Project Title/Task: 1.5 Annual Report

Period covered: October 1, 2022 – September 30, 2023

Date: April 16, 2024

Grant No: SEANWS-2023-CICoCD-00005

County: Clallam





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ANNUAL REPORT 2 0 2 3



Oct 2022 - Sep 2023









ABOUT THE CLALLAM MRC

The Clallam County Marine Resources Committee (Clallam MRC) was established in 1998 as part of the Northwest Straits Marine Conservation Initiative to involve citizens in protecting and restoring marine resources. We work on improving shellfish harvest areas, habitat protection, salmon recovery, and reducing impacts on marine resources. The committee also engages in environmental monitoring, manages projects like marine debris removal and oil spill response training, restores Olympia oysters, educates the community on environmental issues, and sponsors student interns. The MRC is working toward benchmarks for marine habitats, marine life, water quality, community engagement, and climate change.

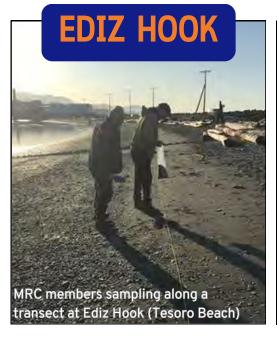


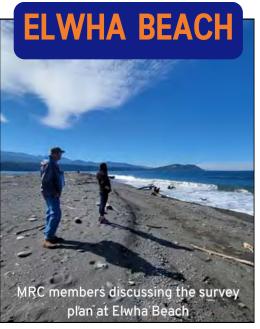
Tim Cochnauer ------ Chair and representing the Community At-Large Ann Soule ------ Vice Chair and representing Commissioner District II Alan Clark ------ NWSC Representative and representing the Community At-Large Mary Sue Brancato ----- Alternate representing the Community At-Large Ray Kirk ------ Alternate representing the Community At-Large Chris Burns ----- Representing the Jamestown S'Klallam Tribe Robert Knapp ------ Alternate representing the Jamestown S'Klallam Tribe Justin Stapleton ------ Representing the Lower Elwha Klallam Tribe Allyce Miller ------ Alternate representing the Lower Elwha Klallam Tribe Ed Bowlby ------ Representing the Academic Community Ioana Bociu ------ Alternate representing the Academic Community Bob Vreeland ----- Representing Conservation & Environmental Interests Nancy Stephanz -----Alternate representing Conservation & Environmental Interests Jeff Ward ----- Representing Commissioner District I Lance Vail ------ Alternate representing Commissioner District I Lvn Muench ----- Alternate representing Commissioner District II Mike Doherty ------ Representing Commissioner District III Jesse Waknitz ----- Representing the Port of Port Angeles Katharine Frazier ----- Alternate representing the Port of Port Angeles Ann Stafford ----- Representing Marine Recreation & Tourism Interests Helle Andersen ------ Alternate representing Marine Recreation & Tourism Interests Arnold Schouten ----- Representing the Development Community Lisa Law ------ Alternate representing the Development Community LaTrisha Suggs ------ Representing the City of Port Angeles Navarra Carr ----- Alternate representing the City of Port Angeles Meggan Uecker ------ Representing the City of Sequim Harmony Rutter ----- Alternate representing the City of Sequim Cathy Lear ----- ex officio, Clallam County Habitat Biologist Rebecca Mahan ----- ex officio, MRC Coordinator & Clallam County Habitat Biologist

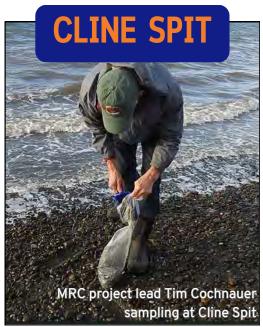
FORAGE FISH MONITORING

GOAL: To provide a better understanding of the forage fish populations within the Salish Sea by performing citizen science monitoring and raising awareness about the ecological importance of forage fish.

HIGHLIGHTS: MRC members sampled monthly for forage fish eggs across four locations: Ediz Hook, Cline Spit, and Elwha Beaches east and west - finding a total of 1,505 eggs.







