

NETWORK ACTION PLAN

Northern Shelf
Bioregion



MPANetwork
BC Northern Shelf

Cover photo: Barb Dinning

Please use the following citation for referencing this document:
MPA Network BC Northern Shelf Initiative (2023). Network Action Plan.

MPA Network BC Northern Shelf – Governance Partners:

Gitga'at, Gitxaala, Haisla, Kitselas, Kitsumkalum, Metlakatla, Heiltsuk, Kitasoo Xai'xais,
Nuxalk, Wuikinuxv, Mamalilikulla, Kwiakah, Tlowitsis, and Wei Wai Kum First Nations;
Council of the Haida Nation; the Province of British Columbia; and the Government of Canada.

Dear Reader,

On behalf of the Governance Partners, we are pleased to present the Network Action Plan for a Marine Protected Area (MPA) Network in British Columbia's Northern Shelf Bioregion. The Network Action Plan represents a considerable amount of technical work and collaboration by the Governance Partners—the Gitga'at, Gitxaala, Haisla, Kitselas, Kitsumkalum, Metlakatla, Heiltsuk, Kitasoo Xai'xais, Nuxalk, Wuikinuxv, Mamalilikulla, Kwiakah, Tlowitsis, and Wei Wai Kum First Nations; Council of the Haida Nation; the Province of British Columbia; and the Government of Canada. It has been further informed by input and feedback from other First Nations, stakeholders, and the public regarding how best to achieve Network goals and objectives with respect to biodiversity conservation and cultural priorities. This valuable feedback will continue to inform the implementation of the Network, including the establishment of individual MPA sites. As we strive to achieve the Network's objectives, the Governance Partners will continue to consider the costs and benefits of MPAs and minimize potential negative impacts on user groups.

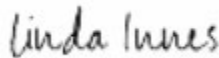
The term 'marine protected area' is used in Canada and within the context of this Network Action Plan as an umbrella term for a wide range of marine protection tools available under Indigenous, provincial, and federal laws and authorities. Together with collaborative governance and management agreements the Action Plan recommends that many of these tools be used to implement the Network. Success will therefore depend on the ongoing commitment and cooperation of many different governments to implement and refine the recommendations set out in this plan.

We are confident that through our continued work together, we can achieve our vision for an ecologically comprehensive, resilient, and representative network of MPAs in the Northern Shelf Bioregion. We welcome your help and support as we strive to protect the biological diversity and health of this important area of the coast, while continuing to support community, cultural and economic values for present and future generations.

Sincerely,



Arnold Clifton, Chief Councillor
Gitga'at Nation



Linda Innes, Chief Councillor
Gitxaala Nation



Crystal Smith, Chief Councillor
Haisla Nation



Glenn Bennet, Chief Councillor
Kitselas Nation



Don Roberts, Chief Councillor
Kitsumkalum Nation



Harold Leighton, Chief
Councillor
Metlakatla Nation



Marilyn Slett, Chief Councillor
Heiltsuk Nation



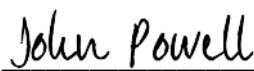
Doug Neasloss, Chief Councillor
Kitasoo Xai'xais Nation



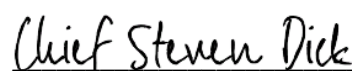
Samuel Schooner, Chief
Councillor
Nuxalk Nation



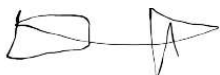
Danielle Shaw, Chief Councillor
Wuikinuxv Nation



John Powell, Chief Councillor
Mamalilikulla Nation



Steven Dick, Chief Councillor
Kwakwaka'wakw Nation



Dallas W. Smith, Chief Councillor
Tlowitsis Nation



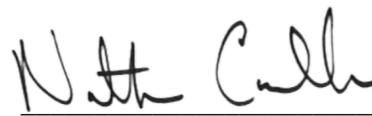
Christopher Roberts, Chief
Councillor
Wei Wai Kum Nation



Gaagwiis Jason Alsop, President
Council of the Haida Nation



Joyce Murray
Minister
Fisheries, Oceans and the
Canadian Coast Guard



Nathan Cullen
Minister
BC Ministry of Water, Land and
Resource Stewardship

Preface

The initiative to create a Marine Protected Area Network for the Northern Shelf Bioregion (NSB) was identified as a priority for implementation in the Pacific North Coast Integrated Management Area Plan. The Network Action Plan (the Action Plan) has been developed in consideration of several overarching agreements between various Governance Partners, including reconciliation framework agreements for bioregional oceans management and protection, the Marine Plan Partnership (MaPP) implementation agreements, and others.

