efficiently.

This year brought many changes within the seven Marine Resources Committees that lie at the core of the Initiative's focus. Term limits imposed at the County level resulted in significant turnover in MRC composition in 2008 and also resulted in changes in MRC representation at the Commission level. The way in which these changes occurred - with heartfelt loss for members leaving the MRCs and excitement and hopeful expectation for new MRC members - is truly reflective of the cooperative and inclusive nature of the MRCs and belies the good friendships that have developed over the years.

Hearing the MRCs highlight key projects at our recent Commission annual planning retreat reinforced for me the capacity of citizen scientists to educate themselves on topics of interest - no matter how technical the subject matter - and to then use that knowledge to engage in protection and restoration projects to facilitate meaningful change in their communities. The MRCs continue to showcase just how much good can be done with a little bit of money and a handful of engaged and motivated people.

I look forward to year 10 of the Initiative with great pride in our accomplishments thus far, but also with a cautious optimism. The current political environment does not favor Federal earmarks, the mechanism that the Initiative has relied on for funding. While the Initiative retains unwavering support from our Congressional delegation and there is significant potential for the Northwest Straits Initiative to find a more permanent home within the budget of an appropriate Federal agency, this form of longer-term financial stability brings with it the potential for increased management from afar and could, to my way of thinking, pose a fundamental challenge to our grass-roots, bottom-up approach to local marine resource protection, enhancement and restoration work.

So much of the "magic" of the MRCs and the Commission that was noted by the Northwest Straits Evaluation Panel in their 2004 report was inherent to this grass-roots approach. As we move into 2009, I would challenge all of the MRC members and Commissioners and staff to hold tight to those characteristics that make the Northwest Straits Initiative so unique: to maintain the creative tension that is the fruit of a membership comprised of diverse stakeholders and to ensure that the focus of and actions taken by the Commission reflect the interests and priorities of the local MRCs.

I continue to be truly awed, even after ten years of involvement in the Initiative, at how far the commitment and involvement of the Northwest Straits Commissioners and MRC members surpasses that of any other group of similar appointees and volunteers that I have ever worked with or seen.

My sincere thanks to each of you for your gifts of time and talent.

Scott McCreery
Chair, Northwest Straits Commission



Letter from the Director

We had many big events and exciting successes in 2008. The things that excited me the most were hosting natural resource managers from Canada to share our derelict gear program and our annual fall conference which had sessions on fascinating topics from ocean acidification to economic valuation of natural resources and a wonderful keynote on plastics in the marine environment. We also shared our story with people involved in forming MRCs on the outer coast of Washington.

These events come down to the basic elements of what makes the Northwest Straits Initiative work: people working together at the community level and making things happen. The Northwest Straits Initiative is truly a group of “doers” and I’m continually inspired by the great work our dedicated volunteers accomplish each and every year.

This coming year brings new challenges - most notably in the form of dwindling funds. We will continue to use our creativity and human resources to achieve conservation and restoration in the Northwest Straits.

Many thanks to all of our Commissioners, MRC members, MRC staff and Commission staff all of whom make this Initiative continue to make progress to restore the Northwest Straits region.

A handwritten signature in blue ink that reads "Ginny Broadhurst".

Ginny Broadhurst
Director, Northwest Straits Commission

Introduction: The Northwest

“Ten years ago when Congressman Metcalf and I first created the Northwest Straits Initiative, a lot of people were skeptical that a volunteer conservation effort could work. But now a decade later, the Northwest Straits Initiative is a model for how to bring many different groups together to restore our marine ecosystem.”

— US Senator Patty Murray

The Northwest Straits Marine Conservation Initiative (the Initiative) was authorized by the United States Congress in 1998 to restore and protect the Northwest Straits’ marine resources. The Initiative carries out projects and activities that are driven by sound science, local priorities, community-based decisions and the ability to measure results.

The Initiative provides funding for citizens to design and carry out marine conservation projects driven by local priorities and informed by science and the Initiative’s guiding goals and benchmarks. Successful local projects are adopted and expanded to the regional level to achieve results across the seven Northwest Straits counties, and in some cases the entire Puget Sound. Regional projects involve multiple public, private and nonprofit partners and catalyze action to address problems that may otherwise go unaddressed.

The Northwest Straits Initiative is a unique combination of local people, integrated within a regional framework, combining strategic partnerships and federal support. The Initiative is widely recognized as a model of action, collaboration, and participation.

Marine Resources Committees—

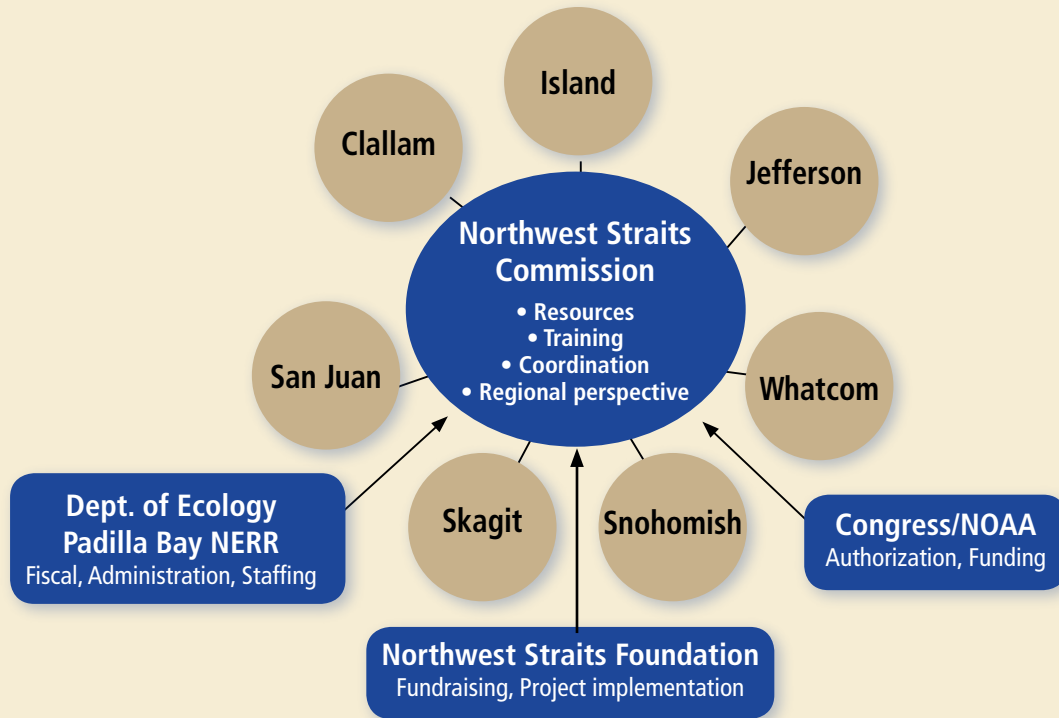
At the core of the Initiative are seven locally-established Marine Resources Committees (MRCs) in Clallam, Island, Jefferson, San Juan, Skagit, Snohomish and Whatcom counties. MRCs provide grassroots, bottom-up structure and give a strong voice to citizens on marine issues. Each MRC is created by county ordinance and members are appointed by their county commission or council. MRCs involve scientists, local and tribal governments and economic, recreational and conservation interests. MRC members set priorities and design marine restoration and protection projects, provide stewardship information to local residents and work in coordination with their local elected officials.

MRCs receive funds and support from the Northwest Straits Commission (the Commission) to carry out scientifically-based projects that meet the Initiative’s benchmarks. MRCs may also receive support from their county government in the form of additional funding or in-kind staff services. MRCs are a model of efficiency; on a shoe-string budget, they carried out more than 45 different projects in 2008.



Clayton Beach, Maya Hunger

Straits Marine Conservation Initiative



The Northwest Straits

Commission—In addition to supporting MRCs, the Commission manages marine conservation projects on the regional scale and carries out projects in partnership with tribal governments. The Commission consists of five gubernatorial representatives, one tribal representative appointed by the Secretary of the Interior, and one representative from each MRC. Commissioners meet monthly and serve as a board of directors for the Initiative. They provide vision and guidance, and ensure the Initiative is making progress towards its goals and benchmarks. With diverse professional backgrounds and multiple perspectives, Commissioners work through consensus to address marine conservation in the Northwest Straits.

