

Clallam County Marine Resources Committee 2019 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. In 2019 we celebrated our 20th anniversary. 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. At a MRC retreat in 2019 the members added climate change as a benchmark. The table below shows how the MRC tasks support the benchmarks.

In 2018-19 The Clallam MRC received funding from Washington State; US EPA through the Puget Sound Partnership and NWSC; from the Northwest Strait Foundation (NWSF); and the City of Port Angeles Lodging Tax Grant.

Clallam MRC Grant Tasks	NWSC Benchmarks					
	Marine Habitats	Marine Life	Marine Water Quality	Citizen Science	Education & Outreach	Climate Change
Operations						
Educational Outreach					❖	❖
Oil Spill Response	❖	❖	❖		❖	
Marine Debris/Derelict Gear	❖	❖			❖	
Olympia Oyster Restoration	❖	❖	❖	❖	❖	❖
Forage Fish Survey	❖	❖		❖	❖	❖
Kelp Monitoring	❖	❖		❖	❖	❖
Pigeon Guillemot Survey	❖	❖		❖	❖	❖
Shellfish Biotxin 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 2019	
Bob Vreeland, Chair	Conservation & Environmental Interests
Robert Knapp, Vice-Chair	Jamestown S'Klallam Tribe
Alan Clark, NWSC Representative	At-Large
Sissi Bruch, NWSC alternate	Port Angeles City Council
Lyn Muench	Commissioner District II
Mike Doherty	Commissioner District III
Jesse Waknitz	Port of Port Angeles
Pete Schroeder	Marine Related Recreation & Tourism
Ann Soule	Sequim City Council
Arnold Schouten	Development Community
Tim Cochnauer	At-Large
Jeff Ward	Commissioner District I
Ed Bowlby	Academia
Open position	Lower Elwha Klallam Tribe
Greig Arnold	Makah Tribe
Alternates	
Chris Burns	Jamestown S'Klallam Tribe
Jim Moran	Port Angeles City Council
Ex-Officio Members	
Mary Ellen Winborn	Director, Clallam County Dept. Community Development
Cathy Lear	CMRC Coordinator
Helle Andersen	CMRC Project Coordinator
Former Members: Served in 2018-19	
Mike McHenry	Lower Elwha Klallam Tribe
Kathy Cooper	Marine Trades
Peggy McClure	Sequim City Council Alternate

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 eight invited guests. 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. The Clallam MRC was awarded the NWSF Opportunity Fund grant to purchase and distribute clean shells enhancing the substrate at one of the Olympia oyster restoration sites in Sequim Bay. The Clallam MRC and its partners were awarded the City of Port Angeles Lodging Tax grant along with a NWSF grant and support from Olympic Climate Action to organize and host an educational forum on the Resident Southern Orcas.

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.

Annual Workplan Development – The Clallam MRC developed a work plan to guide the work and priorities of the Clallam MRC for the 2018-2019 grant year.

Strategic Plan – The Clallam MRC wrote and approved the Clallam MRC 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. Ten MRC members and staff attended the annual 2019 MRC conference. As in other years several members renewed their HAZWOPER and Arnold Schouten co- led the oiled wildlife training. Ed Bowlby and Jeff Ward led the pigeon guillemot survey training.

Representation at NWSC Meetings – Alan Clark served as the Clallam MRC representative to the NWSC and Sissi Bruch served as the alternate. The Representative or Alternate attended the monthly meetings and Alan Clark participated in the joint NWSC/NWSF meeting in Port Townsend.

Presentations to Local Government Officials: On March 11 Jeff Ward presented for Port Angeles City Council and Ann Soule and Peggy McClure presented for the City of Sequim Council. On May 11 Jeff Ward drove to Forks and presented for the City Council. On February 26th Commissioner Mark Ozias read up a proclamation dedicating the month of March 2019 as Oil Spill Preparedness Month. Jeff Ward received the proclamation and gave a short thank you speech.

Participation in Local Integrating Organization Meetings – As a member of the steering group Cathy Lear, 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 water quality issues including ocean acidification, marine debris, and other water quality concerns within Clallam County that have the potential to adversely affect marine life.

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. In 2019 the Clallam MRC offered five 80-hour paid internships. Three internships were funded through the NWSC and two internships through a NOAA Marine Debris grant awarded to the NWSF.

One intern monitored kelp beds as part of the Puget Sound wide kelp monitoring project led by NWSC, creating maps of three kelp beds in Freshwater and Clallam Bay. One intern worked with the Jamestown S’Klallam Tribe to trap and remove the invasive European green crab and to help with the Olympia oyster restoration effort. Two interns informed recreational crabbers about derelict gear and the proper deployment of crab pots during the 2019 crab season. The last intern worked on the pigeon guillemot survey project which involved 25 volunteers surveying breeding colonies at 12 locations in the eastern part of the Strait of Juan de Fuca.

