

ANNUAL REPORT 2021

San Juan County
Marine Resources
Committee



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ABOUT THE MRC

The San Juan County Marine Resources Committee (MRC) is a citizen advisory committee to San Juan County dedicated to the protection and restoration of marine resources in the San Juan Islands. The San Juan MRC was the first marine resources committee established in the region. The Committee was created in 1996 as a local management alternative to an initiative for establishing a national marine sanctuary in the San Juans. The MRC provides a citizen forum to advise the County Council on marine issues. In addition to policy issues, the MRC supports marine research and provides education and outreach.

MRC GOALS

Ecological

- To protect and restore the marine biological diversity, ecosystem processes, representative ecosystems, and special natural features.
- To conserve fish populations and the upland, nearshore, and deepwater habitats that support them.
- Prevent further reductions in marine populations including marine birds and habitats within the San Juans and increase populations of marine species to levels exceeding present levels, within the range of natural variability.

Cultural, social and economic

- To recognize and appreciate the existence values provided by a fully functioning marine ecosystem. To protect and restore the marine ecosystem so that these benefits will be available for future generations.
- To recognize and protect direct use benefits for marine resources, including ceremonial, subsistence, recreational and commercial fishing.
- To acknowledge cultural heritage resources and encourage understanding and appreciation of them.
- To recognize the need for scientific research opportunities and the benefits that accrue from this research.
- To promote increased education and awareness of the marine environment.
- To protect marine-based recreational resources, including fishing, recognizing that on (and in) the water recreation and enjoyment is an important part of not only our local economy but also our community, culture and the coastal legacy we leave for our children.



MESSAGE FROM THE CHAIR

The second year of the pandemic did not slow down San Juan County's Marine Resource Committee's (MRC) work to protect and attempt to restore the marine resources in the County.

The County's reorganization of the MRC within the newly formed Department of Environmental Stewardship provides an opportunity for an interdisciplinary approach to managing our environment. One of the commitments that came from the reorganization was better communication of the broad scope of work of the Department. As a result, local citizens will now have the chance to know more about this exciting work, and in particular, the critical work of the MRC and Marine Program.

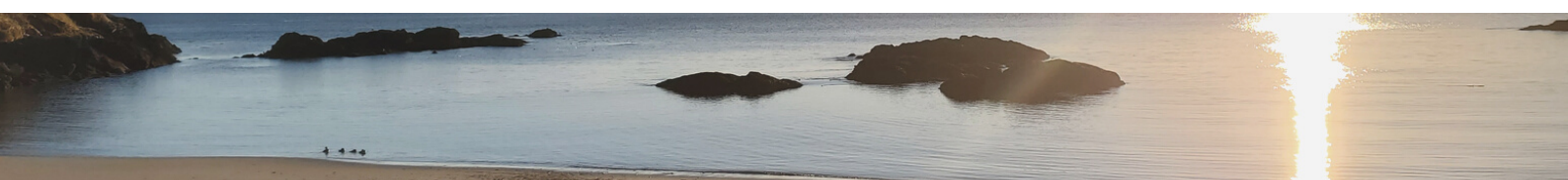
The San Juans marine ecosystem is right at the hub of the greater Salish Sea in the US and Canada. In the last year, our Marine Manager Frances Robertson and her talented colleagues have increased regional and transboundary partnerships to expand their broad scope of work. These projects included: derelict boats, collaboration with regional tribal governments, oil spill prevention, eelgrass protection, Southern Resident Killer Whale management, whale watching licensing, recreational boating, salmon recovery, public affairs outreach, marine-based early childhood education, Plastic Free Salish Sea, co-hosting the Navy Jet Noise Symposium, and the monumental task of updating the Marine Stewardship Area Plan.

Our participation along with six other marine counties in the Northwest Straits Commission is hugely beneficial for information sharing. Much of the labor, research and data collection related to marine restoration in the Salish Sea simply could not happen without volunteers making the most of the limited resources available.

The opening of the Orcas Landing Marine Interpretive Area at the ferry dock was a festive (brief) break from COVID and a landmark event in 2021. San Juan County's Public Works, Environmental Resources Division, MRC staff, and volunteers, along with Environmental Stewardship Director Kendra Smith collaborated with tribal artists and representatives from the Tulalip, Lummi, Samish, Port Gamble, and the Cowlitz Tribes, and local artists to build the area. The citizens and visitors to the islands now have a spectacular opportunity to learn some of the cultural and ecological perspectives of the islands.

