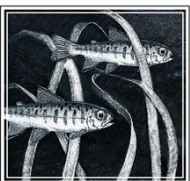


JEFFERSON COUNTY MARINE RESOURCES COMMITTEE 2021 ANNUAL REPORT



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 Board of Jefferson County Commissioners. In addition to serving the county in an advisory capacity, the MRC engages in hands-on restoration and monitoring projects and provides education and outreach to county residents and visitors. The Committee's work focuses on the marine waters of eastern Strait of Juan de Fuca, Admiralty Inlet and northern Hood Canal and covers nearly 200 miles of shoreline from Gardiner to Brinnon. These include the ancestral lands and waters of the Coast Salish Peoples who have inhabited this area since time immemorial and who continue to steward it for future generations. The Jefferson MRC's goal is to promote an ethic of stewardship, support science-based projects, and work in partnership with local Tribes, 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 (Res. No. 45-99) and is one of seven county MRCs affiliated with the Northwest Straits Initiative. Also part of the Initiative is the Northwest Straits Commission, which provides scientific, technical and financial support to the MRCs, and the Northwest Straits Foundation, the nonprofit arm established to leverage additional financial resources. This report summarizes the Jefferson MRC's work from October 2020 through September 2021.

Prepared by Monica Montgomery, MRC Coordinator
WA Department of Ecology Grant: SEANWS-2019-JeCoWS-00007
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-01]65401], nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

MRC MEMBERSHIP

MRC members are residents of Jefferson County and represent a range of backgrounds, interests, and expertise, with the unified goal of protecting and restoring our local marine and nearshore environments.

In 2021, one MRC member, Ray RaLonde (District 1), resigned and three new members were appointed - Janette Mestre (District 1), Liz Hoenig-Kanieski (District 1 Alt), and Joanie Hendricks (District 3 Alt).

2020-2021 Jefferson MRC Member Reprsentatives

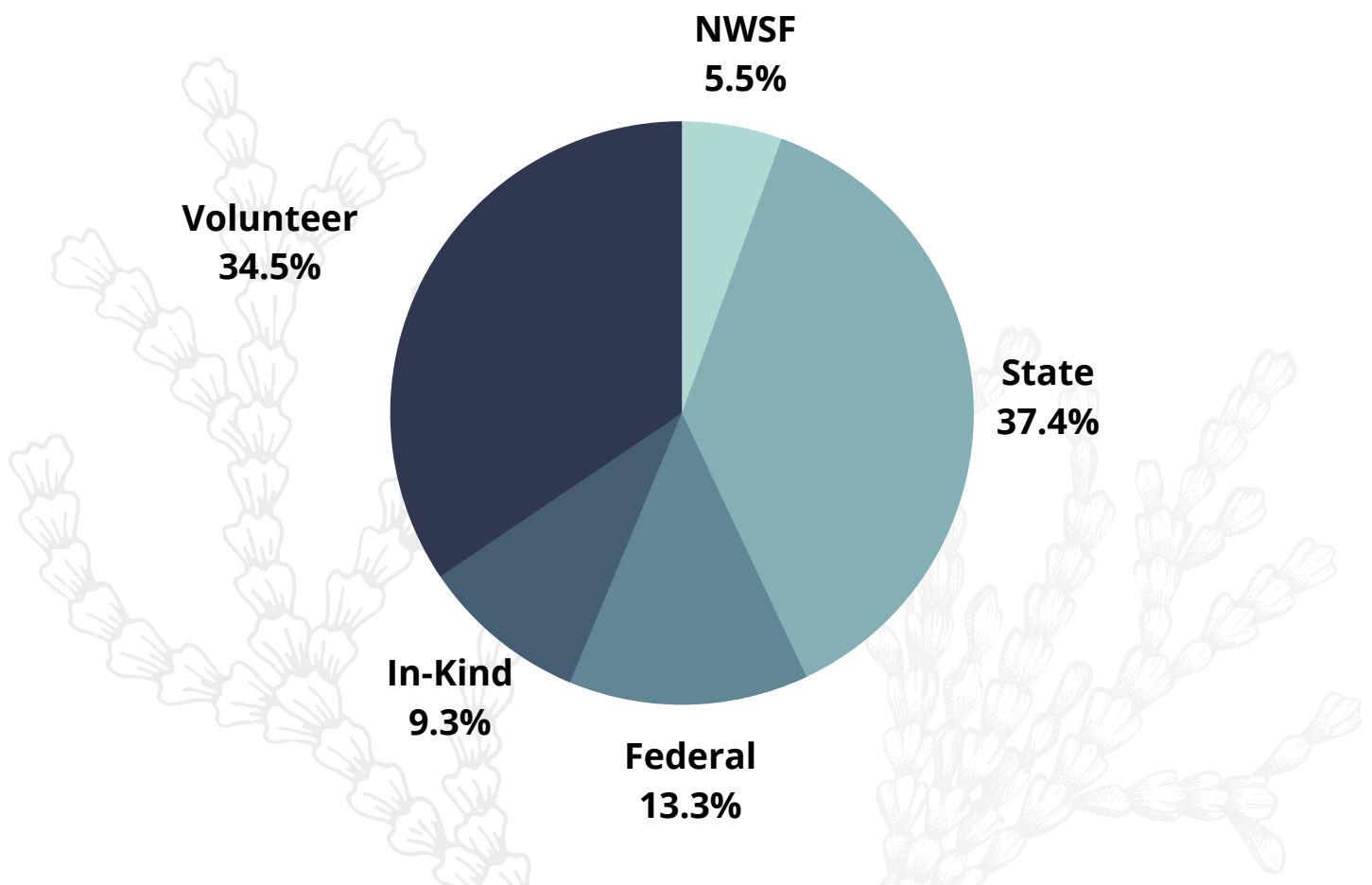
Neil Harrington, Chair - Tribal
Brenda Johnson, Vice Chair - District 2
Jeff Taylor, NWS Rep - District 2
Sarah Fisksen, NWS Alt - District 3
Janette Mestre - District 1
Solenne Walker - District 1
Liz Hoenig-Kanieski - District 1 Alt
Frank Handler - District 2 Alt
Heather Burns - District 3
Joanie Hendricks - District 3 Alt
Heidi Eisenhour - Jefferson County Commissioner, *ex officio*
Pam Petranek - Port of Port Townsend
Judy Surber - City of Port Townsend
Nam Siu - Marine Science
Brent Vadopalas - Marine Science Alt
Gordon King - Commercial
Troy McKelvey - Recreational
Roy Clark - Recreational Alt
Betsy Carlson - Environmental Interests
Bryan DeCaterina - Environmental Interests Alt



