Átl'ḵa7tsem/Howe Sound

**M**arine
**S**tewardship
**I**nitiative

# STRATEGIC PLAN

2022-2027

A project of
**MakeWay**

# ACKNOWLEDGEMENTS

The Átl'ḵa7tsem/Howe Sound Marine Stewardship Initiative would like to thank our community, donors, staff, and Steering Committee for their contributions to the compilation of this plan and their future contributions in our work that is yet to come.

It is with the utmost respect and gratitude that we conduct our work on the Lands of the Sḵwx̱wú7mesh Úxumixw (Squamish Nation), whose history is closely tied to the rivers, lakes, and ocean that we seek to steward. We acknowledge the societal inequities that persist today due to colonization. It is with this knowledge that we understand the weight of our role in dismantling colonial systems. It is our intention to practice reconciliation to improve the lives and lands that surround us now, to support our future ancestors and the relations they have with the lives and lands that will surround them.
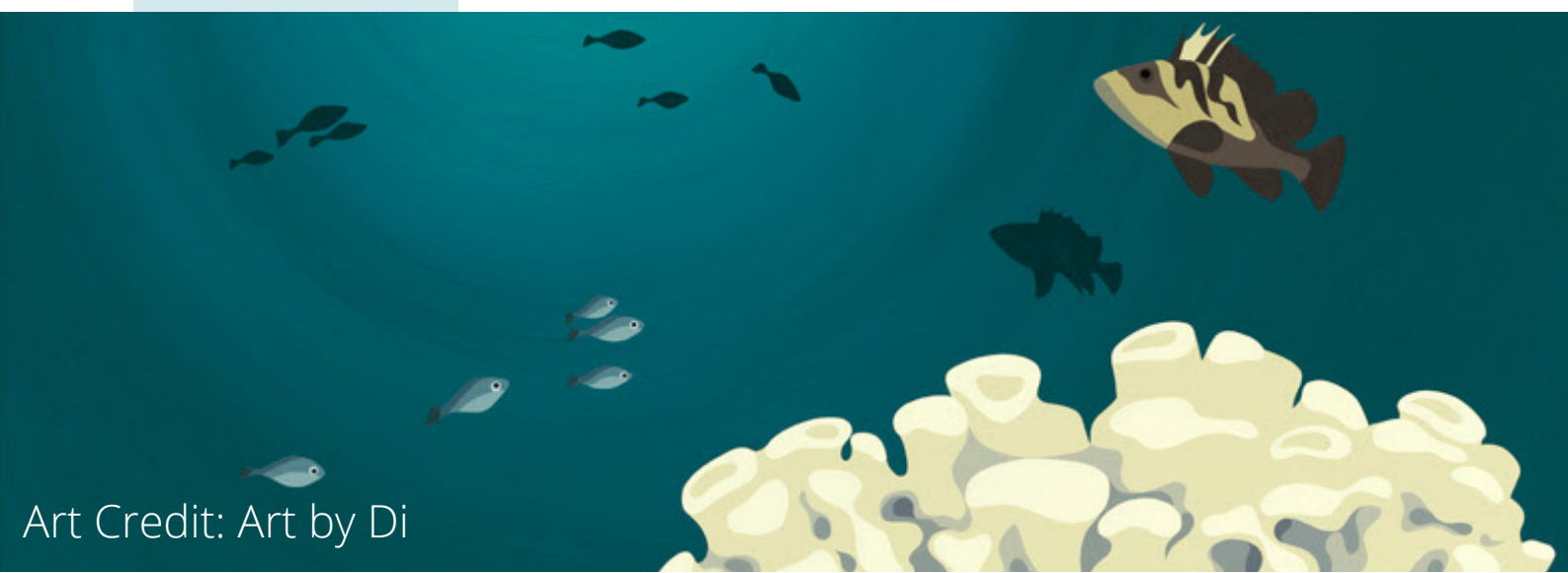
Huy chexw a (Thank you)

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## MISSION

Our mission is to foster ocean stewardship in Átl'ḵa7tsem/Howe Sound, and support regional planning by mobilizing tools, sharing knowledge, and building community.

## VISION

Our vision is to bring communities together to achieve positive outcomes for current and future generations of life in Átl'ḵa7tsem/Howe Sound.

