

# Skagit County

# MARINE RESOURCES COMMITTEE

**2013 Annual Report**  
September 16, 2013 — September 15, 2014



Eagle Harbor, Cypress Island  
Photo Credit: Carvin Kramer



**Northwest Straits Initiative**  
partners in marine conservation

**PugetSoundPartnership**  
LEADING PUGET SOUND RECOVERY



*The projects in this report have been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency.*

# ABOUT SKAGIT MRC



Established in 1999, the Skagit County Marine Resources Committee (SMRC) is one of seven citizen-based advisory committees formed under the congressionally authorized the 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. Fostering citizen stewardship and community support is an integral part of the SMRC's work and essential for long term success. The SMRC works in collaboration with an expanding list of partners and volunteers to help share resources and have a greater collective impact.

SMRC members represent diverse interest groups including: local government, tribes, Ports, environmental groups, marine scientists, and sport and commercial fishing. Committee members are appointed by the Skagit County Board of Commissioners. Skagit MRC is currently looking to expand its membership. The Committee meets the second Thursday of each month. Staff support for the SMRC is provided by the Water Resources Section of the Skagit County Public Works Department and is partly funded through the Clean Water Program.

SMRC Member	Interest Group
Tracy Alker (Staff Support)	Skagit County Public Works
Kari Odden (Chair)	Skagit Land Trust
Jay Lind (Vice-Chair)	Sport & Commercial Fishing
Christine Woodward (NWSC Rep)	Samish Tribe
Julie Barber	Swinomish Tribe
Morty Cohen	WSU Beach Watchers
Ric Boge	Concerned Citizen
Paul Dinnel	Marine Scientist
Liz Lovelett	City Of Anacortes
Betsy Stevenson	Skagit County Planning Dept
Terry Switalski	Port of Anacortes

## Northwest Straits Marine Conservation Initiative

The United States Congress authorized the Northwest Straits Marine Conservation Initiative (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.

**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 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, MRC grant funding, technical guidance, and training.

**Northwest Straits Foundation (NWSF):** Serves as the non-profit extension of the Initiative. The NWSF works with the MRCs to identify and pursue additional funding opportunities to help support 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. They have agreed to pay the Foundation \$500,000 over a 5 year period for restoration projects in Fidalgo and Padilla Bays.



# SKAGIT MRC OPERATIONS

**Meetings & Communication:** Skagit MRC holds monthly meetings from 9:00 AM -11:00 AM on the second Thursday of each month. Meeting locations rotate between the Skagit County Administration Building in Mount Vernon and the Fidalgo Bay Resort in Anacortes. Meeting information is widely distributed via an expansive e-mail distribution list including contacts for the local paper. Meeting agendas and minutes are posted on the SMRC website. This year, the meeting programs primarily focused on prioritization projects, project updates, and updating the SMRC 5-year strategic plan. In addition, guest speakers provided presentations on different projects and issues impacting the Salish Sea. The Skagit MRC Coordinator provided communication between SMRC members, the County, the NWSC, and other outside agencies and organizations.

**NWSC Representation:** Christine Woodward attended the monthly Northwest Straits Commission (NWSC) meetings as the representative for the SMRC and Chair of the NWSC, and reported back to the SMRC. Jay Lind was the alternate representative.

**MRC Membership:** 2013-2014 SMRC officers included: Kari Odden-Chair, Jay Lind-Vice Chair, Christine Woodward-NWSC Rep, and Jay Lind-NWSC Rep Alternate. Skagit MRC bid farewell to several long-time MRC members who resigned this year including: Erica Pickett, Charlie O'Hara, Jim Ramaglia and Ric Boge. They will be greatly missed. We are pleased to welcome one new MRC member who was appointed this year, Liz Lovelett, representing the City of Anacortes.

**Grant Administration:** The Skagit MRC Coordinator provided continued grant administrative support including: grant proposal development, grant contract agreements, grant amendments, reports, contract management, project coordination, and budget tracking for the grant period September 16, 2013—September 15, 2014. Administrative reports were provided at the monthly SMRC meetings.

**SMRC Website:** The Skagit MRC website is: [www.skagitmrc.org](http://www.skagitmrc.org). It is regularly updated to keep the public informed about SMRC meetings and special events.

**Training:** The two day annual MRC/NWSC Training Conference was held in November at the Northwest Maritime Center in Bellingham. Eight Skagit MRC members attended the conference. The theme of the conference was “Celebrating the Collective Impact of Local Stewardship”. Christine Woodward provided the opening remarks and presented Skagit MRC’s “Ignite” presentation. Several MRC served on a panel for Skagit MRC’s nearshore restoration projects including: Weaverling Spit beach restoration, Shannon Point nearshore restoration, and March’s Point nearshore restoration. Skagit MRC members donated a gift basket filled with items from Skagit County for the Northwest Straits Foundation’s silent auction fundraiser. Several MRC members also attended the Salish Sea Ecosystem Conference that was held in Seattle on April 30—May 2, 2014.

