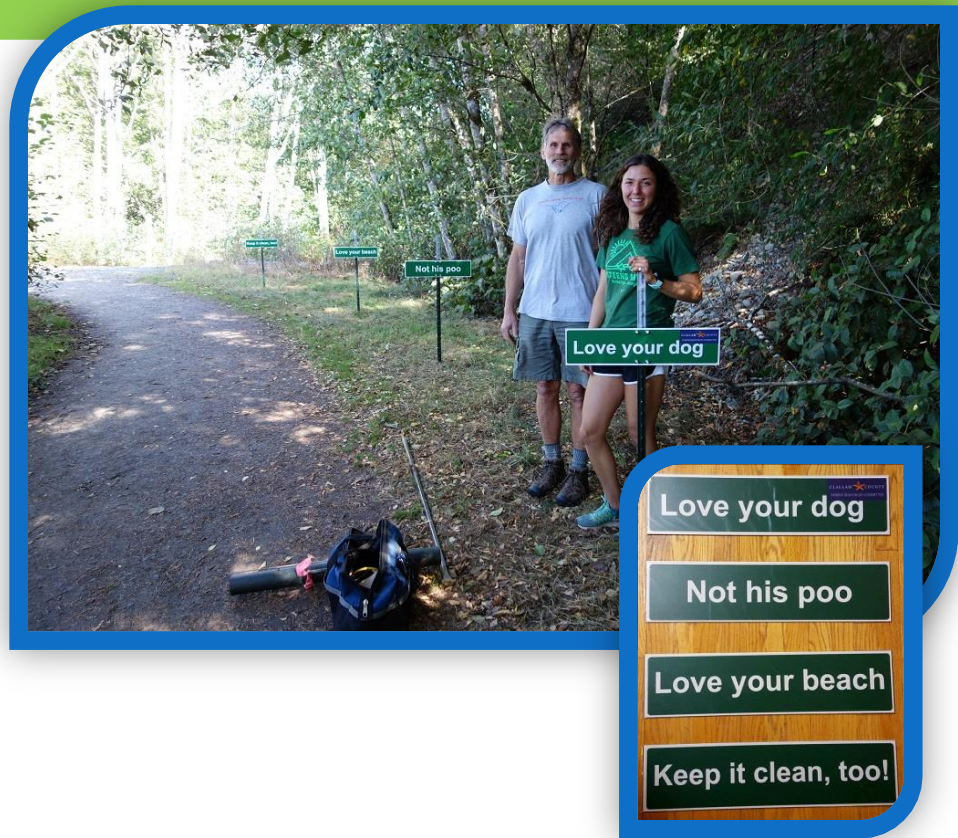


# Clallam County Marine Resources Committee 2017 Annual Report



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, which 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 provide input to Clallam 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 also manage and support projects focused on removing marine debris, 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.

As shown in the benchmark table below, our work includes a combination of activities that promote marine conservation education and outreach to the general public, projects to increase the understanding of the marine environment, projects that help restore natural shellfish populations, and projects that enable us to prepare for and respond to climate change and potential environmental accidents such as oil spills.

The Clallam MRC receives funding from US EPA through the Puget Sound Partnership and Northwest Straits Commission (NWSC). The table below shows how the 2016-2017 MRC tasks supported the NWSC Benchmarks.

Clallam MRC Grant Tasks	NWSC Benchmarks				
	Marine Habitats	Marine Life	Marine Water Quality	Science	Education and Outreach
<b>Operations</b>					
<b>Educational Outreach</b>					❖
<b>Marine Debris</b>	❖	❖			❖
<b>Oil Spill Response</b>	❖	❖	❖		❖
<b>Forage Fish Survey</b>	❖	❖		❖	❖
<b>Olympia Oyster Restoration</b>	❖	❖	❖	❖	❖
<b>Kelp Monitoring</b>	❖	❖		❖	❖
<b>Pigeon Guillemot Survey</b>	❖	❖		❖	❖

# Membership

The Clallam MRC is a balanced team of members comprised of local citizens representing commercial and sport fishers, conservation and environmental interests as well as tribes, cities, academia and other local governmental agencies.