## PURPOSE

The Átl'ḵa7tsem/Howe Sound Marine Stewardship Initiative (MSI) conducts research and community engagement in service of marine planning, education, and relationship building in Átl'ḵa7tsem/Howe Sound. The MSI provides up-to-date resources and tools for decision-makers, marine spatial planners, and marine sectors (e.g., industry, recreation, tourism, conservation, education) so regional ocean health and sustainable economic and community development can flourish in a context of improving regional ocean health.
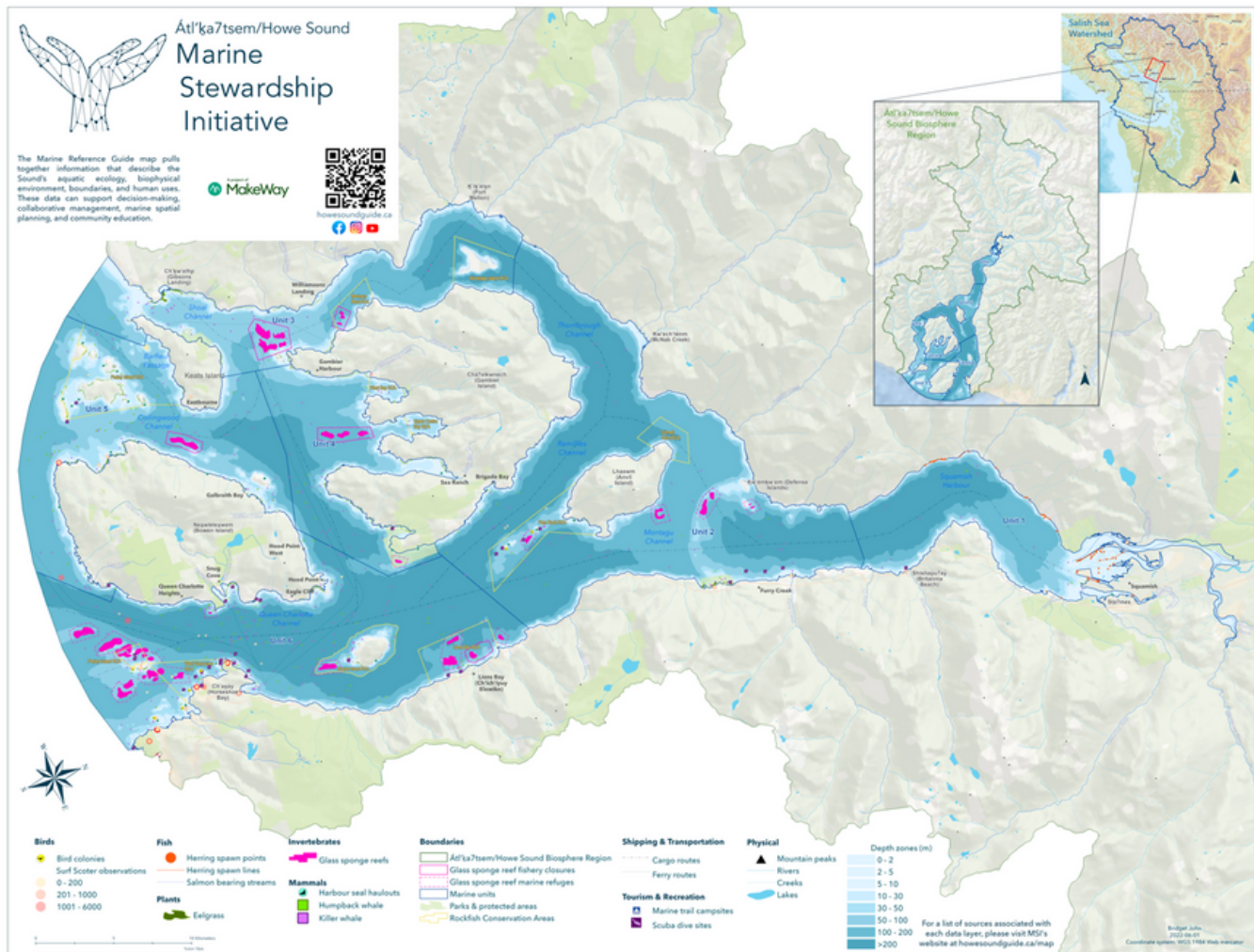
# 02



Figure 1. Átl'ḵa7tsem/Howe Sound. We recognize the fact that everything is connected to our ocean, and therefore, the watershed is considered as part of our ocean seascape and project scope.

