

**Whatcom County
Grant No. G1000002**

GRANT TITLE: Northwest Straits Project: Marine Resources Committee Administration and Action Projects

TASK NO: Task 1.3: 2009-10 Annual Report

- ☒ ANNUAL REPORT
- ☐ WORK PLAN
- ☐ PROGRESS REPORT No. 1 ☐ No. 2 ☐ No. 3 ☐
- ☐ FINAL PROGRESS REPORT
- ☐ PROJECT COMPLETION REPORT
- ☐ SUMMARY REPORT
- ☐ TECHNICAL REPORT
- ☐ PROTOCOL
- ☐ QUALITY ASSURANCE/QUALITY CONTROL

PERIOD COVERED: July 1, 2009-June 30, 2010

DATE SUBMITTED: July 9, 2010



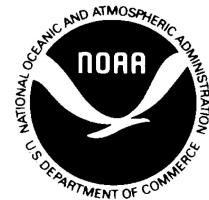
This report was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration.

The views expressed herein are those of the author(s) and do not necessarily reflect the views of NOAA or any of its sub-agencies.

Annual Report for Whatcom County Marine Resources Committee July 1, 2009-June 30, 2010

Whatcom County Public Works – Natural Resources

July 9, 2010



This report was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration.

The views expressed herein are those of the author(s) and do not necessarily reflect the views of NOAA or any of its sub-agencies.

Summary

This report summarizes the Whatcom County Marine Resources Committee's (MRC) activities and progress towards the MRC Work Plan and NWSC Benchmarks for Performance between July 1, 2009 and June 30, 2010. This summary report addresses Task 1.3 (Annual Report) of CZM grant G1000002.

A. Activities

Whatcom County MRC activities between July 1, 2009 and June 30, 2010 focused on grant and committee administration, implementing community education and outreach projects, initiating a nearshore habitat restoration monitoring project, continuing three on-going projects dedicated to clam enhancement, and the development of a strategic plan. The Benchmarks for Performance addressed are referenced by superscript by each task subheading.

Administration⁵

• Staff Support

Whatcom County Public Works – Natural Resources (Natural Resources) staff provided administrative support for the Whatcom County MRC. In addition to the 0.70 FTE position funded by this grant, Whatcom County Public Works has dedicated a 0.25 FTE position to the MRC projects and administration. Duties have included note-taking and summary preparation for monthly MRC meetings, compilation of agendas and meeting packets, distribution of documents and materials to MRC members and interested community members, responding to requests from agency officials, community members, and MRC members for information, development of summaries of MRC activities, preparing grant deliverables, and other administrative functions required to support the Whatcom County MRC.

- **Presentations** - Natural Resources staff gave a presentation on the MRC and MRC projects to an Environmental Studies class at Whatcom Community College on July 16, 2009.
- **MRC**- The MRC continues to have several active subcommittees that focus on specific projects or topics. Subcommittees are regarded as instigators for committee projects, and recommendations from the subcommittees are highly regarded by the full committee. Each project is championed by a subcommittee, and each subcommittee has a chairperson (in bold).
 - Community Education and Outreach: **Doug Stark**, Chris Fairbanks, Mark Herrenkohl, Ken Carrasco, Burt Rubash, Elizabeth Kilanowski***, Cheryl Lovato-Niles*, and Sue Blake**
 - Nearshore Habitat: **Ken Carrasco**, Chris Fairbanks, Alan Chapman, Mark Herrenkohl, Andrea MacLennan, Wendy Steffensen, Stephanie Williams, and Burt Rubash
 - Shellfish: **Bob Cecile**, Andrea Olah, Jerry Larson, Susan Burke, Wanda Cuccinotta***, and Keats Garman
 - Rockfish: **Ron Akeson**, Jerry Larson, Andrea Olah, Ken Carrasco, and Chris Fairbanks
 - Strategic Planning: **Keats Garman**, Susan Burke, Stephanie Williams, Alan Chapman, Jeff Chalfant, Bert Rubash, and Sue Blake**

*WSU Extension Watershed Masters/Beach Watchers Coordinator

**WSU Extension Water Resources Educator
***private citizen

- **NWSC-** Bob Cecile has served as the Whatcom MRC representative to the NWSC for the past year. Other MRC members and Natural Resources staff often attend NWSC meetings as unofficial representatives of the committee as well.

