

Jefferson County Marine Resources Committee 2020 Annual Report



Jefferson County
**Marine
Resources
Committee**

About the Jefferson MRC

The Jefferson County Marine Resources Committee (MRC) is a locally based, volunteer advisory group appointed by the Jefferson Board of County Commissioners. In addition to serving the county in an advisory capacity, the MRC engages in on-the-ground restoration and monitoring projects and provides education and outreach to county residents. The Committee's work covers nearly 200 miles of shoreline and the marine waters of eastern Strait of Juan de Fuca, Admiralty Inlet and northern Hood Canal. Our goal is to promote an ethic of stewardship, support science-based projects, and work in partnership with other agencies, organizations, and the broader community to restore and protect the marine and nearshore resources of East Jefferson County.



The Jefferson County MRC was created in 1999 and is one of seven Marine Resources Committees affiliated with the Northwest Straits Initiative. Also part of the Initiative are the Northwest Straits Foundation (NWSF) and the Northwest Straits Commission (NWSC), which provide scientific, technical, and financial support to the MRCs. This report summarizes the Jefferson MRC's work from October 2019 through September 2020.

Prepared by Monica Montgomery, MRC Coordinator (monica.montgomery1@wsu.edu)

WA Department of Ecology Grant: SEANWS-2018-JeCoWS-00008

Project Title: Jefferson County MRC Operations and Projects



Jefferson County
**Marine
Resources
Committee**



PUGET SOUND
PARTNERSHIP



**Northwest
Straits**
INITIATIVE

This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401], nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Membership

MRC members are residents of Jefferson County and represent a wide range of backgrounds, interests, and expertise, with the unified goal of protecting and restoring the local marine and nearshore environment. Members of the Jefferson MRC include representatives from the Jamestown S’Klallam Tribe, City of Port Townsend, Port of Port Townsend, Board of County Commissioners (ex officio), and Districts 1-3, as well as individuals who represent local recreation, commercial, marine science, and conservation interests.

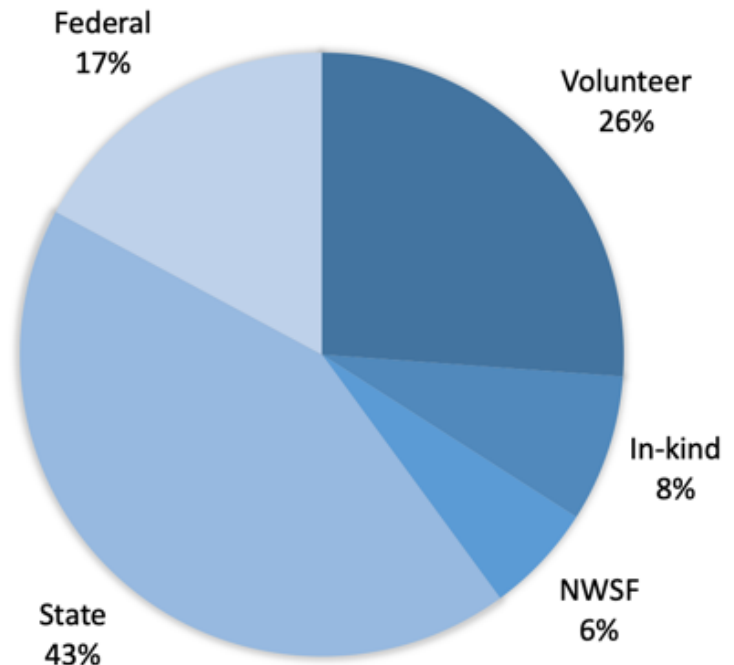
In November 2019, the MRC Coordinator, Cheryl Lowe, retired and in January 2020, Monica Montgomery was hired to fill the position. Additionally, 10 members stepped down in 2019 – Al Bergstein, Anna Bachmann, Shannon Davis, Judy D’Amore, Ashley Mackenzie, Andrew Palmer, Wade Crouch, Jacqueline Gardner, Steve Tucker, and Kate Dean (ex officio). During the first few months of the 2019-2020 grant year, the MRC welcomed 10 new members – Ray RaLonde, Solenne Walker, Brenda Johnson, Heather Burns, Greg Brotherton (ex officio), Betsy Carlson, Bryan DeCaterina, Pam Petranek, Brent Vadopalas, and Roy Clark.

