

County: Jefferson
Grant No: SEANWS-2018-JeCoWS-00008

PROJECT TITLE: Jefferson County MRC Operations and Projects

DELIVERABLES FOR TASK NO: 1-Project Administration/Management

T1.12 Annual Report for 2018

PROGRESS REPORT: [X]

FINAL REPORT []

PERIOD COVERED: Jan 1, 2019 – March 31, 2019

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Jefferson County Marine Resources Committee 2018 ANNUAL REPORT

Jan 1, 2018 – Dec 31, 2018



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www.jeffersonmrc.org

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Jefferson County Marine Resources Committee

2018 ANNUAL REPORT

Jan 1, 2018 – Dec 31, 2018

The Jefferson MRC emphasizes on-the-ground projects and education/outreach on emerging marine resources issues. In 2018, the Jefferson MRC's activities included:

- Monitoring kelp, forage fish and shoreline restoration projects
- Voluntary no-anchor zones protecting 110 acres of eelgrass & shellfish
- Rain garden installations to treat stormwater
- Olympia oyster enhancement and monitoring

Jefferson County Marine Resources Committee

We are a citizen-based, volunteer committee appointed by Jefferson County Board of Commissioners. Our members come from the fishing, boating, aquaculture, environmental, marine education, tribal, and government communities. We serve the County in an advisory capacity, having no regulatory or enforcement authority.

This MRC is one of seven Marine Resources Committees affiliated with the Northwest Straits Marine Conservation Initiative (NWSI). MRCs provide local input to the Northwest Straits Commission (NWSC), which provides MRCs with scientific, technical, and financial assistance.

Our goal is to promote an ethic of stewardship, support science-based projects, and work in partnership with other groups and agencies to preserve and conserve Puget Sound and the Salish Sea.

The MRC and Northwest Straits Initiative provide important economic, recreational and environmental benefits to Jefferson County. The estimated value of these grants for 2018 was **\$145,870**. Our community also donated volunteer time, services and materials to MRC projects, valued at an additional \$69,015.



Jefferson MRC's efforts focus on the County's shorelines in eastern Strait of Juan de Fuca, Admiralty Inlet and northern Hood Canal, where most of the County's 30,000+ people live.

In 2018, the MRC recorded 1,811 volunteer hours, which reflects strong community interest and support for the work of the MRC.

Membership

Jefferson MRC Members (as of December 31, 2018)

MEMBER NAME	REPRESENTING
Jackie Gardner, Exec Committee Co-Chair	District 3 Alt
Ashley Mackenzie, Exec Committee Co-Chair	District 1
Jeff Taylor, Exec Committee NWSC Rep	District 2
Sarah Fiskien, Exec Committee NWSC Rep Alt	District 3
Emily Bishop	District 1
Shannon Davis	District 1 Alt.
Andrew Palmer	District 2
Frank Handler	District 2 Alt.
Wade Crouch	District 3
Kate Dean, <i>ex officio</i>	Jefferson County Commissioner
Gordon King	Commercial Interests
Al Bergstein	Environmental Interests
Anna Bachmann	Environment Alt.
Judy Surber	Local Govt (City of Port Townsend)
Steve Tucker	Local Govt (Port of Port Townsend)
Nam Siu	Marine Science
Judy D'Amore	Marine Science Alt.
Troy McKelvey	Recreation
Roy Clark	Recreation Alt
Neil Harrington	Tribal Rep (Jamestown S'Klallam)



Operations

Goal: MRC serves as an accessible, informed, and engaged local advisory group on marine-related issues, contributing to the work of the Northwest Straits Commission and local priorities.

NWSI Strategic Goal: Maintain strong MRCs

Partners & Funding Leveraged:

- 1,811 Volunteer hours (@\$28.99/hr.) **\$52,512**

Accomplishments

Meetings & Communication: Monthly MRC meetings, open to the public, often included a guest speaker or special topic of interest as well as project and Northwest Straits Commission/Foundation updates. An MRC representative attended most of the monthly NWSC meetings.