FUNDING & SUPPORT

In 2020-2021, the Jefferson MRC received the majority of its funding from Washington State and the U.S. Environmental Protection Agency through a grant administered by the Northwest Straits Commission (NWSC). The MRC also received grant funding from the Northwest Straits Foundation (NWSF).

The MRC continues to heavily rely on the dedication of its members and community volunteers. In 2020-2021, Jefferson MRC members and community volunteers logged 1,473 volunteer hours, a value of \$49,714 (@ 33.75/hr). The MRC also received in-kind contributions from community and project partners amounting to \$13,359. Through grants, volunteer hours and in-kind contributions, the MRC brought an estimated total value of \$144,259 to Jefferson County between October 2020 and September 2021.



During the 2020-2021 grant year, Jefferson MRC members and community volunteers contributed **1,473** volunteer hours.

MRC OPERATIONS

Meetings & Communication: The MRC met virtually on the first Tuesday of every month, except for July. Meetings remained open to the public, covered project and partner updates, and often included a guest speaker or special topic of interest to discuss. The NWSC representative, Jeff Taylor, attended the monthly NWSC meetings and presented on project updates to the NWSC alongside the MRC Coordinator. The MRC Coordinator, along with three MRC Members (Jeff Taylor, Brenda Johnson, Neil Harrington) and WSU Extension staff, Bob Simmons, also presented on MRC project updates to the Jefferson Board of County Commissioners (BoCC). In 2021, the MRC engaged in the following advisory actions:

- Sent a letter to the BoCC concerning potential impacts to eelgrass habitat in response to the Navy's proposal for expanding special operations training in Western WA State Parks
- Supported a congressional funding request for the Northwest Straits Initiative
- Supported the Jamestown S'Klallam Tribe's grant application for quantifying marine macroalgal habitat resources and resilience planning
- Supported the Port Townsend Marine Science Center's grant application for funding and updating the marine mammal stranding response on the North Olympic Peninsula

Local Integrating Organization (LIO) & Puget Sound Partnership (PSP): MRC Members and Staff attended meetings among local and regional partners, including meetings of the Strait ERN LIO, Hood Canal Coordinating Council, and Chumsortium.

