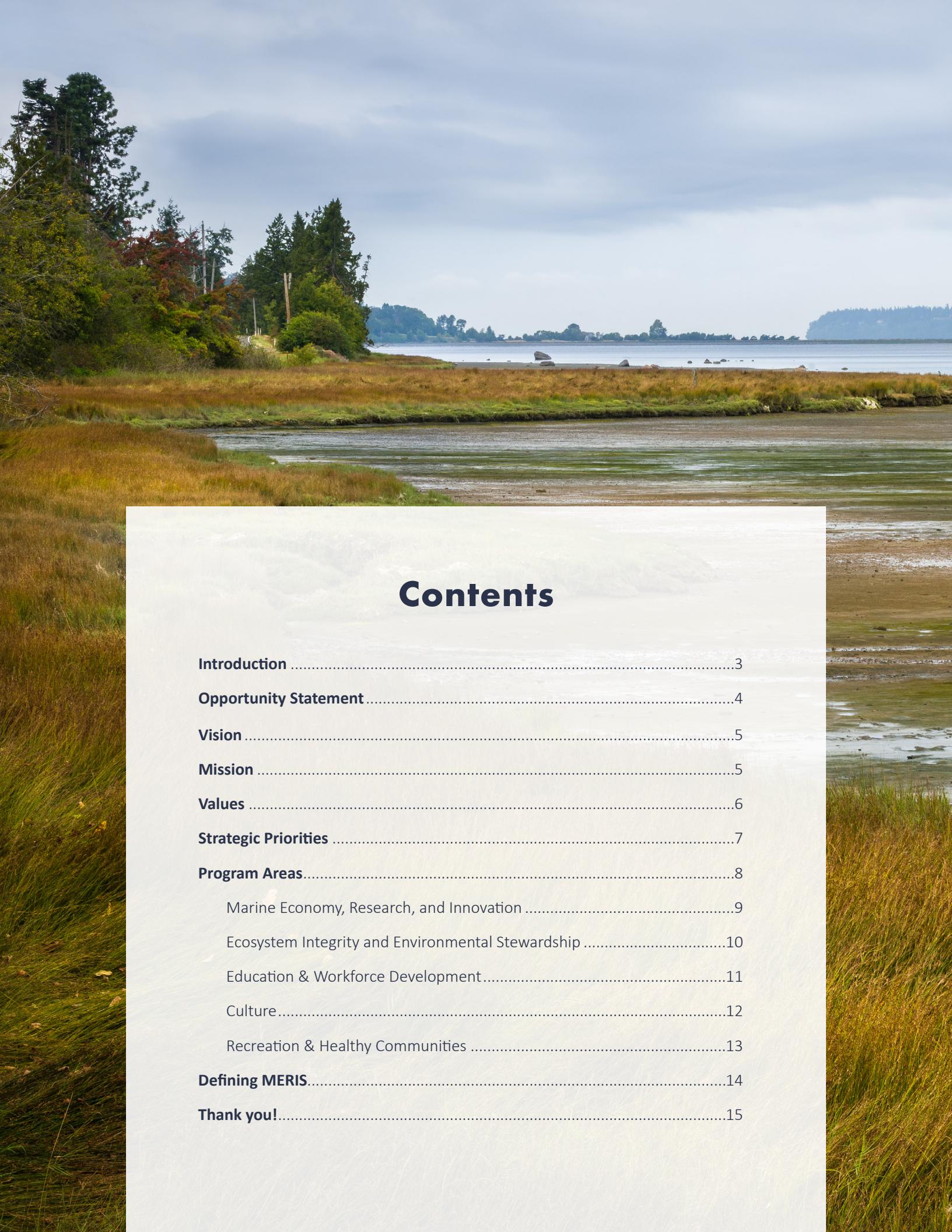


Marine, Economic, and Research Institute for Sustainability

Conceptual Framework





Contents

Introduction	3
Opportunity Statement.....	4
Vision	5
Mission	5
Values	6
Strategic Priorities	7
Program Areas.....	8
Marine Economy, Research, and Innovation	9
Ecosystem Integrity and Environmental Stewardship	10
Education & Workforce Development	11
Culture	12
Recreation & Healthy Communities	13
Defining MERIS.....	14
Thank you!.....	15



Introduction

The Marine¹, Economic, and Research Institute for Sustainability (MERIS) Executive Steering Committee (ESC) presents this Conceptual Framework for MERIS. MERIS is located on the U.S./Canada border in Blaine, Washington, a strategic location for operations across the Salish Sea. This document outlines the opportunity and provides a guiding vision, mission statement, values, strategic priorities, and program goals for MERIS.