**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. It is anticipated that a LIO will be established in Skagit County in 2015.

**Volunteer Hours:** Skagit MRC members contributed approximately **737 volunteer hours** attending meetings, training, project planning, grant preparation, and helping with special events.

# SKAGIT MRC PROJECTS

The Skagit County Marine Resources Committee (SMRC) selects projects based on specific local prioritized needs guided by sound science, the SMRC Five Year Strategic Plan and Performance Benchmarks set by the Northwest Straits Marine Conservation Initiative (NWSI). The projects and activities in this report were federally funded wholly or in part by the United States Environmental Protection Agency via the Puget Sound Partnership grant agreement #G1400105 administered through the Northwest Straits Commission. The WA Department of Ecology is the fiscal agency.

Projects	Project Lead	NWSC Grant (EPA/PSP)	Other Funding	NWSI Performance Benchmarks (Primary)	NWSI Performance Benchmarks (Secondary)	NWSI Performance Benchmarks
<b>Operations</b>	Tracy Alker	\$15,503	\$28,651 Clean Water Funds			<p><b>■ Marine Habitats</b> <i>Protect and restore marine, coastal and nearshore habitats, prevent loss and achieve a net gain of healthy habitat.</i></p> <p><b>■ Marine Life</b> <i>Protect and restore marine populations to healthy sustainable levels.</i></p> <p><b>■ Marine Water Quality</b> <i>Protect marine water quality of the Northwest Straits region, and restore the health of marine waters.</i></p> <p><b>■ Sound Science</b> <i>Collect high quality data and promote its use and dissemination.</i></p> <p><b>■ Education/ Outreach</b> <i>Promote stewardship and understanding of Northwest Straits' marine resources through education and outreach.</i></p>
<b>Fidalgo Bay Day</b>	Ric Boge/ Beckie Arnold	\$2,000	\$48 Clean Water funds. ~\$2,471 In-kind support (not volunteer hours)	■		
<b>Salish Sea Stewards</b>	Morty Cohen	\$8,000	\$1,669 Clean Water Funds	■		
<b>Beach Naturalists</b>	Morty Cohen	\$10,000	\$60 Clean Water Funds	■		
<b>Shannon Point Nearshore Restoration</b>	Paul Dinnel	\$13,000	\$14,000 NWSF grant from Ecology Coastal Protection Fund	■	■	
<b>Bowman Bay Nearshore Restoration</b>	Jay Lind	\$13,000	\$51,820 NWSF grant from EPA/ ESRP	■	■	
<b>Marine Shoreline Protection Assessment</b>	Kari Odden	\$7,500	\$10,403 Skagit Land Trust	■	■	
<b>Total</b>		\$70,000	~\$109,122	= \$179,122 Total Budget		

## 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. In 2013, the NWSC and the MRCs received \$70,000 grant funding from the United States Environmental Protection Agency through the Puget Sound Partnership. Skagit MRC operations/administration is also supported by the Skagit County Public Works Clean Water funds and several MRC projects are supported under other various grants administered by the Northwest Straits Foundation.

# EDUCATION & OUTREACH



## Year End Accomplishments

- **Fidalgo Bay Day:** Over 338 visitors, 36 volunteers, over 200 volunteer hours, 25 partner organizations, and leveraged over \$2,000 in donated supplies, facilities and insurance, complimentary food tastings, advertisement, etc.
- **Salish Sea Stewards:** Developed and implemented a new 40 hour volunteer citizen science training program, trained and coordinated 11 new volunteers who contributed over 80 hours of service for SMRC projects and over 200 hours for partner projects.
- **Beach Naturalists:** Developed and implemented a ~20 hour volunteer interpretive training program in coordination with Deception Pass State Park. Trained and coordinated 8 new Beach Naturalists who contributed over 200 hours of service educating visitors about the marine environment at Washington Park's Sunset Beach in coordination with the City of Anacortes.
- **Oil Spill Response and Preparedness Workshop:** Skagit MRC co-hosted the workshop with the Northwest Straits Foundation. The workshop was Federally funded through a grant secured by the Foundation. It was attended by 50 members of the local community including County Commissioner, Ron Wesen. Presenters at the workshop included representatives from the WA Department of Ecology, the US Coast Guard, Tesoro and BP Refineries, the Swinomish Tribe, the WA Department of Fish and Wildlife, and the Skagit County Department of Emergency Management.
- **Ocean Frontiers Film Screenings:** Skagit MRC co-hosted two film screenings of this documentary with the Friends of Skagit Beaches. Over 100 people attended the first screening in Anacortes which was followed by a panel discussion. The panel consisted of representatives from the Samish Tribe, Taylor Shellfish, the WA Department of Natural Resources, the Shannon Point Marine Center, and Cascadia Mushrooms. Around 25 people attended the second screening that was held at the Skagit Valley College in Mount Vernon.
- **MRC Educational Display:** Updated and hosted the Skagit MRC display at several special events including: Mount Vernon High School Science Night, Ocean Frontiers film screening, the Volunteer Open House, and Fidalgo Bay Day. The display contains current and past project information and provides an excellent overview of what the MRC is all about. The display also includes a variety of outreach and educational materials, as well as an interactive ocean acidification demonstration.