- | | |
|---|--|
| • July 2009 – <i>Bob Cecile</i> (by phone) | • January 2010 – <i>Bob Cecile</i> |
| • August 2009 – <i>Bob Cecile</i> | February 2010 – <i>Bob Cecile</i> |
| • September 2009 – <i>Bob Cecile</i> and Bert Rubash | • March 2010 – <i>Bob Cecile</i> and Ron Akeson |
| • October 2009 – no NWSC meeting | • April 2010 – <i>Bob Cecile</i> , Melissa Roberts, Doug Stark, Scarlet Tang, and Bert Rubash |
| • November 2009 – no NWSC meeting | • May 2010 – <i>Bob Cecile</i> |
| • December 2009 – <i>Bob Cecile</i> , Melissa Roberts, and Ron Akeson | • June 2010 – <i>Bob Cecile</i> , Scarlet Tang, Ron Akeson, Bert Rubash, Melissa Roberts, and Bill Knutzen |

- **Training**

Natural Resources staff organized six presenters at MRC meetings to provide additional information about local projects and programs to MRC committee members. The speakers and topics are listed below.

- July – Dr. Brian Bingham (Western Washington University) – Cliffside Beach Monitoring Results
- August – Mike Hogan (Port of Bellingham) – Squalicum Estuary Restoration Project
- January – Dr. Bert Webber (Western Washington University) – Dissolved Oxygen in Bellingham Bay
- February – Dr. Jude Appel (Western Washington University) – Water Quality Monitoring in Whatcom County
- April – Craig Dolphin (Lummi Nation) – Lummi Intertidal Baseline Monitoring
- June – Dr. David Shull and students (Western Washington University) – Bellingham Bay Nutrient Budget and Modeling

Whatcom County MRC members and staff attended at least six training events during this period: the MRC Training Conference held in Bellingham, the Citizen Science Summit on Plastics Pollution in Port Townsend, Planning for Climate Change in Mt. Vernon, a COMPASS Communication workshop in Mt. Vernon, an Indicators Workshop in Bellingham, and a training in Brinnon on Olympia oysters.

Community Education and Outreach^{1, 2, 4, 5}

- **Training**

- **Drainage-based public outreach-** Through a contract with RE Sources for Sustainable Communities and WSU Extension, the Education and Outreach subcommittee

coordinated and hosted a half-day “train the trainer” style workshop for Beach Naturalist and Beach Watcher volunteers to lead tours during the Chuckanut Bay Days events in August and September.

- **Community Events**

- **Public Speaker Series** - Three Public Speaker events were organized in coordination with monthly MRC meetings by the Education and Outreach subcommittee and Natural Resources staff. The presenters and their topics are listed below. Public Speaker events were advertised through press releases, flyers, and e-mail notices sent to a variety of marine interest mailing lists. In total, about 80 community members attended the Public Speaker series.
 - September 2009 – Shoals and Shores of Chuckanut Bay (Tim Wahl, City of Bellingham)
 - March 2010 – Ocean Acidification (Dr. Brady Olson, Shannon Point Marine Science Center)
 - May 2010 – Juvenile Salmon in the Nearshore (Kurt Fresh, NOAA)
- **Coordination of Volunteers** - Volunteers were recruited and trained for five projects: monthly water quality monitoring, pilot clam seeding (post-seeding survey), clam surveys, Mussel Watch, and Chuckanut Village Marsh monitoring. Through the joint efforts of the MRC Education & Outreach subcommittee, the MRC Nearshore subcommittee, the Beach Watchers and Beach Naturalists programs, and Natural Resources staff, more than 750 volunteer hours were recorded for these events.
- **Underwater Neighborhood Tour** – The Education & Outreach subcommittee co-sponsored a showing of a video made by a local diver highlighting the underwater wonders of the Salish Sea. Approximately 150 people attended the event.
- **Chuckanut Bay Days** – Two drainage-based education events were held in Chuckanut Bay on August 29 and September 19. These events were led by 15 volunteers who designed and implemented marsh plant ID hikes, tideflat tours, water quality demonstrations, bird ID, stewardship activities, and clam ID. Local watershed residents were targeted with door hangers and advertisements in the local neighborhood bulletin, as well as in the Bellingham Herald. Surveys submitted after the event showed that participants learned new facts about their local ecosystem and were encouraged to try new stewardship techniques.

