



NORTHWEST STRAITS
marine conservation initiative

Northwest Straits Initiative



2006 ANNUAL REPORT

Table of contents

Introduction	1	Skagit	12
Northwest Straits Commission Projects ..	2	Olympia Oysters	12
Derelict gear removal	2	March Point Restoration	12
Creosote debris removal	3	Creosote Removal	12
Tribal project	3	Spartina Eradication	13
Marine Managers Work Session	3	Snohomish	14
Research Needs and Science Gaps	3	Landowner Workshops	14
The Northwest Straits Foundation	4	Escape Cord Education Project	14
MRC Project Highlights	5	Juvenile Crab Habitat Study	15
Clallam	5	Beach Expos	15
Annual PSP monitoring	5	Whatcom	16
Eelgrass surveys	5	Clam Surveys and Seeding	16
Derelict gear survey and removals	5	Water quality monitoring	16
Olympia oyster monitoring	5	Nearshore Analysis	16
Island	6	Bellingham Waterfront Planning	16
Getting to the Water's Edge Book	6	The Northwest Straits Initiative	
Shore Stewards	6	Goals and Performance Benchmarks ...	17
Interpretive Signage	7	Goals	17
Beach Seining	7	Benchmarks	17
Breeding Survey of Pigeon Guillemots	7	Marine Habitats	17
Jefferson	8	Marine Life	17
Olympia Oyster Restoration	8	Education and Outreach	18
Voluntary No Anchor Eelgrass		Sound Science	18
Protection Zone Project	8	Marine Water Quality	19
Shoreline Armoring Alternatives Project	9		
San Juan	10		
San Juan County Marine Stewardship Area ..	10		
Eelgrass Surveys	10		
Study of Marine Vessel Pressures			
in the San Juan Islands	11		
Local Knowledge Project	11		

Northwest Straits



NORTHWEST STRAITS marine conservation initiative

Northwest Straits
Marine Conservation Initiative
10441 Bayview-Edison Road
Mount Vernon, WA 98273
360-428-1084
www.nwstraits.org

Commission Staff and Resource Support

Lew Moore, Director

Sasha Horst, Project Specialist

Ginny Broadhurst, Marine Program
Coordinator

Terry Stevens, Padilla Bay Director

This report was written by Ginny Broadhurst
with assistance from all seven Marine
Resources Committees.

Marine Resources Committee Representatives

Polly Fischer is the representative from Skagit County MRC. She was appointed by the Director of WA Department of Fish & Wildlife to the Puget Sound Recreational Fisheries Enhancement Oversight Committee in May 2006, and serves as an Ad Hoc member of the British Columbia Sports Fishing Advisory Board to the Department of Fisheries & Oceans, Canada.

Jody Kennedy* was the Lead Staff and Northwest Straits Representative for the San Juan County Marine Resources Committee. Jody has worked in natural resources conservation for over ten years in Alaska, Colorado, and now northern Puget Sound. She has an MPA from the U.W. Daniel J Evans School of Public Affairs.

Phyllis Kind is the representative from the Island County Marine Resources Committee. Since moving to Island County in 1999, Phyllis has volunteered with the Whidbey Audubon Society and Beach Watchers, in addition to her work on the MRC and the Northwest Straits Commission. In her previous life she was a Professor of Microbiology and of Genetics at George Washington University.

Buck Meloy, with the able help of his alternate Amy Kraham*, has represented Whatcom County on the Northwest Straits Commission since its inception. As a commercial fisherman on the Commission, he brings a unique, resource-based perspective to the group's deliberations.

Anne Murphy* is the Director of the Port Townsend Marine Science Center where teachers, students and citizens of all ages are trained in marine and coastal sciences and are provided diverse opportunities to participate in citizen science and stewardship programs. Anne received a BS in Natural Resource Management from Oregon State University. She has lived, played and volunteered in Jefferson County since 1976.

Joe Schmitt is the representative from Clallam County Marine Resources Committee. Joe is a third generation resident of the Western Strait area. He co-owns and operates the Whiskey Creek Beach Resort and owns the tide flats to 3 feet below low-low water. Joe also works in commercial fishing, charter fishing and commercial diving.

Kent Scudder* was the representative from the Snohomish Marine Resources Committee in 2006. He is a principal with Norquest Realty Advisors and his work frequently involves analyzing the effects of government regulations on the productivity and economics of urban and rural land utilization. Mr. Scudder has worked as a research biologist conducting marine recreational fishing research. A significant portion of his life has been involved in marine fisheries as both a commercial fisher and a sport fishing enthusiast.

Commission

Governor's Appointees

Susan Bauer* is the Planning and Environmental Manager for the Port of Port Angeles. She has a Master of Science in Resource Management and serves on the Washington Public Ports Association's Environmental Committee. She is also a Port Angeles Chamber of Commerce Ambassador.

Andrea Copping is a biological oceanographer who has spent the past 20 years looking at marine issues in Puget Sound and the Pacific Northwest, and promoting the use of science in the management of marine resources. She is program manager for marine and coastal waters at Pacific Northwest National Labs, and affiliate faculty in the School of Marine Affairs at the University of Washington. Andrea chaired the BC/WA Marine Science Panel, and is a former chair of the Commission.

Duane Fagergren was a member of the Puget Sound Water Quality Authority Board of Directors and joined the agency as Deputy Director in 1991 and now serves as the Director of Special Projects for the Puget Sound Action Team. He has an extensive background in water quality, fisheries, aquaculture, engineering, and environmental impacts. He received a BS in Fisheries Science, with a minor in Biological Oceanography, from the University of Washington.

Kathy Fletcher is founder and executive director of People For Puget Sound, a citizens' organization formed in 1991 to protect and restore the health of Puget Sound and the Northwest Straits. She is a member of the Washington state Oil Spill Advisory Council and the Governor's Puget Sound Partnership, and previously chaired the Puget Sound Water Quality Authority. She is currently on the board of Restore America's Estuaries, and is president of the WA Foundation for the Environment.

