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Education and Outreach 2015 Summary Report

Prepared by Whatcom County Public Works Staff
For the Marine Resources Committee

Community Education and Outreach ^{4,5}

- **General Community Outreach**

The MRC participates in local community outreach events providing the MRC display, fact sheets, and staff and volunteers to interact with the public and answer questions. The MRC typically focuses on outreach events promoting clean water and protecting shellfish resources which this year included: participation in Whatcom Water Weeks, clam surveys in partnership with the Garden of the Salish Sea Curriculum, development of the Jerry's Journey interpretive trail, and other annual local events.

Whatcom Water Week



MRC member Pete Granger represented the MRC on the Whatcom Water Weeks subcommittee which met every two weeks since January 2016 to begin planning for the 2016 event. The theme this year was “Water – It’s Everybody’s Business” and the mission was to facilitate and promote widespread community participation in an event that celebrates the environmental, economic, cultural and recreational importance of Whatcom County’s water resources. Given the group’s capacity this year, they decided to condense Water Weeks from two weeks to one, occurring from September 24-October 2, and, therefore, changing the

title to Whatcom Water Week. This decision supports the 2014/15 WWU Evaluation results showing that past event hosts had concerns that the messaging and purpose of Water Weeks would get diluted over the two week time span.

The MRC had limited involvement in Water Week, but chose to participate in this year’s Film Festival titled, “Streams of Thought”. The MRC sponsored the film *A Sea Change* which showed at the Bellingham Pickford Cinema and focused on the topic of ocean acidification. Sixty community members viewed this film, and Meg Chadsey, from Washington SeaGrant, spoke to the audience about local efforts to address ocean acidification and encouraged participation in groups like the Marine Resources Committee.



The Water Week finale this is a large community event

called SeaFeast, which is being sponsored by the City of Bellingham, Port of Bellingham, and the Working Waterfront Coalition (Pete Granger is the lead organizer). The MRC is hosting the MRC booth this event which will occur on October 1 at Zuanich Park in Bellingham.


Chuckanut Clam Surveys in Partnership with the Garden of the Salish Sea Curriculum

Temporary MRC staff and members (Eleanor Hines and Doug Stark) were actively involved in planning the 2016 North Chuckanut Bay Clam Surveys in partnership with the Garden of the Salish Sea Curriculum. The surveys occurred on May 6 and 9 with over 100 Wade King Elementary School students and assistance from Bellingham Technical College and Explorations Academy students. Participants found nearly 500 clams from eight different species in the identified transects. MRC staff helped with preparation and distribution of outreach materials and mapped the data. Students used shellfish population survey protocols developed by WDFW. Data was shared with NWSC staff for inclusion into Sound IQ and was also posted to the Whatcom MRC website. Below shows a map of the survey transects, a graph of the overall findings from 2016, and an analysis of the clam population from surveys done between 2004-2016 .


NORTH CHUCKANUT BAY CLAM SURVEY

MAY 6 & 9, 2016

The Whatcom Marine Resources Committee will be partnering with the Pacific Shellfish Institute's Garden of the Salish Sea Curriculum to conduct a clam survey in North Chuckanut Bay. This clam survey will provide a unique opportunity to educate third grade students from Wade King Elementary School and the local community about the value of protecting shellfish, marine resources, and marine water quality.



Students and community members will work with trained volunteers from the Marine Resources Committee to collect data on clam species diversity and abundance in N. Chuckanut Bay. This provides a great opportunity for students to connect with community members who share knowledge and a commitment to volunteerism and the environment.






This survey will provide:

- Baseline information about the types, numbers, and sizes of clams found in Chuckanut Bay.
- Data will be added to the previous survey numbers to look for trends in abundance and distribution. See past data online at www.mrc-whatcomcounty.org.

