

SKAGIT COUNTY MARINE RESOURCES COMMITTEE

2012 *Annual Report*



Photo: Jim Ramaglia

SKAGIT COUNTY MARINE RESOURCES COMMITTEE



Mission Statement

“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”

About the Skagit County Marine Resources Committee

Established in 1999, the Skagit County Marine Resources Committee (SMRC) is one of seven citizen-based advisory committees formed under the congressionally authorized Northwest Straits Marine Conservation Initiative (NWSI). The three primary goals of the SMRC include: 1) Restore the health of the local 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.

The SMRC members represent diverse interest groups including: Tribes, marine scientists, non-profit environmental organizations, local government, marine dependent businesses, industry, the Port, recreational diving, recreational and commercial fishing, and concerned citizens. Staff support for the SMRC is provided by the Water Resources Section of the Skagit County Public Works Department. Committee members are appointed by the Skagit County Board of Commissioners.

**SMRC Members
Contributed Over 716
Volunteer Hours in 2012**

The SMRC combines sound science and a “bottom-up” approach to protecting and restoring the marine resources of the Northwest Straits. The SMRC works in collaboration with an expanding list of partners. With the help of partners and volunteers, the SMRC is able to do a lot of great work on a very small budget. Community involvement is an integral part of the SMRC’s work. Fostering citizen stewardship helps to ensure long term success.

Skagit County SMRC Project Area

Skagit County has a population of over 118,000 people, two oil refineries, and approximately 275 miles of marine shoreline consisting of several islands, beaches, bays, and pocket estuaries. The Skagit River is one of the largest rivers in the Pacific Northwest and is home to over 1/3 of the Puget Sound salmon. The near-shore environment is home to a diverse range of species from sea grasses to shellfish, fish and wildlife. Commercial and recreational fishermen and shellfish harvesters rely heavily on clean, safe waters.



2012 SKAGIT COUNTY MRC MEMBERS

SMRC Member	Interest Group
Tracy Alker (Staff Support)	Skagit County Public Works
Lori Kyle (Chair)	Skagit Conservation District
Kari Odden (Vice Chair)	Skagit Land Trust
Rachel Benbrook (NWSC Rep)	People for Puget Sound
Christine Woodward (NWSC Rep Alt)	Samish Tribe
Kevin Bright	American Gold Seafoods
Kurt Buchanan	Skagit Fisheries Enhancement Group
Paul Dinnel	Marine Scientist
Ivar Dolph	Concerned Citizen
Jay Lind	Recreational and Commercial Fishing
Charles O’Hara	Swinomish Tribe
Erica Pickett	Marine Dependent Business
Jim Ramaglia	Recreational Diving
Scott Schuyler	Upper Skagit Indian Tribe
Rebecca Spurling	Tesoro Refinery
Terry Switalski	Port of Anacortes
Betsy Stevenson	Skagit County Planning Dept



Background:

The United States Congress authorized NWSI in 1998 to restore and protect marine resources of the Northwest Straits. The Initiative is a coordinated effort that combines sound science with grassroots consensus building. A series of Performance Benchmarks were established to help measure the progress of the NWSI in reaching its goals. The primary goal of the NWSI is to protect and restore the marine waters, habitats and species of the Northwest Straits region and to achieve ecosystem health and sustainable resource use.

Northwest Straits Commission:

The Northwest Straits Commission (NWSC) serves as a "board of directors" for the NWSI. The Commission is comprised of five gubernatorial representatives, one tribal representative appointed by the Secretary of the Interior, and one representative from each of the seven Marine Resources Committees (MRCs). The NWSC holds monthly meetings rotating between counties. The Commission provides regional oversight to the MRCs and ensures they have the tools and best available policy and scientific information to make decisions. They provide regional coordination, grant assistance, technical guidance, and training. The seven Marine Resources Committees established under the Initiative include: Clallam, Island, Jefferson, San Juan, Skagit, Snohomish and Whatcom counties. In addition to supporting the MRCs, the Commission also manages projects on a regional scale including carrying out projects in partnership with tribal governments. Some of the projects include: derelict gear research and removal, forage fish habitat suitability modeling and mapping, tribal canoe journey water quality monitoring, and expansion of the Shore Stewards and *Spartina* survey programs.

Financial History:

Up until 2012, the NWSI received funding through an annual federal appropriations bill. This funding was directed to the NWSC through the National Oceanic and Atmospheric Administration and allocated to each MRC through an annual grant that enables them to carry out their activities. Grant amounts ranged from \$10,000 - \$150,000. Unfortunately, these benchmark accounts are no longer available to help support the NWSI and MRC projects. In 2012, the NWSC and the MRCs received Environmental Protection Agency grant funding through the Puget Sound Partnership to continue operations. The NWSC and MRCs will keep on working together to get the NWSI re-authorized and develop a sustainability plan to continue the important work in the Northwest Straits region.

Northwest Straits Foundation:

The Northwest Straits Foundation (NWSF) serves as the non-profit extension of the Initiative. The NWSF works with the MRCs to identify and pursue a spectrum of funding opportunities for implementation of MRC priority projects. In addition, the Foundation administers the Skagit Restoration Initiative (SRI) funds which are overseen by the SMRC. SRI funds are part of the Natural Resources Damages Settlement payment from Kimberly-Clark for the former Scott Paper Mill Site in Anacortes.

