

# State of Washington DEPARTMENT OF FISH AND WILDLIFE

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December 30, 2022

The Honorable Kevin Van De Wege Chair, Senate Agriculture, Water Natural Resources, and Parks 212 John A. Cherberg Building Post Office Box 40424 Olympia, WA 98504-0424 The Honorable Mike Chapman Chair, House Rural Development, Agriculture, and Natural Resources 132B Legislative Building Post Office Box 40600 Olympia, WA 98504-0600

Dear Chairs Van De Wege and Chapman,

I am writing to provide you with the Washington Department of Fish and Wildlife's annual report regarding the Coastal Marine Resource Committees (MRCs). In the 2007 and 2008 Legislative Sessions, the Legislature endorsed the MRC approach to implement locally directed and regionally coordinated marine resource conservation in the five southern Puget Sound counties and five coastal counties and designated the Washington Department of Fish and Wildlife as the regional coordinating entity for coastal MRCs.

The MRCs are county-based organizations that promote dialogue between different interest groups regarding marine resource sustainability and opportunities, including enhancing existing efforts to improve scientific knowledge, public understanding, conservation and restoration, and management of marine resources through non-regulatory mechanisms. The four coastal MRCs provide grants to local groups for projects that forward the MRC mission and that pertain to marine habitats, marine life, marine and freshwater quality, sound science, education and outreach, and promote sustainable and resilient coastal communities.

Each year the coastal MRCs do outstanding work with the limited funds they receive. In 2022 groups cautiously started hosting more in-person meetings, conferences, and school field trips resumed. The lessons learned, and tools developed from hosting virtual meetings are still helping to increase participation in large geographic reaches of the coast where travel times can still be challenging. This year's notable projects and accomplishments of the Coastal MRC Program include:

- Representation and participation on the Washington Coastal Marine Advisory Council
- Organizing and hosting a hybrid science conference in-person and via Zoom
- Improved access to marine shorelines in Cathlamet, and Wahkiakum County
- Seattle Aquarium worked with Makah Bay and Wahkiakum High School students on next generation of subtidal ROV monitoring and Artificial Intelligence (Al). Working in kelp forests and communities along the Coast.
- Increased work in removal of the European Green Crab in Willapa Bay

- Coordination with the University of Washington to provide funds to aid in research on the Origin and Erosion of Rialto Beach and Terrace: Implications for Ongoing Geological Hazards
- Job shadowing opportunities for students at coastal fish hatcheries, and training in natural resources fields
- Planned, organized, and hosted a three day in-person MRC Summit in Cathlamet where all 4 MRC attended. Updates on projects, collaboration, and priorities moving forward were presented
- Completion of extensive coast-wide beach and estuary garbage cleanups
- Continued work to provide fish preservation workshops
- Raised general awareness of marine and estuarine issues through MRC-sponsored newspaper publications, creation of educational signs, and other outreach and communication activities

RCW 36.125 requires the Department to report to the Legislature on Coastal MRC Program activity each December. The attached report describes more detail of this year's accomplishments and upcoming activities. For more detailed information, please contact Chris Waldbillig, Coastal Restoration Coordinator, at (360) 480-8128 or Chris.Waldbillig@dfw.wa.gov.

If you have any questions or concerns about this report, please feel free to contact Tom McBride, WDFW's Legislative Director, at (360)480-1472.

Sincerely.

Kelly Susewind

Director

Margen Carlson, WDFW Chris Conklin, WDFW Kessina Lee, WDFW Nicole Czarnomski, WDFW Gwendolen Lentes, WDFW Madeline Nolan, WDFW

# Coastal Marine Resources Committees Program 2022 Report to the Legislature

Washington Department of Fish and Wildlife





### **Table of Contents**

Acknowledgements	2
Program Overview	3
Program Actions	5
North Pacific Coast MRC	6
Highlight: Remotely Operated Vehicle (ROV) Testing and Artificial Intelligence (AI) Analyses	6
Highlight: Twin Harbors Waterkeeper: Remote Cleanups on Olympia National Park Beaches	8
Projects by Benchmark	9
Grays Harbor MRC	11
Highlight: Westport Marina Waterfront Educational Signage	11
Highlight: Grays Harbor Stream Team Outreach	12
Projects by Benchmark	13
Pacific MRC	15
Highlight: Grass Roots Garbage Gang Beach Clean-ups	15
Highlight: European Green Crab in Willapa Bay	16
Projects by Benchmark	18
Wahkiakum MRC	19
Highlight: Cathlamet Town Dock Repair and Replacement	19
Projects by Benchmark	20
Priority Actions for 2023	22
Coastal MRC Program Priorities	23
Coastal MRC Program Benchmarks	24

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For more information, see https://wdfw.wa.gov/accessibility/requests-accommodation.