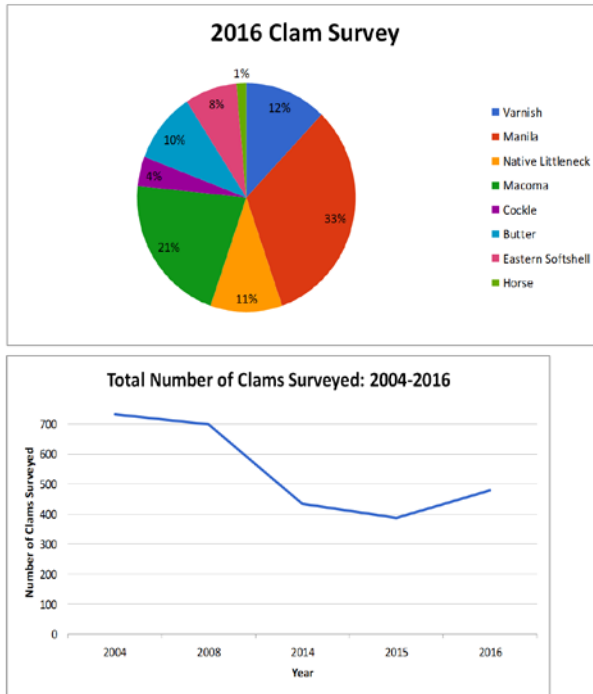
The information will be used to:

- Describe the clam found in Chuckanut Bay to the community, local, state, and tribal agencies.
- Work with the community to provide more information to residents and visitors about how to protect this valuable resource.



For more information contact Holly Faustich at (360) 778-6299 or hfaustich@whatcom.wa.us





Jerry's Journey Interpretive Trail

Jerry's Journey will provide education and recreation activities in a setting that offers rich history and dramatic natural beauty. The objective of this project is to increase public awareness and understanding of the ecological importance of Birch Bay from historical/cultural, economic, environmental, and recreational perspectives, while fostering stewardship of our local marine environment and resources. The project will reach out to local residents as well as the 800,000 annual visitors to the Birch Bay State Park area.

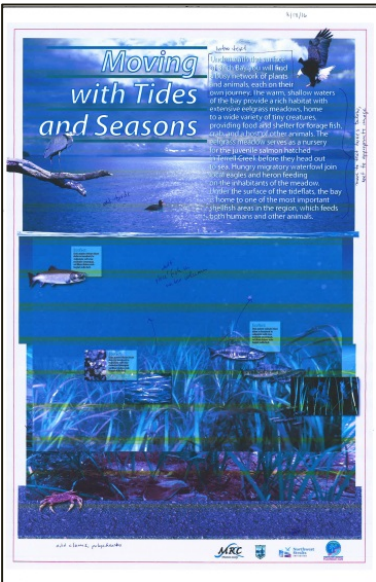
This year, MRC staff and MRC project champion, Atina Casas, have been working with graphic designer Jim Engelhardt and his writing assistant Meg Olson to develop a three panel kiosk featuring ecology of Birch Bay, a tribute to Jerry Larson, and Native American use of the Birch Bay area. These signs are supported by funds bequeathed from former MRC member Jerry Larson. The graphic team has also been drafting two additional signs featuring Terrell Creek and the Terrell watershed. It is anticipated that this team will complete these five signs and the MRC will discuss how they would like to pursue the artistry of the additional signs planned for around the park. Below are the draft signs that have been submitted thus far:



(left) Gathering Together – featuring Native American use of the Birch Bay area (harvesting and recreation).



(right) Joining the Journey – short biography of Jerry Larson. Photos of Jerry involved in Birch Bay projects. Emphasizing the importance of volunteerism and stewardship in the community.



(left) Moving with the Tides and Seasons – showing the Geographical/ecological significance of Birch Bay through a cross section of the bay.



(right) Discover a Distinct Ecosystem – highlighting how

Terrell Creek connects the the sea.
Flowing from the Lake to the highlight the functions and the Terrell wetland (e.g., storage, water quality improvement, fish and use, etc.)



upland to
Bay –
services of
flood
wildlife

Annual Local Events

MRC members Bob Cecile and Chris Brown tabled the MRC booth and Taylor Shellfish-tival on July 20 at Taylor Shellfish Farms in Samish Bay. This event featured in the importance of shellfish and the water they grow in. The MRC booth was visited by several guests throughout the day. Doug Stark tabled the MRC booth at Birch Bay Days and Crab Fest on August 27. The MRC booth featured crabber outreach materials (below) provided by the Northwest Straits Commission at both events. Several guests seemed engaged in the materials and were interested in learn more.