- **Publications**

- **Fact Sheets** - The Marine Life Fact Sheets continue to be one of the more popular elements of the MRC website. In addition to the website distribution, the fact sheets were available for distribution at a variety of outreach events, including clam surveys, Chuckanut Bay Days, and at two Beach Naturalists training events.
- **Display** - The three-panel display is currently being updated with technical and graphical assistance provided by Washington Sea Grant. The display should be completed by the end of July 2010, at which time the MRC Education & Outreach subcommittee will compile a list of locations for long-term exhibition of the display.
- **Website** - The MRC website is routinely enhanced and updated to provide easier access to updates on MRC projects, data, marine news and events, and volunteer opportunities.

- **10 Year Report to the Community** - MRC members and Natural Resources staff completed the 10-Year Report to the Community in year two of the previous grant cycle. This 18-page booklet describes local marine resources, issues facing the resources, and projects the MRC has undertaken to protect and restore those resources. The report distribution occurred in summer 2009 to all local elected officials, NSWC commissioners, local agency officials, and continues to be distributed to the public at public libraries, visitor centers, and at community events.
- **Whatcom Watch Articles** – MRC member Ken Carrasco wrote two full-length articles about the history of the MRC and issues facing the resources for publication in the local newspaper, The Whatcom Watch. These articles came out in two installments in both print and online editions of the paper.

Nearshore Habitat^{1, 3, 4}

- **Chuckanut Village Marsh Monitoring** –The MRC Nearshore subcommittee and Natural Resources staff submitted permit applications and organized volunteers to sample six times at the Chuckanut Village marsh creek and nearshore. Fish presence was measured using beach seines near the mouth of the creek to determine what species of fish were near the creek that may use the creek for refuge or feeding should it be accessible. Fish presence within the creek was measured using hand dip nets and a fyke net stationed 30 m from the mouth of the creek. Volunteers assisted at each sample event. Numerous chum salmon and a few Chinook salmon were found in the beach seines, while one coho salmon was found in the creek above a culvert which is a fish passage barrier the majority of the time, depending on the height of the tide. The committee will repeat the survey in 2010 after which the culvert has been replaced to see if salmon use the newly opened habitat.
- **Terrell Creek** – Plants are purchased, permission has been gained from local tribal and state authorities, and planning is well underway for a community volunteer planting party along the riparian reach of Terrell Creek within Birch Bay State Park. November 20, 2010 is the scheduled date for the event, and it will be advertised through the Nooksack Salmon Enhancement Associations website, flyers, postcards, and email announcements. The restoration project will provide shade and nutrient inputs for salmon or other fish using the reach, and will also provide a filtering buffer for runoff coming from the communal playing fields immediately adjacent to the creek.

Shellfish^{2, 3, 4}

- **Clam Surveys** – Two clam surveys have occurred during this time period. On July 21, 2009, 34 volunteers assisted with a survey at Lily Point, covering 16 transects. On June 26, 2010, 13 volunteers participated in a survey at Marine Park in Blaine, volunteering over 80 hours to cover six transects. During the training for these surveys, volunteers were taught to distinguish between eight species of clams. Clamming etiquette as well as the impact that poor water quality has on clam harvest opportunities was discussed. Three additional surveys (Lily Point, Point Roberts, and Lummi Island) are planned for the remainder of the 2010 summer.
- **Water Quality Monitoring** – Water quality samples are collected monthly at freshwater sites in Drayton Harbor, Lummi Island and Chuckanut Bay. Grab samples are taken to measure fecal coliform bacteria and flow is estimated to calculate bacterial loadings to the marine environment. From July 2009 through June 2010, three volunteers and a local

Washington Conservation Corps crew collected the samples. While the host organization of the crew is reimbursed for the crewmember's time to collect the sample, those six people serving through the Americorps program are considered volunteers to the organization. Using this crew has allowed us to streamline operations and to provide an additional training experience to this group of six young people.