## Acknowledgements

This report summarizes the hard work of the Coastal Marine Resources Committees (MRCs) Program. We acknowledge the coordinators of MRCs in each county for their organization, vision, dedication, and facilitation skills. Coordinators include: Tami Pokorny (Jefferson County), Kristina Hollatz and Amy Sutton (Grays Harbor County), Courtney Hagain and Alexander Birk (Pacific County Conservation District), and Carrie Backman and assistant coordinator Donna Westlind/Shari Parker (WSU Wahkiakum County Extension).

We acknowledge the continued support of the Washington State Legislature and of the Washington State Department of Fish and Wildlife. WDFW Region Six Director Chris Conklin/Larry Phillips, along with WDFW staff involved in fiscal, budgets, and contracts, Janice Jackson and Tiffany Hicks, are also acknowledged for their help and support in making the Coastal MRC Program run smoothly. We would also like to recognize that sections of this report were originally written by F. Brie Van Cleve and Jenna Jewett in prior Reports to the Legislature.

#### **Department Staff**

Chris Waldbilig, Coastal MRC Program Coordinator, Habitat Program

#### **Cover Photo**

Laural Parshall, Creative Commons

## **Program Overview**

#### Goal

The goal of the Coastal Marine Resources Committees Program is to understand, steward, and restore the marine and estuarine ecological processes of the Washington coast in support of the ecosystem health, sustainable marine resource-based livelihoods, cultural integrity, and coastal communities.



Pot of gold at Shipwreck Point. Photo credit: David Sperline.

#### **Overview**

Washington's coastal and ocean resources provide vital economic, recreation, transportation, and cultural benefits to coastal and state residents. Identifying and implementing realistic, effective, and efficient solutions to the unique conservation and management issues of Washington's outer coast requires utilizing the available knowledge and creative approaches of coastal citizens and leaders. Citizenbased Marine Resources Committees (MRCs) are an effective mechanism to harness the dedication, innovation, and wisdom of coastal residents.

MRCs are county-based, volunteer committees that carry out local projects and activities and advise counties on marine resource issues. MRCs are composed of representatives from the scientific community, local and tribal governments, local citizens, and economic, recreational, and conservation interests.

The Washington State Legislature endorsed and funded the MRC model in the 2007 and 2008 legislative sessions. As directed by RCW 36.125, the Washington Department of Fish and Wildlife (WDFW) created the Coastal MRC program. The program provides support for the development, administration, and coordination of the coastal MRCs and their projects. All the coastal counties (Clallam and Jefferson are one MRC, Grays Harbor, Pacific, and Wahkiakum) have created unique MRCs and currently implement community-based projects.

Coastal MRC activities are guided by a set of interim program priorities, benchmarks, and a program goal statement that were developed by the Coastal MRC workgroup in 2009. These measurements were developed to ensure coordination among MRCs, and to provide accountability



to WDFW and the Legislature. The program priorities are to: 1) establish and maintain coastal MRCs, 2) complement existing efforts, 3) build participation, 4) utilize science, and 5) promote healthy communities and resources. The program benchmarks focus on the following broad categories: 1) marine habitats, 2) marine life, 3) marine and fresh water quality, 4) sound science, 5) education, and 6) coastal communities. The following pages summarize each of the MRC activities during 2022 with the respective benchmarks that their activities address.

## **Program Actions**

#### Allocate programmatic funding for MRC activities and projects

In 2021, WDFW awarded each county MRC \$77,000 for operational and project activities, for the 2021-2023 biennium (July 1, 2021 through June 30, 2023).