# LOCATION

Átl'ḵa7tsem/Howe Sound (Figure 1) is the ocean area located within the shared traditional, ancestral and unceded territory of the Sḵwx̱wú7mesh (Squamish), səlilwətaɬ (Tsleil-waututh), and xʷməθkʷəy̓əm (Musqueam) Nations, and borders with the shíshálh (Sechelt) Nations' territory. Átl'ḵa7tsem is one of three Squamish Nation place names for the Sound, and describes paddling out of the fjord toward the Salish Sea. Átl'ḵa7tsem/Howe Sound is an ecologically rich marine area, sitting directly adjacent to the growing metropolis of Vancouver. As such, it is representative of many parts of the world, where post-contact development confronts the integrity and health of coastal communities and ecosystems.

# CONTEXT

Over the past century Átl'ka7tsem was considered an ecological dead zone, primarily due to industrial activities such as acid rock drainage from mining activities and woody debris smothering our ocean floor from logging booms. Over the past two decades, local groups have come together to restore the health of Átl'ka7tsem's water, working alongside local Nations, who have been stewards of this region since time immemorial. In 2017 and 2020, the Ocean Watch Átl'ka7tsem/Txwnéwu7ts/Howe Sound Report summarized these collective efforts by reporting on the status of marine ecological and social indicators, and outlined action items for the area. Following the initial publication of this report, an Ocean Watch Task Force was established to implement these action items - the first of which was to create a centralized decision-support tool about the region's ocean: a marine reference guide.

The Marine Reference Guide ('the Guide') was established in 2018, and officially launched on World Oceans Day of 2021. The Guide is a decision support tool in Átl'ka7tsem/Howe Sound that pulls together comprehensive spatial data associated with aquatic, ecological, and human-use values about this region's ocean, in close collaboration with rights-holders and stakeholders. This initiative led to the creation of deliverables and resources that strengthened the region's ability to protect, restore, and become stewards of the diverse nature and human values associated with Átl'ka7tsem's ocean environment. Since its implementation, the project has been immensely successful at informing local marine stewardship and planning priorities, and played an instrumental role in the designation of Átl'ka7tsem/Howe Sound as Canada's 19th UNESCO Biosphere Region.
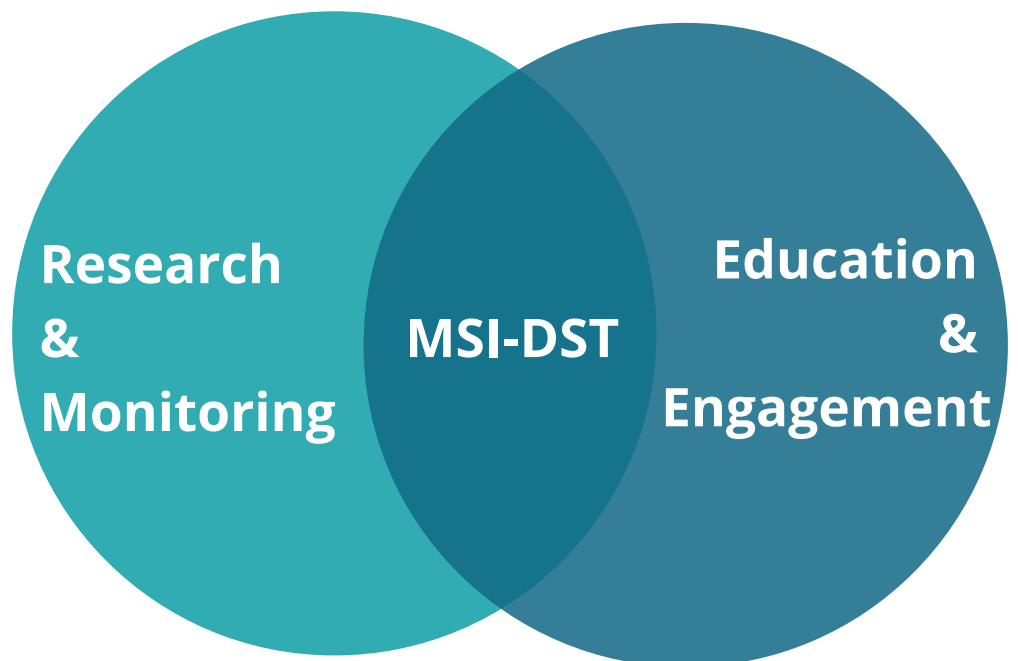
Art Credit: Art by Di

