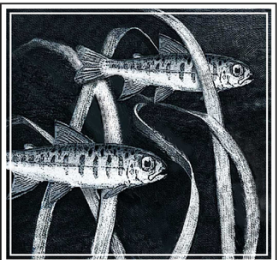


2022 ANNUAL REPORT



Jefferson County
**Marine
Resources
Committee**

ABOUT THE MRC



The Jefferson County Marine Resources Committee (MRC) is a county based advisory group comprised largely of volunteer members appointed by the Jefferson Board of 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 MRC'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 Triton Cove. These include the ancestral lands and waters of the Coast Salish Peoples who have inhabited and stewarded this area since time immemorial. 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 Marine Conservation 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 for the MRCs. This report summarizes the Jefferson MRC's work from October 2021 through September 2022.

Prepared by Monica Montgomery, MRC Coordinator
WA Department of Ecology Grant: SEANWS-2021-JeCoWS-00007
Project Title: Jefferson County MRC Operations and Projects



Jefferson County
**Marine
Resources
Committee**



**Northwest
Straits**
INITIATIVE



PUGET SOUND
PARTNERSHIP



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]97401], 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 2022, one MRC member, Liz Hoenig-Kanieski (District 1 Alternate), resigned and a new Port Commissioner representative, Carol Hasse, was appointed to the MRC.

2021-2022 Jefferson MRC Member Representatives

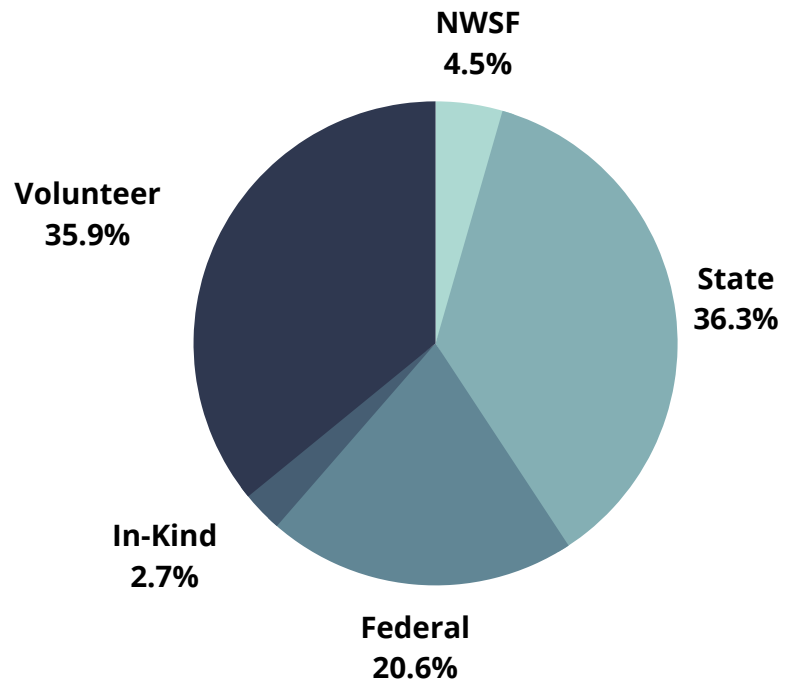
Brenda Johnson, Chair - District 2
Troy McKelvey, Vice Chair - Recreational
Jeff Taylor, NWS Rep - District 2
Sarah Fiskens, NWS Alt - District 3
Neil Harrington - Jamestown S'Klallam Tribe
Heidi Eisenhour - Jefferson County Commissioner, *ex officio*
Carol Hasse - Port of Port Townsend Commissioner
Judy Surber - City of Port Townsend
Janette Mestre - District 1
Solenne Walker - District 1
Frank Handler - District 2 Alt
Heather Burns - District 3
Joanie Hendricks - District 3 Alt
Nam Siu - Marine Science Practitioner
Brent Vadopalas - Marine Science Practitioner Alt
Gordon King - Commercial Interests
Roy Clark - Recreational Interests Alt
Betsy Carlson - Environmental Interests
Bryan DeCaterina - Environmental Interests Alt

FUNDING AND SUPPORT

In 2022, 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).

During the 2021-2022 grant year, Jefferson MRC members and community volunteers contributed **1,845** volunteer hours.