At the start of a new fiscal year MRCs receive operational funds, July 1, and start the solicitation of project proposals for the fiscal year. After projects have been submitted, reviewed, and ranked, a decision is made on how much funding is awarded to each project. Applicants submit a Scope of Work and Deliverables to the MRCs coordinators. WDFW amends the contracts with each MRC to include the projects or tasks with deliverables and due dates. Therefore, this annual report covers the 2022 calendar year and some projects may have been covered in previous annual reports, some projects may be complete while others are just getting underway.

# Assist MRCs to measure their activities against regional performance benchmarks

# Performance benchmarks were developed by the Coastal MRC work group in 2009 to account for MRC activity.

At the conclusion of each state fiscal year, MRCs are required to report annual activities and projects.

# Support the coordination of MRC projects to complement regional priorities

WDFW reports monthly to the State Ocean Caucus, the group designated to oversee implementation of the Washington Ocean Action Plan. Program staff continues to build awareness within WDFW and with other natural resource agencies regarding availability of MRC volunteers for marine resource projects on the coast. The MRCs report regularly on their activities to the Washington Coastal Marine Advisory Council to coordinate project actions.

# Coordinate and promote interaction among Coastal MRCs, other similar groups on issues of common interest

WDFW and MRC representatives continue to provide briefings to county and state officials, the Northwest Straits Commission, the Washington Marine Debris Task Force, and the Olympic Coast National Marine Sanctuary Advisory Council when appropriate.

WDFW will redevelop and maintain a website dedicated to the Coastal MRC program providing updates and announcements for upcoming activities with links to current individual MRC websites that contain contact information for county-based coordinators.

### North Pacific Coast

#### Mission

The North Pacific Coast Marine Resources Committee will actively promote ecosystem resilience through understanding, conserving, and restoring our marine resources. This will be accomplished through research, education, community engagement and advocacy for our shared marine environment and the sustainability of its coastal communities.



#### **Members**

Tami Pokorny, Coordinator Rebecca Mahan

Jill Silver Katie Krueger

Rod Fleck Wendy Eeltham

Jennifer Hagen Eileen Cooner

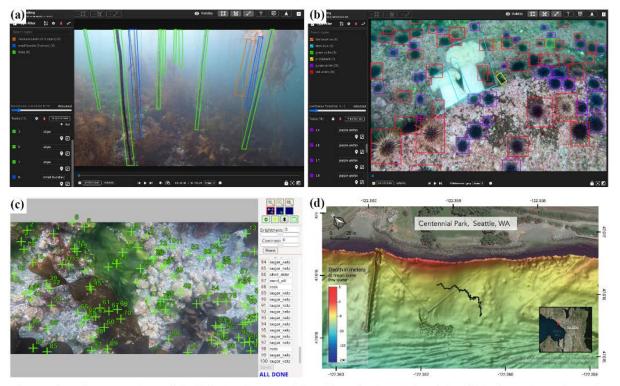
John Hunter Julie Ann Koehliner

Alice Ryan

# Program Highlight: Remotely Operated Vehicle (ROV) Testing and Artificial Intelligence (AI) Analyses

In conjunction with Tribal, state, federal, and non-profit partners, the project will bring the next generation of subtidal monitoring technology and analytical techniques-ROVs and Artificial Intelligence (Al)-into kelp forests and communities along the Outer Coast. Seattle Aquarium will iteratively test and modify standardized ROV survey protocols to obtain high-resolution video of the benthos in relatively shallow waters (5-40m) characterized by urchin barrens, understory algae, and canopy-forming beds of Bull (Nerocystis luetkeana) and Giant (Macrocystis pyrifera) kelp. As it would be labor intensive to have a human review all the ROV imagery, existing Al algorithms will be trained to classify percent-coverage from photo stills (CoralNet [1]) and identify and track individuals from video (VIAME [2]). The project is envisioned as a first step towards a long-term subtidal monitoring program in partnership with communities. It will host a Schools Without Walls event in Neah Bay focused around ROV survey methods and will engage Neah Bay High School and the Quileute Tribal School to develop kelp-forest lecture content and ROV-based field trips so that students can experience the seafloor right outside of their classrooms.