Joe Gaydos is the Regional Director for the Sea Doc Society. He is a wildlife veterinarian and is interested in diseases of free-ranging wildlife and the science of Marine Conservation. He lives with his family on Orcas Island.

Secretary of the Interior Appointee

Terry Williams is the Fisheries & Natural Resources Commissioner for Tulalip Tribes and is the Tribal appointee to the Commission. Terry has worked to establish an office with EPA to address environmental issues of Indian Tribes nationwide. He has been an important participant in a vast number of working groups including the NW Indian Fisheries Commission and the Pacific Salmon Commission, was appointed to the Regional Interagency Executive Committee by President Clinton, and represented tribes on the Puget Sound Water Quality Authority.

New Members

*Indicates members who no longer serve on the Commission. At the end of 2006, the appointments of Susan Bauer, Jody Kennedy, Anne Murphy and Kent Scudder ended. Scott McCreery (BP Cherry Point Refinery-Governor's appointee), Jonathan White (San Juan MRC), Judy Surber (Jefferson MRC), and Kirby Johnson (Snohomish MRC) now serve on the Commission. Mark Herrenkohl serves as Buck Meloy's alternate for the Whatcom MRC.

Northwest Straits Marine Conservation Initiative

7 Marine Resource Committees (MRC)

- Local Priorities
- Community Involvement
- Action Projects

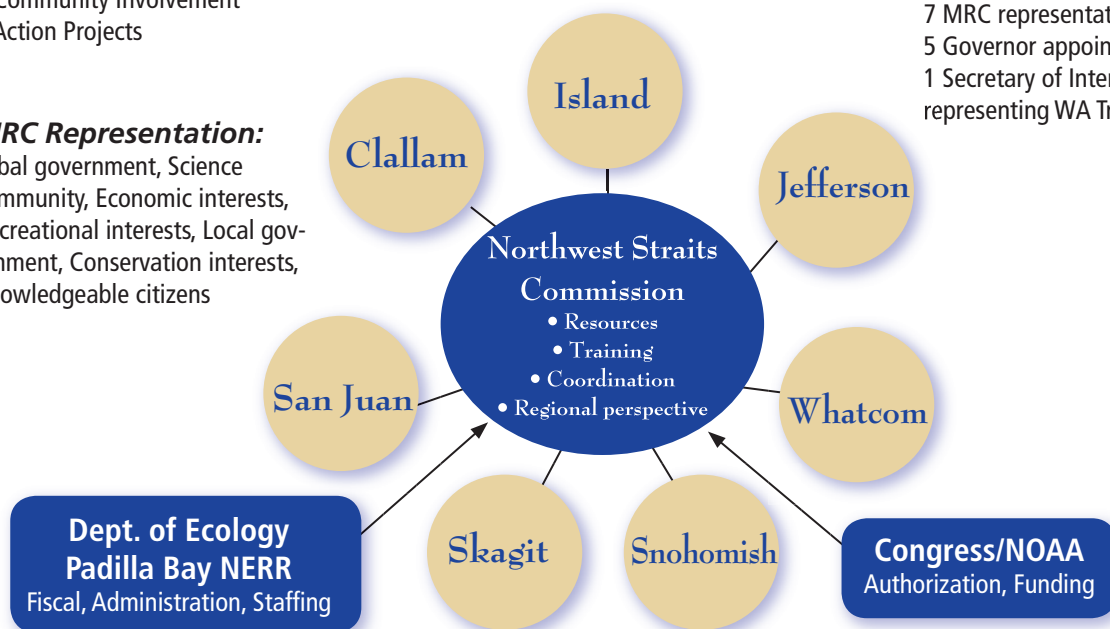
MRC Representation:

Tribal government, Science community, Economic interests, Recreational interests, Local government, Conservation interests, Knowledgeable citizens

Northwest Straits

Commission Representation:

- 7 MRC representatives
- 5 Governor appointed
- 1 Secretary of Interior appointed representing WA Treaty Tribes



Partners

WA Sea Grant Program, People For Puget Sound, Tribal Governments, WSU Beach Watchers, Puget Sound Action Team, Friends of the San Juans, Ports, Dept. of Natural Resources, WA Dept of Fish & Wildlife

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

Introduction

The Northwest Straits Marine Conservation Initiative (the Initiative) was authorized by Congress in 1998 to restore and protect Northwest Straits marine resources. The Initiative was designed as a “bottom-up” program with 7 locally established Marine Resources Committees (MRCs) in Whatcom, Skagit, Snohomish, Island, San Juan, Jefferson and Clallam counties. The MRCs engage citizens to set priorities and design projects of local importance to help protect and restore the marine environment. The MRCs receive funds and support from the Northwest Straits Commission (the Commission) to initiate and carry out scientifically-based projects that meet the Initiative’s benchmarks and implement the goals and objectives of the Puget Sound Plan.

The Commission provides a regional ecosystem-wide perspective, helps coordinate county-level efforts, and links the Initiative work with other agencies and regional activities. The Commission is comprised of one representative from each of the seven MRCs, a

tribal representative appointed by the Secretary of the Interior, and five gubernatorial appointees — one from the Puget Sound Action Team (a program in the Governor’s office) and the others from outside government, including two science representatives, an industry representative and an environmental representative. The Commission has a staff of three.

MRCs are comprised of community members, appointed by the local county board of commissioners or county council, who represent a broad spectrum of interests. Tribal representatives are also invited to participate on every MRC. A typical MRC has representation from business, tribes, recreational interests, the conservation community, the local port and someone with relevant scientific expertise.