As the Marine Reference Guide project neared completion, there was a recognized need to carry on the important work that was started, and continue to implement action items recommended within the Ocean Watch Report(s). Thus, the Átl'ka7tsem/Howe Sound Marine Stewardship Initiative (MSI) formed. The Marine Stewardship Initiative is a continuation of the Marine Reference Guide, and seeks to build upon the work that was started, conducting research to fill identified data gaps, monitor ecological health, and educate and engage the community in the formation of this knowledge and additional decision-support tools, such as the Marine Reference Guide. This work aims to function alongside multisectoral planning processes to improve aquatic ecosystem health in our region, from the bottom up. Additionally, the MSI actively supports the Átl'ka7tsem/Howe Sound Biosphere Region in reaching their goals pertaining to biodiversity conservation, sustainable development, and reconciliation, setting an international example for how regional coordination can create a place where humanity and nature thrive together, now and into the future.

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# STRATEGIC PROGRAM AREAS

In alignment with the Action Plan provided within the Ocean Watch 2020 Report, the Átl'ka7tsem/Howe Sound Marine Stewardship Initiative operates within two programmatic areas that guide project activities. The program areas are: Research & Monitoring (Action 1: Research; Action 6: Monitor), and Education & Engagement (Action 3: Educate and Engage). Activities conducted in each program area are used to inform and support the implementation of the MSI's decision-support tools, such as the Marine Reference Guide. For example, data gaps filled by research activities provide a comprehensive picture of our shared aquatic environment, which decision-makers (such as municipal planners) can use to inform approvals and recommendations for locally proposed developments.

Research & Monitoring          MSI-DST          Education & Engagement

MSI-DST = Marine Stewardship Initiative Decision-Support Tools

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# STRATEGIC PROGRAM AREAS

**Program Area 1: Research & Monitoring**

**Purpose**: *Create knowledge that builds capacity to protect, restore and be stewards of the health, biodiversity, and human-value of Átl'ka7tsem/Howe Sound's aquatic environment.*

| Goals: | Short-Term Objectives (Years 1-2) | Mid-Term Objectives (Years 3-5) | Long-Term Objectives (Years 5+) |
|---|---|---|---|
| **1.1** Fill knowledge gaps for key ecological features, species and habitats,[1] data-poor regions of Átl'ka7tsem, and human-associated data layers (e.g. economically or socio-culturally important areas) | • Collect existing baseline information and fill knowledge gaps for 1 or more indicators [2,3] | • Collaborate with community groups[4] and/or the Squamish Nation to fill knowledge gaps for 3 or more indicators<br>• Continually monitor data from years 1-2 for long term observations and trends | • Reassess knowledge gaps that develop as knowledge increases[5]<br>• Continue to monitor and/or update information from years 1-5 for long-term observations and trends |
| **1.2** Ensure that research led by the Project is collaborative, encouraging partnerships with community groups[6] to improve long-term monitoring, support cultural activities, strengthen intergenerational knowledge sharing, and build local stewardship capabilities.[7] | • Build internal capacity by hiring 1-2 local staff to expand research activities<br>• Collaborate on 1-2 research projects with community groups to build local knowledge<br>• Ensure participation and engagement of Indigenous knowledge holders in research projects by hiring as employees through the MSI, or by engaging through the Squamish Nation Rights and Title Archaeological, Cultural and Environmental (ACE) Technician group | • Build internal capacity by hiring another 1-2 staff to undertake new research projects<br>• Collaborate on 3-4 research projects with existing community groups that build local knowledge<br>• Ensure participation and engagement of Indigenous knowledge holders in research projects by hiring as employees through the MSI, or by engaging through the Squamish Nation Rights and Title Archaeological, Cultural and Environmental (ACE) Technician group | • Use capacity sharing to support Squamish Nation Programming<br>• Continue to build upon the success of previous collaborative research projects<br>• Ensure participation and engagement of Indigenous knowledge holders in research projects by hiring as employees through the MSI, or by engaging through the Squamish Nation Rights and Title Archaeological, Cultural and Environmental (ACE) Technician group<br>• Continually collect and input new spatial and non-spatial data through the Marine Reference Guide |
| **1.3** Act as a centralized hub for information that is accurate, easily accessible and searchable, and trusted and used by decision makers[8] | • Continually collect and input new spatial and non-spatial data through the Marine Reference Guide<br>• Review data within the MRG annually<br>• Review information within the Community Map annually<br>• Obtain 1-2 testimonials on the use of data and/or decision-support tools in decision making processes | • Continually collect and input new spatial and non-spatial data through the Marine Reference Guide<br>• Review data within the MRG annually<br>• Review information within the Community Map annually<br>• Obtain 3-4 testimonials on the use of data and/or decision-support tools in decision making processes<br>• Update Narrative Reports (if needed)<br>• Create a 'Indicator Report' detailing current status of knowledge in Átl'ka7tsem/ Howe Sound | • Review data within the MRG annually<br>• Review information within the Community Map annually<br>• Obtain 3-4 testimonials on the use of data and/or decision-support tools in decision making processes<br>• Update Narrative Reports (if needed) |