# FIDALGO BAY DAY

The Skagit MRC sponsored the eleventh annual Fidalgo Bay Day event which took place Saturday, September 13, 2014 at the Samish Indian Nation's Fidalgo Bay Resort. The purpose of this educational event was to celebrate Fidalgo Bay, increase public awareness of the marine environment and foster environmental stewardship. This year's event was combined with the Friends of Skagit Beach's Trail Tales celebration of National Estuaries Day. It consisted of eight educational stops with interactive passport activities and prizes along the Tommy Thompson Trail near the Fidalgo Bay resort convention center which proved to be a great compliment to Fidalgo Bay Day.

The Samish Indian Nation generously offered to host the event at their beautiful Fidalgo Bay resort convention center free of charge and provided a warm welcoming ceremony. An estimated 338 visitors attended this year's event, including some folks from as far away as New Zealand, Germany, and Canada. 19 participating organizations provided educational displays with interactive activities. There was also a wide variety of children's craft activities. Volunteers provided a demonstration of searching for forage fish eggs on the beach with sieves, buckets, and water. Two of the biggest crowd pleasers were the Shannon Point Marine Center's (SPMC) mobile marine sea creature touch tank and the beach seine demonstration. The SPMC tanks were staffed by freshman Western Washington University Students who encouraged guests to touch and feel the marine critters in the tanks. Fish Biologist Dan Pentilla provided a presentation about the fish caught in the beach seine. Another popular activity was the free traditional canoe rides offered by the Samish Indian Nation canoe family for 95 lucky people who signed up.

In addition to the educational activities, several local restaurants (Mary Ann's Kitchen, Adrift, and Johnny Picassos) provided free samples of local chowders, Taylor Shellfish provided free samples of oysters and clams prepared and served by volunteers, and Gere-A-Deli provided free brownies. The Anacortes Boys and Girls club lent their popcorn machine so that we could offer free bags of popcorn. The Samish Indian Nation offered a delicious traditional no-host barbequed salmon lunch.

This event was made possible through teamwork and collaboration of many partners and more than 50 volunteers who contributed over 300 hours of their time to make it a huge success. Many thanks goes to our event leaders, former MRC member Ric Boge and WSU Beach Watcher Beckie Arnold who did a fantastic job of planning and coordinating this event. And thank you to the "behind the scenes" team: Catherine Buchalski, Sue Ehler, Lin Folsom, Wayne Huseby, and Bob Weathers.

## Project Profile

**MRC Budget:** \$2,000  
NWSC grant from the EPA/PSP

**Other Funding:** \$48  
Clean Water Funds.  
Over \$2,000 donated food, supplies, services

### Partners:

- \* Samish Indian Nation
- \* WSU Beach Watchers
- \* Friends of Skagit Beaches
- \* Shannon Point Marine Center
- \* Many others.....

### Goals:

- \* Increase awareness of the marine environment
- \* Foster stewardship
- \* Celebrate Fidalgo Bay

### Accomplishments:

- \* Over 338 visitors
- \* 19 participating organizations
- \* Over 50 volunteers
- \* Over 300 hours



# SALISH SEA STEWARDS

Skagit MRC developed and implemented a 40 hour volunteer training program, as an alternative to the lengthy 100-hour Beach Watcher training program. It was intended to engage a broader audience and strengthen the core volunteer base. Upon completion of the program, trained volunteers pledged to return 40 service hours on MRC and partner projects. This pilot program was modeled to not compete with the WSU Beach Watcher program.

Prior to launching the training program, the consultant hired to develop and implement the Salish Sea Stewards program organized a Volunteer Program Open House on February 5 (4-7pm) at the Fidalgo Bay RV Resort, to introduce the community to the new Salish Sea Stewards program as well as the different volunteer programs and opportunities offered by other organizations in Skagit County.

The ~40 hour pilot volunteer training program occurred March 10 - April 29, 2014. Classes were held in the evenings with some weekend field sessions. The evening classes were also open to the public. Some of the training was combined with the Friends of Skagit Lecture Series and Fidalgo Bay Shoreline Academy to combine efforts and avoid duplication. The classes were taught by local experts who offered their professional services for free. Training topics included: geology and coastal processes, oceanography and issues impacting the Salish Sea, estuaries, eel grass, tides and currents, marine mammals, shellfish, forage fish, salmon, derelict gear, monitoring protocols, and nearshore restoration. Several of the classes were videotaped.

Eleven volunteers completed the entire training program and logged over 80 service hours on Skagit MRC projects and over 200 service hours on partner projects including: forage fish surveys, harbor porpoise monitoring, great blue heron monitoring, marine biotoxin monitoring, scotch broom removal and sea star wasting disease monitoring.