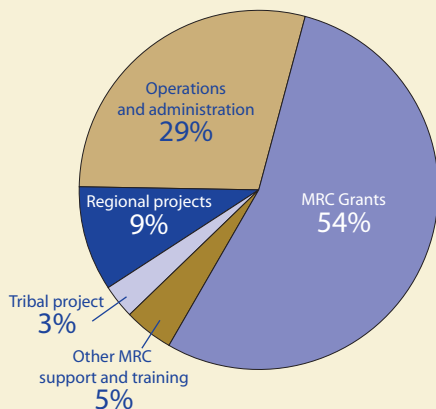


Photo: Sasha Horst

Northwest Straits

Projects

The Commission takes on regional Marine Conservation and restoration projects determined to be high priorities for action. New and on-going regional projects occurred in 2006. The derelict fishing gear removal program was initiated in 2002 when the Commission teamed with Washington Department of Fish and Wildlife (WDFW) to develop and adopt guidelines and protocols for removal. The program has been extremely successful and is widely recognized as a national model. A regional creosote debris program was successfully initiated in 2006, having started in Whatcom and Skagit counties by the local Marine Resources Committees. Also in 2006, Commission staff hosted a San Juan County marine managers' work session, supported by the Russell Family Foundation.



DERELICT GEAR REMOVAL

Tons of derelict fishing gear litters the bottom of Puget Sound, covering marine habitats and catching marine animals indiscriminately. The Northwest Straits Commission has been working to identify and remove derelict fishing gear since 2002. In 2006, the Commission contracted with Natural Resources Consultants to conduct surveys and remove derelict fishing gear from Puget Sound in several priority areas and to conduct diver training programs for Department of Defense and tribal divers. Derelict gear removal operations occurred near Lopez Island, in Rosario Strait, at Keystone dive park, in San Juan channel, at the south end of Lummi Island and offshore of Point Roberts.

During one 4 day removal operation alone, 31 gillnets and one purse seine net were pulled from the waters restoring approximately 7 acres of marine habitat. Underwater side-scan sonar surveys were conducted at Port Gardiner Bay and Utsalady Bay for derelict crab pots. In 2006, 142 derelict fishing nets were removed. These nets would cover 31 acres of seabed if laid out end to end. In addition, 108 crab pots were retrieved.

To date, the diver training program has



successfully certified 31 US Navy and 2 US Army divers in removal protocol and allowed divers the opportunity to be involved in the removal of 13 nets covering an area of 2.1 acres. An Army landing craft and a Coast Guard vessel supported the operations in August 2006. Divers from local stations were trained (Whidbey NAS, Naval Base Kitsap-Bangor) as well as divers from California, Hawaii, and Virginia. The diver training program has also provided training to 8 tribal divers from the Lummi Nation and Nisqually Indian Tribe.

During 2006, the Commission helped several other coastal states learn about the issues associated with derelict fishing gear and helped provide guidance to get other derelict gear programs in place. Through this assistance, shoreline clean ups focused specifically on removing fishing gear occurred in Alaska. Underwater gear surveys and removals were initiated in Chesapeake Bay and California. This "exporting" of the NWS program was funded by the National Oceanic and Atmospheric Administration (NOAA).

Washington Department of Fish and Wildlife is an active partner in this program and hosts an on-line derelict gear reporting system and accompanying data base of reported gear. Currently, approximately 4000 pieces of derelict gear have been reported and logged in the database. The Commission uses this database to inform removal efforts.



Commission

CREOSOTE DEBRIS REMOVAL

Creosote coated materials are commonly found on beaches throughout the Northwest Straits region. Removing creosote debris from beaches is a high priority for the Northwest Straits Commission because there is a tremendous amount of creosote debris in critically sensitive shoreline habitats. Creosote treated wood leaches harmful chemicals on beaches which threaten the health of forage fish eggs and larvae. In 2006, the Commission worked with Washington Department of Natural Resources (DNR) to remove creosote at the Dungeness National Wildlife Refuge, Jetty Island Park, and Lake Hancock. The Northwest Straits Commission used \$35,000 of core funds to support these projects. DNR provided funding and in-kind support for all projects and has sponsored additional removal efforts. Through the NWS Foundation an additional \$111,000 was leveraged from NOAA's marine debris program which will be available for project work in 2007.

Accumulations of creosote vary significantly by sites. Approximately 70 tons of creosote debris were removed at Jetty Island, over 160 tons at Dungeness National Wildlife Refuge and 130 tons at Lake Hancock. Several MRCs contributed volunteer time to survey beaches and tag creosote debris. In Snohomish County this was a partnered effort that occurred during the United Way Day of Caring. In Skagit County, the MRC has full management of the surveys as well as the removal.

TRIBAL PROJECT

The Commission has established a fund specifically to support projects identified as a high priority by the Commission's tribal committee. Approximately \$80,000 from fiscal years 2005 and 2006 were used to develop a film called *Shadow of the Salmon*. This hour long docu-drama features an exciting view of the great importance of salmon and the environment among the Salish tribes of western Washington. Viewers will experience this through the eyes of a young Native American from Pine Ridge, South Dakota. The eye-opening adventure provides insights into traditional tribal culture, including a First Salmon Ceremony and the annual Canoe Journey, as well as the natural resource management achievements of tribes today.

MARINE MANAGERS WORK SESSION

In March 2006, the Northwest Straits Commission organized and hosted a work session for marine managers in the San Juan archipelago. Many different federal and state agencies, tribal governments and local authorities manage shorelines and marine areas in San Juan County yet no structure existed to coordinate or communicate among these programs. The Marine Managers Work Session provided a forum for these managers

to share information and take steps to develop coordinated approaches to species and habitat conservation. Attendees included the San Juan County Board of Commissioners, NOAA, Bureau of Land Management, US Fish and Wildlife (USFW) refuge system, Tulalip Tribes, Lummi Nation, DNR, WDFW, The Nature Conservancy, local land banks and the San Juan Marine Resources Committee.