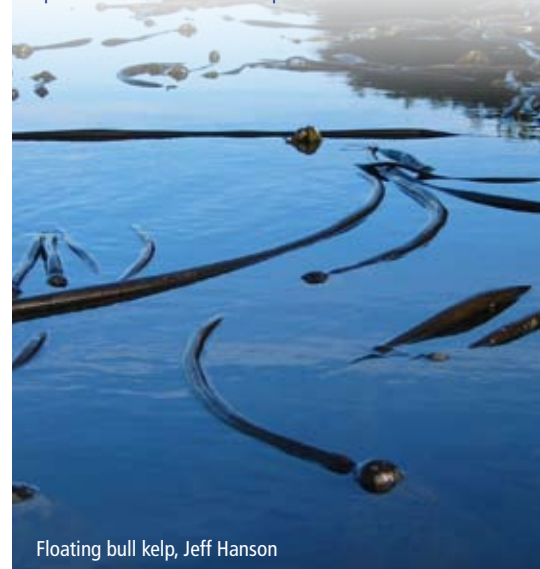
The Northwest Straits

Foundation—The Northwest Straits Foundation (the Foundation) is a non-profit organization established to leverage additional funding for the Initiative's scientific, restoration, and education projects. 2008 was a hallmark year for the Foundation. Funding expenditures topped \$600,000 and funding raised exceeded \$700,000. The Foundation is now the major source of funding for the Initiative's derelict fishing gear removal program, spending more than \$300,000 on gear removal, planning, and research in 2008.

Several important projects were completed this year, including the derelict gear prioritization project and the net mortality study. In addition, the Foundation completed the Port

Susan Bay targeted interview project and the regional creosote beach debris removal project.

Projects started this year include an expanded recreational crabber escape cord outreach project and a study to assess the economic and biological impacts of derelict crab pots.



Floating bull kelp, Jeff Hanson

Northwest Straits Initiative Goal

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

Performance Benchmarks

Marine Habitats

Protect and restore marine, coastal and nearshore habitats, prevent loss and achieve a net gain of healthy habitat areas

Marine Life

Protect and restore marine populations to healthy, sustainable levels

Marine Water Quality

Protect marine water quality of the Northwest Straits region, and restore the health of marine waters

Sound Science

Collect high quality data and promote its use and dissemination

Education and Outreach

Promote stewardship and understanding of Northwest Straits marine resources through education and outreach



Making a Regional Impact

2008 Northwest Straits Initiative Regional Projects For more information: www.nwstraits.org	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Derelict Fishing Gear Removal in Areas of High Ecological Importance	■	■			
Tribal Canoe Journey Water Quality Monitoring			■	■	●
Derelict Gear Research—Habitat Recovery Study.				■	
Derelict Gear Research—Net Mortality Study				■	
Forage Fish GIS Habitat Suitability Analysis	●	●		■	
Derelict Gear Escape Cord Education and Outreach—Supported a WSU Beach Watcher program to educate recreational crabbers about the use of escape cord on crab pots					■
Expansion of Shore Stewards Program					■
Marine Stewardship Planning in Port Susan Bay.	●	●	●	●	■
Derelict Gear Technology Transfer to British Columbia, CANADA					■
Pinto Abalone Protection Outreach—Printed educational posters and supported a new website, pintoabalone.org					■
Training and Outreach—Fall conference, monthly newsletter, website					■
■ = Primary Benchmark ● = Secondary Benchmark					

“The Commission works collaboratively with local elected officials, tribes, citizens and agencies. The environmental results are measurable but no less importantly, the sense of community and stewardship is strengthened through the process.”

—Kevin Ranker, Washington State Senate, 40th District

The Northwest Straits Initiative carries out regional marine conservation and restoration projects that address the Initiative’s performance benchmarks in multiple Northwest Straits counties. In some cases these are projects developed by one MRC that are expanded to a larger geographic scale, and at other times projects are initiated at the regional level by the Commission and Foundation. The Commission also has specific funds available on a yearly basis for projects that meet the priorities of Northwest Straits’ tribes as well as projects to advance understanding and restoration of the Northwest Straits ecosystem.

“The Northwest Straits Initiative has worked tirelessly to develop and implement a comprehensive derelict gear program focused on safe and environmentally friendly gear removal, a no-fault reporting hotline and database, and targeted prevention and outreach. These efforts have shed light on the tremendous impacts derelict gear has on marine species, as well as valuable marine habitat, in Puget Sound.”

*David Dicks, Puget Sound
Partnership Executive Director*

The Derelict Fishing Gear Removal Program

One of the Sound’s true hidden threats, lost or abandoned fishing gear silently and continuously kills thousands of marine animals each year. Thousands of marine birds, marine mammals, commercially valuable species such as salmon, ling cod, rockfish and Dungeness crab end up tangled in lost nets and pots. Removing derelict gear is a cost effective way to protect marine species and restore marine habitat quickly, efficiently, and permanently.

In Puget Sound, lost gillnets and abandoned crab pots are a legacy of strong commercial and recreational fisheries. Gillnets, made from tough, nearly invisible monofilament line, do not degrade in the marine environment. On rocky reefs in the Sound’s prime fishing grounds, lots nets stack one atop another, some decades old. Puget Sound’s Dungeness crab fishery remains strong and tens of thousands of pots continue to be lost each year. A lost crab pot can catch and kill 72 crabs over the course of a year.

As of December 2008, the Initiative has removed 1,707 derelict crab pots and 990 derelict fishing nets restoring 211 acres of marine habitat. Thousands of dead animals, representing no less than 117 different species were found entangled or trapped in these nets or pots.

In 2007, the Commission completed an estimate of the number of remaining derelict nets and pots in Puget Sound, prioritized the gear for removal and estimated the cost and capacity necessary to remove 90% of the derelict net accumulations by 2012. In 2008, we implemented this prioritization plan, concentrating gear removal activities where they have the greatest impact. Removal operations were prioritized to protect human safety, navigational safety, marine species and high value marine habitats. As a result of the prioritization process, much of our work in 2008 occurred in the San Juan Islands.



Derelict net, Barron Carswell



Juvenile seal in net, Kyle Antonellis

In 2008, the Initiative:

- Removed 340 derelict nets, with removal efforts concentrated around high priority areas in the San Juan Islands. Derelict nets contained 17,408 live and dead animals including 9 dead marine mammals, 265 dead birds, 236 live and dead fish, and 16,371 live and dead invertebrates.
- Removed 372 derelict crab pots from Puget Sound. Thirty-five percent of pots recovered were still actively fishing. Three hundred ninety-six crab and four fish were found alive in recovered pots. One hundred twenty-six crabs and one bird were found dead in recovered pots.
- Restored 66.5 acres of Puget Sound marine habitat as a result of derelict gear removals.
- Conducted 22 days of derelict gear surveys, covering 12.7 square nautical miles of Puget Sound. Surveys revealed 677 derelict crab pots and 21 derelict nets.
- Trained 21 US Army divers to safely remove derelict fishing gear. To date, the Initiative has trained 59 Department of Defense divers. Army divers spent five weeks this year removing derelict nets in Whatcom and Skagit County and an additional week removing discarded tires from Saltwater State Park near Burien.
- Hosted a two day workshop with the state of Washington and Canada to develop a transboundary approach to derelict gear removal. The Initiative is working with the province of BC and the Canadian federal government on two transboundary derelict gear removal pilot projects for 2009.
- Completed field work for a study on the rate of habitat recovery following removal of derelict fishing gear. Preliminary results indicate that kelp beds achieve 75%-90% recovery in one growing season, while eelgrass recovery is somewhat slower. The final report should be available in the spring of 2009.
- Completed a research study to estimate how much marine life is being killed by derelict fishing nets over time and to determine how quickly animals killed in derelict fishing nets decompose. This information is critical to understanding the long-term impact of derelict fishing nets on marine species in Puget Sound.
- Supported a WSU Beach Watcher program to educate recreational crabbers about the use of escape cord on crab pots. More than 6,000 educational cards and escape cord samples were distributed to crabbers or placed at locations crabbers were likely to pick them up throughout the seven Northwest Straits counties. Crab pots equipped with escape cord lose their lethality within a period of months. Those without escape cord can fish for years.
- Increased outreach to recreational divers, encouraging safe diving practices in the vicinity of derelict gear and urging divers to report gear sightings at recreational dive sites.

In 2008, the following organizations contributed to derelict gear surveys, removal work and research:

Boeing Co.

Conoco Phillips Spirit of Conservation Migratory Bird Fund

Horizons Foundation

King County

Lucky Seven Foundation

National Fish and Wildlife Foundation/NOAA Marine Debris Program Grant Partnership

NOAA Marine Debris Program

Ocean Foundation

WA State general funds

Puget Sound Conservation Fund

Russell Family Foundation

Salmon Recovery Funding Board

Sea World Busch Gardens Conservation Fund

Stillaguamish Tribe

Tulalip Tribes

Tulalip Tribes Charitable Fund

U.S. Fish and Wildlife Service Coastal and Recovery Programs.