These tasks addressed the program benchmark for Marine Habitats.



**Fig. 2**: (a) A screen-shot of bull kelp stipes and bundles of stipes being identified in VIAME from the forward-facing imagery. (b) VIAME identifying conspicuous species such as sea urchins and anemones using downward-facing imagery. (c) A screen-shot of CoralNet and the 100 randomly generated points where percent-cover is predicted using downward-facing imagery. (d) The black line is a real 100m ROV transect as recorded by the GPS system overlain atop open-source bathymetry during a ROV survey with the Port of Seattle.

Photo credit: Dr. Randall



LEFT: Dr. Randall and Makah Fisheries interns watch the ROV deploy over the side of the vessel, east of Neah Bay.

RIGHT: Viewing the ROV's feed live on the ROV laptop. Photo credit: Dr. Randall

# Program Highlight: Twin Harbors Waterkeeper: Remote Cleanups on Olympia National Park Beaches

This project will provide supplies, tipping fees and travel support for volunteers recruited by Twin Harbors Waterkeeper to collect plastic and other debris from two remote cleanups of wilderness beaches between Scotts Bluff and Cape Alava, with a goal of removing a total of 3,000 pounds of debris. This project is consistent with the benchmarks Marine Habitats and Education and Outreach.

In April 2022, Twin Harbors gathered their volunteers to assist with the first ever remote haul out from the ONP beaches west of Lake Ozette. Volunteers made multiple trips over three days to carry loads on the remote trail from the Sand Point area to Lake Ozette. From there, the ONP crew ferried the loads to a small motor craft for land disposal. Time was also spent making plans for these events, contacting volunteers, gathering supplies, and making additional arrangements to ensure the safety of volunteers.



CLOCKWISE FROM UPPER LEFT: Setting off group of folks who camped at Erickson Bay and then made multiple trips on the remote trail with loads of debris. Megan Juran sorting debris. Volunteers with large loads getting ready to haul out.



 Table 1. 2022 North Pacific Coast MRC Projects by Benchmark.

Project Name	MRC Award	Marine Habitats	Marine Life	Marine and Fresh Water Quality	Sound Science	Education & Outreach	Coastal Communities
MRC Coordination and Operations	\$20,000						
University of Washington – Geological Hazards and Rapid Terrace Erosion at Rialto Beach, Olympic National Park, WA	\$28,884						
University of Washington – Dead Bird Citizen Science for Youth Community	\$11,951						
Twin Harbors Waterkeeper – Remote Cleanups on Olympia National Park Beaches	\$2,657						
Twin Harbors Waterkeeper – Micro-plastic Education and Outreach for Youth on the North Pacific Coast	\$3,687						
National Marine Sanctuary Foundation – MATE Olympic Coast Remotely Operated Vehicle (ROV) Competition: Taking Blue Tech to New Depths	\$1,300						
Washington CoastSavers – Rebuilding of Online Volunteer Registration System and Expanding Outreach	\$5,390						
Seattle Aquarium – Remotely Operated Vehicle (ROV) Testing and Artificial Intelligence (AI) Analyses	\$24,800						

#### **2022 Project Partners**

COASST Pacific Education Institute

Washington CoastSavers University of Washington Sea Grant

Olympic Coast National Marine Sanctuary
University of Washington
Engineering/Geology

Olympic Coast NMS Foundation
10,000 Years Institute

Clallam County

Forks High School

Jefferson County

City of Forks Coast Salmon Partnership

Makah Tribe North Pacific Coast Lead Entity

Quileute Tribe Olympic National Park

Hoh Tribe Other Marine Resource Committees

Quileute Tribal School Olympic Discovery Trail

Forks Chamber of Commerce Northwest Straits Commission

# **Grays Harbor County**

#### Mission

The mission of the Grays Harbor County MRC is to understand, steward, and restore the natural function and economic vitality of the marine resources in Grays Harbor County for all citizens through research, action, and outreach and education.



