Drone image by John Gussman

JEFFERSON COUNTY MARINE RESOURCES COMMITTEE

ANNUAL REPORT

2025

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 to advise on research, educational, and regulatory measures necessary to protect and restore the marine resources of East Jefferson County. This area includes the marine waters of the eastern Strait of Juan de Fuca, Admiralty Inlet and northern Hood Canal, nearly 200 miles of shoreline from Gardiner to Triton Cove, and the ancestral lands and waters of the Coast Salish Peoples who have inhabited and stewarded this area since time immemorial. In addition to serving the county in an advisory capacity, the MRC engages in hands-on restoration, monitoring, and education outreach projects. The MRC's goal is to promote an ethic of stewardship, implement science-based recommendations, and work in partnership with Tribes, local and state government agencies, nonprofit organizations, and the broader community to restore and protect our corner of the Salish Sea.

The Jefferson County MRC was established 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. This report summarizes the Jefferson MRC's work from January 2025 through December 2025.

Prepared by Katie Kowal, MRC Coordinator
WA Department of Ecology Grant: SEANWS-2025-JeCoWS-00013
Project Title: Jefferson County MRC Operations and Projects
Photos taken by Katie Kowal unless otherwise noted.

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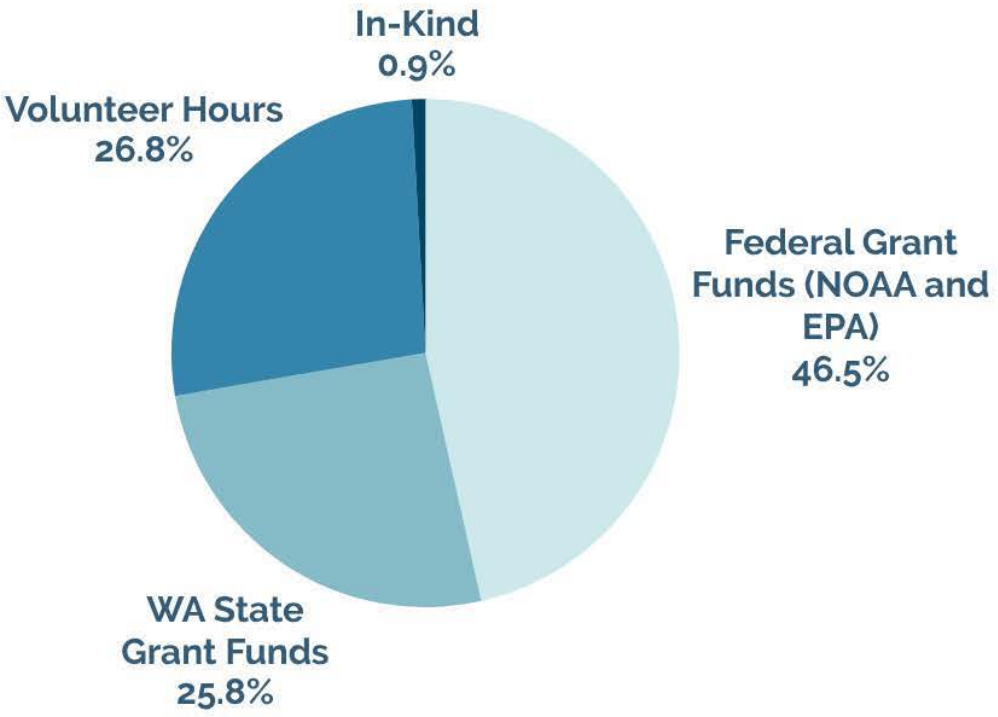
MRC MEMBERSHIP

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 2025, we welcomed two new MRC members, Jon Waggoner (Marine Science Practitioner Alt) and Steve King (City of Port Townsend). One MRC member renewed their term – Janette Mestre (District 1) – and one MRC member, Brad Bebout (District 1) resigned. In 2023, the MRC members decided by consensus to add a new position on the committee to represent local youth, with a starting age of 15–21 years old and serving up to a four year commitment (to be determined at the beginning of their term). In 2025, our first youth member, Akeyla Behrenfeld, completed her 1-year term as the Local Youth representative.