LIOs & PSP: The MRC worked with both of Puget Sound Partnership's Local Integrating Organizations (LIO) for our County: Hood Canal Coordinating Council (HCCC) and Strait Environmental Restoration Network (Strait ERN). Jefferson MRC made progress on their 2016-2018 Near Term Actions (NTAs) from the 2016 Action Agenda. They are collaborating with partners for two 2018 NTAs.

Grant Administration & Program Support: MRC staff provided administrative support (grant reports; budgets, and other record-keeping), managed contracts, prepared grant applications, and provided support for MRC projects.

Website: The MRC website www.jeffersonmrc.org is regularly updated to provide information about programs, events and projects.

Training – Jefferson MRC members participated in trainings relevant to the MRC's goals and projects. Nineteen (19) members attended the 2018 annual MRC conference. Eight MRC members attended the Salish Sea Ecological Conference. Individual members also attended trainings related to kelp, PSP Action Agenda, BioBase, the MyCoast App and forage fish.

Monitoring & Citizen Science

Goals: Provide data to state and regional agencies; offer community engagement opportunities in citizen science & education about nearshore, kelp and forage fish.

NWSC Strategic Goals

- Shoreline and habitat protection and connectivity
- Education and engagement

PSP 2016 Action Agenda: Stormwater Sub-strategies 10.3 and 27.1 and Habitat Strategic Initiative (16.2 & 16.3). Shoreline Armoring Vital Sign

Partners & Funding Leveraged:

- Point No Point Treaty Council (forage fish lab work) \$600
- WDFW forage fish staff

Accomplishments

Bull Kelp Studies: Jefferson MRC continues to participate in a regional bull kelp monitoring effort coordinated by the Northwest Straits Commission (NWSC). Four volunteers participated in this work in 2018.

Fort Townsend Monitoring: A shoreline restoration was completed in 2016 at Fort Townsend State Park. Post construction monitoring in 2017-18 has helped document changes following restoration actions. Monitoring included forage fish spawning, visitor surveys and beach character changes, in partnership with WDFW and Point No Point Treaty Council. In 2018, 22 different volunteers assisted with monitoring and nearshore plantings. Forage fish eggs (surf smelt) were found in beach samples in January and Nov. 2018.

Adelma Beach Forage Fish Index Site: Monthly monitoring began here in 2016 in support of WDFW's forage fish database. We also hope to educate local shoreline landowners through informal conversations on the beach. Four volunteers are currently engaged in this project. Sand lance and surf smelt eggs were found in 2018 and eight neighbors engaged in conversation.

What's next?

Continue supporting these citizen science efforts.



Education and Outreach

Goals: Protect marine habitats and processes by increasing awareness of issues and stewardship actions, especially related to stormwater runoff, shoreline armoring, and boating.

NWSI Strategic Goals:

- Education and engagement
- Shoreline and habitat protection and connectivity

PSP 2016 Action Agenda: Sub-strategy 26.2, with high ranking for NWSF Shoreline Armor Reduction Project and Shellfish (2016-0001)

Partners & Funding Leveraged:

- \$70,870 (NWSF) – 17 Shoreline Landowner site visits, 2 workshops, site design work & seasonal Program Assistant.
- WDFW shellfish biologists support (Digging for Dinner)
- News coverage of MRC events and programs

Accomplishments

The MRC's 2018 education and outreach efforts targeted specific audiences with key messages about stormwater runoff and water quality, shoreline landowner best management practices, sustainable shellfish harvesting and ocean acidification. The MRC emphasized individual actions that improve environmental conditions. **We counted 921 direct contacts, 37 new volunteers engaged (Oct 2017-Sept 2018) and 1,811 volunteer hours in 2018 (Jan-Dec.)**

Promoting Best Management Practices for Shellfish Harvesting:

- **Digging for Dinner:** The MRC sponsored 2 family-oriented Digging for Dinner programs about sustainable clam harvesting on Dosewallips and Quilcene tidelands (WDFW partnership, 84 participants).
- **Crabber Outreach:** We also increased efforts to reach new crabbers with information about how to prevent loss of their pots (40+ direct contacts) by inserting info packets in new crab pots at point of purchase,



offered a free Crabber 101 workshop and provided on-the-dock outreach at the beginning of crabbing season.