The Conceptual Framework builds on input from a planning summit held on March 4, 2025, attended by over 60 individuals representing local, regional, and cross-national professional and community networks. Proposed elements were developed and iteratively refined in ESC meetings and Program Area workgroups held May – July 2025. Continued collaboration between the ESC and community partners will shape these concepts into a General Use Plan, targeted for completion by December 2025.

¹ Note that *marine* and *maritime* are used throughout this document and often reference similar aspects of economic, educational, and cultural activities. *Marine* can also include aspects of ocean monitoring, research, and innovation that may fall outside of the traditional sphere of *maritime* activity, but we recognize there is significant crossover between the two terms.

Opportunity Statement

MERIS will be located in Blaine, Washington, at the U.S.–Canada border — a unique convergence point of international partnerships, abundant fisheries, and established maritime industries supported by clean, accessible marine environments. It will serve as a collaborative hub where applied research, education, entrepreneurship, and community engagement advance sustainability for coastal communities while driving new streams of economic growth.

Within sight of the proposed campus are **1,200 acres of certified shellfish waters**, thousands of acres of historic shellfish grounds with restoration potential, **20 square miles of potential kelp-growing waters**, and **two salmon-bearing streams** flowing into Drayton Harbor. Local infrastructure includes marinas, docks, boat ramps, and vacant port properties, supported by unlimited high-quality seawater, **1 million gallons/day of reclaimed wastewater**, and low-cost, near-zero-carbon electricity.

Regionally, MERIS is situated within a cross-border community of **2.5 million residents, Coast Salish Tribes and First Nations with treaty fishing rights**, six post-secondary institutions, and over **2,000 acres of active shellfish farms**. The area also benefits from more than **30 years of successful watershed restoration** led by Tribes, governments, and nonprofits — creating a foundation of resilience and collaboration.

MERIS builds on proven models and input from organizations such as the **Aquaculture Innovation Center, Northwest Innovation Resource Center, Northwest Maritime Center**, and the **Blue Schools network**. By combining abundant natural resources, cultural heritage, research institutions, and industry expertise, MERIS will become an unmatched **living laboratory for sustainable marine innovation** — strengthening Blaine’s maritime economy while creating solutions applicable to coastal systems worldwide.

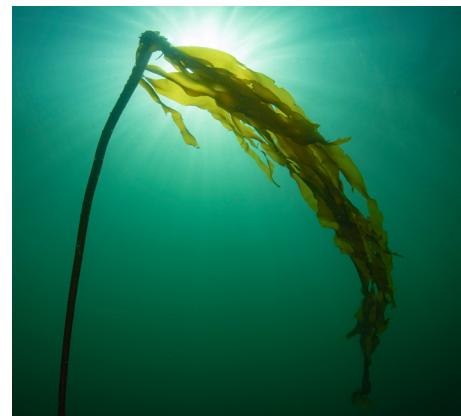


Vision

Our vision is a hub on the Salish Sea for applied research, innovation, education, workforce development, business growth, and cultural and recreational programs that foster connections to place. MERIS, a collaboration across sectors, inspires stewardship of our region's abundant coastal resources while supporting the growth of a resilient blue economy.

Mission

A cooperative institute where education, research, and innovation intersect with policy, history, and culture to sustain ecosystem integrity in the Salish Sea and create scalable solutions that grow the blue economy, develop a skilled workforce, and foster thriving coastal communities.



Values

MERIS is guided by a set of core values that reflect our intentions and shape our actions. These values highlight our shared commitment to learning and growing together as we work to preserve and enhance the ecosystems of Drayton Harbor and the Salish Sea.

Sustainability

Committing to practices that protect and enhance natural and cultural resources for future generations; building adaptive systems, communities, and economies that can thrive through change.

Innovation

Encouraging creativity, research, and new approaches that advance sustainability while building a strong maritime economy.

Collaboration

Working together across borders, sectors, and cultures to achieve shared goals; fostering exchange and integration of knowledge, ideas, and practices across cultures, disciplines, and communities to spark creativity and shared growth.

Empowerment

Building capacity, confidence, and agency in people, communities, and ecosystems so they can lead, innovate, thrive, and contribute.



