

What happens when
45+ people get
together to work on a
healthy marine
ecosystem

Notes from the Baynes Sound/ Lambert Channel EcoForum

Summer 2023

Four things became clear at the Baynes Sound/Lambert Channel EcoForum when it met on May 26, 2023 at VIU's Marine Field Station.

- A lot of data has been (and is being collected) about Baynes Sound. However, there is no central inventory list and access can be haphazard.
- It has been two decades since there has been a comprehensive look at the kind of data/knowledge that is required to make grounded decisions about many aspects of the care and management of the marine ecosystem in Baynes Sound.
- Stakeholders, communities, industry, and even other government departments would value a jurisdictional map outlining ministry, departmental, legislative, and regulatory responsibilities.
- There are grassroots community groups that are eager to undertake local projects that could change attitudes and behaviours about human waste entering the Sound.

The Sum is Greater Than Its Parts

The Forum supports collaborative initiatives made up of participants which work on projects as directed by Forum participants. It is these groups and committees that do the work between meetings to advance a need or tackle an issue that has been identified by the participants. This has been accomplished in the past because of the commitment and energy of Forum participants representing their communities or organizations. The EcoForum brings interested parties together in that most delightful of human endeavours – hive mind. It provides a regular opportunity (the bi-annual meeting) for individuals representing various levels of government departments and ministries, First Nations, industry, academic research, and community. Information is shared through presentations and informal discussion over lunch and coffee breaks. Participants have an opportunity to hear presentations about current challenges and successes. This provides a window out of individuals silos and broadens perspectives. Sometimes it sparks informal working relationships. It reinforces the idea that protecting and maintaining a healthy marine ecosystem is not the work of any one organization. It respects traditional and cultural knowledge and traditions.

How to best “catalyze” action among participant organizations is a fluid concept based on the issue and input from participants. In some cases, the role of the EcoForum can be to profile work in progress being done by an organization, ministry, agency, or community and provide an opportunity for feedback. Ongoing dialogue and collaborative action have already increased the practice of knowledge-sharing about the area with participants reporting that they value contacts made. And the EcoForum's terms of reference explicitly require that we identify and undertake collaborative actions and processes to support the health of the Baynes Sound/Lambert Channel marine ecosystem. Members have had successes. But much work remains. A further goal is to avoid duplication of effort, identify jurisdictional gaps, and enhance any single organization's capacity for action.

In the case of an emerging issue, one task of the EcoForum is to give voice to the participants on front lines (industry, communities, researchers) to report concerns or findings. A second role is to facilitate connections for action.

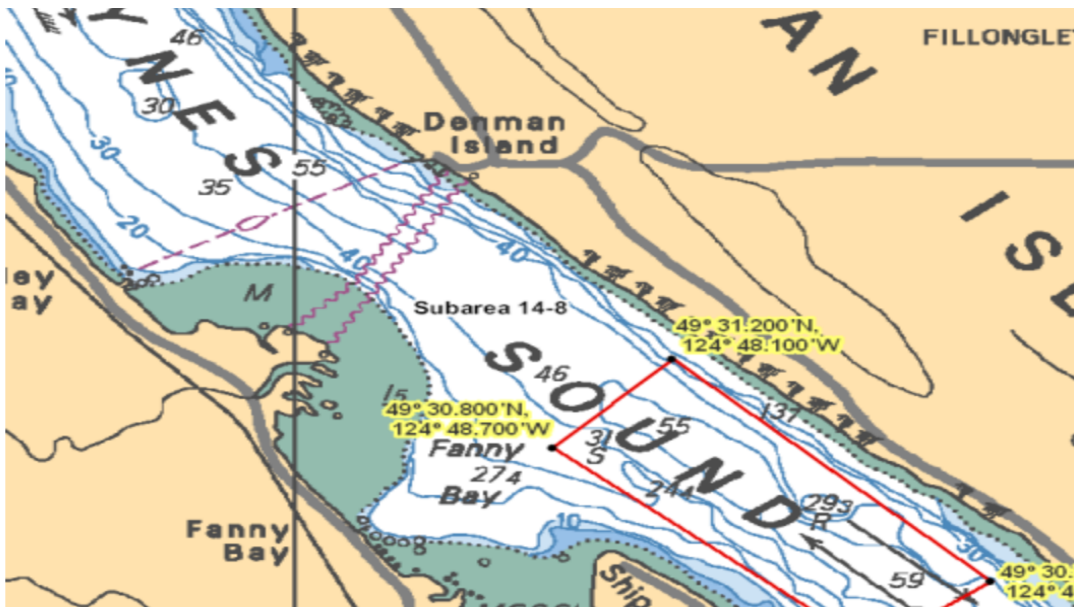
It has been the experience of the five years of the EcoForum that this somewhat unique model is an effective way to stimulate both conversation, interaction, and action. Participants come to the table with a common goal: To protect, maintain and improve the marine ecosystem in Baynes Sound and Lambert Channel.