US Environmental Protection Agency

USFWS Coastal and Recovery Programs

Washington Department of Ecology Coastal Protection Fund

Washington Department of Natural Resources

Creosote Debris Removal

In 2008, the Northwest Straits Foundation finished its Creosote Beach Debris Removal Project with funding from the National Oceanic and Atmospheric Administration (NOAA) Marine Debris Removal and Prevention Grant Program. Washington Department of Natural Resources (DNR) was the project partner, mobilizing its staff and crews to coordinate with land managers and implement on-the-ground removal. WSU Beach Watchers coordinators and volunteers helped to survey and tag debris on the beach prior to removal.

Using helicopters, barges and hand hauling, 720 tons of creosote-contaminated debris was removed from beaches and nearshore areas at Lake Hancock, Dungeness Spit National Wildlife Refuge, Fort Flagler State Park, Fort Worden State Park, Fort Ebey State Park, Ebey's Landing National Historical Reserve, Monroe's Landing Island County Park, and American Camp National Historic Park.

One hundred forty-four volunteers donated 384 hours to this project, either by surveying and tagging, assisting with removal operations, or training for future surveying activity. One hundred eighty miles of shoreline in the Northwest Straits were

surveyed for contaminated debris as part of this project.

This project is a great example of the power of MRCs and strong partnerships. It was inspired by the initial work of the Whatcom MRC, Department of Ecology and City of Bellingham, and then was replicated by the Skagit MRC and grown and strengthened by DNR. The project was featured on NOAA's Restoration Center website and is currently being replicated in British Columbia.



Creosote debris, Department of Natural Resources

Creosote debris, Department of Natural Resources

Port Susan Bay Marine Stewardship Area

Port Susan Bay's rich estuarine habitat and high biodiversity make it an important place for salmon, Dungeness crab, marine birds, marine mammals, and other wildlife. Port Susan Bay is also important for people: Tribal and non-tribal fishermen, farmers, hunters, birders, kayakers, and landowners all use and appreciate the bay and its uplands.

Bounded on the west by Island County and on the east by Snohomish County, both Snohomish and Island MRCs have taken a strong interest in the protection and management of Port Susan Bay. The Stillaguamish and Tulalip Tribes are concerned with the long-term cultural and economic impacts from the bay's dwindling marine resources. The Nature Conservancy and birding, hunting, and fishing groups are also invested in protecting Port Susan Bay. With its high biodiversity, diverse user groups and multiple jurisdictional

boundaries, Port Susan Bay is a good candidate for a comprehensive ecosystem based management approach.

For the past 24 months, Snohomish and Island MRCs, the Northwest Straits Commission, the Stillaguamish and Tulalip Tribes, WSU Beach Watchers, Shore Stewards, the Nature Conservancy and a host of other partners (called the Port Susan Bay Working Group) met to lay the initial groundwork for a potential voluntary Marine Stewardship Area in Port Susan Bay.

Marine Stewardship Areas (MSAs) are successful tools that have served to focus attention and prioritize management decisions for both San Juan and Island MRCs. While no two MSAs are alike, what's true for most is that they involve community-based planning processes that typically target areas of high biodiversity. MSAs can be used to harmonize multiple-use/multiple-value conflicts.

Involvement from stakeholders, concerned citizens, and technical experts is critical to ensure that a potential MSA addresses the community's concerns. In 2008 the Northwest Straits Foundation conducted a series of targeted stakeholder interviews in Port Susan Bay to identify issues and concerns. Interviews provided information about the natural and cultural setting that makes Port Susan Bay unique, about what has changed over the years, and what needs further protection. Information from interviews is helping develop a vision and goals statement for a Port Susan Bay MSA. This project was funded by the Harder Foundation.



Port Susan shoreline, Sean Edwards

“Funding from the Northwest Straits Commission was critical in providing the Tribal Canoe Journey water quality mapping project with the resources to move forward with the initial planning, coordination and implementation phases. Without the Commission funding, I don’t think the project would have been as successful as it was in providing valuable information for the greater Coast Salish Community and other residents of the Salish Sea.”

Charles O’Hara, Planning Director for the Swinomish Indian Tribal Community and Skagit MRC member

Tribal Fund: Canoe Journey Water Quality Monitoring

The Northwest Straits Commission’s Tribal Committee is a forum to discuss policy, projects, and priorities of tribal governments within the Northwest Straits region. The Committee also recommends projects for funding that benefit the Northwest Straits’ ecosystem and tribal capacity to protect marine resources.

In 2008, the Tribal Committee allocated \$25,000 to the Coast Salish Canoe Journey to install equipment and train personnel to sample water quality during the annual journey.

Each summer, more than 70 First Nations and tribes travel by canoe to a landing destination in the Salish Sea. The Canoe Journey is an important cultural event for all involved.

Northwest Straits Commission funding provided support and equipment for a pilot project to collect baseline water quality data for the Salish Sea, identify potential hotspots of water quality concern and train families to collect water quality data during the Canoe Journey.

Four canoes were outfitted with GPS units and water quality probes that continuously measured surface-water temperature, salinity, pH, dissolved oxygen, total dissolved solids, and turbidity. At the end of the Journey, data was downloaded and used to compile a database and maps of water-quality measurements across the Salish Sea.

This project brings tradition and science together to accomplish a data gathering process that is ideally done with a canoe, eliminating the impacts of boat engine and exhaust disturbance that interfere with data collection and quality.

Ecosystem Fund: Forage Fish Habitat Suitability Mapping

The Northwest Straits Technical Committee provides technical and scientific review for MRC and Commission project proposals. The Committee also recommends funding for ecosystem scale projects that contribute to our understanding, protection and restoration of the Puget Sound ecosystem.

2008 was a year for strategic planning throughout the Initiative, and strategic use of ecosystem project funds was a priority for



Tribal canoe journey, Ginny Broadhurst

the Commission. The Technical Committee developed a new ranking process to evaluate potential ecosystem projects based on objective criteria. Following evaluation of a number of project proposals, the Commission allocated funds in 2008 to investigate gaps in forage fish protection in the Northwest Straits.

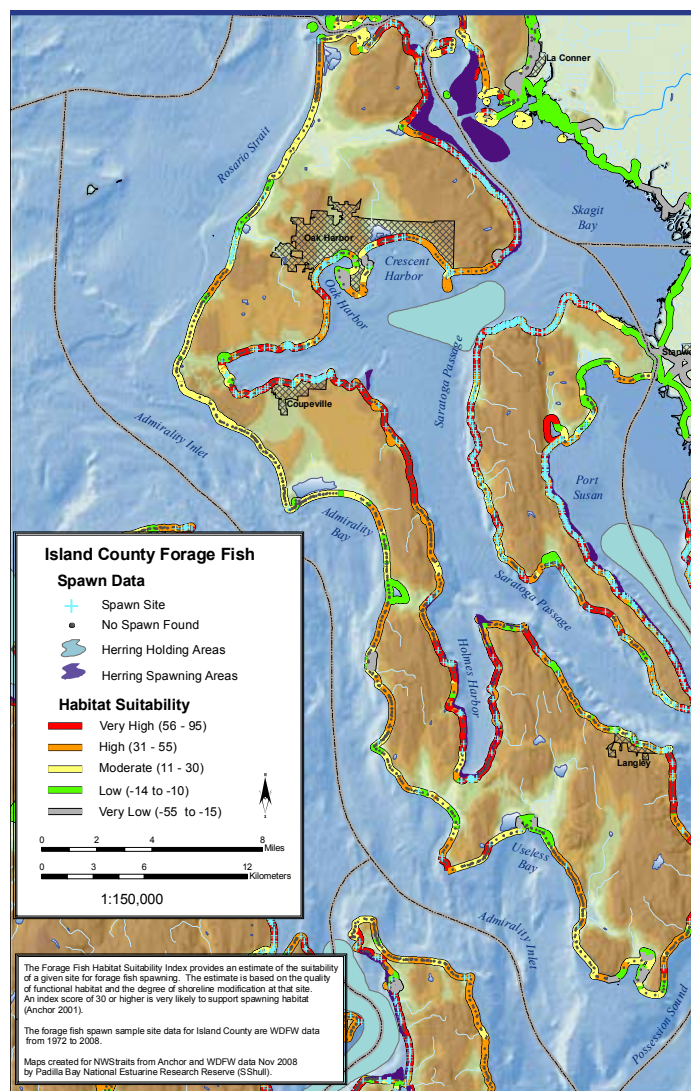
Forage fish (Pacific herring, Pacific sand lance, and surf smelt) are a key component of Puget Sound's food chain and identifying and protecting the beaches where forage fish spawn is necessary for Puget Sound recovery. State law protects forage fish spawning habitat from many of the impacts of shoreline development—but only on

beaches where forage fish spawning activity has been physically documented.