#### **Members**

Kyle Deerkop, ChairSarah BissonJohn Shaw, Vice ChairScott MazoneArthur "RD" GrunbaumMichael BruceGarret DalanJulie NelsonKevin DeckerMolly Bold

Amy Spoon Amy Stratton, Coordinator

Katy Wrubel Kristina Hollatz, Assistant

#### **Program Highlight: Westport Marina Waterfront Educational Signage**

Amount awarded: \$3,500

As part of Westport's Fresh Catch initiative, Grays Harbor MRC, Port of Grays Harbor, and the City of Westport funded this signage to inform visitors of local seafood. Each sign represents a species that is available to consumers from fisherman selling their catch from the docks. The deliverables were completed in August 2022.





Albacore tuna and salmon trolling educational signs at Westport Marina.







Dungeness crab, oyster farming, and groundfish educational signs at Westport Marina.

#### Program Highlight: Grays Harbor Stream Team Outreach

Amount awarded: \$12,874.68

Funding was awarded to increase community involvement and environmental stewardship of local streams and estuaries in the lower Chehalis Watershed of Grays Harbor.

Fewer field trips were offered because of the delay in the Coastal Interpretive Center (CIC) opening following COVID and renovation. Additionally, increased bussing and admission fee costs ate up our budget quickly. Teachers showed enthusiasm around getting their students out to the beach following COVID. Ocosta's after school program and the Cub Scouts covered their transportation



costs. Since we did not offer as many trips to the CIC and educational talks, we made up the difference on offering more beach cleanup field trips.





Previous events and field trips with the Coastal Interpretive Center. Photos gathered by: Alexa Brown, Grays
Harbor Stream Team Coordinator

 Table 2. 2022 Grays Harbor County MRC Projects by Benchmark.

Project Name	MRC Award	Marine Habitats	Marine Life	Marine and Fresh Water Quality	Sound Science	Education & Outreach	Coastal Communities
MRC Coordination and Operations	\$20,000						
PEI Shellfish Educations Resources Inventory and Performance Task (along with Pacific MRC)	\$8,836						
Westport Marina Waterfront Educational Signage	\$3,500						
Grays Harbor Stream Team Outreach	\$12,875						

#### **2022 Project Partners**

CoastSavers

Pacific Education Institute

Montesano School District

**Quinault Indian Nation** 

Aberdeen School District

Lake Quinault School District

Washington State University Extension

Port of Grays Harbor



# **Pacific County**

#### Mission

The Pacific County Marine Resources Committee serves as a steward for the marine and estuarine resources in our county by facilitating science-based policies, research, and education that enhance the sustainability of the economy and ecology of our communities.



#### **Members**

Mike Nordin, Chair Richard Ashley

Jackson Blalock, Vice Chair Dale Beasley

Ed Darcher Mike Cassinelli

Doug Kess Key McMurray

Ann Skelton Brian Sheldon

Tom Kollash Lauren Baurenschmidt

Kim Patten Alexander Birk, Coordinator

Larissa Pfleeger

#### Program Highlight: Grass Roots Garbage Gang Beach Clean-ups

The Grass Roots Garbage Gang (GRGG) is an all-volunteer, Washington State not-for-profit group that cleans up the Peninsula beaches in SW Washington. Each January, April and July hundreds of volunteers clean the Peninsula's 28-mile beach. Support comes from incredible volunteers, local businesses, City of Long Beach, Pacific County, and Washington State Parks. The GRGG promotes the events by providing a venue for a community potluck and speaker. The GRGG then provides a hot meal after the clean-up event.

Starting in November 2001, a small, friendly group of full and part time residents in Ocean Park, Washington, volunteered time and talents to tackle garbage on the ocean beaches of the Long Beach Peninsula. The Grass Roots Garbage Gang is a grassroots volunteer group of all ages, means and backgrounds, utilizing their talents, learning as they go, and have a very clear direction and mission.

- 1. The Pacific Ocean and the Columbia River are beautiful natural resources to be protected, not abused with uncontrolled littering. A clean ocean beach is beautiful.
- 2. There are health and safety concerns for human beach goers, marine wildlife and the beach environment. Plastics are the most notorious for marine wildlife destruction. For example, the large, heavy plastic bags dumped at sea can cover a 4 ft sq area of sand that stops food supply to the razor clams sanded below.
- 3. Community pride and tourism everyone wins when beaches are clean and safe. Visitors to our peninsula expect to enjoy the ocean beaches. Garbage has a very negative impact upon



- visitors who ponder why this community tolerates such dumping. They can walk away, never to return.
- 4. Disposal is habit forming and we are creatures of habit, good and bad. Once we can break the bad habit of littering, we see a safer and healthier environment for all to enjoy.