As indicated at the outset, participants felt that their aims could be better achieved with a more comprehensive understanding of data and jurisdictional responsibilities.

May 26 Meeting Notes

The meeting began with a land (and water!) acknowledgement – then a welcome by Qualicum Nation Chief Michael Recalma, a member of the EcoForum steering committee.

Dorrie Woodward, an EcoForum founder and director of the Association of Denman Island Stewards used a map to describe the unique geographical and hydrographic attributes of Baynes Sound. She led participants around that map describing the pressure points. You can find the [text of the presentation here](#).

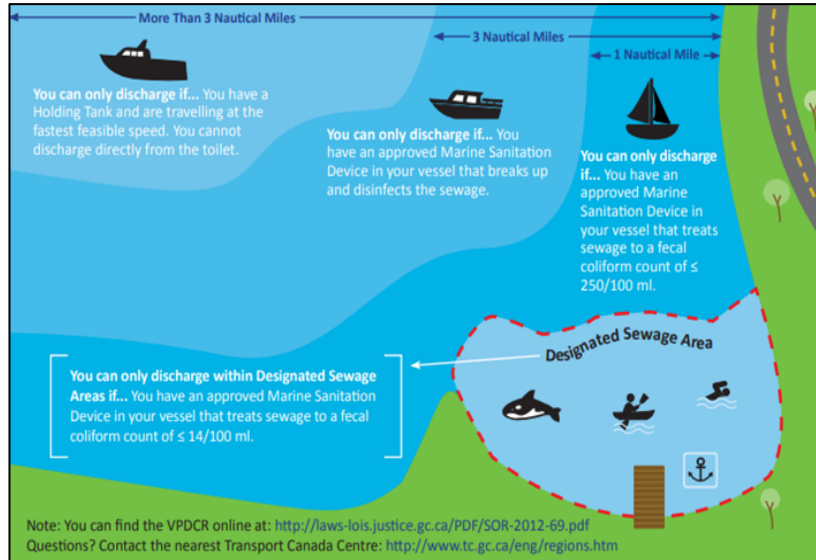


Elysha Gordon, with the Aquaculture Management Division of the federal Department of Fisheries and Oceans, gave an overview of the Area Based Aquaculture Management Plan. This pilot program is intended to support sustainable aquaculture opportunities for both the K'ómoks First Nation and partners within the region. This new approach will see the federal government, Indigenous government and other levels of government, industry, and stakeholders collaborate to plan, manage, monitor, and enhance shellfish activities in Baynes Sound.

Nico Prins, executive director of the BC Shellfish Growers Association, updated participants on the work of an action group whose purpose is to build a partnership to apply for a Rural Economic Diversification and Infrastructure Program grant. Much more work needs to be done on this initiative which potentially could help kickstart an inventory of public infrastructure (pump outs, washrooms near beaches or near public docks etc.). There was some discussion among participants about requirements to qualify for such a grant. Post-meeting, the EcoForum

coordinator will be reaching out to participants whose communities/organizations might qualify to take part in this grant application.