MEMBERS (as of December 2019)	REPRESENTING
Frank Handler, Exec Committee Co-Chair	District 2 Alt.
Neil Harrington, Exec Committee Co-Chair	Tribal Rep (Jamestown S’Klallam Tribe)
Jeff Taylor, Exec Committee NWSC Rep	District 2
Sarah Fisker, Exec Committee NWSC Rep Alt	District 3
Emily Bishop	District 1
Ray RaLonde	District 1
Solenne Walker	District 1 Alt.
Brenda Johnson	District 2
Heather Burns	District 3
Greg Brotherton, <i>ex officio</i>	Jefferson County Commissioner
Gordon King	Commercial Interests
Betsy Carlson	Environmental Interests
Bryan DeCaterina	Environmental Interests Alt.
Judy Surber	Local Govt (City of Port Townsend)
Pam Petranek	Local Govt (Port of Port Townsend)
Nam Siu	Marine Science
Brent Vadopalas	Marine Science Alt.
Troy McKelvey	Recreation
Roy Clark	Recreation Alt.

Funding

In 2019-2020, the Jefferson MRC received a grant administered by the Northwest Straits Commission and funded by Washington State and the U.S. Environmental Protection Agency through the Puget Sound Partnership. The MRC also received grant funding from the Northwest Straits Foundation.

Despite the many challenges brought by the COVID-19 pandemic, Jefferson MRC volunteers logged 1,475 volunteer hours, a value of \$40,120 (@ [27.20/hr](#)). The MRC continues to rely heavily on the dedication of its members and other community volunteers.



The MRC also received in-kind contributions from community and project partners amounting to \$11,960.

Through grants, volunteer hours and in-kind contributions, the MRC brought an estimated total value of \$152,016 to Jefferson County between October 2019 and September 2020.

During the 2019-2020 grant year, the Jefferson MRC recorded 1,475 volunteer hours!



MRC Operations

The COVID-19 pandemic posed many unprecedented challenges. However, MRC members quickly adapted to working virtually and followed county public health guidelines when engaged in fieldwork, to ensure their safety and that of the broader community.

Meetings & Communication: The MRC met on the first Tuesday of every month, except for April and July. March was the last in-person meeting, and monthly meetings have been held virtually as of June. Meetings remained open to the public, covered project and partner updates, and often included a guest speaker or special topic of interest to discuss.

A representative attended the monthly NWSC meetings and one member, Neil Harrington, presented to the Commission on the MRC's Olympia oyster enhancement project. Another member, Troy McKelvey, and WSU staff affiliate, Bob Simmons, presented on the MRC's no-anchor zones and rain gardens projects through the virtual MRC symposium. The MRC Coordinator, along with three members, presented updates to the Jefferson Board of County Commissioners.

Local Integrating Organization (LIO) & Puget Sound Partnership (PSP): MRC staff attended the Strait ERN LIO quarterly meetings to participate in the local planning process and action agenda updates.

Grant Administration: MRC staff prepared grant reports, administered budgets, managed contracts, documented in-kind contributions and volunteer time, and provided other administrative support for MRC projects.

Website Maintenance: The MRC website was regularly updated to provide current information about completed and ongoing projects, meeting agendas and approved minutes, and upcoming events (www.jeffersonmrc.org).

Training: MRC members engaged in 306 hours of conferences and trainings that were relevant to the MRC's goals and projects. Members participated in various virtual trainings (kelp, forage fish, rain gardens, Beach Naturalists), conferences (annual MRC Conference and adapted virtual symposium, Salish Sea Ecosystem Conference), and other presentations (Salish Sea Shared Waters Forum, Puget Sound Days on the Hill).

Accomplishments

- Held 10 MRC monthly meetings.
- Participated in NWSC, Strait ERN LIO, and other regional meetings.
- Presented MRC projects to NWSC and the Jefferson County BoCC.
- Developed 2019-2020 annual work plan.
- Members engaged in 306 hours of trainings and conferences.