NWSI Performance Benchmarks

Marine Habitats

Protect and restore marine, coastal and near-shore 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.

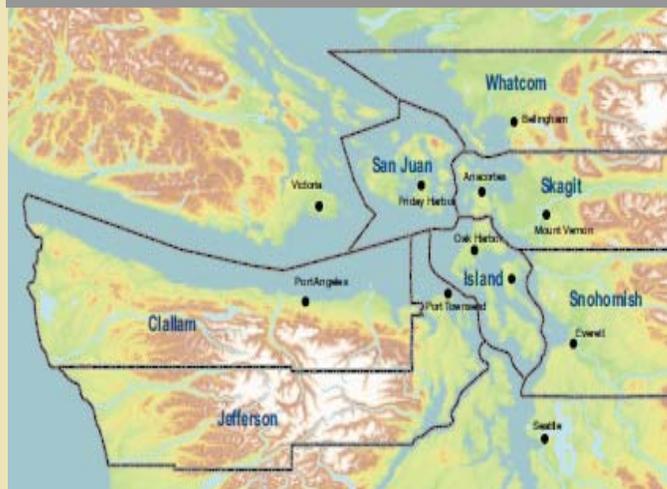
Sound Science

Collect high quality data and promote its use and dissemination.

Education/ Outreach

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

NORTHWEST STRAITS REGION 7 County MRCs ~1,460 Miles of Marine Shoreline



SKAGIT COUNTY MRC OPERATIONS

SMRC Meetings & Communication:

Monthly SMRC meetings were held 9:00 AM -11:00 AM on the second Thursday of each month and were open to the public. Meeting locations rotated between Mount Vernon and Anacortes. Meeting information was widely distributed via an expansive e-mail distribution list including contacts for the local paper. Meeting agendas and minutes were posted on the SMRC website. Meeting programs were primarily focused on developing an immediate work plan and updating the long-term 5-year strategic plan. The SMRC project leads provided project updates and the NWSC representative provided updates on the NWSC and other MRCs at the SMRC meetings each month. County Staff coordinated communication between SMRC members, the County, the NWSC, and other outside agencies and organizations. 2012 SMRC officers included: Lori Kyle - Chair, Kari Odden - Vice-Chair, Rachel Benbrook-NWSC Rep, and Christine Woodward-NWSC Rep Alternate.

Grant Administration:

Staff provided continued grant administrative support including: grant amendments, grant reports, contract management, project coordination, and budget tracking for the grant period January 1, 2012 to December 31, 2012. Administrative reports were provided at the monthly SMRC meetings.

SMRC Website:

The SMRC web page is currently located within the Skagit County Public Works website (<http://www.skagitcounty.net/MRC>). The SMRC web page is continually updated to keep the public informed about SMRC meetings, projects, special events, and issues related to marine resources. The SMRC is in the process of contracting with a company to design and develop a new website for the SMRC that will be more easily accessed.

NWSC Meetings and Training Conference:

Rachel Benbrook attended the monthly NWSC meetings as the representative for the SMRC and reported back to the SMRC. Christine Woodward was the alternate representative. The two day annual MRC/NWSC Training Conference was held in November at the Northwest Maritime Center in Port Townsend. Eight Skagit MRC members attended the conference and gave a report to the SMRC members at the November MRC meeting. Skagit MRC donated several items to the MRC/NWSC conference silent auction including: A Padilla Bay sweatshirt; marine life photos printed on mugs and canvas provided by Jim Ramaglia; a two-night stay in the park's model cottage at the Samish Indian Nation's Fidalgo Bay RV Park; a Skagit Land Trust book: Natural Skagit: A Journey from Mountains to Sea; a three night stay in a beachfront cabin at the Guemes Island Resort; Lunch for two at Anderson's General Store on Guemes Island; and a bird watching trip for four to Vendovi Island. The NWSF raised around \$5,600 from the silent auction.

SMRC Display Updates:

The SMRC display contains current and past project information and provides an excellent overview of what the SMRC is all about. As part of the display, the SMRC provides a variety of outreach and educational materials including: Intertidal Marine Invertebrate and Intertidal Seaweeds identification cards, Low Impact Development in Skagit County brochures, Car Wash Kit brochures, and the SMRC "Report to the Community." The SMRC display along with educational brochures (i.e. Low Impact Development, Car Wash Kits, and Intertidal marine invertebrate ID cards) were taken to the Mount Vernon High School Science Night, the Blue Festival, Sustainable Oceans and Fisheries, and Fidalgo Bay Day. The Intertidal Marine Invertebrate and Intertidal Seaweeds identification cards were also distributed during the WSU Beach Watcher training and naturalist beach walks. Ric Boge, a WSU Beach Watcher volunteer, developed a one page/double-sided SMRC fact sheet and updated the SMRC "Report to the Community" brochure. The fact sheets and brochures will be printed for distribution in 2013.