1 This includes but is not limited to conducting slhawt', eelgrass, and plankton surveys, UAV surveys for nearshore monitoring and ROV surveys for ground truthing benthic habitats (e.g., suitable rockfish habitat and glass sponge reef locations).
2 Indicators are based on the Ocean Watch 2020 Report where Ocean Watch Health Rating Legend has noted indicators with limited data or not rated, or where indicators are rated as critical but note a lack of comprehensive data
3 Goal directly relates to Action 1: Research - 1.1 "Conduct baseline studies and ongoing monitoring of key indicator species and habitats to guide conservation actions."
4 "Community groups" include, but are not limited to: Non-profit organizations, educational institutions, citizen scientists, municipalities, etc.
5 Goal directly relates to Ocean Watch 2020 Report Action 1: Research - 1.3 "Address key knowledge gaps that develop as knowledge increases"
6 First Nation, aquatic sectors, and academic institutions
7 This may learn from and eventually evolve towards the Guardian Watchmen Program
8 Objective directly relates to the Ocean Watch 2020 Report, Action 1: Research, 1.4 "Improve availability and sharing of data"

# STRATEGIC PROGRAM AREAS

| Program Area 2: Education and Engagement | | | |
|---|---|---|---|
| **Purpose**: *Provide education and a holistic understanding of Átl'ḵa7tsem/Howe Sound to advance knowledge and appreciation of the region, while creating opportunities to strengthen engagement and collaboration between First Nations, governments, aquatic sectors and communities in planning activities.*[9] | | | |
| **Goals** | Short-Term Objectives (Years 1-2) | Mid-Term Objectives (Years 3-5) | Long-Term Objectives (Years 5+) |
| **2.1** Increase education and awareness around MSI tools, environmental knowledge, the interconnected nature of human, terrestrial and aquatic systems, and best practices, including Traditional knowledge taught by Squamish Nation members (where applicable)[10] | <ul><li>Create and/or participate in 1-2 webinars</li><li>Attend and/or present at 1-2 conferences per year</li><li>Increase opportunities for Squamish Nation members to connect to Traditional Knowledge by engaging nation members in research activities and/or workshops [11]</li><li>Host 4-5 workshops to train First Nations, governments, aquatic sectors and communities so they are aware of, trust, and refer to MSI tools</li><li>Use Social media and blog posts as a platform to engage community members in project activities and updates, achieving a year-over-year increase in engagement</li></ul> | <ul><li>Create and/or participate in 2-4 webinars per year</li><li>Attend or present at 2-4 conferences per year</li><li>Increase opportunities for Squamish Nation members to connect to Traditional Knowledge by engaging nation members in research activities and/or workshops</li><li>Host 6-7 workshops to train First Nations, governments, aquatic sectors and communities so they are aware of, trust, and refer to MSI tools</li><li>Use social media and blog posts as a platform to engage community members</li><li>Use social media and blog posts as a platform to engage community members in project activities and updates, achieving a year-over-year increase in engagement</li></ul> | <ul><li>Create and/or participate in 4+ webinars per year</li><li>Attend 4+ conferences per year</li><li>Increase opportunities for Squamish Nation members to connect to Traditional Knowledge by engaging nation members in research activities and/or workshops</li><li>Host 8+ workshops to train First Nations, governments, aquatic sectors, and communities so they are aware of, trust, and refer to MSI tools</li><li>Use social media and blog posts as a platform to engage community members</li><li>Use social media and blog posts as a platform to engage community members in project activities and updates, achieving a year-over-year increase in engagement</li></ul> |
