



AGENDA

Climate Action Committee Meeting

Tuesday, November 25, 2025, 6:00 p.m.
Council Chambers, 400 Centre Road, Lions Bay
And Via Zoom Video Conference

Zoom Invite Link: <https://us02web.zoom.us/j/2780145720?omn=82427300648>
To join via phone, dial 778-907-2071 | Meeting ID: 278 014 5720

We are privileged to be meeting and doing work on behalf of the residents of Lions Bay on the traditional unceded territory of the Squamish and Musqueam Nations.

	Pages
1. Call to Order	
2. Adoption of Agenda	
Recommendation: That the Agenda of November 25, 2025, be adopted.	
3. Public Participation	
4. Approval of Minutes of Prior Meetings	
4.1 Climate Action Committee Meeting- October 28, 2025	3
Recommendation: THAT the Climate Action Committee Meeting Minutes of October 28, 2025, be approved.	
5. Unfinished Business	
5.1 LGCAP Funds	6
Continued discussion on recommendations for the allocation of remaining funds.	
- For discussion	
5.2 FIREUP Project Update	
Continued discussion on recommendations for the allocation of remaining funds.	
- For discussion	
5.3 Electric Vehicle Recommendations	
Committee Member Norm Barmeier to draft recommendations for the 2026 Budget for a used EV Bylaw Enforcement vehicle, including carbon reduction estimates.	
- For information	
5.4 BC Recycling Funds	7

Committee to explore additional uses for the funds generated by BC Recycling revenue.

- For discussion

6. Reports

- None

7. Resolutions

- None

8. New Business

8.1 Recommendations to Council for Budget 2026

8

Recommendations by the Climate Action Committee for the 2026 Budget.

- For recommendation

8.2 Delegation - Simon Fraser University Students for a Tree & Natural Asset Inventory

- To be confirmed

8.3 Grant Opportunities for Electrification of the Municipal Fleet

Discussion to be led by Chair Abbott or Member Norm Barmeier.

- For discussion

8.4 Annual Report

Discussion of the Annual Report by Norm Barmeier, which is to be presented to Council at the next Regular Meeting by Councillor Abbott.

- For discussion

8.5 Update on the Letter to Department of Fisheries and Oceans Regarding the Proposed Marine Refuge

16

Update from Councillor Abbott on the letter to be sent to Department of Fisheries and Oceans regarding the Proposed Marine Refuge and report by Committee Member John Robb.

- For information

9. Public Questions and Comments

10. Adjournment

Recommendation:

THAT the Climate Action Committee Meeting be adjourned.



MINUTES

CLIMATE ACTION COMMITTEE MEETING

VILLAGE OF LIONS BAY

**October 28, 2025, 6:00 p.m.
Council Chambers, 400 Centre Road, Lions Bay
And Via Zoom Video Conference**

In Attendance: Councillor Neville Abbott (by phone)
Councillor Jaime Cunliffe (Chair)
Committee Member Clara George
Committee Member Greg Weary
Committee Member Norm Barmeier
Committee Member John Robb

Absent: Committee Member Andrew Wray

Public Presentation: Councillor Ron McLaughlin

1. **Call to Order**

The Chair called the meeting to order at TIME

2. **Adoption of Agenda**

Moved/Seconded

That the Agenda of October 28, 2025, be adopted as amended (emissions report added under unfinished business).

CARRIED

4. **Approval of Minutes of Prior Meetings**

THAT the minutes of the September 4, 2025, meeting be adopted as presented.

CARRIED

3. Public Participation

Councillor Ron McL suggested the CAC publish an article highlighting the 7 metric tons of carbon reduction achieved.

5. Unfinished Business

Emissions Report

- Clara mentioned she emailed the emissions report.
- Staff did not buy renewable diesel exclusively; only one of four diesel deliveries in 2024 was renewable.
- Committee recommends council prioritize renewable diesel as it does not cost more.
- Clara to provide a total emissions report.

FIREUP Project Update

- Project came in under budget. Scope included heat pumps and a fireplace upgrade.
- Resulted in a 15.6% reduction in fuel use (7 metric tons).
- Norm to write a 90-second article for public outreach, geared to a grade 7 reading level.
- Remaining funds (\$112K) to be allocated; committee to discuss options.
- report provided on-table from Joe Chirkoff confirmed \$165k available to spend in 2026.

Vehicle Fuels & Propane

- Two more targets identified: vehicle fuels and propane.
- Committee discussed options for replacement of aging works-yard F150 and zero emissions vehicle for bylaw enforcement. Options suggested included replacement of bylaw vehicle with an EV and reallocating F150 for public works use, or selling bylaw F150 and replacing both vehicles with EVs.
- Committee recommends purchasing an electric bylaw vehicle and charging station, replacing the previously selected gasoline F150.
- Norm to draft a recommendation for a used EV bylaw vehicle, including carbon reduction estimates.
- Neville to obtain annual bylaw vehicle kilometers. Recommendation to be drafted by Nov 13 for Nov 16 budget discussion.

BC Recycling Money

- Received \$45K this year (previously \$25K/year).
- Funds to be used for Saturday morning staffing; committee to explore additional uses.

- Survey to be developed for resident input on recycling funds. Clara to share previous survey.

- Neville to track depot usage. Article launch pending.

Climate Ready Plans

- Grant application submitted; awaiting decision (could take up to 6 months).

Propane Use & Electrification

- Propane used in firehall and truck bay heaters. Committee to propose electrification and improve asset fuel reporting.

Staff Support

- Committee requested increased staff support. Possibility of a new works yard manager to be used as opportunity to create improved alignment with the committee's goals.

Conservation Area Update

- Changes to Rockfish and Glass Sponge Conservation Area to include Lions Bay. Neville to forward report link.

Climate Action Guidebook

- Committee to review performance against best practices.

Communications & Outreach

- Article for VU to be written.
- Call for teen/young student to assist with social media and branding.
- Consider opening Lions Bay Climate Action Committee Facebook/Instagram account.
- Develop communications schedule for remainder of term.

10. Adjournment

Moved/Seconded

THAT the Climate Action Committee Meeting be adjourned.

The meeting adjourned at 7:42 PM

CARRIED

Chair

Corporate Officer

Village of Lions Bay
FIREUP
Local Government Climate Action Program ("LGCAP")

Available Funding	Year	CARIP	LGCAP	Total
	2016-2022	6,804.00		6,804.00
	2022-2023		102,164.00	102,164.00
	2024-2026		149,647.00	149,647.00
Total Funding		6,804.00	251,811.00	258,615.00
Total Expenditures				146,677.04
Remaining				111,937.96

Before GST					
Expenditures	Date	Vendor	Invoice	Amount	Description
	22-Aug-25	SMR Plumbing	3354	68,775.00	Heat Pumps, Air Handler, Electric Backup
	23-Jul-25	Corporate Electric	48414	12,616.81	Electrical
	7-Mar-25	Maxwell Fireplace	8925	10,761.00	Heat pump for municipal hall
	2-Jul-25	Flashpoint Fuels	115824	1,531.10	Pumpout, removal
	23-Jul-25	Corporate Electric	48412	52,993.13	Electrical
				146,677.04	

**Village of Lions Bay
Recycle BC Revenue**

Available Funding	Year	Recycle BC	Total	
	2022	7,083.00	7,083.00	
	2023	28,510.00	28,510.00	
	2024	28,838.00	28,838.00	
ESTIMATED	2025	43,740.00	43,740.00	(\$36,338 collected to October 31, 2025)
Total Funding		108,171.00	108,171.00	
Total Expenditures			46,282.25	
Remaining			61,888.75	

Expenditures	Date	Vendor	Amount	Description
ESTIMATED	2025	VOLB	13,330.00	Public Works OT at recycling centre
	2024	VOLB	10,201.00	Public Works OT at recycling centre
	2024		10,000.00	Composting centre
	2023	VOLB	10,201.00	Public Works OT at recycling centre
	2022	VOLB	2,550.25	Public Works OT at recycling centre
			46,282.25	

Assumptions				
*Labour costs are estimated average 6 hrs a pay period over 26 payperiods				
*Labour costs are based on average of PW hourly rate, which is usually Double Time				
For example:				
Position	Date	Hours	Rate	
Foreman I	8-Nov	3.00	94.80	284.40
Water Operator	1-Nov	3.00	83.88	251.64
Pay Period 23 Total				536.04
26 Pay Periods Total				13,937.04

COUNCILLOR REPORT

DATE: 2025-10-30 **FILE:** Council-2025-022
TO: Regular Council Meeting of November 04, 2025
FROM: Neville Abbott
RE: **Climate Action Committee (CAC) Budget Recommendations for 2026**

RECOMMENDATION:

The CAC request Council approve the recommendations of the committee as discussed at the CAC meeting of October 28, 2025 for the 2026 budget.

BACKGROUND:

See attached draft minutes from CAC direct quotes from the minutes are *in italics*. Further discussion relates to previous meetings and email clarifications sent between members in response to draft minutes.

1. Emissions Report

- *Staff did not buy renewable diesel exclusively; only one of four diesel deliveries in 2024 was renewable.*
- *Committee recommends council prioritize renewable diesel as it does not cost more.*

Further discussion (email October 30th)

Suncor/Petrocan has R100 is available to use all year long in BC. (Eg City of Vancouver)

It can be delivered by Cost Mountain Fuels.

Shell's R100 is only available in warmer months.

I do not know which one our supplier is using as the 1 delivery for 2024 was at the end of October. (Not ideal for a summer blend depending as that would likely last through December)

2. Vehicle Fuels & Propane

- *Two more targets identified: vehicle fuels and propane.*
- *Committee discussed options for replacement of aging works-yard F150 and zero emissions vehicle for bylaw enforcement. Options suggested included replacement of bylaw vehicle with an EV and reallocating F150 for public works use, or selling bylaw F150 and replacing both vehicles with EVs.*
- *Committee recommends purchasing an electric bylaw vehicle and charging station, replacing the previously selected gasoline F150.*

Further discussion (email October 29th)

I don't love the idea of the F150 moving to the works yard. My instinct is that it would burn a lot more fuel as a works yard truck than as a bylaw vehicle... but we would need to look at kms and idling patterns to determine that.

If that F150 will be heavily used at the works yard - then we are committing to years of emissions on that vehicle. (If it runs exclusively on Renewable Diesel that would be less emissions)

I thought we had a commitment that any new vehicles purchased for the works yard would be electric?

The good thing about the EV trucks is that they also work as rechargers for battery power - so that would allow all the works yard equipment to be electrified as they could recharge on site.

Idling would be silent and clean.

It would also require an EV charger set up at the works yard - for the works yard; as opposed to for the Bylaw officer...

And the existing Green procurement policy would be followed.

In an ideal world, they sell the F150, and get 2 EVs. An EV truck for works yard, and a small used EV for bylaw officer.

I think we need to be careful that we aren't increasing emissions by moving the diesel F150 to the works yard.