Huge thanks are due to the local volunteers that work for the San Juan Islands Salish Sea marine environment and the talented public servants executing this broad scope of critical work.

Christina Koons, MRC Chair





MEMBERSHIP

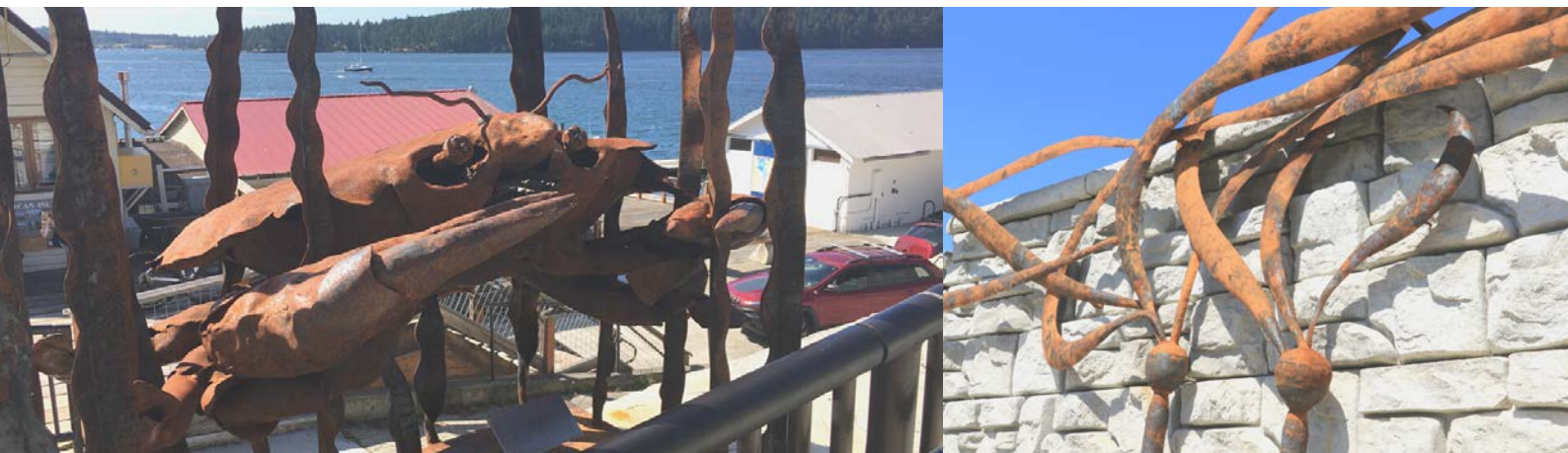
The San Juan MRC is currently comprised of representatives from San Juan County, the Tulalip Tribal government, the University of Washington’s Friday Harbor Labs, environmental organizations, local marine-based businesses, and residents, all of whom bring a diversity of perspectives and expertise to the San Juan MRC. One more member stepped down in 2021 —Cathleen Burns, resulting in two vacant seats.

MRC Members

Christina Koons, Chair	Karin Roemers-Kleven, Vice-Chair
Patti Gobin, Tulalip Tribes	Lovel Pratt, Friends of the San Juans
Dr. Megan Dethier, Friday Harbor Labs, University of Washington	Kendra Smith, Director, Environmental Stewardship, San Juan County
Cathleen Burns, San Juan Island*	Jeff Dyer, Lopez Island
Carl Davis, Orcas Island	Laura Jo Severson, San Juan Island
Kailey Genther, San Juan Island	Phil Green, San Juan Island
Beth Tate, Jen Jay Consulting	Ivan Reiff, Pintail Marine & PWWA