The Action Plan provides a recommended approach to establish a network of marine protected areas in the NSB. It provides a blueprint for multiple marine conservation efforts to operate more cooperatively and effectively than if they were to be undertaken independently. The proposed Network design presented in the Action Plan was informed by the best available data and information, including traditional, local, and scientific knowledge.

This document is not legally binding. It is not intended to define, create, recognize, deny, or amend any of the rights of the Governance Partners. While it is intended to inform decision makers, it will not be interpreted or implemented in a manner that fetters the decision-making authorities of any of the Governance Partners. This Action Plan does not define the legal status of the Crowns' rights or title or any particular Indigenous Nations' rights or title, or how those rights co-exist with each other or other Indigenous Nations. Further, the Action Plan is not to be used, construed, or relied on by anyone as evidence, acceptance or admission of the existence, nature, scope or content of any treaty or Aboriginal rights or title and Crown rights or title.

It is recognized that the implementation of the Action Plan will require ongoing cooperation among the Governance Partners, as well as the involvement of other First Nations, stakeholders, and the public as regulatory processes are initiated, MPA designation tools confirmed, and site-specific management measures developed.

In releasing this Network Action Plan, the Governance Partners acknowledge the mutual and ongoing commitment to prioritize completion of collaborative governance and management agreements between First Nations, British Columbia, and Canada that will support the implementation and management of individual MPA sites and the Network.

Acknowledgements

The Network Action Plan is the result of several years of committed work by individuals who represent First Nations, provincial and federal governments, and several marine interests. The Governance Partners would like to recognize and thank the following individuals, who played key roles in providing technical support, direction, and oversight on the creation of this document.

Network Committee:

Chris Apps, Rich Chapple, Merv Child, Rina Gemeinhardt, Paul Kariya, Ryan Leighton, Allan Lidstone, Lesley MacDougall, Chris Picard, Mike Reid, Trevor Russ, Charlie Short, and Bruce Watkinson.

Marine Protected Area Technical Team:

David Angus, Chris Apps, Stephen Ban, Karin Bodtker, John Bones, Heather Brekke, Tayler Brown, Sally Cargill, Julie Carpenter, Tyson Carswell, Diana Chan, Molly Clarkson, Kyle Clifton, Lena Collins, Ken Cripps, Rebecca Croke, Zoe Crysler, Evan Damkjar, Danielle Denley, Steve Diggon, Barb Dinning, Sadie Donovan, Jason Dunham, Corinna Favaro, Andra Forney, Molly Fraser, Alejandro Frid, Katie Gale, Rina Gemeinhardt, Larry Greba, Niisii Guujaaw, Sydney Hamilton, Emery Hartley, Aaron Heidt, Mike Jacobs, Kate Keats, Melanie Knight, Karen Leslie, Dan Leus, Erika Lok, Evan Loveless, Elizabeth MacDonald, Jessica MacIntosh, Avery Maloney, Joshua Mann, Rebecca Martone, Taylor Mason, Meaghen McCord, Chris McDougall, Gord McGee, Dan McNeill, Ailish Murphy, William Nelson, Mairead Norton, Mirium O, Greig Oldford, Sachiko Ouchi, Sam Pascoe, Brigid Payne, Danielle Perron, Chris Picard, Nichole Prichard, Simone Reece, Stacey Rehel, Mike Reid, Lindsay Richardson, Catherine Rigg, Carrie Robb, Tracey Ross, Emily Rubidge, Christa Rusel, Vicki Sahanatien, Kerra Shaw, Marie-Michelle Simard, Jason Slade, Kira Stevenson, Allison Stocks, Jason Thompson, Hilary Thorpe, Karen Topelko, Michael Turner, Nicole Wallace, Berry Wijdeven, Kristin Worsley, Kevin Yang, and past members.