Puget Sound Partnership Local Integrating Organization:

The SMRC has been tasked with participating in the development and discussions of the Puget Sound Partnership's Local Integrating Organization (LIO) in order to contribute a marine water and nearshore focus to the process. Skagit County officials and tribes have had several meetings regarding the LIO structure process, but no final decisions have been made. SMRC member, Erica Pickett, is the SMRC representative on the Puget Sound Partnership's Education, Communication and Outreach Network (EcoNet) Committee. Erica contributed approximately 10 volunteer hours participating on the EcoNet and reporting back to the SMRC.

SKAGIT COUNTY MRC PROJECTS

The Skagit County Marine Resources Committee (SMRC) selects projects based on specific prioritized needs guided by the SMRC Five Year Strategic Plan and Performance Benchmarks set by the NWSI. The following SMRC projects and activities were funded under various grants in 2012.

SPARTINA SURVEYS

Spartina (*S. anglica*) was deliberately planted in 1962 to stabilize dikes and as cattle forage. It spread rapidly across the region, reaching close to 1000 acres by the mid-1990s. The SMRC trains volunteer kayakers to conduct *Spartina* surveys as part of a collaborative effort to eradicate this invasive species. This unique region-wide citizen science program for kayakers was developed by People for Puget Sound (PPS) and is the only one of its kind in the country. The SMRC has supported this groundbreaking work since 2003. Partners include: Skagit MRC, PPS, WSU Beach Watchers, Hole in the Wall Kayak Club, Swinomish Tribe, the Skagit County Noxious Weed Control Board, the Washington State Department of Agriculture, WDFW, and the NWSC.

In 2012, the SMRC received \$3,100 from the Skagit County Clean Water Program to help support the PPS *Spartina* Program in Skagit County. PPS met with the Department of Agriculture to identify priority areas for *Spartina* surveys and control. Priority areas surveyed in Skagit County included Dredge Islands north of the Swinomish Channel, Guemes Island, Skagit Delta, Skagit Island, Hope Island, Burrows Island, Flounder Bay, Samish Bay, and Cypress Island. Fifteen volunteer kayakers were recruited and trained to identify *Spartina* and map the density of plants found and locations surveyed using established protocols. Volunteers surveyed approximately 26 miles of shoreline in Skagit County and identified approximately 69 square meters of *Spartina* in 2012.

Although great strides have been made towards eradication of *Spartina* in Skagit County, we are still discovering new clones of *Spartina* scattered across the marine shorelines every year. *Spartina* kayak volunteers continue to demonstrate that trained paddlers can become skilled citizen scientists and have a valuable role to play in the statewide eradication of invasive *Spartina*.

~85 Volunteer Hours Contributed

2013 Work Plan: Regrettably, People for Puget Sound officially closed its doors on October 1, 2012 due to a major budget shortfall. Some of their programs will continue under two different organizations. The policy and education programs will go to the Washington Environmental Council and the restoration projects will be moved to EarthCorps. Unfortunately, EarthCorps will not be able to take on the *Spartina* program. The future of the *Spartina* kayak survey program is uncertain at this time.



Photo: Rachel Benbrook



Photo: Rachel Benbrook

FIDALGO BAY DAY

The SMRC sponsored the ninth annual Fidalgo Bay Day event which took place September 15, 2012 at the Samish Indian Nation's Fidalgo Bay RV Park. The purpose of this educational event is to increase public awareness of the marine environment and foster environmental stewardship.

This year's Fidalgo Bay Day event was funded by a grant from the Burning Foundation that was administered by the NWSF. In addition, the Samish Indian Nation waived the fee for the facility rental and the Anacortes Community Maritime Center allowed us to buy insurance at a reduced rate. This event wouldn't be possible without the 45 dedicated volunteers (mostly Beach Watchers) and 30 participating organizations.

An estimated 302 visitors, mostly local, attended this year's event. Although 13 visitors were from out of state and 19 were from Canada. Some of the popular children's activities included fish prints, marine creature stamps, knot tying, and face painting. Two of the biggest crowd pleasers were the Shannon Point Marine Center's mobile marine sea creature touch tank and the beach seine demonstration. This year the Shannon Point Marine Center brought high tech microscopes that could be viewed on large flat screen TVs. Several college students participated in a scavenger hunt and the younger kids participated in a passport activity which required them to visit educational booths to find the answers to questions relating to the natural world.

In addition to the educational activities, several local restaurants (Mary Ann's Kitchen, Adrift, and Randy's Pier 61) provided free samples of local chowders, Taylor Shellfish provided free samples of grilled shellfish, and Gere-A-Deli provided free brownies. A delicious traditional barbecued salmon lunch was provided by the Samish Indian Nation and Mad Hatter's Ice Cream brought a variety of delicious ice cream.

~305 Volunteer Hours Contributed

2013 Work Plan: The SMRC will seek funding to continue this educational event in 2013.



SHANNON POINT RIPRAP REMOVAL FEASIBILITY STUDY

In 2012, the SMRC partnered with Western Washington University/Shannon Point Marine Center, the City of Anacortes, and the Skagit Conservation District to complete a draft feasibility study for the removal of the riprap along the southwest shoreline of Shannon Point. The goal is to open up the area to improve the shoreline for potential forage fish spawning habitat, improve public access, and investigate the possibility of connecting the wetland east of the railroad grade to marine water influence at high tides.