Jefferson MRC Member Representatives (as of December 2025)

Gordon King - Commercial Interests
Betsy Carlson, Chair - Environmental Interests
Bryan DeCaterina - Environmental Interests Alt
Neil Harrington - Jamestown S'Klallam Tribe
Heidi Eisenhour - Jefferson County Commissioner, *ex officio*
Carol Hasse - Port of Port Townsend Commissioner, *ex officio*
Steve King - City of Port Townsend
Janette Mestre - District 1
Timothy Behrenfeld - District 1
Vacant - District 1 Alt
Brenda Johnson - District 2
Jeff Taylor, NWSC Rep - District 2
Frank Handler - District 2 Alt
Sarah Fisken, NWSC Alt - District 3
Vacant - District 3
Tim Cross - District 3 Alt
Emily Buckner, Vice Chair - Marine Science Practitioner
Jon Waggoner - Marine Science Practitioner Alt
Troy McKelvey - Recreational Interests
Roy Clark - Recreational Interests Alt
Vacant - Local Youth

FUNDING & SUPPORT



In 2025, the Jefferson MRC received a total of $182,000 from Washington State, the U.S. Environmental Protection Agency, and the National Oceanic and Atmospheric Administration through grants administered by NWSC. Additionally, MRC members and community volunteers contributed a total of 1,620 volunteer hours, a value of $67,550 (**@ $41.70/hr**). The MRC also received an estimated $2,180 through in-kind contributions from community partners, including contributions from Taylor Shellfish for use of their truck and vessels for no-anchor zones work, Marine Survey and Assessments for conducting a biological survey, and the City of Port Townsend for rain garden green waste removal services. Through grants, volunteer hours and in-kind contributions, the MRC brought an approximated total value of $251,730 to Jefferson County between January 2025 and December 2025.

1,620

total hours contributed by MRC members and community volunteers

$251,730

estimated value the MRC brought to Jefferson County between January 2025 and December 2025

MRC OPERATIONS

Operations: In 2025 the MRC funded one staff member, the MRC Coordinator Katie Kowal, and continued to work towards hiring a part-time staff member.
Also through 2025, the MRC Diversity, Equity, and Inclusion (DEI) subcommittee continued their work, led by Emily and Neil, to evaluate internal and external practices. With funding help from Strait ERN, the MRC continued their 2024 work with USAWA Consultants to help understand how to improve the MRC's meeting format, and increase representation and engagement of communities across East Jefferson County.

MRC members at the November 2025 NWSC conference.
Photo credit: Caitlyn Blair

Meetings: Public meetings were offered in a hybrid format and held on the first Tuesday of each month, with the exception of July. Meetings often included a guest speaker or special topic of interest to discuss, as well as project and partner updates. MRC members and staff also engaged in meetings among local and regional partners, including NWSC, the Strait Ecosystem Recovery Network, and Hood Canal Coordinating Council. In November, 13 MRC members attended the NWSC Conference in Everett, WA, to attend workshops, network, and share experiences with other MRC members and NWSC staff.

MRC OPERATIONS

Communications: To share about the MRC's work and connect with the broader community, the MRC tabled several events across East Jefferson County, including the Connectivity Fair in March, Hood Canal Shrimpfest in June, and Wooden Boat Festival in September. Two MRC members and the Coordinator presented an annual update to the Board of County Commissioners in April 2025.

The MRC also maintains a website (**www.jeffersonmrc.org**) which was regularly updated to provide current information about completed and ongoing projects, meeting agendas, approved minutes, and upcoming events. MRC events and workshops were also shared via the WSU Extension Facebook page and website.