Washington Department of Fish and Wildlife, MRCs and other groups have surveyed much of Puget Sound for evidence of forage fish spawning activity. And In 2002, the Northwest Straits Commission funded a regional forage fish habitat suitability model. In 2008, the Commission combined this habitat suitability information with actual survey data in a series of GIS maps. These maps are being used to identify suitable habitat where survey data is thin. In 2009, the maps will be used to plan new surveys and analyze forage fish protection policy and strategies.

“The Northwest Straits Commission is dedicated to using science and traditional ecological knowledge as a foundation for all the work we do. The Technical Committee exists to ensure we hold true to that. We’re a small group with diverse backgrounds and we’re committed to this process. Whether it’s identifying ecosystem-scale projects, coordinating data collected by MRCs or ensuring that regional projects are scientifically robust, the Technical Committee is always working behind the scenes.”

—Joe Gaydos, Technical Committee Chair



Forage fish spawning suitability map for Island County, produced by Suzanne Shull, Padilla Bay National Estuarine Research Reserve. Maps have been created for each of the seven Northwest Straits counties. For more information or to obtain copies, contact the Northwest Straits at info@nwstraits.org

Training and Outreach

Providing funding and staff support for MRC training and outreach is a key role of the Commission. Direct outreach, workshops, speaker events, print, web and visual media are all tools used by the Commission to carry out their outreach tasks.

Fall Conference—Each November, the Commission organizes and plans a conference for MRC members and partners to provide regional context for MRC work, introduce new science and provide tools to support MRC activities. Clallam County MRC hosted this year's conference in Port Angeles, with more than 130 people in attendance for the two-day event. All seven MRCs were represented, with additional participants from state and federal agencies, local governments, universities, and non-profit groups. The conference featured

presentations on ocean acidification, new communication methods, user-friendly GIS tools, ecosystem valuation techniques, and the San Juan Initiative. We expanded our scope this year to include citizens from the outer coast to participate in a workshop on development of outer coast MRCs. The workshop was an opportunity for MRC members to share lessons learned with outer coast participants and express support for their process.

Communications

Newsletter—2008 marked the first year of the Northwest Straits Newsletter. Starting in April, commission staff prepared and distributed the newsletter electronically to more than 200 people on a monthly basis. Newsletter articles highlighted MRC and Commission activities and alerted MRC members to events and issues within the Northwest Straits region. The newsletter improved internal communication considerably in 2008, and will be continued in the years to come.

Website—The Northwest Straits Commission's website was revamped in 2008 with new content and capabilities. The homepage was redesigned to deliver focused and timely information and reflect the human capital of the Initiative with monthly MRC member biographies. A new searchable online database of MRC and Commission publications was developed to help respond to requests for our research and work products. New content was added to support outreach for Pinto abalone protection and restoration, as well as crab pot escape cord education and outreach. This new content was channeled into two spin-off websites: www.pintoabalone.org and www.escapecord.org. At the end of 2008, we began preparing for another new website for 2009, this one on derelict fishing gear— derelictgear.org. Web statistics reflect robust use of our website with users logging on to learn about key Puget Sound issues and the Initiative's structure and activities.



Fall conference field trip, Kat Hoffman

Marine Resources Committees



“Working together with a common goal of improving the natural world in which we live has a powerful pull on people. Political, ethnic, and lifestyle differences melt away, and consensus builds as MRC members discover that their differences are really small, and that meaningful ideas can be shaped through accommodation, often adding strength to the concepts to which they are applied.”

*—Buck Meloy, Commercial Fisherman,
Whatcom County MRC Member and
Northwest Straits Commissioner*

Phyllis Kind, Simon Geerlofs

Clallam



"I have enjoyed serving on the board of the Clallam MRC these many years, mainly because of the breadth of expertise sitting around the table. Though there were some disagreements at the outset, this committee has been able to move forward and develop unique 'bottom-up' projects, with tangible results. With Elwha watershed restoration on the horizon, the Clallam MRC stands ready to move forward with state of the art restoration projects."

Doug Morrill, fisheries biologist for the Lower Elwha Klallam Tribe, Clallam MRC chair

Clallam County's 200 miles of shoreline stretch along the northern third of Washington's rugged outer coast and the length of the Strait of Juan de Fuca to the middle of Discovery Bay. The county's rich nearshore and marine waters are the gateway to the Northwest Straits and are transited more than 5,000 times each year by container ships, tankers, and barges bound for Puget Sound ports. This geography fuels marine economic activity—fishing, marine transportation services, ship building, tourism, and a strong Coast Guard presence. Clallam County is mostly rural, with a population of 70,000 people—nearly 20,000 in Port Angeles, the county seat. The relatively mild, dry climate of eastern Clallam County, especially in Sequim, has led to an influx of new residents. Olympic National Park and the Olympic Coast National Marine Sanctuary are ecological treasures that last year attracted more than 2.8 million visitors.

Clallam County MRC consists of 15 citizens that represent commercial and sport fishers, local government, the Makah Tribal Council, the Lower Elwha Klallam Tribe, the Jamestown S'Klallam Tribe, builders, conservation interests, the Olympic Coast National Marine Sanctuary and representatives from the county's different geographic areas. Clallam County MRC members are often working professionals who balance MRC duties with the demands of their "day job".

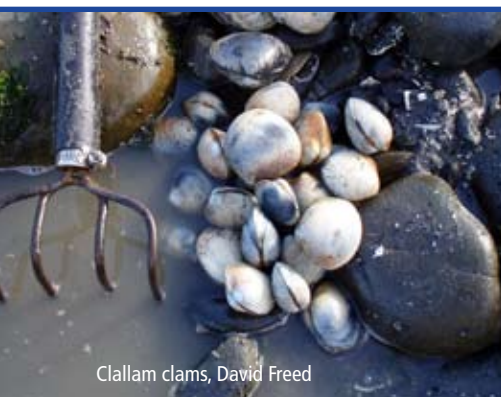
The MRC's stated purpose is "to discover collaborative ways to improve shellfish harvest areas, protect marine habitat, support salmon and bottomfish recovery, and examine resource management alternatives. Ultimately, we will recommend remedial actions to local authorities. In meeting these goals, we hope to address and rectify the many serious threats to the Northwest Straits, its natural resources and human residents."



Port Angeles, Connie Price

Clallam MRC is developing a strategic plan that will guide the committee in its efforts over the next 5-10 years. The Committee has focused its work on addressing issues associated with coastal erosion, shellfish and water quality, forage fish, nearshore marine habitat, and rockfish. The future removal of the two Elwha River dams and expected changes in the nearshore marine ecology that will result have been a strong driver for recent MRC projects. Additionally, the MRC is an advocate for responsible growth in the region. As the county grows, stormwater runoff, reduced estuary health, habitat degradation, and impaired water quality are pressing issues.

In 2008, Clallam MRC projects focused on data collection in the nearshore. The MRC funded a pilot project using video and geo-referencing technology to record shoreline features from a survey vessel just offshore. Also in 2008, Clallam MRC collected fish use data in the Elwha nearshore zone. Both of these data sets will assist the county as they update their shoreline master plan in the coming years. Additionally, the MRC monitored area beaches for paralytic shellfish poisoning and relayed the information to the Department of Health.



Clallam clams, David Freed

2008 Clallam County Projects For more information: clallammrc.org	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Support Volunteer Beach Clean Up Activities on County Beaches—Five beaches were cleaned by the MRC and 33 volunteers.	■				●
Shoreline Inventory—The MRC carried out a vessel-based geo-referenced video survey of county shoreline from Freshwater Bay to Dungeness Spit (44 miles of shoreline). Information about shoreline features and condition will be used by the county for shoreline master planning.	●			■	
Marine Ecosystem Analysis Field Assessment (MESA)—The Clallam MRC is revisiting the baselines established by the MESA project in the late 1970s to assess the degree to which the ecosystem has changed over the last three decades. In 2008, the MRC sampled nearshore infauna based on MESA protocols. This pilot project developed the methodology for further work to identify long-term trends in the nearshore environment .		●		■	
Elwha Nearshore Fish-use Seining Surveys—More than 250 seine sets recorded fish species in the Elwha River, data will inform Clallam County's shoreline master plan update (in collaboration with WDFW and Peninsula College).		●		■	
Shellfish PSP Monitoring—Citizen volunteers sample county beaches for paralytic shellfish poisoning monthly and provide data to the state Department of Health. This sampling program has resulted in the opening of more than 30 miles of beaches to shellfish harvest previously closed by state regulation.			●	■	●
Education and Outreach—The MRC sponsored and participated in numerous outreach events, including workshops, conferences, and trainings.					■
■ = Primary Benchmark ● = Secondary Benchmark					

Island



“Volunteers need to know their time is being well spent. By participating on the Northwest Straits Commission I’m able to make a real difference.”