Transport Canada is responsible for the Vessel Pollution and Dangerous Chemical regulations. Jackie Grant is acting manager with the Marine Safety and Security division. Her presentation explained what that meant in terms of monitoring and enforcement as well as providing public education and signage about pump out stations. You can find the presentation [here](#).



The question and answer/discussion period following her talk led to some participants, including representatives of the Comox Valley Yacht Club expressing interest in an action group that would address question around whether the current stations are adequate in terms of making it easy for boat traffic to use; how to raise boater awareness and related issues. An end of summer start date was discussed for that work.

In a 2018 referendum, Cumberland voters agreed to proceed with a “made in Cumberland” solution and bypass tying in to the CVRD’s South Sewer project. It was a fascinating, controversial development because this rapidly growing community’s wastewater finds its way into Baynes Sound via Maple Creek and the Trent River. Its aging system has not kept up with growth and changing rainfall patterns. Cumberland Mayor Vicky Brown spoke to participants about the status of the plans and Cumberland’s role in protecting the marine ecosystem of Baynes Sound. *(Extremely large file, please contact us if you would like a copy)*

Rolling Up Our Sleeves

Group problem-solving and information sharing is an integral part of the EcoForum model.

During the second half of the EcoForum facilitated by ThinkSpace’s Janet Bonaguro participants identified main themes that needed to be explored. They then broke out into thematic tables to identify problems, propose solutions, and recommend action.



Three themes for an action plan:

A strong theme that emerged was the **state of data compilation**. It was felt that although there might be a lot of existing data, there is **no central clearing house and a lot of it is siloed** some of it is private. It appears that decisions about new data collection are being made without a clear understanding of what others are doing or how it might fit into a larger, more comprehensive narrative.

At the same time, there was concern about **bias in data collection**. There were multiple suggestions for how this could be improved. Not surprisingly from a group that strives to reach across organizational boundaries for the sake of the health of the marine ecosystem, improvements in amalgamation, analysis and communication of findings were considered paramount. And the direction to the EcoForum Steering Committee was to follow up on the

work for modernizing this model. More points from this discussion can be found in the Discussion Notes at the end of this document.

The second main theme of concern among participants was the need for comprehensive and integrated management planning. [This report](#), done in 2019 by the World Wildlife Federation for the EcoForum, pointed out 29 different management plans. Many had inflexible mandates and overlapping jurisdictions and seem to have been written without reference to other plans. Participants felt a mapping of jurisdictional responsibilities would be a good first step.

A third theme was around monitoring and enforcement.

“It is a bit like the Wild West with low compliance and even less enforcement,” said one participant describing the current situation in Baynes Sound.

Rules and regulations exist. But enforcement is complaint-based. This extends from regulation of land-based septic systems in surrounding communities to failure to use pump out stations and beyond.

Suggestions were made about bringing agencies and departments together for discussion about an overarching compliance and enforcement structure. It is another example of why the group felt jurisdictional mapping was important. This also echoes a Washington state model of interdepartmental cooperation that was discussed at the December 2022 EcoForum. You can find that presentation [here](#).

WHAT NEXT?

The volunteer Steering Committee of the EcoForum has had two meetings since the May event. They have reviewed the input from the breakout tables and explored how to follow up on the direction given to them from participants. It was agreed that the next EcoForum meeting recognize:

- It is essential to have as much current knowledge and data about the Sound more easily accessible.
- It is important to identify gaps, overlaps in data collection and monitoring and enforcement.
- Grassroots activities have an important role to play in changing attitudes and behaviours towards to marine ecosystem.

The current workplan entails:

- Informally polling EcoForum participants and others to get their input on what data and knowledge would be most helpful in their work around Baynes Sound.
- Members of the Steering Committee and the coordinator contacting key players within government and the research community to identify key people on this initiative with a view to present at the next Forum.
- The EcoForum coordinator and members of the steering committee reaching out to potential partners for an application to the Rural Economic Diversification and Infrastructure Program to craft a solid application.
- Connecting with wharfingers, dock managers and Comox Valley Yacht Club about their follow up to the Transport Canada presentation on human waste from sailing vessels.