The SMRC contracted with Aqua-Terr Systems, Inc. for the initial feasibility study which was completed June 30, 2012. Two options were considered for removing the riprap. The first option was to remove the riprap by sea using a barge at an estimated cost of \$700,000 to \$800,000. The second option was to remove the riprap by land using excavators, dump trucks, and the construction of a temporary access road at an estimated cost of \$210,000. Several permits will be required to remove the riprap. The SMRC determined that more information is needed before identifying the best option.

The NWSF helped the SMRC secure an additional \$28,000 in grant funding from the US Fish and Wildlife Service to conduct a geotechnical survey, enhance the feasibility study, and project design. The Scope of Work and Request for Quotes has been drafted and will be sent out to qualified contractors in February, 2013.

~10 Volunteer Hours Contributed

2013 Work Plan: The SMRC will continue working with the City of Anacortes, Western Washington University, and WA State Ferries to work out details regarding the proposed layout of the Tommy Thompson Trail in the project area, potential re-use and storage of the rock, improving public access to the beach, and public outreach and participation.

A contractor will be hired to complete the geotechnical survey, enhance the feasibility study, and project design. Trained volunteers will help conduct baseline monitoring prior to any construction. Construction is scheduled to begin in 2014.



FORAGE FISH SURVEY TRAINING

Forage fish play an important role in the marine food web. They are key prey items for the larger predatory fish like salmon and marine birds. Nearshore habitats are critical to the survival of many forage fish species in the Northwest Straits region including: Pacific sand lance (*Ammodytes hexapterus*); surf smelt (*Hypomesus pretiosus*); and Pacific herring (*Clupea pallasii*), because they use these areas for spawning.

The NWSF helped the SMRC secure grant funding from the Burning Foundation to train Beach Watcher volunteers to survey for forage fish in Skagit County. Dan Penttila, a forage fish specialist, was hired to conduct two training sessions for Beach Watchers in July 2012.

Thirteen Beach Watchers volunteered for the training. Each training session took about four hours during low tides on Fidalgo Bay. Volunteers learned about the life cycle of forage fish and the proper protocol and procedures for collecting forage fish egg samples. They learned what type of materials would be required, how to use the equipment, and where to collect samples. They surveyed and flagged seven sites to sample for surf smelt eggs. The volunteers separated eggs from the sample material and were shown how to preserve them for later analysis.

Following the training, the volunteers had lots of hands-on practice at the seven sites that were marked during the training sessions. They divided into teams of three or four and conducted sampling procedures four times, at two week intervals. These practice sessions took place from late July to early September. Dan analyzed the egg samples and provided a detailed report for each trip and site.

~ 140 Volunteer Hours Contributed

2013 Work Plan: The SMRC and the NWSF, in collaboration with local tribes and state resource agencies, will develop a comprehensive long-term forage fish monitoring program for Skagit County. Opportunities for the newly trained team of volunteers to conduct forage fish surveys will be identified and prioritized.



NATIVE OYSTER RESTORATION

The Olympia oyster (*Ostrea lurida*) is native to the Pacific Coast of North America and used to be common in Puget Sound before they were driven to near extinction from over harvest in the late 1800s and pollution from pulp and paper mills. As part of a collaborative effort, the SMRC worked with Puget Sound Restoration Fund (PSRF), the Washington Department of Fish and Wildlife (WDFW), NOAA, and Taylor Shellfish, to initiate a project to establish several self-sustaining native oyster beds in Fidalgo Bay in 2002. Since then, there have been signs of natural recruitment and population expansion which indicates that the oyster beds have become self-sustaining. In addition, DNA test results indicate that oysters from Fidalgo Bay are producing genetically diverse oyster seed that are viable for oyster restoration. Part of the 10-year goal is to enhance 100 acres of native oyster habitat in Puget Sound by 2020.

In 2012, the SMRC partnered with the PSRF, Samish Indian Nation, the Swinomish Tribe, the Washington Department of Natural Resources, Shannon Point Marine Center, and WSU Beach Watchers, to continue the native oyster restoration program in Fidalgo Bay and expand the program to four new proposed sites including: North Fidalgo Bay; the eastern shore of Padilla Bay; Lone Tree Point Lagoon in Skagit Bay; and Kiket Island Lagoon. The program was funded by the Skagit Restoration Initiative (SRI) program administered by the NWSF and overseen by the SMRC in 2012. Funding from the PSRF was used to purchase native oyster seed from the hatchery. Native oyster seed was planted by the PSRF, Swinomish tribal members, and biologists at Lone Tree Lagoon and Kiket Island Lagoon. Volunteers were recruited and trained in the spring of 2012 to help monitor the survival and growth of oysters that were planted in previous years. Spawning surveys were also carried out to quantify new native oyster settlement, densities, and oyster sizes at several locations around Fidalgo Bay. Nineteen volunteers collected over 500 samples. SMRC member and marine scientist, Dr. Paul Dinnel, and a student at the Shannon Point Marine Center filled and distributed 20 oyster cultch bags to enhance oyster habitat and to monitor new oyster settlement. The student also produced a very detailed map of the trestle survey area substrate type (e.g., oyster shells, clam shells, number of native oysters) to use as a baseline to monitor future changes. The Friends of Skagit Beaches Trail Tales docents shared the information about Fidalgo Bay native oyster restoration work with the public.