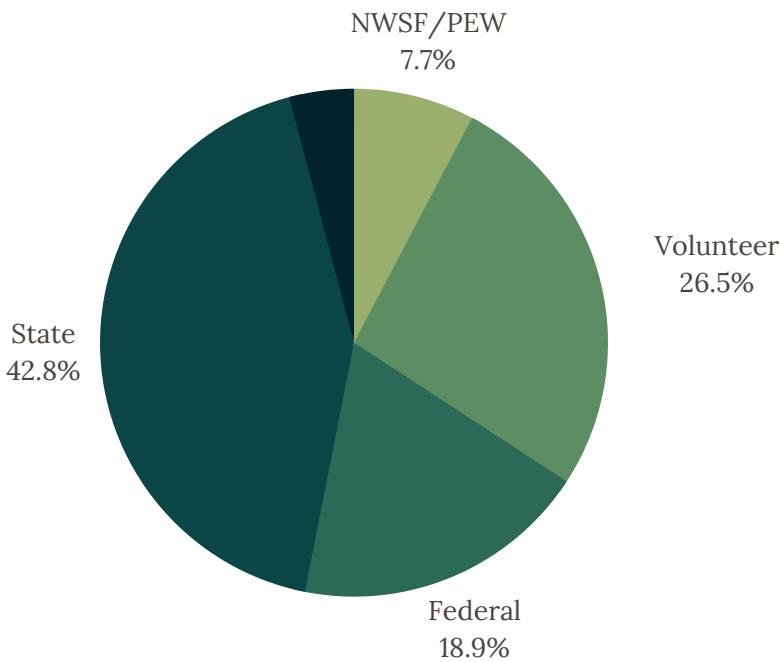
**Cathleen ended her term with the MRC in June 2021*

Ex-Officio and Support Staff: Jamie Stephens, San Juan County Council
Dr. Frances Robertson, MRC Coordinator
Sam Whitridge, Salmon Recovery Coordinator



FUNDING

The MRC is predominantly funded through a grant administered by the Northwest Straits Commission. This grant is comprised of state and federal dollars that fund the basic MRC operations as well as specific projects. In addition to these funds, the MRC also receives support from San Juan County and may also partner with the County in seeking external grants. The time and resources dedicated to the MRC by its members provide just over a quarter of the annual support for the program.



Value of volunteer hours



\$39,724

2021 VOLUNTEER SUPPORT



1,177 hours

The value of community citizens volunteering their time, expertise, and resources cannot be emphasized enough. Over the 2020-2021 grant cycle, MRC members and volunteers put in over 1000 hours. This included attending meetings, organizing a symposium, providing expert guidance in the County's oil spill prevention efforts, running the SeaBin pilot, creating the Orcas Landing marine information kiosk, participating in outreach, and beach clean-ups.



27%

value of volunteer hours and resources 2020-2021

MRC OPERATIONS

The 2020-2021 year saw MRC operations continue despite challenges associated with the COVID-19 pandemic. The MRC continued to utilize virtual platforms to keep members engaged and connected. The MRC also expanded use of its social media with the addition of a dedicated Plastic Free Salish Sea facebook page.

The MRC was represented on the Northwest Straits Commission by Chair Christina Koons and member Phil Green. Phil also represented the MRC on the Local Integrating Organization (LIO) along with MRC Coordinator Frances Robertson. Both of these efforts allow the San Juan MRC to contribute to local and regional planning, and funding decisions. San Juan MRC continued to collaborate with the San Juan LIO throughout the year on oil spill prevention efforts for the County. The MRC was represented in the San Jun County Stewardship Network and the transboundary Be Whale Wise partnership by Coordinator Frances Robertson. Members also engaged in the County's Charter Review Commission process to remind commissioners of the importance of the marine environment to the Islands' communities as well as the work of the MRC and the County to protect, conserve and sustain the County's marine resources.





ADVISORY ROLE

The MRC has been involved in advising the County on matters related to marine resources since its inception. This advisory role is a critical part of the MRC's activities.

LOCAL GOVERNMENT

The MRC provides scientifically-based guidance on issues that affect the County's marine environment.

Core advisory activities in 2021 included:

- Participation in the Puget Sound on the Hill virtual events.
- Participation in the State Commercial Whale Watch Licensing process.

SALMON RECOVERY

The MRC also undertakes the role of Citizens Salmon Advisory Group for Water Resource Inventory Area (WRIA) #2, the local Lead Entity for Salmon Recovery in the San Juan Islands.

The MRC provides the final scoring for all proposed salmon recovery projects in the year's grant round. This is perhaps one of the most important roles that the MRC undertakes each year.

In 2021 the MRC helped ensure that **\$308,602** were awarded for Salmon Recovery projects in San Juan County.



San Juan County Lead Entity for Salmon Recovery

\$308,602

Awarded to salmon recovery
in San Juan County in 2021

OUTREACH

The majority of the San Juan County MRC's project efforts focus on education and outreach. Education and outreach are key components to the Marine Stewardship Area Strategy focused on fostering a stewardship ethic in visitors and residents to the County. During the 2020-2021 grant year, the MRC continued outreach efforts in two core areas:

- 1.Reducing impacts of vessels on Southern Resident killer whales.
- 2.Reducing the impacts of single-use plastics on the marine environment.