The next full EcoForum gathering will take place on Friday, November 24, 2023, at VIU's Deep Bay Marine Field Station.

In the meantime, participants from previous forums have committed to working with their organizations or communities to take decisions or actions that strengthen the vision of a healthy, productive marine ecosystem. Much of this work is on a volunteer basis, or off the side of an already busy desk. Maintaining momentum, working across traditional boundaries, unpacking the complicated jurisdictional issues, addressing data issues, participating in action groups or the steering committee takes work – a lot of work. A growing number of EcoForum participants see the value in this collaborative model. The Steering Committee and EcoForum coordinator will continue to reach out to as wide a group of stakeholders, researchers, academics, and government representatives as possible to strengthen this initiative.

Attachment #1

Registered Participants May 2023 Baynes Sound/Lambert Channel EcoForum

Participant Name	Title	Affiliation/Organization
Dr. Tim Green	Biology Professor	VIU
Dr. John D. Neilson	Semi-retired Fish Biologist	
Vince Van Tongeren	Environmental Analyst	CVRD
Stuart McLean	Director	Nanaimo Regional District Area H
Dr. Ken Newman	Member	CVRD Sewer Extension Liquid Waste Management Plan Public Advisory Committee
Tim Peterson	Vice-chair Trust Council, representative from Lasqueti	Islands Trust
Gillian Nicol	Program Coordinator	Islands Trust
Connie Graham	Referrals Coordinator	Tla'amin Nation
Holly Clermont	We All Share the Harvest	First Nations Health Authority
Akhil Manne	Environmental Health Officer	First Nations Health Authority
Jackie Ainsworth	Chair	Ships Point Improvement District
Gord Johns	Federal MP, Deputy Critic for Fisheries	
Ryan Chaput	Parliamentary Assistant to MP Johns	
Lesley Chapman	Industry Advisor	Ministry of Agriculture and Food
Bryan Rusch	Regional Pelagics Manager	DFO
Eric Kelch	Manager of the Sea Garden Restoration Project	Parks Canada
Grace Runciman	ABAM project	DFO
Elysha Gordon	Senior Aquaculture Manager	DFO (Presenter)
Amber Newman	ABAM Project	DFO
Gabrielle Kosmider	Senior Aquaculture Management Coordinator	DFO
Clara MacKenzie	Aquatic Science Biologist	DFO
Jacob Melville	Community Advisor, Salmon Enhancement	DFO
Tim Wenman	Area Coordinator, Shellfish Classification	Environment and Climate Change Canada
Jim Elliot	Semi-retired Water Specialist	
C Rea	Biologist (Retired)	ADIMS
Theresa Clinton	Board Member	ADIMS
Luise Hermanutz	Co-Chair	Denman Conservancy
Caitlin Pierzchalski	Executive Director	Project Watershed
David Innes	Biologist MUN	Comox Valley Nature -VP

Ray Rewcastle	President	Concerned Citizens of Baynes Sound
Mike Mesford	Director	Beaufort Watershed Stewards
Bryanna Pearson	Executive Director	Hornby Island Conservancy
Malcolm Cowan	Deputy Director	BCSGA
Vickey Brown	Mayor of Cumberland	Presenter
Jackie Grant	Acting Manager, Marine Safety and Security División	Transport Canada (Presenter)
Daniel Wild	Dock Manager - Deep Bay	
Peter Stockdill	Director	Council of BC Yacht Clubs
Barb Thomson	Commodore	Comox Valley Yacht Club
Jonathan Rothwell	Past Commodore	Comox Valley Yacht Club
Edi Johnson	Wharfinger	Denman Community Dock
John Foster	Manager	Fanny Bay Dock
Stephanie Hewson	Lawyer	West Coast Environmental Law
Gordy McLellan	Mac's Oysters	
Keith Reid	Stellar Bay Shellfish	
Jim McIsaac	Managing Director	BC Commercial Fishing Caucus
Kevin Romanin	Senior Policy Analyst	WLRS
Carl Butterworth	EcoForum Chair, Manager VIU Deep Bay Facility	Steering Committee Chair
Nico Prins	Executive Director	BCSGA, Steering Committee (Presenter)
Dorrie Woodward	Director	ADIMS, Steering Committee (Presenter)
Candace Newman	Councillor K'omoks First Nation	Steering Committee
Chris Pearce	Research Scientist	DFO, Steering Committee
Janet Bonaguro	CEO ThinkSpace	Meeting Facilitator
Gail Dugas	Coordinator	BS / LC EcoForum