Frank ready to network at Connectivity Fair (left), Photo credit: Emily Buckner, and Gordon sharing the MRC's work at Wooden Boat Festival (right). Photo credit: Betsy Carlson

Grant Administration: The MRC Coordinator tracked project progress and deliverables; prepared monthly, quarterly and annual grant reports; managed budgets, permits and subcontracts; documented in-kind contributions and volunteer hours; and coordinated the MRC grant proposal for the 2025-2027 funding cycle.

Advisory Actions: In late 2025, the MRC was asked to provide a Letter of Support to the Department of Natural Resources, in support of the 2025 Trust Land Transfer (TLT) proposals #1 and #2, to permanently preserve approximately 2,600 acres of timber trust lands that remain within the Dabob Bay Natural Area boundaries. The MRC voted to support the TLT, as it will protect and preserve upland habitat critical to the health of the nearshore environment of Dabob Bay. The uniquely undeveloped watershed surrounding Dabob Bay provides significant recreational, commercial, and ecosystem services. A Letter of Support will be completed in 2026.

MRC PROJECTS

In addition to serving Jefferson County in an advisory capacity, the MRC engages in hands-on marine stewardship projects with numerous local and regional partners. MRC projects are led by committee members, engage community volunteers in conservation efforts, and support local and regional conservation efforts. These projects include monitoring forage fish spawning beaches, bull kelp populations, and storm surge events; improving water quality by maintaining a network of rain gardens; protecting eelgrass and shellfish habitat by maintaining voluntary no-anchor zones; restoring Olympia oyster populations in priority areas; recovering lost crab pots using submersible remotely operated vehicles (ROVs); and providing environmental education opportunities across East Jefferson County. In 2025, MRC projects engaged a total of 53 volunteers in stewarding our marine and nearshore resources, and served 80 participants through education and outreach workshops.

53 volunteers who contributed to marine stewardship through MRC projects

80 participants in MRC education and outreach workshops

With support and coordination from NW Straits Foundation, the Jefferson MRC also participates in the Shore Friendly - Landowner Outreach program. MRC members join NWSF staff and local biologists on site visits to local shoreline homeowners properties. The Shore Friendly team advises homeowners on bulkhead and shoreline armoring removal, landscape management, and drainage and erosion control.

The Shore Friendly Program community beach walk on Marrowstone Island. Photo credit: Brenda Johnson

COMMUNITY SCIENCE: FORAGE FISH SPAWNING SURVEYS

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 their spawning habitat and populations, which in turn supports a resilient marine ecosystem. The data collected from these surveys contribute to regional monitoring efforts, with index site data contributing to the **WDFW Forage Fish Spawning Database**. In 2025, the MRC monitored two forage fish spawning sites, Dabob Bay and the Quilcene Yacht Club.

Dabob Bay WDFW Index Site:
Monthly monitoring began here in June 2020. This year, seven volunteers conducted 10 surveys. 1 sand lance egg was found January 2025. Data results from September 2025 onward have not yet been received.

Forage fish volunteers lay a transect line during a sampling event. Photo credit: Sarah Fisken

Quilcene Yacht Club WDFW Restoration Site:
The MRC began sampling this location for forage fish as a pre-restoration site in January 2025. This is in support of continued work with the Port of Port Townsend for a potential bulkhead removal. The goal at this site is to remove the bulkhead and provide nourishment for the beach. This year, seven volunteers conducted 10 surveys. 1 surf smelt egg was found February 2025. Data results from September 2025 onward have not yet been received.

Two MRC members also attended the October 2025 NWSC Forage Fish Training in Padilla Bay, WA. They practiced collecting, sieving, and preserving samples, identifying eggs in sediment samples, and reviewed forage fish identification, life history, and ecology.

Sarah takes several photos and logs them in the iForm app for WDFW review. Photo credit: Troy McKelvey

COMMUNITY SCIENCE: BULL KELP MONITORING

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. Declines in parts of south and central Puget Sound have galvanized efforts to assess kelp abundance and distribution statewide, to better inform recovery. For more information, read the **Puget Sound Kelp Conservation and Recovery Plan** and **2023 Status Update**. Jefferson MRC continues to collect data as part of NWSC's regional bull kelp monitoring project, with 2025 marking the ninth year of surveying the East Kelp Bed at North Beach.