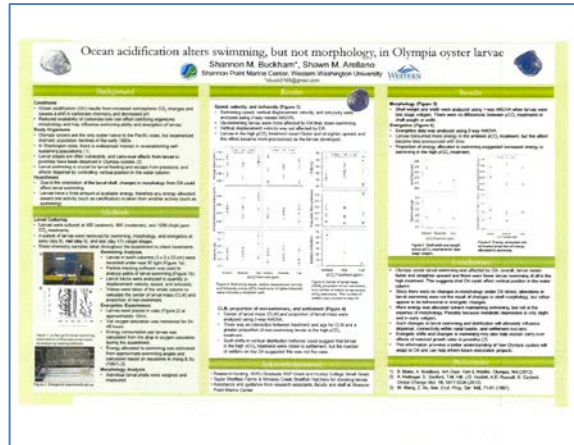
Public Speaker Series

The MRC/WWIN coordinated six speaker events this year. Four were hosted at MRC general meetings, one was held at the Squalicum Boathouse in Bellingham, and one was held at Huxley College. The speaker events included:

- ***The New Salish Sea Institute***, Bert Webber, Director of the Salish Sea Institute - discussion on the Salish Sea Studies Institute at Western Washington University, an

interdisciplinary center for collaboration, education, research, and community involvement focused on the health of the Salish Sea and its environment.

- **Restoration of Olympia Oysters in Fidalgo Bay**, Dr. Paul Dinnel, Shannon Point Marine Center with a poster presentation by student Shannon Buckham detailing the effects of ocean acidification on Olympia Oyster larvae.



SPEAKER SERIES EVENT

Restoration of Olympia Oysters in Fidalgo Bay 2002-2016

May 5, 2016 • 6 - 7pm
Garden Level Room, Civic Center Annex, 322 N. Commercial St. Bellingham

Dr. Paul Dinnel will share insight into Olympia oyster restoration techniques and success stories from Fidalgo Bay over the past 14 years.
*Bonus poster presentation by Husky College student, Shannon Buckham, will be at 5:30pm to view her poster detailing the effects of ocean acidification on *Ostrea lurida* larvae.

Another Public Speaker Series Event coordinated by:

MRC WWU Puget Sound Partnership

Hosted by: Whatcom Marine Resource Committee
www.whatcomcommunity.org

EPA United States Environmental Protection Agency

Fourteen evaluations were submitted and all guests valued the presentations and felt they left knowing more information about the topic of Olympia Oyster restoration efforts and the effects of ocean acidification. This was the only presentation in which evaluations were shared. In the future, the subcommittee will ensure evaluations are shared at each event in order to receive valuable public feedback on events.

- **Common Sense Approaches to Economic/Environmental Conflicts**, Dr. Leah Bendell, Professor of Marine Ecology and Conservation – featured a discussion about decisions related to the management of Baynes Sound/Lambert Channel and the negative consequences to this region from increased industrial activity will be substantial if not managed correctly.
- **City of Bellingham Restoration Assessments**, Analiese Burns, City of Bellingham Habitat and Restoration Manager – presentation included an overview of terrestrial and marine habitat assessments and how they are used as tools to prioritize restoration.
- **Hypoxia, snarks and phytoplankton: A story of oxygen dynamics in Bellingham Bay**, Dr. Jude Apple, Research Coordinator at Padilla Bay NERR – presentation featured an overview of research led by Jude Apple and partners studying hypoxia and its effects in Bellingham Bay.

SPEAKER SERIES EVENT

City of Bellingham Restoration Assessments Bellingham Bay 2016

July 7, 2016 • 6 - 7pm
Garden Room, Civic Center Annex, 322 Commercial, Bellingham

Analiese Burns will provide an overview of the City's terrestrial and marine habitat assessments and how they can be used as tools to prioritize restoration.