Member	Interest/Representation
<b>Current Members: September 2017</b>	
Jeff Ward , Chair	Commissioner District I
Brad Collins, Vice-Chair	City of Port Angeles Council
Alan Clark, NWSC Rep (May 2016 - current)	At-Large
Bob Campbell, NWSC alternate	Marine Related Recreation & Tourism
Lyn Muench	Commissioner District II
Mike Doherty	Commissioner District III
Jesse Waknitz	Port of Port Angeles
Ed Bowlby	Academia
Ann Soule	Sequim City Council
Arnold Schouten	Development Community
Kathy Cooper	Marine Trades
Bob Vreeland	Conservation & Environmental Interests
Ralph Riccio	Jamestown S'Klallam Tribe
Mike McHenry	Lower Elwha Klallam Tribe
Greig Arnold	Makah Tribe
<b>Ex-Officio Members</b>	
Mary Ellen Winborn	Director, Clallam County Dept. Community Development
Chris Byrnes	WA Department of Fish & Wildlife
Cathy Lear	CMRC Coordinator
Helle Andersen	CMRC Project Coordinator
<b>Former Members: Served in 2016-17</b>	
Andrew Shogren	Commissioner District I
Doug Morill	Lower Elwha Klallam Tribe

# 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, grant writing, travel, planning, and participating in training opportunities.

**Clallam MRC Meetings and Communication** – The Clallam MRC met monthly to discuss project items and listen to educational presentations of 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 support a longer-termed internship providing educational outreach to recreational crabbers in Clallam County and to support another intern working on the pigeon guillemot project.

**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 2016-2017 grant year.

**Training** – Clallam MRC members and staff were encouraged to participate in trainings relevant to the Clallam MRC's goals and projects. Six MRC and staff members attended the annual 2017 MRC conference. As in other years several members renewed their HAZWOPER and Arnold Schouten co- led the oiled wildlife training. Ed Bowlby led the pigeon guillemot survey training with several members participating.

**Representation at NWSC Meetings** – Alan Clark served as the Clallam MRC representative to the NWSC and Bob Campbell served as the alternate. The Representative or Alternate attended the monthly meetings with the NWSC. Alan Clark also participated in the annual NWSI retreat in Padilla Bay.

**Presentations to Local Government Officials:** In March Ed Bowlby, Clallam MRC Chair, and Jeff Ward, Clallam MRC Vice-Chair, gave a presentation about the Clallam MRC to the three Clallam County Commissioners. In July Ed Bowlby and Jeff Ward gave a similar presentation to the Sequim City Council.

**Participation in Local Integrating Organization Meetings** – As a member of the steering group Cathy Lear, Clallam MRC Coordinator, attended the quarterly steering group meetings. In addition, Jeff Ward and Cathy Lear participated in 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 2017 the Clallam MRC offered four 80-hour paid internships that focused on reducing human impacts to the West Elwha beach, monitoring kelp populations along the Strait, providing education and outreach to recreational crabbers, and monitoring shellfish biotoxin levels at Pillar Point in the Western Strait. Three interns completed their internships at the end of August and presented their work at a public meeting.

The intern working on the West Elwha Beach project conducted 11 beach usage surveys and identified pet waste as the most significant impact to the beach. To address this issue she made and installed four signs encouraging owners to pick up after their pets. The intern working on the kelp monitoring created maps of kelp beds in Freshwater and Clallam Bay based on four surveys.

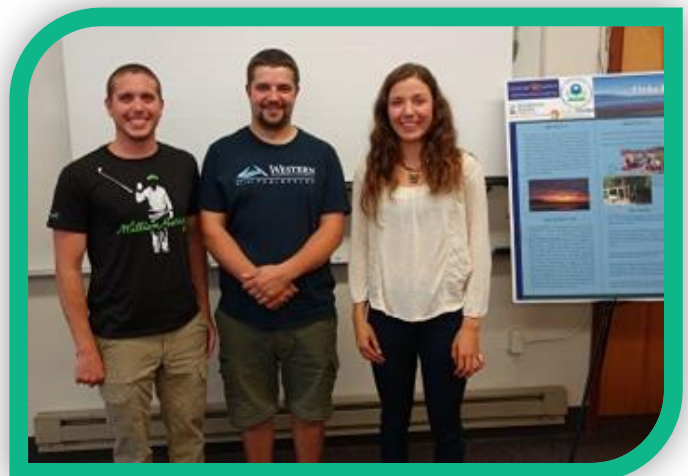
The third intern informed recreational crabbers about derelict gear and the proper deployment of crab pots during the 2017 crab season and handed out 274 educational outreach kits to the public and local stores. The latter two efforts are part of larger long-term monitoring efforts lead by the Northwest Straits Initiative.

The Peninsula Daily News published [two articles](#) about the internship program.

## Community Events

2016-2017 community events included:

- Science Saturday family event titled “Food Webs Can Be Fishy”
- The Celebration of Science event on Port Angeles City Pier
- Tour of Arnold and Debbie Schouten’s waterfowl sanctuary
- Dungeness River Festival
- Joint meeting in Port Townsend with Clallam, Jefferson and Island MRCs
- Earth Day and International Coastal Cleanup marine debris cleanup along the Strait of Juan de Fuca.