RESEARCH NEEDS AND SCIENCE GAPS

The Northwest Straits Commission hosted a workshop in 1999 for scientists to identify and discuss current gaps in the field of knowledge on marine species and habitats. The results from that workshop helped to initiate several important Northwest Straits projects such as the derelict fishing gear program and forage fish spawning surveys. In 2006, a follow-up workshop was organized, this time focusing specifically on marine water quality issues such as pathogens, bacteria, viruses, and protozoa; naturally occurring biotoxins, including domoic acid; and water quality constituents, such as dissolved oxygen and nutrients. A list of priority research needs was developed at this meeting and will be merged with lists from 2 upcoming workshops on habitat and ecosystem health.

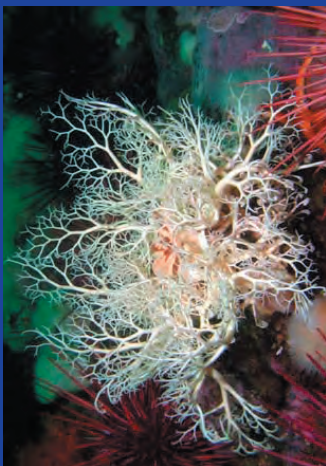


Photo: Katrina Lassiter

The Northwest Straits Foundation

The Northwest Straits Foundation took significant steps forward in 2006 by hiring a part-time development director to raise funds and manage contracts and grants. The Foundation brought in nearly half a million dollars to fund diverse projects aimed at protecting and restoring the Northwest Straits area in 2006. Two projects were funded in San Juan County: the Marine Managers' Work Session and a spatial analysis task for the Marine Stewardship Area. The Foundation received funds to expand the Certified Shore Stewards Program from Island County into Whatcom, Skagit, Snohomish and Clallam counties. It also received approval for a regional creosote beach debris survey and removal project, and several derelict fishing gear removal projects.

The Foundation received funding this year from NOAA's Marine Debris Program, the Puget Sound Conservation Fund, the Puget Sound Action Team and the National Fish and Wildlife Foundation. Private foundations such as the Horizons Foundation, the Hugh and Jane Ferguson Foundation, the Charlotte Martin Foundation, Marjorie Mosher Schmidt Foundation, the Russell Family Foundation and the Tulalip Tribes Charitable Fund all provided significant financial support in 2006, as did BP and the Snohomish County Board of Realtors.



Photos: Jim Ramaglia, Duane Fagergren, Ginny Broadhurst



MRC Project Highlights

Clallam



The Clallam MRC invested significantly in eelgrass surveys and derelict gear research and removal in 2006 and worked diligently to set the stage for a shellfish garden and a data analysis workshop which will occur in 2007.

ANNUAL PSP MONITORING

For many years, a few trained and dedicated MRC members have taken samples on remote beaches for Paralytic Shellfish Poisoning (PSP). These samples are provided directly to Washington Department of Health. The samples have demonstrated the absence of PSP resulting in recreational access to beaches that would otherwise be closed.

EELGRASS SURVEYS

The Clallam MRC contracted with Marine Resources Consultants in 2006 to survey eelgrass from Freshwater Bay to the tip of Ediz Hook. Surveys were conducted using WA Department of Natural Resources Submerged Vegetation Monitoring Protocols. Eelgrass data will be mapped and provided to local and state agencies. The MRC is planning to continue with more extensive mapping in county waters in 2007. This mapping is critically important to provide awareness of the extent of eelgrass beds offshore. Local governments are required to update shoreline master programs and conduct extensive surveys of marine resources, but state funds are not provided for these resource inventories and in many areas there is little or no documentation of eelgrass.



Photo: Maya Hunger

DERELICT GEAR SURVEY AND REMOVALS

The Clallam MRC also contracted with Natural Resources Consultants to assess the extent of the derelict fishing gear problem at depths beyond diver operational feasibility using side-scan sonar surveys. The project produced important information on derelict gear concentrations in Dungeness Bay at depths below 105 feet. The project allowed researchers to conduct trial crab pot removal operations using a remotely operated vessel (ROV) which demonstrated the operational and cost efficiencies of this equipment. Biologists were also able to determine the loss rate

of crab pots and shrimp traps in Clallam County embayments. Forty-two crab pots were removed from Dungeness Bay, contents of marine life were recorded, and the presence or absence of rot cord was noted.

OLYMPIA OYSTER MONITORING

The Clallam MRC and the Jamestown S'Klallam tribe have planted many Olympia oyster seeds over the last several years. In 2006, the tribe maintained a monitoring program to measure oyster growth and mortality. The oysters are growing well, exhibiting an average size of about 23mm. Mortality is approximately 35% in Sequim Bay and slightly higher in Port Angeles where there are more predators such as red rock crabs and Pisaster sea stars. Natural reproduction is occurring for the Olympia oysters. The MRC and Jamestown S'Klallam tribe are interested in expanding the project and are currently exploring appropriate sites for additional planting.

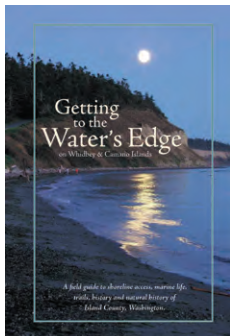


Photo: Duane Fagergren



The Island MRC has a strong focus on educating residents and visitors about the importance of stewardship and long-term protection of the marine resources of the county. The Island MRC continued this stewardship theme and introduced some exciting new projects in 2006 in addition to supporting long-time favorites such as Shore Stewards.

GETTING TO THE WATER'S EDGE BOOK



This book was written and published through a partnership with Washington State University (WSU) Beach Watchers. The book provides comprehensive

information about public access to the shoreline and has messages about stewardship and conservation woven

throughout it. It is appealing to a broad cross-section of recreationists, visitors and property owners and started flying off the shelves as soon as it was introduced.