3. BC Recycling Money

- Received \$45K this year (previously \$25K/year).
- Funds to be used for Saturday morning staffing; committee to explore additional uses.
- Survey to be developed for resident input on recycling funds. Clara to share previous survey.
- Neville to track depot usage. Article launch pending.

DISCUSSION:

1. Emissions Report

Staff to respond to question from the committee and propose solution to ongoing renewable diesel concerns.

2. Vehicle Fuels & Propane

Please note the following is already in play:

- Staff have asked for 2026 budget to replace the oldest of the Works-yard trucks with a newer F150. According to what was agreed with previous PWM and as per CAC previous recommendations this should be our first public works electric pickup, with cost difference paid from LGCAP monies but that is not what Staff have asked for.

- We previously budgeted and purchased the additional F150 for BEO use in 2025. This also should have been an EV had we followed the “green purchasing” language from previous recommendations and as written into the current Purchasing Policy.
- The CAC recommendation as per attached minutes is Option 1 below. This will require switching the BEO F150 to public works procuring an EV for BEO use.
- In follow-up emails described above there is a consensus opinion on the CAC that I propose, and Council approve Option 2. This alternative will require EVs be procured for both vehicles which puts us back on track in compliance with CAC previous recommendations, Council resolutions and Staff commitments.

3. *BC Recycling Revenue*

- For council information future recommendations from CAC may require resolutions.

RECOMMENDED OPTION: Re Vehicle Fuels and Emissions

Option 1 - Council approve the Committee recommendation requiring Staff to purchase an electric bylaw vehicle and charging station, replacing the aging public works F150 with the previously selected gasoline F150.

Option 2 - Council approve the Committee alternative recommendation requiring Staff to purchase an electric bylaw vehicle and replace the aging public works F150 with an EV pickup including required charging infrastructure.

Option 3 – other proposed solutions Council may suggest.

FINANCIAL CONSIDERATIONS:

Cost impacts will be included in the 2026 budget and drawn from LGCAP Fund as required to finance the costs. See attached LGCAP fund status sheet.

LEGAL CONSIDERATIONS:

None

MOTION:

THAT Council approve CAC recommendation Option 2 - Vehicle Fuels and Emissions as recommended by the CAC to replace both BEO vehicle and aging public works F150 Vehicle with EVs including required charging infrastructure at works-yard, and

THAT additional costs over proposed Staff request for additional gasoline vehicle and costs incurred by replacement of BEO F150 with a small EV be drawn from LGCAP fund, and

THAT Council direct staff to take necessary measures to ensure all future diesel purchased is R100 including necessary documentation to confirm for LGCAP reporting.

Respectfully submitted,

Neville Abbott Councillor

Attachments:

- (1) Draft minutes of CAC meeting of October 28, 2025
- (2) LGCAP Fund Status sheet.



MINUTES

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Report to CAC on Council Response on DFO's Proposed GSR-RCA Project

CAC Meeting, Nov 25, 2025

At the Oct 28th CAC meeting, Councillor Abbott reported that at the Howe Sound Community Forum he had recently attended a proposal from the federal Department of Fisheries and Ocean (DFO) to amend glass sponge (GSR) and rockfish (RCA) conservation provisions in Howe Sound was doing the rounds, and it was suggested that this was something I might pay attention to. What neither of us realized at that point that there was a near-term deadline for stakeholder comment on this proposal.

On Nov 3rd Councillor Abbott contacted me with information he had just received from Adam Taylor of MLSS, which included notification of the deadline to comment of Nov 14th. He and I agreed that the proposal, specifically the changes proposed offshore of Lions Bay, felt like something on which the Village of Lions Bay should comment. The proposal from DFO is included herein as Exhibit 1.

At the Council meeting the following evening he had this topic added to the agenda. The Council then agreed in principle to: i) consider whether the Village should comment on the DFO proposal; ii) hold a special meeting if it was considered a valid use of Council time; iii) have me represent the Village on relevant regional initiatives/task forces/groups going forward.

I prepared briefing notes together with a draft letter of response to DFO for Council to consider – attached herein as Exhibit 2. On Nov 10th such consideration did occur at a Special Council meeting. Thereafter, I embedded the points I heard from Council's discussions, especially those on added concerns with respect to moorings/docks which I had included in the first draft, into a revised second letter.

Council considered that revised letter on Nov 13th. However, at that meeting CAO Blackwell announced that he received a 1 week extension from DFO for receipt of comments: new deadline Nov 21st. With the extra time allowed, the Council, having heard that West Vancouver had some of the same concerns as themselves, asked CAO Blackwell to consult with that municipality for additional information should anything relevant be available.

At the regular Council meeting of Nov 18th, CAO Blackwell reported back that i) West Vancouver had decided not to submit their own comments, but that ii) their concerns mirrored those within the letter that I had already drafted. He recommended to Council that they proceed with sending this letter which they proceeded to unanimously approve.

The letter submitted to DFO from the Village of Lions Bay is included below as Exhibit C.

John Robb
Nov 20, 2025

Exhibit 1

Marine Conservation Targets (MCT) Initiatives Update: Pacific Region

Fall 2025 Information Package

Developed by Fisheries and Oceans Canada (DFO)

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Purpose of this Update

This package is intended to support information sharing and consultation with representatives from First Nations and stakeholders as Pacific Region continues to advance work on Fisheries and Oceans Canada's (DFO's) and Marine Conservation Targets (MCT) Team initiatives, including those relating to the *Glass Sponge Reef – Rockfish Conservation Area (GSR-RCA) Project* and Scott Islands marine National Wildlife Area. There are two key things we want to focus on:

- 1) Information Overview: DFO wants to provide more clarity on key MCT initiatives.
- 2) First Nations and Stakeholder Input: Input is being sought for two initiatives led by DFO Fisheries Management.

Marine Conservation Target Consultation Meetings – Meeting Standards

Purpose

These meeting standards outline shared principles for respectful, constructive, and effective participation in meetings led by the MCT team. Following these standards helps ensure meetings remain focused, inclusive, and productive. By upholding these principles, participants contribute to a collaborative environment and meaningful dialogue. We appreciate your participation and commitment to making all meetings valuable and effective for everyone involved.

Communication Standards

- Communicate respectfully and constructively
- Speak clearly, listen actively, and seek clarification when needed
- Share relevant, agenda-focused information and perspectives
- Express interests and concerns concisely and transparently
- Avoid knowingly sharing misleading or inaccurate information
- Respect shared time: keep comments concise and on-topic. Chairs may intervene to ensure balanced participation

Respectful Engagement

- Value and respect the perspectives of others
- Separate issues from individuals; express disagreement with ideas, not people
- Use inclusive, respectful language and avoid stereotypes or accusatory remarks
- Allow space for all voices; avoid interrupting and listen with openness and curiosity

Outside Communication

- Accurately represent meeting discussions and outcomes
- Avoid sharing misleading or inaccurate information with the public or networks

Enforcement

The chairs may:

- Intervene if participants do not follow these standards
- Ask individuals to leave a meeting or restrict future participation if necessary
- End a meeting early if conduct becomes disruptive or prevents constructive dialogue

Fisheries Act Marine Refuges

A marine refuge is a type of area-based fisheries closure established under the *Fisheries Act* that provides long-term biodiversity conservation benefits. These areas are designed to mitigate risks posed primarily by fishing activities but may also address other human activities if a risk is identified. Marine refuges are recognized as one type of Other Effective Area-Based Conservation Measures (OECMs), and these terms are used interchangeably.

Marine refuges contribute to the in-situ conservation of biodiversity by protecting species, habitats, and ecosystem functions. For example, they may safeguard rockfish, corals, or glass sponge reefs (GSRs). To be recognized as an OECM, a marine refuge must be governed and managed in a way that avoids or mitigates risks to biodiversity, provides long-term protections, and support ecosystem services. Implementation typically occurs through Variation Orders or Conditions of Licence under the *Fisheries Act*. These measures ensure that the conservation outcomes are enforceable and integrated into Canada's broader marine protection strategy.

Strait of Georgia and Howe Sound GSR Conservation Initiative

Glass Sponge Reef Marine Refuges

Since 2016, 17 marine refuges have been established through the Strait of Georgia and Howe Sound GSR Initiative. Further information is available through the fishery notice for [the Strait of Georgia](#), fishery notice [for Howe Sound](#) including [Defence Island and Queen Charlotte Sound](#), and through [the website](#).

Glass Sponge Reef Fishery Closures

Five additional GSR fisheries closures were established in 2022. Further information is available through the [fisheries notice](#) and [the website](#).

GSR-RCA Project

Glass Sponge Reefs

GSRs are globally unique ecosystems found only in a few locations off the Pacific coast of Canada and the United States. Once thought to have gone extinct approximately 40 million years ago, live reefs were rediscovered in 1987 by Canadian scientists. In British Columbia, GSRs are located in areas such as Hecate Strait, Queen Charlotte Sound, the Strait of Georgia, and Howe Sound, typically at depths ranging from 90 to 300 metres, though some in Howe Sound are as shallow as 22 metres.

GSRs play a critical role in marine ecosystems. They provide habitat, refuge, and nursery areas for over 120 aquatic species, including rockfish, sea stars, crabs, and spot prawns. Species richness within reef footprints is approximately three times higher than in surrounding areas. They contribute to ocean health by filtering vast quantities of water.

Because their skeletons are made of silica, GSRs are highly sensitive to disturbance. Glass sponge reefs grow slowly, only 1 to 2 cm per year, and have very fragile rigid skeletons. This makes them highly vulnerable to bottom-contact fishing gear and other bottom contact activities. Damage to these reefs can take decades or centuries to recover, and activities that resuspend sediment may inhibit new growth or suffocate existing sponges.

To mitigate these risks, DFO has implemented conservation measures, including phased fisheries closures that began in 2014. These protection measures aim to preserve the structural integrity and ecological function of GSRs, ensuring their continued role in supporting biodiversity and maintaining healthy marine ecosystems and fisheries.

Rockfish Conservation Areas (RCA)

RCAs were established as part of a broader rockfish conservation strategy in British Columbia developed in 2001 by DFO, which also included measures such as comprehensive catch monitoring and efforts to reduce fishing mortality. Between 2003 and 2007, 162 RCAs were designated across the British Columbia. These areas were closed to a range of recreational and commercial fishing activities for species such as Yelloweye, Quillback, Copper, China, Black, and Tiger rockfish.

RCAs were designed as long-term spatial conservation measures to alleviate further declines in inshore rockfish populations by reducing mortality and protecting their habitat. Over time, RCAs have continued to play an important role in rockfish conservation as one of several key fisheries management tools. In 2018, a review began that focused on assessing whether existing RCAs were meeting their conservation objectives and to identify opportunities for improvement.

