Whatcom County Marine Resources Committee

2025 Annual Report

MRC
Whatcom County

UNITED STATES • ENVIRONMENTAL PROTECTION AGENCY •

Northwest Straits COMMISSION

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION • U.S. DEPARTMENT OF COMMERCE

WHATCOM COUNTY WASHINGTON

PUGETSOUND PARTNERSHIP

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The Whatcom Marine Resources Committee (MRC)

The Whatcom Marine Resources Committee (MRC) is one of seven citizen-based committees in the Northwest Straits Region that exist to protect, preserve, and restore the marine environment. The MRC utilizes up-to-date information and scientific expertise to guide local communities in achieving important goals for marine habitat protection within the Northwest Straits.

There are five marine interest groups represented on the MRC in addition to representation from elected officials, local tribes, an local government staff.

The Committee

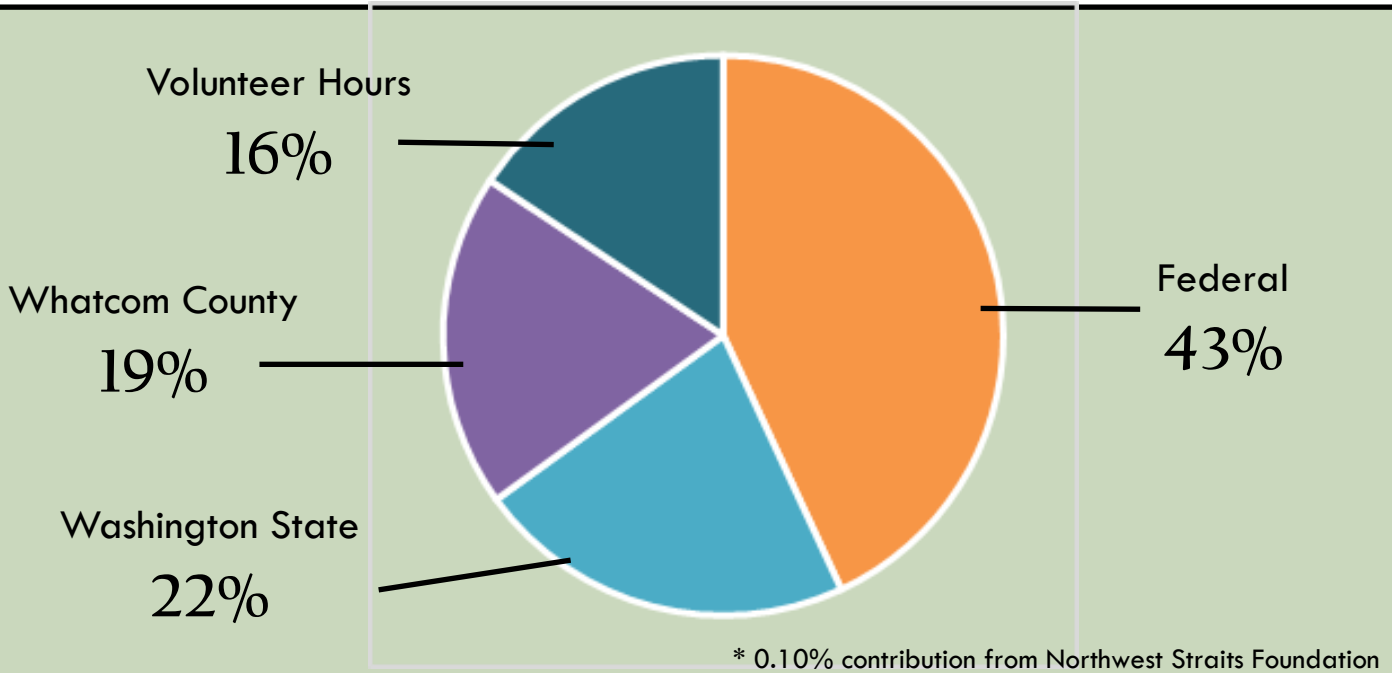
Member	**Representation**
Glen (Alex) Alexander	Citizen-at-Large
Rick Beauregard	Scientific Expertise
Jackie Dexter	Economic
Mark Fairhart	Citizen-at-Large
Alexi Guddal	Conservation/Environmental
Thomas (Joe) Hoats	Economic
Kathy Ketteridge	Citizen-at-Large
Elizabeth Lorence	Conservation/Environmental
Mike MacKay	Scientific Expertise
Paul Meyer	Conservation/Environmental
Andrew Shelton	Economic
Colin Wahl	Scientific Expertise

Alternates, Ex-Officio*, and Staff**

Kurt Baumgarten*	Port of Bellingham
Kaylee Galloway*	Whatcom County Council
Mary Lou Steward*	City of Blaine (Mayor)
Austin Rose**	Whatcom County Public Works-Natural Resources
Dana Flerchinger**	Whatcom County Public Works-Natural Resources

Funding

The MRC receives funding through a grant administered by the Northwest Straits Commission. This grant is comprised of state and federal dollars that fund basic MRC operations and targeted projects. In addition to these funds, the MRC receives support from Whatcom County and often partners with the County to seek external grants. Additionally, the Northwest Straits Foundation funds additional projects and resources to assist the MRC.



* 0.10% contribution from Northwest Straits Foundation

$34.79
Estimated value of a volunteer hour in 2025
(independentsector.org)