Integrated/Ocean Advisory Committees:

Hussein Alidina, Chuck Ashcroft, Mike Atkins, Karl Bergman, Tyson Berkenstock, Owen Bird, Caitlin Birdsall, Michael Bissonnette, Jason Bowers, David Boyes, Ainsley Brown, Dennis Buchanan, Peter Christensen, Yvonne Christensen, Skyler Collision, Doug Daugert, Sydney Dixon, Lindsey Doerkson, Grant Dovey, Karina Dracott, Dennis Dugas, Lauren Eckert, Chelsey Ellis, Alex Fields, Ken Franzen, Erin Gray, Guustlaas (Trey Rorick), Dr GwaaGanad (Diane Brown), Stephen Hales, Robert Hauknes, Nick Heath, Lanna Hodgson, Albert Hummel, Barrett Johnson, Sid Keay, Mike Kelly, Gary Krause, Geoff Krause, Erin Latham, James Lawson, David Lewis, Robert Lewis Manning, Fraser MacDonald, Kate MacMillan, Russell Markel, Jeremy Maynard, John McCulloch, Michael McGuire, Jim McIsaac, Kathy McRae, Hermann Meuter, Rob Morley, Brian Mose, Kim Olsen, Andy Olson, Richard Opala, Emily Orr, Anitra Paris, Ted Pellegrino, Breanne Quesnel, Dave Renwall, Fred Robertson, Todd Russell, Jason Scherr, Cailyn Siider, Craig Smith, Jack Smith, Kevin Smith, Richard Snowdon, Chris Sporer, Kilian Stehfest, Greg Thomas, Urs Thomas, Michael Uehara, Greg Vance, Leandre Vigneault, Mike Viveiros, Warren Warttig, Lori Wilson, Darlene Winterburn, Brewster Woodburn, Janie Wray, and past members.

The partners would also like to acknowledge the valuable input provided by members of the public through open houses, surveys, webinars, and e-mail.

The advice, information and direction provided created a better Network Action Plan and will continue to inform its implementation and site establishment.

Acronyms

DFO	Fisheries and Oceans Canada	MaPP	Marine Plan Partnership for the North Pacific Coast
E-CP	Ecological conservation priority	MPA	Marine protected area
C-CP	(First Nations) cultural conservation priority	NMCAR	National Marine Conservation Area Reserve
I/OAC	Integrated / Ocean Advisory Committee	NSB	Northern Shelf Bioregion
IPCA	Indigenous Protected and Conserved Area	NVI	Northern Vancouver Island
IUCN	International Union for Conservation of Nature	PMZ	Protection Management Zone
		RCA	Rockfish Conservation Area
		SMZ	Special Management Zone

Glossary of Terms

Term	Definition
Activities of concern	Human uses and activities that have been identified as having potential interactions and negative consequences for one or more zone -specific conservation objectives .
Canadian Science Advisory Secretariat (CSAS)	Coordinates the scientific peer review and science advice for Fisheries and Oceans Canada (DFO). The CSAS publishes departmental scientific advice and information on issues such as fish stock dynamics, species at risk, invasive species, ecology of marine and freshwater ecosystems, MPAs , aquaculture, and the use of living aquatic resources. All CSAS processes, including those involving traditional knowledge, are subject to due diligence, which includes rigorous review and quality control of all input, analyses, findings, and recommendations.
Collaborative governance and management	Nation-to-nation and government-to-government arrangements that support decision-making, authorities, responsibilities, laws, and jurisdictions being exercised collaboratively, including working together on planning, decision-making, decision implementation processes, and management.
Conservation Gaps Analysis (CGA)	A tool developed to assess the contributions of existing and proposed new protected areas to the Network goals and objectives concerning representation. The tool tracks the proportion of each E-CP within a zone and reports it in two ways: presence within a network scenario footprint, and ‘down-scaled’ presence within a network scenario footprint when considering the potential interactions of human use activities.
Conservation objectives	Describe the expected outcomes if MPA network design and management are successful. Developed for zones (a.k.a. ‘zone-level conservation objectives’).
Conservation priorities (E-CPs and C-CPs)	The features to be protected by an MPA network and prioritized during the identification of potential MPA sites. Developed from and contribute to the Network objectives . Include ecological conservation priorities (E-CPs) and cultural conservation priorities (C-CPs).

