SKAGIT COUNTY MARINE RESOURCES COMMITTEE



2007 ANNUAL REPORT



Background

The Skagit Marine Resources Committee (SMRC) is a citizen-based advisory committee established by Skagit County Resolution #17433 in May 1999 to discuss marine related issues and identify action items to enhance, restore, and protect local marine habitat. SMRC's stated Mission and 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." The primary three goals of the Skagit MRC include: 1) Restore the health of the Skagit County marine waters, habitats, and shorelines to sustainable levels; 2) Collect high quality data and promote its use and dissemination; and 3) Promote stewardship and understanding of Skagit County marine resources through education and outreach.

SMRC is composed of 18 members who have been appointed by County Council and represent various interest groups including: marine scientists and concerned citizens, sport and commercial fisheries, recreational divers, marine industry, oil companies, and environmental, and conservation organizations, as well as local and tribal governments. Staff support for the SMRC is provided by the Surface Water Management Division of the Public Works Department.

The SMRC combines sound science and a "bottom-up" approach to protecting and restoring the marine resources of the Norhwest Straits. Community involvement is an integral part of SMRC's work. Not only is it more cost efficient to use the help of volunteers, but many important projects would not be successfully accomplished without them. In addition, SMRC has developed and expanded partnerships with local, federal, and tribal governments, non-profit organizations and citizen groups to share resources to help get the projects off the ground and achieve long-term success.

The Northwest Straits Commission (NWSC) is the regional group that supports the Congress authorized Northwest Straits Marine Conservation Initiative (NWSI) and the administration of all seven MRCs through grants, coordination with appropriate governmental agencies, and training on marine resource issues.

A series of Performance Benchmarks were created to measure progress of the NWSI in protecting and restoring degraded resources and habitats of the Northwest Straits. The goal of the NWSI Performance Benchmarks is to protect and restore the marine waters, habitats and species of the Northwest Straits region to achieve ecosystem health and sustainable resource use.

NWSI Performance Benchmarks:

- Marine Habitats- Protect and restore marine, coastal and nearshore habitats, prevent loss and achieve a net gain of healthy habitat.
- 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.



SMRC selects restoration and conservation projects based on specific needs and measurable objectives guided by the Performance Benchmarks set by the NWSI. This report highlights the Skagit MRC activities and accomplishments and the specific NWSI Benchmarks each project addressed during year 2007 and work plan for 2008.

Administrative Tasks

Project Lead: County Staff (general administration)/ Ivar, Jim, Paul S. (educational

materials)/ Polly (NWSC Representative)

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

SMRC Meetings and Communication

Monthly SMRC meetings were held on the second Thursday of each month and were open to the public. Guest speakers provided important information on current marine resources related issues at most meetings. There was a full roster of SMRC members in 2007 and meeting attendance was strong. Meeting agendas and minutes were posted on the SMRC website. County Staff facilitated communication between SMRC members and outside agencies and continuously updated the SMRC website to help inform the public on SMRC meetings, SMRC projects and reports, stewardship opportunities, educational programs, and current issues related to marine resources.

Educational Materials

Seaweed and marine animal identification cards were printed in 2007 and were used as training tools for Washington State University (WSU) Beach Watchers. These identification cards were also distributed to the public at several educational events including Fidalgo Bay Days. The Educational materials will continue to raise public awareness of common marine species in Skagit County, issues impacting marine resources, and activities that help restore and protect the marine environment.



Above: Seaweed and marine animal ID cards

MRC Training

A representative of SMRC attended each NWSC meeting in 2007 and presented highlights from the NWSC meetings at the monthly SMRC meetings. Nine SMRC members attended the 2007 annual NWSC training conference. SMRC members also engaged in additional training opportunities including the 2007 Georgia Basin Puget Sound Research Conference in Vancouver, B.C. in March and the Nearshore Reef Management Symposium held in June at the University of Washington.

2008 Work Plan

Staff Support

Skagit County Staff will continue to provide administrative support including grant administration, contract management, budget tracking, and communication facilitation.