Attachment #2

Strategic Themes and Action Items

The following table presents the thinking of the Eco Forum participants on May 26 regarding how to approach the challenges identified above. Three categories were selected for discussion:

- Data Compilation and Sharing to Inform Decision Making
- Comprehensive and Integrated Management Planning
- Monitoring and Enforcement

Strategic Theme	Problems Identified	Proposed Solutions	Actions
Data Compilation and Sharing to Inform Decision Making	<ul style="list-style-type: none"> • Lots of data exists but its not widely known where to find it and it is not integrated • Much data is private (protected) • Data available from Ministry of Health, Island Health, First Nations health Authority, Comox Valley regional District, local government etc. • Potentially missing data on: <ul style="list-style-type: none"> ○ Dissolved oxygen (DO) ○ Microbial source tracking ○ Phytoplankton • There is bias in data collection. Metadata should be involved to understand where data comes from 	<ul style="list-style-type: none"> • Desire to have a shared public database to support data analysis and reporting (or at least an amalgamated list of linked data sources) • Consider what key data can/should be shared on the forum website to support the purpose of the Forum • Data should reflect the entire ecosystem, and all areas of Baynes Sound / Lambert Channel • Obtain the services of a data analyst and contractor • Leverage Science Communicators to tell the story (increase accessibility of data to the public) • Engage more opportunities for citizen science so that there is more trust in this science 	<ul style="list-style-type: none"> • Do some stakeholder outreach to determine what support might be available for next steps • Search for funding and capacity supports for this work (reach out to Ryan from Gord John’s MP office) • Identify the story we want to tell and the key questions we want to answer to identify which data is needed. • Engage industry experts to identify which data points will help us tell the story we want to tell (the group felt that they didn’t have the expertise to identify

	<ul style="list-style-type: none"> • Unclear if the current data collection stations represent all of the area (are more collection sites needed, do they cover the entire year) • Differences in terminology between data sources and groups interpreting the data • Lack of communications between groups doing monitoring • Funding needed to amalgamate, analyze and communicate findings 	<ul style="list-style-type: none"> • Do some stakeholder outreach to determine what support might be available for next steps • Streamline collection and distribution of data (consider opportunities to share data platforms) • Increased education and communication opportunities may bring more funding opportunities to light • Push for more media and education from government and industries • Consider delivering educational workshops on data collection and use (Kayaker Club expressed some interest in supporting funding for this) • Increase public awareness on issues • Increase pressure on homeowners to understand the impact of their septic systems on the marine environment • Educate commercial fleets about the rules and importance of adherence to laws preventing raw sewage dumping in Canadian waters 	<p>this and suggested external subject matter expertise</p> <ul style="list-style-type: none"> • Do a literature review to identify which data points are commonly being used to report on the health of a marine ecosystem
<p>Comprehensive and Integrated Management Planning</p>	<ul style="list-style-type: none"> • 29 different plans, not integrated and often have inflexible mandates and overlapping jurisdiction • Many recommendations already exist within these 	<ul style="list-style-type: none"> • Alignment on strategies to increase • Develop a jurisdictional map of responsibilities • Consider how to create a governance model that brings together various stakeholders with similar objectives 	<ul style="list-style-type: none"> • Continue to pursue REDIP funding to address need for more data compilation, communication and translation into an integrated management plan