SHORE STEWARDS

Shore Stewards was introduced in 2003 as a project of Island County Marine Resources Committee (MRC), in partnership with dedicated volunteers of WSU Beach Watchers of Camano Island. Beach Watcher volunteers developed ten guidelines for shoreline stewardship, wrote the acclaimed handbook, *Guide*

for *Shoreline Living*, set up the enrollment form and developed the original Shore Stewards website. In 2006, the MRC hired a full time Shore Stewards Coordinator to expand the Camano and Whidbey Island programs and add at least 80-100 new landowners to the program and help develop a new program evaluation system. This evaluation will determine the extent to which participation in the program increases understanding of natural shoreline processes leading toward beneficial actions by shoreline property owners.



Photo: Celia Bartram

INTERPRETIVE SIGNAGE

As part of a campaign to promote improved stewardship in the marine waters, the Island MRC installed the first of five interpretive panels at the Port of South Whidbey's Clinton Beach facility adjacent to the Clinton ferry terminal. In a cost-sharing arrangement with local partners, the MRC intends to continue deploying interpretive signage at many public-access sites along the shoreline of both Whidbey and Camano islands over the coming years. In addition, the MRC worked with a Northwest Straits Commission intern to develop an evaluation plan for the signage.

BEACH SEINING

The Island MRC partnered with NOAA, Skagit Systems Cooperative and WSU Beach Watchers to conduct beach seining in small pocket estuaries along

the Whidbey shoreline. Data collected provide information on the types of habitat young fish use.

Volunteers collect fish using seine nets and conduct water quality tests at sample sites in and outside of several lagoons. A sample of each species is measured to determine growth patterns and then all samples are released. For 2006, *Oncorhynchus gorbuscha* or pinks, were the dominant juvenile salmon species at both sites, while *Oncorhynchus keta* or chum were also abundant. *Oncorhynchus tshawytscha* or Chinook were found in small numbers. Also abundant were Pacific staghorn sculpin (*Leptocottus armatus*) and Starry flounder (*platichthys stellatus*). The Whidbey seining team experienced an accelerated learning curve in 2006 and will assume primary responsibility for field operations at Race and Harrington Lagoons in 2007.

BREEDING SURVEY OF PIGEON GUILLEMOTS

The Island MRC is working with Whidbey Audubon and Washington Audubon to determine the breeding trends in Pigeon Guillemot colonies in Island County over several years as an indicator of the health of Puget Sound. This citizen-science project has trained 30 volunteers who visited 23 active pigeon guillemot colonies. The teams found more than 800 birds in the colonies during 2006 but only 150 active burrows, so roughly one third of the birds attempted to breed this year. In 2006 the teams surveyed by boat in August and September and observed 35 juveniles, usually several hundreds offshore at water depths of 40 to 100 feet. The MRC contributes funding and a board member to work closely with the volunteer teams in this project.