Floating Kelp at North Beach.
Photo credit: Jill Alban

The MRC conducted three surveys this year, in June, July, and August. Surveys were conducted by four MRC members and five community volunteers. Overall, the bull kelp bed at North Beach appeared to be healthy and relatively dense, with a larger perimeter compared to previous years. The MRC will continue to monitor kelp beds at North Beach and other areas, as capacity allows.

Additionally this year, the Kelp Subcommittee held an evening lecture in May 2025, "Understanding the underwater forest: Kelp research and monitoring at North Beach."

50 members of the public heard from Jeff Whitty (NWSC), Kari Inch (PSRF) and Sophie Schwager (PSRF) about kelp life history and presence in WA state, and the new monitoring buoy stationed off of North Beach in Port Townsend.

Community members attended an evening lecture to learn more about regional and local kelp forests.
Photo credit: Katie Koval

COMMUNITY SCIENCE: STORM SURGE MONITORING

Local residents have identified data gaps in existing king tide observations in WA State associated with the degree to which storm surge and wave runup contribute to coastal flooding. In effort to address these data gaps, the Jefferson MRC adopted a storm surge monitoring project from Local 20/20, a local nonprofit fostering community resiliency. In 2025, the MRC continued building upon eight years of this existing data at the Salmon Club boat ramp in Port Townsend. The Salmon Club boat ramp was monitored two times between October-December 2025.

Jeff Taylor, Barney Burke, and Dave Wilkinson photographing a small storm surge event in Port Townsend (left); Dave Wilkinson and Barney Burke monitoring surge on 11/5/25 (right). Photo credit: Jeff Taylor

Monitoring total water levels captures the sum of parameters that contribute to coastal flooding (i.e., tidal elevation, storm surge, wind direction, wind speed, fetch, and wave runup) that are not currently assessed together in forecasts. This involves collecting repeat photos during high storm surge and wave runup events at the same location, using fixed features in photos to provide reference against which the elevation of total water level during these events can be estimated, and coupling these observations with ancillary data on other parameters that contribute to coastal flooding. In addition to monitoring total water levels, the MRC will be developing a written protocol that can be adopted for other locations across the Salish Sea so that other communities can better understand their own coastal flood risks and make more informed decisions at the local level. The overall goal of this project is to improve our understanding of the combination of variables that contribute to coastal flooding.

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 fertilizers, oils, bacteria from pet waste, and toxicants in rubber car tires that are lethal to coho salmon. Rain gardens are designed to filter and treat stormwater. Concerned about water quality in the marine environment, the MRC began installing rain gardens in 2014. To date, the MRC has co-sponsored the installation of 19 rain gardens across East Jefferson County.

In 2025, the MRC shifted it's focus to maintaining existing rain gardens. To help address maintenance needs, the MRC focused efforts on recruiting and educating community members interested in stewarding, or "adopting," their neighborhood rain garden. To date, five community members have adopted three rain gardens. In 2025, the MRC organized six maintenance work parties, focusing on weeding, mulching, replanting and dividing plants. Janette coordinated with the City of Port Townsend to pick up the green waste generated during rain garden work parties. The MRC also hired a landscaper in Fall 2025, to assist with weeding several rain gardens that had become overgrown. In the coming years, the MRC will continue to focus on maintenance and cultivating community stewardship.

Janette and Frank weed the Monroe St. rain garden (top); Frank, Cheryl, Janette and volunteers weed the Chetzemoka Park rain garden (bottom).

VOLUNTARY EELGRASS PROTECTION NO-ANCHOR ZONES

Eelgrass (*Zostera marina*) is an underwater flowering plant that provides numerous important ecosystem benefits, including shelter for juvenile salmon and Dungeness crab, substrate for herring eggs, uptake of excess nutrients, and carbon sequestration. 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 the first voluntary no-anchor zone to protect eelgrass beds along the Port Townsend waterfront. The MRC now maintains 21 buoys that protect over 100 acres of eelgrass and shellfish beds in Port Townsend Bay (along the Port Townsend waterfront and near Port Hadlock) and in Mystery Bay.

