Clallam County Marine Resources Committee 2021 Annual Report



Prepared by Clallam County Marine Resources Committee











About the Clallam MRC

The Clallam County Marine Resources Committee (Clallam MRC) was established by a resolution of Clallam County as a result of the 1998 Northwest Straits Marine Conservation Initiative. The Initiative combines data-driven science with grassroots involvement by citizens in an effort to promote local solutions that protect and restore marine resources in Clallam County.



We work to discover collaborative ways to improve shellfish harvest areas, protect marine habitat, support salmon and forage fish recovery and explore resource management alternatives to reduce impacts on marine resources. We also provide input to Clallam County Board of Commissioners, when appropriate, to ensure the protection and restoration of marine resources. In addition to participating in a variety of environmental monitoring programs, we manage and support projects focused on removing marine debris and derelict fishing gear, training citizens to safely respond to an oil spill, restoring Olympia oysters, and educating the community on emerging environmental issues. We also sponsor student interns to work on Clallam MRC projects to foster their interest in natural resource careers. Early on the Northwest Straits Commission (NWSC) developed several benchmarks for the Initiative including marine habitats, marine life, water quality and engagement of the local community through citizen science and educational outreach. In 2019 the members added climate change as a benchmark. The table below shows how the MRC tasks support the benchmarks.

In 2020-21 The Clallam MRC received funding from Washington State and US EPA through the Puget Sound Partnership and NWSC.

	NWSC Benchmarks					
Clallam MRC Grant Tasks	Marine Habitats	Marine Life	Marine Water Quality	Citizen Science	Education & Outreach	Climate Change
Operations						THE REAL PROPERTY.
Educational Outreach					*	*
Oil Spill Response	*	*	.		*	
Marine Debris/Derelict Gear	*	*			*	
Olympia Oyster Restoration	*	*	.	*	*	*
Forage Fish Survey	*	*		*	*	*
Kelp Monitoring	*	*		*	*	*
Pigeon Guillemot Survey	*	*		*	*	*
Shellfish Biotoxin Monitoring	*	*	.		*	

Membership

The Clallam MRC is a balanced team of members comprised of local citizens representing academia, the development community, conservation and environmental interests as well as Makah, Lower Elwha Klallam and Jamestown S'Klallam tribes, City of Port Angeles and City of Sequim, the Port of Port Angeles and the county districts.

Member	Interest/Representation			
Current Members: October 2020				
Tim Cochnauer, Chair	At-Large			
Robert Knapp	Jamestown S'Klallam Tribe			
Alan Clark, NWSC Representative	At-Large			
LaTrisha Suggs	Port Angeles City Council			
Lyn Muench	Commissioner District II			
Mike Doherty	Commissioner District III			
Jesse Waknitz	Port of Port Angeles			
Ann Stafford	Marine Related Recreation & Tourism			
Ann Soule	Sequim City Council			
Arnold Schouten	Development Community			
Bob Vreeland	Conservation/ Environmental			
Jeff Ward	Commissioner District I			
Ed Bowlby	Academia			
Justin Stapleton	Lower Elwha Klallam Tribe			
Open position	Makah Tribe			
	Alternates			
Chris Burns	Jamestown S'Klallam Tribe			
Navarra Carr	Port Angeles City Council			
Harold Kline	Commissioner District III			
Ioana Bociu	Academia			
Lance Vail	District Alternate			
Nancy Stephanz	Conservation/Environmental Issues Alternate			
Ray Kirk	At-Large Alternate			
Lisa Law	Development Community Alternate			
Mary Sue Brancato	At-Large Alternate			
open	Makah Tribal Alternate			
open — — — — — — — — — — — — — — — — — — —	Marine Related Recreation and Tourism Alternate			
open	Sequim City Council			
	Ex-Officio Members			
Mary Ellen Winborn	Director, Clallam County Dept. Community Development			
Cathy Lear	Habitat Biologist Clallam County			
Rebecca Mahan	CMRC Coordinator / Habitat Biologist			

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 five invited guests. All meetings were held online because of Covid-19 restrictions. Clallam MRC staff prepared and distributed meeting agendas and minutes.

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 website containing information on past and upcoming meetings, and current and completed projects (http://www.clallamcountymrc.org/). The website was regularly updated with meeting agendas and approved minutes, as well as current news. In February of 2020, Clallam MRC initiated their Facebook page to post weekly information about MRC projects and activities. By end of 2021, the Facebook page had 324 followers.

Annual Workplan Development – The Clallam MRC developed a work plan to guide the work and priorities of the Clallam MRC for the 2020-2021 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. Because of Covid-19 restrictions, the annual MRC conference was cancelled. Ed Bowlby led the online pigeon guillemot survey training. In December 5, MRC Members plus Coordinator attended and received their 8-hour Oiled Wildlife HAZWOPER (Hazardous Waste Operations and Emergency Response) Certification.