SOUTHERN RESIDENT KILLER WHALES

BOATER ENGAGEMENT

San Juan County MRC continued to build off their efforts in 2020 and engage with boaters on a local and regional scale, supporting the transboundary Be Whale Wise partnership with the distribution of Be Whale Wise materials and amplification of the boater best practice messages through MRC and County facebook pages.

With the COVID-19 pandemic continuing to limit in-person outreach efforts the MRC focused on sharing Be Whale Wise and whale flag messages with virtual boater talks and through social media posts. The MRC made 20 SRKW dedicated posts over the boater season reaching >2,000 people. Posts were also shared with partners including the Northwest Marine Trade Association who were able to reach 84,833 people. The capacity of the NMTA to reach so many people with an interest in boating underlines the importance of these partnerships in directing important messages to the target audience.



THE WHALE WARNING FLAG

Efforts also continued around the whale warning flag. The WA State Parks boating safety program invested ~\$20,000 in whale warning flags with the goal of distributing flags to recreational boaters throughout the Salish Sea. The MRC and County continued to supply flags directly and through partners in both WA and BC distributing a further 386 flags. A grant from the National Fish and Wildlife Foundation is enabling a much-needed focus on the charter and boat rental sector.



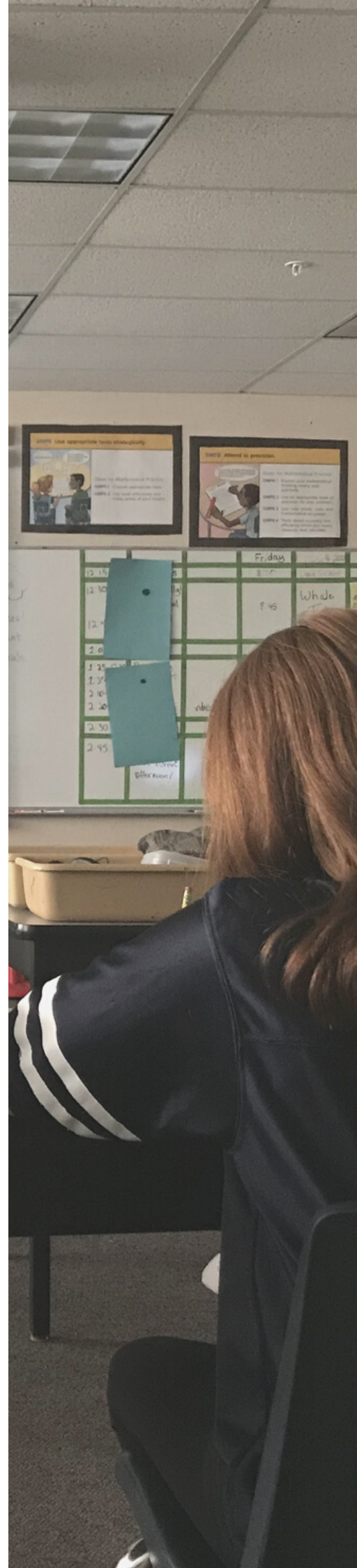
ODLIN COUNTY PARK BOATER SAFETY KIOSK

After the successful creation of a boater safety kiosk at the San Juan County Park in 2020 the MRC partnered with San Juan County Parks again to create another kiosk for Odlin County Park on Lopez Island. The Odlin kiosk provides boaters launching from the park with information on Be Whale Wise, KELP guidelines, the whale warning flag, and on the eelgrass anchor out zone at Odlin and the importance of eelgrass. The kiosk also serves as a life-vest loaning station. San Juan County Parks procured the life-vests through donation.



BRINGING THE SOUTHERN RESIDENT KILLER WHALE INTO THE CLASSROOM

In 2021 the MRC partnered with the Seattle-based environmental education program Killer Whale Tales. Together KWT and the MRC, led by MRC member Kailey Genter provided the KWT program to 140 4th and 5th-grade students on San Juan and Orcas Islands. The students also produced pledges to the Salish Sea. The MRC is excited to continue this partnership in 2022.