—Phyllis Kind, Island County MRC member and Northwest Straits Commissioner.

Island County MRC has more than 212 miles of shoreline along Whidbey and Camano islands. Nearly 80,000 people call Island County home, with Oak Harbor the largest city at just over 20,000 residents. Oak Harbor is also the location of Whidbey Island Naval Air Station, which contributes strongly to the culture and economy of northern Whidbey Island. More than 50,000 residents live in unincorporated Island County and the county maintains a strong rural/agricultural base. Island County’s marine environment has rich eelgrass beds that support juvenile salmon, Dungeness crab, seabirds and other species. Admiralty Inlet, on Whidbey’s west side, is the entrance to central Puget Sound, a bottleneck for ship traffic, and a testing ground for potential tidal energy projects.

Many of the treaty tribes have Usual and Accustomed fishing areas in Island County.

Island MRC has a strong focus on science, education and stewardship. Island County is the birthplace of the Beach Watchers and Shore Stewards programs, and the MRC has developed innovative methods for reaching new audiences with stewardship messages. The MRC worked strategically over the past several years to install educational signage in locations throughout the county—with 12 new signs added in 2008. Also in 2008, Island County Shore Stewards added their 500th member; the Shore Stewards program continues to make measurable improvements in the knowledge, behaviors, and actions of people and communities that live along the shore.



Dave Mackie County Park, Dan Pedersen

In 2008, the MRC made a major commitment to shoreline restoration, partnering with Washington State Parks and the National Fish and Wildlife Foundation to restore Cornet Bay in Deception Pass State Park. A major new effort of the MRC to design and fund a citizen science eelgrass mapping project in partnership with WSU Beach Watchers and the Washington Department of Natural Resources also started in 2008. Using portable video mapping equipment, volunteers collected eelgrass presence/absence data in Holmes Harbor and Cornet Bay to establish baselines.

The MRC's 13 members represent a cross-section of interests including recreational and commercial fishing, agriculture, boating, aquaculture, science, the environment, local government, higher education, and Island County's substantial Navy presence.

The MRCs stated purpose is to: "contribute to the protection of the local and Northwest Straits marine environments through education, research and voluntary action. In so doing the MRC recommends remedial actions to local authorities and builds community awareness of the issues and support for the remedies."



Island signage, Sarah Schmidt

2008 Island County MRC Projects For more information: www.islandcountymrc.org	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Cornet Bay Restoration—The MRC began feasibility work in 2008 as part of a long-term project to restore sites in Cornet Bay in Deception Pass State Park	■	●	●	●	●
Low Impact Development Feasibility Assessment—The MRC is working to improve the community's capacity to implement low impact development projects. Partners on this project include Whidbey Island Conservation District and the City of Langleys.			■		●
Estuary Seining—Partnering with Beach Watchers and NOAA, the MRC provided support and equipment for an award winning citizen science project to collect fish use data in Island County/WRIA 6 estuaries. Two Beach Watcher volunteers participating in the project, Jim Somers and Bob Buck, received the 2008 NOAA Environmental Hero Award for their service.		●		■	●
Pigeon Guillemot Breeding Survey—A summer intern was hired, citizen science protocols were analyzed, and data was collected about Pigeon Guillemot nesting and feeding behavior.		●		■	●
Shore Stewards Support—The MRC provided funds for a Shore Stewards coordinator position. In 2008, Island County Shore Stewards added their 500th member.					■
Interpretive Signage—Twelve new marine education interpretive signs providing messages about the County's two marine stewardship areas were designed, installed, and evaluated in seven locations in Island County.					■
Community Workshops—The MRC hosted two workshops on marine resource issues and low impact development and water reclamation.					■
Eelgrass mapping—The MRC worked with citizen scientists to map eelgrass presence/absence in Holmes Harbor and Cornet Bay. In partnership with Beach Watchers, WA Department of Natural Resources, and University of Washington.					■
■ = Primary Benchmark ● = Secondary Benchmark					

Jefferson



The Jefferson MRC has proven to be a valuable resource during the Shoreline Master Program update process completed by the City of Port Townsend (2007) and currently underway for Jefferson County. The data gathered by the MRC was incorporated into the shoreline characterization work required by the state guidelines. More importantly, the MRC is uniquely qualified to assist in implementing restoration plans and monitoring the overall success of SMP implementation. It is a natural partnership that continues to blossom.”

*—Judy Surber, Senior Planner/
Planning Manager for the City
of Port Townsend, and MRC
member*

Jefferson County's 202 marine shoreline miles include the easternmost extent of the Strait of Juan de Fuca, Admiralty Inlet, and northern Hood Canal. Most of Jefferson County's 30,000 people live in its eastern edge, with Port Townsend the county seat and largest city at nearly 9,000 residents. Port Townsend has a vibrant marine-trades economy, with nationally-renowned riggers, sail makers, boat builders and marine industrial firms. Port Townsend has become a hub for maritime activity, with the city's annual Wooden Boat Festival drawing boaters and marine enthusiasts from around the world. The city is also home to nationally-recognized marine science and maritime education programs. The Port Gamble S'Klallam Tribe holds reservation lands within Jefferson County.

The Jefferson MRC serves as an advisory group to the Jefferson County Board of County Commissioners. The 17 members represent the different geographic regions of

the county with backgrounds in recreation, industry, environmental interests, education and marine science as well as state, county, and local government. MRC members work closely with homeowners, business owners, recreational enthusiasts and commercial and sport fishers to reduce or stop the decline of the marine habitat in ecologically-rich Jefferson County. Jefferson MRC has shaped stewardship messages to target Port Townsend's boating community and boating tourists.

One of the MRC's signature projects, the Voluntary No-Anchor Eelgrass Protection Zone along Port Townsend's waterfront, has succeeded in communicating eelgrass stewardship messages to boaters from across the region and beyond. Eelgrass protection is a priority for the MRC; in 2008 new project were developed to educate citizens about the value of eelgrass through signage and an eelgrass protection pledge.



Longboat, Simon Geerlofs

In 2008, Jefferson MRC took great strides in developing work on drift cell analysis, restoration and post restoration monitoring. At Fort Flagler, MRC volunteers conducted a bathymetric survey of the beach following removal of a derelict pier by the Washington Department of Natural Resources. A similar monitoring and analysis project is planned for the Port Townsend Marine Science Center Pier at Fort Warden State Park and the MRC is also developing plans for restoration activities at Oak Bay County Park.

Typically, Jefferson MRC focuses their attention and resources on a limited number of multi-faceted projects. This focused effort creates the conditions for self-sustaining projects that succeed at many different levels and meet multiple benchmarks. MRC members are also providing guidance and input to Jefferson County and Port Townsend planners throughout recent and ongoing Shoreline Master Program update processes. The MRC also completed a strategic plan in 2008 that is guiding MRC project planning.