Representation at NWSC Meetings – Alan Clark served as the Clallam MRC representative to the NWSC. The Representative attended the monthly meetings, which were held online due to Covid-19 restrictions.

Presentations to Local Government Officials: Due to Covid-19, restrictions there were not any in person meetings with our local Board of County Commissioners.

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.

Education and Outreach

Goal: ♦ Successful engagement of the public, students, and citizen scientists in emerging issues including climate change, toxics including marine debris, fossil fuel transportation and shoreline development within Clallam County that have the potential to adversely affect marine life.

<u>Covid-19</u>: ♦ Clallam MRC's education and outreach events were severely impacted by Covid-19. All festivals and the Ocean Science event in Clallam County were cancelled. All other events or programs were adapted to Covid -19 restrictions on social engagement.

Intern Program

Since 2010 Clallam MRC has provided paid internships to high school and college students to work with scientists and other professionals on current environmental projects.

For the last six years, the internships have been tied into the four major categories of Clallam MRC's projects: nearshore, water quality, marine species, and education & outreach.

In 2021 the Clallam MRC sponsored three internships associated with the following projects 1) green crab capture and removal in Neah Bay led by the Makah Tribe, 2) smolt trap on Tumwater Creek and 3) Education and Outreach.

Community Events

2021 community events included:

- MRC Sponsored Webinar on kelp with Dr. Tom Mumford.
- West Elwha Beach stewardship.
- Online Intern Celebration with Presentations from our Interns.
- Educational Outreach cards prepared by an intern were printed and distributed to local businesses.

The internships culminate in the Intern Celebration – a public event that highlights the interns and the work done by Clallam MRC. Because of Covid-19 restrictions, the event at the Feiro Marine Life Center





was cancelled and the celebration was moved to an online platform. During the August monthly MRC meeting, the interns presented their projects in Power Point form to MRC members and local residents.

Fellow Program

In 2020 the Clallam MRC expanded their educational outreach to college students by offering a fellowship. The decision was made partly because of Covid-19 impacts, but also because the leaders

on the kelp monitoring project expressed interest in hiring a more mature student to avoid having to retrain an intern and thereby be able to accomplish more on the project. The fellowship focused on the kelp and the pigeon guillemot monitoring projects but the fellow was also tasked with administrative tasks such as writing Facebook posts, running online meetings and assisting with other projects on an as needed basis. In 2021, the Clallam MRC



was without a Coordinator for 6 months. Due to this, the Fellowship continued until July 2021.



West Elwha Beach Stewardship

The Stewardship Program of West Elwha Beach was initiated in summer 2015 and it quickly became apparent that the main issue was dog and human waste. In winter 2017 the Clallam MRC decided to fund a Sanikan, dog waste disposal bins and a dog waste bag dispenser to encourage the visitors to use the facilities instead of leaving waste on the beach and in the bushes. The Clallam MRC continued to maintain the Sanikan and dog waste facility in 2021. Twice monthly the bag dispenser are checked and refilled with bags. A total of approximately 4,000 bags are dispensed every year.

What's Next?

Clallam MRC will continue to conduct educational outreach through the intern program and online events as long as Covid-19 restrictions are in effect. When possible, Clallam MRC will resume the educational outreach through the Ocean Science program, forums, workshops, and participation in festivals. For 2021 high-priority topics include climate change, toxins in the marine environment, fossil fuel transport, shoreline development and Derelict Vessel Removal.

Derelict Fishing Gear

<u>Goal</u>: ♦ Educate recreational crabbers about the impacts of lost crab pots and how to catch crabs correctly.

Since its inception the Clallam MRC has been involved in removing debris from our marine waters. In the early 2000s the focus was on derelict fishing gear, but as that effort was taken over by the NWSF the Clallam MRC focused on marine debris removal along the shores of the Strait of Juan de Fuca.

In 2017, as part of the "Catch More Crab" program led by Snohomish MRC, the Clallam MRC started conducting educational outreach to recreational crabbers about how to correctly set your crab pot so not to lose it and thereby catch more crab. Our goal is zero lost crab pots in Puget Sound and for everyone to have a successful day on the water.

Accomplishments

- Educational kits and posters were distributed to recreational crabbers, Port Angeles Marina and Clallam County Parks.
- Clallam MRC's Facebook posts promoting proper crabbing techniques reached 948 people and 32 people engaged.

Outreach to recreational crabbers in 2021 through the NWSF and their NOAA Marine Debris grant was cancelled due to Covid-19 restrictions. Because the Clallam MRC places great importance in the



educational outreach to recreational crabbers the members decided to conduct a very limited outreach by placing educational kits in the retail store Swains in Port Angeles and posting information on our website and Facebook page. We gave posters to Clallam County Parks that they posted.