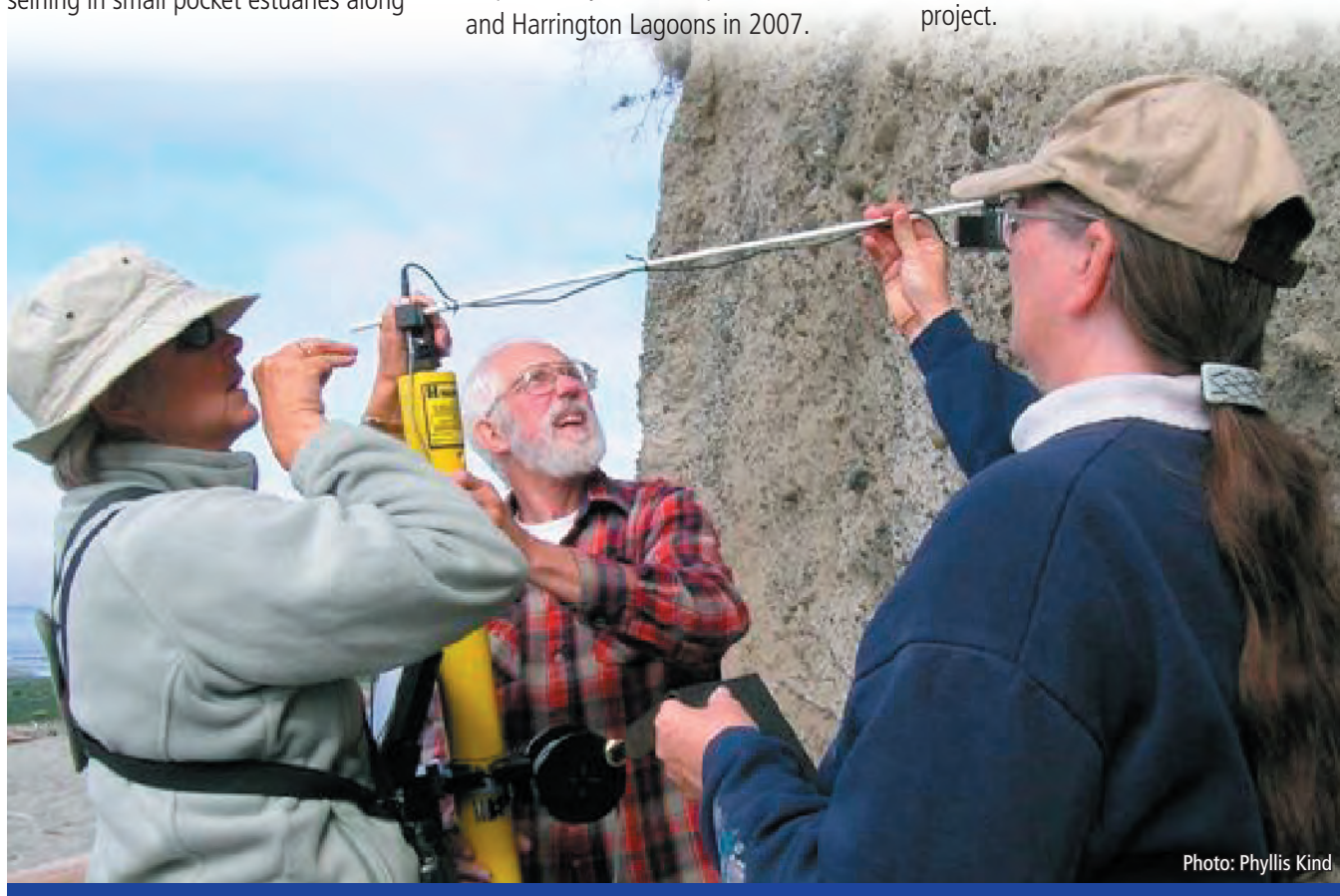


Photo: Phyllis Kind

The Jefferson MRC continues to promote and maintain a few signature projects and is exploring ways for these to be self-sustaining over the next few years.

OLYMPIA OYSTER RESTORATION

Over the past several years the Jefferson MRC has partnered with the Puget Sound Restoration Fund to plant Olympia oyster seed (*Ostrea conchaphila*) in several locations. In 2006, the focus shifted to monitoring and conducting reproductive studies to better understand and design appropriate Olympia oyster enhancement activities. Growth and reproduction have been very successful in newly seeded areas.



Photo: Gabrielle LaRoche

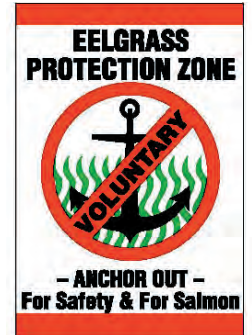
Photo: Gabrielle LaRoche

VOLUNTARY NO ANCHOR EELGRASS PROTECTION ZONE PROJECT

The Jefferson MRC's signature project is an eelgrass protection zone that they established along the City of Port Townsend's waterfront to keep boat anchors from harming eelgrass. This is a cutting edge project that is demonstrating the strength of education and non-regulatory programs. The MRC worked with the boating community and downtown businesses to develop broad support. The MRC designed and installed interpretive signs, placed marker

buoys around the eelgrass and developed an education program so boaters know where to anchor boats without damaging

eelgrass. During big festivals and events, the MRC has volunteers on hand to provide information to boaters. In 2006, the MRC continued its education outreach and worked with a Northwest Straits Commission intern to evaluate signage. Monitoring has shown that boater education is working to keep anchoring away from the eelgrass.



SHORELINE ARMORING ALTERNATIVES PROJECT

The Jefferson MRC held two workshops in partnership with Puget Sound Action Team, Washington State University, Jefferson County and North Olympic Salmon Coalition in Quilcene and Port Hadlock. All shoreline landowners in Eastern Jefferson County were invited, of which 116 were in attendance. The workshops were focused on providing information to landowners about the extent of shoreline hardening and more environmentally friendly alternates to protect shoreline.



Photo: Gabrielle LaRoche





The focus of the San Juan MRC's work is developing and refining the county-wide Marine Stewardship Area. This project has received recognition and support from organizations and foundations outside the Northwest Straits Initiative.

SAN JUAN COUNTY MARINE STEWARDSHIP AREA

The San Juan MRC's main efforts are focused on the Marine Stewardship Area (MSA) that encompasses all the county waters which was adopted by the Board of County Commissioners in 2004. The goal of the MSA is to protect the unique and valuable marine resources of the islands while allowing sustainable use of marine resources to continue forever. Work in 2006 was focused on identifying

the top threats to local marine resources and developing strategies to mitigate these threats. This assessment and planning process was done in partnership with The Nature Conservancy, top regional marine scientists, local businesses, managers, local decision makers and the local community. As a result of this effort, the MRC will present an action plan in 2007 to local elected officials for protecting and restoring San Juan County's marine ecosystem.

EELGRASS SURVEYS

The San Juan MRC contributed funding to support eelgrass surveys being done by Friends of the San Juans in a few embayments that hadn't been included in recent surveys conducted by WA DNR. Westcott Bay (San Juan Island) was surveyed to see if eelgrass had begun to recover after a severe decline. Blind Bay (Shaw Island) and Fisherman Bay (Lopez Island) were also surveyed because of a recent and significant loss of eelgrass beds. New data will aid scientists in determining whether the declines are sustained. Completed maps were provided to DNR.



photo: Ginny Broadhurst

STUDY OF MARINE VESSEL PRESSURES IN THE SAN JUAN ISLANDS

The San Juan MRC conducted a pilot study to assess boating pressure in county marine waters. Boat counts were made using spotters in a small aircraft during peak vessel time in the summer. The pilot study tested sampling regime, study design, and methodology. Results showed that on August weekend days, about 1,000 vessels (power, sail, and commercial) were counted in the water over a 2-hour time span and about 500 were counted on weekdays. The MRC is interested in continuing this type of assessment in order to better understand boating pressure on marine resources.