ACCOMPLISHMENTS

- Provided Southern Resident killer whale education to 140 elementary students.
- Created a boater education kiosk on Lopez Island.
- Amplified Be Whale Wise and the Whale Flag on social media in partnership with Be Whale Wise partners and the Northwest Marine Trade Association.
 - distributed 386 whale warning flags
 - distributed 50 BWW posters
 - distributed 812 BWW brochures

PLASTIC FREE SALISH SEA

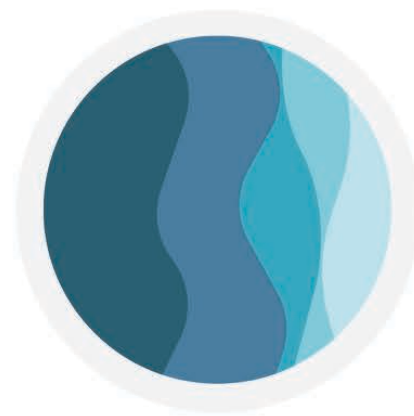
Plastic Free Salish Sea is a partnership created and led by the San Juan County MRC. The initiative seeks to change citizen behavior and the culture of plastic use in San Juan County and the surrounding Salish Sea region. Through 2020 and 2021 the MRC continued to expand its efforts throughout the County and around the Salish Sea with the following goals:

- Create an adopt a beach program in San Juan County
- Engage with the community through regular beach clean-up events and social media
- Pilot a SeaBin

BEACH STEWARDS: A COMMUNITY ADOPT A BEACH PROGRAM

The PFSS steering committee, comprised of MRC members, Friends of the San Juans, Lopez Solid Waste District, San Juan County Solid Waste Program, and the Conservation District launched the PFSS Adopt a Beach effort through a dedicated section on the PFSS website. This webpage allows county residents and visitors to engage with PFSS through the adoption of public or private beaches. The first year of this effort resulted in 43 individuals or groups signing up to steward 32 public and private beaches throughout the county.

<https://plasticfreesalishsea.org/adopt-a-beach/>



PLASTIC FREE
SALISH SEA

MRC members also participated in monthly and seasonal beach clean-ups. In September 2021 the MRC joined with more than 100 volunteers county-wide for the Great Islands Clean-up and collected 2,318 lbs of trash plus 11 garbage cans and 1 full dumpster. The MRC is gearing up to participate in the spring 2022 Great Islands Clean-up



ACCOMPLISHMENTS

- Created the Adopt a Beach program
- Created the Plastic Free Salish Sea facebook page
- Participated in Plastic Free July

THE SEABIN PILOT

Using innovative ocean-cleaning technology to collect trash and filter pollution, gather data, and raise public awareness.

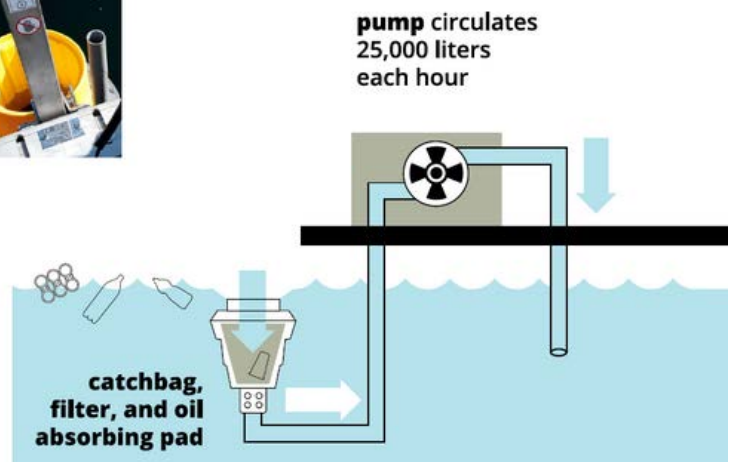


Seabins filter water and capture floating marine debris, with the ultimate goal of being an upstream solution for cleaner oceans. They are designed to selectively target buoyant microplastics, oil, and fuel without harming marine life in the process. Removal of these surface pollutants at scale is a necessary step towards ecological restoration efforts and exploring environmental services that improve overall ecological health in the San Juan Islands.

The pilot was established to allow the MRC to better understand the level of maintenance required, understand the logistics of marine litter disposal with the county, and assess the clean-up effort with data collection and impact reporting.

The SeaBin was installed at Deer Harbor Marina on Orcas Island on June 24, 2021 and ran until August 6, 2021. The SeaBin was monitored daily and the catchment bag was emptied and sorted to determine the amount of trash/microplastics and marine biomass. The SeaBin filtered 160,000 gallons of seawater daily. The majority of material collected consisted of marine biomass (e.g. marine fauna, algae, seaweeds, and detritus), in addition, volunteers sorted for marine fauna, identifying species, status, and where possible returning them to the marine environment.