The MRC's work relies on the dedication of its members and community volunteers. In 2022, Jefferson MRC members and community volunteers logged 1,845 volunteer hours, a value of \$64,335 (@ \$34.87/hr). The MRC also received in-kind contributions from community and project partners amounting to about \$4,866. Through grants, volunteer hours and in-kind contributions, the MRC brought an estimated total value of \$179,201 to Jefferson County between October 2021 and September 2022.





Meetings & Communication: The MRC held virtual public meetings on the first Tuesday of each month, except for in 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 NW Straits Commission (NWSC) representative, Jeff Taylor, attended the monthly NWSC meetings. The MRC Coordinator, along with three MRC Members (Jeff Taylor, Brenda Johnson, Troy McKelvey) and WSU Extension staff, Bob Simmons, presented an annual update to the Jefferson Board of County Commissioners. The MRC Coordinator also presented on the MRC's work to the Strait Ecosystem Recovery Network Local Integrating Organization, North Pacific Coast Marine Resources Committee, and at the 2022 NW Straits Initiative (NWSI) Conference.

Local Integrating Organization (LIO) & Puget Sound Partnership (PSP): MRC members and staff participated in meetings and planning processes among local and regional partners, including 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 99 hours of trainings and self-education, including the Salish Sea Ecosystem Conference, NWSI 2021 Climate Change Symposium Series, NWSI 2022 Conference, and WDFW forage fish survey training.

COMMUNITY SCIENCE MONITORING: BULL KELP

Bull kelp (*Nereocystis luetkeana*) is a large brown algae that is native to the Strait of Juan de Fuca and Puget Sound areas. It often grows in dense “forests” in the rocky subtidal zone and provides vital foraging, nursery and spawning habitat for a variety of species, including forage fish, salmon, and rockfish. Concerns of decline in parts of southern and central Puget Sound have prompted 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 2022 marking its seventh year of monitoring. This data is used to inform regional kelp planning and conservation efforts. In Summer 2022, the MRC, with the help of community volunteers, conducted three kayak-based surveys (June 25, July 27, and August 27) of the East Kelp Bed at North Beach. Overall, the kelp bed did not grow as close to the shoreline as in recent years and did not grow in as densely in the center of the bed by the last survey in August. Late spring La Niña (cool) weather may have contributed to a delayed growth cycle and the smaller floating kelp bed extent observed.



COMMUNITY 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 continues to monitor three forage fish spawning sites as part of long-term data collection efforts:

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 NW Straits Foundation, WA Department of Fish and Wildlife (WDFW), and Point No Point Treaty Council. The 2021-2022 winter season (October through March) marked the seventh year of monitoring here. Five surveys were conducted (Oct, Nov and Jan-Mar) with the help of six dedicated volunteers. No eggs were detected in the samples this season.



Adelma Beach WDFW Index Site: Monthly monitoring began here in 2016. This past year, two volunteers conducted ten surveys, with sand lance eggs detected in December and January.

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.



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 were prior to the arrival of settlers in the mid-1800s. A small natural Olympia oyster population persists near the southwest portion of Discovery Bay, with scattered occurrences throughout the bay. Since 2014, the MRC has partnered with WDFW and the Jamestown S’Klallam Tribe to expand this population by distributing clean Pacific oyster shell, provided by Taylor Shellfish, as substrate for larvae to settle on at two restoration sites.

Powerlines Sites: In 2022, the MRC expanded the original "North Powerlines Site" to include a new parcel, the "South Powerlines Site", located just south and adjacent to it. The MRC conducted population surveys, estimating more than 79,000 individuals at the North site and setting a baseline of just over 44,000 individuals at the South site. Olympia oysters ranged from 2 to 81mm in size, signaling that natural recruitment is occurring. The MRC spread 3 cu yds of clean shell at the North site.

Lagoon Site: The MRC spread 80 cultch bags (2 cu yds) of clean shell with the help of community volunteers.

What’s Next? Monitor and spread shell at all sites. Assess restoration needs at Broad Spit (Dabob Bay) and Kilisut Harbor.



VOLUNTARY EELGRASS PROTECTION 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 100 acres of eelgrass and shellfish beds near Port Townsend, Port Hadlock and in Mystery Bay.

In 2022, the MRC conducted maintenance of the Port Hadlock and Port Townsend buoy fields. Monitoring of boater compliance along the Port Townsend waterfront occurred throughout the boating season, noting only one boat out of compliance, during the Wooden Boat Festival, resulting in 95% boater compliance.