Term	Definition
Design guidelines and strategies	Design guidelines inform how the Network should be created to achieve Network objectives . They are operationalized by design strategies, which describe how E-CPs will be spatially incorporated into the Network and include area-based targets for conservation priorities .
Design scenarios	Options for configurations of MPAs , including boundaries and activities of concern , to meet Network objectives . Assessed against performance measures .
Ecologically or Biologically Significant Marine Area (EBSA)	An area of relatively higher ecological or biological significance than surrounding areas, where greater risk aversion is required in the management of activities. EBSAs are important for the healthy functioning of our oceans and the services they provide, and are designated using seven criteria developed by the Convention on Biological Diversity (CBD, 2008).
Ecological Conservation Targets	Quantitative estimates of how much of each feature (e.g., habitat types or species) should be included in the Network .
Governance Partners	Federal, provincial, and First Nations governments responsible for the planning and implementation of the Network (see Table 1).
Implementation (of the proposed Network or Network Action Plan)	Ongoing steps to carry out the recommendations of the Network Action Plan , including development of collaborative governance and management agreements, MPA establishment , and Network monitoring .
Indigenous knowledge	Place-based knowledge held by Indigenous peoples that is compounded intergenerationally, and intrinsically tied to and informed by social and cultural processes.
Marine Plan Partnership for the North Pacific Coast (MaPP)	A partnership between B.C. and 17 member First Nations to develop and implement marine use plans for activities and uses. The MaPP plans provide recommendations for key areas of marine management, including uses, activities, and protection to inform decisions regarding the sustainable economic development and stewardship of British Columbia's coastal marine environment.
Marine Planning Team (MPT)	A group of individuals with a broad range of experience in the commercial fishing industry, including fishing, fishery management, science, and economics. The Marine Planning Team has supported the broader commercial fishing sector in engaging with various government-led marine planning initiatives in British Columbia.
Marine protected area (MPA)	A clearly defined geographical space recognized, dedicated, and managed through legal or other effective means to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
MPA Establishment, Designation, and ongoing Management	MPA Establishment refers to the steps involved in creating an MPA , which vary according to designation tool and may include the legal Designation of the protected area under federal or provincial law (processes for establishing Indigenous Protected and Conserved Areas – IPCAs – will be unique to each First Nation and may be guided by their Indigenous laws, governance structures, and management objectives). See s. 3.1 for more information. The ongoing Management of an MPA begins once the MPA is established and may include the development of management plans, site monitoring , and enforcement and compliance activities.