Of the marine life collected, 17 species or types of animals were identified; most animals were recovered alive and returned to the marine environment. 20 Three-spined stickleback, 2 juvenile herring, 1 gunnel, and 1 juvenile rockfish were recovered dead. It was not clear if the SeaBin caused the deaths or if these fish were already dead when they entered the SeaBin.



Compared to marine biomass there was very little marine debris recovered by the SeaBin. The majority of material recovered was composed of styrofoam and small plastic shards. The Styrofoam appeared to be coming from a nearby dock float that was sloughing off Styrofoam bits. This highlights the need for alternatives to be used in the construction of floating docks in San Juan County and the wider Salish Sea area.



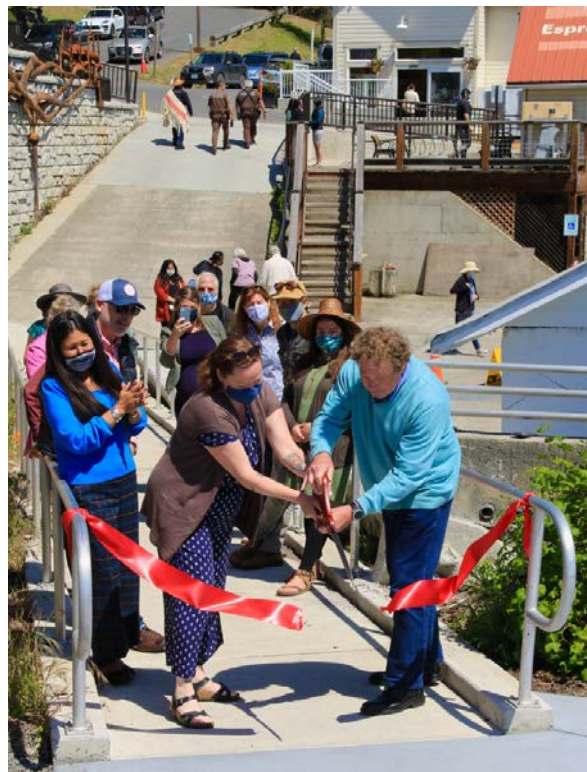
ORCAS LANDING MARINE INTERPRETIVE AREA

In May 2021, the MRC participated in the grand opening of the Orcas Landing Marine Interpretive Outlook. The MRC has played a key role in the development of the site and commissioned two interpretive panels that provide visitors with both ecological and cultural perspectives. One panel shares a view of life below and above the water, highlighting the diversity of species in the islands, the other shares the traditional Coast Salish reef net fishing practices, once common in the islands. MRC member Patti Gobin of the Tulalip Tribes guided the development of this panel.

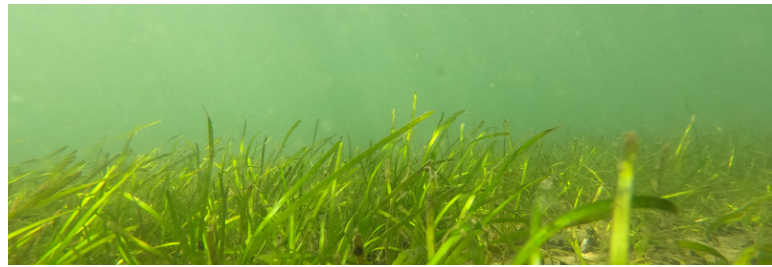


A mural "Preservation" that ties the community together in its interpretation of the past, present, and future of life in the islands was unveiled. It was created by a team of young Coast Salish artists from the Samish, Port Gamble, and Cowlitz tribes.

Rep. Debra Lekanoff led parts of the event with Council Chairperson Jamie Stephens. Representatives from the Lummi, Samish, and Tulalip Tribes also attended.



EELGRASS PROTECTION



The San Juan MRC deployed an eelgrass protection zone at Odlin County Park in 2021. This is the first of several planned for the county in the coming years.

The MRC also participated in the PEW funded EPIC (Eelgrass Protection Initiative Consortium) to bring together partners working to protect and recover eelgrass in San Juan County. As a part of this effort they led vessel monitoring at Odlin County Park and several sites where protection zones are planned for installation in 2022. They will continue this monitoring effort in 2022 also. The PEW funding for EPIC was made possible through a partnership with the Northwest Straits Foundation.

VESSEL MONITORING

The MRC implemented a vessel monitoring effort at four sites on San Juan, Lopez, and Orcas where there were either protection zones or planned protection zones. Vessel counts occurred throughout the summer.