Gordon diving on the Mystery Bay buoys while Brad Bebout inspects buoy condition on the dock (top left). Photo credit: Troy McKelvey

Gordon and Bryan swap winter floats with summer spar buoys (right). Photo credit: Troy McKelvey

In 2025, 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 year, noting 95% compliance, even during the Wooden Boat Festival, the busiest boating weekend of the year.

OLYMPIA OYSTER RESTORATION

The Olympia oyster (*Ostrea lurida*) is the only native oyster of the North American Pacific Coast and once thrived along the Strait of Juan de Fuca and Puget Sound areas. However, due to habitat degradation and overharvesting, these oyster populations are a mere fraction of what they were prior to the arrival of settlers in the mid-1800s. In 2025, the MRC focused its efforts on Discovery Bay, identified as a priority area for Olympia oyster restoration (**WDFW 2012**).

Discovery Bay: Since 2014, the MRC has partnered with WDFW and the Jamestown S'Klallam Tribe to expand a nearby extant population by spreading clean Pacific oyster shell which provides substrate for larvae to settle on and grow. In 2025, the MRC counted and measured Olympias in a population survey of the South Powerlines Sites, calculating an estimated more than 97,000 Olympia oysters. These oysters had an average size of 17mm, and followed a normal distribution curve, indicating that natural recruitment continues to occur in this area. The MRC also contracted Hood Canal Oyster Company to deliver 1,500 bags (approximately 50 cubic yards) of clean shell at the South Powerlines site in December 2024, spread in spring 2025. An additional 1,000 bags of shell were spread at the South Powerlines site in May 2025, with the help of WDFW.

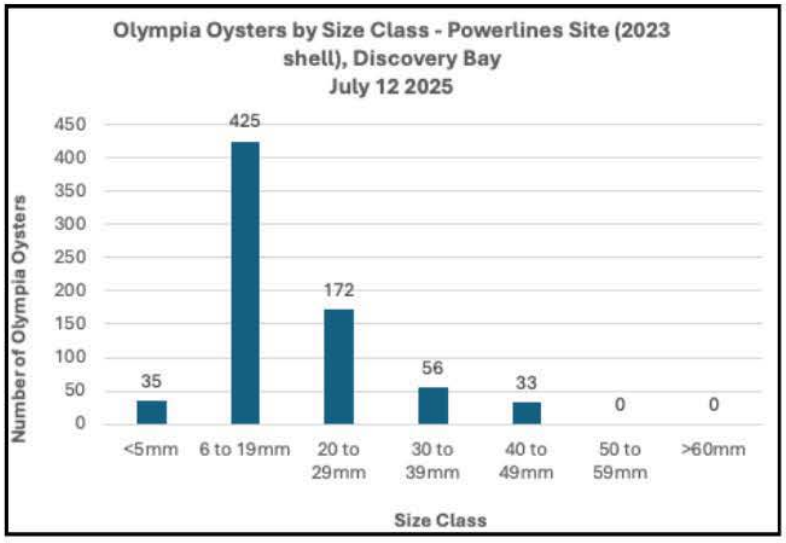


Figure 1. Size class (mm) distribution of Olympia oysters measured during a survey at the South Powerlines site on July 12, 2025. The graph shows some recruitment in 2023 (likely most of the oysters greater than 30mm), strong recruitment in 2024 (roughly 6mm to 29mm) and some recruitment in 2025.

Pacific oyster shell placed at the Powerlines site in July 2023, showing Olympia oyster spat (settlers) in July 2025. Photo credit: Neil Harrington

OLYMPIA OYSTER RESTORATION

85 cu yds

of clean shell were spread in South Discovery Bay in 2025 to provide substrate for native Olympia oyster larvae to settle on and grow

>97,000

population of Olympia oysters estimated from surveys in 2025, compared to essentially zero when the project began in 2014

Throughout 2025, Olympia oyster spat was found to have settled on both Pacific oyster and Olympia oyster shell, a key goal of this project.