Two key scientific assessments were conducted to support this review:

- 2019: [A Regional Assessment of Ecological Attributes in Rockfish Conservation Areas in British Columbia](#): This study reviewed all RCAs for four ecological attributes: size, rockfish habitat, depth, and connectivity and assessed whether they could be modified to better meet conservation goals. (DFO 2019)
- 2020: [Risk Assessment of Permitted Human Activities in Rockfish Conservation Areas in British Columbia](#): This analysis examined whether activities permitted in RCAs posed a conservation risk and if current management measures aligned with criteria for OECMs. (DFO 2020)

The 2020 DFO science advice highlighted that some permitted fisheries may pose risks to rockfish conservation by removing prey species, impacting habitat, or contributing to direct mortality. In addition to the above, site-level assessments were conducted to determine whether individual RCAs are achieving their intended outcomes. Some areas may also not be meeting their conservation objectives due to the boundary designs and habitat coverage.

The coastwide review of RCAs is currently paused, except for the five RCAs included in this project and select sites in the Northern Shelf Bioregion. This approach reflects a shift toward more detailed site-level analyses that were needed to effectively review specific RCAs in the project area, particularly those associated with coral and sponge aggregations. DFO will communicate any future plans regarding the broader RCA review as they become available.

GSR-RCA Project Details

The GSR-RCA Project aims to strengthen conservation measures in Jervis Inlet and Howe Sound, focusing on ecologically important benthic habitats. While the project initially included Sechelt Inlet, Indian Arm, and Salmon Inlet, these areas were removed to allow for more in-depth analysis of key sites.

Using updated scientific advice, habitat data, and engagement feedback, the project assesses existing Rockfish Conservation Areas (RCAs), Glass Sponge Reefs (GSRs), and newly identified aggregations to

determine what's needed to effectively conserve inshore rockfish, lingcod, and their habitats. DFO science surveys in 2021–2022 revealed high concentrations of boot sponges, corals, and rockfish beyond mapped GSRs, primarily near Hardy Island, Culloden Point, and Hotham Sound. These findings, along with the 2020 DFO Science advice, highlight habitat impacts as a concern in five RCAs. This supports the need to reassess boundaries and management measures in the project area.

The project aligns with [*DFO's Policy for Managing the Impacts of Fishing on Sensitive Benthic Areas*](#), which emphasizes protecting vulnerable habitats that support ecological functions. Key features identified for conservation include glass sponge reefs, sponge gardens, corals, eelgrass beds, and rocky relief habitats.

To mitigate risks from fishing activities, the project is exploring the establishment of marine refuges that support long-term biodiversity and contribute to Canada's marine conservation targets.

Engagement on this initiative began in 2022 to gather early input. Thank you to all individuals and organizations who provided feedback throughout the process so far. The current proposal reflects input received during the initial stages of engagement, and additional feedback is still being reviewed on the six sites that are now proposed as marine refuges. DFO is continuing consultation through advisory board meetings and bilateral sessions in fall 2025.

GSR-RCA Project Goals and Objectives

The overarching goals for the project are to protect inshore rockfish and lingcod, their habitat, and high-density coral and sponge aggregations. More detailed objectives include:

- Prevent damage to unprotected GSRs and dense coral and sponge areas from bottomcontact gear and from resuspended sediment.
 - Recent surveys in Jervis Inlet¹ revealed new and high concentrations of boot sponges, corals, and rockfish beyond currently mapped reefs, primarily near Hardy Island, Culloden Point, and Hotham Sound. Some other sites in the project area E.g., Pam Rock, contain unprotected high density glass sponge aggregations.
 - This includes protecting the reef and a 150m buffer to protect against the impacts of sedimentation.
- Maintain the structural integrity and associated ecological functions of rocky sponge-covered slopes, which serve as shelter, spawning grounds, and feeding areas for inshore rockfish and lingcod.
- Protect soft-bottom habitats such as glacial sills and muddy basins that support structureforming species like sea whips, sea pens, and eelgrass. These habitats are important for juvenile fish and invertebrates and contribute to overall biodiversity. Repeated trap use can disturb sediments and reduce vertical structure, making these areas less suitable for marine life.
- Design protected areas to reduce edge impacts and improve habitat connectivity, enabling species like rockfish and lingcod to complete their life cycles within these areas.
- Recognize the broader ecosystem, beyond the GSR footprint, that supports the full life cycle of key species. Integrated protection is essential for effective conservation and the long-term viability of multiple fisheries.
- Where possible, increase the size of some sites to meet the science recommended minimum of 5km² (DFO 2019).
- Several DFO surveys have documented physical damage to GSRs, including the presence of lost fishing gear and signs of disturbance to reef structure, underscoring the vulnerability of these habitats to bottom-contact activities, including fishing².

¹ DFO. In Prep. Mapping sponges, corals, and rockfishes in and around Rockfish Conservation Areas in Jervis Inlet, Pacific Canada. DFO Can. Sci. Advis. Sec. Sci. Resp.

Feedback Received and Considerations

Throughout the engagement process for the *GSR-RCA Project*, DFO received a range of feedback from Indigenous groups, industry representatives, and environmental organizations. This input has helped shape the direction of the project and highlighted key areas of concern and interest.

One consistent theme was concern about the potential impacts of new conservation measures on fishing activities. Stakeholders noted that proposed closures or boundary changes could displace fishing effort to other areas, potentially increasing pressure on adjacent ecosystems and strongly affecting specific sectors, such as invertebrate fisheries. These compounded impacts were seen as particularly significant for communities and operators who rely on access to traditional fishing grounds.

There was also a strong desire for greater clarity around the conservation benefits of the proposed changes. Engaged groups asked for more information on the ecological drivers behind the project, including how alignment of RCAs and GSR closures would improve habitat protection and species outcomes. Many emphasized the importance of grounding decisions in science and clearly communicating the goals of the project. The previous section, “*GSR-RCA Project Goals and Objectives*” outlines the project goals in detail and provides further context around the drivers for this work.

The need for a long-term monitoring and management plan was another key point raised. Participants expressed interest in understanding how GSRs and RCAs would be monitored over time, and how adaptive management would be used to respond to new data or changing conditions. This was seen as essential for ensuring transparency and accountability in conservation efforts. The

² Fisheries and Oceans Canada. (2020). Ground-truthing the latest set of suspected glass sponge reefs in Howe Sound: Reef delineation and status assessment. Canadian Science Advisory Secretariat Science Response 2020/026. 29 pp.; DFO. In Prep. Mapping sponges, corals, and rockfishes in and around Rockfish Conservation Areas in Jervis Inlet, Pacific Canada. DFO Can. Sci. Advis. Sec. Sci. Resp development of a GSR monitoring plan is anticipated to begin through the DFO Canadian Science Advisory Secretariat (CSAS) this fall. In June 2025, a CSAS meeting for RCA monitoring advice was held and that advice will be published on the CSAS webpage when it is finalized.

Operational and conservation concerns were also highlighted. Participants noted that differing boundaries, closure types, and management measures across RCAs and GSRs can create confusion on the water. They also noted that more understandable boundaries have been shown to be more effective. Navigating fishing regulations is already complex, and inconsistent or unclear rules may hinder compliance. Depth considerations were also raised, particularly for fisheries operating over GSRs, where gear deployment and habitat sensitivity vary significantly.

Enforcement and compliance were recurring topics. Representatives asked how alignment of conservation areas would improve enforcement, and whether clearer boundaries and consistent rules could support better outcomes. Many participants also noted witnessing repeated infractions in the project area, and the importance and need for effective conservation and enforcement activities.

There was also a request to review current price data in fisheries overlap analyses to ensure that socioeconomic assessments reflect actual market conditions. This has been completed in conjunction with the Pacific Prawn Fishermen’s Association and DFO, and has been included in the socioeconomic analysis.

Finally, some participants expressed confusion or concern about the term “marine refuge”. Clarifying what this recognition entails – how it differs from existing closures, what activities are permitted, and how it contributes to conservation targets, was identified as an important step in building understanding and support.

Looking Forward

The proposed conservation measures are site-specific and do not apply coastwide; they are focused on select areas in the project area where scientific assessments and stakeholder engagement have identified ecological concerns.

A final decision on proposed marine refuges, associated boundary modifications and management measures, is anticipated in early 2026, with implementation planned prior to the start of the fishing 2026 season.

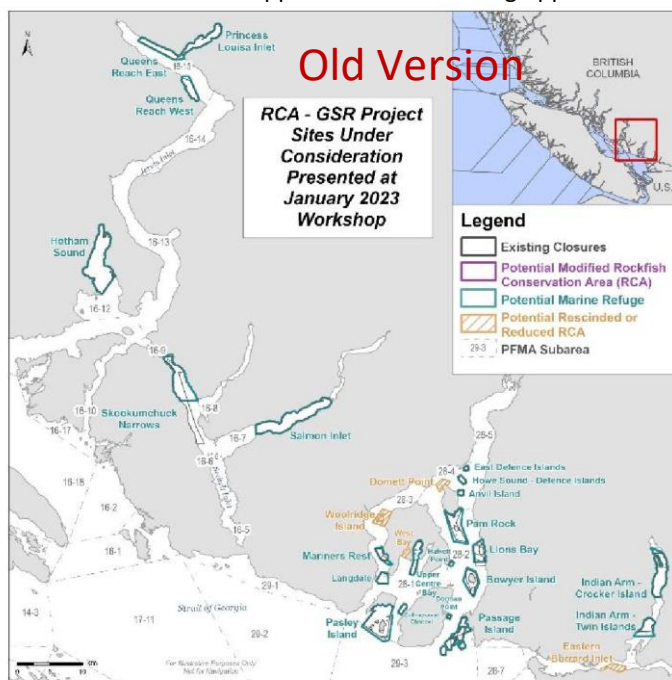
From September to November 2025, DFO will present the proposal at relevant advisory board meetings and conduct bilateral meetings with Indigenous groups, industry representatives, ENGOs and other interested parties. In parallel, DFO will continue work on assessing non-fisheries threats to sensitive benthic habitats.

To support meaningful input and ensure timelines are met, early bilateral meetings are encouraged, particularly with groups where specific interests or concerns are anticipated. Written comments should be submitted by November 14, 2025, and earlier if possible, to the project team at dfo.pacfmmt-ocmgppac.mpo@dfo-mpo.gc.ca.

Proposed Marine Refuges in the GSR-RCA Project

Overview of Sites

The initial version of the GSR-RCA Project included 21 potential marine refuges, as shown in an earlier engagement and in Map 1. In response to significant feedback from consulted groups, the scope has been refined to focus on six proposed sites. All six sites contain GSRs and have a high potential to contribute to biodiversity protection and healthy fisheries in Howe Sound and Jervis Inlet. Where feasible, boundaries have been reduced to support continued fishing opportunities while still meeting conservation objectives.



Site Specific Information

Please note that the names of the proposed sites are not final and are being used for reference purposes during this consultation period. These names may be updated as the project progresses, and further input is received. All six sites contain at least one GSR.