Community Events

2018-2019 community events included:

- Forum about the Southern Resident Orca Whales
- The Celebration of Science and Technology on Port Angeles City Pier
- Ocean Science event at Clallam Bay
- Earth Day and International Coastal Cleanup marine debris cleanup along the Strait of Juan de Fuca
- Dungeness River Festival.



The internships culminated at the Intern Celebration. During the public event three of the interns presented their projects to more than 20 local residents at Feiro Marine Life Center.

The Peninsula Daily News posted an article about the intern program on April 10, 2019 <https://www.peninsuladailynews.com/news/five-intern-positions-open-with-clallam-county-marine-resources-center/>

Southern Resident Orca Forum

On May 10, 2019 Clallam MRC hosted a free public forum about Southern Resident Orca Whales. The forum was attended by more than 50 local residents. Four members from the Governor's Orca Recovery Task Force, Dr. Rich Osborne, Dr. Todd Hass, Dr. Scott Veirs, and Donna Sandstrom, highlighted the current status of the orcas, and some of the Task Force recommendations. They discussed how the decreasing availability of Chinook salmon is impacting our orcas, the need to reduce toxins in our waters, funding for continuing restoration efforts, and how we can reduce noise or acoustic disturbance affecting the whales. Ann Murphy, President of the NWSF Board, facilitated the forum. The forum was funded through a City of Port Angeles Lodging Tax grant, a NWSF grant and support from Olympic Climate Action.



Ocean Science Event at Clallam Bay

In June Clallam MRC partnered with the Olympia Coast National Marine Sanctuary and Clallam Bay School District to teach a one-day field and classroom event at Slip Point in Clallam Bay. Approximately 20-25 grade school students participated in the program exploring the intertidal during a super low tide. The Clallam MRC provided a [kelp guide](#) used by the students to identify the most common seaweeds. After the fieldtrip the students went to the school and played a food web game and did an

ocean acidification experiment with vinegar and chalk under the supervision of Sanctuary staff.

Dungeness River Festival

Clallam MRC participated in the 21st Dungeness River Festival September 27th with a booth focusing on how to catch more crabs by using proper crabbing techniques and thereby reduce the number of lost crab pots. For the educational outreach to the students, one of the MRC summer interns had made a game consisting of a wheel with nine slots; six of these slots displayed proper crabbing techniques and three incorrect techniques. Each student would spin the wheel once and if the wheel landed on a proper technique the student was awarded a “catch more crab” sticker.

The festival reached about 1,400 festival participants; approximately 950 3rd-5th grade school students enjoyed the festival along with 450 teachers, chaperons and other residents. The members thought the game went pretty well, however they decided to change the rules and give everyone a sticker as long as the losers promised never to do the bad crabbing practice again.

The festival was featured in Sequim Gazette <https://www.sequimgazette.com/life/river-festival-returns-for-21st-year/> and in Peninsula Daily <https://www.peninsuladailynews.com/entertainment/river-festival-returns-for-21st-year/> and <https://www.peninsuladailynews.com/entert> and <https://www.peninsuladailynews.com/entertainment/river-festival-focuses-on-health-of-dungeness/>. The festival was also featured on the Dungeness Audubon River Center website and blog <http://dungenessrivercenter.org/dungeness-river-festival>.



What's Next?

Clallam MRC will continue to conduct educational outreach through the intern program, Ocean Science program, forums, workshops, and participation in the Dungeness River Festival. For 2020 high-priority topics include climate change, toxins in the marine environment, fossil fuel transport, shoreline development and “get to know you MRC.”

Oil Spill Response

Goal: ✧ Partner with federal, state and non-profit organizations to offer annual oil spill response trainings to local citizens.

In 2019 Clallam MRC coordinated or hosted four educational outreach events focusing on oil spill preparedness. The events included:

- January 28th presentation on the update of Strait of Juan de Fuca Geographic response Plans
- March 2nd 8-hour HAZWOPER training
- March 18th presentation on oil spill preparedness along the Strait of Juan de Fuca by the Marine Spill Response Corporation
- April 27th oiled wildlife training.

Again this year the Clallam County Commissioners signed a [proclamation](#) in support of declaring March the Oil Spill Preparedness Month.

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.

The 8-hr oiled wildlife training focused on wildlife behavior, handling and initial care.