~275 Volunteers Hours Contributed

2013 Work Plan: SRI funding will be used to continue the native oyster restoration program in Fidalgo Bay in 2013. Approximately 50 cubic yards of Pacific oyster shell will be added to four plots in Fidalgo Bay to increase the amount of settlement substrate for larval oysters. A survey of use of the shell habitat by infaunal organisms will be conducted. Monitoring new oyster settlement will continue, and seeding of native oysters will take place to enhance the native oyster population. Funding from the PSRF will be used to purchase native oyster seed from the hatchery for distribution at two new sites that were identified as potential locations for establishing native oyster beds (i.e. North Fidalgo Bay and east Padilla Bay). Monitoring in Padilla Bay will be funded through the Centers for Ocean Sciences Education Excellence (COSEE) program.



Photo: Paul Dinnel



Photo: Paul Dinnel



Photo: Paul Dinnel

COMMUNITY BEACH SEINING DAY AT SHIP HARBOR

The SMRC partnered with Western Washington University/Shannon Point Marine Center, City of Anacortes, Port of Anacortes, and WSU Beach Watchers to facilitate two Community Beach Seining Day events in 2012. The objective was to facilitate citizen science to help increase public awareness and foster stewardship of the marine environment. In addition, the fish monitoring data collected was added to the Skagit River System Cooperative database for future research.

Both events were held at Ship Harbor located on northwest Fidalgo Island, just east of the Anacortes-San Juan Island ferry terminal. The first event was held June 14, 2012 and the second one was held August 13, 2012. The June 14 event was funded through the Ecology Grant Agreement #G1200389. The August event was funded through the Burning Foundation Grant which was administered by the NWSF. Each event drew a crowd of approximately 30-40 citizens. Local citizens were trained on how to collect scientific data and monitor the status of our marine resources and habitats. Sampling was conducted with a large (36.6m long) net beach seine using sampling protocols established by the Skagit River System Cooperative Research Department (SRSC 2003). The beach seine was set using the Shannon Point Marine Center's research vessel *Fauna*. The net was set three successive times. Once the net was retrieved, volunteers identified and measured each fish for total length. Measurements of salinity and water temperature were also collected at the sampling location. Everything collected in the beach seine was recorded and added to the fish database maintained by the Skagit River Systems Cooperative. Data collected in 2012 was in part, a continuation of the beach seining data that was collected during the 2011 Community Beach Seining event and in 2010 at the same location

An estimated 33 volunteers including 13 Shannon Point Marine Center scientists and graduate students, and 19 trained Washington State University Beach Watchers participated in the event.

~102 Volunteer Hours Contributed

2013 Work Plan: The Skagit County Clean Water Program will help fund the Community Beach Seining Day event in 2013. Staff time will be covered under the current Ecology grant.



NORTHEAST MARCH'S POINT BEACH RESTORATION MONITORING

March's Point, a small peninsula in Skagit County, extends northward dividing Fidalgo Bay to the west and Padilla Bay to the east. March's Point nearshore environment provides important habitat for a diverse range of species from sea grasses and macroalgae, to shellfish, fish and wildlife and plays a critical role in salmon recovery. The primary focus of the SMRC is on the restoration of sediment transport processes and improvement of forage fish spawning habitat at March's Point. According to the 2007 March's Point drift cell study, two net shore-drift cells converged to form a cusp at northeast March's Point. The two groins at Tesoro Refinery's northeast March's Point public boat ramp, were likely impeding the sediment transport processes. The impediment of sediment transport processes caused grain size coarsening, a slope decrease on the beach face, and a loss of forage fish spawning habitat.

In 2010, the SMRC partnered with Skagit County Public Works to remove approximately 700 cubic yards (1,150 tons) of rock and concrete blocks from the site. After the groin was successfully removed, approximately 400 feet of shoreline was interplanted with native vegetation to enhance riparian habitat. In addition, SMRC partnered with WSU Beach Watchers to collect pre- and post-groin removal survey data at the boat launch using established protocol. The monitoring protocol included a beach profile survey, vegetation survey along transects, beach substrate surveys along transects, and photo documentation. Monitoring data will continue to be collected for at least three years to analyze changes in tidal vegetation (seaweed) and beach substrate (sand, gravel, etc.) and to identify erosional or depositional trends and other environmental impacts over time.

In 2011 and 2012, the SMRC continued monitoring and maintenance of the riparian planting and monitoring of the beach to determine if sediment transport has been affected by removing the groin. According to preliminary survey results, sediment transport processes has improved and the SMRC has determined that beach nourishment will not be necessary at this time. Much of this work at northeast March's Point was paid for under the SRI funding program and the Department of Ecology Coastal Protection Fund. The SRI funding is administered by the NWSF and overseen by the SMRC. SRI funding was heavily leveraged.