Key terminology

- Low/high scoring/ranking: did not meet one or more of the ideal criteria if low
- Depth ranges: inshore rockfish are typically found shallower than 200m
- Spillover risk: some RCAs are designed in ways that lead to adult fish moving out of the boundaries. This should be minimized to allow adults enough time to reproduce in a site, which can increase conservation for rockfish
- Connectivity: movement of fish (larvae/adults) between reserves
- GSR: GSRs are built on skeletons of previous generations. May consist of live and dead area
- Sponge garden: aggregation of sponges at a notably higher biomass than in surrounding areas, but without evidence of reef formation
- Ratio-to-edge: biodiversity objectives are better served by protected areas that are larger with minimized edges – RCAs with longer perimeter/edge boundaries likely experience higher spillover and more fishing along boundaries

Data considerations

Habitat and Species Presence

- Eelgrass, kelp beds, rockfish, coral, and sponge observations
- Rockfish Habitat Models
- Science surveys (e.g., Jervis Inlet surveys in 2021/2022)
- Bathymetry
- Detailed substrate reviews

Commercial

- Commercial harvest data
- Biological sampling data
- Trap modifications
- Prawn spawner surveys: minimized any effects of proposals on those sites

Recreational

- The Internet Recreational Effort and Catch reporting program (iREC) estimates

Additional considerations were reviewed throughout the engagement process, including input shared during bilateral meetings. While not all of these are reflected in this summary, they have informed the overall development of the proposal. Because of the volume and nature of the input received, including confidential or context-specific contributions, it is not possible to list all items individually.

Mariner's Rest Proposed Marine Refuge

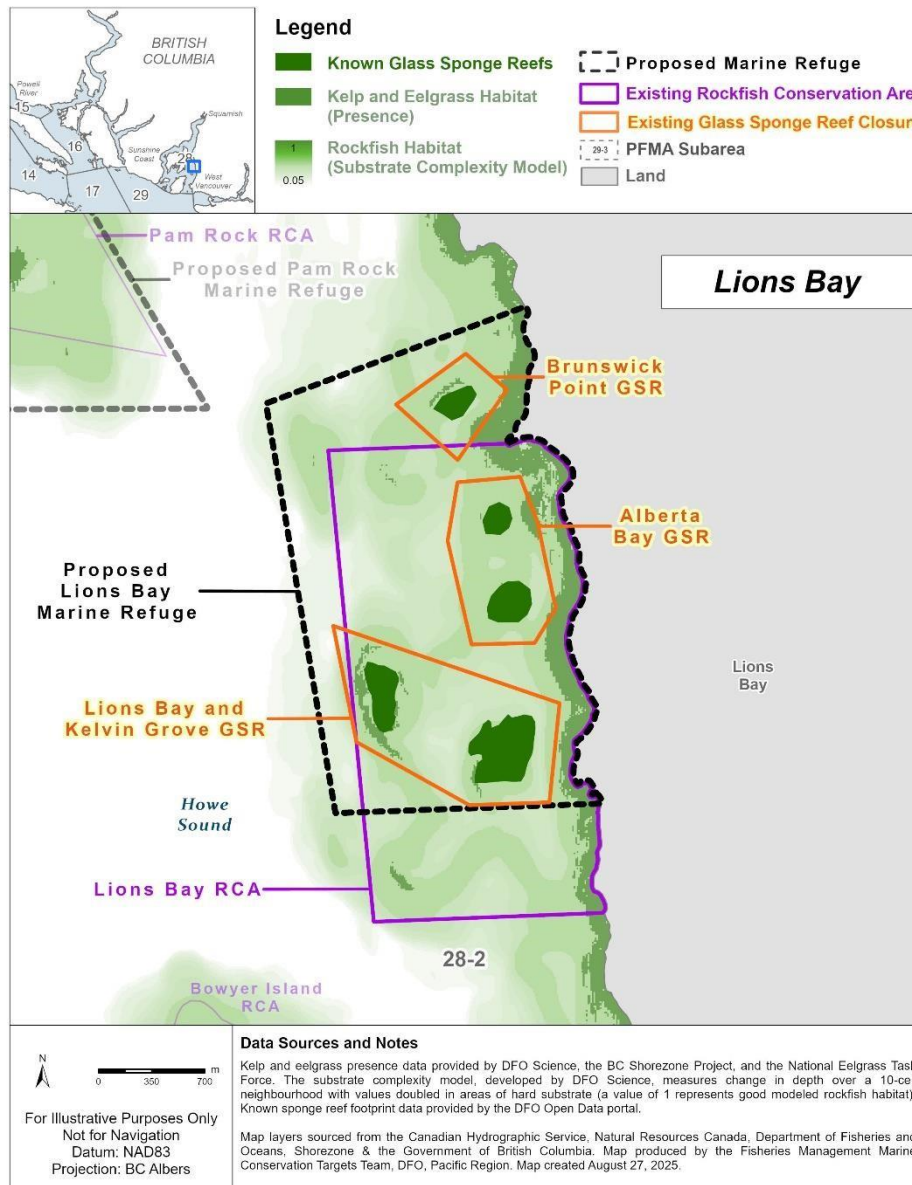
- Contains a protected GSR.
- Currently a low scoring RCA and below the recommended size for adequate protection of rockfish.
- This RCA has a high spillover risk as the boundary slices rockfish habitat in both the North and South. Extending North and South sections to more fully encompass rockfish habitat would better protect rockfish and their habitat and allow for connectivity.



Lion's Bay Proposed Marine Refuge

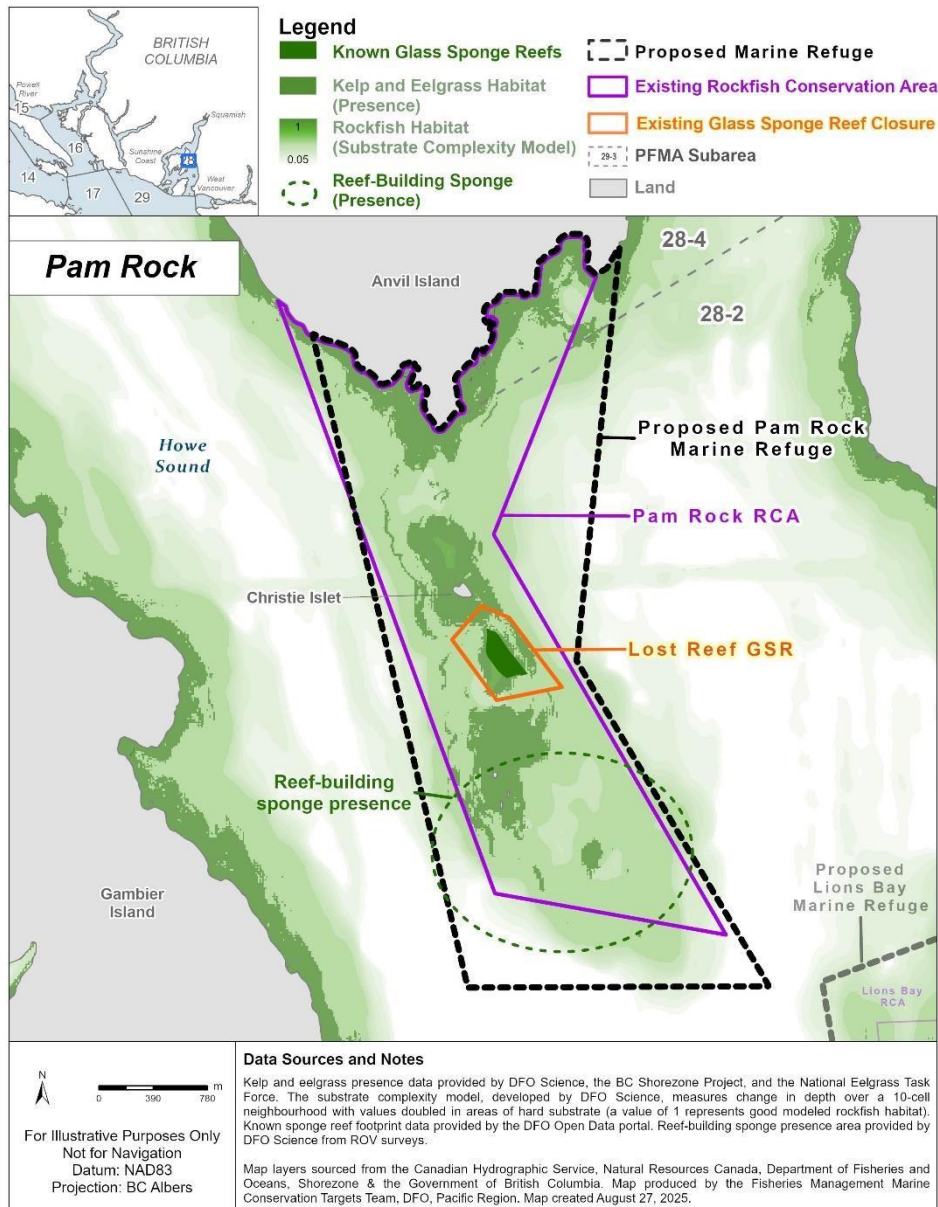
- Contains three protected GSRs.
- Currently ranked in the top 50% of RCAs and is one of the top 7 that could benefit from improvement due to high quality habitat surrounding the existing RCA closure.

- Reduce boundaries that intersect rockfish and glass sponge reef habitat.
- Combine three GSR & one RCA closures into one marine refuge by extending the northern portion of the RCA to include Brunswick Point GSR to reduce spillover.
- Strengthening protections would better protect rockfish and their habitat and allow for connectivity.



Pam Rock Proposed Marine Refuge

- Contains one protected GSR and high-density glass sponge north and south (see dashed circle) of the GSR.
- Proposed to combine the Pam Rock RCA and Lost Reef GSR into one marine refuge.
- Proposal includes sponge garden near Christie Islet.
- Configuration focuses on glass sponge and rockfish habitat and increases the depth profile in the northeastern quadrant.
- Strengthening protections would better protect rockfish and their habitat, protect high density glass sponges that are currently unprotected, and allow for connectivity.