Accomplishments

- ✧ 39 volunteers received the HAZWOPER certification in 2019.
- ✧ 45 volunteers participated in the oiled wildlife training in 2019.
- ✧ 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.

Marine Debris & Derelict Fishing Gear

Goal: ✧ Respond to the continued issue of marine debris accumulation on local beaches and 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 2008 the Clallam MRC began partnering with local organizations, state and federal agencies and other MRCs to form a network of citizen volunteers to carry out marine debris removal projects.

The Washington CoastSavers was established in 2007 and in the early years focused on marine debris removal along the Pacific Coast. In 2015 CoastSavers asked the Clallam MRC if they would help organize the removal of marine debris along the Strait of Juan de Fuca for the Earth Day Celebration in April and the International Coastal Cleanup in September.

Accomplishments

- ✧ In 2019 more than 200 local citizens and students participated in Earth Day and ICC marine debris removal along the Strait of Juan de Fuca.
- ✧ More than 1,210 lbs. of marine debris was removed.
- ✧ Marine debris was removed from at least 23 beaches along the Strait of Juan de Fuca during the two events.



Since 2016 more than 1,000 volunteers have removed more than 3.5 US tons of marine debris along the Strait. The Clallam MRC provided funding for dumpsters at Clallam Bay, garbage bags, and gloves. Many co-sponsors and volunteers also contributed to these events. Because CoastSavers and its other partners have taken on the cleanup efforts along the Strait of Juan de Fuca, Clallam MRC in 2019 decided to refocus their effort on removal of derelict fishing gear in partnership with the NWSF.

Accomplishments

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. In the summers of 2017-19 Clallam MRC interns provided educational materials including gauges at local boat launches during the summer crabbing season. They also distributed the materials to retail stores selling crab licenses and gear.

- ✧ In 2019 the two summer interns distributed more than 200 crabber outreach kits to retail stores and at the boat ramps at John Wayne Marina and Boat Haven Marina.
- ✧ The two workshops in Sequim and Port Angeles were attended by 82 recreational crabbers.
- ✧ Removed 149 derelict crab pots from Dungeness Bay.

In 2019 Clallam MRC, in partnership with the NWSF and local expert crabbers, held two workshops to inform recreational crabbers about state and tribal regulations and to share tricks of the trade about how not to lose crab pots and thereby catch more crabs. The workshops were funded by a NOAA Marine Debris grant through the NWSF. In 2019 NWSF and its partners removed 149 derelict crab pots from Dungeness Bay.



What's Next?

Clallam MRC will continue educational outreach to recreational crabbers. In 2020 we will start the 2nd year of the 3-year NOAA grant and more removal actions will occur in Dungeness Bay.

Olympia Oyster Restoration

Goal: ✧ Contribute to the Puget Sound wide effort to restore 100 acres of sustainable Olympia oyster habitat by restoring 2 acres in Sequim Bay by 2020.

The 2019 restoration season was busy with five major tasks accomplished. A total of 67 cubic yards of blank shells were purchased, transported and spread at the old 1.5 acre restoration site. The effort was done by Jamestown S’Klallam Tribe (JST) with help from the 2019 summer intern hired by Clallam MRC.

At the new 0.3 acre restoration site 850 bags of blank shells were purchased, transported and spread at the site. The effort was done by JST with help from the 2019 summer intern and Clallam MRC members. The effort was funded by the MRC Opportunity Fund through NWSF.

Population surveys at the two restoration sites found that the oyster beds cover about 1.2 acres within the dedicated 1.8 acres. One oyster bed had expanded outside the dedicated area and this area was not included in the population assessments. An assessment of the two test plots established in fall 2018 at Dawley Road found the site was not suitable for restoration of Olympia oysters.

Accomplishments

- ✧ Substrate enhancement at the two restoration sites in Blyn.
- ✧ Conducted surveys at the two restoration sites to assess population abundance and size distribution of the Olympia oysters.
- ✧ Conducted suitability assessment of the two test plots at the USWFS Dawley Road property.



What's Next?

Clallam MRC and its partners will continue to monitor and enhance the two Olympia oyster restoration sites in Sequim Bay. Population surveys will answer the question – did we reach the goal of 2 acres in 2020.

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 efforts in 2018 and 2019.



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/biotoxin.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.

Pigeon Guillemot

Goal: ✧ 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 gunnells and pricklebacks and other small marine creatures it catches by diving beneath the surfaces.

In 2016 Clallam MRC initiated pigeon guillemot breeding surveys in the county in collaboration of 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 2019 volunteers surveyed 12 separate colonies between Freshwater Bay and Mussel Beach. A total of 25 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 25 volunteers.
- ✧ Surveyed 12 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/2019/>



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.