2013 Work Plan: The SMRC will continue monitoring and maintenance of the riparian planting of the backshore area. The SMRC and NWSF, in collaboration with local tribes and state resource agencies, will develop and implement a long-term forage fish monitoring program. The program will be designed to assess the effectiveness of forage fish spawning habitat restoration in Skagit County.



Photo: Tracy Alker



Photo: Erica Pickett



Photo: Erica Pickett

CENTRAL WEAVERLING SPIT BEACH ENHANCEMENT

Forage fish spawning areas are known to have existed historically in Fidalgo Bay. However, suitable spawning habitat has seriously declined with the armoring of the shoreline, loss of fine-grained beach sediment, and removal of native vegetation.

The Samish Indian Nation owns several acres of tidelands, uplands and conservation area at Weaverling Spit in Fidalgo Bay, where the Fidalgo RV Park and Convention Center are located. Sediment sources at Weaverling Spit, have become severely impacted due to shoreline armoring. A combination of limited sediment sources and increased energy down drift from the altered shoreline have caused severe erosion to occur along the base of the spit. Shell midden, a culturally significant site for the Samish Indian Nation, became exposed from the eroding banks.

In 2012, the SMRC partnered with the Samish Indian Nation to stop shoreline erosion, enhance forage fish spawning habitat, and protect important cultural sites along 500 feet of shoreline at Central Weaverling Spit in Fidalgo Bay. Drift sills consisting of large root balls and ecology blocks were installed to achieve 'soft shore stabilization' of the upper beach. Beach nourishment material composed of appropriately sized spawning gravel was also applied. The shoreline was transformed from a severely eroding bank, to a naturally sloping beach. The native vegetation that was planted along the upper shoreline two years prior to construction, with the help of Cap Sante High School students, will provide shade and insect food sources for juvenile salmon.

This project was primarily funded under the SRI program directed at protecting the marine resources of Padilla and Fidalgo Bays. The SRI funding is administered by the NWSF and overseen by the SMRC.

2013 Workplan: Construction was completed in summer 2012. SRI funding will be used for monitoring and maintenance of the site in 2013.



TIDELAND HABITAT ACQUISITION IN PADILLA BAY

During the 1920s, the Padilla Bay tidelands were subdivided into approximately 1,750 parcels, with each parcel ranging from 1 to 12 acres. The Padilla Bay Research Reserve, established in 1980, has purchased many of these parcels back from willing private land owners over the past 30 years, and continues to purchase parcels as property and funding becomes available. The 12,000 acre reserve still contains over 400 acres of private tideland in-holdings. Once the Reserve owns and manages these fragile tidelands, they are protected in perpetuity under a Federal Management Plan for the purposes of resource conservation, research and education.

In 2012, with SRI funding provided by the SMRC and NWSF, the Washington State Department of Ecology was able to complete the acquisition of 70-acres of tideland, the largest single privately owned tideland parcel remaining in Padilla Bay. The parcel extends a distance of close to 2.75 miles from the shoreline out to the line of mean lower-low tide. The SRI is a funding program directed at protecting the marine resources of Padilla Bay and Fidalgo Bay. The funding is administered by the NWSF and overseen by the SMRC.

2013 Workplan: The tidelands purchase was completed in the summer of 2012 and no more funds will be spent on this project in 2013. A report of the acquisition was included in the annual report provided by the NWSF.



Photo: Northwest Straits Foundation

WSU SKAGIT BEACH WATCHERS TRAINING

The SMRC partnered with Washington State University (WSU) to provide 100 hours of free professional training. In exchange, participants were asked to donate 100 hours of volunteer service towards marine resources related projects. The goal is to facilitate citizen science and foster stewardship in our local community.

Volunteers were recruited to participate in the 100 hour core Beach Watcher training program through advertisements in the local news paper, the WSU Beach Watcher display booth at special events, newsletters, posters, and on social media sites (i.e. Facebook, Twitter, and the WSU Beach Watcher website). A record number of 27 new volunteers participated in the training program in 2012. This was a significant increase in the number of volunteers that typically enroll in the training program which reflects a greater interest in the Beach Watcher program overall. The training took place from March 27 to May 11, 2012. Thirtysix local experts, including several MRC members, contributed over 40 hours of their time and expertise towards this effort. Topics included: State of the Sound, Skagit watershed history and coastal processes, forage fish habitat and importance, estuary ecology, Fidalgo Bay ecology and clean up, salmon habitat restoration, Clean Samish Initiative, low impact development, citizen science, and many other topics. Several field trips were also included as part of the training. The Beach Watcher Coordinator compiled and delivered monthly newsletters to each volunteer.

The SMRC relies heavily on these professionally trained citizen scientists to help with projects. Since 2005, a total of 100 citizens have completed the 100 hours of WSU Beach Watcher training and have collectively contributed well over 29,000 hours of volunteer services in Skagit County on important projects such as: beach naturalists, recreational crabber escape cord education, outreach at special events, winter lecture series, a One Day University, Trail Tales docents, public education workshops, Coastal Observation and Seabird Survey Team surveys, invasive species monitoring, Marine Mammal Stranding Network, water quality monitoring, beach cleanups, and shoreline habitat restoration, etc. Beach Watchers contributed over 249 volunteer hours towards SMRC sponsored projects (WSU Beach Watcher training, forage fish survey training, Fidalgo Bay Day, and the Community Beach Seining Day) in 2012.