## Project Profile

**MRC Budget:** \$8,000 NWSC grant from the EPA/PSP

**Other Funding:** \$1,669 Clean Water Funds

### Partners:

- \* WSU Beach Watchers
- \* Friends of Skagit Beaches

### Goals:

- \* Develop and implement a 40 hour training program
- \* Train at least 10 volunteers
- \* Citizen scientists return 40 hours of service on MRC and partner projects

### Accomplishments:

- \* 40 hour volunteer training implemented in the spring of 2014
- \* Trained 11 volunteers
- \* Over 80 hours of volunteer service on MRC projects
- \* Over 200 hours of volunteer service on partner projects



Salish Sea Stewards Class of 2014

# BEACH NATURALISTS

Washington Park, located in Anacortes WA, has two rocky intertidal areas at Green Point and Sunset Beach. Visitors ranging from large school groups, weekend locals, and summer campers come to the park to explore and experience the nearshore habitat. Most are unaware that some of their activities at the beach can result in the destruction of habitat and mortality of the intertidal organisms. Much research has shown that a deeper understanding of biology, habitat and human impacts moves people to make healthier choices in their behavior in natural settings.

Skagit MRC recognized the need to have trained beach naturalists on the beach to educate visitors about local intertidal marine life and how to reduce recreational impacts. Skagit MRC hired a consultant develop and implement a Beach Naturalist training program in coordination with the City of Anacortes Parks Department and local schools. The Beach Naturalist training was partly combined with the Salish Sea Stewards training, as a project specific training component. In addition, training was integrated with the Deception Pass State Park Rosario Beach Naturalist program in order to optimize volunteers' time for those in both programs, share presenters' time and avoid duplication. The training curriculum consisted of proper beach etiquette, intertidal marine life identification, nearshore ecology, working with school groups and parents, and talking to the public. Eight very enthusiastic volunteers completed the program in the spring of 2014.

Throughout the summer, this team of trained Beach Naturalists contributed over 200 volunteer hours sharing their passion for the marine environment through a series of interpretive programs at the beach during low tides. The programs were tailored to engage citizens of all ages and promote personal connections to the marine environment that will hopefully last a lifetime. A "Naturalist Pack" was assembled for collective use by all naturalists while at the beach, and stored at the Rangers office. The pack included a Beach Naturalist banner, business cards, first aid supplies, reference ID cards for algae and invertebrates, copies of the volunteer handbook, and a log book for tracking engagements with visitors and other pertinent information for evaluation of program. Beach goers were very excited to have knowledgeable Naturalists present at the beach. Many expressed interest in future interpretive programs.

## Project Profile

**MRC Budget:** \$10,000 NWSC grant from the EPA/PSP

**Other Funding:** \$60 Clean Water Funds

### Partners:

- \* City of Anacortes
- \* Deception Pass State Park

### Goals:

- \* Train at least 5 Beach Naturalists
- \* Provide interpretive programs at Washington Park
- \* Coordinate interpretive programs with local schools and the City Parks Department

### Accomplishments:

- \* 20 hour volunteer training implemented in the spring of 2014
- \* Trained 8 volunteers
- \* Over 200 volunteer hours conducting interpretive programs at Washington Park