MRC Meetings & Communication

SMRC will continue holding monthly meetings on the 2nd Thursday of each month and informing the public and policy makers about their ongoing activities.

Educational Materials

The SMRC will update, print, and distribute the Skagit Marine Resources Committee "A Report to the Community" brochure. Marine animal and seaweed identification cards will be distributed to the WSU Beach Watcher training and public events.

MRC Training

A new representative of SMRC has been appointed to attend the **NWSC** meetings & present highlights at SMRC meetings. SMRC members will attend the 2008 NWSC training conference, well other training as opportunities as they arise.



Fidalgo Bay Day

Project Lead: Erica

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

This annual Skagit MRC event had an outstanding year. Approximately 300 people attended the fourth annual Fidalgo Bay Day, which took place September 24, 2007. This educational event involved more than thirty agencies, companies and organizations who provided food, activities for kids, marine environmental education, and music performances. Most of the fifty volunteers who staffed the kitchen and other activities were WSU Beach Watchers.





2008 Work Plan

SMRC will continue this popular supporting annual event to increase public awareness of the marine environment and the creatures that live there. SMRC will help develop an agenda for Fidalgo Bay Day that will include items such as environmental education presentations. educational displays, beach seine demonstrations, activities for food booths. entertainment. The next annual Fidalgo Bay Day is scheduled for September 20, 2008.

Treated Wood Inventory and Removal

Project Lead: Paul D.

NWSI Benchmarks: Water Quality

Education/Outreach Marine Habitats

2007 Accomplishments

Skagit MRC partnered with Washington Department of Natural Resources, WSU Beach Watchers, and People For Puget Sound to recruit and train volunteers to inventory creosote treated wood. Approximately 4/5 of County shorelines were inventoried and approximately 120 tons of creosote plus 3,000 lbs of trash were removed over a six day period. A contractor was hired to remove the creosote treated logs and take them to a hazardous waste facility.



2008 Work Plan

Treated wood inventory and removal is not included in the 2008 Work Plan.



Heron Camera

Project Lead: Jim

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

SMRC partnered with Skagit Land Trust and Padilla Bay Reserve in an effort to educate the community on marine food webs and the dependence of birds on estuaries and marine shorelines. Live images of the Heron Rookery at March's Point were provided via the internet. A link to the Padilla Bay website was added to SMRC web page that shows live images of these amazing birds.



Above: Image captured on the heron web cam 7/25/2007

2008 Work Plan

This project was completed in 2007 and is not included in the 2008 Work Plan.

March's Point Drift Cell Analysis

Project Lead: Aundrea

NWSI Benchmarks: Marine Habitats

Marine Life Sound Science

2007 Accomplishments

SMRC contracted with Coastal Geologic Services to develop a detailed analysis of the drift cells around March's Point and to prioritize restoration projects. The final drift cell analysis report was completed March 20, 2007.



2008 Work Plan

March's Point Drift Cell Analysis was completed in 2007 and is not included in the 2008 Work Plan.

March's Point Restoration Monitoring

Project Lead: Erica

NWSI Benchmarks: Marine Habitats

Marine Life Sound Science Education/Outreach

2007 Accomplishments

SMRC partnered with WSU Beach Watchers to recruit and train volunteers to gather pre-restoration data on the biological community, substrate distribution and relative elevation of March's Point. Information will be used as a baseline to aid in the detection of changes and to provide data that can be used in support future Skagit MRC projects. SMRC identified methodology to use, trained volunteers, and collected baseline data.



2008 Work Plan

March's Point Restoration Monitoring was completed in 2007and is not included in the 2008 Work Plan.



Pigeon Guillemot Nesting Bird Study

Project Lead: Ivar

NWSI Benchmarks: Sound Science Education/Outreach

2007 Accomplishments

SMRC partnered with WSU Beach Watchers to recruit and train volunteers to survey pigeon guillemot colonies nesting in Skagit County. The survey involved volunteers visiting known colonies weekly during the nesting season and counting birds. The information gathered was shared with Washington Department of Fish and Wildlife.