~249 Volunteer Hours Contributed

2013 Work Plan: There is currently no funding available to support the Beach Watcher Coordinator position or to provide the core 100 hour Beach Watcher training in 2013. The Skagit County MRC Coordinator will help coordinate communications with the Beach Watcher volunteers until a funding source is identified.



BW Class of 2012



Photo: Nancy Olsen

Dan Penttila discusses the importance of native vegetation along the shore



Photo: Nancy Olsen

Field time at Taylor Shellfish afforded Hands on opportunities



Photo: Nancy Olsen

Skagit Watershed field trip lead by Skagit Fisheries Enhancement Group—Lucy DeGrace

PLASTIC CAPS RECYCLING ART PROJECT

The Plastic Caps Art Project was part of a collaborative effort to bring awareness about the impact of plastics in the marine environment and how people can make a difference. To help spread the message, the community was brought together to collect plastic caps and lids for the Girl Scout Troop #42328 and students to create murals. The murals were displayed at the Island View Elementary School in Anacortes as a reminder to reduce the use of plastics or reuse and recycle plastic whenever possible. Project partners included: SMRC, the Girl Scout troops, Skagit County Public Works, Samish Indian Nation, Island View Elementary School, Safeway, the Anacortes Senior Center, Frontier Industries, Ace Hardware, Read Me A Story, and Watermark Book Store.



Photo: Rebecca Spurling

The Girl Scout Troop #42328 and several volunteers kicked off the plastic cap and lid collection campaign in January. Plastic cap collection centers were located at Safeway, the Anacortes Senior Center, Skagit County Public Works, and Island View Elementary. It was a huge success!! Several organizations and businesses donated funding and supplies to build the murals: The SMRC provided \$500 for supplies, Frontier Industries donated the plywood and miscellaneous supplies, and Ace Hardware provided the paint.



Photo: Rebecca Spurling

A team of 40 volunteers, including SMRC members, helped lead the students of Island View Elementary in Anacortes through a week-long celebration of Earth Day in April. Education stations were set up around the school. Students learned about the harmful impact of plastics on the marine environment and what they can do to reduce the amount of plastic trash. In addition, there was a student contest to win *The Lorax* movie tickets or the book, *The Lorax*, a classic Dr. Seuss book, teaches us why it is important to protect our precious natural resources. In order to enter the contest, students were required to pick up trash and complete a survey as their entry into the weekly drawing.



Photo: Rebecca Spurling

Several articles about this community project were published in the local paper, the Anacortes American.

~486 Volunteer Hours Contributed

2013 Workplan: This project is COMPLETE and will not continue in 2013.

WIN 2 Movie Tickets to *The Lorax* or the Dr. Seuss book, *The Lorax*.

With an adult, clean up trash in your community for 15-minutes.
Safety first! Wear gloves and sturdy shoes. Do not pick up anything sharp.
 Select areas safe from cars, like parks and beaches.

Complete the ticket and return to your teacher to be entered into the weekly drawing leading up to the Plastic Cap Mural Build Week: Apr 16 – Apr 20.

Name _____ cleaned up trash in my community for 15 minutes.

The most common trash item I found was _____

Teacher/Item # _____ Parent Signature _____

Skagit Marine Resources Committee 2012 Annual Budget and Benchmarks

SMRC Operations and Projects	SMRC Project Lead	SMRC Budget	Funding Source	NWSI Benchmarks				
				Marine Habitats	Marine Life	Marine Water Quality	Sound Science	Education and Outreach
SMRC Operations	Tracy Alker	\$30,000	Ecology Grant: PSP/CZM 310 funds					
Community Beach Seine Sampling	Paul Dinnel	\$2,500	NWSF/ Burning Foundation				●	●
Fidalgo Bay Day	Erica Pickett	\$2,500	NWSF/Burning Foundation					●
Forage Fish Survey Training	Kurt Buchanan	\$1,000	NWSF/Burning Foundation		●		●	
Shannon Point Riprap Removal Feasibility	Paul Dinnel	\$12,000 \$28,000	Ecology/PSP Grant & NWSF/ USFWS Grant	●			●	
Native oyster Restoration	Paul Dinnel	\$15,000	NWSF/SRI Funds		●		●	
Spartina Surveys	Rachel Benbrook	\$3,000	Skagit County Clean Water Program	●			●	
NE. March's Point Beach Restoration Monitoring	Erica Pickett	\$3,000	NWSF/SRI Match Funds	●				
Weaverling Spit Beach Restoration	Christine Woodward	\$12,000	NWSF/SRI Funds	●				
Padilla Bay Tideland Acquisition	Erica Pickett	\$20,000	NWSF/SRI Funds	●				
WSU Beach Watchers Training	Ivar Dolph	\$13,000	Ecology Grant: PSP/CZM 310 funds					●
Plastic Caps Recycling Art Project	Rebecca Spurling	\$500	Ecology Grant: PSP/CZM 310 funds					●