1333
Volunteer hours donated in 2025

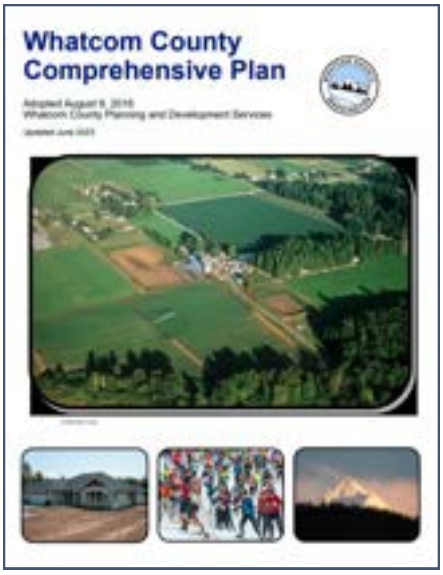
$46,375
Total value to Whatcom County

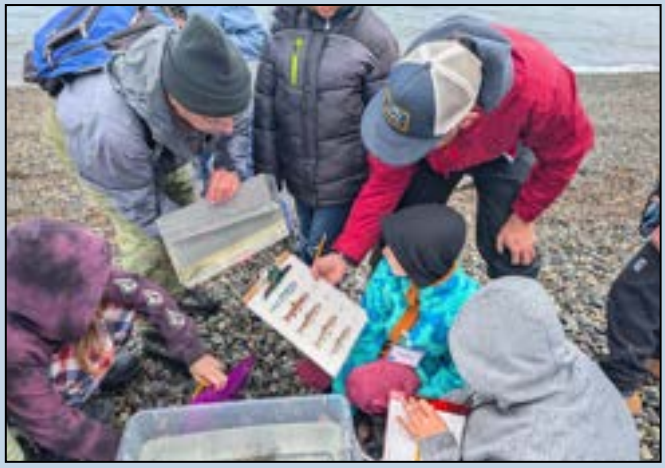
Broad public engagement in marine issues through volunteering time, expertise, and resources is a key component of the Northwest Straits Initiative. In 2025, MRC members and volunteers contributed over 1300 hours towards MRC projects and interests. This included participating in monthly public meetings, providing input on the Whatcom County Comprehensive Plan update, volunteering for monitoring efforts, and participating in community outreach and education.

Operational Strategies

ADVISORY ROLE

The MRC is defined as an "Advisory Committee", providing technical expertise and perspective on important issues in addition to leading targeted projects in the community. A key role of the MRC is to work with Whatcom County leadership and other key constituencies to help protect marine and nearshore habitat through local regulatory plans. In 2025, the MRC continued to provide recommendations on the Environment and Climate chapters for the required update of the Whatcom County Comprehensive Plan.





EDUCATION AND OUTREACH

Education and outreach lie at the heart of MRC projects. The MRC focuses on work that builds community education and involvement, increases coordination with partners, and advances dialogue with policy makers.

Photo: *Students observing juvenile salmon at the MRC's Beach Seine with Schools program.* Credit: Dana Daniels

MONITORING

The MRC leads local monitoring projects, collecting data over an identified time period using established protocols, to answer a scientific or management-based question. Projects include: bull kelp surveys, Olympia oyster restoration, forage fish spawning surveys, water quality sampling, and monitoring for harmful algae.

Photo: *Volunteer collecting sediment sample to sieve and identify forage fish eggs.* Credit: Dana Daniels

Projects

Beach Seine with Schools

The MRC continued the Beach Seine with Schools program that provides elementary students with an opportunity to observe juvenile salmon utilizing intertidal habitats along the shoreline, improving students' understanding of the importance of these migratory corridors.

Applications were sent to 4th grade classrooms throughout Whatcom County, including Tribal schools. Due to limited staff and volunteer capacity, the program could only accommodate 4 schools with classrooms of 20–30 students each. Schools were chosen to participate based on the program's relevance to the existing educational goals for the students.

At each field event, the beach seining was conducted by biologists with Lummi Natural Resources (LNR). LNR also demonstrated how to count and measure the catch from the beach seine.

Beach used for seining at Boulevard Park, Bellingham. Source: Google Maps.

Credit: *MRC staff conducting a classroom lesson prior to the field event.* Credit: Mike MacKay.

Prior to and following each field event, MRC staff and members visited the classrooms of participating students to provide information on beach seining, the Bellingham shoreline, and the importance of intertidal habitats. The participating 4th grade classrooms also previously engaged with the Nooksack Salmon Enhancement Association's Students for Salmon Program, in which the students raise salmon from eggs to fry in their classroom before releasing them into local waterways.

Each field event was preceded by a short talk by a Tribal Elder or marine scientist, who discussed the ecological and cultural importance of salmon.

Photo right: Lummi Nation member, Althea Wilson, speaking to Carl Cozier Elementary students about the importance of protecting our local waters to support salmon populations. Credit: Kimberly Cauvel, NWIFC.

Event Summaries

In 2025, the MRC conducted 3 beach seining events with 4 schools. Across the 3 events, 170 total elementary students participated and over 115 volunteer hours were contributed. This year, the MRC also partnered with the Salish Sea School to run activity stations to supplement the beach seine, allowing for smaller learning groups to improve student engagement.

Volunteers, Salish Sea School staff, and MRC staff display an intertidal mural that 4th graders from Harmony Elementary School painted at a beach seining event. Credit: Ellen Goudie, Northwest Straits Foundation.

Harmony Elementary
April 22, 2025

Students observe the catch from the beach seine. Credit: Dana Daniels.

Students: 53 (2 classes)
Tribal Speakers: Jim and Sandra Bura, Nooksack Indian Tribe

Carl Cozier Elementary
May 6, 2025

LNR crew conducts a beach seine. *Credit: Kimberly Cauvel, NWIFC.*

Students: 47 (2 classes)
Tribal Speaker: Althea Wilson, Lummi Nation

Acme Elementary and Alderwood Elementary
May 20, 2025

Students observe the catch from the beach seine. Credit: Dana Daniels.

Students: 70 (3 classes)
Tribal Speaker: Frank Lawrence III, LNR Director

Since the project began in 2022:

12 Beach Seine with Schools events have taken place

13 Schools have participated in the program

620 Total students have participated

415 Hours of volunteer time have been contributed

Forage Fish Monitoring

The MRC participates in a regional effort to characterize populations of two species of forage fish that spawn on beaches in the Salish Sea: Pacific sand lance and surf smelt. Gathering data on forage fish spawning grounds can result in legal protections of spawning beaches, can inform potential soft shore restoration projects for Whatcom County, and can be used to assess the effectiveness of local restoration projects.

MAIN ACTIVITIES

Following protocols developed by the Washington Department of Fish and Wildlife (WDFW), surveys are conducted monthly when the tide is below 5 ft. A bulk sediment sample is collected and condensed to concentrate the fish eggs. WDFW conducts lab analysis and egg identification.

Bulk sediment samples are collected from sites monthly.

A sieving process and vortex method are used to separate eggs from the beach sediment.

The condensed sediment samples are preserved and transported to WDFW for analysis.

RESULTS/IMPACTS

Since this project began in 1972:

- WDFW has conducted 33,000 forage fish surveys.
- MRCs and partners have conducted over 11,000 more.