Citizen Science Monitoring: Bull Kelp

Bull kelp (*Nereocystis luetkeana*) is a large brown alga that is native to the Strait of Juan de Fuca and Puget Sound regions. It often grows in dense “forests” in the rocky subtidal and provides critical habitat and food to a variety of species, including forage fish, salmon, and rockfish. Concerns of decline in parts of southern and central Puget Sound have compelled efforts to assess kelp abundance and distribution, to better inform restoration and protection.

The MRC continues to collect data for the Northwest Straits Commission’s regional bull kelp monitoring project. In summer 2020, seven volunteers conducted three kayak-based surveys (June 20, July 18, and August 16) of the East Kelp Bed at North Beach. This year, the kelp bed grew in two separate patches – one at the edge of the subtidal zone and one in a deeper patch further offshore, with some kelp growing sparsely in between. It wasn’t until September when biologists with the WA Department of Natural Resources conducted a survey and noted that the kelp patches had finally connected, possibly due to the late onset of sunny weather this past summer.

Accomplishments

- Engaged 7 volunteers who contributed 87 hours.
- Conducted 3 kayak-based surveys of bull kelp at North Beach.
- Fifth year of kelp monitoring.

What’s Next? The MRC will continue to monitor the North Beach bull kelp bed annually.



Photo by Tyler Cowdrey

Citizen Science Monitoring: Forage Fish

Forage fish are small schooling fish that form an important link in the marine food web, feeding salmon, seabirds, and other animals. Two forage fish species spawn intertidally: surf smelt (*Hypomesus pretiosus*) and Pacific sand lance (*Ammodytes hexapterus*). Knowing when and where this spawning occurs is critical for protecting these species and their spawning habitat, which in turn supports a resilient marine ecosystem. The MRC is currently monitoring three forage fish spawning sites – one nearshore restoration site in partnership with the WA Department of Fish and Wildlife (WDFW) and Point No Point Treaty Council, and two index sites as part of WDFW's statewide database.

Accomplishments

- Added a new forage fish index site at Dabob Bay.
- Conducted 20 surveys: Adelma Beach (11), Fort Townsend State Park (5), Dabob Bay (4).
- Engaged 11 volunteers who contributed a total of 109 hours.
- Sand lance and surf smelt eggs were found at Adelma Beach.

Fort Townsend State Park Restoration Site: Monitoring began here in 2015, prior to removing 1700 cubic yards of rock-armored landing fill. The 2019-2020 winter season (October through March) marked the fifth year of post-restoration monitoring. Five surveys were conducted with the help of six volunteers. Results are pending.

Adelma Beach Index Site: Monthly monitoring began in 2016. This past year, eleven volunteers conducted eleven surveys. Lab results found sand lance (Oct, Dec, Jan) and surf smelt (Oct) eggs in samples collected.

Dabob Bay Index Site: Monthly monitoring began here in June 2020. So far, three volunteers have conducted four surveys. Results are pending.

What's Next? Continue monthly monitoring at both index sites, and depending on results and funding, continue post-restoration monitoring at Fort Townsend State Park.



Education & Outreach

The MRC supports active stewardship of East Jefferson County's marine resources by providing science-based information to the public, engaging community members in hands-on learning, and building community support and appreciation for restoration, conservation, and water quality improvement projects. However, during the COVID-19 pandemic, the MRC has been unable to organize its popular annual community engagement events, such as Diggin' for Dinner and Searching for Seaweed. The MRC had to completely shift its approach, to reach public members in a variety of ways while social distancing – through targeted ads, educational videos, virtual trainings, and printed materials.