Strategic Priorities

Economic Stability and Innovation in Maritime Industries: Provide opportunities for concept testing, business incubation, new technologies, scientific research, environmental monitoring, and workforce training in sustainable aquaculture, fisheries, resource protection, and blue innovation.

Sustainability and Environmental Stewardship: Support local, regional, and institutional partnerships to monitor and address environmental issues such as water quality, habitat restoration, and sustainable aquaculture.

Sustainable Coastal Urban Development: Develop and implement leading-edge, sustainable development practices in the City of Blaine as an example for other small coastal communities.

Destination and Accessibility: Create a welcoming destination where residents and visitors can play, engage, and learn through environmental, cultural, and historical programs and interpretive exhibits—ensuring waterfront access for all.

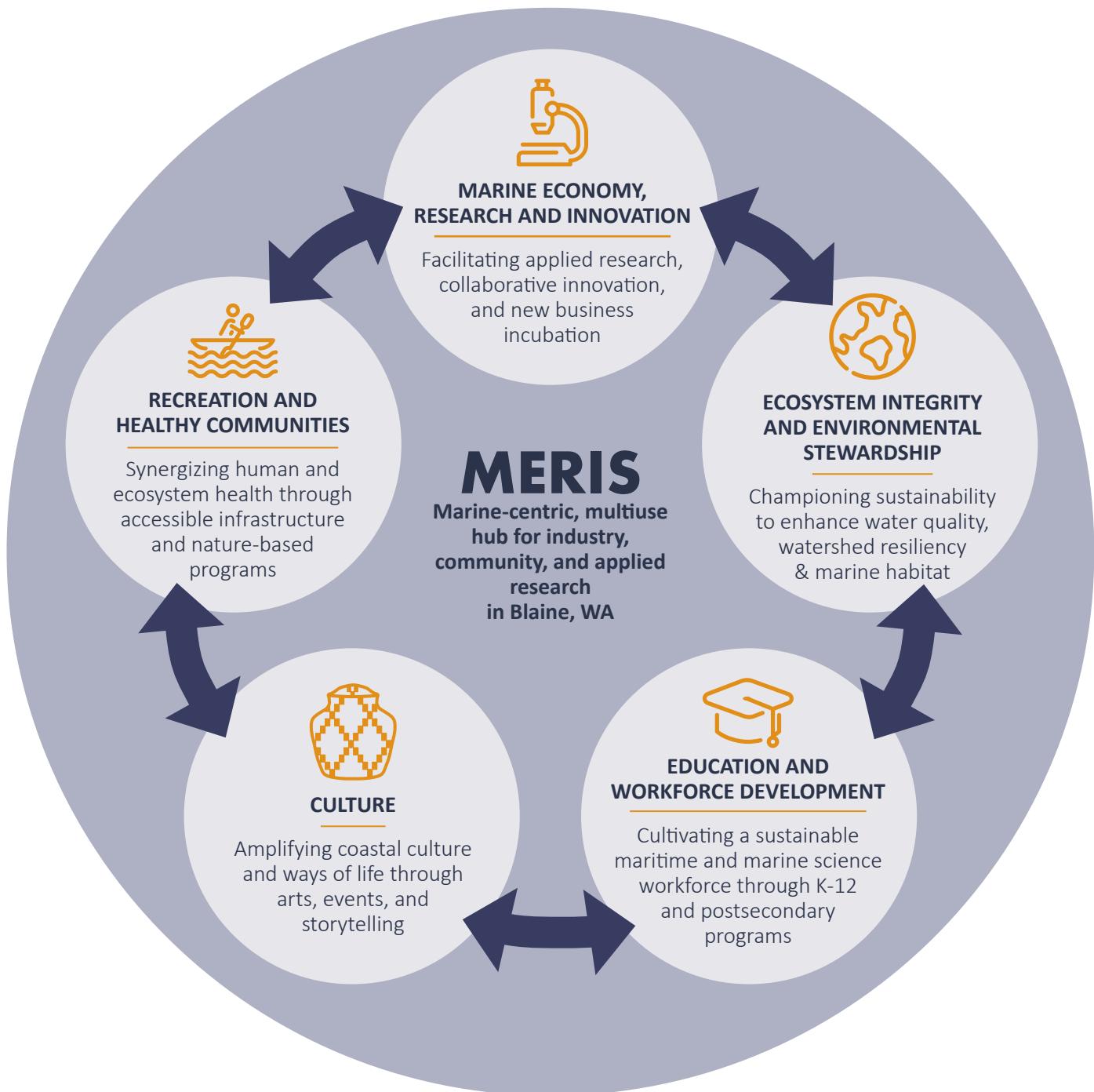
Fostering Strong Relationships: Build partnerships among maritime industry operators, research and educational institutions, government agencies, and nonprofit organizations, and hold space for Indigenous-led partnerships with Tribes and First Nations, to create opportunities, nurture innovation, and integrate Indigenous knowledge.