Grant Administration: The MRC Coordinator prepared grant reports, managed budgets and contracts, documented in-kind contributions and volunteer hours, 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 over 75 hours of trainings and self-education relevant to the MRC's goals and projects. Members participated in various presentations offered through the NW Straits Commission, PSEMP Nearshore Summit, HCCC Shellfish Summit, and more.



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 areas. It often grows in dense “forests” in the rocky subtidal and provides vital 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 statewide, to better inform protection and restoration. For more information, read the [Puget Sound Kelp Conservation and Recovery Plan](#). Jefferson MRC continues to collect data for the [Northwest Straits Commission’s regional bull kelp monitoring project](#), with 2021 marking its sixth year of monitoring. This information can help lead to science-based decisions on how to manage this resource, and has been used to inform regional kelp planning and conservation efforts. It is important to continue this monitoring effort annually.

In Summer 2021, the MRC Coordinator and four MRC Members (including one former member) conducted three kayak-based surveys (June 22, July 17, and August 20) of the East Kelp Bed at North Beach, and began collecting water quality data (dissolved oxygen, salinity, and turbidity) in addition to sea surface temperature. Throughout the season, the kelp bed appeared to be healthy with the densest growth occurring along the shoreline. This year, the main bed seemed to grow in further east than in the past. There were also extensive patchy occurrences of kelp both west, near the old boat ramp, and east of the main bed. MRC Members also participated in the Puget Sound Restoration Fund's Kelp Expedition at Chetzemoka Park in July, spotlighting the importance of kelp as a marine foundation species. Explore the region's kelp forests with [this interactive storymap](#) highlighting the Puget Sound Restoration Fund’s 2021 Kelp Expedition.



What’s Next? Continue seasonal monitoring of the North Beach bull kelp bed. As capacity allows, conduct a county-wide assessment of bull kelp.

CITIZEN SCIENCE MONITORING: FORAGE FISH SPAWNING

Forage fish form a vital link in the marine food web, as they feed on plankton and in turn are prey to salmon, seabirds, and other animals. The MRC monitors two forage fish species that spawn intertidally: surf smelt (*Hypomesus pretiosus*) and Pacific sand lance (*Ammodytes hexapterus*). Knowing when and where these species spawn is critical for protecting these species and their spawning habitat, which in turn supports a resilient marine ecosystem. The MRC monitors three forage fish spawning sites:

- **Fort Townsend State Park Restoration Site:** Monitoring began here in 2015, one year prior to removing 1700 cubic yards of rock-armored landing fill in partnership with the WA Department of Fish and Wildlife (WDFW), NW Straits Foundation, and Point No Point Treaty Council. The 2020-2021 winter season (October through March) marked the sixth year of post-restoration monitoring here. Four surveys were conducted (Nov and Jan-Mar) with the help of seven volunteers. Sand lance and surf smelt eggs were present in the November and January samples.
- **Adelma Beach WDFW Index Site:** Monthly monitoring began here in 2016. This past year, three volunteers conducted eleven surveys. Lab results found sand lance (Nov) and surf smelt (Oct, Nov, Feb) eggs in samples collected.
- **Dabob Bay WDFW Index Site:** Monthly monitoring began here in June 2020. This past year, five volunteers conducted twelve surveys, with sand lance eggs detected in November.



What's Next? Continue monthly monitoring at both index sites and seasonal monitoring at Fort Townsend State Park. Consider additional sites for long term monitoring.

EELGRASS PROTECTION: 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, filtration of runoff, and sequestration of carbon. Localized eelgrass declines are primarily attributed to anthropogenic causes, one of which is physical damage caused by boat propellers and 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 buoys that protect 52 acres of eelgrass beds near Port Townsend, and nearly 50 acres in Mystery Bay and 8 acres near Port Hadlock where shellfish beds are also protected.

In 2020-2021, the MRC adopted a dive safety manual, conducted maintenance of the Port Hadlock buoy field (by boat), and monitored boater compliance. Monitoring of the Port Townsend buoy field typically occurs during the Wooden Boat Festival, which was canceled due to the pandemic. Instead, volunteers monitored compliance at the Port Townsend and Port Hadlock buoy fields throughout the boating season, at varying times and days of the week, noting 100% compliance.



What's Next? Resume dive work for buoy maintenance at all sites, conduct boater compliance monitoring, and aid other MRCs and organizations working to establish their own eelgrass protection voluntary no-anchor zones.