- **Birch Bay Seeding Project** – The final post-seeding clam survey was conducted on May 15, 2010 at the two pilot seeding areas in Birch Bay - Cottonwood Beach and north of the mouth of Terrell Creek. Fourteen citizen volunteers assisted during the survey, volunteering 56 hours of their time. A follow-up slide-show was presented to the full MRC by Bob Cecile, explaining the project, the outcomes, and possible future steps.
- **Lummi Island Clam Tents** – The Clam subcommittee began planning for a new clam enhancement project in summer 2009. Clam tents were designed, permitted and installed in the winter and spring of 2010. Before installation of the two clam tents along the eastern shore of Lummi Island, surveys were conducted by 3rd, 4th, and 5th graders at the Lummi Beach School. These data will be used to compare against post-installation surveys in fall 2010 to determine if the tents have had an impact on clam populations at the two sites.

Strategic Planning⁵

- The Strategic Planning subcommittee and Natural Resources staff worked with Crossroads Consulting to help implement a strategic planning process that was designed by the MRC. In addition to bi-monthly meetings, the subcommittee planned an Indicator's Workshop for MRC members. This workshop was designed for members to learn about the current state of the resources, so that when it came time to develop objectives and goals for the MRC, they could have current information regarding six target topics (water quality-toxins, eelgrass, shellfish beds, forage fish, intertidal marshes, and salmon). This event was held on February 17, and 27 MRC and community members attended. A strategic planning retreat was planned and held on June 18, at which time MRC members discussed goals, outcomes, objectives, and timelines for a strategic plan. A draft strategic plan was introduced at the July 2010 MRC meeting, and is scheduled for completion by the end of August 2010.

Creosote Log Removal^{1,3}

- The MRC received additional Benchmark Account funding to initiate a creosote log removal project along the Cherry Point Reach. Although the original location became unfeasible due to safety concerns and landowner logistics, the project was successful at removing approximately 6.9 tons of treated wood debris from Birch Bay. The project area spanned from the intersection of Beach Way Drive and Birch Bay Drive to Rogers Slough, approximately 0.65 miles of beach. The removal was accomplished using an EarthCorps crew May 10 - May 13, 2010.

Policies/ Advisory Roles⁵

The MRC submitted the following comment or support letters regarding local marine issues:

- **Semiahmoo Resort Development EIS (August 19, 2009)** – The committee commented on the scope of the EIS for an expansion of the Semiahmoo Resort. The letter was addressed to the planning department at the City of Blaine.

- City of Bellingham Shoreline Management Plan (October 9, 2009) – The committee commented on the City’s proposed SMP amendment, specifically regarding buffer requirements around vertical structures. The letter was addressed to the Bellingham City Council.
- Puget Sound Rockfish Conservation Plan (December 4, 2009) – The committee commented on the draft plan released by WDFW. Recommendations were made for adopting specific alternatives of the DEIS. The letter was addressed to the SEPA/NEPA Coordinator at WDFW.
- City of Blaine Wastewater Treatment Plant upgrade (December 8, 2009) – The committee sent letters of support for federal funds to contribute to the upgrade of the wastewater treatment plant in Blaine. This upgrade will lead to increased water quality in the region. The letters were addressed to Senator Murray, Senator Cantwell, and Representative Larsen.
- On-site Sewage System (OSS) Regulations (January 25, 2010) – The committee commented on a proposed County ordinance to rescind regulations for professional inspections of OSS. In addition to sending the letter to individual councilmembers, the committee presented the letter at a regularly scheduled County Council meeting during public comment.