Transboundary Collaboration: Provide integrated programming across borders and bioregions to connect environmental stewardship, the maritime economy, education, workforce development, tourism, recreation, and cultural preservation.



Program Areas

MERIS will focus on five program areas. Collaboration and cross-pollination across the program areas are at the core of how MERIS will function and create opportunities for synergy in the pursuit of our mission and vision.





MARINE ECONOMY, RESEARCH, AND INNOVATION

Goal

Support the growth of new and innovative businesses, technologies, and collaborative partnerships to sustain a thriving maritime economy. Serve as a catalyst for advancements in restorative aquaculture and food systems, renewable energy production, and green marine transportation.

Approaches & Activities

1. Provide laboratory space and supportive programming to develop, test and incubate new businesses and products in the maritime industry, such as value-added seaweed products, marine technologies, and innovations in marine waste and byproduct use.
2. Apply aquaculture science to industry through water quality and seafood² health testing, monitoring and data-sharing.
3. Create space and resources for indigenous-led cultural revitalization, honoring practices such as traditional reef netting, clam gardens, and cultural foodways.
4. Host a Blue Foods curriculum and lab, with youth and culinary training programs to promote local, sustainable seafood systems.

Outcomes

1. MERIS provides an environment that inspires creative synergy, where entrepreneurs are free to create and expand.
2. New products, businesses, harvesting practices, and innovations emerge from MERIS to cultivate Blue Foods resilience, maintain ecosystem integrity, supply solutions in marine technology and transportation, and offer workforce growth and opportunities in the maritime sector.

² We mean seafood to include all cultured and wild food produced in marine and marine-adjacent environments.



ECOSYSTEM INTEGRITY AND ENVIRONMENTAL STEWARDSHIP

Goal

Improve knowledge and understanding of environmental realities; integrate sustainability practices across the MERIS hub and satellite activities; promote public awareness and participation in watershed stewardship; and nurture partnerships and programs that shape environmental planning, monitoring, and enhancement efforts throughout the region.

Approaches & Activities

1. Center measurable and transparent sustainability at every scale of MERIS, modeling traceable impacts for all actions, building infrastructure centered around coastal resilience, and contributing to a circular economy.³
2. Promote environmental literacy through educational materials and programs, interpretive signage, and accessible tools for public participation in data collection and monitoring.
3. Facilitate alignment among coastal planning bodies by hosting briefings and events, researching and connecting environmental policies and plans, quantifying ecosystem services, and developing platforms for data sharing and collaborative stewardship activities.

Outcomes

1. MERIS leads by example in sustainable construction and business practices.
2. Communities are engaged and participate in meaningful stewardship activities of marine and marine-adjacent environments.
3. Regional monitoring and planning bodies connect through MERIS to cultivate innovative approaches, build mutual trust, share data, and strengthen transboundary, system-level partnerships.
4. Sustainability is integrated across all MERIS programs.

³ U.S. Environmental Protection Agency. "What is a circular economy?" Accessed 3 September 2025. <https://www.epa.gov/circulareconomy/what-circular-economy>.



EDUCATION & WORKFORCE DEVELOPMENT

Goal

Involve and empower people of all ages to effectively engage in nearshore and water-based educational and career development activities to facilitate stewardship, preservation, and enhancement of our marine environments.

Approaches & Activities

1. Connect and collaborate with local and regional businesses, associations, and educational partners, and Coast Salish Tribes and First Nations to develop and implement scaffolded, hands-on, dynamic curricula focused on three pathways within the maritime sector:
 - a. **Marine Sciences/Resources** (in the water) e.g., aquaculture, ecosystems, water quality, and marine biology
 - b. **Vessel Operations** (on the water) e.g., tugboats, ferries, and marine transportation
 - c. **Marine Construction/Engineering/Repair** (for the water) e.g., boat building, repair, and maintenance
2. Continue collaborations and connections to develop and implement age- and content-appropriate educational and training programs to expose and prepare our citizens for abundant maritime career opportunities:
 - a. Exploration activities appropriate for grades PK-8
 - b. Preparatory programs appropriate for grades 8-12
 - c. Career launch activities appropriate for post-secondary adult learners
3. Provide a hub for continued community education and engagement with our marine environment (e.g., build and manage a commercial kitchen focused on seafood handling/preservation/menu preparation, etc.).