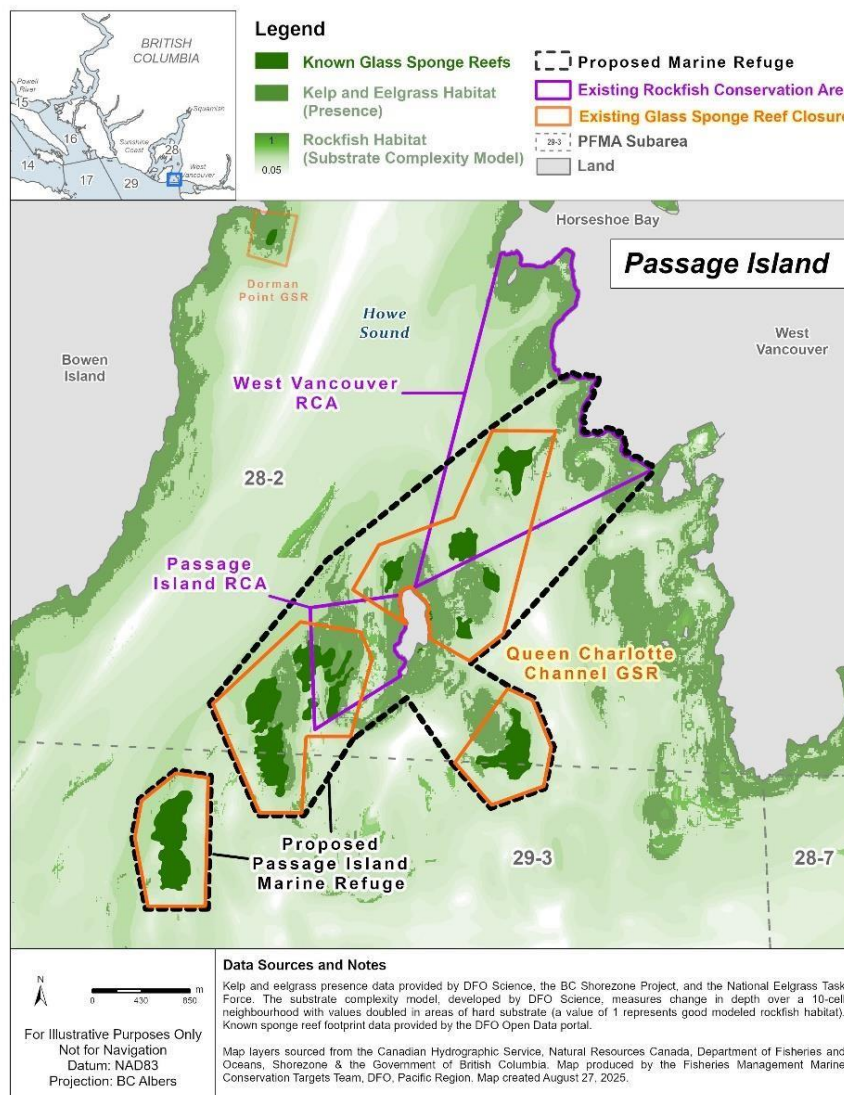
Passage Island Proposed Marine Refuge

- Contains four protected GSRs and dead reef areas.
- West Vancouver RCA highly ranked. Passage Island RCA has a lower ranking. Both RCAs are in the top 7 RCA sites recommended for improvement due to the high-quality habitat surrounding the existing RCA closure.
- Both RCAs below the recommended size and intersect RCA habitat - causing a high spillover risk for fish.
- This location needs improvement for connectivity between closures (e.g., GSRs) and to meet the depth, size, distance-to-boundary, habitat area and ratio-to-edge RCA criteria.
- Proposal to combine Queen Charlotte Channel GSR, Passage Island RCA and West Vancouver RCA into a new marine refuge to be more all-encompassing and include dead reef GSR habitat.
- Protecting the 2 dead GSRs:

- Habitat value: although classified as "dead," these reefs retain complex structure that provides habitat for various species.
- Recovery potential: preserving reef structure, both live and dead, is crucial for reef recovery and growth, which in turn preserves the reefs' ecological function². Protecting these areas from bottom-contact fishing is necessary to maintain the conditions that support sponge regrowth and ecological connectivity. ○ Incomplete sampling: some areas have not been fully surveyed and may still contain live sponge, which is vulnerable to damage from bottom-contact gear.
- For marine refuges to be ecologically effective, they must be guided by sound design principles. This includes incorporating areas that contribute to habitat function, recovery, and connectivity. Protecting these areas helps safeguard sensitive habitats and supports long-term reef resilience.
- Remove Northern portion of the RCA to allow for fishing opportunities while maintaining ecological integrity of the site.

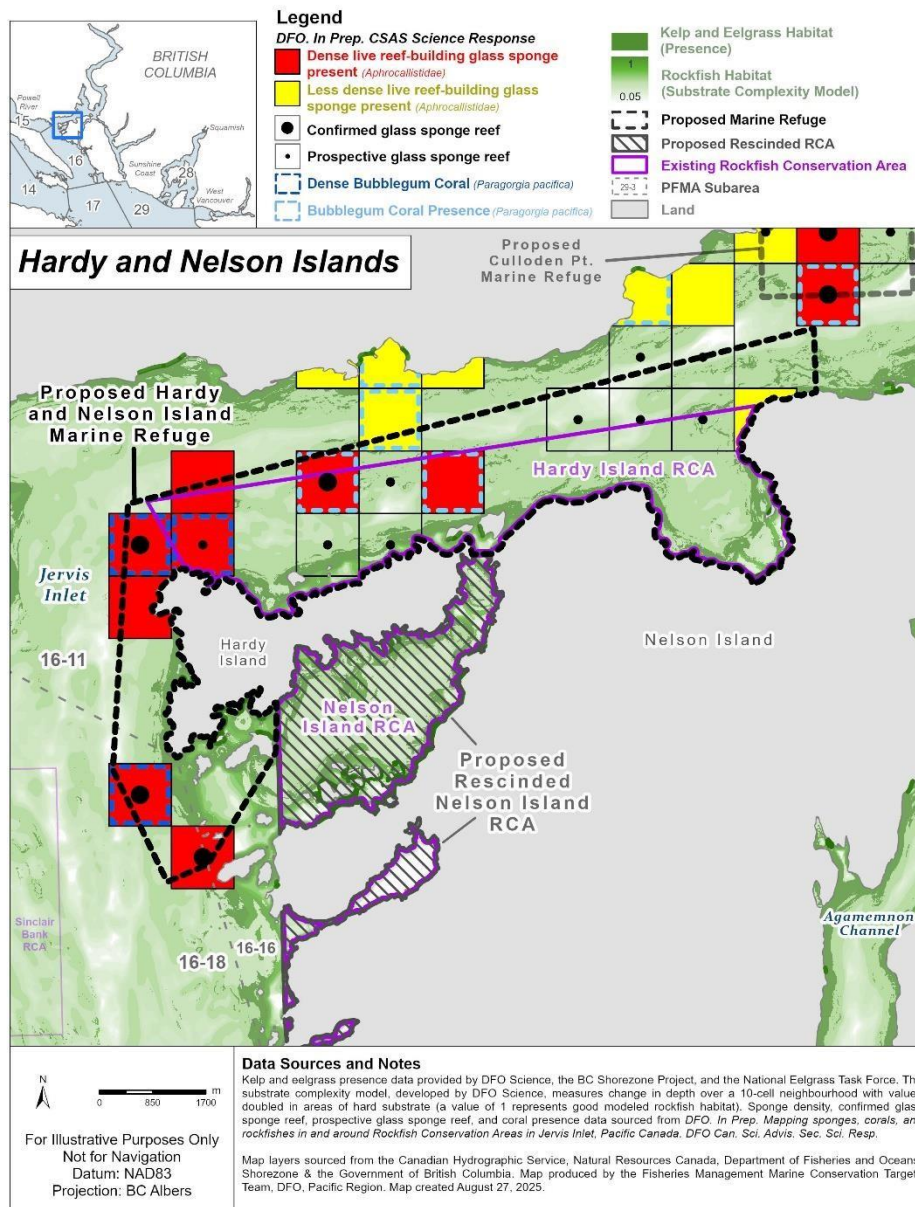
² Fisheries and Oceans Canada. (2020). Ground-truthing the latest set of suspected glass sponge reefs in Howe Sound: Reef delineation and status assessment. Canadian Science Advisory Secretariat Science Response 2020/026. 29 pp.

Passage Island Proposed Marine Refuge (Continued)



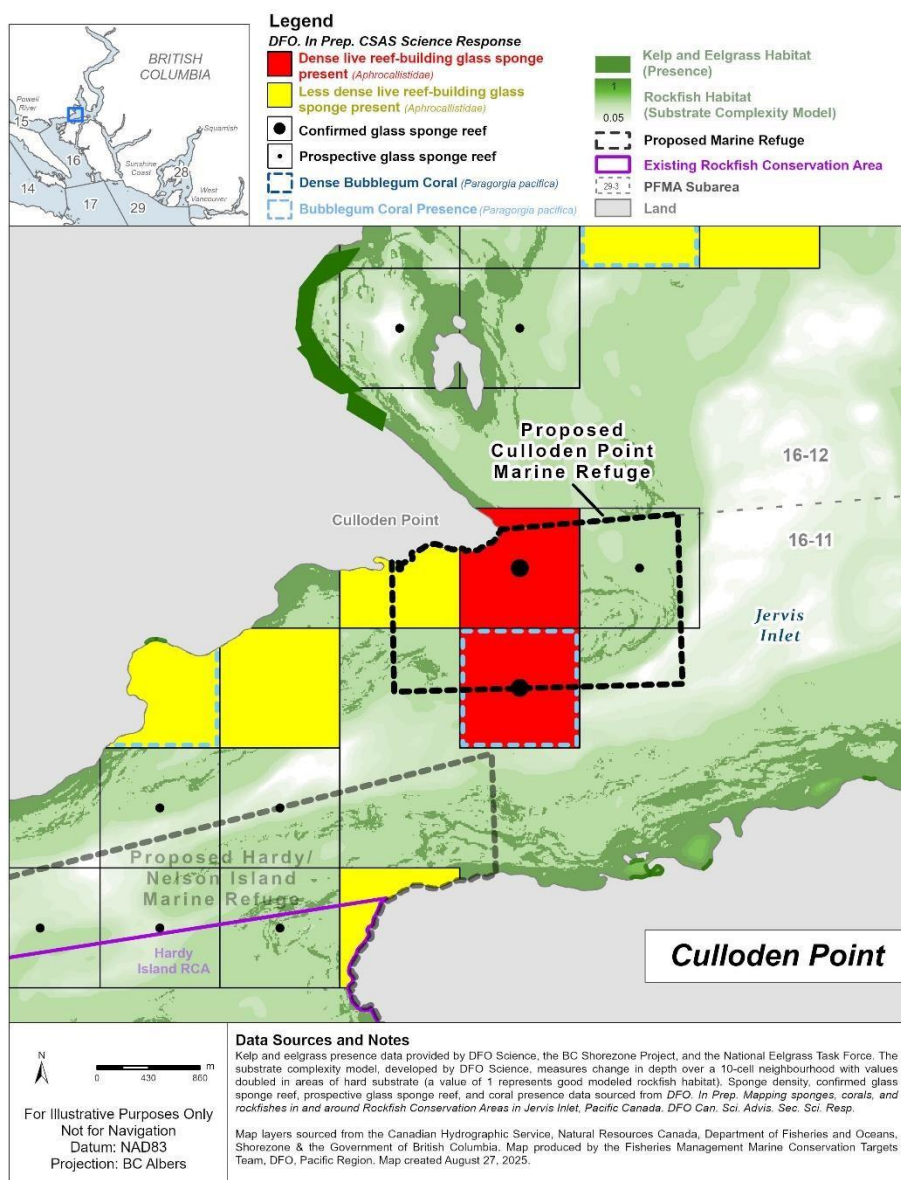
Hardy and Nelson Island Proposed Marine Refuge

- New high-density coral and sponge aggregations and confirmed GSR formation found in 2021/2022 DFO science surveys.
- Hardy Island RCA has a low conservation score due to isolation. It met all ideal criteria except for habitat area.
- Coral, sponge, and eelgrass presence observations spread across site.
- Quillback, yelloweye & lingcod observed at the site (DFO Survey 2021/22).
- Protecting coral and sponge in this site could provide stronger biodiversity protection for many species, including lingcod, rockfish, and prawn.
- Rescinding Nelson Island RCA.