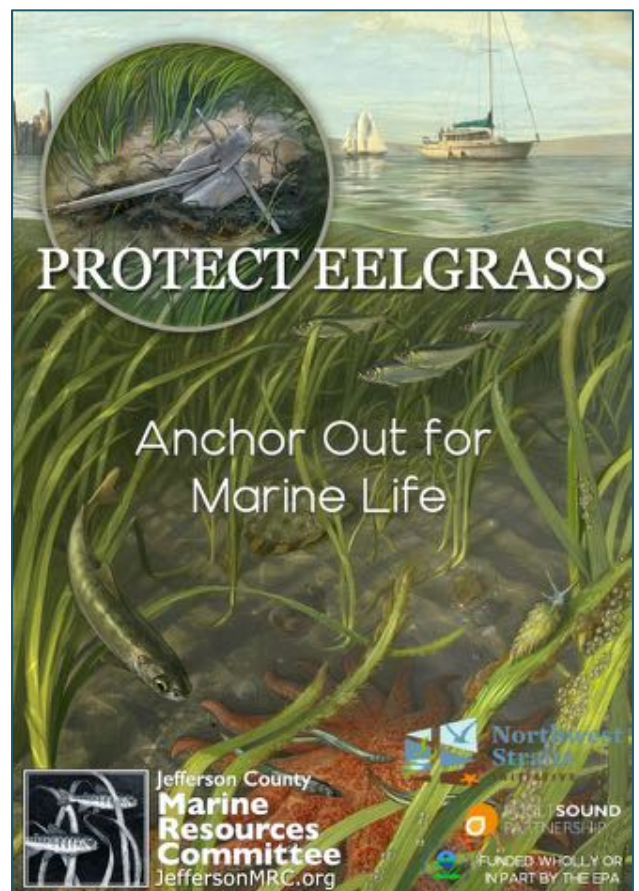
Targeted ads: Ads addressing individual actions for improving water quality were shared through a beloved local theater's newsletter, as well as through the local newspaper on strategic "saturation" days when every household in the City of Port Townsend receives a copy, both reaching an estimated total of 14,600 viewers. Another ad was placed in a boating magazine with 84,000 readers per month to encourage boaters to anchor outside of eelgrass habitat.

Educational videos: The MRC hired a local film production company, Plumb Productions, to create videos – one about [Olympia oysters](#), one about [eelgrass](#) – to educate viewers about these important habitat forming species and about efforts to restore and protect them. Each video has more than 200 views, they are featured on the website, and will continue to be used as educational tools going forward.

Virtual rain garden training: A two-day rain garden training for professional landscapers and high-level volunteers that was originally planned for in-person was swiftly adapted to a virtual

Accomplishments

- Distributed targeted ads for improving water quality and protecting eelgrass habitat, reaching an estimated 98,600 viewers.
- Created two educational videos, about eelgrass and Olympia oysters.
- Delivered a virtual two-day rain garden training to more than 30 participants.

