

Átl'ka7tsem/Howe Sound

Marine Stewardship Initiative



2022

Art by Di

An update to share with you in celebration of **World Oceans Day**. The United Nations theme this year is Revitalization: Collective Action for the Ocean.



About Átl'ka7tsem

Átl'ka7tsem/Howe Sound is within the traditional, ancestral, and unceded territory of the Skwxwú7mesh Úxwumixw (Squamish Nation) and borders the Tsleil-waututh, Sechelt and Musqueam Nations' territories. Átl'ka7tsem is one of three Squamish Nation place names for this deep-water fjord, and describes paddling out of the fjord toward the Salish Sea. The region's waters are ecologically rich and support thriving cultures, livelihoods, and communities. Being directly adjacent to the growing metropolis of Vancouver, Átl'ka7tsem faces unique opportunities and challenges to preserving its socio-economic, cultural, and ecological integrity.

About the MSI

The Marine Stewardship Initiative (MSI) conducts aquatic research, education, and community engagement in service of marine planning and relationship building. 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 health and sustainable economic and community development can flourish in tandem.



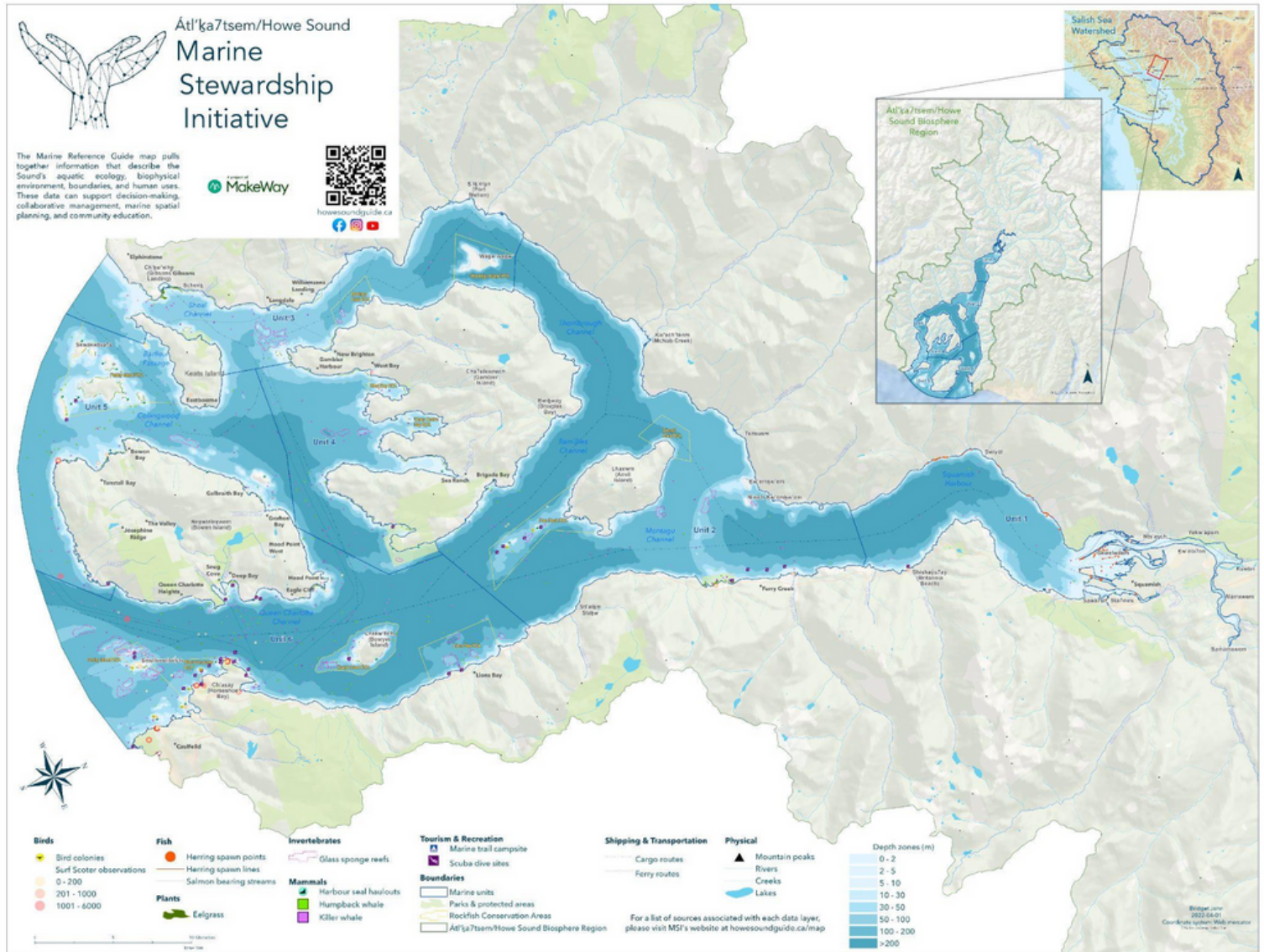
MSI-DST = Marine Stewardship Initiative Decision Support Tools