# MARINE HABITATS PROTECTION AND RESTORATION

## Year End Accomplishments

### Bowman Bay Nearshore Restoration:

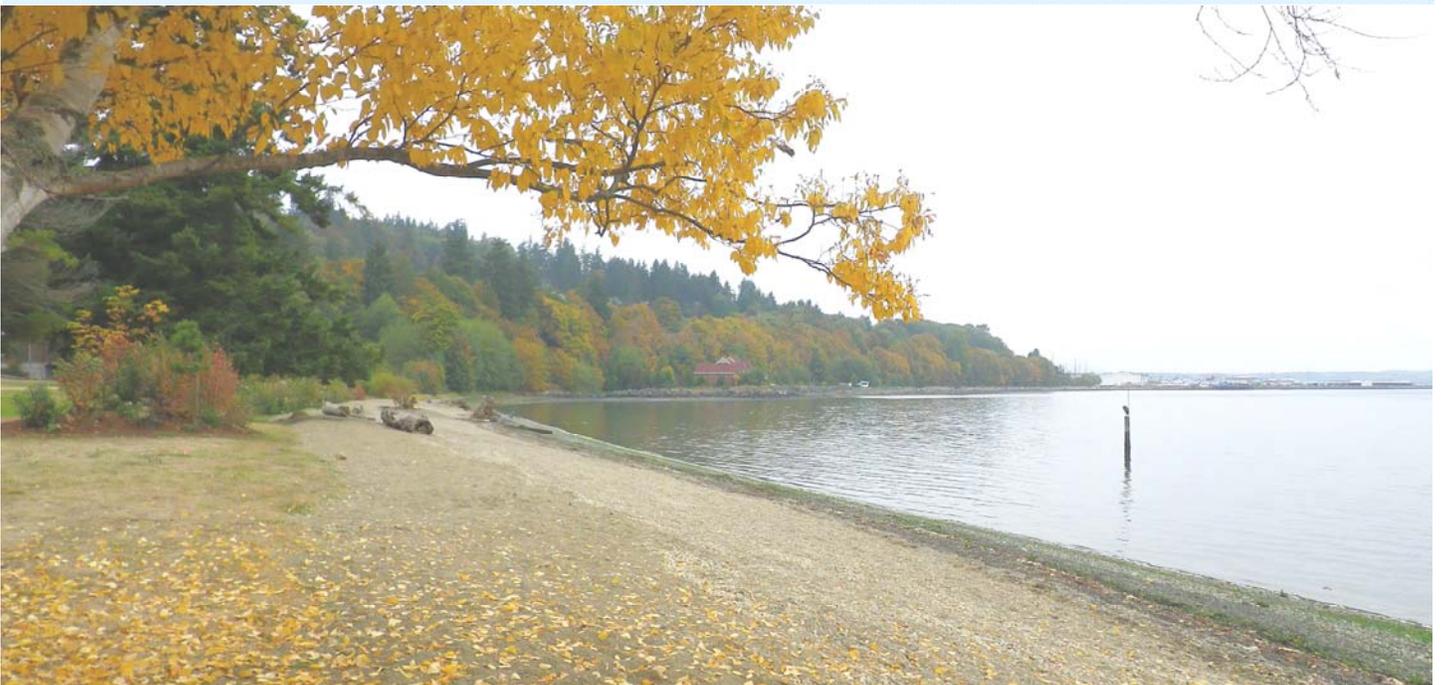
- \* Feasibility study
- \* 60% project design
- \* Draft SEPA Checklist and JARPA
- \* Outreach and monitoring plans
- \* Forage fish spawning surveys

### Shannon Point Nearshore Restoration:

- \* Feasibility study
- \* 60% project design
- \* Permitting underway
- \* Outreach and monitoring plans
- \* Forage fish spawning surveys
- \* Anticipated 2015 fall construction

### Marine Shoreline Protection Assessment:

- \* Shoreline Protection Index
- \* Mapped Skagit County marine shorelines with high conservation value and high protection feasibility
- \* Identified properties in private ownership that are ecologically important
- \* Mapped the two conservation targets



# BOWMAN BAY NEARSHORE RESTORATION

**Background:** Bowman Bay is a pocket beach located in the Whidbey basin at Deception Pass State Park. The site was armored prior to the 1970s to protect a fish hatchery that operated on the shoreline in the 1950s. The hatchery has since been dismantled. The long range goal of this project is to restore 0.6 acres of shoreline by the removal of about 540 lineal feet (1,600 tons) of rock riprap. Armor removal will directly benefit the nearshore ecosystem processes as well as improve sediment transport processes, improve forage fish spawning habitat, improve nearshore habitat for juvenile salmon and bull trout, and restore resilience to the system, allowing for lateral shifts in sea grass beds in response to sea level rise. In addition, removing this armoring will improve access to the beach for kayakers and other park visitors. Riparian planting of the upper beach area will enhance nearshore habitat for salmon, bull trout and forage fish. This project will also provide interpretive signage and other opportunities to educate the public and park users about the value of nearshore habitat and benefits of removing hard shoreline armoring.

**Accomplishments:** Coastal Geologic Services (CGS) was contracted to complete the feasibility study and 60% design. To date, preliminary investigations including soil composition and cultural resource surveys have been completed to develop an existing conditions report that was used to inform the feasibility of the project. The hatchery was found about 10 feet or so from the edge of the path. Dan Meatte, State Parks Archaeologist, was also on site and was able to provide some old as-built drawings of the hatchery. Some cultural resources were discovered. Project partners will continue working closely with the Samish Indian Nation and Swinomish Tribe. An archeologist will be on hand during the construction phase that is scheduled to take place in the fall of 2015.

The preferred alternative identified in the feasibility study includes the removal of all riprap except that which is required to maintain support of the pier footings. The voids from the riprap will be filled with beach nourishment materials suitable for forage fish spawning and graded to meet existing conditions on the unarmored area of the beach. The existing trail will be moved further landward and will be curved to allow for a variety of vegetation to be planted for view corridors enjoyed by park users. The Skagit Fisheries Enhancement Group (SFEG) drafted a planting design for the project and will plant and maintain the native plants following construction.

The monitoring plan has been completed and includes the following elements: forage fish surveys, beach profiles, photo-points to document sediment changes, beach seine sampling for nearshore fish use, and wrack line changes. Trained volunteers have been conducting forage fish spawning surveys at the site since January 2014. No signs of forage fish eggs have been observed to date.