The MRC will continue to conduct population surveys at the North and South Powerlines and Lagoon sites, and spread clean shell in Discovery Bay in accordance with project permits. The MRC will also continue community engagement efforts and work with partners to conduct baseline surveys of Olympia oyster populations at various properties along Kilisut Harbor.

Volunteers open 1000 bags of shell (top, middle). Photo credit: Anour Esa

Volunteers gather at the South Powerlines site to count and measure Olympia oysters (bottom). Photo credit: Emily Buckner.

ROV LOST CRAB POT REMOVAL

It is estimated that over 12,000 crab pots are lost and become derelict each year in Washington waters of the Salish Sea, killing 180,000 otherwise harvestable Dungeness crabs annually. To expand the **NW Straits Foundation**'s derelict crab pot removal program, 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 2025 the ROV Lost Crab Pot Removal project partnered with Port Townsend High School, Northwest Straits Foundation and Coastal Sensing and Survey to conduct four days of on-the-water ROV crab pot removal efforts.

Over four days, a total of 33 pots were removed from Port Townsend Bay, and four pots were removed from Kilisut Harbor. Six MRC members, two community members, and nine students from the Port Townsend High School Robotics Club participated in recovery efforts, learning how to maneuver the ROV, identify invertebrates found on derelict pots, and recording data.

Students posing with recovered derelict crab pots in 2025 (left, top); A student practices manuevering the ROV (left, middle); Juvenile kelp crabs found on a surfaced derelict crab pot (left, bottom)

EDUCATION & OUTREACH

The MRC supports stewardship of 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.

Nam leading the Searching for Seaweed event. Photo credit: Katie Kowal

In 2025, the MRC reached 2,040 community members and visitors through on-the-beach education, classroom workshops, and tabling at community events. The MRC offered two on-the-beach education events, "Digging for Dinner" and "Searching for Seaweed," in partnership with WDFW, to educate recreational harvesters about digging clams, shucking oysters, and harvesting seaweed safely and responsibly. The MRC also held a Crabbing 101 workshop to provide education on WA crab regulations, co-management efforts, and best practices for properly rigging pots to avoid loss. They also distributed over 175 crabber education packets at key locations across the county.

For the second year in a row the MRC hosted the Marine Science and Stewardship Stage at the Port Townsend Wooden Boat Festival. The MRC partnered with the Port Townsend Marine Science Center to invite 19 speakers to present over 3 days, on topics ranging from red tides, to puffins, to the impacts of dam removal on the marine environment. Each morning started with a 1-hour live plankton lecture and demonstration, with a hands-on plankton tow and microscope activity, which was incredibly popular with kids and adults alike.

Visitors to the Marine Science Stage (left)
Photo Credit: Betsy Carlson

Becca Mahan, PTMSC volunteer, helps visitors locate plankton under the microscope (right).
Photo Credit: Betsy Carlson

THANK YOU

Thank you to our Jefferson County Marine Resources Committee members and the many community volunteers who continue to support MRC projects. 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, Strait Ecosystem Recovery Network, Port Townsend Marine Science Center, Coastal Sensing & Survey, John Gussman, Eric Wennstrom, Stewart Pugh, Hood Canal Oyster Company, Native Plant Salvage Foundation, WSU Extension (Master Gardeners, Beach Naturalists), and many others. This includes staff time, advice, materials, and general support for MRC projects. The MRC is also grateful to our funders and for support from the Northwest Straits Commission.

How to get involved: Attend monthly MRC meetings 5:30-7:30PM the first Tuesday of each month (**sign up here** to be added to the notification list). Volunteer on a **project**. **Sign up** for the NW Straits Commission and Foundation newsletters.

How to reach us: Website: **www.jeffersonmrc.org** Email: **jeff.co.mrc@gmail.com**