| **2.2** Increase educational programming by embedding the Marine Reference Guide into curricula | <ul><li>Create or integrate program materials into school curriculum</li><li>Pilot at 1 local school</li><li>Present at 2-3 Educational Institutions</li></ul> | <ul><li>Roll out to 5 schools within Atl'ḵa7tsem/Howe Sound</li><li>Update school curriculum</li><li>Present at 4-5 Educational Institutions</li></ul> | <ul><li>Roll out to 5-10 schools within Atl'ḵa7tsem/Howe Sound</li><li>Update school curriculum</li><li>Look for opportunities to expand regionally using Atl'ḵa7tsem as a case study</li></ul> |
| **2.3** Increase engagement with youth (ages 18-30) through citizen science opportunities enhancing sense of place | <ul><li>Recruit 3-5 volunteers or staff to participate in project research and/or stewardship activities (e.g., Shoreline Cleanups)</li><li>Aim for 208 volunteer hours</li></ul> | <ul><li>Recruit 5-10 volunteers or staff to participate in project research and/or stewardship activities (e.g., Shoreline Cleanups)</li><li>Aim for 416 volunteer hours</li></ul> | <ul><li>Recruit 10+ volunteers or staff to participate in project research and/or stewardship activities (e.g., Shoreline Cleanups)</li><li>Aim for 1000+ volunteer hours</li></ul> |
| **2.4** Support the implementation of the Ocean Wise Howe Sound Action Plan through planning and engagement activities | <ul><li>Form Government Advisory Committee that meets quarterly to workshop case studies, facilitating dialogue to break down silos between various governmental organizations and jurisdictions in service of marine spatial planning for aquatic health</li><li>Support governments at all levels by providing relevant information and support to help inform governmental management strategies and/or action plans, such as Watershed Management Plans</li><li>Facilitate Ocean Watch Action Committee on a quarterly basis</li></ul> | | |

9 Some wording borrowed from the Gwaii Haanas Land-Sea-People Management Plan between the Council of the Haida Nation and the Government of Canada.
10 Directly related to the Ocean Watch 2020 Report, Action 3: Educate and Engage - 3.2 "Increase education and awareness around environmental knowledge and best practices. Include Traditional Knowledge in these education opportunities, and where applicable, ensure they are taught be Squamish Nation members"
11 Directly related to the Ocean Watch 2020 Report, Action 3: Educate and Engage - 3.3 "Increase opportunities for Squamish Nation members to connect to Traditional Knowledge in Howe Sound. Further meaningful reconciliation efforts are needed."

# 04
# KEY DECISION-SUPPORT TOOLS

Information and feedback gained from research & monitoring activities, and education & engagement sessions, will all be used to inform and enhance decision-support tools created by the Marine Stewardship Initiative.

The Marine Stewardship Initiative will maintain, and where appropriate expand, the following Decision-Support Tools (DST's):

## MARINE REFERENCE GUIDE

**('the Guide')**

An open access online interactive map that displays spatial and non-spatial data associated with the Átl'ka7tsem's marine environment and watersheds (including ecological, socio-economic, and cultural data that upholds local, Indigenous and western scientific knowledge). This tool helps community groups to visualize the complex interactions in Átl'ka7tsem and see areas of potential collaboration and conflict.