## Project Profile

**MRC Budget:** \$13,000 NWSC grant from the EPA/PSP

**Other Funding:** \$51,820 NWSF grant from the EPA/ESRP

### Partners:

- \* Northwest Straits Foundation
- \* State Parks
- \* Skagit Conservation District
- \* Skagit Fisheries Enhancement Group

### Long Range Goals:

- \* Remove 540 lineal feet (1,600 tons) of rock riprap.
- \* Restore ~0.6 acres of nearshore habitat
- \* Improve feeder bluff functioning and sediment processes
- \* Restore forage fish spawning habitat
- \* Enhance nearshore habitat for salmon and bull trout and forage fish
- \* Improve public access
- \* Install interpretive signage for education and outreach opportunities

### Accomplishments:

- \* Feasibility Study
- \* 60% Project Design
- \* Planting Plan Completed
- \* Permitting Underway
- \* Cultural/Historical Review
- \* Endangered Species Act Review
- \* Monitoring Plan
- \* Outreach Plan
- \* Forage Fish Spawning Surveys
- \* ~ 99 Volunteer Hours

# SHANNON POINT NEARSHORE RESTORATION

**Background:** The nearshore habitat and processes along the southwest shoreline of Shannon Point are currently degraded and impeded by riprap that was originally placed there for the railroad. Removing over 2,500 cubic yards of riprap along 770 linear feet of shoreline would restore approximately 15,250 ft<sup>2</sup> of beach/intertidal habitat, improve feeder bluff functioning and restore spawning habitat for two forage fish species, Pacific sand lance and surf smelt. Forage fish are important prey for salmon and many marine fishes, birds, and mammals.

**Accomplishments:** Skagit MRC partnered with the Northwest Straits Foundation to complete a feasibility study and project design for the Shannon Point Nearshore Restoration project. The Foundation acted as the project manager and provided technical expertise. Coastal Geologic Services was hired to complete the feasibility study and project design which was finalized in January, 2014. The study determined that removal by barge would provide the most cost efficient method with the least short-term impact. The preferred alternative identified in the study was to remove all of the riprap and leave the causeway in place to erode naturally. The study indicated that the erosion would not impact adjacent properties. However, despite extensive community outreach, the residents of the adjacent property were still concerned about potential erosion and diminished property values. Community support is extremely important to the Skagit MRC and the Foundation, so the project design will need to be modified. The City of Anacortes is also considering hiring a third party engineering firm to assess the project before moving forward with the State Environmental Policy Act (SEPA) determination.

A monitoring plan for pre and post construction has been completed. Elements of the monitoring plan include forage fish surveys, beach profiles, nearshore fish use, photo points to document sediment changes and wrack line changes. Volunteers will be trained to help conduct baseline monitoring prior to any construction. Pre-project forage fish monitoring has already been taking place at the project site by trained volunteers since July, 2014. To date, no forage fish eggs have been observed.

The permitting process is currently underway. The U.S. Fish and Wildlife Service assisted with the Endangered Species Act review that satisfied the critical areas review. Caldera Archaeology completed the cultural and historical review. Construction is anticipated to begin in the fall of 2015, pending funding, permitting, and project design approval.

## Project Profile

**MRC Budget:** \$13,000  
NWSC grant from the EPA/PSP for the feasibility study/project design

### Other Funding:

- \* \$14,000 NWSF grant from the Ecology Coastal Protection Funding for the Feasibility study/design
- \* \$192,000 from WDNR for construction

### Partners:

- \* Northwest Straits Foundation
- \* Western Washington University
- \* City of Anacortes
- \* Skagit Conservation District

### Goals:

- \* Remove 2,500 cubic yards of riprap along 770 linear feet of shoreline
- \* Restore ~15,250 ft<sup>2</sup> of nearshore habitat
- \* Improve feeder bluff functioning
- \* Restore forage fish spawning habitat
- \* Improve nearshore fish use

### Accomplishments:

- \* Feasibility Study
- \* 60% Project Design
- \* Permitting Underway
- \* Cultural/Historical Review
- \* Endangered Species Act Review
- \* Monitoring Plan
- \* Outreach Plan
- \* Forage Fish Spawning Surveys
- \* ~24 Volunteer Hours

# MARINE SHORELINE PROTECTION ASSESSMENT

**Project Background:** The majority of Skagit County's 228 miles of marine and estuarine shorelines are unaltered and in private ownership. Protecting shorelines is critical to maintaining marine and estuarine ecosystem processes. Land conservation helps retain natural shoreline processes, such as erosion, deposition, and flooding, and contributes to the protection of habitat conditions, species, and vegetation communities by limiting shoreline modifications.

**Accomplishments:** Skagit MRC, in partnership with the Skagit Land Trust (SLT), conducted a spatial analysis of Skagit County marine shorelines to identify and prioritize the most ecologically valuable private parcels for land protection to maintain critical marine and estuarine ecosystem processes. Important criteria for prioritizing marine shorelines include: eroding bluffs/sediment source beaches; spawning beaches for forage fish; pocket estuaries; presence of freshwater outflow; eelgrass beds; area of impact (versus size of parcel); habitat quality and productivity; connectivity to protected lands or ability to protect larger bluff-beach or estuarine systems; absence of shoreline modifications; and public access opportunities compatible with resource protection.