2008 Work Plan

This project was completed in 2007and is not included in the 2008 Work Plan.

Landowner Workshops

Project Lead: Lori

NWSI Benchmarks: Education/Outreach

Marine Habitat

2007 Accomplishments

SMRC partnered with WSU Beach Watchers, Skagit Conservation Education Alliance (SCEA), and the Puget Sound Action Team, to

host a series of three shoreline landowner workshops and a combined field trip. The first workshop was held on February 10, 2007 at Dewey Beach, the second on Febrary 24, 2007 on West Fidalgo Island. SCEA held the third workshop in the Edison Community on April 28, 2007. Over 100 landowners attended this valuable training opportunity.



2008 Work Plan

SMRC will continue its partnership with WSU Beach Watchers/Shore Stewards SCEA provide to shoreline landowner workshops. Educating shoreline landowners on the importance and application of a habitat-friendly concepts helps create healthier waters and shores for birds, fish and wildlife.

Ship Harbor Signange

Project Lead: Paul D.

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

A meeting was held with the City of Anacortes to discuss the possible content of the signs and to get input from the Ship Harbor Interpretive Preserve signs committee. A draft contract between the City of Anacortes and Skagit County was submitted and is now waiting for approval by the City and County. The interpretive signage will increase public awareness on the importance of marine resources and the threats that impact them.

2008 Work Plan

After the contract is approved, the City will design and install one or more interpretive signs that will focus on the features, functions, and values of the marine shoreline environment. SMRC will recruit volunteers to monitor the signs at least two times to answer questions and evaluate the effectiveness of the signs by estimating the number of people reading the sign.



Native Oyster Restoration

Project Lead: Paul D.

NWSI Benchmarks: Marine Life

Sound Science Marine Water Quality Education/Outreach

2007 Accomplishments

As part of the native oyster restoration effort, oyster shell bags were placed at intervals along the trestle in Fidalgo Bay in 2006. The oyster shell bags were sampled for natural native oyster recruits during the summer of 2007, all appeared to be native. Thirty more bags of clean oyster shell were placed in and around Fidalgo Bay during the summer of 2007. The thirty bags will be sampled during the summer of 2008 to assess natural oyster recruitment and dispersal range. Paul Dinnel, the SMRC lead for this project, attended the Second West Coast Native Oyster Restoration Workshop held in Shelton, WA and presented a poster on our SMRC

restoration work in Fidalgo Bay. Mr. Dinnel also presented the SMRC native oyster poster at the November 2007 NWSC/MRC Annual Conference on Orcas Island and drafted a manuscript on the SMRC native oyster project and submitted it for publication in Journal of Shellfish Research. The manuscript is now under review.



2008 Work Plan

SMRC will coordinate the recruitment, training, supervision of WSU Beach Watcher volunteers monitoring the survival, growth, and dispersal of the 30 bags of seed oysters placed during the summer of 2007. The survival and growth data will he evaluated for the success of the previous 4-5 years of oyster restoration effort by quantifying the dispersal range and number of native oyster larvae settling in and around Fidalgo Bay.

Low Impact Development (LID) Workshops

Project Lead: Lori

NWSI Benchmarks: Education/Outreach

Marine Water Quality

2007 Accomplishments

SMRC has partnered with the Skagit Conservation District to provide two LID workshops in 2008. LID workshops will educate landowners on the importance of LIDs and how they can utilize LID components on their property to minimize their own storm water runoff in order to help reduce the input of contaminants entering Skagit County's marine waters.

2008 Work Plan

The first LID workshop is scheduled for Friday, February 22 at the Padilla Bay National Estuary Research Reserve. The Agenda for the LID workshop has been completed. The schedule for the second workshop is to be determined.