What's Next?

Clallam MRC will continue educational outreach to recreational crabbers.

Oil Spill Response

<u>Goal</u>: ♦ Partner with federal, state and non-profit organizations to offer annual oil spill response trainings to local citizens.

In 2021 Clallam MRC coordinated/ hosted or attended two educational outreach events focusing on oil spill preparedness. The events included:

- A Presentation by Wendy Buffet, the Strait of Juan de Fuca lead for the Dept. of Ecology. Wendy gave a detailed update of Strait of Juan de Fuca Geographic response Plans.
- 8-hour HAZWOPER Oil wildlife training.

Annual HAZWOPER (Hazardous Waste Operations & Emergency Response) certification is a requirement for participation in an oil spill response. The participants learned about safety & health, use of personal protective equipment, site characterization and the organization of an oiled wildlife response.



Accomplishments

- ♦ 8 volunteers received the 8-hour HAZWOPER and Oiled Wildlife certification in 2021.
- Since 2010 more than 550 volunteers have received HAZWOPER training and more than 400 volunteers have received oiled wildlife training.

What's Next?

Clallam MRC will continue to collaborate with its partners to offer annual HAZWOPER and oiled wildlife trainings.

Forage Fish Monitoring

Goals: ♦ 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.

In 2021 Clallam MRC continued collaborating with Washington Department of Fish & Wildlife (WDFW) on the forage fish spawning project. Monthly samples were collected at the index site Cline Spit and at the restoration site on Ediz Hook. Sampling resumed in July of 2021 on east and west Elwha River mouth beaches.

Unlike previous years the intensive annual sampling event was cancelled by the WDFW because of Covid-19 restrictions.

WDFW is the lead agency analyzing the data to improve the understanding of the ecology of forage fish and their importance in the food web. All the forage fish data collected by WDFW, the MRCs and other organizations is available online.

Accomplishments

- ♦ Conducted 11 monthly surveys at Cline Spit, a WDFW index site.
- → Conducted 11 monthly surveys at restoration site on Ediz Hook.
- Re-established sampling on Elwha River mouth east and west beaches. Conducted 6 surveys combined.



What's Next?

The Clallam MRC will continue to monitor forage fish at numerous sites along the Strait of Juan de Fuca and participate in the intensive annual sampling event to better understand this important component to the marine food web.

Olympia Oyster Restoration

<u>Goal</u>: ♦ Contribute to the Puget Sound-wide effort to restore sustainable Olympia oyster populations in Puget Sound.

After the busy 2019 restoration season the 2020 season at the two restoration sites was quiet giving the Olympia oyster populations time to respond to the blank shells spread in 2019.

In August 2021 three population surveys were conducted at the restoration sites. This was the year to see if the restoration effort had met the goal of 2 acres by 2020. Unfortunately, Olympia oyster populations covered approximately 1.60 acres of tidelands -0.4 acre short of the goal.



Accomplishments

- Collaborated with Jamestown S'Klallam Tribe to conducted surveys at the two restoration sites to assess population abundance and size distribution of the Olympia oysters.
- Assisted Jefferson County MRC to conduct population survey at their restoration site in Discovery Bay.

However, to investigate a notable increase in Olympia oysters observed by Jamestown's Natural Resources staff throughout the Blyn tidelands, a large-scale survey of Olympia oysters throughout Jamestown's tribal tidelands was conducted in summer of 2020 and 2021. The purpose of this tideland-wide survey was to identify "hot spots" of Olympia oysters and their preferred habitat at the head of Sequim Bay.

In July, an additional survey was conducted to evaluate the effect of the June 26-28, 2021 heat wave event, "heat dome", on the 1.5 acre Olympia oyster restoration site. Results from the tideland-wide survey and the post-heat dome surveys will be shared with Clallam MRC when they become available.

What's Next?

Clallam MRC and its partners will continue to monitor and enhance the two Olympia oyster restoration sites in Sequim Bay.

Kelp Monitoring

Goal: ♦ Monitor the size and density of kelp canopies during low-tide events between July and September and develop a georeferenced database of kelp abundance and distribution that can be incorporated into the Sound IQ database and used by Washington State Department of Natural Resources.

Accomplishments

- Conducted surveys of three kelp beds in Freshwater and Clallam Bay.
- → For 2 months measured water temperature at two levels in a kelp bed.
- ♦ Took numerous underwater videos.
- ♦ Submitted three maps to NWSC to be incorporated into SoundIQ.

In 2015 Clallam MRC joined the NWSC kelp monitoring project and the effort was continued 2021 by conducting kayak based surveys of one bed in Clallam Bay and two beds in Freshwater Bay. In addition, the surveyors deployed two Hobo temperature monitors for two months in Freshwater Bay and took numerous underwater videos.