Term	Definition
MPA network	A collection of individual MPAs that operates cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfill ecological aims more effectively and comprehensively than individual sites could alone.
Monitoring	An iterative process of observation, evaluation, communication, and adaptation using standardized methods to study the state of a system and changes within it; supports an adaptive approach to managing MPAs and the Network as a whole.
“(the) Network”	The proposed MPA Network for the NSB .
Network Action Plan (the Action Plan)	This document.
Network goals and objectives	The <i>Canada-B.C. MPA Network Strategy</i> ¹ lists six Network goals for the establishment of MPA networks in B.C. Nested under these goals, Network objectives were developed at the scale of the NSB to identify and focus management priorities and provide a context for finding solutions and resolving challenges, a rationale for decisions made in the development of the proposed Network design, and a means for assessing Network effectiveness. ²
Northern Shelf Bioregion (NSB)	One of 13 ecologically defined bioregions that cover Canada’s oceans and Great Lakes. There are three other bioregions in B.C. (Figure 1). For planning purposes, the NSB is subdivided into four subregions: North Vancouver Island (NVI), Haida Gwaii, North Coast, and Central Coast.
Ocean Advisory Committees (I/OACs)	One of four sub-regional and one bioregional advisory committee established to engage local community members, resource users, and other stakeholders in the Network planning process. Collectively, the I/OACs: • Bioregional OAC • Central Coast OAC • North Coast OAC • North Vancouver Island OAC • Haida Gwaii Integrated Advisory Committee
Oceans RFA	The 2018 Reconciliation Framework Agreement for Bioregional Oceans Management and Protection (the ‘Oceans RFA’) was signed by thirteen First Nations and the Government of Canada (Pacific North Coast Nations & Canada, 2018). British Columbia and the Kwiakah Nation joined this Oceans RFA in 2022. Separate RFAs were signed for similar purposes with Lax Kw’alaams and Metlakatla, and with Kitselas and Kitsumkalum First Nations. These RFAs reflect and reinforce the collaborative governance models used for the <i>PNCIMA</i> , MaPP, and preliminary MPA Network development in the NSB.

¹ See Canada and B.C. (2014).

² Network goals and objectives are listed in s.1.4.

Term	Definition
Other Effective Area-based Conservation Measures (OECM)	A geographically defined area, other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity, including associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic, and other locally relevant values.
Pacific North Coast Integrated Management Area (PNCIMA)	One of five national Large Ocean Management Areas identified in Canada's 2005 Oceans Action Plan, the boundaries of PNCIMA closely align with those of the NSB and the proposed Network planning area. The Integrated Ocean Management Plan for PNCIMA was produced in 2017.
Performance measures	A decision support tool for evaluating the 'performance' of alternate Network design scenarios in terms of Network goals, objectives , and design guidance.
Protection Management Zone and Special Management Zone (PMZ and SMZ)	These zones, identified within the four sub-regional MaPP marine plans, were an important input to the proposed Network design.
Rockfish Conservation Area (RCA)	Area-based closures to protect inshore rockfish from all mortality associated with recreational and commercial fisheries. Many fishing activities, including recreational halibut and salmon fishing, are prohibited in all 162 RCAs coastwide.
Science Advisory Committee (SAC)	Established in 2017 to provide the Network initiative with additional expert scientific and technical guidance and feedback. The SAC provides a means to access science advice beyond the representatives of partner organizations. The SAC membership was established through a nomination process to bring knowledge and experience in a range of topics relevant to MPA network planning (e.g., coastal ecology, fisheries science, anthropology, economics). SAC membership draws primarily from academia, but also includes scientists from Fisheries and Oceans Canada (DFO).
Socio-Economic Overview	A document outlining economic activities and other human uses of the marine environment in the NSB and providing estimates of the overlap between these activities and the zone boundaries in the proposed Network . The overview (see Compendium 3) serves to support the Network planning process by providing information for the Governance Partners and other First Nations, stakeholders, local governments, and the public to evaluate the Network Action Plan .
Zone	A discrete unit of marine space contained in the proposed Network , including outer boundaries. A zone that contains existing protected areas but with potential enhancements, new marine areas proposed for the Network , or a combination of the two has specific conservation objectives identified in the Network Action Plan . Existing MPAs often contain multiple zones, and Category 1 zones within the proposed Network are aggregated together under identified potential designation tools for future assessment. ³ Within MPA planning in a broader context, individual zones will typically have specific conservation objectives (and associated management direction) that distinguishes them from adjacent zones.

3 See s. 3.2.3.

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I INTRODUCTION

Photo: Barb Dinning



1.1. Purpose and overview of the Network Action Plan

Photo: Charles Short

This Action Plan was collaboratively developed through a trilateral partnership between the governments of Canada, British Columbia (B.C.), and 15 First Nations (the **‘Governance Partners’**, Table 1) and in consideration of input from other Indigenous governments, local governments, stakeholders, and the public. It is intended to serve as a blueprint to guide implementation of a **Network of Marine protected areas (MPAs)** in the **Northern Shelf Bioregion** (Figure 1). It summarizes the approach used to develop the proposed design for the MPA Network (henceforth the **‘Network’**), and provides recommendations to support its implementation, governance, and adaptive management.⁴ These next steps, including the development of detailed management plans for individual MPAs within the Network, are expected to be undertaken through **Collaborative governance and management** agreements (see Chapter 4).