Eelgrass protection buoys installed, Gabrielle LaRoche

2008 Jefferson County MRC Projects For more information: www.jcmrc.org	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Drift Cell Restoration— In 2008, the Jefferson MRC continued work on drift cell restoration with a focus on community outreach and assessment and conceptual design. A bathymetric survey was conducted by MRC volunteers at Fort Flagler State Park following removal of the Fort Flagler pier by WA Department of Natural Resources.	■	●		●	●
Voluntary Anchor-Free Eelgrass Protection Zone—The MRC continued this successful project in 2008, monitoring the efficacy of signs, distributing outreach materials, installing new signs, and studying potential to expand eelgrass protections strategies to Port Hadlock and Mystery Bay. The voluntary anchor-free zone along Port Townsend's waterfront is achieving a 98% voluntary compliance rate from visiting boaters.	■	●			●
Olympia Oysters—The MRC sampled and monitored previously restored sites for growth and reproduction. Restored oyster populations showed clear signs of stress and the MRC is investigating the source of this stress.		■		●	●
Marine Stewardship—In 2008, the MRC focused outreach efforts to coincide with the ongoing update of the county's Shoreline Master Program. The MRC coordinated closely with WSU Beach Watchers to provide information and volunteer opportunities consistent with its vision and goals. Outreach and volunteer opportunities included creosote debris removal, crab pot escape cord education and outreach, pet waste removal and Discovery Bay Water Quality Monitoring.					■
■ = Primary Benchmark ● = Secondary Benchmark					

San Juan



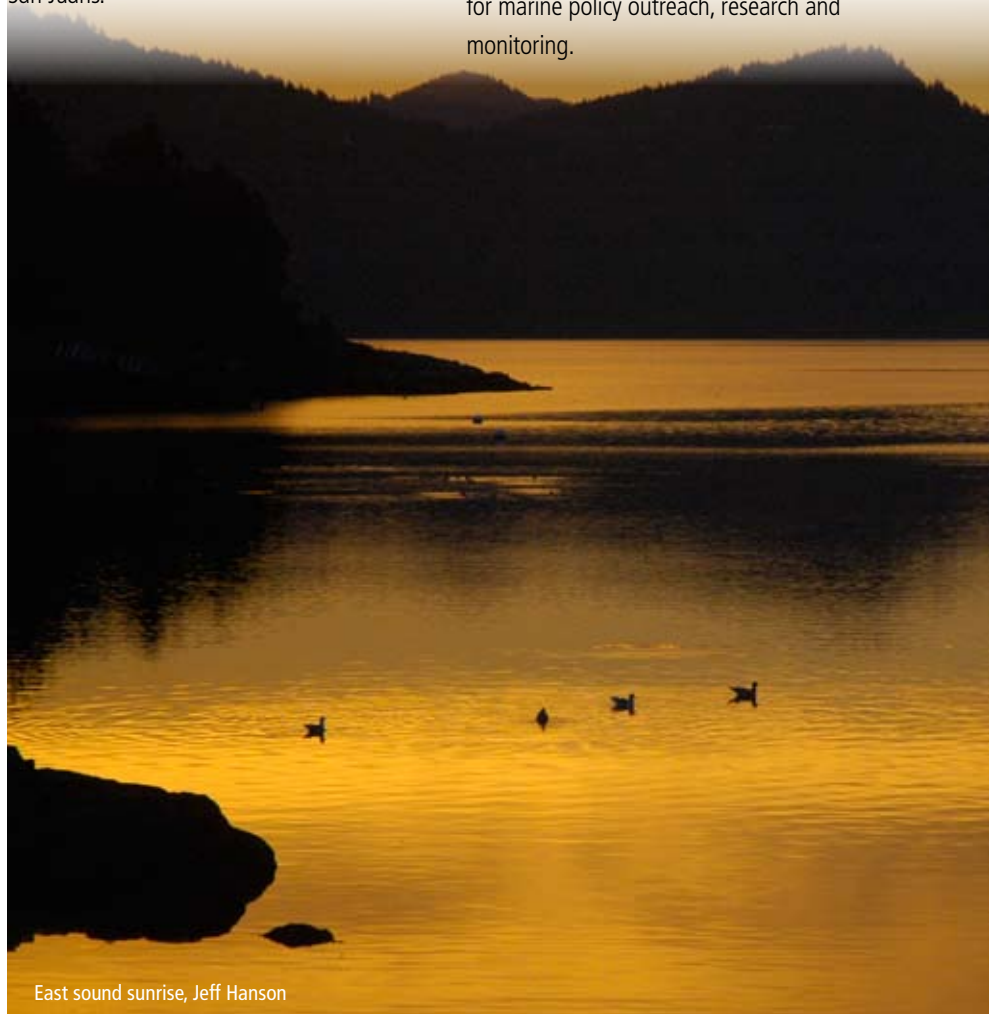
“To accomplish protection in the San Juan Marine Stewardship Area we’re working to create an effective circle of actions. We work with our community partners to support citizen science and encourage stewardship in the community. We’re offering training in sustainable practices for citizens and business owners. As we build a cadre of informed citizens, we improve our ability to track the health of the environment and gain tools for protection. The tools are then used to spread knowledge and love for the environment and to help support needed protections. The circle keeps widening and marine stewardship grows.”

—Kit Rawson, chair of the San Juan MRC and Tulalip Tribes senior fisheries biologist

With more than 170 named islands and countless rocky reefs and outcrops, San Juan County’s 408 miles of shoreline are the most of any county in the nation. Cold, nutrient-rich waters from the Pacific Ocean and strong tidal currents make ideal conditions for marine biodiversity. Because of this, San Juan County is home to one of the nation’s finest marine research centers at Friday Harbor Labs. There are nearly 16,000 full time or seasonal residents of the San Juan Islands. Tourism is extremely important to the county’s economy, with 23% of sales tax revenues stemming from visitor spending. Tourists and locals alike are drawn to the islands’ tremendous natural beauty and iconic wildlife. Many of the treaty tribes have Usual and Accustomed fishing areas in the San Juans.

The San Juan MRC’s 16 individuals represent local government, the Tulalip Tribes, Friday Harbor Labs, builders, local fishermen, boaters and economic, recreational and conservation interests. San Juan County was the first of the seven Marine Resources Committees and recently added the additional responsibility of serving as the county’s citizen advisory group for salmon recovery efforts. At this point, the MRC is fully integrating salmon recovery with their other work.

Over the last several years, San Juan MRC’s focus has been developing and refining the county-wide Marine Stewardship Area (MSA). This project has received recognition and support from organizations and foundations outside the Northwest Straits Initiative. In 2008, San Juan MSA served as a focal point for marine policy outreach, research and monitoring.



East sound sunrise, Jeff Hanson

San Juan MRC also takes an active policy role, working with the county council to recommend actions to protect the marine environment and maritime livelihoods.

2008 San Juan County MRC Projects For more information: www.sjcmrc.org	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Marine Stewardship Area Monitoring—The MRC completed the monitoring plan for county waters and is working with their science subcommittee to prioritize actions in 2009. The MRC is also developing a comprehensive citizen monitoring program and interviewing scientists to identify research and monitoring needs.	●	●	●	■	●
Marine Stewardship Area Outreach—Working with multiple partners, San Juan MRC held community workshops, distributed 6,000 copies of a marine stewardship guide, distributed two installments of a marine resources newsletter, and participated in trainings to promote marine stewardship.					■
Rockfish Protection—San Juan MRC completed a peer reviewed report on the status of rockfish in San Juan County, including management options for recovery.		■			
Marine Stewardship Area Annotated Bibliography—The MRC contracted to annotate a bibliography of sources for marine stewardship area planning to aid other counties and groups who might carry out similar comprehensive action planning activities.					●
■ = Primary Benchmark ● = Secondary Benchmark					

Skagit



"For the past five years Skagit MRC has involved a host of other businesses and organizations in an event designed to remind the public that the sea around them is a marvelous collection of nooks, crannies, caves and holes filled with plants and animals both as familiar as oysters and as strange as any alien being ever imagined. Each one of us has a little bit of the secret scientist inside us. It is this spark of curiosity we seek to strike with our annual MRC public education effort, Fidalgo Bay Day. As budgets shrink, an educated electorate will be increasingly important to preserving the treasures of the sea. Public education about the world of water is one of the most vital parts of our mission."

—Erica Pickett, City of Anacortes
and Skagit MRC Member

Skagit County's 189 miles of shoreline include rocky islands, the productive Skagit River delta, countless sloughs, bays, and pocket estuaries. The Sauk, Skagit and Samish rivers flow from the Cascade mountains through fertile agricultural land, providing water needed to grow crops and support salmon and waterfowl populations. The county's marine waters are plied by pleasure craft bound for the San Juan Islands as well as large oil tankers calling at two refineries at March Point near Anacortes. One hundred fifteen thousand people live in Skagit County, with Mount Vernon and Anacortes the county's two largest cities. The Sauk-Suiattle Tribe, Swinomish Tribe and the Upper Skagit Tribe hold reservation lands and the Samish Indian Nation has federal trust lands within Skagit County. Padilla Bay National Estuarine Research Reserve is also located in Skagit County.

Skagit County MRC's 18 members represent a broad spectrum of interests including the four tribes, Shannon Point Marine Center, Washington Department of Natural Resources, People For Puget Sound, marine scientists, recreational divers and fishermen, local government, the oil refineries at March Point, Skagit Land Trust and concerned citizens. Members take active leadership in accomplishing MRC projects.