Spartina Survey/Removal

Project Lead: Keeley

NWSI Benchmarks: Marine Habitats

Sound Science Education/Outreach

2007 Accomplishments

The 9th Annual Skagit *Spartina* Dig Days was held on June 16th 2007. This community event was co-sponsored by Skagit County Marine Resources Committee, People For Puget Sound, and the Swinomish Tribal Community. The event was again held on Turner's Bay in the northern most tip of Similk Bay on the private property of Nancy and Harriett Mack. Eighteen volunteers contributed 72 volunteer hours during the four hour work party. An estimated two cubic yards of *Spartina* above and below ground mass were removed from 0.5 acres of mudflat habitat. This year's efforts focused on the continuation of removing small outlier clones and fringe areas missed by the larger mechanical control devices used at the site for several years.

Volunteers and project staff conducted *Spartina* surveys along 16.2 miles of Skagit County shoreline resulting in approximately 32 square meters of *Spartina* found around the southern portion of the Swinomish Channel, Goat and Ika Islands, Lone Tree Point to Kiket Island, and Skagit and Hope Islands. All 2007 surveys were kayak-based and experienced kayak volunteers were recruited from the local Hole in the Wall kayak club.

2008 Work Plan

It is important for the SMRC to provide continued support of the Spartina Dig because it educates Day Skagit residents on how to identify Spartina and the extent and affects of this invasive specie and what they can do to help in the eradication effort. Removing nonnative Spartina during the community dig will allow estuarine habitat to recover, increase the productivity of the estuaries. and provide more habitat for native species. Surveying and mapping Spartina will help identify and prioritize shoreline habitat restoration needs. The 10th Annual Skagit Spartina Dig Day is scheduled for late Spring 2008 and will again be held at Turner's Bay. Spartina surveys will be conducted during the summer of 2008.







Fidalgo Bay Storm Water Assessment

Project Lead: Erica & Christine

NWSI Benchmarks: Water Quality

Sound Science

2007 Accomplishments

SMRC partnered with the Samish Indian Nation and Washington State Department of Natural Resources to collect water quality data in stormwater outfalls flowing into Fidalgo Bay. A sampling protocol and QA/QC was completed. Water samples were collected for a total of four times (summer, fall, winter and first rain event) in 2007 and tested for nutrients, metals, and pesticides. The goal of this project is to provide a snapshot into what is being introduced into the environment of Fidalgo Bay and determining the overall health of the waters entering the Bay.

2008 Work Plan

Water samples will continue to be collected and tested four times in 2008 (summer, fall, winter, and first rain event). Supplemental information from this study will be added to the already existing database for baseline water quality information that has been gathered by this program for the past two years.

WSU Beach Watcher/Shore Stewards Volunteer Support

Project Lead: Ivar

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

SMRC partnered with WSU to recruit and train Beach Watcher Volunteers fall 2006. In 2007 Beach Watcher volunteers participated in several SMRC projects including: pre-restoration monitoring at March's Point, a detailed Pigeon guillemot nesting bird survey, native oyster restoration in Fidalgo Bay, creosote treated log survey and removal, Fidalgo Bay Days, and shoreline landowner workshops. Adria Banks was recently hired as the new Skagit County Beach Watcher/Shore Stewards Coordinator.

Right: WSU Beach Watcher Class, Fall of 2006



2008 Work Plan

SMRC will continue supporting the WSU Beach Watcher program. Skagit County Beach Watcher Training is scheduled for 3/10/08 -5/1/08 at the Padilla Bay National Estuary Research Reserve. The application deadline for Beach Watcher Training is February 22, 2008. Up to 50 volunteers will be recruited to complete the 100 hours of professional training course on marine resources. In return, the volunteers will be asked to each commit to 100 hours of volunteer service that will include SMRC projects such as native ovster restoration, and Fidalgo Bay Day.



Lone Tree Pocket Estuary Restoration Monitoring

Project Lead:

NWSI Benchmarks:

Lori & Charlie

Sound Science

Marine Habitats

Marine Life

Education/Outreach

2007 Accomplishments

In 2006 Skagit MRC partnered with the Swinomish Tribal Community to analyze the success of marine habitat restoration efforts by monitoring the use of the pocket estuary by salmonids. In addition, the SMRC contracted with the Skagit River Cooperative to

add a public education/outreach component to the effort. Fish Sampling and Monitoring and Education Reports were updated and a power point presentation was designed and presented to targeted groups. A new Draft contract with the Swinomish Tribe was completed in 2007 to continue monitoring efforts.