Shoreline Landowner Outreach: MRC supported the NWSF's shoreline armor reduction project, which included 17 landowner site visits, 2 public workshops and site design work for a future armor removal project.

Ocean Acidification: Action at a Local Level: In August, the MRC joined the PT Marine Science Center in assisting the PTSD's Maritime Discovery Program with a 2-day teacher-training to help teachers from first grade to high school incorporate ocean acidification concepts into their 2018-19 curriculum planning.

Other Presentations & Programs

- Board of County Commissioners & WSU Beach Naturalists
- Info booths at the 2018 Wooden Boat Festival, All-County Picnic and Quilcene Fair with activities that focused on rain gardens, stormwater info and eelgrass no-anchor zones
- Pre-movie ads promoting personal stewardship actions such as picking up dog poop and proper disposal of old medicines.

What's Next?

Continue our successful public outreach programs. In 2019 we plan to add a public educational, science-based forum about shellfish aquaculture.



Voluntary No Anchor Zones

Goals: Protect eelgrass from damage due to boat anchors; protect shellfish beds from boat-associated impacts to water quality; and increase awareness of importance of eelgrass beds.

NWSI Strategic Goals:

- Shoreline and habitat protection and connectivity
- Marine species and habitats

PSP 2016 Action Agenda: Shellfish Sub-strategy 17.1

Partners & Funding Leveraged:

- \$1300 - Port of Port Townsend
- \$650 – Taylor Shellfish licensed diver

Accomplishments

MRC volunteers maintained, deployed and repaired 21 navigational buoys, protecting 52 acres of eelgrass beds in Port Townsend, approximately 50 acres in Mystery Bay and 8 acres in Port Hadlock. Voluntary No-anchor Zones in Port Hadlock and Mystery Bay protect commercial and recreational shellfish beds as well as eelgrass meadows. Port of Port Townsend provides a boat and skipper for most of our needs.

Compliance monitoring takes place during the Wooden Boat Festival, when hundreds of boats anchor along the Port Townsend waterfront. Only one boat was out of compliance in 2018 and they moved out within a day. Outreach consists of Interpretive signs and postings on a navigational app (Active Captain), as well as a special display at WBF.

What's Next?

Buoy maintenance and outreach are on-going.



Olympia Oysters

Goals: Enhance population in Discovery Bay and explore re-establishment of an Olympia oyster bed in Quilcene Bay. Annual monitoring data will guide future restoration work.

NWSC Strategic Goals

- Marine species and habitats

PSP 2016 Action Agenda: Shellfish Sub-strategy 19.2

Partners & Funding Leveraged:

- Taylor Shellfish (staff & staging assistance)
- WA Fish and Wildlife (staff advisory)
- Puget Sound Restoration Fund (advisory)