B. Benchmarks for Performance

Superscript numbers following each project descriptions above refer to the listed NWSC benchmarks. A brief description of activities addressing the benchmarks is also included below.

1. ***Marine Habitats.*** *Protect and restore marine, coastal and nearshore habitats, prevent loss and achieve a net gain of healthy habitat areas.* Three projects directly relate to the Marine Habitats Benchmark for Performance. Chuckanut Bay Days were ostensibly an education and outreach event. However, because they focused on stewardship activities that individuals can do, and because event surveys indicated that participants were encouraged to try at least one new stewardship technique, this project also covers the marine habitats benchmark. The Terrell Creek revegetation project will restore the nearshore habitat of Terrell Creek, providing a net gain of healthy salmonid habitat. The creosote log removal project worked to protect the natural environment from human activities, and led to an increase in healthy habitat.
2. ***Marine Life.*** *Protect and restore marine populations to healthy, sustainable levels.* Two projects relate to the Marine Life Benchmark for Performance. As with the previous benchmark, the Chuckanut Bay Days had a segment on invasive plants and weeds and how to safely remove them, therefore preventing the spread of invasive species. Numerous participants noted that removal of invasive species from their yards was a stewardship goal of theirs after the event. The shellfish enhancement project also directly relates to restoring marine populations of native clams by protecting their early growth under clam tents. This is a pilot project with the anticipated effects of increasing harvestable clam populations at two locations on Lummi Island.
3. ***Marine Water Quality.*** *Protect marine water quality of the Northwest Straits region and restore the health of marine waters.* The Shellfish subcommittee focuses on collecting water quality data in three key shellfish harvesting areas. Community outreach efforts, such as the

Chuckanut Bay Days, focus on the MRC's water quality monitoring efforts and are designed to help people understand the linkages between land uses, water quality, and safe shellfish harvest. The Terrell Creek project is designed to filter runoff coming from public picnic areas where dog waste is found, before it enters Terrell Creek. By removing creosote timbers from Birch Bay, water quality will be improved by reducing an input of toxic contaminants.

4. ***Sound Science.*** *Collect high quality data and promote its use and dissemination.* The clam surveys, water quality monitoring, Mussel Watch, and Chuckanut Bay monitoring project all strive to use best available science and methods for data collection and analysis. Each of these projects uses past projects to determine the best methods to use for gathering the desired data. Goals and objectives of each of these studies are identified and used as guidance for selecting methods and analysis techniques. Data collected through these efforts is shared with the citizen volunteers who contribute to the collection, posted to the MRC website and shared with appropriate groups and agencies. The Whatcom MRC is dedicated to encouraging citizen science where it is applicable.
5. ***Education and Outreach.*** *Promote stewardship and understanding of Northwest Straits' marine resources through education and outreach.* Each of the Whatcom MRC projects involves an education and outreach component. In addition, there is a strong emphasis on community outreach as a tool to build the community's understanding in and support of marine restoration and protection projects. Volunteers are used in all appropriate projects to encourage the community to take a stake in local marine resource protection. Additionally, the MRC strives to communicate the status of habitats and resources to policy makers through informed comments on ordinances, project proposals, and plans. A partnership with other community organizations to expand the public speaker series is in development, and the revised display will enhance the MRC's outreach efforts at public events. And finally, as the MRC develops and implements its strategic plan, education and outreach will continue to be a focus of this organization. New targeted outreach groups are being considered, and partnerships will be forged to most effectively communicate the health status of the Salish Sea.

C. Summary and Conclusions

The Whatcom County MRC continues to work towards meeting the NWSC benchmarks by participating in local restoration and monitoring projects, forging partnerships, and focusing on education of the community. The MRC projects help to develop a greater understanding of nearshore habitat, shellfish resource issues, and the impacts of human activities in Whatcom County. This continues to strengthen efforts towards protecting shellfish, nearshore habitat, and other marine resources.