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





What's Next?

The Clallam MRC will continue monitoring the kelp beds in Freshwater and Clallam Bay, along the Strait of Juan de Fuca.

Pigeon Guillemot

<u>Goal</u>: ♦ Monitor pigeon guillemots nesting success and foraging behavior in Clallam County.

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 it catches by diving beneath the surface.

In 2016 Clallam MRC initiated pigeon guillemot breeding surveys in the county in collaboration with Island MRC and Olympic Peninsula Audubon Society. Pigeon guillemots lay eggs in the early summer, and by end of June the birds are busy providing fish for the juveniles in the burrows. In 2021, volunteers surveyed 14 separate colonies between Freshwater Bay and Mussel Beach. A total of 32 volunteers surveyed the colonies once a week for one hour between June and September.





Accomplishments

- → Partnered with Olympic Peninsula Audubon Society.
- ♦ Organized a team of 32 volunteers.
- Surveyed 14 pigeon guillemot colonies throughout the summer months.
- The data was incorporated into a regional database and made available to the public at http://pigeonguillemotdata.org/clallam/2020/

What's Next?

Clallam MRC will continue monitoring pigeon guillemot colonies in Clallam County. The number of colonies surveyed each year will depend on the number of volunteers.

Shellfish Biotoxin Monitoring

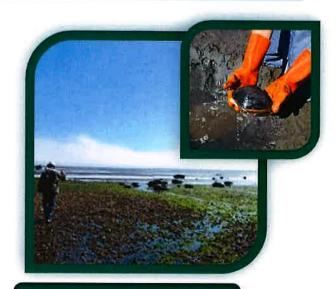
Goal: ♦ Monitor for shellfish biotoxin and the sanitary conditions at Pillar Point Park.

In 1942, three people died after eating shellfish contaminated with PSP. The shellfish were collected along the Strait of Juan de Fuca and because of the deaths WDFW closed the Strait to recreational shellfish harvest from April 1 to October 31 each year.

In 2002, WDFW and DOH worked to replace this regulatory closure with a management system based on actual biotoxin data. Clallam MRC collected shellfish samples every two weeks from several locations west of Dungeness Spit. Based on this effort recreational summertime shellfish harvesting in the Strait was opened up for the first time in more than 40 years.

In 2017, DOH and CCEH asked the Clallam MRC if the members would be interested in monitoring the public beach at Pillar Point west of Port Angeles. The monitoring included collecting shellfish for biotoxin analysis and reporting the sanitary conditions of the beach every two weeks. In 2012 the public beach had been downgraded from "approved" to "conditionally approved" because of poor water quality stemming from bacterial pollution. "Conditionally approved" meant that the beach was closed to shellfish harvest during high risk parts of the year.

The monitoring efforts contributed to reopening 27 acres of commercial shellfish harvest area near Pillar Point in December 2017. The Clallam MRC continued the monitoring efforts in 2021.



Accomplishments

- Partnered with Washington Department of Health and Clallam County Environmental Health.
- Collected shellfish samples for biotoxin analysis every two weeks between April and September.
- Monitored the sanitary conditions at Pillar Point Park every two weeks between April and September.
- The biotoxin data was made available to the public at DOH's website https://fortress.wa.gov/doh/biotoxin/b iotoxin.html

What's Next?

Clallam MRC will continue collecting shellfish and monitoring the sanitary conditions at Pillar Point Park each year between April and September. Clallam MRC also hopes to add Freshwater Bay to the sampling sites.

On the Horizon

In addition to the continuation and development of existing projects as highlighted throughout this report, the Clallam MRC is looking forward to focusing on the following efforts in 2022.

With the COVID induced 'shelter-in-place', ZOOM meetings, and reduced direct contact with committee members and the general public waning, the Clallam County Marine Resources Committee activities are slowly returning to 'normality' to help protect and preserve our important marine resources. The committee members, alternates, and volunteers have re-initiated collection of field data and interaction with the local community.

As the committee continues with ongoing projects we anticipate developing additional programs addressing derelict vessels, community education and outreach regarding impacts of climate change on near shore communities, and expanding development of educational materials. –*Tim Cocnhauer, Chair, Clallam MRC*

- Climate Change/ Sea Level Rise
 - Homeowner workshops.
- Derelict Vessel removal
 - o Implement along with WDFW removal of derelict vessels in Clallam County.
- Derelict Crab pot removal
 - o Continue to collaborate with the NWSF to remove derelict crab pots from Sequim Bay.
- Outreach Cards (Coasters)
 - Expand and create a set of varying marine critters/issues cards.





Partners

Through the years Clallam MRC has collaborated with numerous partners. The logos below list the organizations and agencies Clallam MRC partnered with in 2021.

















partners in marine conscruation





























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