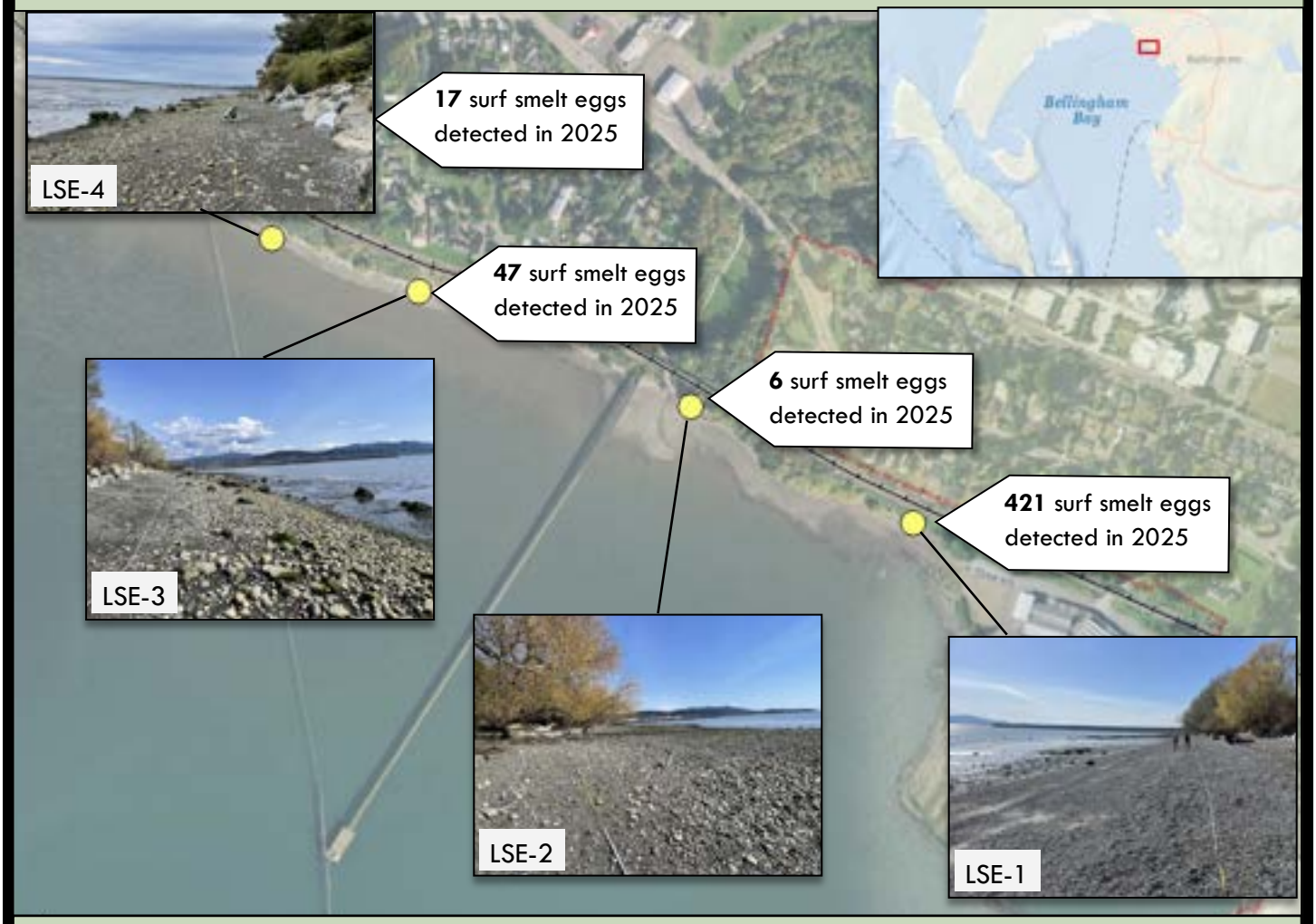
Combined efforts have identified over:

- 714.57 miles of surf smelt spawning habitat.
- 135.25 miles of sand lance spawning habitat.

"A dataset this large that goes back 50 years is rare and incredibly valuable. This project is part of one of the longest running, continuous datasets in the state and is used daily by regulators and environmental planners."

- Kate Olson, Forage Fish Biologist, Washington Department of Fish and Wildlife

The MRC collects bulk sediment samples from 4 locations along **Little Squalicum Beach,** within the beach nourishment areas of two recent restoration projects completed by the City of Bellingham and the Port of Bellingham.



In partnership with the Northwest Straits Foundation and the Skagit MRC, the Whatcom MRC also conducts forage fish surveys at 2 sites at **Clayton Beach** every other month. These surveys are conducted in anticipation for a proposed nearshore restoration project at Clayton Beach.

Bull Kelp Monitoring

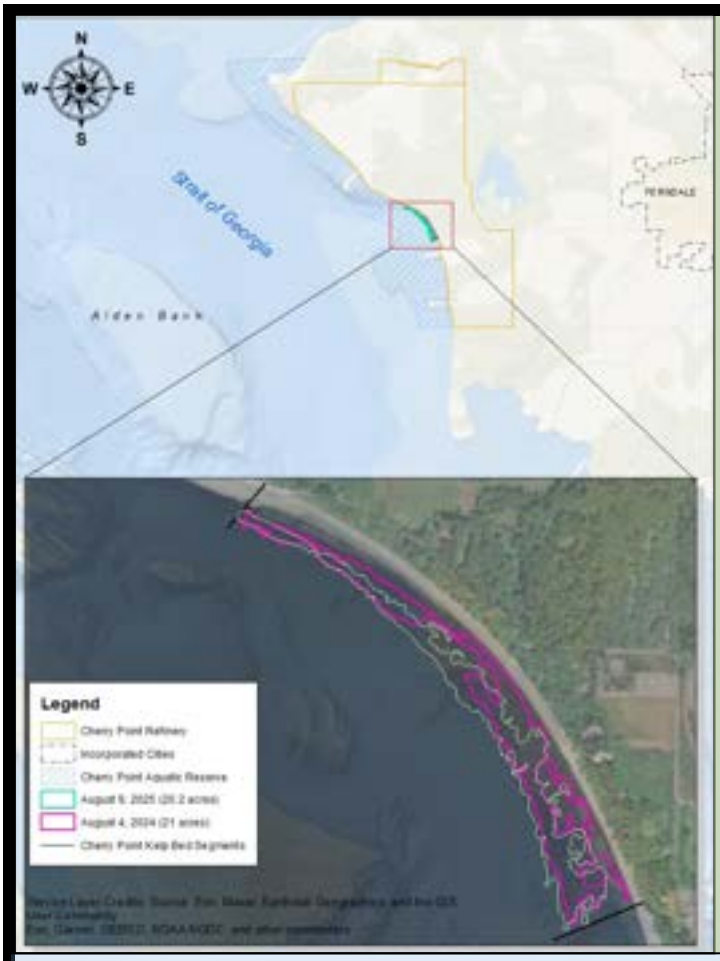
Bull kelp (*Nereocystis luekteana*) is the largest species of brown algae native to our region. This fast growing seaweed can grow up to 100 feet in a single year and is an important component of the rocky intertidal ecosystem of the Salish Sea.