3

1

surf smelt eggs sand lance egg

In April 2017, the MRC began sampling for forage fish eggs at two restored sites on Ediz Hook, in partnership with the Lower Elwha Klallam Tribe. The sampling is now focused on Tesoro Beach, where low numbers of forage fish eggs were found during October, January and July.

4

1

surf smelt eggs sand lance egg

The MRC first sampled east of the Elwha River's mouth, and in 2021 expanded to a site west of the river's mouth after WDFW's surveys there ended. All eggs found at these sites in 2023 were west of the river's mouth.

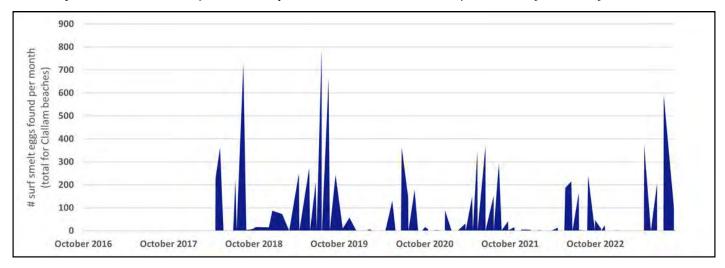
1,495

surf smelt eggs

sand lance egg

Since 2018, Cline Spit has been surveyed monthly as a "reference site", as survey efforts reliably find surf smelt eggs here - particularly during summer. In 2023, 94% of the surf smelt eggs found here came from May - September surveys.

Forage fish data are both processed by and shared with WDFW, as part of a regional long-term dataset.



KELP MONITORING

GOAL: To monitor the size and density of kelp canopies during summer low-tide events, and develop a georeferenced database of kelp abundance and distribution for the SoundlQ database and sharing with WDNR.

HIGHLIGHTS: Four kelp surveys conducted between August and September at Freshwater Bay and Clallam Bay, showing healthy beds overall.

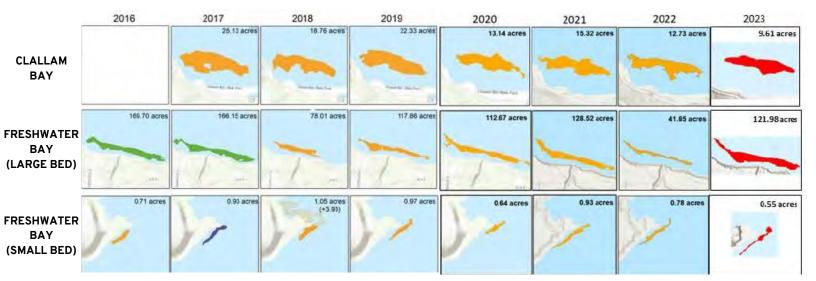


MRC members and volunteers conducted three kelp surveys at Freshwater Bay in August 2023. The entirety of the kelp bed -- Southwest of Bachelor Rock as well as Northeast of the Rock -- was dominated by bull kelp (*Nereocystis leutkeana*). The kelp bed was well connected around the outer edge of Bachelor Rock, as well as through the gap between Bachelor Rock & the shoreline. This made for a larger kelp bed area than what is included in just the main surveyed bed, continuous with the bed of bull kelp present in the bay North of the Rock. In 2022 and previous years, the northernmost bed was composed of a mixture of giant kelp and bull kelp; this year, giant kelp was entirely absent.



The MRC conducted one survey of Clallam Bay this year, given the constraints of weather and tides. This year, the bed again consisted of a mix of giant kelp and bull kelp, with giant kelp more dense at the center of the bed. The kelp bore many bryozoan colonies on their blades, as well as red and brown epiphytic algae. The kelp seemed to be healthy overall, and quite thick and dense throughout the main bed. However, the bed size of 9.61 acres was the lowest ever measured for this bed by the Clallam MRC. Volunteers were forced to exclude the southern portion of this bed due to unsafe wave conditions, so this figure does not account for the entirety of the Clallam Bay kelp bed.

The survey data will be incorporated into the NWSC SoundIQ database and used to track the size and extent of the kelp beds in the Strait of Juan de Fuca. The information will also be shared with WDNR.



PIGEON GUILLEMOT MONITORING

GOAL: To monitor pigeon guillemots' nesting success and foraging behavior in Clallam County.