Collaborative governance and management agreements refer to nation-to-nation and government-to-government arrangements that support decision-making, authorities, responsibilities, laws, and jurisdictions being exercised collaboratively, including working together on planning, decision-making, decision implementation processes, and management.

The recommendations presented in the Action Plan have been developed to support the shared vision of:

An ecologically comprehensive, resilient and representative network of marine protected areas that protects the biological diversity and health of the marine environment for present and future generations – Canada-B.C. MPA Network Strategy (Canada & B.C., 2014, p. 9).

⁴ While the Governance Partners intend to collaboratively advance the guidance in the Action Plan, the Action Plan does not replace statutory processes, nor does it limit or fetter the jurisdiction, authority, obligations, or responsibilities of the partners.

The Action Plan supports implementation of the Reconciliation Framework Agreements (RFAs) between the Government of Canada, British Columbia, and First Nations to facilitate collaborative governance and management in the Northern Shelf Bioregion (NSB), including development and implementation of a network of MPAs in the NSB.⁵ It is consistent with direction provided by the *Canada – British Columbia Marine Protected Area Network Strategy*,⁶ the *National Framework for Canada's Network of Marine Protected Areas*,⁷ and partner First Nations' marine plans, and supports efforts to create a national network of MPAs. It also supports ecosystem-based and adaptive management as set out in the **Pacific North Coast Integrated Management Area Plan (PNCIMA)**⁸ and the **Marine Plan Partnership (MaPP)** sub-regional plans and *Regional Action Framework*.⁹

This chapter gives a brief overview of MPAs and the Network planning process. Chapter 2 summarizes the results of the planning process: a proposed Network of existing and recommended new MPAs with Zones that contribute to the proposed Network's goals, principles, and objectives. Chapter 3 presents operational recommendations for protecting the Conservation priorities within zones, including a summary of potential MPA Designation tools, identification of Activities of concern, and a recommended Implementation approach. Finally, Chapter 4 outlines the recommended approach to collaborative Network governance and management developed by the Governance Partners, which is anticipated to be further refined as part of site Establishment processes.

Full details of the proposed Network, including sub-regional maps and area details, proposed zone-specific conservation objectives, potential designation tools, and preliminary activity assessment tables, are provided in Appendix 1 ("Profiles"). In addition, a series of compendiums to this Action Plan are also available on the MPA Network website,¹⁰ providing further information on the Network planning process, context, and analytical outputs:

Compendium 1

- Existing MPAs in the NSB
- Stakeholder Engagement & Consultation Details
- Network Design Guidelines
- Description of Current Activities in the NSB

Compendium 2

- Ecological Conservation Priorities, Spatial Features and Target Ranges
- Conservation Gaps Analysis
- Performance Measures and Associated Report cards

Compendium 3

- Socio-Economic Overview of the Northern Shelf Bioregion

Additional materials have been developed to inform and support future establishment of the proposed MPA Network, including draft management measures and monitoring approaches, and will continue to be refined in early implementation of the Network Action Plan.

5 The 2018 Reconciliation Framework Agreement for Bioregional Oceans Management and Protection (the '**Oceans RFA**'), was signed by thirteen First Nations and the Government of Canada (Pacific North Coast Nations & Canada, 2018). British Columbia and the Kwikwaka'wakw Nation joined this Oceans RFA in 2022. Separate RFAs were signed for similar purposes with Lax Kw'alaams and Metlakatla, and with Kitselas and Kitsumkalum First Nations. These RFAs reflect and reinforce the collaborative governance models used for the PNCIMA, MaPP and preliminary MPA Network development in the NSB.