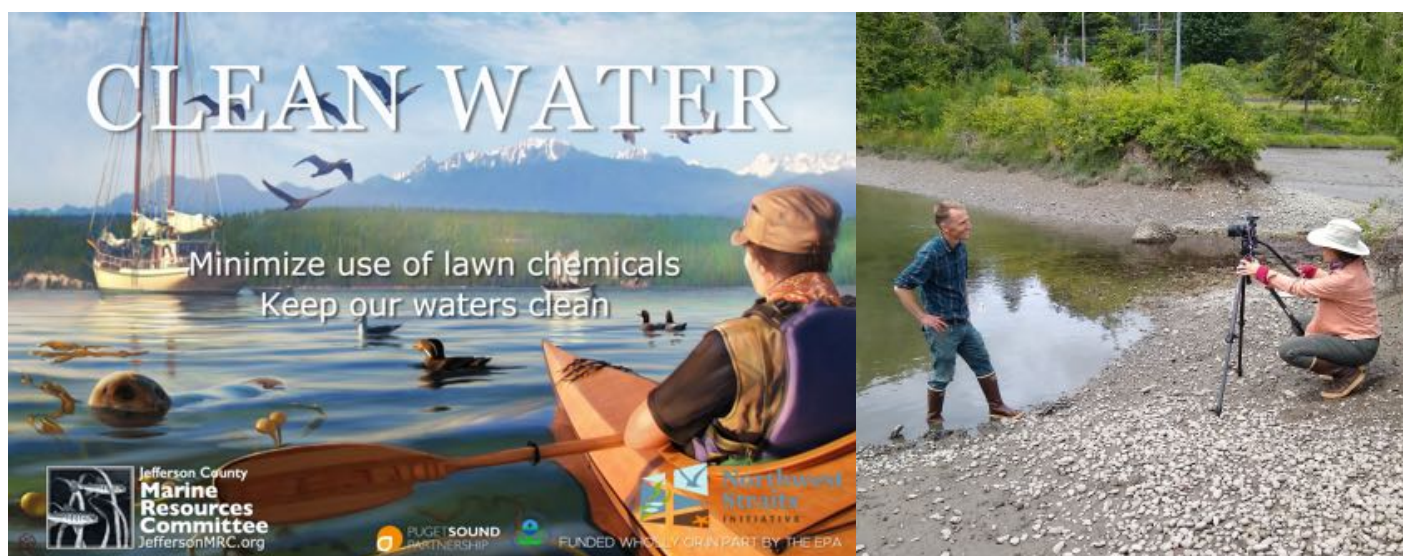


format. The training included information about stormwater and water quality issues, the purpose of rain gardens, and how to install a rain garden, with details about site selection, soils, design considerations, plant selection, and more. Over 30 participants attended the training, which was led by WSU affiliate, Bob Simmons, and contracted plant specialist, Erica Guttman.

Printed and other materials: The MRC invested in redesigning and printing educational rack cards for information on soft shore stabilization, as well as greetings cards using previously commissioned art and adding facts about eelgrass and Olympia oyster habitats. The MRC also invested in microscopes, a monitor, and accessories for future in-person events and educational activities.

Partner outreach efforts: Staff and members also provided MRC-related outreach through several partner projects. One member, Nam Siu, hosted a [virtual beach tour](#) at Point Hudson, which was organized by WSU Extension to educate participants about subaquatic vegetation, specifically eelgrass and kelp. This virtual event in the “Discover the Salish Sea” series had 49 attendees, for which the recording is posted online and has more than 200 views. Several MRC members and affiliates also presented through the virtual WSU Beach Naturalists training, educating 49 students about kelp and eelgrass, rain gardens, shoreline restoration, kelp monitoring, and Olympia oyster enhancement efforts at Discovery Bay. The MRC Coordinator presented about the MRC’s work as it relates to ocean acidification for the Port Townsend School District’s Maritime Discovery School’s two-day Ocean Acidification teacher training. The MRC also helped to promote the virtual crabber outreach workshop organized by the Northwest Straits Foundation and distributed educational materials for the “Catch More Crab!” campaign.

What’s Next? Continue to develop public outreach education programs for social distancing.



Eelgrass & Voluntary No-Anchor Zones

Eelgrass (*Zostera marina*) is an underwater flowering plant that provides numerous important ecosystem functions, including shelter for juvenile salmon and Dungeness crab, substrate for herring eggs, and filtration of runoff.

Localized eelgrass declines are primarily attributed to anthropogenic causes, one of which is physical damage caused by boat anchors. In 2004, the MRC established a voluntary no-anchor zone to protect the eelgrass beds along the Port Townsend waterfront. The MRC now maintains 21 navigational buoys that protect 52 acres of eelgrass beds in Port Townsend and nearly 50 acres in Mystery Bay and 8 acres in Port Hadlock where shellfish beds are also protected.

In 2019-2020, seven volunteers contributed 43 hours monitoring boater compliance, developing diver safety protocols, and swapping out the Port Townsend spar buoys. Monitoring typically occurs during the Wooden Boat Festival, which was canceled this year. Instead, volunteers monitored compliance throughout the busier-than-normal boater season, at varying times and days of the week. One boat was observed anchored inside the buoys at Port Hadlock for a short period of time and one derelict vessel was abandoned inside the no-anchor zone near Port Townsend. Due to liability concerns, the MRC contracted divers for underwater maintenance this year. The MRC Coordinator worked with the WA Department of Natural Resources to combine and renew permitting for all 3 sites.

What's Next? Adopt a dive safety manual, continue buoy maintenance, and aid other MRCs and organizations working to establish eelgrass protection zones.

Accomplishments

- Engaged 7 volunteers who contributed 43 hours.
- Contracted divers to check and replace underwater hardware in Port Townsend Bay.
- Monitored throughout the busier-than-normal boating season.
- Observed 98% compliance, protecting a total area of approximately 110 acres of eelgrass and shellfish beds.