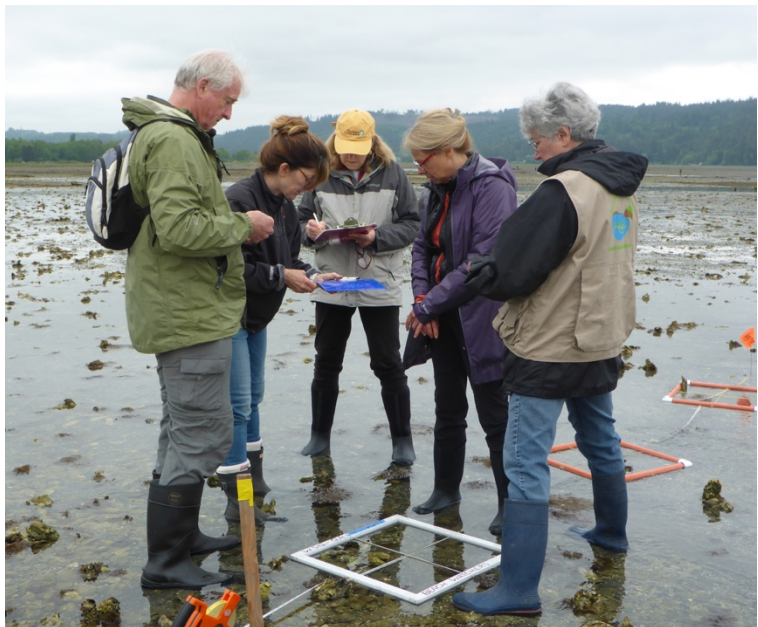
Accomplishments

In Discovery Bay, we continue to monitor a habitat enhancement project. A long-term data set is needed to claim success, but early results show promise. A wide range of oyster sizes within the plot indicates natural settlement and growth is continuing. Average sizes of measured Olympia oyster spat are also slightly larger than in 2017. Density of Olympia oyster spat per square meter, however, is approximately 20% less than 2017, but we don't know yet if this is natural variability or a trend.

In Quilcene Bay the MRC continued collaborating with WDFW and tribal co-managers (Jamestown S’Klallam) in 2018 to test the feasibility of an Olympia oyster restoration project there. Taylor Shellfish donated seeded cultch for a new set of test plots and Beach Naturalist volunteers helped the MRC with data collection.

What’s next?

Monitoring will continue for several more years at both sites. The MRC now has permits in hand to add a bit more Olympia oyster habitat in Discovery Bay.



Rain Gardens

Goals: Intercept and reduce flow of stormwater into Port Townsend Bay by constructing rain gardens in high-priority locations to increase rain absorption and intercept street run-off.

NWSI Strategic Goals:

- Water quality

PSP 2016 Action Agenda: Stormwater Sub-strategies 10.3 and 27.1

Partners & Match Leveraged = \$16,379 total value:

- City of Port Townsend (donated site work, etc.) **\$4,340**
- WSU Extension (rain gardens & volunteer support) **\$8,111**
- Over 135 volunteer hours **\$3,928**

Accomplishments

Two new rain gardens in Port Townsend now intercept and reduce the amount of storm water entering Port Townsend Bay and increase local awareness of the benefits of rain gardens to improve water quality in Puget Sound. Over the last 4 years, we have installed 8 rain gardens.

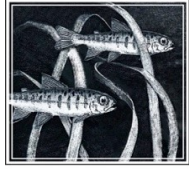
The MRC and its partners (WSU Extension and City of Port Townsend) were successful at engaging community volunteers in these efforts. A WCC crew and the Native Plant Salvage Foundation provided the bulk of the labor, with community volunteers (MRC, neighbors and WSU Master Gardeners) also assisting. Community volunteers are maintaining the installations.

Community members, including an OPEPO class, contributed more than 135 hours of site preparation, planting and mulching. City of Port Townsend donated site work and materials.

What's Next?

The MRC plans to continue working on rain garden installations at priority sites, partnering with WSU Extension, City and County on one or two rain garden installations each year, depending on available funding.





2018 MRC Projects Summary

Olympia Oyster Projects

In Discovery Bay, the Olympia oyster habitat enhancement project is going well. Data collected in 2018 supports our premise that Olympia oyster larvae are continuing to settle and grow on the distributed shell. In Quilcene Bay, the MRC, WDFW and tribal co-managers are continuing to monitor test plots. **2019 plans include working with Co-Managers to add more clean shell to Discovery Bay near the extant population and continue to monitor test plots at Quilcene Bay.**

Citizen Science Monitoring

Forage fish spawner surveys continued at Fort Townsend State Park & Adelpa Beach in 2018, in partnership with WDFW & Point No Point Treaty Council. New community volunteers are engaged, and forage fish eggs have been found at both sites during the winter months. **Forage fish monitoring will continue in 2019.**