<p>plans, don't need to reinvent the wheel</p>	<ul style="list-style-type: none"> • Include industry in the development of an integrated plan • Consider updating the written overview of the study performed >5 years ago • Consider conducting a study of current conditions in Baynes Sound to engage a wide range of stakeholders (funding required) • Engage K'omoks First Nation in leading this initiative • "Be the squeaky wheel" • Consider developing a community-based committee to gather existing management recommendations and gaps • Recommend changes to regulations where value is identified • Develop a public relations and communications strategy • Research key contacts in industry to understand who to go to best impact change
<p>Monitoring and Enforcement</p>	<ul style="list-style-type: none"> • Enforcement is complaint based vs. systemic. • Presence of Norovirus in human wastewater entering Baynes Sound prevents this shellfish fishery from operating, impacting all companies and staff livelihoods. • Need an overarching compliance and enforcement strategy • Need someone monitoring key data points. • Clarify responsibilities. • Obtain funding to address issues. • Work with regulatory bodies to identify key issues that require enforce to focus and align enforcement capacity • Meet with Village of Cumberland to request norovirus testing and identify potential mechanisms to increase disinfection techniques. • Meet with the agency responsible for septic system oversight to

- The legislation and rules exist but there is little compliance and enforcement capacity available.
 - Little monitoring and enforcement happening related to wastewater and other environmentally hazardous activities (e.g. shipbreaking)
 - Increase requirements for disinfection in municipal wastewater systems
 - Advocate for regulatory change to require landowners to maintain septic system records to ensure that septic systems are monitored for leeching.
 - Consider leverage points where septic systems can be inspected (e.g. at property sale)
 - Consider supports to assist homeowners in upgrading septic systems.
 - Consider making Baynes Sound a “no dump zone” (it essentially already is as its illegal to dump within 1NM of shore, nowhere in Baynes Sound or Lambert Channel is this distance away from shore)
 - Desire to see a small vessel compliance program
 - Desire for more examinations and investigations of potential cases of marine sewage discharge
 - Educate the public on the requirements (e.g. types of sewage equipment required on board vessels)
 - Enhance communication on existing designated sewage discharge areas (Cortez and Quadra islands)
 - Consider incentives for vessels to not discharge in alignment with the rules
- understand what could be done

Attachment #3

Baynes Sound Lambert Channel EcoForum

May 26, 2023

AGENDA

9:00 – 9:30 Grab a coffee, meet some people with a diversity of interests and expertise in areas that affect Baynes Sound.

9:30 – 9:35 **Call to Order** by Carl Butterworth, Chair of the Steering Committee and Manager of Vancouver Island University's Deep Bay Marine Field Station.

9:35 – 9:40 **Welcome** by Chief Michael Recalma, Qualicum First Nation, Steering Committee Member.

9:40 **Facilitator** The EcoForum gathers participants with a diversity of responsibilities, knowledge, and perspectives. The people you meet here and the knowledge that is shared can result in formal and informal collaborations that can change the status quo. Getting to a place where that is possible requires a plan and some savvy facilitation. [Janet Bonaguro](#) will outline the way to get there.

THE CHALLENGES

9:45 [49°32'0"N 124°50'0"W](#) **AN AREA UNDER PRESSURE**

Baynes Sound has had a productive, resilient marine ecosystem. K'omoks First Nation has considered it their "breadbasket" for millennia.

But numerous factors are putting stress on the Sound.

Dorrie Woodward is chair of the Association of Denman Island Marine Stewards and a founding member of the Ecosystem Forum. She walks us through a map of the area and its pressure points.

9:55 ACTION GROUP REPORT

It is against the law to discharge human waste into Baynes Sound. But there is a loophole.

If a boater doesn't have access to a pump out station or a toilet within a reasonable distance – then over the side, it goes. Toilet paper. E coli. Norovirus. The works.