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, populations are a mere fraction of what they once were. Discovery Bay has a small natural Olympia oyster population near the southwest portion of the bay as well as scattered occurrences throughout the bay. Since 2014 and 2018, the MRC, in partnership with WDFW and the Jamestown S’Klallam Tribe, has been working to expand this population by distributing clean Pacific oyster shell as substrate for larvae to settle on at two restoration sites.

Powerlines Site: The MRC Coordinator, Project Lead, 4 MRC Members and 7 community volunteers conducted a population survey in July, following the 2021 heat wave. Monitoring discovered surprisingly good survivorship. A total of 52,575 individuals were estimated to be in the plot and ranged from 5 to 68mm in size with a normal distribution curve, indicating that natural recruitment continues to occur at this site.

Lagoon Site: Spread 80 cultch bags (2 cu yds) of clean cultch in April with the help of the MRC Coordinator, Project Lead, 6 MRC Members and 4 community volunteers.

What’s Next? Submit permit renewal and modification applications to expand the Powerlines Site. Distribute clean cultch at project sites and continue to monitor annually.



RAIN GARDENS

Rain running off rooftops, driveways, and roads flows into storm drains that discharge to local streams and bays untreated. This stormwater often carries harmful contaminants such as heavy metals, fertilizers, toxicants in rubber car tires that are lethal to coho salmon, pet waste (bacteria), and oil. Rain gardens are designed to filter this runoff with special bioretention soils that hold onto pollutants, plant roots that absorb excess nutrients, and mycorrhizal fungi that further help treat stormwater. Concerns about stormwater and water quality have prompted the MRC to initiate a multi-year effort to install a network of rain gardens in high priority locations.

In 2020-2021, the Jefferson MRC worked closely with WSU Jefferson County Extension (Water Programs and Master Gardeners), Native Plant Salvage Foundation, Quilcene School, NW Maritime Discovery Schools, the City of Port Townsend, and homeowners. The MRC and its partners installed a second rain garden at Quilcene School, conducted maintenance work at the Chetzemoka Park rain garden, rehabilitated the rain garden fronting the Maritime Center, and installed a new rain garden at Franklin and Adams Streets in Uptown Port Townsend. To date, the MRC has co-sponsored the installation of 18 rain gardens across East Jefferson County.



What's Next? Conduct assessments of maintenance needs for all 18 MRC co-sponsored rain gardens and install one new rain garden in 2022.

EDUCATION & OUTREACH

The MRC supports active stewardship of East Jefferson County's marine and nearshore 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 efforts. While still challenged with organizing community events during the pandemic, the MRC reached community members through targeted ads, educational materials, a new speaker series coupled with outdoor stewardship opportunities, and virtual workshops:

- **Targeted Ads:** The MRC placed boater targeted ads in 48 Degrees North, NW Yachting, and The Leader Summer Activities Guide to raise awareness of the no-anchor zones for eelgrass protection. The MRC also placed ads focused on individual actions for improving water quality in The Rose Theatre weekly newsletter and The Leader, with a new (fifth) ad focused on preventing plastic pollution. These ads had a total potential reach of 144,915 readers.
- **Speaker Series:** The MRC created a new speaker series, in partnership with the Port Townsend Marine Science Center, that aims to address local marine issues through educational presentations coupled with hands-on activities. The series launched with a talk on "[Microplastics as Marine Debris](#)" by Andrew Mason (NOAA) coupled with a beach cleanup event as part of the annual International Coastal Cleanup.
- **Crabber Outreach:** The MRC distributed posters, rack cards, and packets at key locations across East Jefferson County to educate recreational crabbers about best harvesting practices and to promote the virtual crabber workshop hosted by the Northwest Straits Foundation and WA Department of Fish and Wildlife.
- **Shoreline Landowner Outreach:** The MRC shared Shore Friendly resources with shoreline landowners, promoted virtual workshops, and helped to connect Jefferson County shoreline property owners with the Northwest Straits Shore Friendly program, resulting in more than 21 site assessments with recommendations by coastal geologists at no cost to the property owners.