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 two kelp beds in Freshwater Bay.
- ✧ Conducted one survey of the bed in Clallam Bay.
- ✧ Worked on a kayak-based plankton sampling method.
- ✧ 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 in 2019 by conducting one survey of the kelp bed in Clallam Bay and one survey each of the two beds in Freshwater Bay. In addition, the surveyors collected water quality data and worked on a method to collect plankton samples inside and outside the kelp beds.

Three maps of the kelp beds were made based on the GPS information. The maps were submitted to the NWSC along with other survey information such as water temperature, visibility, and kelp composition. The data will be incorporated into the NWSC SoundIQ database and shared with WDNR.



What's Next?

The Clallam MRC will continue monitoring the kelp beds in Freshwater Bay and Clallam Bay and maybe expand the effort with motorized surveys of kelp beds in Dungeness Bay.

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.

Accomplishments

- ✧ Conducted 12 monthly surveys at Cline Spit, a WDFW index site.
- ✧ Conducted 6 monthly surveys at two restoration sites on Ediz Hook and at two restoration sites on Elwha Beach.
- ✧ Sampled 14 beaches during the annual WDFW intensive sampling.
- ✧ Documented surf smelt spawning at Cline Spit and rock sole spawning at two locations along Ediz Hook.



In 2019 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. The sampling effort also continued during the spring and summer months at the two restoration sites on Ediz Hook and at the two restoration sites east of Elwha River mouth.

In August 2019 Clallam MRC participated in the intensive annual sampling event conducted by WDFW. The CMRC members conducted sampling at 14 beaches between Old Town near Sequim and Crescent Beach west of Port Angeles.

All forage fish samples were submitted to WDFW for laboratory analysis. The analysis documented that surf smelt spawn throughout the year at Cline Spit except February. Rock sole eggs were observed in samples collected at the western end of Ediz Hook in May.

WDFW is the lead agency analyzing the data to improve the understanding 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](#).

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.

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 2020.

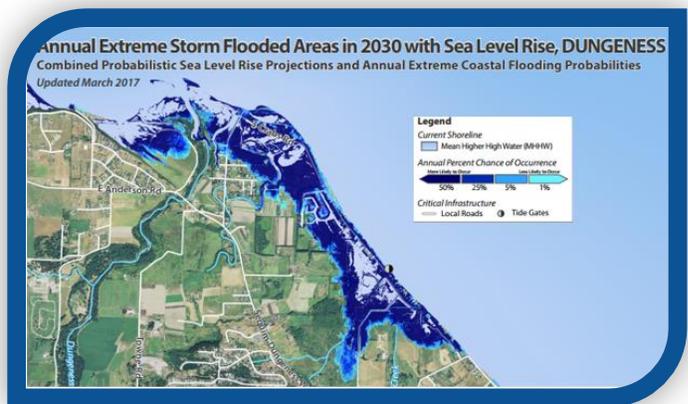
2019 MRC Retreat

In October MRC members met for an all-day retreat to, among other themes, discuss high-priority topics for projects that align with our vision and mission.

The members identified nine high priorities for 2020 of which the following five topics rank highest:

- Climate Change
- Toxics in the Marine Environment Incl. Plastics
- Fossil Fuel Transport
- Shoreline Development
- “Get to know your MRC” events incl. a video highlighting the work done by the MRC.

These high-priority topics are a part of the 2020 Clallam MRC educational outreach plan.



GreenLink Launched in Port Angeles

Phase 1 of the project is currently underway. The goal is to plan and begin implementing an integrated network of green stormwater infrastructure that will improve the city’s water quality, habitat, and community assets.

Project leaders are the City of Port Angeles and Futurewise. Additional partners include the Lower Elwha Klallam Tribe, Clallam MRC, Streamkeepers, and Feiro Marine Life Center. These partners meet quarterly to provide local expertise concerning the watersheds’ conditions, opportunities for public engagement, and potential projects and/or policies that should be evaluated.

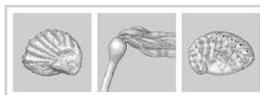
Phase 1 will end in spring 2020 with a list of priority projects that community members and decision-makers can use to apply for implementation funding. The second phase, which begins in spring 2020, will advance at least one of the prioritized projects into a design and implementation process.

Partners

Through the years Clallam MRC has collaborated with numerous partners. The logos below list the organizations and agencies Clallam MRC partnered with in 2019.



Jamestown S'Klallam Tribe



PUGET SOUND RESTORATION FUND



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