HIGHLIGHTS: Two new colonies were added for monitoring in 2023, for a total of eight pigeon guillemot colonies monitored by 3 MRC members and 31 community volunteers.

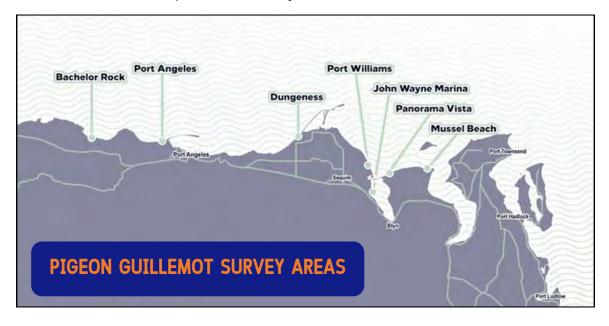
The pigeon guillemot is considered an indicator species of nearshore health, since it feeds primarily on forage fish such as gunnels and pricklebacks, and other small marine creatures which it catches by diving beneath the surface. Clallam MRC initiated pigeon guillemot breeding surveys in the county in 2016, in collaboration with Island MRC and Olympic Peninsula Audubon Society. Pigeon guillemots lay eggs in the early summer, and by the end of June the birds are busy providing fish for the juveniles in the burrows.



MRC members and a large crew of volunteers continued their efforts to survey pigeon guillemot populations in 2023. The six existing sites were monitored beginning the week of June 4th, and two new sites were added in 2023 - the Port Angeles Wharf, and the Port Angeles McDonald Bluff colonies. All data are provided to the regional Salish Sea Guillemot Network.

number of pigeon guillemot colonies surveyed in 2023

number of volunteers for quillemot surveys in 2023



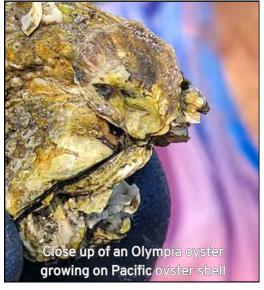
OLYMPIA OYSTER RESTORATION

GOAL: To contribute to the Puget Sound wide effort to restore sustainable Olympia oyster populations in Puget Sound.

HIGHLIGHTS: Four population surveys of the restoration site in Sequim Bay, in partnership with Jamestown S'Klallam Tribe biologists. Additional restoration is needed going forward, as the surveys showed poor recruitment.

The Clallam MRC is part of a regional effort to restore the native Olympia oyster. One acre of tidelands has been established in Sequim Bay as a restoration site, where the MRC has been focusing its efforts since 2018. In partnership with the Jamestown S'Klallam Tribe, the MRC conducted four population surveys in 2023, showing poor recruitment of juvenile oysters (likely due to the 2021 heat dome, or lack of substrate). The MRC will continue to focus going forward on restoring this habitat through the addition of Pacific oyster shell - a preferred substrate for juvenile Olympia oysters.







8

mean Olympia oyster density (oysters / m2) at the restoration site

10,164

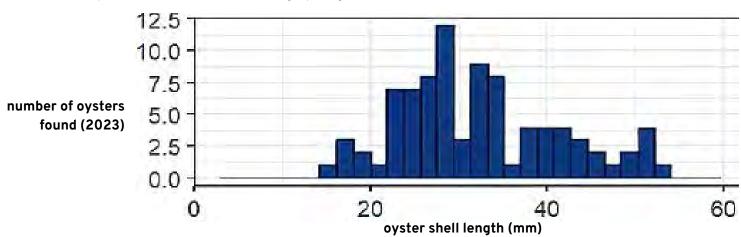
+/- 6,081

estimated Olympia oyster population at the restoration site

68%

estimated decline in Olympia oyster population at the restoration site since 2019

Jamestown S'Klallam Tribe biologists analyze this data to determine population and recruitment trends. The low number of oysters under 20mm found in 2023 indicates low recruitment. The MRC is continuing its efforts to spread Pacific oyster shell to improve available habitat for Olympia oyster recruits.