Outcomes

1. People of all ages:
 - a. Observe and engage with ongoing collaborative activities at MERIS across the other four Program Areas, facilitating crossover educational and fulfilling career opportunities.
 - b. Engage with our marine waters to facilitate the ethic of working collectively to preserve and enhance this resource to benefit all for generations to come.
 - c. Proudly amplify and showcase the maritime endeavors occurring in Drayton Harbor and the Salish Sea.
2. MERIS programs enhance a thriving, innovative, and sustainable marine workforce for the region and beyond.



CULTURE

Goal

Amplify, celebrate, honor, and uplift the rich local and traditional stories, history, and art of Drayton Harbor and the Salish Sea, all revolving around gratitude for the abundant resources of our shores and waters. Exemplify the values of cultural collaboration and reciprocal learning through art and science along Blaine's waterfront.

Approaches & Activities

1. Connect and collaborate with Tribal and First Nation partners, local/regional knowledge resources, and the vibrant arts community, to amplify, honor, and celebrate:
 - a. Indigenous stories through the seasons and ways of knowing and living along our shores and waters.
 - b. Coastal traditions and artwork.
 - c. The history and impacts of European contact—including acknowledging how conflicts, overfishing, and boom/bust cycles have reshaped regional ecosystems and impacted local communities—and sharing stories of resistance and resilience.
2. Emphasize and implement a throughline of gratitude for all who came before and the bounty of our waters.
3. Establish a central gathering place for the arts, history, and storytelling to uplift the MERIS community and share the stories of Drayton Harbor and the Salish Sea, extending to the Strait of Georgia and the Fraser Delta.
 - a. Develop a central, circular, multi-use campus to house visual and interactive displays, theater space and seating, events and receptions, classes, a commercial kitchen, and a public gathering space for connecting over local food.

Outcomes

Citizens, through intentional and collaborative programs, displays, and activities, understand and appreciate how our shared coastal culture revolves around the natural resources of the Salish Sea. The community can deepen its knowledge and appreciation of the waterfront's resources and all those who have been involved in protecting and preserving it.



RECREATION & HEALTHY COMMUNITIES

Goal

People of all ages, abilities, and income levels connect with community and the natural environment through safe, accessible programming, equipment, and infrastructure designed to facilitate access to; skills-building for; recreation in; and the interconnectedness, appreciation, and stewardship of the Drayton Harbor watershed.

Approaches & Activities

1. Develop opportunities for the public to access, recreate, and engage with the natural resources abundant in the Drayton Harbor watershed and Boundary Bay.
 - a. Create integrated programs and infrastructure such as waterfront spaces, free kayak rentals, and sliding-scale on-water skills instruction, to promote safety and healthy behaviors while enhancing on-water and cross-water access.
 - b. Enhance and develop interpretive signage for trail systems and nature walks to allow people to immerse themselves in coastal ecosystems and experience the physical, emotional, and mental benefits of spending time in nature while learning about biodiversity, coastal foods, and local history and artwork.
2. Nurture community wellness through a variety of programs and activities including nature-based therapy, arts and culture, cultural wellness gatherings, and experiential learning about local foods.
3. Facilitate community-based observational science and volunteering opportunities.
4. Provide culturally grounded nature-based wellness programs and retreats along the shoreline.

Outcomes

Programs and infrastructure are developed in partnership with local education, associations, nonprofits, government, and business entities to support an active and healthy coastal community and provide abundant opportunities for nature-based activities, recreation, citizen science, and tourism. Benefits will include:

1. Reduced stress and improved concentration in the population.
2. Enhanced learning opportunities through outdoor education.
3. Cultivating joy and gratitude.
4. Fostering intrinsic stewardship by creating connection.

Defining MERIS

Marine

Nearshore ocean, coastal waters, intertidal environments, estuaries and watersheds, including their connected atmospheric and biological systems.

(Blue) Economic

Systems of livelihood, trade, and innovation tied to marine and coastal resources.