Benefits of Bull Kelp	
Sequesters carbon	Protects against storm surge and shoreline erosion
Provides oxygen to the marine environment	Provides critical nutrients and habitat for several species in the Salish Sea.

MAIN ACTIVITIES

- Bull kelp beds are monitored at least once annually during the July-September growing season at four locations throughout Whatcom County including Aiston Preserve, Southwest Lummi Island, Cherry Point/Gulf Rd, and Point Whitehorn (see map below).
- Volunteers use GPS units to track the perimeter of the beds, the start/end points, and the outer/shoreline edge points. Volunteers also collect temperature and depth data. Data are collected within specific spatial locations that are returned to each year for the surveys.

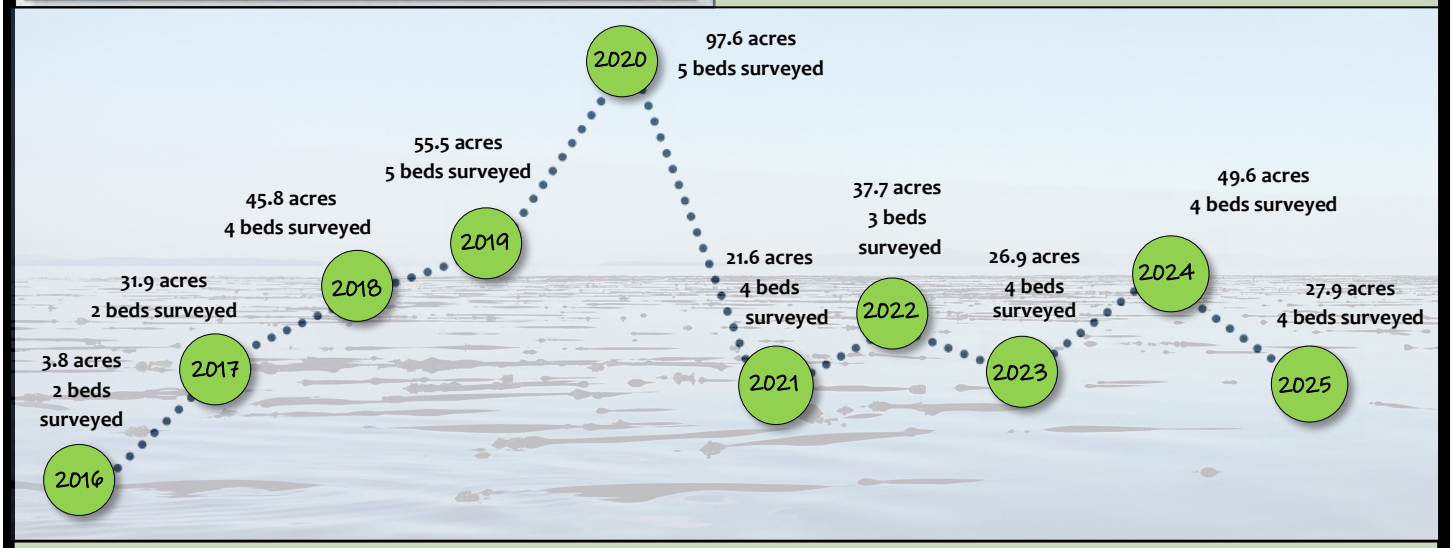
Top: *Tattered kelp, Aiston Preserve.* Bottom: *Kayak and kelp, Cherry Pt./Gulf Rd.* Credits: Dana Daniels



Left: *Cherry Point/Gulf Road bull kelp survey perimeter tracks. The area of the bed slightly decreased in 2025 (green track, 20.2 acres) as compared to 2024 (pink track, 21 acres).*

RESULTS/IMPACTS

- In 2025, four bull kelp surveys were completed in Whatcom County. One survey was completed at each of the following locations: Aiston Preserve, Cherry Point/Gulf Road, Point Whitehorn, and Southwest Lummi Island. The second survey did not occur at Cherry Point due to weather conditions.
- All of the kelp beds either remained similar in size to previous years or decreased slightly.
- Kelp data collected during these surveys are a key part of the Washington State floating kelp indicator and synthesis of floating kelp in our region.



Above: *MRC kelp survey data from 2016-2025 including the number of surveys completed and the total kelp bed acreage surveyed per year.* Below: *Kelp survey photos from the 2025 season.* Credit: Dana Daniels.

Pilot Olympia Oyster Restoration—North Chuckanut Bay

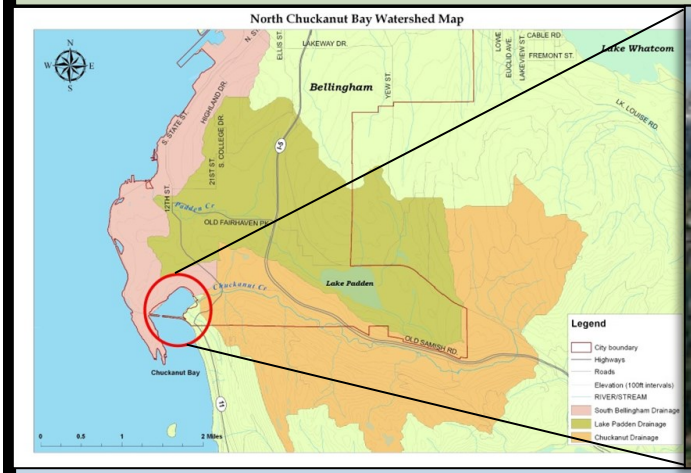
North Chuckanut Bay, a small inlet in southern Bellingham, offers habitat conditions and historical evidence of Olympia oyster presence that make it a strong candidate for restoration. The Washington Department of Fish and Wildlife (WDFW) designated the area as a priority site for rebuilding Olympia oyster populations.