2008 Work Plan

Skagit MRC will continue partnering with the Swinomish Tribe to conduct post-restoration monitoring. Data collected will be evaluated to determine impacts and benefits of restoring the Lone Tree Point estuary on communities. Swinomish Tribe will also collect data from fyke trapping the stream channel and beach seining inside and outside the estuary two times pure month during the salmon out migration season (Feb-Oct).

North Fidalgo Island Drift Cell Analysis

Project Lead: Aundrea

NWSI Benchmarks: Sound Science Marine Habitat

2007 Accomplishments

SMRC contracted with Coastal Geological Services (CGS) to complete a drift cell analysis of North Fidalgo Island. CGS has completed current geomorphic mapping. The geomorphic shore types mapped throughout the study area included all modifications, bluff sediment sources, transport zones, and accretion shore forms along with recent landslides and toe erosion. The tidal elevation of each shore modification was also measured to aid in the later prioritization of restoration opportunities. Historic conditions mapping was also well underway in 2007.

2008 Work Plan

CGS will continue the North Fidalgo Island Drift Cell Analysis in 2008. Index scores will be analyzed and the current and historic conditions of the shore will be compared. Modified units will then be prioritized for restoration, based on results. The results and comparison of historic and current conditions mapping will be analyzed and reported upon in a draft report complete with maps and figures displaying results. The projected completion date for the draft report is February 29th, 2008.



Whitmarsh Pocket Estuary Restoration

Project Lead: Keeley

NWSI Benchmarks: Marine Habitats Education/Outreach

2007 Accomplishments

With the recommendation of the Skagit River System Cooperative (SRSC), the City of Anacortes is installing an improved culvert design that will enlarge the estuary opening to near historic size to enhance critical habitat for juvenile salmon and other marine organisms. Following the estuary

enlargement, SMRC will partner with People for Puget Sound and the Skagit River System Cooperative to coordinate the recruitment and supervision of volunteers to help with the pocket estuary restoration efforts which will begin spring 2008.



2008 Work Plan

SMRC will partner with People for Puget Sound and the Skagit River System Cooperative to recruit and supervise volunteers with the pocket estuary restoration efforts. Volunteers will plant trees to restore the riparian vegetation the Whitmarsh surrounding estuary and install a fence to keep the cows in. Restored riparian vegetation will provide a buffer to improve water quality, provide a source of energy, provide habitat for fish and wildlife, provide bank stabilization, and prevent flooding.

Port of Anacortes Beach Enhancement & LID Demonstration

Project Lead:

NWSI Benchmarks:

Marine Habitats

Education/Outreach

Water Quality

2007 Accomplishments

SMRC partnered with the Port of Anacortes for a combined beach enhancement and LID Demonstration project. A draft contract with the Port was completed in 2007. SMRC members attended a storm water presentation in Seattle and a tour of a new housing project in Langley that is incorporating many LID provisions. Restoration efforts and LID construction is anticipated to begin this spring 2008 depending on County's approval of the contract.

Right: Permeable pavers



2008 Work Plan

SMRC will partner with the Port of Anacortes to:: place suitable sand/gravel as substrate onto the beach to improve the overall habitat for forage fish; plant native/salt-tolerant vegetation along the beach bank to provide beach shading; install a narrow path alongside the adjacent road for safer pedestrian use; remove the concrete bulkhead & creosote pilings; install a LID demonstration project; and install interpretive signage about the restoration work, pocket beaches, and need for and use of LID features. In addition, SMRC will recruit volunteers to monitor the restoration work. The Port will provide a copy of permits for beach enhancement, the restoration design plan, interpretive signage photos, and a project report.



Candidate Bottom Marine Reserve Assessment & Monitoring

Project Lead: Paul D.