Photo: Ginny Broadhurst

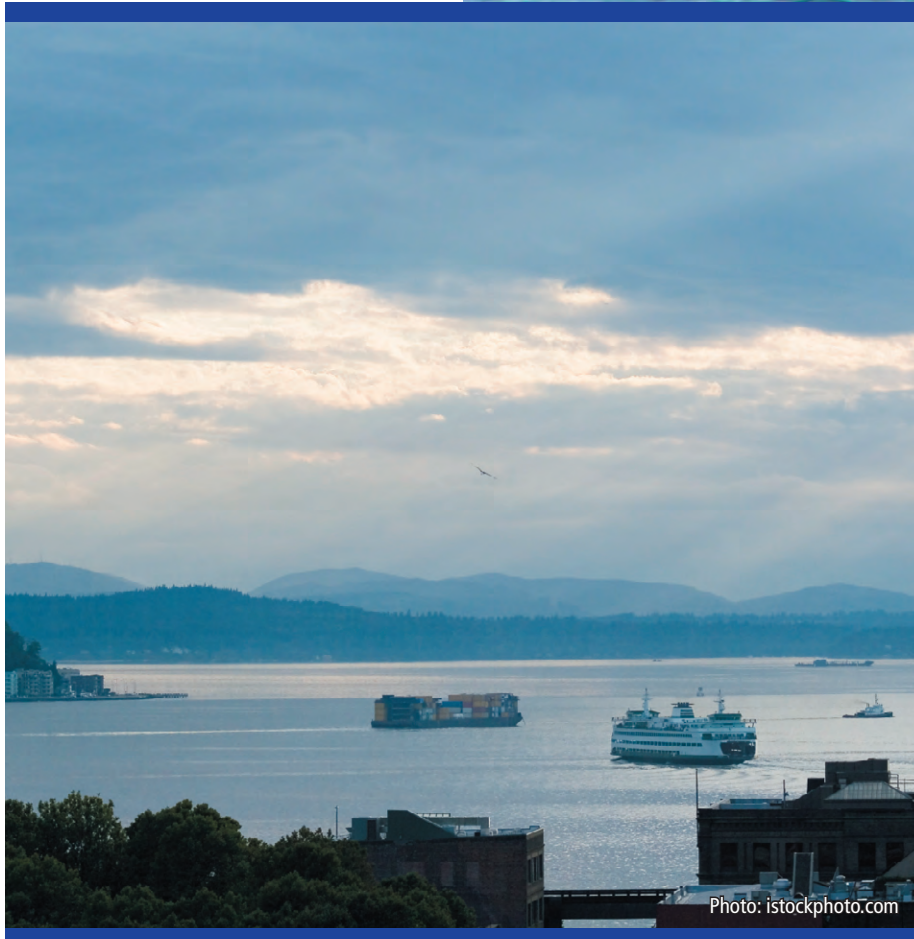


Photo: istockphoto.com

LOCAL KNOWLEDGE PROJECT

San Juan MRC hired a local historian to interview long-time residents of the county to document an oral history of harvesting in county waters. Interviews revealed a rich cultural history of an archipelago reliant on marine resources and personal accounts of dramatic changes in the abundance of marine life. The MRC will use this information to inform the development of the Marine Stewardship Area and to share anecdotal information about the history of local marine resources with the community.



The Skagit MRC has developed a solid reputation for getting their feet muddy and working on a variety of shoreline projects. In 2006, they continued to work at several important projects.

OLYMPIA OYSTERS

In 2006 the Skagit MRC spread 20 yards of oyster spat at four sites in Fidalgo Bay and March's Point. Over 250,000 native oyster seed have been dispersed by the MRC since 2002. This project has brought together many partners. Technical support is provided through the Puget Sound Restoration Program. The MRC monitors growth and reproduction of the oysters. In 2006, successful reproduction was documented in some of the newly planted areas. Continued monitoring ensures the success of the project.

MARCH POINT RESTORATION

The Skagit MRC has focused on several nearshore restoration opportunities at March Point. In 2006, the MRC contracted with Coastal Geologic Services to conduct a drift cell analysis of March Point to improve understanding of natural sediment transport along the shoreline. The MRC will use this information in developing restoration projects to protect forage fish spawning beaches in the area. The MRC also explored several alternatives for removing or re-designing a boat ramp at March Point.

CREOSOTE REMOVAL

The Skagit MRC has trained and committed volunteers who survey miles of beaches, tag and record the locations of creosote debris. In 2006, the Skagit MRC surveyed and removed 20 tons of creosote debris from county beaches. The Skagit MRC has put in several years of committed work on this project. Previous years have totaled 85 tons of creosote debris removed making a grand total of over 105 tons removed.



Photo: Sasha Horst



Photo: G. Munger

SPARTINA ERADICATION

In June 2006, Skagit MRC co-hosted (with People For Puget Sound) the annual Spartina Dig Day to remove invasive *Spartina anglica* from Turners Bay. For this event, 35 volunteers were trained and spent 175 hours digging up this invasive shoreline plant. Due to the success of these annual efforts, Spartina is under control in the area.



Photo: Sasha Horst



The Snohomish MRC works closely with many partner agencies and organizations in the county to promote stewardship and awareness of local marine resources. Much of their work has focused on protecting and researching Dungeness crabs.

LANDOWNER WORKSHOPS

Snohomish MRC partnered with the Puget Sound Action Team, Beach Watchers and others to hold workshops for shoreline landowners in the area. Agenda topics were determined through landowner interviews. Over 250 people attended to learn about landslides, low-impact development, vegetation management and septic system maintenance.

ESCAPE CORD EDUCATION PROJECT

The Snohomish MRC has focused on protecting Dungeness crab for several years. In 2006 the MRC developed a program to raise awareness of the importance of using escape cord (also known as "rot cord") on crab pots to allow crab to escape from lost or abandoned pots. In coordination

with the Beach Watchers, the MRC distributed information and samples of escape cord at boat launches during the first week of the crabbing season. Over 650 cards were distributed, and approximately one-third of crabbers contacted did not have escape cord on their pots. Several local media outlets, including the Everett Herald and local boater newsletters, printed articles about this important work.



Photo: Snohomish MRC



Photo: Snohomish MRC

JUVENILE CRAB HABITAT STUDY

As part of the Snohomish MRC's ongoing Dungeness Crab Stewardship Plan, the MRC partnered with Washington Department of Fish and Wildlife (WDFW) to collect data on juvenile Dungeness crab habitat preferences and duration of settlement along the nearshore environment. This data will be used by WDFW to help develop rules for Hydraulic Project Approval (HPA) activities in marine waters. The MRC investigated juvenile habitat preferences, tide elevation, duration of settlement and residence at Edmonds, Picnic Point, Mukilteo, Hermosa Point, and Kayak Point.