6 *Canada-British Columbia Marine Protected Area Network Strategy*, 2014. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/coastal-marine/canada_bc_marine_protected_area_network_strategy.pdf.

7 *National Framework for Canada's Network of Marine Protected Areas*, 2011. <http://www.dfo-mpo.gc.ca/oceans/publications/mpanf-cnzpm/page01-eng.html>.

8 *Pacific North Coast Integrated Management Area Plan*, 2017. <https://waves-vagues.dfo-mpo.gc.ca/Library/40743032.pdf>.

9 Marine Plan Partnership for the North Pacific Coast (MaPP). <http://mappocean.org/quick-links/>

10 <https://mpanetwork.ca/nap>.

Table 1. Network Governance Partners

First Nations Governments	Government of Canada
• <i>Central Coast:</i> Kitasoo Xai'xais, Heiltsuk, Nuxalk and Wuikinuxv First Nations, supported by the Central Coast Indigenous Resource Alliance (CCIRA) • <i>North Coast:</i> Gitga'at, Gitxaala, Kitsumkalum, Kitselas, Haisla, and Metlakatla First Nations • <i>Haida Gwaii:</i> Council of the Haida Nation • <i>North Vancouver Island:</i> Mamalilikulla, Tlowitsis, and Wei Wai Kum First Nations, as represented by the Nanwakolas Council; and Kwiakah First Nation	• Fisheries and Oceans Canada* • Environment and Climate Change Canada • Parks Canada • Natural Resources Canada
	Province of British Columbia
	• Ministry of Water, Land and Resource Stewardship* • Ministry of Environment and Climate Change Strategy

* Lead federal/provincial agency



Figure 1. Map of the Northern Shelf Bioregion planning area *Note that the boundary extends into the Strait of Georgia bioregion (capturing Bute Inlet) to align with boundaries of previous marine planning initiatives and territorial boundaries of partner First Nations.

1.2. The need for MPAs and MPA networks

Photo: Barb Dinning

The term ‘marine protected area’ is used in Canada as an umbrella term for many different marine protection tools,¹¹ which are available under provincial, federal, and Indigenous law¹² to protect a range of ecological, cultural, and social objectives. The *Canada-BC MPA Network Strategy* (referred to throughout the Action Plan as the ‘*Network Strategy*’) has adapted the International Union for the Conservation of Nature/World Commission on Protected Areas (IUCN/WCPA) 2008 definitions of a protected area and a protected area network. These definitions are:

Marine Protected Area

A clearly defined geographical space recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

Marine Protected Area Network

A collection of individual marine protected areas that operates cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfill ecological aims more effectively and comprehensively than individual sites could alone (Canada & B.C., 2014, p. 7).

¹¹ The umbrella term ‘marine protected area’ is inclusive of Marine Protected Areas under Canada’s *Oceans Act*.

¹² Indigenous protected and conserved areas and their potential role in the Network are discussed in Chapter 3, s. 3.1.1.

Around the world there is a growing recognition of the importance of MPAs for protecting ecosystems, supporting sustainable marine economies, and strengthening the resilience of coastal communities.¹³ Marine biodiversity in the NSB, including species, habitats, and communities, is threatened by multiple stressors, including habitat alteration, resource use pressure, land and sea-based pollutants, and invasive species, as well as larger scale impacts related to global climate change (Canada & B.C., 2014). **Indigenous knowledge** and science shows that multiple species and habitats are declining in the NSB, which is exacerbating other systemic impacts on cultures, food security and future economic opportunities in the region (Ban et al., 2017; Eckert et al., 2018; Frid et al., 2016; McGreer & Frid, 2017; Moody, 2008; Whitney et al., 2020). MPAs can be a tool for addressing these localized stressors by protecting important habitat and recovering endangered and threatened species, as well as for maintaining cultural values and creating and preserving recreational opportunities.