- 27 surveys were conducted
- No boats were observed within the protection zone at Odlin County Park
- The most boats per count were observed at Bell Point (n=28).
- Average boats per scan were:
 - 15.4 - Bell Point
 - 5.6 - Eastsound
 - 1.2 - Crescent Beach
 - 0.67 - Odlin County Park

ACCOMPLISHMENTS

- Installation of eelgrass Anchor Out Zone at Odlin County Park.
- Initiated vessel presence, and compliance monitoring at 4 sites around the County.
- Added eelgrass outreach material to Odlin boater information kiosk.
- Participated in County's EPIC eelgrass effort.
- Participated in NWSC led eelgrass transboundary effort.
- Participated in the County led EPIC effort.



RESEARCH & PLANNING

During the 2020-2021 grant year, the MRC continued to make progress on their update of the Marine Stewardship Area Plan and continued to engage and advise on oil spill prevention efforts.

The MRC also partnered with Western Washington's Salish Sea Institute to host a science symposium on the subject of Navy jet noise and impacts on the marine and terrestrial environment.

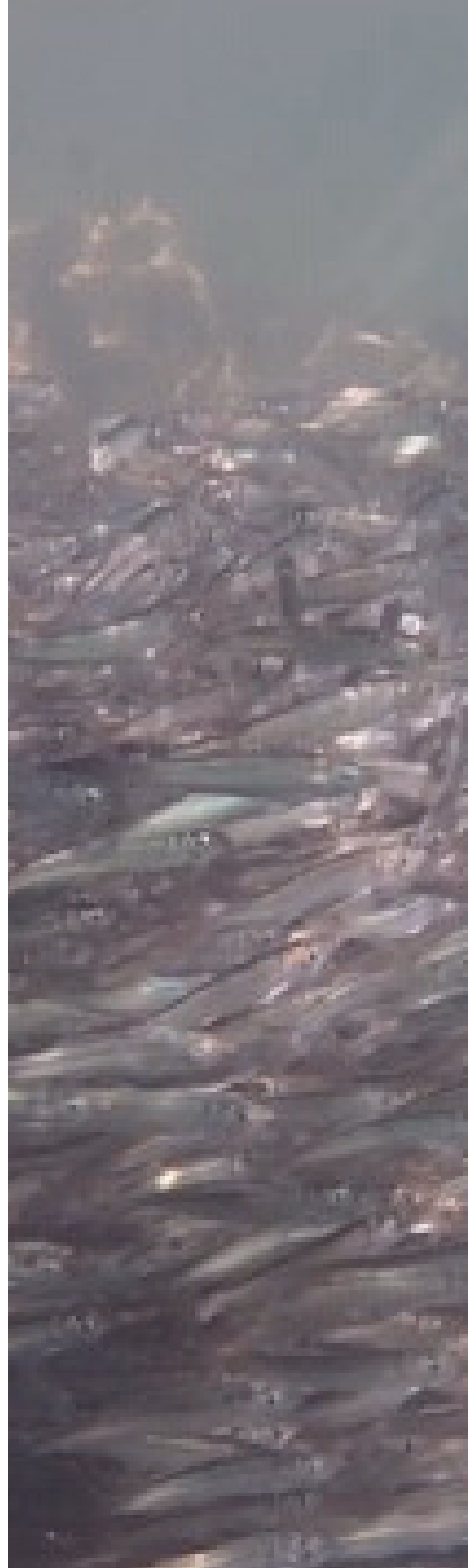
MARINE STEWARDSHIP AREA PLAN

San Juan County MRC began a review of the Marine Stewardship Area (MSA) Plan in early 2019, and hosted a successful Marine Managers Meeting in 2020. Through 2021, the MRC has continued to build off these efforts to complete draft chapter updates and add new chapters to the plan.

The long-term goal of this project is to ensure that the MSA Plan includes the most relevant information regarding the County's marine resources and tangible strategic actions to guide the MRC and County in their protection and sustainable management of the County's marine resources.

The core goals for the second year of this project included:

- Complete updates to the Biodiversity Target chapter
- Add a chapter on Critical Habitat and Protected Areas.
- Add a chapter on Relevant Management Plans and Efforts.