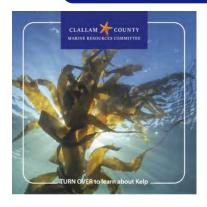


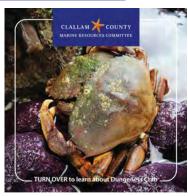
EDUCATION AND OUTREACH

GOAL: Successful engagement of the public, students, and citizen scientists in emerging issues including climate change, toxins including marine debris, fossil fuel transportation, and shoreline development within Clallam County.

HIGHLIGHTS: The MRC continued to distribute educational materials, attend local events, steward a public beach, and provide information for shoreline property owners.

COASTERS





For the second year, MRC members distributed custom drink coasters to local eateries and community establishments. Coasters include photos and critter information written collaboratively by MRC members, and link users to the MRC website. Over 3,000 coasters have been distributed to date in 6 designs. The MRC also adopted a new logo and began developing new educational displays for outreach events in 2023.



The Clallam MRC engages in community outreach events and festivals, promoting marine stewardship and sharing information about the MRC itself. In September 2023, pictured above, MRC members hosted a table at the Dungeness River festival. All 3rd - 5th graders from City of Sequim schools attended, many enjoying the specimens and information shared by MRC members.



Since 2016, the MRC has been stewarding the public beach at the mouth of the Elwha River - beginning with marine debris removal, and shifting focus in 2017 to sponsorship of a Sanikan and dog waste bags to reduce fecal contamination. MRC member Helle Andersen replenished these resources and conducted surveys on beach use in 2023, providing a more complete understanding of how the public uses this coastal access point - including for dog walking and surfing.



The MRC continues to collaborate with the Northwest Straits Initiative on the Shore Friendly program, educating shoreline landowners on best stewardship techniques. In March 2023, the Clallam MRC sponsored a Shore Friendly workshop at the Dungeness River Nature Center. This year's well-attended workshop focused on the topic of "Living With Sea Level Rise".

BIOTOXIN MONITORING

GOAL: To monitor for biotoxins in Clallam County waters through shellfish biotoxin and sanitary condition surveys, and through participation in the Sound Toxins HAB monitoring program.

HIGHLIGHTS: MRC member Nancy Stephanz participated in weekly Sound Toxins surveys for harmful algal blooms, in collaboration with Feiro Marine Life Center. MRC members conducted routine shellfish sampling for biotoxins.



Biotoxins intermittently present at beaches can be impossible to detect without lab testing, and are a serious issue as the toxins can accumulate to dangerous levels within shellfish, This can make people ill if consumed, and has even been a cause of death in the past. Because of deaths in 1942, WDFW (Washington Department of Fish and Wildlife) closed the strait to recreational shellfish harvest from April - October. This measure was replaced in by WDFW in partnership with DOH (Department of Health), using a management system based on gathered biotoxin data. Clallam MRC project lead Bob Vreeland collected shellfish samples every two weeks from several locations, helping to enable the re-opening of recreational shellfish harvest. Clallam MRC has monitored Pillar Point for shellfish biotoxin since 2017, contributing to reopening 27 acres of commercial shellfish harvest area, and this effort continued in 2023 by reporting the sanitary conditions, and collecting shellfish for biotoxin analysis every two weeks. In 2022, Clallam MRC added to the monitoring rotation another site at Freshwater Bay, to be surveyed every two weeks, helping to generate data informing commercial and recreational shellfish harvest safety in the area. Access the shellfish safety map here.



The Sound Toxins project is a regional, collaborative effort to monitor phytoplankton, particularly those associated with harmful algal blooms that are toxic to humans. MRC members Nancy Stephanz and Mary Sue Brancato have collaborated since July 2023 with Feiro Marine Life Center to establish a Sound Toxins monitoring station in Port Angeles Harbor. The team samples weekly using both a plankton tow and a whole water sample, and shares the data to a central Sound Toxins database. Harmful species have unfortunately been located at various levels during this effort, giving regional scientists better tools with which to understand and manage harmful algal blooms.

MRC OPERATIONS

GOAL: To carry out administrative functions in support of the mission, including work plan preparation, developing and preparing grant proposals, programmatic staff support, project monitoring and performance tracking, coordinating education and internship programs, planning, and participating in training opportunities.