HISTORY

2016 WDFW identified seven pilot plots (including one reference plot) as suitable to plant seeded cultch in North Chuckanut Bay (see map at bottom of page).

2018 The Whatcom MRC spread approximately 95,000 Olympia oyster cultch (on Pacific oyster shell) within the identified test plots.

2025 Monitoring surveys conducted from 2019-2025 have shown a clear decline in live Olympia oysters within the pilot restoration plots.



Aerial view of North Chuckanut Bay. Credit: Dana Daniels.

MAIN ACTIVITIES

Annual monitoring events occur in May to evaluate oyster retention and habitat changes in the plots. Monitoring is conducted with help from Bellingham Technical College (BTC) Fisheries and Aquaculture Program students.

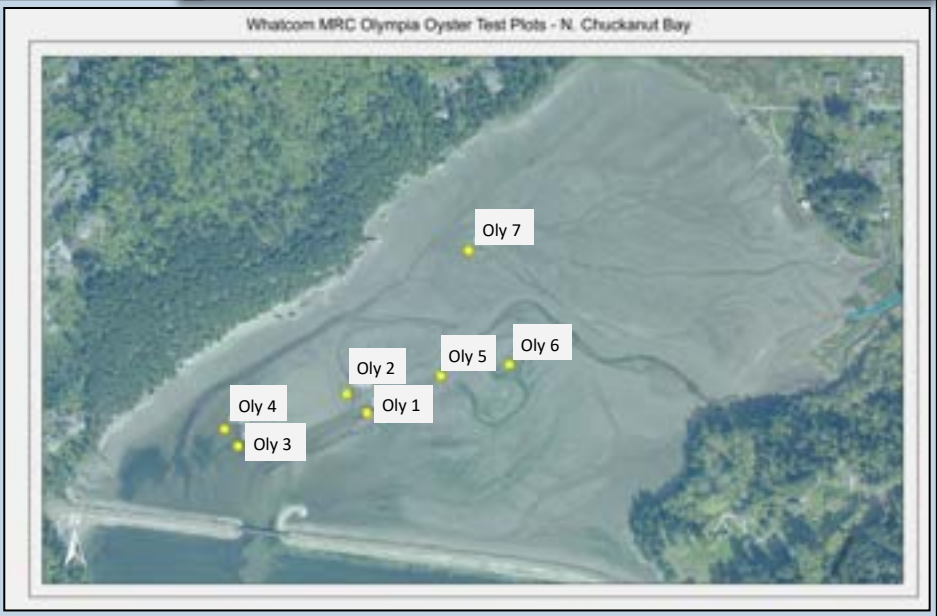
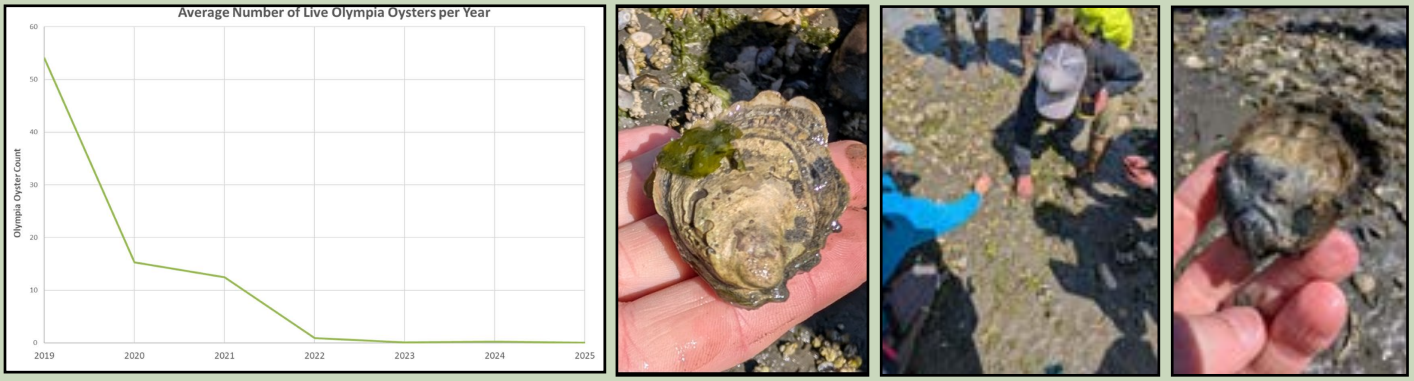


Figure: *Map of MRC Olympia oysters test plots in North Chuckanut Bay.* Credit: Austin Rose.

RESULTS/IMPACTS

- In 2025, the MRC completed their 7th annual survey of the Olympia oyster pilot plots in North Chuckanut Bay. Participants included students and an instructor from BTC's Fisheries and Aquaculture Program, MRC staff, and the MRC project lead.
- The survey results illustrate a decline in population growth and retention within most plots (see graph below). Some reasons for this decline may include the area's substrate, comprised of fine sediments, resulting in the oysters sinking and becoming buried over time, or the presence of the railroad trestle that greatly restricts tidal circulation throughout the bay.



(Left) *Graph showing average number of live Olympia oysters per year monitoring.* (Right) *Photos of live Olympia oysters found in Oly 7 and students observing plot area.* Credits: Dana Daniels.

During the 2025 survey, live adult Olympia oysters were observed at Oly 2, Oly 3, and Oly 7, indicating suitable habitat. Shell and organic material were well retained, suggesting strong potential for larval settlement. At Oly 7, smaller oysters were also present, providing evidence of recruitment at some point during the project period.

Students from BTC conduct the 2025 Olympia oyster population survey in North Chuckanut Bay. Credit: (left) Dana Daniels and (right) Glen Alexander.

Pilot Olympia Oyster Restoration—Drayton Harbor

HISTORY

- The Washington Department of Fish and Wildlife (WDFW) identified Drayton Harbor as an area in the North Puget Sound that historically had large native oyster beds.
- The MRC contracted with the Puget Sound Restoration Fund (PSRF) to complete a reconnaissance survey in Drayton Harbor to determine locations for the MRC to test Olympia oyster restoration potential.
- Using PSRF and WDFW survey findings, the MRC plans to pilot Olympia oyster restoration test plots in 2026 in two areas of Drayton Harbor: the tidelands of California Creek and the inside of Semiahmoo Spit.