REVIEW OF MARINE BIODIVERSITY TARGETS

The 2020-2021 grant year saw the Biodiversity Targets re-organized and updated. The updated Biodiversity Targets are:

- Intertidal and Nearshore Habitats
- Kelp and Eelgrass
- Subtidal Habitats
- Rockfish and Bottomfish
- Pacific salmon and Forage fish
- Marine Birds
- Marine mammals

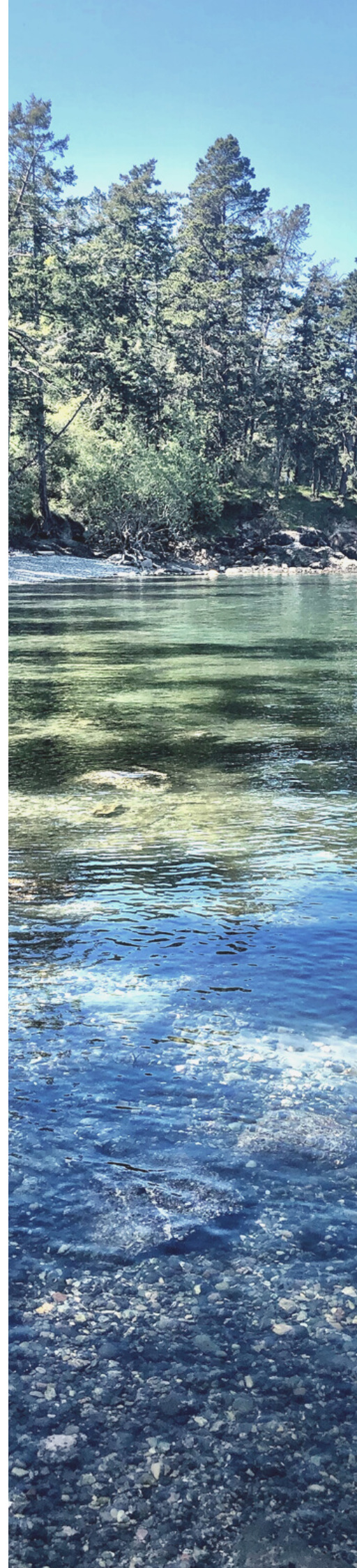
The MRC also added two new chapters:

- Critical Habitat and Protected Areas
- Relevant Management Plans and Efforts

These new chapters provide additional resources for future plan users.

ACCOMPLISHMENTS

- Completed biodiversity target updates
- Compiled two new chapters
- Established workplan to complete update in 2022.



OIL SPILL PREVENTION

The risk of a major oil spill is of huge concern to the County. It was identified as the highest-ranking threat to marine biodiversity in the 2007 Marine Stewardship Area Plan and was again identified as a top threat at the 2020 Marine Managers Workshop. The MRC works closely with the County, the San Juan Local Integrating Organization (LIO), and local non-profit organizations to further efforts toward oil spill prevention.

The MRC oil spill subcommittee continued to play a key role in supporting oil prevention efforts in 2021 through San Juan County's Vessel Drift and Response Analysis near-term action. This analysis adds to the growing body of evidence supporting an Emergency Response Towing Vessel in the transboundary region.

NAVY JET NOISE SYMPOSIUM

In March 2021 the MRC co-hosted a science symposium with the Washington Salish Sea Institute on Navy jet noise and the impacts on marine and terrestrial habitats of the Salish Sea and Olympic Peninsula.

The symposium was moderated by the Director of the Salish Sea Institute, Ginny Broadhurst, and saw presentations from scientists Lauren Kuehne, from Omnifishent Consulting and Dr. Rob Williams from Oceans Initiative and a panel discussion that also included Dr. Todd Hass from the Puget Sound Partnership, Micheal Jasney of the NRDC, and Dr. Edmond Seto of the University of Washington.

The virtual symposium drew over 230 people from 14 US States, Canada, and Mexico.



WHAT'S NEXT?



The San Juan MRC is expanding with its core project list in the 2021-2022 grant year. The MRC is excited to embark on new projects in 2022. These include:

- Re-starting the derelict vessel prevention program to support the County's Derelict Vessel Program.
- Monitoring vessel presence and compliance at eelgrass protection sites.
- Partnering with the Friday Harbor Labs and Friends of False Bay to monitor ecological conditions and visitor usage.
- Continuing to build partnerships with local Tribes and local organizations for the benefit of San Juan County's Marine Resources.



PARTNERS

The work of the San Juan County MRC is made possible through grants, collaborations, and partnerships.



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, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.



LIST OF PHOTOGRAPHS

Many of the photographs used throughout this report have been contributed by MRC members, staff, or partners. Credits and descriptions are provided below.

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