Culloden Point Proposed Marine Refuge

- New high-density sponge aggregations, coral presence, and confirmed GSR formation found in 2021/2022 DFO science surveys.
- High value complex habitat site with strong potential to contribute to rockfish conservation and provide broader ecosystem benefits.
- Quillback, yelloweye & lingcod observed at the site (DFO Survey 2021/22).



Proposed Management Measures for the GSR-RCA Project

First Nations Fisheries

- Potentially impacted First Nations will be engaged and consulted with on a bilateral level.

Commercial Fisheries

- All Groundfish, including Rockfish, Midwater Trawl, Hook and line, Dogfish, and Bottom Trawl
- Shellfish: Crab by Trap, Prawn by Trap, and Shrimp Trawl
- Salmon: Troll, Seine, and Gillnet
- Pelagics: Tuna Hook and Line
- All: Bottom-contact fisheries

Recreational Fisheries

- Salmon: Trolling and Mooching (with downriggers), Angling
- All Groundfish, including Halibut, Groundfish by Angling, Lingcod

- Invertebrates: Crab, Prawn and Shrimp, Octopus by Angling, Squid by Jigging
- All: Bottom-contact fisheries
- All: Spearfishing

Policy and Economics Summary for the GSR-RCA Project

DFO's Policy and Economics team conducted an analysis that estimated the commercial and recreational activity and potential impacts in the proposed marine refuge sites. For commercial data, this includes information pre-and post-GSR implementation, potential impact to landed value, concentration of catch per unit effort in some sites. A summary is presented below.

Commercial Fisheries

The analysis examined proposed closures across six marine refuge sites, including overlaps with existing GSRs and RCAs, using historical harvest activity from 2014 to 2023. Fisheries assessed included prawn, crab, shrimp trawl, and groundfish trawl, with spatial buffers of 500m and 1,080m applied to capture potential economic activity. Key metrics evaluated were landed kilograms, landed value, wholesale value, total GDP contribution, number of vessels, catch per unit effort (CPUE), and pre- versus post-GSR implementation activity. Data sources included logbooks, sales slips, DFO price surveys, dockside prawn price surveys, BC provincial wholesale value data, and the BC Fisheries and Aquaculture Sector Report (2022). In addition to quantitative analysis, the narrative explored potential displacement of fishing effort, congestion in adjacent areas, and the economic vulnerability of harvesters operating in high-productivity zones.

Annual Average Commercial Harvest Pre-GSR Implementation and within the Potential Marine Refuge (all \$ values shown in 2023\$) [range shows 500m and 1,080m buffers applied]

Potential Marine Refuge (and relevant GSRs)	Landed Value ³	
	Within GSR Pre-GSR Implementation	Potential Marine Refuge
Hardy-Nelson Island	No existing GSR	\$301,000 - \$370,000
Culloden Point	No existing GSR	\$25,000 - \$52,000
Mariners Rest (Mariners Rest GSR)	\$4,000	\$78,000 - \$107,000
Pam Rock (Lost Reef GSR) and Lions Bay (Alberta Bay GSR, Brunswick Point GSR, Lions Bay and Kelvin Grove GSR)	\$22,000	\$98,000 - \$115,000
Passage Island (Howe Sound – Queen Charlotte Channel GSR)	\$134,000	\$203,000 - \$276,000
Total Potential Impact	\$160,000	\$705,000 - \$920,000

For commercial fisheries, implementing potential marine refuges increases the area for which certain fisheries are not permitted to operate. Some potential marine refuges encompass existing GSRs which were

³ All of the sites only contain information across relevant years with harvest activity.

implemented at various points after 2014. The average annual value of activity that occurred within the GSRs prior to implementation was \$160,000. Based on historic data, the value of activity which occurs within the potential marine refuges is used as a proxy to represent incremental revenues that could be foregone. The average annual revenue at risk is \$705,000 to \$920,000. Hardy-Nelson Island and Passage Island potential marine refuges account for the majority of the potential foregone harvest. The prawn fishery makes up nearly the entire revenue stream in the potential marine refuges. It is expected that additional costs may be incurred by displaced harvesters following implementation. There are concerns around congestion in the areas surrounding the marine refuges, which could lead to lower productivity per vessel and therefore lower profitability. For example, the catch per unit effort (CPUE) for prawn is 29% higher in the affected areas.

Recreational Fisheries

Potentially Affected Annual Average Recreational Fishing Activity

Metric (all \$ values shown in 2023\$)	
Fishing Days	1,375
Total Expenditures	\$488,000
Major Expenditures	\$198,000
Package Expenditures	\$23,000
Direct Expenditures	\$267,000
GDP Contribution	\$171,000

About 0.1% of coast-wide recreational fisheries days occur in the potentially affected areas. However, costs will be concentrated in the Howe Sound area, with almost half a million (\$488,000) in potentially affected revenue for businesses that supply the recreational sector. It is unclear to what extent recreational harvest might be displaced.

Summary for *GSR-RCA Project*

This proposal focuses on increasing protection for the highest quality habitats to support multispecies benefits, including corals, sponges, eelgrass, rocky reefs, and kelp. Site selection is based on the latest available scientific data and advice, such as the 2021/2022 Jervis Inlet survey results, and spawner index sites have been minimally impacted. We are seeking feedback on the *GSR-RCA Project*.

Guiding questions for feedback:

Social and Economic

- Has the socioeconomic information for your fishery been accurately captured?

Closure Boundaries

- Do you have any additional information or concerns about the current proposed boundaries?

Community and Culture

- Is there specific local knowledge or cultural information that should be considered to improve the accuracy or completeness of these proposed marine refuges?

Other Considerations

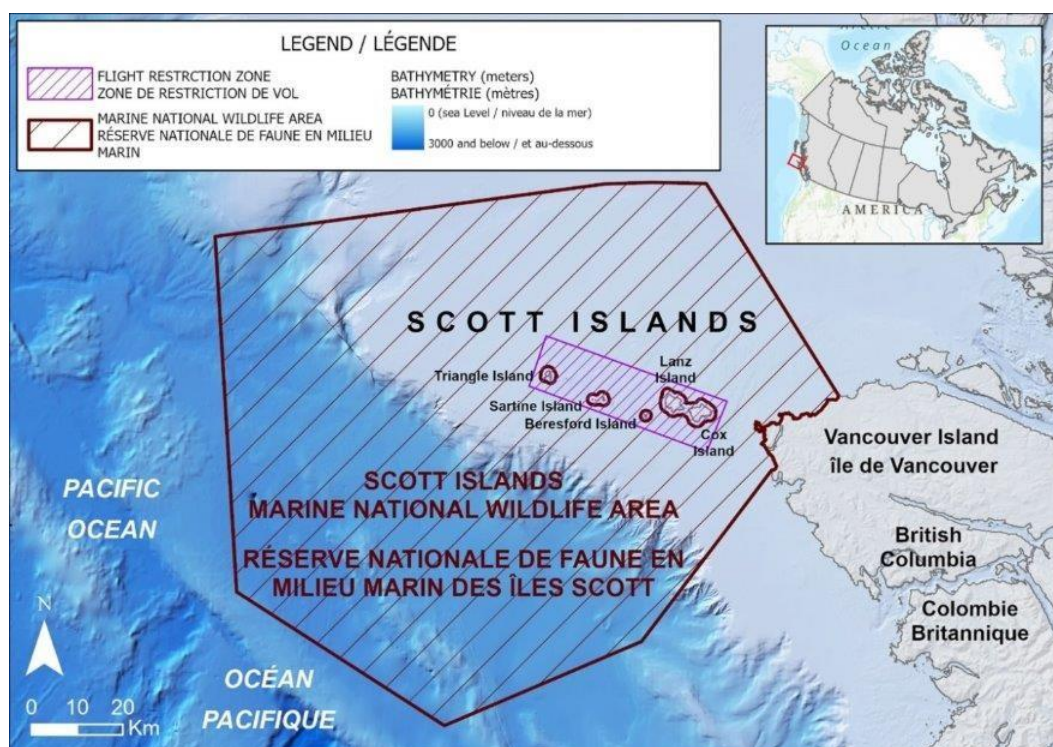
- Is there any other information that should be considered to improve accuracy or completeness of these proposed marine refuges?

Questions, concerns, or written feedback can be submitted to dfo.pacfmmt-ocmgppac.mpo@dfompo.gc.ca by November 14, 2025. A decision on the recommendation of proposed marine refuge sites is expected in early 2026.

Proposed Biodiversity Protection Regulations (BPR) within the Scott Islands marine National Wildlife Area (NWA)

Site Description:

- In 2018, Environment and Climate Change Canada established the Scott Islands marine National Wildlife Area (NWA; alternatively known as the Scott Islands Protected Marine Area) to protect the millions of migratory seabirds that congregate on the islands to nest, as well as their prey and habitat. Fisheries and Oceans Canada released a Notice of Intent to develop management measures to mitigate risk from fisheries in support of the conservation objectives of the marine NWA.
- DFO is proposing the use of Biodiversity Protection Regulations (BPR) under Section 43.3(1) of the *Fisheries Act* to establish management measures to mitigate risks from select fishing activities and provide long term protections for the highly biodiverse area.
- Consultations have been ongoing since 2017 with no major concerns received from the commercial sector on the proposed fisheries closures. Fisheries Management is notifying stakeholders on our intent to move forward with pre-publication in Canada Gazette, Part I, dependent on responses received during final consultations.



Fisheries proposed to be restricted through the BPR:

- Commercial groundfish bottom trawl: Minimal anticipated impact; proposed Scott Islands marine NWA closures align with current bottom trawl footprint variation order.
- Commercial Pacific sand lance and Pacific Saury: Minimal anticipated affect; commercial fisheries for these species do not currently exist in the area.
- Commercial Northern Pacific krill: Minimal anticipated affect; commercial fishery does not currently occur in the area.
- Commercial salmon (gillnet and seine): Minimal anticipated affect; commercial fishery does not currently occur in the area.

Current Status:

- Fisheries Management is seeking feedback from potentially affected fisheries (groundfish bottom trawl, euphausiid, and salmon by gillnet and seine gear) on the proposed regulations by November 17, 2025, prior to moving forward with a pre-publication in Canada Gazette Part I.

Looking Forward:

- Feedback can be directed to the Marine Conservation - Fisheries Management team via email: DFO.PACFMMCT-OCMGPPAC.MPO@dfo-mpo.gc.ca.
- Fisheries and Oceans Canada is planning to pre-publish in Canada Gazette Part I where public comments will be open for 30 days. An official pre-publication date has not been finalized.

Other Marine Conservation Target Initiatives

Other new federal marine conservation initiatives that are being implemented in context of the Northern Shelf Bioregion (NSB) Marine Protected Area (MPA) Network Action Plan, e.g., including DFO Oceans Act MPAs, PCA National Marine Conservation Area Reserves, and the ECCC marine National Wildlife Area, will be engaged on as appropriate in context of respective conservation tools and site establishment processes. To note, there are no anticipated fisheries closures this year associated with these other federal marine conservation initiatives. Broader Network engagement at the bioregional level will continue through the NSB MPA Network partners.