MAIN ACTIVITIES

- Permits were submitted in December of 2025 to implement bioassay monitoring stations within each of the identified locations.
- The MRC purchased 150 bags of Pacific oyster shell with North Sound Olympia oyster spat (estimated to be 200,000 baby Olympia oysters), and set up a over-wintering location with Drayton Harbor Oyster Company.
- WDFW conducted another site visit of the identified locations to further explore habitat characteristics and to identify specific areas that would be most suitable to set up bioassays for further testing.

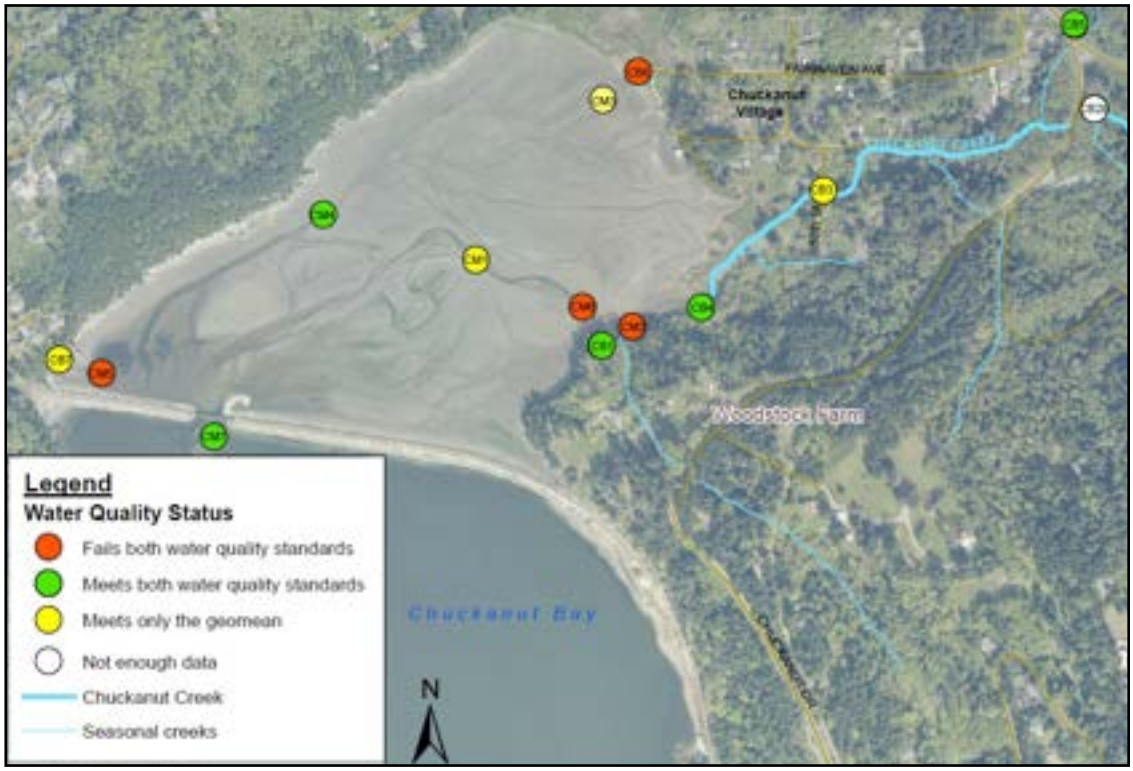
Field surveys in Drayton Harbor with PSRF and WDFW. Credit: (left): Allie Simpson, NWSC. (right): Dana Daniels.

Chuckanut Pollution Identification and Correction (PIC) Program

In partnership with local and state agencies, the MRC continued their PIC project in North Chuckanut Bay by conducting water quality monitoring and data reporting on a monthly basis.

HISTORY

- North Chuckanut Bay is a recreational shellfish harvest area that supports many species of clams. Due to concerns about bacterial contamination, the bay has been closed to shellfish harvest for 30 years.
- In 2014, the MRC began working with Whatcom County Public Works (WCPW), Whatcom County Health and Community Services, and the Washington Department of Health (WA DOH) to begin a PIC project in the area.
- To protect water quality, WA state has criteria for bacteria levels in both fresh and marine waters. The MRC conducts monthly water quality monitoring in the marine water and in the freshwater systems flowing into the bay.