BEACH EXPOS

The Snohomish MRC's annual Beach Expos were held this year at Howarth Park, Mukilteo State Park and Kayak Point. The Stilly-Snohomish Fisheries Enhancement Task Force and Beach Watchers participated as partners in these events to educate the public about local marine life and issues in Puget Sound, as well as remove debris from the beach. Information booths and a touch tank were set up, and Beach Watchers served as interpreters along the beach, with about 400 people contacted directly at the events.



Photo: Snohomish MRC



The Whatcom MRC has a strong interest in local recreational clamming and working to ensure that clamming opportunities continue. The group also has been actively involved in ensuring that the urban waterfront stays healthy.

CLAM SURVEYS AND SEEDING

Whatcom MRC has recruited and trained volunteers to conduct clam surveys along county shorelines. In 2006, volunteers surveyed beaches at Marine Park, Point Roberts and Lummi Island, with continued work at Birch Bay, Drayton Harbor and Chuckanut Bay. This work fills data gaps and raises awareness of the connection between water quality, harvesting activities and healthy shellfish beds. The Nooksack Salmon Enhancement Association and RE Sources are partners on this project, with a pilot clam seeding project scheduled to begin in Spring 2007.

WATER QUALITY MONITORING

Using trained volunteers, the MRC is collecting monthly water quality samples at freshwater locations adjacent to Drayton Harbor, Birch Bay, and northern Chuckanut Bay. The samples are analyzed for fecal coliform bacteria in a local, certified lab. Results will assist in identifying priority areas for community outreach and water quality projects to enhance and protect shellfish beds.

NEARSHORE ANALYSIS

Whatcom MRC contracted with Adolfson and Coastal Geologic Services to conduct an enhanced marine nearshore assessment that has been incorporated

into the update of the Whatcom County Shoreline Management Program. CGS Conducted an assessment of the physical characteristics of the county shoreline. Adolfson Associates conducted a coarse-scale nearshore habitat assessment and developed conceptual models for forage fish, juvenile salmonids, aquatic vegetation and beach sediment supply. Restoration and conservation opportunities were identified based upon the physical and habitat assessments and has since been incorporated into the Whatcom County Shoreline Master Program Restoration Plan.

BELLINGHAM WATERFRONT PLANNING

The Whatcom MRC devoted significant time and expertise to ensure that marine resource protection is well integrated in local waterfront redevelopment plans that were underway in 2006. The MRC hosted a community forum with expert speakers on the subject of fish and wildlife protection for the new Bellingham waterfront. An MRC sub-committee drafted a comment letter to the City, Port, County and waterfront advisory group with site-specific comments and suggestions to ensure that water quality and marine habitats are protected in any redevelopment scenario. This letter was approved by the entire MRC and proved to be a highly effective mechanism to promote marine habitat protection.



Northwest Straits Initiative

Goals and Performance Benchmarks

Goals

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



Photo: Snohomish MRC

- designing and initiating projects that are driven by sound science, local priorities, community-based decisions and the ability to measure results;
- building awareness and stewardship and making recommendations to improve the health of the Northwest Straits marine resources;
- maintaining and expanding diverse membership and partner organizations;
- expanding partnerships with tribal governments and continuing to foster respect for tribal cultures and treaties;
- recognizing the importance of economic and social benefits that are dependent on marine environments and sustainable marine resources.

Benchmarks

MARINE HABITATS

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



Photo: Sasha Horst

- protecting habitats from human activities that cause degradation;
- designing and implementing local and regional projects that restore natural processes;
- surveying and mapping marine resources and physical characteristics of marine habitats; and
- making policy and scientifically-based recommendations about appropriate management tools to protect marine habitats, including designation of marine protected areas.

MARINE LIFE

Protect and restore marine populations to healthy, sustainable levels by



Photo: NWSC

- identifying and carrying out actions to protect and restore species of concern including marine mammals, birds, fish, shellfish and other invertebrates;
- designing and implementing projects to restore native marine plant and animal populations and preventing the introduction and spread of invasive species;
- rebuilding populations of fish species, particularly bottomfish, shellfish and forage fish; and
- making policy and scientifically-based recommendations about appropriate management tools for species recovery, including designation of marine protected areas.

MARINE WATER QUALITY

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



- working to reduce the input of contaminants, including toxic substances, to Northwest Straits marine waters;
- promoting management actions that would restore areas experiencing degraded water quality and sediment contamination; and
- designing and supporting projects that will restore and maintain marine waters clean enough for safe marine harvest and consumption.

SOUND SCIENCE

Collect high quality data and promote its use and dissemination by



- developing protocols for the collection, analysis and use of scientific data that supports Northwest Straits goals;
- identifying gaps in data that limit protection and restoration efforts and work to fill those gaps;
- promoting the development of comprehensive, accessible, marine resource databases;
- promoting the consistent collection and coordination of data to assist the efforts of Northwest Straits and its partners in protecting and restoring habitats and species of concern; and
- translating and disseminating scientific information about local marine resources to management agencies and the public.

EDUCATION AND OUTREACH

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



- informing the public about threats to living resources and presenting them with practical measures they can take to prevent further harm;
- coordinating outreach and education programs with other organizations and evaluating their effectiveness;
- engaging the public in active stewardship opportunities through community workshops, restoration projects and educational programming; and
- communicating the status of Northwest Straits habitats and resources to regional policy makers and resource managers





NORTHWEST STRAITS
marine conservation initiative

Northwest Straits Marine Conservation Initiative
10441 Bayview-Edison Road
Mount Vernon, WA 98273
360-428-1084
www.nwstraits.org