Clallam MRC Meetings and Communication -The Clallam MRC met monthly to discuss project items and listen to informative presentations from various invited guests. Meetings were held in a hybrid format, with the opportunity to attend either in-person or via Zoom. Clallam MRC staff prepared and distributed meeting agendas and minutes. One special meeting was held on February 23 - a retreat for MRC members to collaborate on planning and prioritizing future projects.

Grant Administration - Clallam MRC staff wrote regular progress reports, tracked and administered the budget, and ensured projects were supported and reaching their stated goals.

Website Maintenance -The Clallam MRC maintained its <u>website</u> with information on past and upcoming meetings, and current and completed projects. The website was regularly updated with meeting agendas and approved minutes, as well as current news. In February of 2020, Clallam MRC initiated their <u>Facebook page</u> to post weekly information about MRC projects and activities. By April 2024, the Facebook page had 458 followers - an increase of more than 100 in the past year.

Annual Workplan Development - The Clallam MRC developed a <u>work plan</u> to guide the work and priorities of the Clallam MRC for the 2023-2024 grant year.

Strategic Plan - The Clallam MRC adhered to the 2019-24 Strategic Plan.

Training - Clallam MRC members and staff were encouraged to participate in trainings relevant to the Clallam MRC's goals and projects.

- Coordinator Rebecca Mahan attended the Climate Change and Shellfish Impacts Workshop planned by the Jamestown S'Klallam Tribe.
- Nancy Stephanz and Mary Sue Brancato attended trainings for the Sound Toxins program.
- Jeff Ward, Ed Bowlby, and Coordinator Rebecca Mahan attended a 2-day training on oiled bird/wildlife response held by International Bird Rescue.
- Nancy Stephanz attended the regional meeting of the Sound Toxins program.

Representation at NWSC Meetings - Alan Clark served as the Clallam MRC representative to the Northwest Straits Commission. The Representative attended the monthly meetings, which were both online and in-person at various times.

Presentations to Local Government Officials - In March 2023, Northwest Straits Commission Director Lucas Hart gave a presentation to the Clallam County Board of Commissioners discussing the MRC's structure, projects, funding, and support needs.

Participation in Local Integrating Organization Meetings - As a member of the steering group Rebecca Mahan, Clallam MRC Coordinator, attended the quarterly steering group meetings and the ERN/LIO quarterly meetings.

THANK YOU TO OUR PARTNERS

THANK YOU to all the following organizations, who have collaborated on the MRC's projects through funding, staff and volunteer support, project development, and logistical assistance.













































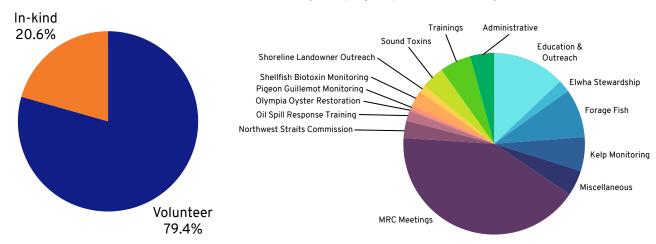






FUNDING AND SUPPORT

The Clallam MRC depends on its members and community volunteers. During the 2022-2023 grant year, Clallam County MRC members and community volunteers contributed 892.25 hours for a total value of \$33,575.37 (@37.63/hr). The MRC also received 231.5 hours of in-kind contributions from community and project partners, totaling \$8,711.35.



In the 2022-2023 grant year, the Clallam MRC received funding from Washington State, the US Environmental Protection Agency (EPA), and the National Oceanographic and Atmospheric Administration (NOAA) through grants administered by the Northwest Straits Commission (NWSC). Thank you to our funders!









GET INVOLVED

Resources for those who would like to learn more about the Clallam MRC or get involved in our work:

WEBSITE

clallamcountymrc.org

- Project information
- MRC news
- Event schedule
- Supporting documents

MEETINGS

3rd Monday each month

Always open to the public

Details on MRC calendar

EMAIL

MRC Coordinator Rebecca Mahan rebecca.mahan@clallamcountywa.gov

MRC Admin Specialist Amelia Kalagher amelia.kalagher@clallamcountywa.gov