## NARRATIVE REPORTS

These resources will be embedded into the Guide, detailing aquatic values and stewardship objectives for the aquatic environment to protect significant ecological, economic and socio-cultural values, and support an action framework for decisions regarding the management of watershed ecosystems and activities. These resources are informed by the collated knowledge and data provided in the Marine Reference Guide, developed by the project staff, and approved of by the Steering Committee.

# KEY DECISION-SUPPORT TOOLS
### CONTINUED

## COMMUNITY MAP

An online map dedicated to strengthening regional collaboration and networking and increasing awareness about the Marine Stewardship Initiative across Átl'ḵa7tsem's community. This map supports research and collaboration, and builds awareness and access to the many aquatic stakeholders and rights-holders in our diverse area.

**The Marine Stewardship Initiative will build and produce the following tool:**

## ÁTL'ḴA7TSEM/HOWE SOUND AQUATIC INDICATOR REPORT

The Átl'ḵa7tsem/Howe Sound Aquatic Indicator Report will provide an overview of the health of the coastal marine environment throughout Átl'ḵa7tsem, in alignment with the UN Sustainable Development Goals (SDG's) with an emphasis on SDG 14, life below water. This report will build upon the framework used in the Ocean Watch 2017 and 2020 Reports, incorporating new research, activities, and collaborative relationships forged throughout Átl'ḵa7tsem/Howe Sound. The Aquatic Indicator Report will release a new edition every five years, arming individuals with the best available information on aquatic ecological health in Átl'ḵa7tsem/Howe Sound.

# 05                  GUIDING PRINCIPLES

**The MSI will strive to embody the following guiding principles:**

*Ecosystem and Watershed Approach:* The MSI acknowledges the intrinsic relationship between terrestrial, freshwater, and marine ecosystems. Accordingly, the MSI's outcomes and processes will adopt an ecosystem approach that balances ecosystem function and connectivity with human activity on land and at sea. Additionally, we recognize the fact that our watersheds impact regional ocean health. Therefore, the watershed is considered within our scope, with the ocean at its core.[12]

*Adaptive:* The MSI will integrate local and Indigenous knowledge together with historic, industrial, ecological, and social information, and acknowledges that project objectives, processes and outputs may change over time as available knowledge improves. [13]

*Community-based:* The closer an environmental management organization is to the ecosystem, the greater the responsibility, ownership, accountability, participation, and use of local knowledge. Therefore, the MSI strives to operate by and for the communities we live and operate within.[14]

*Two-eyed Seeing:* The MSI acknowledges and incorporates a two-eyed seeing approach to research. Two-eyed seeing provides a pathway to a plural coexistence where Indigenous knowledge systems can be paired with western scientific insights for an equitable and sustainable future for all.[15]

*Reconciliation:* The MSI is committed to reconciliation by recognizing the United Nations Declaration on the Rights of Indigenous Peoples, building trust, partaking in ongoing dialogue, and conducting all project activities in collaboration with local Indigenous groups.

*Reciprocity:* The MSI will conduct activities based on fair exchanges, achieving balance and harmony with diverse life-forms by integrating human behaviour with earth's behaviour.[16]

*Respect:* The natural world, First Nations' traditional laws, Codes, Laws, Bylaws, rights and title, Nation's Codes, Laws and Bylaws, as well as the rights and responsibilities of aquatic sectors and regional residents are respected.[17]

*Trust and Inclusivity:* All sectors, communities, and persons impacted by this project will have the opportunity to participate in a fair and open manner in order to strengthen trust and respect within the Átl'ḵa7tsem's community.[13]

*Transparency:* Operations and communications are clear, fair and open, and decision-making is accountable to the public and stakeholders.[17]

*Shared Responsibility:* First Nations, governments, aquatic sectors, and communities in Átl'ḵa7tsem acknowledge a shared responsibility for aquatic environmental health.[13]

*Information to Action:* Upon gathering knowledge and reaching consensus, the decision-support tools created by the MSI will aim to transform knowledge into action. Outcomes will vary depending on the topic, and may include outreach events, dissemination of information, and hands-on activities.[13]