Skagit MRC is taking a long-term strategic approach to identifying restoration opportunities in county waters. Over the last two years, the MRC has completed drift cell analyses for nearly 30% of the county shoreline. Looking at the movement of sediment and comparing current and historic conditions helps the MRC make restoration decisions based on underlying ecological processes.



Stormwater sampling, Christine Woodward

In 2008, Skagit MRC also took on new projects to focus attention on water quality. Low impact development (LID) workshops and demonstrations, a Fidalgo Bay Contaminant Assessment, and investigations of point source control methods were all accomplishments in 2008.

The Skagit MRC's stated purpose is to "act as a catalyst for protection and restoration of the marine waters, habitats and species of Skagit County to achieve ecosystem health and sustainable resource use." A key committee task is to involve and educate the public about these issues.



Fidalgo Bay Day, Michele Pope

2008 Skagit County MRC Projects For more information: www.skagitcounty.net/MRC	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Spartina Survey and Removal—Skagit MRC partnered with People for Puget Sound on the 10th annual Skagit Spartina Dig Day. Thirty-eight trained volunteers contributed 157 hours of service. In addition, volunteer kayakers contributed 123 hours to survey more than 25 miles of Skagit shoreline for Spartina in 2008.	■				●
Low Impact Development Workshops—Skagit MRC partnered with Skagit Conservation District to hold two technical LID workshops in 2008 to educate nearly 86 participants about LID techniques.			■		●
Port of Anacortes Beach Enhancement and Low Impact Development—Conceptual design complete and construction anticipated in 2009.	●		■		
Fidalgo Bay Contaminant Assessment—Skagit MRC Partnered with the Samish Indian Nation to collect samples from stormwater outfalls during four sampling periods. Samples were tested for nutrients, heavy metals, and pesticides.			●	■	
North Fidalgo Island Drift Cell Analysis—the MRC completed a geomorphologic assessment and restoration prioritization of the North Fidalgo shoreline. Added to a similar study of March Point, the MRC has completed drift cell analyses for 30% of the Skagit shoreline.	●			■	
Olympia Oyster Restoration Monitoring—Monitored and evaluated the success of the previous five year's oyster restoration efforts. This work led to a peer reviewed publication in the Journal of Shellfish Research.		●		●	
Fidalgo Bay Day—An annual public awareness day focused on marine resources of Fidalgo Bay. Hundreds attended the event, with more than 30 organizations and 50 volunteers on hand to provide education, interpretation, fun, and food.					■
Financial Support for Beach Watchers Program					■
Financial Support for Shore Stewards Program					■
■ = Primary Benchmark ● = Secondary Benchmark					

Snohomish



“The enthusiasm and commitment of the volunteers and partners who support our MRC projects is amazing. For example, our ‘Mussel Watch’ water quality monitoring project could not have been implemented without volunteers from WSU Beach Watchers, the Stilly Snohomish Fisheries Enhancement Task Force, Everett Community College Ocean Research College Academy (ORCA), as well as our partners - NOAA and the Stillaguamish Tribe. We actually had to turn away extra volunteers for mussel collection days!”

– Mary Cunningham, City of Everett and Snohomish MRC member

Snohomish County is the most populous and urban of the seven Northwest Straits counties. With a population of nearly 670,000 people, more people live in Snohomish County than the other six MRC counties combined. Snohomish County’s 130 shoreline miles are largely developed, with the Port of Everett a major industrial presence, naval base and marine transportation hub. County waters support valuable Dungeness crab stocks and productive estuarine habitat, especially in Port Susan Bay near Stanwood. The Tulalip and Stillaguamish tribes have usual and accustomed fishing grounds within county waters.

Since its inception in 1999, Snohomish County has supported the Snohomish MRC with staff from their Surface Water Management Department. The MRC’s 11 members represent a balance from local government, tribal government and resource management staff, economic and real estate interests, recreational divers, scientists and conservation and environmental interests. Their mission, guided by sound science and the needs of the marine ecosystem, is to “address local marine issues, recommend remedial actions to local authorities and build local awareness of the issues and support for remedies.”



Mussel watch, Amy Johnson

In 2008, Snohomish MRC focused attention on a shoreline restoration project at Kayak Point County Park. Working with County Parks, People for Puget Sound, and the Northwest Straits Commission, the MRC contracted to develop restoration strategies in light of potential future sea level rise scenarios. It is the intention of the MRC for this study and subsequent restoration to serve as a model project as other groups grapple with the interplay of climate change and nearshore restoration.

2008 also marked another successful year for the MRC's Mussel Watch water quality monitoring program. Partnering with NOAA and WSU Beach Watcher volunteers, the MRC collected tissue samples from mussels in six locations. Samples were analyzed for more than 100 compounds in order to establish a water quality "finger print" in strategic locations.

In another citizen science project, MRC volunteers worked together with People for Puget Sound to monitor beach profiles at two sites on Jetty Island, near Everett. Monitoring is investigating the effects of beach nourishment on Jetty Island, a popular destination for people and wildlife alike. This information is being used to assess the viability of beach nourishment as a restoration option along county shorelines.

2008 Snohomish County MRC Projects For more information: www.mrc.surfacewater.info/	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Kayak Point Restoration—In 2008, the MRC completed restoration design and a sea level rise assessment of the site. The MRC continues to work with project partners on this long-term effort to restore habitat function at several sites in this popular county park.	■			●	●
Jetty Island Monitoring—Volunteers monitored beach profiles at two sites to investigate the effects of beach nourishment and assess its viability as a restoration strategy along the Snohomish shoreline.	■				
Gravid Female Dungeness Crab Habitat Study—Completed study protocols and preliminary maps of gravid (egg-bearing) female Dungeness crab habitat. Underwater surveys will begin in 2009.	●	■		●	
Mussel Watch—expanded NOAA's nationwide water quality Mussel Watch Program from three to six sites in Snohomish County. Mussels collected, processed and analyzed for more than 100 chemicals.			■	●	
Pharmaceutical Take-Back Program—The MRC is participating in an innovative coalition called PH: ARM (Pharmaceuticals from Households: A Return Mechanism) to encourage collection and proper disposal of waste pharmaceutical products.			■		●
Beach Watcher Training—The MRC provided financial support to WSU Beach Watchers to develop and conduct a 100-hour training course.					■
■ = Primary Benchmark ● = Secondary Benchmark					

Whatcom



“Whatcom County’s marine waters are a wonderful public place; a diminished yet still rich resource; a familiar, yet scarcely known or understood wilderness; close by, yet harboring dark, seldom seen depths. The Marine Resources Committee is a volunteer group of citizens engaged in protecting, restoring, and actively learning about that wonderful public place. We are citizens from varied backgrounds and with many different relationships to Whatcom’s marine waters and marine life. Living at the edge of Whatcom’s waters, my participation in the activities of the Marine Resource Committee returns satisfactions of both civic engagement and exploration.”

– Bert Rubash, Whatcom MRC member

The northernmost county in the Northwest Straits, Whatcom County has 118 miles of shoreline that includes shellfish beaches in Birch Bay, Drayton Harbor, and Chuckanut Bay; Bellingham’s bustling urban waterfront; important herring spawning beaches at Cherry Point; and Lummi Island, just west of Bellingham. One hundred and eighty five thousand people live in Whatcom County, including members of the Lummi Nation and Nooksack Tribe. Timber, fishing and agriculture remain important to the county’s economy. Service sector jobs associated with tourism are on the rise, while manufacturing jobs have fallen. Lummi Island maintains an important salmon reef net fishery and Bellingham is a hub for maritime industrial activity and transportation.

Whatcom MRC’s 17 members consist of scientists, commercial fishermen,

recreational divers and clammers, the conservation community, resource managers, elected officials and local government staff, the Nooksack Tribe and Lummi Nation. The Whatcom MRC has a strong interest in healthy, harvestable shellfish. MRC members and citizen volunteers have worked tirelessly to ensure that recreational clamming opportunities remain vibrant. The MRC has also taken an analytical approach to prioritizing nearshore restoration activities to achieve maximum benefit. Protecting the health of rockfish in county waters has been another focus of the MRC. Throughout their projects, the MRC makes education and outreach and community involvement a priority.

In 2008, the MRC continued to build on a solid foundation of established projects. June-through August, 46 volunteers assisted the MRC’s Clam Subcommittee



Invasive tunicate training, Whatcom MRC

and Whatcom County staff in assessing clam populations in Birch Bay and Mud Bay. Identifying, protecting, and restoring clam populations and connecting citizens to this resource will continue to be a priority for Whatcom MRC in 2009.