Research

The pursuit and sharing of knowledge and innovation, including education, applied science, and ocean monitoring, to benefit sustainable management of marine ecosystems and economies.

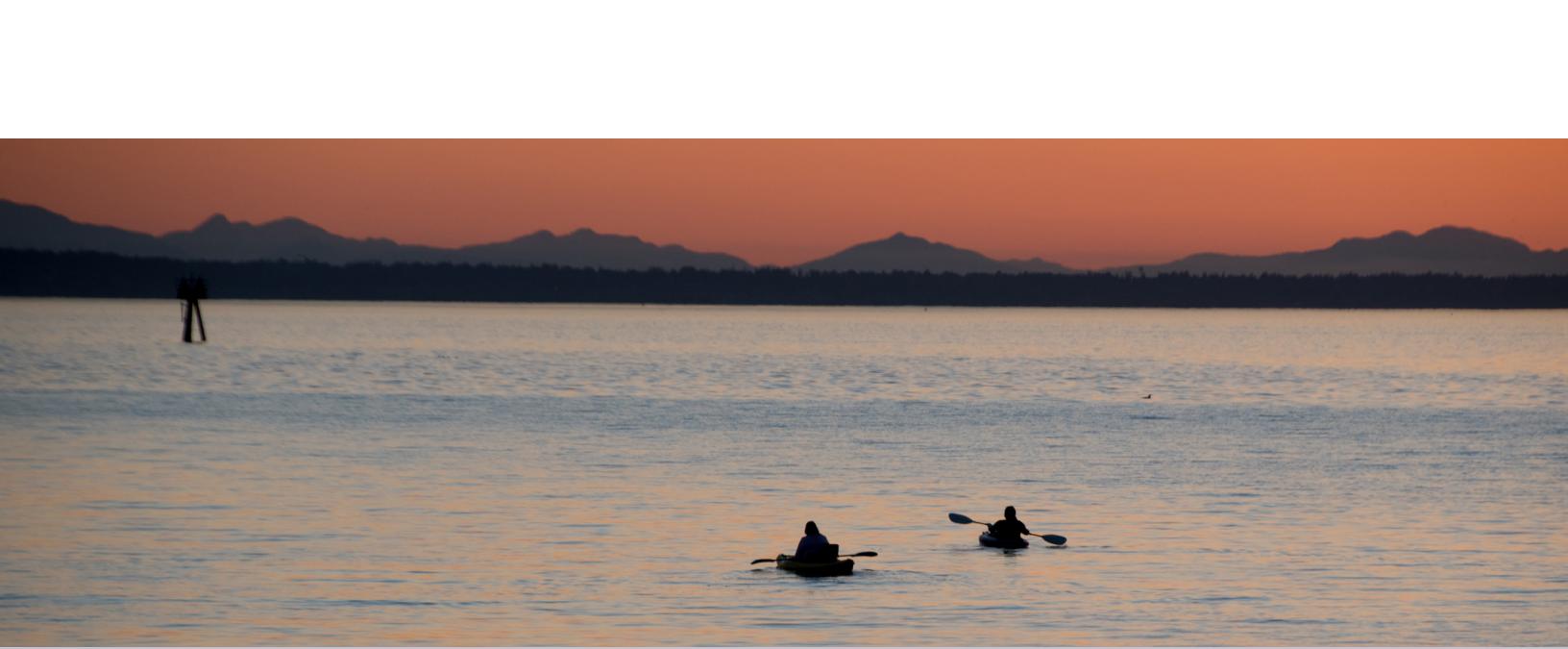
Institute

A convening hub for lived experience, traditional knowledge, culture, policy, and science.

Sustainability

Systems, practices, and relationships that endure over time because they respect and regenerate ecosystems, support stable economies, strengthen social and cultural wellbeing, and remain viable through strong institutions.





Thank you!

We are grateful to our many inspiring partners working together to create MERIS, including the following groups of people:

- Sponsor Steering Committee
- Planning Summit Attendees – March 4, 2025
- Executive Steering Committee
- Program Work Groups
- Core Planning Team

With funding from The Builders Initiative and guidance from the team at Maul, Foster & Alongi, we look forward to continuing to connect and collaborate with our community as we develop and implement the MERIS vision.

We welcome all voices and encourage you to visit meris.blue for updates on the MERIS project, a complete list of partners, and to get in touch.





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