Note: ● = Primary NWSI Benchmark
● = Secondary NWSI Benchmark

2013 Skagit Marine Resources Committee **DRAFT** Workplan

TASK	OBJECTIVES	TIMEFRAME	PRODUCTS	BENCHMARKS
Task 1: SMRC Operations	<ul style="list-style-type: none"> Schedule and hold monthly meetings, prepare and distribute agendas and minutes, invite speakers on topics of interest, and participate in NWSC meetings and report back to the SMRC. Grant administration and preparation, prepare reports, track and administer budget, update the workplan and 5-year Strategic Plan, develop a sustainability plan, update the display and educational brochures, and design and launch a new website. Participate in the development and discussions of the Puget Sound Partnership Local Integrating Organization. 	<ul style="list-style-type: none"> Jan — Dec 2013 	<ul style="list-style-type: none"> Progress Reports Meeting Agendas & Minutes Website Address and CD of Site Contents Matching Funds Tracking Spreadsheet Semi-Annual Report Sustainability Plan 	NA
Task 2: Community Beach Seining	<ul style="list-style-type: none"> Partner with the Shannon Point Marine Center to conduct an educational community beach seining event at Ship Harbor to collect important data for research database and increase public awareness of the marine environment. 	<ul style="list-style-type: none"> Jan– Dec 2013 June 2013 <i>(First Event)</i> August 2013 <i>(Second Event)</i> 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Sound Science Education and Outreach
Task 3: Fidalgo Bay Day	<ul style="list-style-type: none"> Work with multiple partners to plan and organize the FBD event to increase public awareness of the marine environment. 	<ul style="list-style-type: none"> Jan - Dec 2013 Sept 14, 2013 <i>(day of event)</i> 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Education and Outreach
Task 4: Shannon Point Riprap Removal	<ul style="list-style-type: none"> Partner with Shannon Point Marine Center and the City of Anacortes to enhance the feasibility study and design, and develop a monitoring plan, for the removal of riprap on the southwestern side of Shannon Point. 	<ul style="list-style-type: none"> Jan- Dec 2013 	<ul style="list-style-type: none"> Progress Reports Feasibility Report Project Design Annual Report 	<ul style="list-style-type: none"> Sound Science Marine Habitats
Task 5: Forage Fish Monitoring Program	<ul style="list-style-type: none"> Compile all existing forage fish data from local tribes and state resource agencies primarily focused on Fidalgo Bay. Implement a comprehensive long-term forage fish monitoring program for Skagit County. Prioritize monitoring areas. 	<ul style="list-style-type: none"> May 2013— April 2014 	<ul style="list-style-type: none"> Progress Reports Forage Fish Monitoring Plan Annual Report 	<ul style="list-style-type: none"> Sound Science Marine Life
Task 6: Native Oyster Restoration	<ul style="list-style-type: none"> Partner with the NWSF, PSRF, Samish Indian Nation, Swinomish Tribe, the Shannon Point Marine Center, and the Padilla Bay Research Reserve. Enhance oyster habitat, monitor oyster settlement, and purchase and distribute native oyster seed. 	<ul style="list-style-type: none"> May 2013— April 2014 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Sound Science Marine Life
Task 7: March's Point Shoreline Restoration	<ul style="list-style-type: none"> Maintain and monitor native vegetation plantings in backshore area of NE. March's Point Beach where groins were removed at the boat launch. 	<ul style="list-style-type: none"> May 2013— April 2014 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Marine Habitats Sound Science
Task 8: NW March's Point Beach Nourishment	<ul style="list-style-type: none"> Partner with Tesoro and property owners to apply beach nourishment at NW. March's Point just south of Tesoro's emergency boat launch. 	<ul style="list-style-type: none"> May 2013— April 2014 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Marine Habitats Sound Science
Task 9: Weaverling Spit Beach Restoration	<ul style="list-style-type: none"> Partner with the Samish Indian Nation to monitor and maintain the Weaverling Spit beach restoration site. 	<ul style="list-style-type: none"> May 2013— April 2014 	<ul style="list-style-type: none"> Progress Reports Annual Report 	<ul style="list-style-type: none"> Marine Habitats Sound Science
Task 10: Bowman Bay Riprap Removal	<ul style="list-style-type: none"> Partner with State Parks to complete a feasibility study, project design, and monitoring plan for the removal of riprap at Bowman Bay. 	<ul style="list-style-type: none"> Jan—Dec 2013 	<ul style="list-style-type: none"> Progress Reports Feasibility Study Project Design Annual Report 	<ul style="list-style-type: none"> Marine Habitats Sound Science
Task 11: Oil Spill Pre- paredness and Response	<ul style="list-style-type: none"> Partner with the NWSF, the state agencies, County, local refineries, and local tribes, to provide an informational workshop on oil spill preparedness and response. 	<ul style="list-style-type: none"> July—Dec 2014 	<ul style="list-style-type: none"> Progress Reports Workshop agenda and roster 	<ul style="list-style-type: none"> Education and Outreach