12 Wording borrowed from the Pacific North Coast Integrated Management Area Plan for the Federal and Provincial governments and the Central and North Coastal First Nations 2017.
13 Wording borrowed from West Coast Aquatic's Governance Board Manual, 2017.
14 Wording borrowed from the Convention of Biological Diversity Principles of the Ecosystem Approach, 2000.
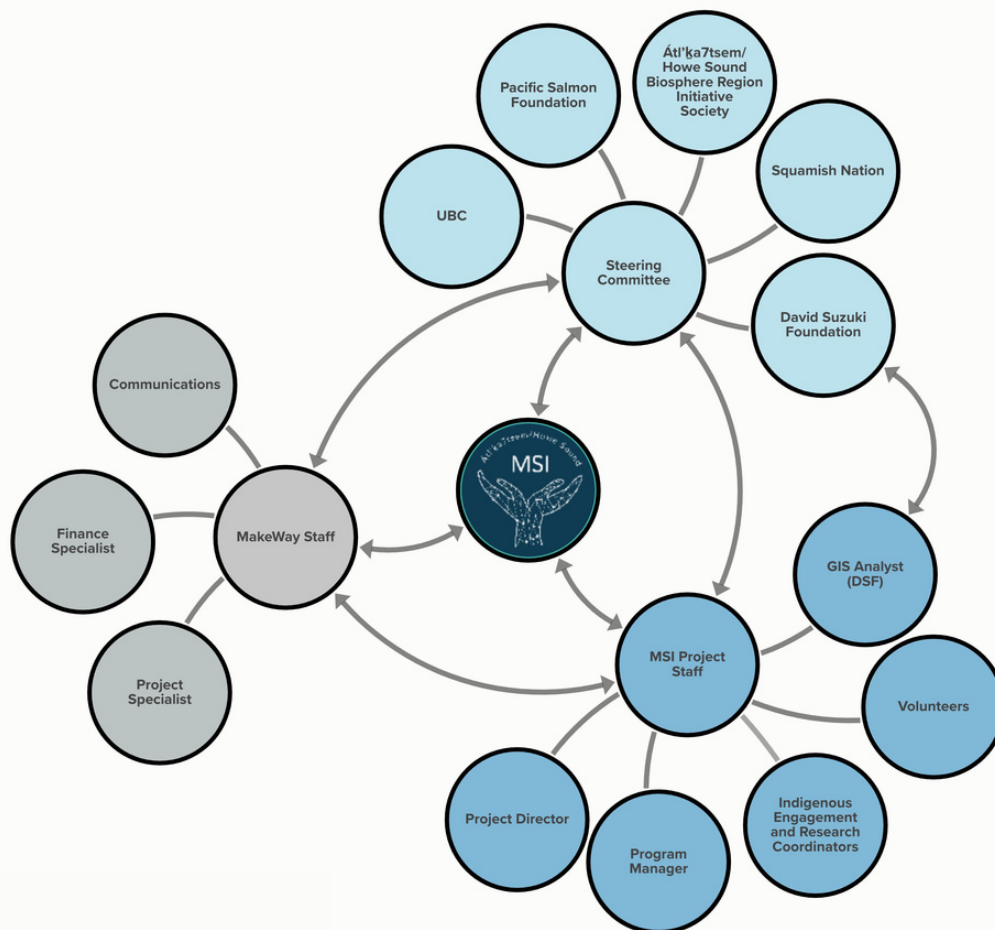15 Wording borrowed from Reid et al., "Two-Eyed Seeing": An Indigenous framework to transform fisheries research and management, 2020.
16 Wording borrowed from Alteo. Principles of Tsawalk. An Indigenous approach to global crisis. 2011.
17 Wording borrowed from the Coastal First Nations Conservation Economy framework, 2018, and has been modified to include input from the Squamish Nation Rights & Title Department.

# 06

# COLLABORATORS AND CONTRIBUTORS

**Figure 2: Organizational Structure**[18]

# COLLABORATORS AND CONTRIBUTORS

# REVISION HISTORY

| Version Number | Revision Date | Implemented By | Approved By | Revision Description |
|---|---|---|---|---|
| 1.0 | 12-09-2022 | Courtney Smaha | Steering Committee | First version of the Strategic Plan |
| 2.0 | 06-02-2023 | Courtney Smaha | Steering Committee | Revised to include recommendations made by Squamish Nation Rights & Title |

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