The Protection Assessment, including maps of Skagit County marine shoreline with high conservation value and high protection feasibility, and the Shoreline Protection Index were completed using available analyses and data from state agencies and other organizations. The index was used to map the two conservation targets, important nearshore habitats and species and shorelines critical for ecosystem processes. The index was also used to inform any recommended conservation or restoration actions within each reach from local analyses/plans. The second part of the assessment was to analyze each reach with high conservation value in order to determine whether or not protection was feasible, and to what degree. Priority reaches were identified. Finally, the tidelands assessment was completed, mapping private tidelands and describing ownership patterns and a protection approach.

Key mapping products included:

- \* High conservation value shoreline reaches in north and south Skagit County
- \* Marine reaches identified as priority for land protection
- \* Public and private ownership of tidelands
- \* Samish Bay tideland ownership

The intended use of this assessment is to help guide proactive outreach to landowners in the areas that are most important -- those areas with the most conservation value combined with the best opportunities for conservation. The focus is on permanently protecting lands with exceptional conservation value throughout Skagit County. Land protection is achieved through purchase or donation of property interests.

## Project Profile

**MRC Budget:** \$7,500  
EPA/PSP

**Other Funding:** \$10,404  
Skagit Land Trust Match

### Partners:

- \* Skagit Land Trust

### Goals:

- \* Protection of ecologically important properties to maintain marine ecosystem processes

### Accomplishments:

- \* Shoreline Protection Index complete
- \* Mapped Skagit County marine shorelines with high conservation value and high protection feasibility
- \* Identified properties in private ownership that are ecologically important
- \* Mapped the two conservation targets

# Skagit County Marine Resources Committee

## DRAFT Annual Workplan (Oct 2014– Sept 2015)

TASK	Project Lead	OBJECTIVES	PRODUCTS	BENCH-MARKS
<b>Operations</b>	<b>Tracy Alker</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Grant administration and proposal preparation, prepare reports, track and administer budget, update the workplan and MRC website and draft the annual report.</li> <li>Participate in the annual NWSC/MRC conference and in the development and discussions of the Puget Sound Partnership Local Integrating Organization.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Meeting agendas &amp; minutes</li> <li>Website address and CD of site contents</li> <li>Match tracking spreadsheet</li> <li>Workplan</li> <li>Annual report</li> </ul>	NA
<b>Fidalgo Bay Day</b>	<b>Kari Odden</b>	<ul style="list-style-type: none"> <li>Work with multiple partners to plan and coordinate the FBD event to increase public awareness of the marine environment.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Summary report</li> <li>Photos</li> </ul>	<ul style="list-style-type: none"> <li>Education &amp; Outreach</li> </ul>
<b>Shoreline Landowner Workshops</b>	<b>Betsy Stevenson</b>	<ul style="list-style-type: none"> <li>Partner with the Northwest Straits Foundation to provide at least one half-day workshop to shoreline landowners to educate them about shoreline processes, the potential impacts of shoreline armoring on nearshore ecosystems.</li> <li>Conduct at least five site visits by a qualified professional to address specific concerns of property owners.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Workshop agenda</li> <li>Workshop roster</li> <li>Summary report</li> <li>Workshop evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Education &amp; Outreach</li> </ul>
<b>Salish Sea Stewards/ Beach Naturalists</b>	<b>Morty Cohen</b>	<ul style="list-style-type: none"> <li>Recruit, train and coordinate at least 15 new volunteers.</li> <li>Program graduates will contribute at least 50 hours of volunteer service on MRC or partner projects following the training within one year.</li> <li>Conduct an evaluation of the program to assess its overall value to training participants and the MRC, as well as identify possible modifications.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Training curriculum</li> <li>Training roster and evaluation</li> <li>Summary report</li> </ul>	<ul style="list-style-type: none"> <li>Education &amp; Outreach</li> </ul>
<b>Bowman Bay Nearshore Restoration</b>	<b>Jay Lind</b>	<ul style="list-style-type: none"> <li>Partner with Northwest Straits Foundation and State Parks to remove 560' of riprap and plant native plants along the Bowman Bay Deception Pass State Park shoreline to restore nearshore processes and forage fish spawning habitat and enhance nearshore habitat for salmon and bull trout.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Project design</li> </ul>	<ul style="list-style-type: none"> <li>Marine Habitats</li> </ul>
<b>Abalone Restoration</b>	<b>Paul Dinnel</b>	<ul style="list-style-type: none"> <li>Collect monitoring data to measure the success of the most recent pinto abalone restoration efforts and conduct an additional juvenile outplant to increase the genetic diversity and build a sustainable pinto abalone population around Burrows and Allan Islands in Skagit County.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Monitoring plan and protocols</li> <li>Monitoring data</li> <li>Project photos</li> <li>Summary report</li> </ul>	<ul style="list-style-type: none"> <li>Marine Life</li> </ul>
<b>Nearshore Restoration Monitoring</b>	<b>Tracy Alker</b>	<ul style="list-style-type: none"> <li>Train volunteers in habitat monitoring data collection to establish baseline conditions at restoration sites prior to construction.</li> <li>Assess the changes in conditions from pre-project to post restoration.</li> <li>Fill in status and trends data gaps.</li> <li>Make recommendations for future projects or management actions based on monitoring results.</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports</li> <li>Monitoring plan</li> <li>Monitoring maps</li> <li>QAPPs</li> <li>Monitoring data</li> </ul>	<ul style="list-style-type: none"> <li>Sound Science</li> <li>Marine Habitats</li> </ul>
<b>Sound IQ</b>	<b>Kari Odden</b>	<ul style="list-style-type: none"> <li>Skagit MRC will participate in the expansion of the online data sharing system, Sound IQ, by preparing for the expansion of the online data sharing system, preparing local datasets, coordinating with local government entities, and hosting a public meeting to share information about the system.</li> </ul>	<ul style="list-style-type: none"> <li>Launch Skagit MRC data in Sound IQ</li> <li>Progress reports</li> <li>Summary report</li> </ul>	<ul style="list-style-type: none"> <li>Sound Science</li> </ul>