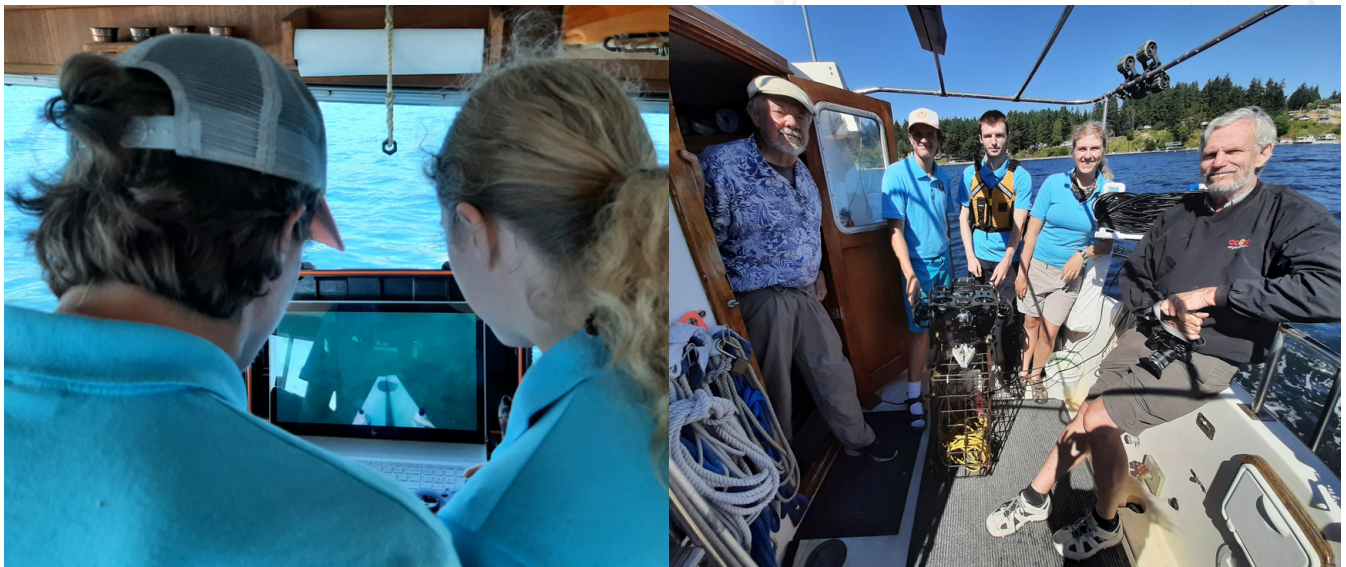


What's Next? Continue to offer educational opportunities safely.

MAPPING LOST CRAB POTS

More than 12,000 crab pots are lost and become derelict each year in Washington's Salish Sea. A single lost crab pot can kill up to 15 crabs per year, adding up to 180,000 otherwise harvestable crabs annually. The Northwest Straits Foundation (NWSF) works to eliminate impacts of lost crab pots through targeted removals, research, education and outreach. Since 2002, the NWSF and its partners have removed over 5,400 derelict crab pots from the the region. However, these efforts have been focused in targeted areas, such as Port Townsend and Dungeness bays, and the high costs of using side-scan sonar surveys to locate pots and hiring divers to remove them can be prohibitive for communities seeking to address this issue.

In 2021, the Jefferson MRC partnered with the Sea Dragons, a Port Townsend-based youth STEM program specializing in underwater robotics, to pilot the use of submersible remotely operated vehicles (ROVs) as a more cost-effective way for locating and removing lost crab pots. A trial run for operating the ROV in open water conditions was completed in July with promising results. The team has since been working on adding navigational equipment to the ROV, developing an ROV survey protocol for locating lost crab pots, and working on securing WDFW permits and approval for removing lost pots. The team will test the ROV's capabilities in the coming year, focusing on the Adelma Beach and Cape George areas of Discovery Bay, where community members report a high concentration of lost pots. If successful, the MRC will look to expand this project to other areas across East Jefferson County.



THANK YOU

Thank you to the Jefferson County Marine Resources Committee members and community volunteers. Your 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 Jamestown S’Klallam Tribe, Taylor Shellfish, Port of Port Townsend, City of Port Townsend, Point No Point Treaty Council, WA Department of Fish and Wildlife, WA Department of Natural Resources, Port Townsend Marine Science Center, the Sea Dragons, Ross Anderson, Lynda Woodson, Quilcene School, the NW Maritime Discovery Schools, Native Plant Salvage Foundation, WSU Master Gardeners, and many others. This includes staff time, advice, materials, and general support for MRC projects.

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

How you can get involved

Attend monthly MRC meetings. Volunteer on local projects. Sign up for the Northwest Straits Foundation and Commission newsletters.

When/where meetings are held

Meetings are held the first Tuesday of every month, 6-8PM. During the COVID-19 pandemic, meetings have been held virtually. Find updated meeting details here: www.jeffersonmrc.org/meetings-events.

How to reach us

Website: www.jeffersonmrc.org

Email: jeff.co.mrc@gmail.com