In October 2021, ESRI Canada awarded the Marine Reference Guide 'App of the Month'!

"Often, what lies beneath the water can be out of sight out of mind, but this map brings together diverse knowledge systems, including Indigenous, local and Western science, into a holistic and integrated tool." -ESRI Canada

In September 2021, Átl'ka7tsem/Howe Sound was announced as Canada's 19th UNESCO Biosphere Region. UNESCO (United Nations Education, Scientific, and Cultural Organization) Biosphere Regions are areas of global ecological significance, that make an ongoing commitment to the United Nations to strive for sustainability. The Átl'ka7tsem/Howe Sound Biosphere Region boundary is used as our study area.

To dig deeper into the Biosphere check out this link: www.howesoundbri.org



4 things you can do to protect Átl'ka7tsem



01 Share your knowledge

Connect with us to share what you value in Átl'ka7tsem/Howe Sound so we can include your voice, knowledge, and perspective in our project deliverables. Contact us [here](#).

02 Learn and Explore

Explore some of the maps, blogs and reports we have produced over the past year to document the Sound's communities and water! Check out our [Resources page](#).

03 Volunteer

Interested in building community? Looking to develop research skills? Passionate about making an impact? We are eager to work with you – please get in touch [here](#)!

04 Donate

Our project flourishes on the support and generosity of community members and organizations. A gift toward the Marine Stewardship Initiative supports direct, positive action toward protecting Átl'ka7tsem's environment and community for generations to come. [Donate today](#).

Explore our resources

Click on the pictures and buttons to
explore links and resources



Visit our website:
howesoundguide.ca



Dive into hundreds of
data layers and learn
Squamish Nation place
names in the [Marine
Reference Guide](#)



Discover the magical
world of [herring](#)!



[Donate here](#)



Connect with
likeminded groups
through our
[Community Map](#)!



Team

Steering Committee Members

Fiona Beaty, Chair - Youth Representative (UBC)
Ruth Simons - Howe Sound/Átl'ka7tsem Biosphere
Region Initiative
Jay Ritchlin - David Suzuki Foundation
Isobel Pearsall, Pacific Salmon Foundation
Charlene Williams - Squamish Nation



Photo by Bridget John



Photo by Kieran Brownie

Management Team

Courtney Smaha - Project Director
Bridget John - Program Manager
Nikita Wallia - GIS Analyst (David Suzuki
Foundation)
Eleana Block - Marine Debris Coordinator
Myia Antone - Indigenous Research
Coordinator
Jonathan Williams - Indigenous
Research Coordinator
Vivian Joseph - Indigenous Research
Coordinator

Dedicated Volunteers

Matthew Van Oostdam
Melina Stokes
Jody Phillips
Devin Waugh
Cassidy Barraca
Kyla Hemmelgarn

Contributors and collaborators

Thank-you immensely.





Our achievements

Decision-Support Tools

On June 8th 2021, the Marine Reference Guide, an interactive map, was launched. The Marine Reference Guide contains over 700 spatial data layers and documents associated with Átl'ka7tsem's ocean, freshwater, and communities. This decision-support tool informs marine spatial planning and community education by visualizing how economic, ecological, cultural, and social values and attributes interact with one another in space. Maps are fantastic tools for unveiling the mystery of the underwater world, which is out of sight and out of mind for many people.

Importantly, the Marine Reference Guide was created with a bottom-up and community-driven approach, which strengthened the inclusion of high-resolution data and local and traditional knowledge about the ocean and communities. By centralizing and facilitating access to this diverse place-based information, the Guide builds capacity for decision-makers and communities to protect important socio-economic, cultural, and ecological values from pressures such as climate change, development, and pollution.

An example of how the Marine Reference Guide has been used since its launch include supplying data and high resolution coastal imagery to inform development of the District of Squamish's new marine zoning.