The PMRC supports the GRGG because it promotes healthy communities and resources, complements existing cleanup efforts, builds partnerships, and also contributes to several benchmarks (marine life, habitats, water quality and coastal communities). The GRGG has coordinated beach and creek cleanups averaging between 8-12 volunteers per event and in total the organization is responsible for the removal of 1.7 tons of trash over the course of cleanup events for FY 21-22.



The Grass Roots Garbage Patch Gang.

#### Program Highlight: European Green Crab in Willapa Bay

Pacific County Vegetation Management is a county agency that manages noxious weeds in Pacific County as well as invasive species such as green crab. PCVM is currently targeting an aquatic invasive species whose numbers, location and habits are undocumented in Willapa Bay. PCVM is working with WDFW/WSG green crab teams and has been granted an aquatic invasive species permit from WDFW and is required to have green grab. European Green Crab is a serious threat to estuarine and marine ecosystems and considered on of the worst marine invasive species in the world. They are voracious predators targeting oysters, clams, juvenile crabs, and native eel grass.



Females produce 200,000 larvae annually. They are established on the east coast, especially in New England and Canada, and the impact on native species and shellfish farming is well documented.

Protecting our native ecosystems from aquatic invasive species like European Green Crab will in turn protect coastal communities that rely on shellfish farming, and maintain biodiversity challenged by the nature of green crabs.

During the early efforts in FY 21-22, before the Governor's emergency declaration, the PCMRC allocated 10K which contributed to the monitoring and removal of European Green Crab. During this timeframe there were over 110,000 EGC removed from Willapa Bay. The PCMRC sees a continued relationship with PCVM and investing in the Willapa Bay effort to remove EGC to maintain early action results.



Images of European green crabs from Willapa Bay. Green carb issues are becoming more and more important along the entire Washington coast.

**Table 3.** 2022 Pacific County MRC Projects by Benchmark.

Project Name	MRC Award	Marine Habitats	Marine Life	Marine and Fresh Water Quality	Sound Science	Education & Outreach	Coastal Communities
MRC Coordination and Operations	\$20,000						
Washington Coastal Marine Advisory Council Representation (WCMAC)	\$800						
Beach Cleanup, Grass Roots Garbage Gang	\$5,570						
PEI Shellfish Education Resources Inventory and Performance Task (along with Grays Harbor MRC)	\$3,000						
Science Conference	\$6,000						
Shoalwater Bay Indian Tribe Willapa Bay European Green Crab Removal and Population Monitoring	\$3,500						
Pacific County Vegetation Management Willapa Bay European Green Crab Removal	\$10,000						

#### **2022 Project Partners**

Grass Roots Garbage Gang Chris Jabobsen

Sea Resources Pat Schenk

Port of the Peninsula Pacific County Vegetation Management

CoastSavers City of Raymond

Pacific County Drainage Willapa Valley

Pacific Education Institute Ocean Beach

Paul Leback Pacific County School Districts



# Wahkiakum County

#### Mission

The Wahkiakum County Marine Resources Committee's mission is to address local marine issues; recommend remedial actions to local, state, tribal, and federal authorities; and build local awareness of the issues and support for remedies consistent with the interim "Benchmarks of Performance" as adopted by the Coastal MRC Work Group on January 7, 2009.



#### **Members**

Carol Ervest, Chair Paula Culbertson

Sol Mertz, Vice Chair Todd Souvenir

Brett Deaton Sam Shogren

Terry Ostling Carrie Backman, Coordinator

Mick Backman Donna Westlind, Assistant

David Olson Shari Park, Assistant

#### Program Highlight: Cathlamet Town Dock Repair and Replacement

This project replaced the decaying 60-foot ferro cement (two 30-foot sections) dock located at the foot of Broadway Street. The two-piece cement dock had deteriorated to the point that the northern most section was partially submerged after losing some of its floats. The joint between the two sections was also badly deteriorating due to years of wave action forcing the two sections to rub on each other, especially when factoring in the use of a shared center piling rather than one on each end of each section. With the replacement, the new dock is now a single, 60-foot span that should better withstand the beating from the open water and provide decades of safe enjoyment for the public.