RESULTS/IMPACTS

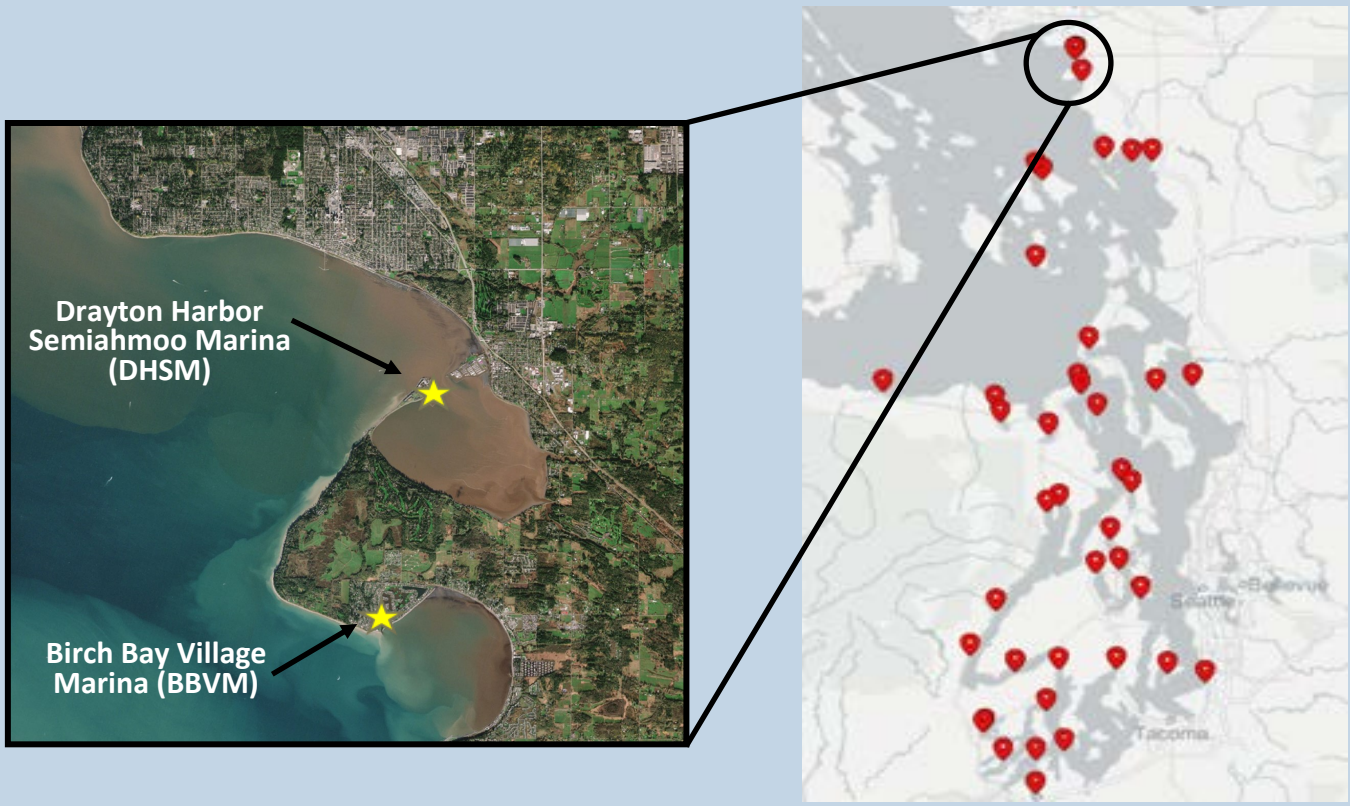
- For the shellfish standard in marine waters, two water quality criteria must be met. The map shown demonstrates the sites that meet one or both standards or fail to meet either standard.
- Because water quality has not improved at many sites in North Chuckanut Bay, the MRC decided to discontinue water quality sampling after September of 2025. The MRC will instead focus on a recovery plan and increased outreach efforts. WCPW Natural Resources staff will also be developing a technical report synthesizing the findings from over 10 years of water quality monitoring in the bay and outlining recommendations for next steps.

Harmful Algal Bloom (HAB) Monitoring

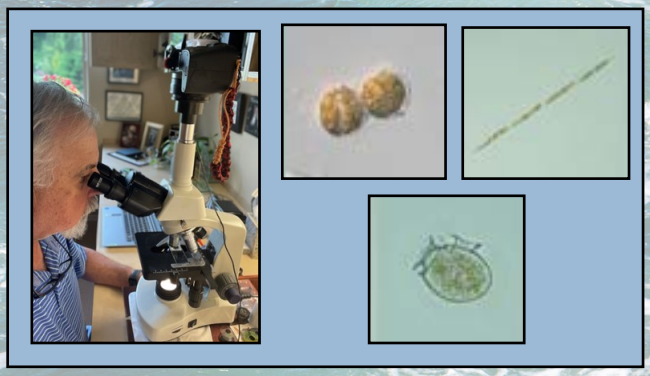
The MRC continued monitoring for harmful algal blooms (HABs) in north Whatcom County. This data provides important information to management agencies and scientists to effectively manage shellfish closures for public safety.

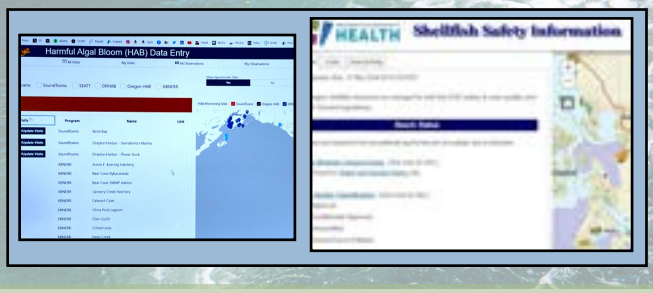
HISTORY

- Harmful algae threaten water quality, shellfish, and fisheries throughout Washington State. Damaging effects have been seen on local communities, ecosystems, and economies, with impacts occurring earlier and extending later into the year. In 2006, an organization called SoundToxins was created to monitor phytoplankton throughout the Salish Sea to better predict HAB events and to provide early detection alerts to the Washington State Department of Heath (WA DOH) to better manage marine resources.
- The SoundToxins monitoring network, managed by Washington Sea Grant, monitors over 3 dozen sites for HABs throughout the Salish Sea, but until 2023, lacked data for north Whatcom County where high levels of paralytic shellfish toxin have been observed in the past. This project fills that data gap by providing HAB monitoring data to more effectively manage shellfish resources in north Whatcom County.



Map showing all of the SoundToxins HAB monitoring sites throughout the Puget Sound. The two northernmost sites, including Drayton Harbor/Semiahmoo Marina and Birch Bay Village Marina, are sampled by the Whatcom MRC.





MAIN ACTIVITIES

Phytoplankton samples and environmental conditions are collected from Semiahmoo Marina and Birch Bay Village Marina biweekly from November through February and weekly from March through October. Concurrently, mussel samples are collected and sent to the WA DOH for biotoxin analysis.

Phytoplankton samples are analyzed microscopically for HAB species.

All environmental and HAB data are reported to SoundToxins. The biotoxin analysis conducted by the WA DOH is used to inform shellfish closure maps. Together, these programs help to ensure safe and effective management of shellfish resources in the Salish Sea.

RESULTS/IMPACTS

The HAB monitoring data from Drayton Harbor/Semiahmoo Marina and Birch Bay Village Marina filled the HAB data gap for the north Puget Sound, allowing for better management of shellfish resources within Whatcom County.

"In Whatcom County, there have been several occasions when WA DOH was considering upgrading an area closed to shellfish harvest based on declining toxin levels in shellfish, but the early warning phytoplankton data suggested the toxic bloom was not over. In these cases, we kept the closure in place and the next shellfish sample was over the closure level once again. Opening and closing an area to shellfish harvest has a significant cost to the commercial shellfish companies, tribes, local health jurisdictions, and recreational shellfish harvesters. WA DOH relies on the early warning phytoplankton data that the Whatcom County phytoplankton samplers provide to make the most confident public health changes in shellfish harvesting opportunities and to minimize the economic burden to all shellfish harvesters."