## Community Events

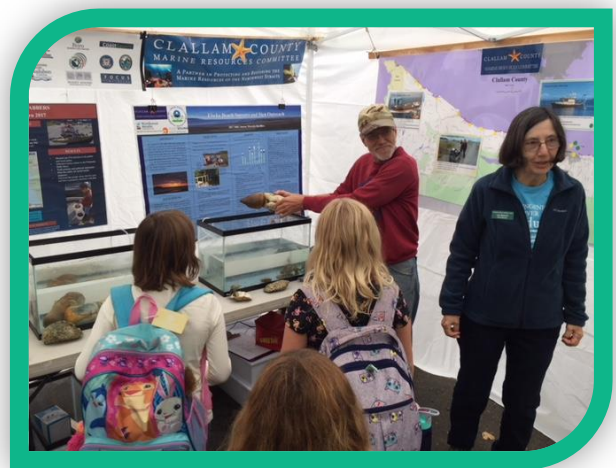
In February Clallam MRC organized a free science Saturday family event titled “Food Webs Can Be Fishy.” The event offered hands-on activities for children and three presentations for adults. Phil Dionne, Washington Department of Fish and Wildlife, gave a presentation on the importance of forage fish and Bob Boekelheide, Olympic Peninsula Audubon Society, presented on seabirds feeding on forage fish. Ed Bowlby, chair of Clallam MRC, rounded out the presentations by discussing the Clallam MRC's current pigeon guillemot project and informed the audience about volunteer opportunities including participation in the monthly forage fish spawning surveys. The event also offered hands-on demonstrations for the adults of forage fish spawning surveys and the laboratory egg analysis. The Peninsula Daily News published [one article](#) about the event.



## Dungeness River Festival

At the 2017 festival the Clallam MRC's booth focused on the importance of good habitat and clean water for healthy shellfish populations. Aquaria containing live geoducks, and Olympia and Pacific oysters provided a way to talk about water quality and other essentials of marine habitat. Many of the visitors also learned about the biology and life history of geoducks.

Clallam MRC members staffed the booth during the event and reached many of the approximately 1,500 festival participants, of which 900 were 3-5 grade school students. The Dungeness River Festival was featured with an article in [Peninsula Daily News](#).



# Marine Debris

Goal: ✧ Respond to the continued issue of marine debris accumulation on local beaches through an expanded network of partners and volunteers.



In 2017 Clallam MRC participated in three marine debris cleanup events.

On Earth Day Clallam MRC in partnership with CoastSavers organized the cleanup efforts along the Strait of Juan de Fuca. The Earth Day cleanup effort was a success - 207 volunteers participated in the beach cleanup along the Strait of Juan de Fuca. Marine debris was removed from at least 11 beaches and Peabody Creek in Port Angeles. Almost 2,000 lbs. or one ton of debris was removed.

The City of Port Angeles' ban of personal fireworks within the city limits causes people to shift their fireworks use to other locations – one of which is the west side of the Elwha Estuary. After July 4th seven volunteers organized by the Elwha Beach summer intern and staff conducted a beach cleanup.

In the fall Clallam MRC in partnership with CoastSavers organized the International Coastal Cleanup effort along the Strait of Juan de Fuca. During the event 67 volunteers removed about 610 lbs. of marine debris eleven beaches.

## Accomplishments

- ✧ More than 274 local citizens and students participated in marine debris removal along the Strait of Juan de Fuca.
- ✧ More than 2,600 lbs. of marine debris was removed.
- ✧ Marine debris was removed twice from at least 11 beaches along the Strait of Juan de Fuca.

## What's Next?

Clallam MRC will continue to partner with Washington CoastSavers and other organizations to organize and conduct marine debris removal events.

# Oil Spill Response

- Goal: ✧ Partner with federal, state and non-profit organizations to offer annual oil spill response trainings to local citizens.
- ✧ Integrate forage fish beach spawning assessments into shoreline protection and restoration projects in Clallam County.

Clallam MRC partnered with federal, state and non-profit organizations to offer an 8-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training which was held in Port Angeles. Annual HAZWOPER 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 including the set-up of the rehabilitation center.

Clallam MRC and Island Oil Spill Association partnered to host two oiled wildlife trainings. The first training focused on basic intake and stabilization. The participants learned basic bird anatomy and how to take care of oiled birds while working with live ducks.

The second training focused on search and capture. The participants learned about search and collection procedures and how to perform an initial bird examination. During a field trip to Ediz Hook the participants practiced search and capture techniques.