# ACKNOWLEDGEMENTS

## **Board of County Commissioners**

Ron Wesen, Chair  
Kenneth Dahlstead, Commissioner  
Sharon D. Dillon, Commissioner

## **Skagit County Public Works Staff**

Tracy Alker, *Skagit MRC Coordinator*  
Dan Berentson, *Public Works Director*  
Heather Bickford, *Editor*  
Samantha Clark, *Grant Administration*  
Cheri Renfro, *Office Assistance*  
Michael See, *Water Resources Manager*

## **Skagit MRC Members & Alternates**

Julie Barber  
Ric Boge  
Morty Cohen  
Paul Dinnel  
Jay Lind  
Liz Lovelett  
Kari Odden  
Betsy Stevenson  
Teri Switalski  
Christine Woodward  
Todd Woodard  
Aundrea McBride  
Leaha Hines

## **Partner Organizations**

City of Anacortes  
Deception Pass State Park  
Fidalgo Bay Aquatic Reserve Citizen  
Advisory Committee  
Friday Harbor Whale Museum  
Friends of Skagit Beaches  
Northwest Straits Commission  
Northwest Straits Foundation  
Orca Network  
Pacific Biodiversity Institute  
Padilla Bay Estuarine Research Reserve  
Port of Anacortes  
Puget Sound Energy/Green Power  
RE sources  
Salish Sea Biological  
Samish Indian Nation  
SCEA  
Shannon Point Marine Center  
Skagit Conservation District  
Skagit Fisheries Enhancement Group  
Skagit Land Trust  
Skagit Valley College  
Swinomish Tribe

Taylor Shellfish  
Tesoro Refinery  
Washington Environmental  
Council  
WA Department of Ecology  
WA Department of Natural Resources  
WSU Beach Watchers

## **Volunteers**

Beckie Arnold  
Betty Bookheim  
Phyllis Bravinder  
Chris Brown  
Betty Carteret  
Don Coleman  
Bill Clark  
Charlene Day  
Donna Davidson  
Claudia Dillman  
Erik Dinnel  
Aundrea Doll  
Ivar Dolph  
Bev Dresen  
Sue Eheler  
Dixon Elder  
Tammy Ennen  
Liz Faletti  
Lin Folsom  
Bob Freedman  
Pete Haase  
Mike Hendon  
Wayne Huesby  
Pat Johnson  
Peyton Kane  
Lynn Karns  
Canda LePage  
Keith Magge  
Raffi Manion  
Mary Lou Meader  
Vicki McNeil  
Dan McCroskey  
Mary McCroskey  
Mike Muhondro  
Jazz Morgan  
Bev Mowrer  
Charlie O'Hara  
Scott Peterson  
Erica Pickett  
Elizabeth Richards  
Tom Richards  
Karen Richman

Maddie Rose  
Tricia Sharp  
Eric Shen  
Gordon Sijogren  
Caroline Spehar  
Pat Steffani  
Mae Tabor  
Carol Taylor  
Sheila Tomas  
Bob Weathers  
David Young  
Patricia Young

## **Misc. Expertise**

Glen Alexander  
Ginny Broadhurst  
Richard Brocksmith  
Catherine Buchalski  
Bill Dewey  
Jack Hartt  
Aileen Jeffries  
Jim Johannsen  
Lisa Kaufman  
Adam Lorio  
Andrea MacLennan  
Nancy Olsen  
Dan Pentilla  
Sharon Riggs  
John Rybczyk  
Jamey Selleck  
Hugh Shipman  
Doug Stark  
Wendy Stephenson  
Sjusan Wood

## **Other Contributors**

Adrift Restaurant  
Anacortes Boys & Girls Club  
Gere-A-Deli  
Johnny Picassos  
Mary Ann's Kitchen  
Cayou Family Catering