NWSI Benchmarks: Sound Science

Marine Life Marine Habitats

2007 Accomplishments

SMRC partnered with Shannon Point Marine Center and National Science Foundations to collect three years of bottomfish/habitat baseline and temporal monitoring data at the eight candidate reserve sites. Funds were also used to provide summer support for Henry Valz (a graduate student at Washington State University) to pay for boat time and SCUBA supplies. Henry's Master Thesis was completed May 2007 and served as the Technical Report for this project.



2008 Work Plan

This project was completed in 2007and is not included in the 2008 Work Plan.

Interpretive Forage Fish Signs

Project Lead: Lori

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

SMRC partnered with the City of Anacortes to design and install two interpretive signs on the Tommy Thompson Trail. The signs were installed to educate the public about the importance of forage fish, threats to their habitat and habitat restoration efforts.



2008 Work Plan

This project was completed in 2007and is not included in the 2008 Work Plan.

Shellfish Water Quality Exhibit

Project Lead: Paul D.

NWSI Benchmarks: Education/Outreach

2007 Accomplishments

SMRC partnered with the shellfish industry, Padilla Bay Reserve, and the Padilla Bay Foundation to develop a shellfish related water quality exhibit for the Breazeale Interpretive Center (Padilla Bay National Estuary Research Reserve).

2008 Work Plan

This project was completed in 2007and is not included in the 2008 Work Plan.



			NWSI Benchmarks			
2007 SMRC Projects	Marine Habitats	Marine Life	Marine Water Quality	Sound Science	Education and Outreach	
Administrative Tasks (i.e. meetings, educational materials, training, etc.)					•	
Fidalgo Bay Day					•	
Treated Wood Inventory & Removal	•		•		•	
Heron Camera					•	
March's Point Drift Cell Analysis	•	•		•		
March's Point Restoration Monitoring	•	•		•	•	
Pigeon Guillemot Nesting Bird Study				•	•	
Shoreline Land Owner Workshops	•				•	
Ship Harbor Signage					•	
Native Oyster Restoration	•	•	•	•	•	
LID Workshops			•		•	
Spartina Survey & Removal	•			•	•	
Fidalgo Bay Storm Water Assessment			•	•		
WSU Beach Watcher/Shore Stewards Volunteer Support					•	
Lone Tree Pocket Estuary Restoration Monitoring	•	•		•	•	
North Fidalgo Island Drift Cell Analysis	•			•		
Whitmarsh Pocket Estuary Restoration	•				•	
Port of Anacortes Beach Enhancement & LID Demonstration Project	•		•		•	
Candidate Bottom Marine Reserve Assessment & Monitoring	•	•		•		
Interpretive Forage Fish Signs					•	
Shellfish Water Quality Exhibit					•	

Skagit County MRC Members

SMRC Member	Interest Group
Tracy Patton (Staff Support)	Skagit County Public Works
Paul Dinnel	Marine Scientist
	Shannon Point Marine Center
Charles O'Hara	Swinomish Tribe
Lawrence Joseph	Sauk-Suiattle Tribe
Kevin Bright	Marine Dependent Industry
Ivar Dolph	Concerned Citizen
Polly Fischer	Sports Fisherman
John Giboney	Tesoro Refinery
Jim Ramaglia	Divers/Marine Resource
Erica Pickett	Marine Dependent Business
Lori Kyle	Commercial Fishing/
	Skagit Conservation District
Keeley O'Connell	People for Puget Sound
Kari Odden	Skagit Land Trust
Connie Thoman	Port of Anacortes
Paul Sund	Scientist
Scott Schuyler	Upper Skagit Indian Tribe
Christine Woodward	Samish Tribe
Neil Borman	Scientist
Betsy Stevenson	Skagit County Planning and Development Services

Alternate Members

The following people are alternate SMRC members who may represent the SMRC member associated with a special interest group in his or her absence:

Jennifer Weeks	Samish Tribe Alternate
Aundrea McBride	Swinomish Tribe Alternate
Brandon Jenson	Marine Dependent Industry (Kevin Bright)-Alternate
Michelle Myers	Upper Skagit Indian Tribe Alternate