## Accomplishments

- ✧ 49 volunteers received the HAZWOPER certification in 2017.
- ✧ 41 volunteers participated in the oiled wildlife trainings in 2016.
- ✧ Since 2010 more than 500 volunteers have received HAZWOPER training and more than 330 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.

## Accomplishments

- ✧ Conducted 12 monthly surveys at two WDFW index sites.
- ✧ Conducted 8 monthly surveys at two restoration sites on Ediz Hook and 6 monthly surveys at two restoration sites on Elwha Beach.
- ✧ Documented forage fish spawning at Cline Spit during the intensive sampling

In 2016 Clallam MRC joined the NWSC's forage fish monitoring efforts.

Since October 2016 Clallam MRC has conducted monthly surveys at two sites - Pitship Point adjacent to John Wayne Marina and at a public beach near Old Town east of Dungeness River. The monthly forage fish samples are submitted to Washington Department of Fish & Wildlife for analysis.

In April 2017 the sampling effort was expanded to include two sites on Ediz Hook. The sites were selected by the Lower Elwha Tribe in an effort to document forage fish spawning in the newly restored area along the inside of the spit. The effort was expanded again in July to include two sites on the beach east of the Elwha River mouth.

In May 2017 Clallam MRC participated in the intensive biannual sampling event conducted by WDFW. The CMRC members conducted sampling at 11 beaches between Old Town near Sequim and Crescent Beach west of Port Angeles.



## What's Next?

The Clallam MRC will continue to monitor forage fish at the six sites and participate in the intensive biannual sampling event.

# Olympia Oyster Restoration

Goal: ✧ Restore 2 acres of sustainable Olympia oyster habitat in Sequim Bay.



In 2012 Jamestown S’Klallam Tribe partnered with Clallam MRC and Puget Sound Restoration Fund to restore Olympia oysters on one acre of their tidelands in Blyn on Sequim Bay. Between 2012 and 2014 more than 755,000 Olympia oyster seed were planted on the tidelands. In 2014 half an acre of tidelands were added to the restoration effort making the total restoration site 1.5 acres.

In 2017, the area of the Olympia oyster bed increased by approximately 40% to 1.05 acres with an estimated population size of 33,978. The mean Olympia oyster density was estimated to be 5 oysters per  $m^2$  within the entire 1.5 acre restoration site and 8 oysters per  $m^2$  within the population area.

The successful restoration effort on Jamestown’s tidelands prompted Clallam MRC to search for other potential restoration sites. A potential site in Sequim Bay was identified in the eastern part of the small cove at Pitship Point next to John Wayne Marina. In the fall 2016 Olympia oysters were spread on two small test plots to explore the suitability of the habitat. Unfortunately in spring 2017 the site was deemed too exposed and the search was expanded to properties off Dawley Road in Sequim Bay and Cline Spit in Dungeness Bay.

## Accomplishments

- ✧ In 2017 the area of the Olympia oyster bed in Blyn increased by about 40% from 2016.
- ✧ In 2017 the population of Olympia oysters was estimated to be 33,978.
- ✧ Two potential new restoration sites were identified in Sequim and Dungeness Bays.
- ✧ The suitability of the sites is being explored with the establishment of test plots.
- ✧ 50 bags of seeded cultch were purchased from Puget Sound Restoration Fund and are being held on the Tribal tidelands in Sequim Bay.

## What's Next?

Clallam MRC will continue to monitor the established Olympia oyster population in Blyn and the two test plots in Dungeness Bay and continue to look for new sites. The 50 seeded cultch bags purchased from Puget Sound Restoration Fund will be overwintered on Jamestown’s tidelands and used for future expansion of the Olympia oyster restoration project.

# 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 Sound IQ.



In 2015 Clallam MRC joined the NWSC kelp monitoring project. In the summer of 2016 Clallam MRC identified two kelp beds in Freshwater Bay and one in Clallam Bay. Four kayak-based surveys were conducted in Freshwater Bay delineating the two beds.

In the summer of 2017 Clallam MRC conducted two surveys of the kelp bed in Clallam Bay and one survey each of the two beds in Freshwater Bay. Four maps of the kelp beds were made based on the GPS information and submitted to the NWSC along with other survey information such as water temperature, visibility, and kelp composition. The survey data will be incorporated into the NWSC database.

## Accomplishments

- ✧ Conducted one survey of the small kelp bed in Freshwater Bay.
- ✧ Conducted two surveys of the large bed in Freshwater Bay.
- ✧ Conducted two surveys of the bed in Clallam Bay.