Bull Kelp Monitoring--Jefferson MRC also continues citizen science monitoring of local bull kelp beds near North Beach Park. **Monitoring will continue in 2019.**



Rain Gardens

In 2018, MRC and WSU Jefferson Extension partnered with City of PT to install two more rain gardens that filter stormwater before it enters Puget Sound (a total of 8 so far). Rain garden volunteers included students, MRC members and community volunteers. Adjacent neighbors have committed to taking care of these installations. **Two more installations planned for 2019 (proposed sites in Port Townsend and in Quilcene).**



Eelgrass and Shellfish Voluntary No-anchor Zones

MRC continued protection of 52 acres of eelgrass beds on the Port Townsend waterfront by maintaining buoys marking the voluntary no-anchor zone. Additional No-anchor Zones in Port Hadlock and Mystery Bay also protect commercial and recreational shellfish beds as well as eelgrass. Our work has also become a model for efforts in other locations. **Buoy maintenance and outreach will continue in 2019.**

2018 MRC Education & Outreach

Outreach by the Numbers

921 direct contacts in 2018
37 new volunteers engaged
1,811 volunteer hours

In addition to the programs highlighted below, MRC was also part of a Maritime Discovery Program partnership to train teachers about ocean acidification; helped with school participation in rain garden projects; and had info tables about stormwater and protecting eelgrass at various festivals. **Continuing in 2019.**



Shoreline Landowner Outreach

The Vegetation Management workshop for shoreline landowners (**49** attendees) and Realtor Training workshop (**33** attendees) co-sponsored by the MRC and NW Straits Foundation were well received. The Foundation also sponsored **17** on-site visits by coastal geologists in 2018 to provide landowner advice about best management practices. **General outreach will continue in 2019.**



Digging for Dinner & Crabber Outreach

Two family-oriented programs on safe and sustainable clam harvesting in partnership with WDFW at Quilcene and Dosewallips public beaches attracted **84** people. The MRC also increased our efforts to prevent loss of crab pots in local bays by inserting info in new crab pots at retail outlets and sponsoring a well-attended Crabbing 101 program just before the recreational season started. **Continuation of these efforts planned for 2019.**

More Info

Website: <https://www.jeffersonmrc.org> Email: Jeff.co.mrc@gmail.com.

Cheryl Lowe, Coordinator, Jefferson County Marine Resources Committee
 360-379-5610 x 230. Program administered within the County's WSU Extension office.

Economic Benefits to Jefferson County

The MRC and the Northwest Straits Marine Conservation Initiative provide important economic, recreational and environmental benefits to Jefferson County through grant funds, support for improved stewardship of local habitats, cleaner water and increased recreation at local beaches and local businesses.



2018 Northwest Straits Commission (NWSC):

\$75,000 annual grant for MRC administration and local projects (Funding sources: EPA and Washington State funding)

2018 Northwest Straits Foundation (NWSF):

\$70,870 value to Jefferson County in 2018 through 2 programs

- **Shoreline Armoring Removal Program:** 17 technical consultant site visits (\$25,500), conceptual design work (\$30,000), realtor workshop (\$7,385), vegetation management workshop (\$3,285)
- **Opportunity Fund** support for program assistant to expand community engagement in marine stewardship actions (**\$4,700**)

Other Leverage (In-kind Value): ≈ \$69,015

\$52,515 in Volunteer hours (1,811 hrs @ \$28.99/hr)

\$16,500 in Community In-kind Match:

- City of Port Townsend (rain gardens)
- WSU Extension (rain gardens & volunteer support)
- WA Fish and Wildlife (shellfish, restoration monitoring & Olympia oysters)
- Taylor Shellfish (oyster cultch)
- Point No Point Treaty Council (forage fish lab work)
- Port of Port Townsend (no anchor zones)