- Jerry Borchert, Marine Biotoxin Lead at WA DOH

Vessel Turn-In Recycling Event

During the summer of 2025, Whatcom County hosted a Vessel Turn-In Recycling Event that allowed boat owners to voluntarily surrender their vessels for free, ensuring they were responsibly dismantled and recycled. Project partners included the Whatcom MRC, Port of Bellingham, Whatcom County, the Nooksack Indian Tribe, Lummi Nation, Whatcom Working Waterfront Coalition, Northwest Straits Commission, WA Department of Natural Resources (DNR), and the WA Department of Ecology. Accepted vessels were transported to the Port of Bellingham, where hazardous materials were removed, boats were deconstructed, and materials were sorted for recycling.

BY THE NUMBERS

Diverting debris out of landfill and marine environments safely disposed of:

29
total vessels

350
gallons of hazardous liquids

69.4
tons of total vessel debris

80%
of this debris was recycled

"Participating in the DNR vessel turn-in programs helps prevent vessels from becoming abandoned and derelict. This program is a true success as recycling costs are only 10% to 30% of the cost of salvaging a sunken vessel. Encouraging owners to voluntarily surrender vessels that they can no longer maintain is one of the best ways to reduce derelict vessels in our waters."

- Mark Fairhart, Whatcom MRC Chair.

Thank You

Thank you to our Whatcom County Marine Resources Committee members and community volunteers—your dedication to protecting and restoring the marine and nearshore environment is making a difference in Whatcom County. We would also like to recognize the ongoing support from our partners, including Whatcom County Council and Whatcom County Executive Sidhu, Port of Bellingham, City of Bellingham, Lummi Nation, Nooksack Indian Tribe, Washington Department of Fish and Wildlife, Bellingham Technical College, the Whatcom Watershed Information Network, and many others. These contributions include staff time, guidance, materials, and general support for MRC projects. The MRC is also grateful for funding and support from the Northwest Straits Commission, Northwest Straits Foundation, Puget Sound Partnership, the United States Environmental Protection Agency (EPA), and the National Oceanic and Atmospheric Administration (NOAA).

How you can get involved:

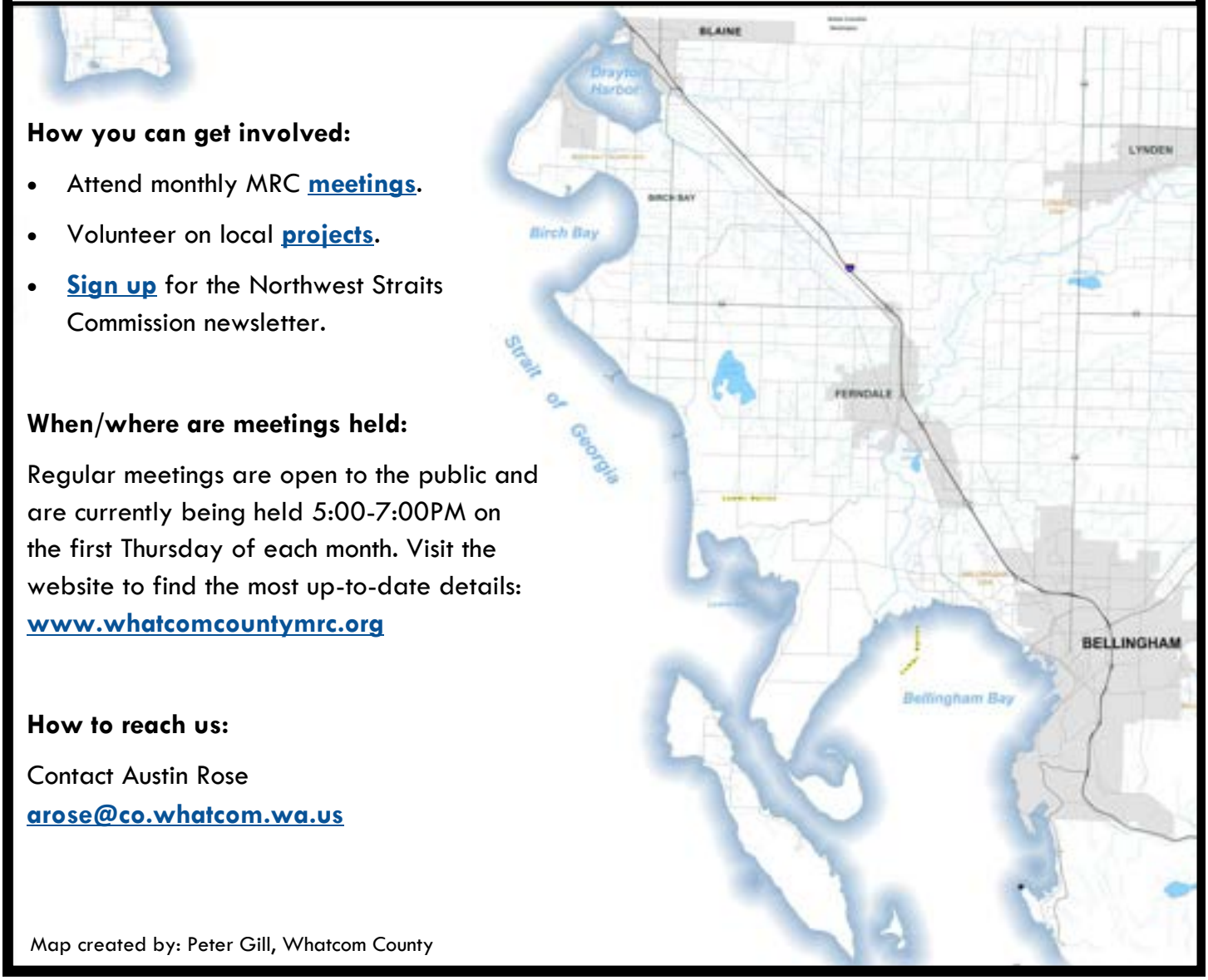
- Attend monthly MRC **meetings**.
- Volunteer on local **projects**.
- **Sign up** for the Northwest Straits Commission newsletter.

When/where are meetings held:

Regular meetings are open to the public and are currently being held 5:00-7:00PM on the first Thursday of each month. Visit the website to find the most up-to-date details: **www.whatcomcountymrc.org**

How to reach us:

Contact Austin Rose
arose@co.whatcom.wa.us



Map created by: Peter Gill, Whatcom County