## What's Next?

The Clallam MRC will continue monitoring the kelp beds in Freshwater Bay and Clallam Bay.

# 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 and other small marine creatures it catches by diving beneath the surfaces.

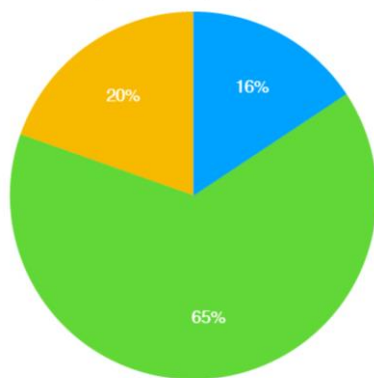
In 2016 Clallam MRC initiated pigeon guillemot breeding surveys in collaboration of Island MRC and Olympic Peninsula Audubon Society. Pigeon Guillemots lay eggs in the early summer, and by end of June the birds are busy providing fish for the juveniles in the burrows. In 2017 10 separate colonies at locations between Port Angeles and Sequim Bay were surveyed by 25 volunteers once a week for one hour between June and September. The data will be incorporated into Island MRC's database.



## Accomplishments

- ✧ Partnered with Island MRC and Olympic Peninsula Audubon Society.
- ✧ Organized a team of 25 volunteers.
- ✧ Surveyed 10 pigeon guillemot colonies throughout the summer months.
- ✧ Documented a total of 310 adults in 10 colonies.
- ✧ 40% of the adults in the colonies attempted to breed.

Sequim PIGU Prey Composition



● sculpin ● gunnels ● other

## What's Next?

The Clallam MRC will continue monitoring the 10 pigeon guillemot colonies and may expand the effort in summer 2018 to other colonies in Clallam Bay.

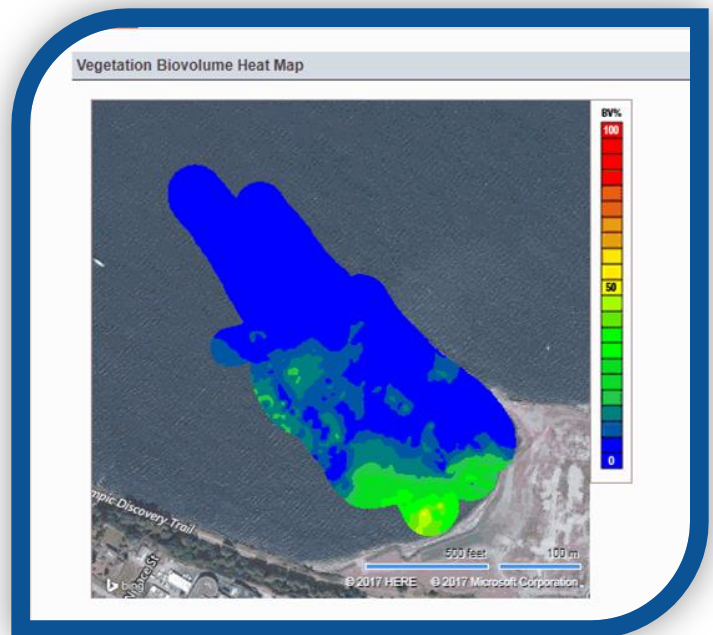
# On the Horizon

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 new projects in 2017-18.

## Eelgrass Surveys

At a July joint Clallam, Jefferson and Island MRC meeting held in Port Townsend the members discussed the possibility of expanding Island MRC multi-beam sonar surveys of eelgrass beds into Jefferson and Clallam County. The surveys are conducted by a volunteer, Albert Foster, using his boat and sonar equipment. A later conference call identified several survey sites with Port Angeles harbor.

In August three surveys were conducted near the Rayonier property, Hollywood Beach and on the harbor-side of Ediz Hook. Other surveys within Clallam County may be conducted in the fall of 2017.



## West Elwha Beach

As a result of the successful Elwha River restoration project, increased public use along including people walking their dogs, has put a lot of pressure on the West Elwha Beach. An obvious need has been recognized for more sanitary waste services for both people and dogs. One of the 2017 summer interns installed signs with a positive light hearted message to make the public more aware of their dog's impact on the dike and beach.

Continuing in 2017-18 Clallam MRC will work to improve signage, install a pet waste bag dispenser, and install an additional Sani-can and pet waste receptacle.

# Partners

Through the years Clallam MRC has collaborated with numerous partners. The logos below list the organizations and agencies Clallam MRC partnered with in 2016.



Jamestown S'Klallam Tribe



DIAHI, WAATCH, OSET, TSOO-YESS, BAADAH