LEFT TO RIGHT: Picture showing damage to dock; Photos showing dock after repairs. Left photo provided by: Town of Cathlament. Center and right photos provided by Donna Westlind.

**Table 4.** 2022 Wahkiakum County MRC Projects by Benchmark.

Project Name	MRC Award	Marine Habitats	Marine Life	Marine and Fresh Water Quality	Sound Science	Education & Outreach	Coastal Communities
MRC Coordination and Operations	\$20,000						
Washington Coastal Marine Advisory Council Representation (WCMAC)	\$500						
Fish Preservation Workshops	\$1,000						
Cathlamet Town Dock Repair & Replacement	\$10,545						
Wahkiakum Outdoors	\$2,300						
Wahkiakum Fish Center HACCP Manual Development	\$2,360						
Fish Hatchery Transportation & Gear	\$4,128						
Marine Science Education Field Trips	\$3,400						
County Line Park Pathway	\$12,737						
2022 Coastal MRC Summit	\$8,827						

#### **2022 Project Partners**

Wahkiakum School District

Cowlitz-Wahkiakum Conservation District

Washington State University Wahkiakum Extension

Town of Cathlamet

Wahkiakum Port District #1

Wahkiakum Port District #2

Wahkiakum Chamber of Commerce



Southwest Washington Workforce
The Nature Conservancy
Columbia Land Trust

Beaver Creek Fish Hatchery
University of Washington Sea Grant



## **Priority Actions for 2023**

- Continued MRC representation and participation in the Washington Coastal Marine Advisory Council (WCMAC)
- Prioritize networking and increase distribution of Requests for Proposals for FY23-25 projects
- Increase MRC networks, encourage MRC collaboration, and find new areas where MRCs can develop coast wide projects
- Continue to adapt to modernize remote meeting and offer in-person alternatives to increase awareness of MRC
- Filling vacant MRC Board openings as soon as possible
- Community involvement and active stewardship
- Funding diverse and valuable projects
- Continue to provide support and funding for riparian enhancement projects
- Continue to provide seafood industry/jobs preservation workshops to the public with trained WSU Food Safety Volunteers
- Identify or create a WA coast marine environment downloadable high school curriculum
- Continue to partner with local agencies to meet their monitoring and restoration goals in the marine environment while providing important workforce skill development
- Support involvement, operations, and activities of the Wahkiakum 4H Robotics Club
- Continue the Grays Harbor MRC Speaker Series by developing new and exciting topics
- Coordinate educational field trips for high school and elementary students
- Continue to support and fund opportunities for local students to experience hands-on marine education
- Cultivate the best possible projects to support Coastal MRC Program benchmarks.
- Continue to explore better options for managing human and pet waste at beach trail parking areas
- Continue partnerships with educational institutions to expand research into coast resources
- Explore additional funding for MRCs, including coordination, training, and project funding
- Consider updating benchmarks and MRC workplan in FY23-25 with Program Work Group

# Coastal MRC Program Priorities

The following priority statements or operating principles, developed and adopted by the Coastal MRC Program Work Group, are used to guide the development of the Coastal MRC Program, and focus the work of the coastal MRCs.

#### **Establish MRCs**

- Establish coastal MRCs to provide a non-regulatory mechanism to discuss and develop solutions for issues facing coastal resources and communities
- Ensure MRC and program accountability and alignment with regional priorities by measuring performance against program benchmarks
- Act in consult with tribal and state co-managers
- Ensure that local residents are selected and participate in MRCs

#### **Complement Existing Efforts**

Complement and support ongoing efforts to improve scientific knowledge, public understanding, conservation and restoration, and management of marine resources

#### **Build Partnerships**

- Coordinate and communicate with MRCs, the Northwest Straits Commission, tribal and state co-managers, local, regional, federal, and other stakeholders and organizations about local and regional projects and issues
- Expand partnerships with tribal governments and continue to foster respect for tribal cultures and treaties