Addressing infrastructure could have an effective impact on reducing the stressors on the marine ecosystem of Baynes Sound and the communities that surround it.

BC Shellfish Growers Association Executive Director and EcoForum Steering Committee Treasurer Nico Prins spearheaded an action group formed at the December meeting. Their

mandate was to work up a proposal to fund a survey that would identify gaps in information and infrastructure.

We'll get an update.

10:05 QUESTIONS AND DISCUSSIONS

10:15 WHAT IS AREA-BASED AQUACULTURE MANAGEMENT?

This pilot program is intended to support sustainable aquaculture opportunities for both the K'ómoks First Nation and partners within the region. This new approach will see the federal government, Indigenous government and other levels of government, industry, and stakeholders collaborate to plan, manage, monitor, and enhance shellfish activities in Baynes Sound. What's needed to make this work well? (Presenter TBA)

10:20 ENFORCING THE RULES

Transport Canada is responsible for the Vessel Pollution and Dangerous Chemical Regulations. What does that mean in terms of regulations regarding sewage?

Jackie Grant is acting manager with Transport Canada's Marine Safety and Security division. She will explain how those rules are currently enforced, the complexities of monitoring the source of discharge from sea-going vessels and the challenges of raising profile and public education campaigns.

10:30 QUESTIONS AND DISCUSSION

10:50 BREAK

Grab a morning snack. Sweet Pea catering makes sure they are nutritious, delicious, and plentiful.

11:05 CHANGING ATTITUDES

The Village of Cumberland is a popular place. But it got a reputation as an environmental outlier when it was non-compliant with provincial environmental regulations for nearly two decades.

Although it is inland, this rapidly growing community's wastewater finds its way into Baynes Sound via Maple Creek and the Trent River. Its aging system has not kept up with growth and changing rainfall patterns.

In a 2018 referendum, Cumberland voters agreed to proceed with a "made in Cumberland" solution and bypass tying in to the CVRD's South Sewer project. What is the status of these plans? How do you motivate residents to care about what is going on downstream?

Cumberland Mayor Vickey Brown has an educational background in Environmental Studies and Political Science – two areas that are critical to pragmatic problem solving in communities around Baynes Sound.

11:20 QUESTIONS AND DISCUSSIONS

11:35 NEXT STEPS

By now you will have worked up an appetite and you can smell that famous Sweet Pea cooking.

Before you eat, facilitator Janet Bonaguro will set up the plan for the breakout tables based on the morning's discussions.

11:50 BUFFET LUNCH

Soups, sandwiches, and salads. Vegetarian/GF options.

12:40 BREAK OUT TABLE DISCUSSION

1:30 WHAT DO WE DO NOW?

During this 90-minute facilitated session, table leaders will report back on group discussions, laying out their best ideas for planning, collaboration, and action. This is when new working groups could be formed based on the priorities identified.

3:00 SAFE TRAVEL HOME

Remember, friends don't let friends throw their poop in the water.

Save the Date for the Autumn EcoForum.

Friday November 24, 2023. VIU's Deep Bay Marine Field Station

The EcoForum is made possible by support from CVRD, Islands Trust, VIU's Deep Bay Marine Field Station, Association of Denman Island Marine Stewards, BC Shellfish Growers Association, and the Lush Charity Pot. We are grateful for this investment in the future of the Baynes Sound and Lambert Channel marine ecosystems.

Steering committee members:

Carl Butterworth, Chair (VIU Deep Bay Marine Field Station)

Nico Prins, Treasurer (BC Shellfish Growers Association)

Dorrie Woodward, Secretary (Association of Denman Island Marine Stewards)

Chief Mike Recalma, Qualicum First Nation.

Candace Newman, Councillor K'omoks First Nation.

Daniel Arbour, Director, Area A, CVRD

Chris Pearce, Research Scientist, Pacific Biological Station, Fisheries and Oceans Canada