Olympia Oyster Restoration

The Olympia oyster (*Ostrea lurida*) is the only native oyster of the North American Pacific Coast and once thrived in coves, inlets, and other protected tidelands along the Strait of Juan de Fuca and Puget Sound areas. Due to habitat degradation and overharvesting, oyster populations are a mere fraction of what they once were.

Discovery Bay is home to a small natural Olympia oyster population near the southwest portion of the bay, as well as scattered occurrences throughout the bay. Since 2013, the MRC – in partnership with WDFW and the Jamestown S’Klallam Tribe – has been working to expand this extant population by distributing clean Pacific oyster shell, which functions as substrate for larvae to settle on.

- **Powerline Site:** The MRC spread 10 bulk bags of clean cultch, provided by Taylor Shellfish, in late June. Monitoring in early August found an estimated 35,700 individuals in the plot (2,023.4m²), ranging from 7 to 67mm in size. Nearly one-third of the oysters counted measured less than 30mm, indicating that natural recruitment continues to occur at this site.
- **Lagoon Site:** Spread 42 cultch bags of clean cultch in late June.

What’s Next? Distribute clean cultch in Spring 2021 and continue to monitor recruitment, growth and survival. Determine how to monitor just south of the habitat enhancement site where cultch and settled oysters tend to drift towards, and update permits.

Accomplishments

- Engaged 8 volunteers who contributed 108 hours.
- Spread 10 bulk bags of clean cultch at the Powerline site and 42 cultch bags of clean cultch at the Lagoon site.
- Conducted a population survey at the Powerlines site.
- Assessed Olympia oyster populations at Mystery Bay and Dabob Bay.



Rain Gardens and Stormwater

Rain running off roads and driveways flows into storm drains that discharge to local streams and bays. This stormwater often carries contaminants such as heavy metals, fertilizers, oil and pet waste. Rain gardens are designed to filter this runoff with special soils that hold onto pollutants and plant roots that absorb excess nutrients. Concerns about stormwater and water quality prompted the MRC to initiate a multi-year effort to install rain gardens in high priority locations.

Accomplishments

- Installed 2 new rain gardens, one in uptown Port Townsend and one at Cape George.

This year, the Jefferson MRC worked closely with WSU Jefferson County Extension, the Native Plant Salvage Foundation, the Cape George community association, the City of Port Townsend, and homeowners fronting the Clay and Benton rain garden. Rain garden installations were limited to just staff this year. Despite such challenges with COVID-19, the MRC was able to have two rain gardens installed, one at Caper George and one at Clay and Benton Streets in Uptown Port Townsend. These rain gardens now help filter and reduce the amount of stormwater entering Port Townsend Bay and Discovery Bay, as well as increase local awareness of the benefits of rain gardens to improve water quality in the Salish Sea. These two rain gardens add to a **total cumulative area of 9,116 sq. ft.** for all 12 MRC co-sponsored rain gardens within the last 6 years.

What's Next? Continue to install one or two rain gardens at priority sites each year.



Thank You

Thank you to our MRC members and other community volunteers and partners. Your work and dedication to protecting and restoring the marine and nearshore environment is making a difference in East Jefferson County.

We would also like to recognize the ongoing support of our partners, including the Port of Port Townsend, City of Port Townsend, Jamestown S’Klallam Tribe, Taylor Shellfish, WA Department of Fish and Wildlife, WA Department of Natural Resources, and many others. This includes staff time, advice, materials, and general support for MRC projects. These are critical partnerships for the MRC!

The MRC receives support from the Northwest Straits Commission, Northwest Straits Foundation, Puget Sound Partnership, the United States Environmental Protection Agency, and Washington State University Jefferson County Extension.

How to get involved?

Attend [monthly MRC meetings](#). Volunteer on local projects. Sign up for the [Northwest Straits Initiative newsletter](#). Get involved with the Northwest Straits Foundation.

When/Where are meetings held?

First Tuesday of every month, 6-8PM. During the COVID-19 pandemic, meetings are being held virtually.

How to reach us?

Website: www.jeffersonmrc.org

Email: jeff.co.mrc@gmail.com