Also in 2008, Whatcom MRC completed the preliminary design and permitting phases of two restoration projects: Chuckanut Village marsh restoration and Cliffside Beach wood debris removal. Partners in these projects include the City of Bellingham, Whatcom County Public Works, and Washington Department of Ecology

Protecting rockfish and identifying rockfish habitat remained a priority in 2008, with the MRC teaming up with Western Washington University to carry out six remotely operated vehicle surveys in Whatcom County waters. Students learned survey protocols and participated in data collection, and the MRC plans to add new sites in 2009.



Semiahmoo clam survey, Whatcom MRC

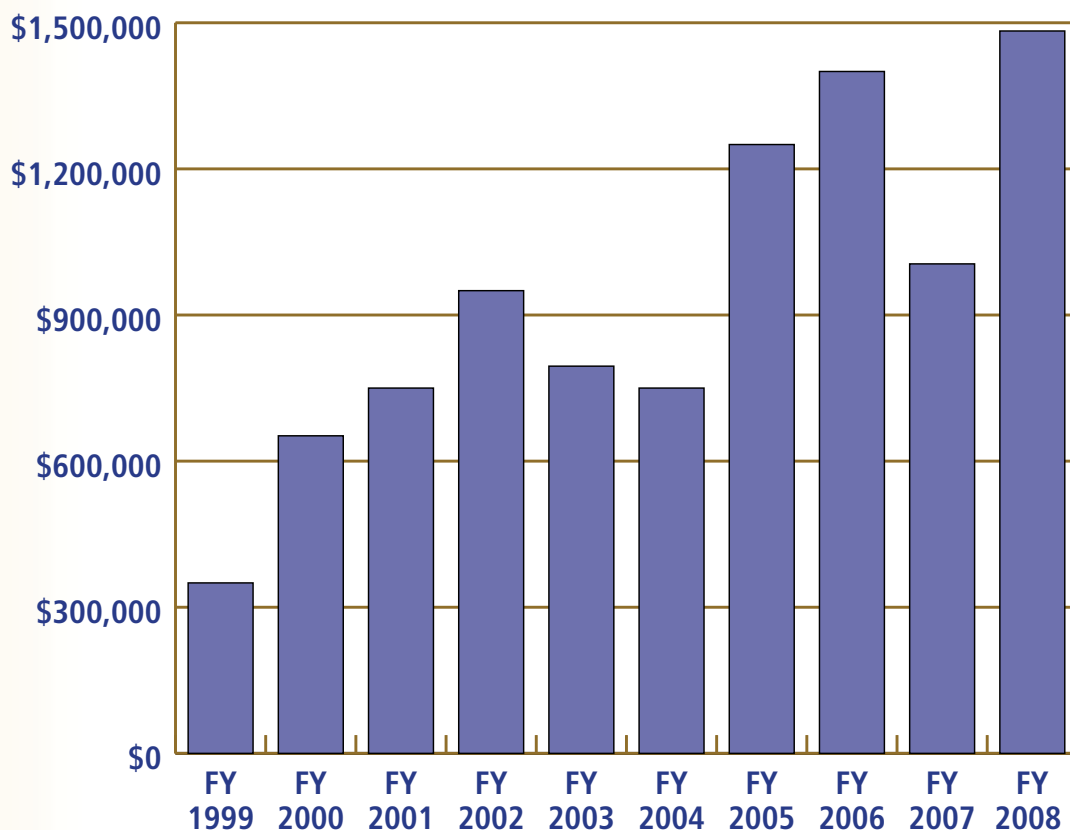
2008 Whatcom County MRC Projects For more information: www.whatcom-mrc.wsu.edu	NWSI Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
Cliffside Beach Restoration—A scope of work for the project was developed in 2008 and the MRC is planning to provide funds for a baseline monitoring assessment of the site in 2009.	■				
Chuckanut Village Restoration —A preliminary restoration plan and wetland characterization has been completed.	■				
Clam Surveys—To date, over 200 volunteers have helped survey Whatcom County beaches for seven species of clams. These surveys help determine where clam enhancement will occur.		●		■	
Shellfish Water Quality Monitoring Program— Ten volunteers continued to sample monthly for fecal coliform and estimate stream flow at 25 fresh water sites in Drayton Harbor, Birch Bay, and Chuckanut Bay.			■	●	●
Rockfish Monitoring—In partnership with Western Washington University, the MRC supported remotely operated vehicle surveys of county rockfish populations. Western Washington University students were trained to carry out much of this work.		●		■	●
Invasive Tunicate Surveys – More than 30 volunteers were trained in invasive tunicate identification and surveys were conducted in Wildcat Cove and Birch Bay. Confirmed colonies were reported to Washington Department of Fish and Wildlife.	●	●		■	●
Drayton Harbor State of the Watershed Newsletter – The MRC partially funded the development of a publication focusing on a variety of water quality, shellfish, and salmon habitat information specific to this watershed.					■
■ = Primary Benchmark ● = Secondary Benchmark					

Financial Summary

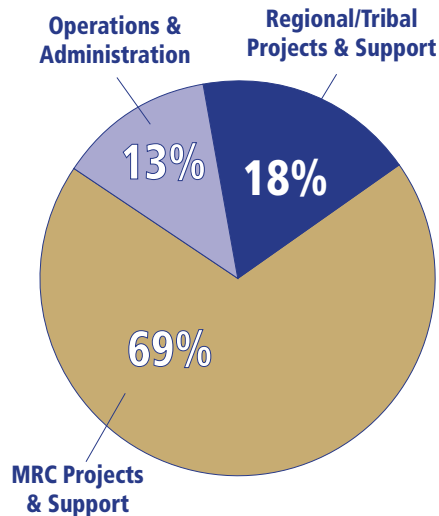
Since its initiation in 1998, funding for the Northwest Straits Initiative has been provided through an annual federal appropriations bill. These funds are directed through NOAA's National Marine Sanctuary Program to the Northwest Straits Commission. From these funds, the Commission allocates each MRC a yearly grant to carry out their activities, pays for the operation and administration of the Commission, funds regional ecosystem projects and supports a tribal project.

Federal Funding History	
Fiscal Year 1999	\$350,000
Fiscal Year 2000	\$652,000
Fiscal Year 2001	\$750,000
Fiscal Year 2002	\$950,000
Fiscal Year 2003	\$795,000
Fiscal Year 2004	\$750,000
Fiscal Year 2005	\$1,250,000
Fiscal Year 2006	\$1,400,000
Fiscal Year 2007	\$1,004,984
Fiscal Year 2008	\$1,483,128

Federal Funding History



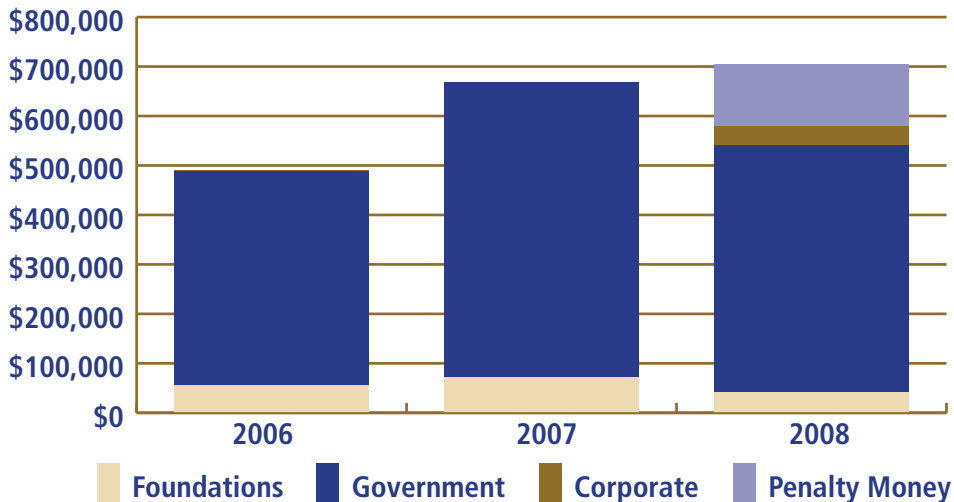
Northwest Straits Initiative typical funding breakdown



The majority of the Initiative's funding goes directly to support the work of Marine Resources Committees. In addition to MRC grants, some of the Commission staff time is spent supporting these projects as well as directing regional ecosystem and tribal projects.

The Initiative also leverages funds through the Northwest Straits Foundation, with the majority of those funds supporting regional projects and approximately 10% for MRC projects.

Northwest Straits Foundation Funding, by Funding Source 2006-2008







NORTHWEST STRAITS
marine conservation initiative

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