#### **Utilize Science**

- Conduct scientific investigations and monitoring efforts to fill key gaps in knowledge about valuable coastal species and habitats (e.g., ecosystem-based management)
- Monitor and assess impacts of coastal and marine development

#### **Promote Healthy Communities and Resources**

- Promote healthy coastal communities through improved infrastructure and sustainable practices relating to marine resources
- Promote marine resources stewardship through community volunteer opportunities and public education efforts
- Promote coastal hazards awareness and community preparedness through education and outreach programs
- Support the conservation and restoration of coastal habitats and marine populations to healthy and sustainable levels and prevent future state and federal species listings
- Conduct and implement strategic planning to identify marine resource-related threats to and opportunities for sustainability
- Assess sources of and reduce marine and estuarine pollution and debris



# Coastal MRC Program Benchmarks

Performance benchmarks are used by the Coastal MRC Program to account for MRC activities and achievement in discrete but broad categories.

#### **Marine Habitats**

Understand, steward, and restore marine, estuarine, coastal, and nearshore habitats, prevent loss, and achieve a net gain of healthy habitat areas by:

- Enhancing ecosystem and community resilience by protecting and restoring marine and coastal habitats
- Designing and implementing local and regional projects that restore natural processes
- Surveying and mapping marine and estuarine resources to better define physical and biological characteristics of marine habitats
- Making scientifically based recommendations about management tools to protect marine and estuarine habitats
- Understanding and evaluating erosion and promoting sound sediment management practices

#### **Marine Life**

Understand, steward, and restore marine and estuarine populations to healthy, sustainable levels by:

- Maintaining the health of marine and estuarine species and preventing further Endangered Species Act (ESA) listings while increasing access to marine resource enjoyment and harvest where feasible
- Balancing protection focus on ecosystem versus target species
- Identifying and carrying out actions to protect and restore species of interest and concern



Sea stars along shore in Ocean Shores. Photo by Robin Mills.

- Designing and implementing projects to prevent the introduction and spread of invasive species
- Making scientifically based recommendations about management tools for species recovery

#### **Marine and Fresh Water Quality**

Understand, steward, and restore marine and estuarine water quality of Washington's coast and coastal embayment's by:

• Conducting or supporting science to fill critical data gaps



- Working to reduce the input of pollutants
- Promoting management actions that would restore degraded water quality and contaminated sediment
- Working with and training students and citizens to conduct water quality monitoring

#### Sound Science

Collect high quality data and promote its transparent presentation, acceptance, and timely dissemination by:

- Utilizing established scientific protocols for the collection, analysis, and use of data that support the Coastal MRC Program goal
- Identifying gaps in data and working to fill those gaps by promoting the development of comprehensive, accessible marine resource databases
- Promoting peer-reviewed science

#### **Education and Outreach**

Promote stewardship and understanding of coastal estuarine and marine resources through science-based education and outreach by:

- Informing the public about threats to living marine resources and coastal communities and
  presenting them with practical measures they can take to prevent further harm, especially
  regarding land use, erosion control, and individual homeowner decisions
- Informing citizens and governmental agencies about ocean energy activities and associated effects on coastal communities
- Coordinating outreach and education programs with other organizations, including local community colleges, and evaluating their effectiveness
- Engaging the public in active stewardship opportunities through community workshops, restoration projects, and educational programming
- Translating and disseminating scientific information about the status of Washington's
  coastal habitats, resources, and communities to regional policy makers, resource managers,
  and the public in a timely manner
- Expanding partnerships with tribal governments and continuing to foster respect for tribal cultures and treaties
- Striving to maintain and improve coordination and communication among stakeholders and all managers

#### **Coastal Communities**

- Promote sustainable and resilient coastal communities by:
- Supporting sustainable marine resource-based industries
- Supporting cultural and economic integrity of coastal communities
- Encouraging citizen participation in local and governmental decisions regarding marine resources
- Engaging in activities aimed at hazard prevention and preparedness, e.g., education
- Increasing sustainable access to marine resource enjoyment and harvest





Exploring tide pools during low tide on the Olympic Coast. Photo by Jonathon Dykes.