What's Next? Continue annual buoy maintenance at all sites (with high priority set for Mystery Bay) and conduct boater compliance monitoring.



DERELICT CRAB POT REMOVAL

More than 12,000 crab pots are lost and become derelict each year in Washington waters of the Salish Sea, killing an estimated 180,000 otherwise harvestable Dungeness crabs annually. To expand the [derelict crab pot removal efforts led by the NW Straits Foundation](#), and with their guidance, in 2021, the Jefferson MRC began a partnership with the Sea Dragons, a Port Townsend-based student-run robotics team specializing in underwater remotely operated vehicles (ROVs), to locate and remove lost crab pots.

In 2022, the MRC acquired approvals from the WA Department of Fish and Wildlife to remove lost crab pots in Discovery Bay. The MRC contracted side scan sonar surveys to optimize the utility of the ROV in locating pots for removal by using known GPS coordinates. The side scan sonar surveys located 126 lost crab pots between the Cape George Marina and Beckett Point and 31 pots near Adelma Beach. With limited time on-the-water, the team worked to adapt the ROV and survey methods, successfully relocating six lost crab pots and removing three, proving the concept of using an ROV for crab pot removal. [See the project StoryMap here for more details.](#)

What's next? Continue working with the Sea Dragons to enhance the ROV's capabilities to recover pots at greater depths, remove pots in other popular crabbing locations across East Jefferson County, and refine ROV survey methods to find pots with unknown locations so that side scan sonar surveys are not required.





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 2022, with the help of numerous community volunteers, the MRC conducted a rain garden maintenance needs assessment, organized four work parties across Port Townsend, and installed one new rain garden behind the Kivley Center in Port Hadlock. To date, the MRC has co-sponsored the installation of 17 rain gardens across East Jefferson County.

What's Next? Install one or two new rain gardens and continue rain garden maintenance work across East Jefferson County. Hire an intern to support the rain garden project and cultivate community stewardship.



EDUCATION & OUTREACH



The MRC continues to support 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. In 2022, the MRC reached over 1,300 community members and visitors through its education and outreach efforts:

Speaker Series: The MRC partnered with the Port Townsend Marine Science Center to co-host two speaker series events. These included [a talk on king tides](#) coupled with a MyCoast demonstration, and [a talk on Dungeness crab research and co-management](#) coupled with a light trap larval crab monitoring event.

Workshops: In partnership with the NW Straits Foundation (NWSF), the MRC helped organize a shoreline landowner outreach workshop and promoted the [NWSF virtual crabber outreach workshop](#), as well as distributed crabber education packets across the county.

Presentations: MRC staff and members gave presentations about local marine resources and MRC projects through WSU Extension's Beach Naturalists training and the Port Townsend Maritime Discovery Schools teacher training programs.

Local Festivals: The MRC shared marine education at Shrimpfest, Forever Streamfest, and the Wooden Boat Festival.

Targeted Ads: The MRC placed ads about individual actions for improving water quality at The Rose Theatre and a boater targeted eelgrass protection ad in the 48 Degrees North September issue.



THANK YOU



Thank you to our 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 Board of Jefferson County Commissioners, Port of Port Townsend, City of Port Townsend, Jamestown S'Klallam Tribe, Point No Point Treaty Council, Taylor Shellfish, WA Department of Fish and Wildlife, WA Department of Natural Resources, Port Townsend Marine Science Center, the Sea Dragons, Applied Education Foundation, Ross Anderson, Port Townsend Maritime Discovery Schools, Hama Hama Oyster Company, Native Plant Salvage Foundation, WSU Extension (Master Gardeners, Beach Naturalists, and Stream Stewards), and many others. This includes staff time, advice, materials, and general support for MRC projects. The MRC is also grateful for funding and support from the Northwest Straits Commission, Northwest Straits Foundation, Puget Sound Partnership, and the United States Environmental Protection Agency.

How you can get involved

Attend monthly MRC meetings ([sign up here](#) to be added to the notification list). Volunteer on local [projects](#). [Sign up](#) for the Northwest Straits Foundation and Commission newsletters.

When/where meetings are held

Regular meetings are open to the public and are currently being held in a hybrid format, 6-8PM the first Tuesday of each month. Visit the website to find the most up-to-date details: www.jeffersonmrc.org/meetings-events.

How to reach us

Website: www.jeffersonmrc.org

Email: jeff.co.mrc@gmail.com