Another Public Speaker Series Event coordinated by:

MRC WWU Puget Sound Partnership

Hosted by: Whatcom Marine Resource Committee, Puget Sound Partnership, EPA
www.whatcomcommunity.org

SPEAKER SERIES EVENT

Hypoxia, snarks and phytoplankton: A story of oxygen dynamics in Bellingham Bay

September 1, 2016 • 6 - 7pm
Garden Room, Civic Center Annex, 322 Commercial, Bellingham

Jude Apple will provide an overview of research that has been conducted in Bellingham Bay over the past few years investigating hypoxia, nutrients and plankton community dynamics.

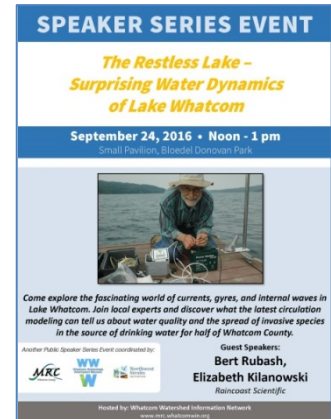
Another Public Speaker Series Event coordinated by:

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- ***The Restless Lake: Surprising Water Dynamics of Lake Whatcom***- Bert Rubash and Elizabeth Kilanowski presented their latest circulation modeling of Lake Whatcom and what the data shows about water quality and the spread of invasive species.

The goal of the MRC with education and outreach is to continue the MRC's engagement is local program and opportunities to help inform the community about marine related topics and raise the awareness of the MRC. The MRC needs to continue to reach more people in the community to attend the general meetings and participate in featured speaker events. Larger speaker events (symposiums or half-day forums) attract more people. The Speaker Series Subcommittee will continue to assess effective ways to reach more people.



North Chuckanut Bay Salmon Viewing Tour

The MRC coordinated one education and outreach event at N. Chuckanut Bay during this grant period. In November of 2015, the MRC partnered with the Nooksack Salmon Enhancement Association (NSEA) to conduct a Salmon Tour at North Chuckanut Bay. This public event provided an opportunity for residents of the area and visitors to learn about the spawning chum salmon that return every fall to Chuckanut Creek and about MRC efforts to improve water quality in the bay. This event was a part of NSEA's popular series of public Salmon Tours that have been offered every fall for three years during the spawning season of chum salmon.

Approximately 40-50 people attended the event, with many walking down from the local community and others taking a NSEA shuttle from the North Chuckanut Trailhead.

Attendees were greeted by five naturalists from NSEA, as well as MRC volunteers who conducted beach walks and shared information about the MRC's water quality monitoring program. Additionally, a representative from Whatcom County Health was on hand to educate folks about the relationship between water quality and healthy shellfish harvest areas. The City of Bellingham provided an historical overview of N. Chuckanut Bay, including photos and stories.



MRC Member Doug Stark educates attendees about nearshore life in Chuckanut Bay. Photo credit: Rachel Benbrook



Chum salmon carcass on the beach at North Chuckanut Bay. Photo credit: Rachel Benbrook.

During the event, a few fish were observed jumping in the bay and two chum carcasses were visible on the beach, providing a great opportunity to talk to visitors about salmon and their use of nearshore habitats. Several visitors identified themselves as residents of the Chuckanut Village community, and it was great to see this target audience represented at the event. Visitors were treated with hot drinks, snacks, and hands-on activities including a button maker where kids could decorate buttons that read “Proud to be a North Chuckanut Bay Steward”. This event was sponsored by the Whatcom Community Foundation. A copy of the invitation is included in this report.

Summary

Education and Outreach continues to lie at the heart of all MRC projects. Partnerships with other local organization to plan and coordinate events make outreach events more successful. The MRC needs to further develop their display to make to more attractive and interactive. At this time the display is cumbersome to transport and is getting worn. The MRC also needs to determine which outreach events are most successful for them as they take a lot of time and energy to participate in. Several MRC members are not interested in standing by the MRC booth at general events, so the MRC needs to make decisions on how they want to become better known in the community. Smaller events seem to allow the MRC to deliver their message and communicate with the general community about MRC activities.