Link to all Other Effective Area-Based Conservation Measures: [Marine refuges across Canada \(dfompo.gc.ca\)](https://dfompo.gc.ca/marine-refuges-across-canada)

Exhibit 2

DFO's Proposed GSR-RCA Project – Briefing Notes and Recommendations to Council

John Robb, Nov 6, 2025

This GSR-RCA project involves changes to a number of existing marine conservation areas or marine refuges in Howe Sound, one of which is the Proposed Marine Refuge which alters the existing fishery restrictions in place for GSRs (Glass Sponge Reefs) and RCAs (Rockfish Conservation Areas) off the coast of Lions Bay^{4,5}. DFO has asked for questions, concerns, or written feedback on this project by Nov 14th, 2025.

Given that there is a fair amount of material to digest, this memo provides summarized background on:

- i) the goals of marine conservation initiatives in Howe Sound
 - ii) the differences between GSRs and RCAs and why the proposal for the new Marine Refuge is being made by DFO
 - iii) the changes specifically with respect to Lions Bay, and both my commentary and opinion on these
- and
- iv) my recommendation to Council based on iii) and an associated draft letter of response to DFO for Council's consideration

Lastly, the Village of Lions Bay is not obligated to provide comments, but it seems to me that there are impacts that are of material interest to the community; and, notwithstanding the tight timeline, if agreement on a response can be reached by Council by Nov 14th, it should be submitted: otherwise DFO will certainly move forward as it sees fit.

Marine Conservation in Howe Sound

Only forty years ago, Howe Sound was considered severely polluted, suffering the legacy of over a century of heavy industry including mining, pulp and paper production, and chemical processing. The current marine ecosystem in 2025 is considered one of British Columbia's most dramatic environmental recovery stories, and the region is now a designated UNESCO Biosphere Reserve, reflecting its ecological value and an ongoing commitment to biodiversity and sustainability. Key signs of this ecosystem recovery are that marine life including herring, salmon, seals, sea-lions, dolphins, and whales has rebounded strongly after decades of absence, and more than 5,600 species have been documented by citizen scientists in the region, showing high biodiversity for a recovering marine ecosystem. Longer-term Lions Bay residents can talk to the fact that few people swam at Brunswick Beach 30 years ago because of the conditions, and over the same period since I have experienced first-hand the astonishing improvement in the diversity and density of marine life underwater, including rockfish populations in some areas although they have been slower to recover on a widespread basis due to their long lifespans and low reproductive rates.

Glass sponges are globally unique, but vital components of Howe Sounds ecosystem. The reefs serve as habitat, nursery, refuge, and feeding grounds for a remarkable variety of marine life, including rockfish, prawns, crabs, sea stars, shrimp, and many other invertebrates and fish. Biodiversity within the reefs is considerably higher than in surrounding areas—up to three times more species have been recorded among the reefs. The sponges are also extraordinary filter feeders, with entire reefs capable of filtering billions of liters of water each day, removing bacteria and excess organic matter, and contributing to improved water quality. The filtration process also cycles nutrients such as nitrogen and carbon, supporting the productivity of the broader ecosystem. Finally, the complex reef structures help stabilize the marine ecosystem by linking seafloor and pelagic open water environments, and supporting food webs, thereby enhancing resilience to environmental change.

Healthy rockfish communities provide food web stability since they serve as both predators and prey in marine food webs, helping maintain balance by controlling populations of smaller fish and invertebrates while also providing food

⁴ A marine refuge is a type of area-based fisheries closure established under the Fisheries Act that provides long-term biodiversity conservation benefits. These areas are designed to mitigate risks posed primarily by fishing activities but may also address other human activities if a risk is identified. Both GSRs and RCAs are already existing types of marine refuges.

⁵ See current map in Schedule 1.

for larger species such as lingcod, sea birds, and marine mammals. The presence of strong rockfish populations contributes to the overall stability and productivity of marine communities. In additions, healthy, protected rockfish populations facilitate the replenishment of fish stocks in surrounding areas through spillover. Larvae and adult fish can move out of conservation areas, increasing abundance and productivity in adjacent unprotected regions, which benefits both the ecosystem and sustainable fisheries.

All in all, rockfish are considered an indicator species - protecting them confers protection to the broader ecosystems and diverse marine habitats in which they live, and their health is used to gauge the effectiveness of marine conservation efforts. While adult rockfish numbers in some Howe Sound sites have stabilized or moderately increased thanks to conservation measures, recovery is incomplete; populations remain a fraction of historic abundance, and ongoing monitoring continues to determine long-term trends.

DFO's ongoing goals from its marine conservation work in Howe Sound is a mixture of species- and habitat-based protections under larger ecosystem goals of sustained recovery, resilience and stewardship of an ecologically significant region. Protecting glass sponge reefs and promoting rockfish recovery and habitat conservation are keystone initiatives in support of these goals.

GSRs, RCAs and the Proposed Marine Refuge Replacements

GSRs are currently isolated areas (see Schedule 1) established to protect the habitat areas. All commercial, recreational, and Indigenous food, social, and ceremonial bottom-contact fishing activities are fully prohibited in these zones. This includes the use of gear such as traps (for prawns, shrimp, and crab), bottom trawls, and hook-and-line methods for groundfish, and in many cases also recreational salmon trolling. Despite protection, damage from gear continues, as can be seen in the circled areas below⁶:



RCAs are larger areas designated to support population recovery. Within RCAs no commercial or recreational fishing is allowed; but in some RCAs such as Lions Bay, invertebrate fishing (prawns, crabs etc) is allowed. This is the crucial current prohibition difference between the Lions Bay GSRs and RCA.

What DFO is now proposing as part of the GSR_RCA project is replacing the 2 existing sets of reserves with a new GRS-RCA marine reserve, for the following primary reasons:

⁶ Extensive damage to the Halkett GSR.

1. Increased Conservation Effectiveness

1. Recent scientific advice has suggested that while RCAs and GSR Marine Refuges have provided some protection, their boundaries and allowed activities do not always match the needs of sensitive habitats and threatened species.
2. Overlapping closure types (GSR, RCA, and others) cause regulatory gaps and inconsistencies, weakening the overall ecosystem protection provided to reef habitats and associated biodiversity

2. Compliance and Enforcement

- Multiple, sometimes overlapping closure types create confusion for recreational fishers and commercial operators, leading to accidental infractions and enforcement difficulties on the water.
- A single, harmonized marine refuge increases clarity for all users, making compliance easier and strengthening enforcement efforts

In general, the purpose is that under a single science-based and streamlined management regime, DFO can strengthen conservation outcomes while creating a more efficient process for ongoing review, consultation, and area management.

However, the new broad GRS-RCA marine reserves will assume the stricter levels of protection associated with GSRs, essentially prohibiting all fishing and harvesting activities within the reserves. I will state my personal opinion that there are plenty of areas in Howe Sound where these activities are allowed, and since I believe the science supporting the conservation methods is sound, and that the goals are important, I have no problem in general with what is conceptually being proposed. I do have comments on the specific Lions Bay proposal as set out below, and recognize that Council may not agree with either my opinions in general, or specifically for Lions Bay.

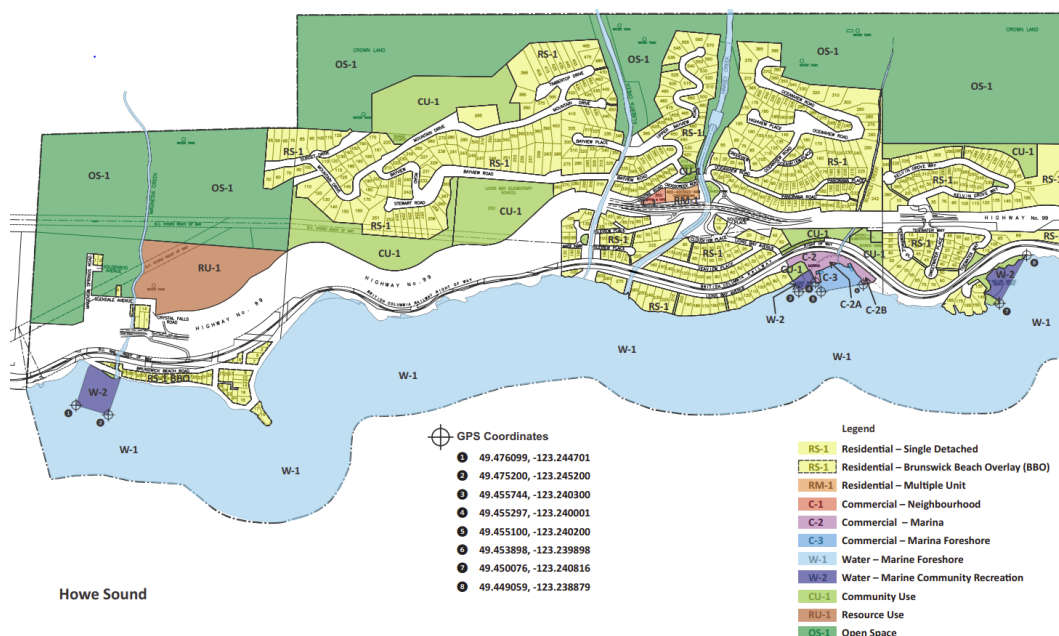
Comments Specific to the Proposed Lions Bay Marine Refuge



Above is an overlay of the proposed Marine Reserve on the existing GSRs and RCA. The notable changes are firstly that the Marine Reserve envelops Britannia Beach on the northern end, but the southern end bisects Kevin Grove beach instead of following the coastline to the cliff jumping headland; and secondly, that the more restrictive protections that apply to GSRs will apply over a much larger area.

My thoughts are as follows:

- Extending the reserve areas to encompass Brunswick Beach makes sense from a protection and enforcement perspective, and I don't see the need to comment on this specifically to DFO
- Not continuing the Marine Reserve to the cliff jumping headland to the south makes no sense. There are diveable rockfish habitats along a reef that continues to the south that would be outside of the proposed marine reserve yet close to the glass sponge reefs which is likely a connected ecosystem. Furthermore, I am confused how either those wanting to exercise their fishing rights or enforce the marine reserve protection are going to do that without a visible reference point. This is an area that has many visitors, and the proposed boundary creates conditions for confusion, and possible friction between users and enforcers.
- Essentially all fishing and harvesting activity off the coastline to somewhere between 500 and 1000m will be prohibited. Some residents may be challenged by this, viewing it as an additional impingement on their recreational rights. Given the proximity to other areas where residents can fish or harvest, as above my view is that the conservation benefit outweighs any individual concerns about the restrictions. However, should DFO not implement sufficient enforcement to prevent recreational or commercial boats from outside Lions Bay fishing/harvesting then residents would have cause to have serious complaint. As such, I think we should comment that continued support is contingent on adequate enforcement activities.
- At the Council Meeting of Nov 4th, 2025, Councillor Broughton raised questions about potential impingement on foreshore protections established for Lions Bay residents. I believe these to be the W-1 areas below (extending about 1000 ft), with 3 additional (W-2) Marine Community Recreations,



So far as I understand, ie unless there are special provisions for Lions Bay that I cannot locate, W-1 represents something that is similar to aquatic crown land, ie:

- The area is not privately owned - it is managed by the Province of BC or, for some regulatory purposes (such as fisheries), by the federal government.
- It is mapped to show jurisdiction for provincial permitting—such as dock approvals, marina zoning, conservation areas, and management of aquatic activities.