"The Guide has already proven to be an incredibly valuable resource for marine planning. The diversity of spatial data and local and cultural knowledge it integrates offers a deeper more holistic view of Átl'ka7tsem/Howe Sound. The more time I spend with the Guide, the more I learn about the dynamic and delicate interplay between our marine environments and human uses/values. The high-definition coastal imagery is my latest discovery – amazing!"

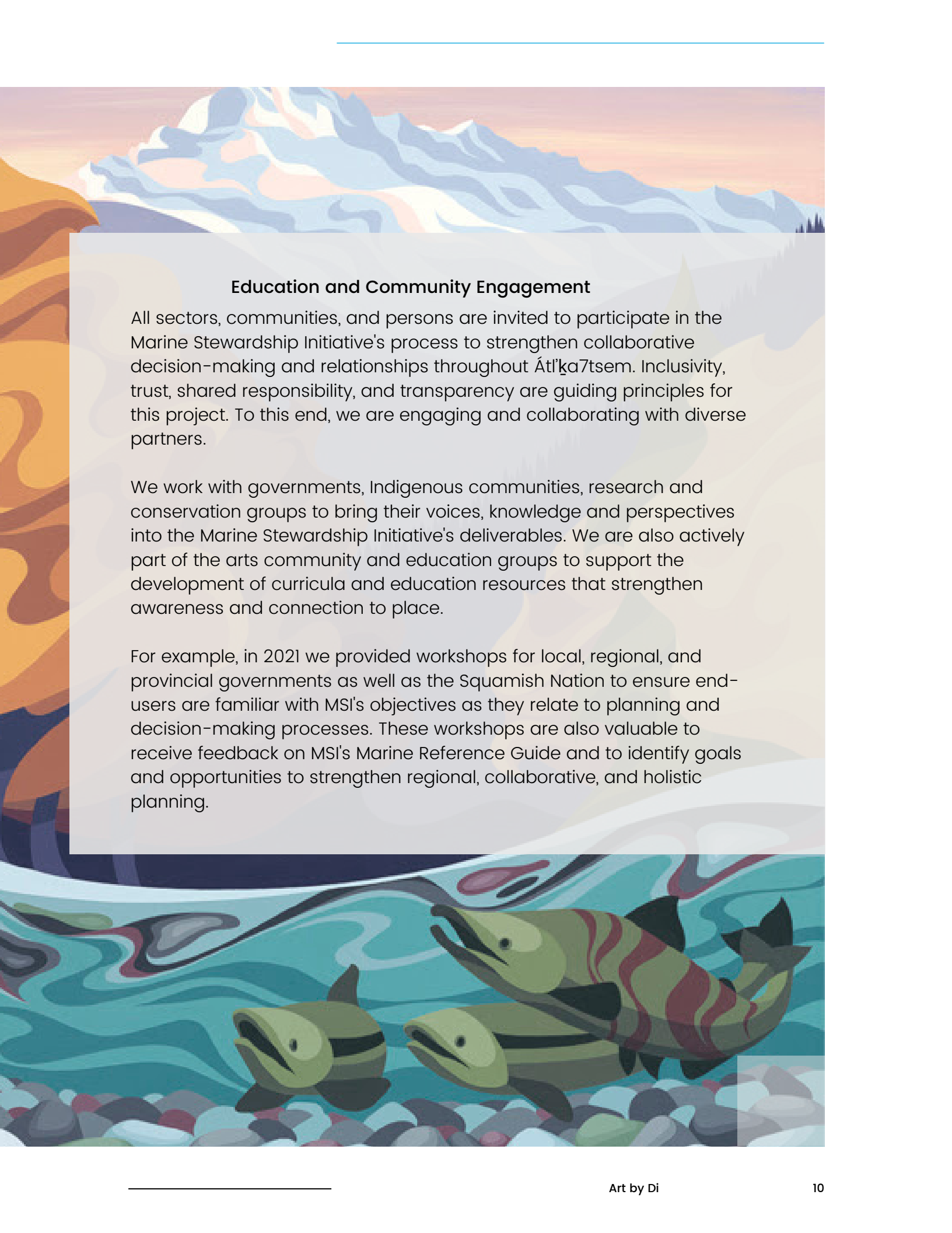
– Sarah McJannet, Senior Planner, District of Squamish

Research

The Marine Stewardship Initiative has come to life through the leadership of young people in the Sound who are channeling their vision for the region's future into the project. They are filling critical knowledge gaps by spearheading field research projects on plankton, herring, eelgrass, and Dungeness crab. They have catalyzed conversations about Indigenous and community-led approaches to stewardship and caring for the region's waters, and people.