- Waterfront property lines typically do not extend into this zone. Private rights to build docks, moorings, or retain access on aquatic crown land require provincial permission.
- The mapped area reflects both practical and legal jurisdiction for resource management, environmental protection, moorage, and public rights.

The W-2 areas generally fall under the jurisdiction of multiple authorities, ie:

- The Village of Lions Bay, where through its zoning bylaws, designates foreshore and adjacent marine areas for community recreation including uses such as community docks, beaches, boat launches, marine recreation facilities, and parks operated by or for the municipality.
- Province of BC: as above, the foreshore (between high and low water marks) and the submerged land beyond (the “aquatic Crown land”) are owned and regulated by the Province. Any structures or uses (like wharves, docks, or floating swim platforms) within Marine Community Recreation zones—beyond the high water mark—require provincial tenure (lease, license, or permit) under the Land Act, even if also approved by the municipality.
- Federal Government: The water column, navigation, and fisheries fall primarily under federal jurisdiction regardless of municipal or provincial zoning.

In short, nothing changes with respect to these W-1 and W-2 zones as a result of the proposed Marine Reserves unless, however, private rights to build docks or moorings become more restrictive through the provincial permitting process. These feels like something also worth commenting on.

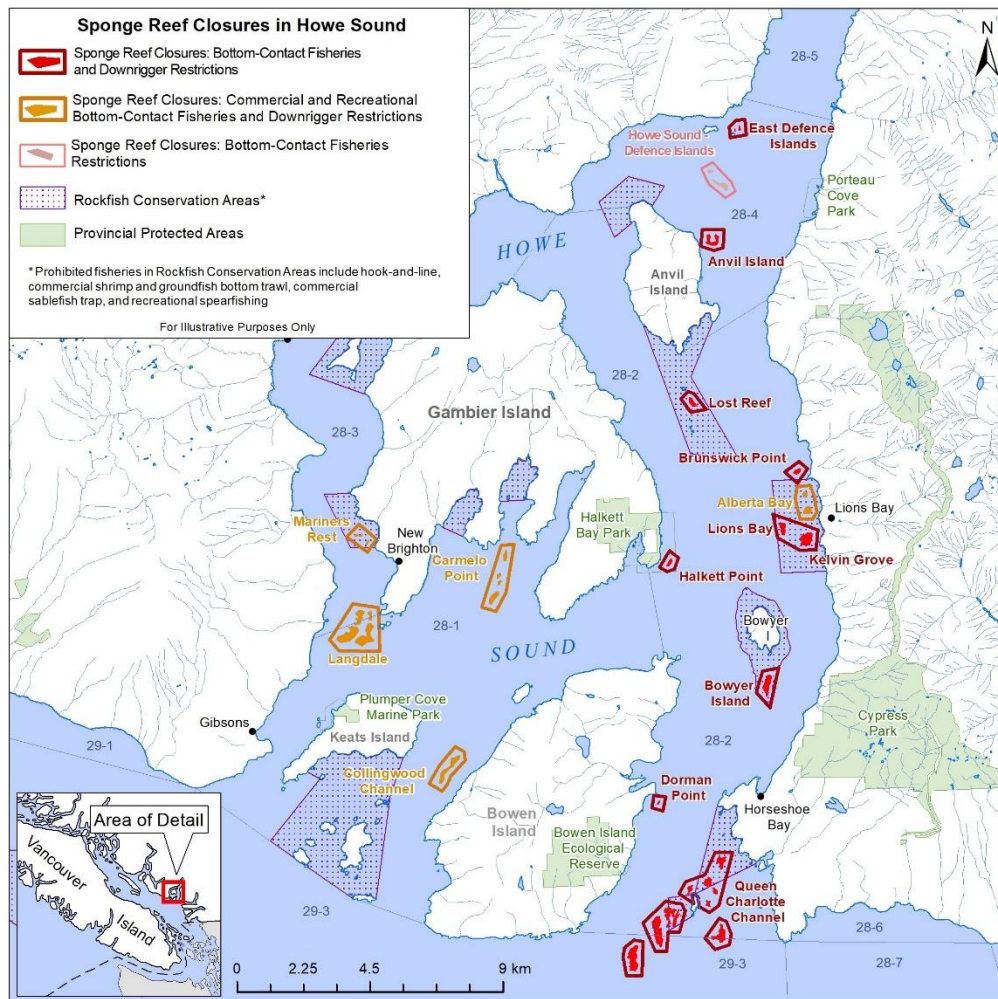
My Recommendations

Based on all of the above, I present the following for consideration by the Council on what Lions Bay should comment on in respect of the proposed GSR-RCA project:

- a. Lions Bay welcomes science-based initiatives that continue the ongoing recovery of the Howe Sound marine ecosystem, and thus generally supports streamlining of the management of conservation outcomes
- b. In respect of the specific proposed new Marine Reserve for Lions Bay to replace the existing GSRs and RCA:
 - i) Having the southern border of the reserve bisecting Kelvin Grove beach area makes little sense and is likely to cause confusion and friction between fishery users and enforcement activities without a strong visual cue of where the boundary begins and ends. We suggest the reserve boundary be the existing southern border of the RCA
 - ii) The enhanced fishery and invertebrate harvesting protection measures to be introduced over a significantly greater area will impinge on the existing rights of Lions Bay residents – this is only acceptable if DFO commits to adequate enforcement to prevent non-resident recreation or commercial users from abusing the protective measures within the Marine Reserve
 - iii) The municipality is concerned that the new Marine Reserve will make permitting of resident docks moorings or similar within the established Municipal Marine Foreshore that stretches out to 1000 ft more challenging, and would like assurance that this will not be the case.

A draft letter that includes these points in included in Schedule 2.

Schedule 1 : Map of Current Marine Refuges in Howe Sound



Schedule 2 – Draft Letter Containing Comments to DFO for Council Consideration

From:

To:

Fisheries and Oceans Canada (DFO)

Marine Conservation Targets Team

dfo.pacfmmt-ocmgppac.mpo@dfo-mpo.gc.ca

Subject: Feedback on the Proposed Lions Bay Marine Refuges

Dear Fisheries and Oceans Canada,

The Village of Lions Bay welcomes science-based initiatives that continue the ongoing recovery of the Howe Sound marine ecosystem, and thus generally supports DFO's ongoing commitment to achieving this goal. We also appreciate this opportunity to provide feedback on the proposed marine refuge for Lions Bay that will subsume the existing GSRs and RCA.

1. We see that it is beneficial that the current proposal combines the existing GSRs and RCA into one marine refuge. However, we cannot understand why the southern section of the Lions Bay RCA is not encompassed by the proposed marine refuge, and would like to hear a clear justification for this. In the first place, we are advised that the area to the south includes multiple endangered species that are nearby to protected areas and one existing GSR. Secondly, the new boundary would bisect the Kelvin Grove beach and we can only see this creating confusion for those who wish to fish/harvest invertebrates without an obvious visual cue: we are also concerned about possible friction between users and enforcement officers as result. Encompassing all of the waters adjacent to Kelvin Grove beach provides clarity for all parties, and we strongly request that the existing border for the RCA be retained.
2. The enhanced fishery and invertebrate harvesting protection measures to be introduced over a significantly greater area as a result of the new Marine Reserve will impinge on the existing rights of Lions Bay residents. We understand why, but feel it is only acceptable if DFO commits to adequate enforcement to prevent non-resident recreation or commercial users from abusing the protective measures within the Marine Reserve.
3. The municipality has an established Marine Foreshore that extends out 1000 ft. While not a federal matter, we have a concern that the new Marine Reserve will make permitting of resident docks, moorings or similar within the Marine Foreshore more challenging, and we would like to hear some assurance from Provincial bodies that this will not be the case.

We look forward to a response on these topics.

Exhibit 3



November 19, 2025

Fisheries and Oceans Canada (DFO)
Marine Conservation Targets Team
dfo.pacfmmt-ocmgppac.mpo@dfo-mpo.gc.ca

Re: Feedback on the Proposed Lions Bay Marine Refuges

Dear Fisheries and Oceans Canada,

The Village of Lions Bay welcomes science-based initiatives that continue to enhance the ongoing recovery of the Howe Sound marine ecosystem, and thus we generally support DFO's ongoing commitment to achieving this goal. We also appreciate this opportunity to provide feedback on the proposed Marine Refuge for Lions Bay that will subsume the existing GSRs and RCA.

We have the following comments to make:

1. The enhanced fishery and invertebrate harvesting protection measures to be introduced over a significantly greater area than current will impose new restrictions for some Lions Bay residents, for instance those who currently set prawn or crab traps in the current RCA. While we accept the conservation and enforcement basis for these changes, we feel that this sacrifice is only acceptable if DFO applies adequate enforcement to monitor and prevent non-resident commercial and recreational fishing or invertebrate harvesting within the Marine Refuge.
2. The municipality of Lions Bay has an established Marine Foreshore that extends out 1000 ft. Within this, many residents have moorings or docks to which repairs are required on an ongoing basis. Others waterfront who don't currently have a dock or mooring may reasonably want to add something in the future. We understand that permitting for such is under Provincial bodies, and not under DFO's purview, but we would like an understanding of how Provincial (or any other relevant entities) may interpret the requirements that come with the new Marine Refuge, and we assume that conversations between DFO and Provincial bodies have already been undertaken on this matter. In short, we have a concern that the new Marine Refuge will make repair or permitting of resident docks, moorings or similar within the Marine Foreshore more

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challenging than present, and we would like to hear assurances from DFO that this will not be the case.

3. Other than the above concerns, we appreciate the conservation benefits of combining the existing GSRs and RCA into one Marine Refuge. Nonetheless, we cannot understand why the southern section of the Lions Bay RCA is not encompassed by the Refuge, and as such would like to hear a clear justification for this change. In the first place, we have been advised that the area to the south includes multiple endangered species that will remain connected to protected areas and one existing GSR through marine corridors that provide important habitat linkages. Secondly, the new boundary would bisect the Kelvin Grove beach and we can see this only creating confusion for those who wish to fish or harvest invertebrates without an obvious visual cue on where the Marine Refuge starts and ends. We are also concerned about possible friction between users and enforcement officers as a consequence. Encompassing all of the waters adjacent to Kelvin Grove beach provides clarity for all parties, and we strongly request that the existing border for the RCA be retained.

We look forward to a response on these topics.

Sincerely, on behalf of the Village of Lions Bay,

Neville Abbott