Every year, Squamish Nation youth undertake herring (slhawt') surveys in the Sound, to provide valuable knowledge of this understudied species, and connect with their cultural heritage. After learning survey techniques from citizen scientists who have documented forage fish for decades, the youth transformed the research process by bringing their passion for the Skwxwú7mesh sníchim (Squamish language) and culture into the process. The data they collected about the value and distribution of slhawt' and ch'em'esh (herring eggs) are captured and shared within the Marine Reference Guide.

This work is an integral part of the MSI. To highlight this research we have added a [new webpage](#) dedicated to the slhawt' surveys. We encourage you to explore our website and the Marine Reference Guide, to enhance your holistic knowledge of this culturally and ecologically important fish.



Education and Community Engagement

All sectors, communities, and persons are invited to participate in the Marine Stewardship Initiative's process to strengthen collaborative decision-making and relationships throughout Átl'ka7sem. Inclusivity, trust, shared responsibility, and transparency are guiding principles for this project. To this end, we are engaging and collaborating with diverse partners.

We work with governments, Indigenous communities, research and conservation groups to bring their voices, knowledge and perspectives into the Marine Stewardship Initiative's deliverables. We are also actively part of the arts community and education groups to support the development of curricula and education resources that strengthen awareness and connection to place.

For example, in 2021 we provided workshops for local, regional, and provincial governments as well as the Squamish Nation to ensure end-users are familiar with MSI's objectives as they relate to planning and decision-making processes. These workshops are also valuable to receive feedback on MSI's Marine Reference Guide and to identify goals and opportunities to strengthen regional, collaborative, and holistic planning.

2021-2022 milestones and team

June

Produced a promo video to showcase the Guide's goals, accomplishments and team from 2018-2021

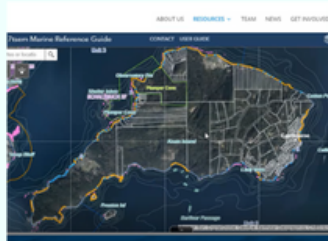


The Marine Reference Guide had its final Steering Committee Meeting and celebratory team event!

December

July

Hosted a technical webinar to teach community members how to use the Howe Sound/Atli'ka7tsem Marine Reference Guide's online interactive map



Marine Reference Guide rebrands to the Marine Stewardship Initiative

Courtney Smaha joins the team as Project Director, and Fiona Beaty transitions to Steering Committee Chair

January

August



Vivian Joseph joins the team as Indigenous Research Coordinator

February



Conducted herring (slhawt') surveys to document the distribution of herring and ch'em'esh (herring eggs)

March



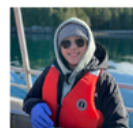
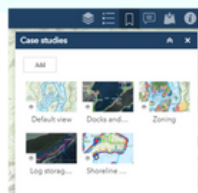
Hosted a celebratory event to celebrate the success of the Marine Reference Guide and transition to the Marine Stewardship Initiative

Began Dungeness crab light trap surveys in partnership with the Hakai Institute, Sewells Marina and Ocean Bridge to understand Dungeness crab distribution and abundance in the Sound

April

October

The Marine Reference Guide was awarded App of the Month by ESRI Canada



Jody, Devin, and Cassidy join the team as volunteers!

Eleana joins the team as Marine Debris Coordinator through the Ocean Wise Direct Action Program

May

2022

2021

Bridget John was a panelist for ESRI Canada's GIS Day on mapping towards more equitable futures



2018 - 2022 at a glance

Uploaded over

730

data layers and reports into our online maps

32

presentations to local, provincial, federal, and First Nations governments

25

instances of sharing our data and resources to industry, provincial, federal, and local governments, and non-profit organizations

\$680,000

funds raised to date

33

research reports and blogs written and published to our website

11,533

unique web visits

44

presentations to communities, non-profits and businesses

556

participants at our workshops

Participated in and provided advice at

52

events, conferences, and workshops

24

media articles

8,119

social media engagements

83

days on the water surveying herring, plankton, stream health, and eelgrass

Photo credit: Taz, Sporkist

Thank You

for working to protect our treasured region's
ocean and communities!



howesoundguide.ca/



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