Decades of scientific evidence have shown that MPAs can deliver not only ecological but economic, social, and cultural benefits (Table 2). These benefits can be enhanced, moreover, when MPAs are part of larger scale networks, which go beyond the protection of specific features in discrete areas towards the protection, recovery, and enhanced resilience of functional ecosystems. By meeting scientific design criteria such as representation, replication, and connectivity, networks provide more comprehensive biodiversity protection than is possible with individual MPAs (IUCN-WCPA, 2008).

For partner First Nations there are several additional reasons why important areas need MPA designations. An MPA network is intended to help sustain and rebuild habitats and species populations that are vital to their ways of life, including for food security. Collaboratively governed and managed MPAs support First Nations' ability to maintain and meet the objectives of traditional marine management and incorporate unique protection perspectives into new collaborative management regimes. Additionally, in the Canadian context the MPA network can also support principles of reconciliation that are shared by Indigenous, provincial, and federal governments (Akins & Bissonnette, 2020).

¹³ Many countries have committed to increasing protection of their marine areas. The Government of Canada's marine conservation targets (MCTs) include conserving 25% of marine and coastal areas by 2025, and 30% by 2030 (DFO, 2019c). Sites that are proposed in this Action Plan as potential new MPAs and extensions of existing MPAs may contribute to these targets.

Table 2. Benefits of MPAs and MPA networks***Ecological benefits**

MPAs and MPA networks may contribute to the protection of the structure, function, integrity, and resilience of ecosystems by:

- providing refuge to harvested species,
- protecting habitats critical to lifecycle stages such as spawning, juvenile rearing and feeding,
- complementing adjacent terrestrial protected areas for anadromous species (e.g., salmon),
- protecting spawning populations, biomass, and aggregations to enhance or maintain reproductive capacity,
- contributing to the restoration and recovery of species, habitats, and ecosystems,
- enhancing local and regional fish populations through increased recruitment and spillover of adults and juveniles into adjacent areas,
- assisting in conservation-based fisheries management regimes, and
- maintaining and enhancing healthy ecosystems that are more able to withstand and recover from stressors related to climate change.

Social, economic, and cultural benefits

Supported by the ecological benefits that MPAs can provide, building an effective and collaboratively developed MPA network may:

- encourage a stable, biodiverse resource base for non-consumptive and sustainable consumptive activities and livelihoods including fishing, recreation, and tourism,
- encourage expansion of knowledge and understanding of marine systems,
- contribute to the coordination of ecosystem-based management of marine activities, thereby promoting long term economic opportunities for sustainable use,
- provide researchers, educators, and policy makers with reference sites to serve as natural benchmarks (e.g., to assess management outcomes, climate change impacts),
- increase the wellbeing of surrounding communities,
- protect historical and contemporary culturally and spiritually significant sites, and
- support the continuance of First Nation governance, management systems, and harvesting practices.

* List of benefits adapted from the *Canada-British Columbia Marine Protected Area Network Strategy* (Canada & B.C., 2014, p. 3) and identified from the MPA literature (Akins & Bissonnette, 2020; Ban et al., 2019; Bennett & Dearden, 2012; Kerwath et al., 2013; Lester et al., 2009; Madin et al., 2016; Marshall et al., 2019; Olson et al., 2020; Sala et al., 2021).

Like terrestrial protected areas such as National Parks and Class A Provincial Parks, MPAs vary in their size, conservation objectives, and the level of protection they can provide. There are also many tools that can be used to designate MPAs in Canada and B.C., including National Marine Conservation Area Reserves (NMCARs), marine National Wildlife Areas (NWAs), *Oceans Act* Marine Protected Areas,¹⁴ and Provincial Parks, Ecological Reserves, Conservancies and Wildlife Management Areas.¹⁵ Indigenous Protected and Conserved Areas (IPCAs) in coastal and marine spaces can include Indigenous laws, practices, and knowledge systems and could similarly help to advance and achieve both local and network conservation goals and objectives. As stated in the *Network Strategy*, the MPA Network for the NSB “will embrace the full spectrum of available tools to maximize the protection of the range of different values provided by marine and coastal environments” (Canada & B.C., 2014, p. 7). While the MPAs that contribute to the Network may differ in many ways, to be considered for inclusion in the Network they should all:

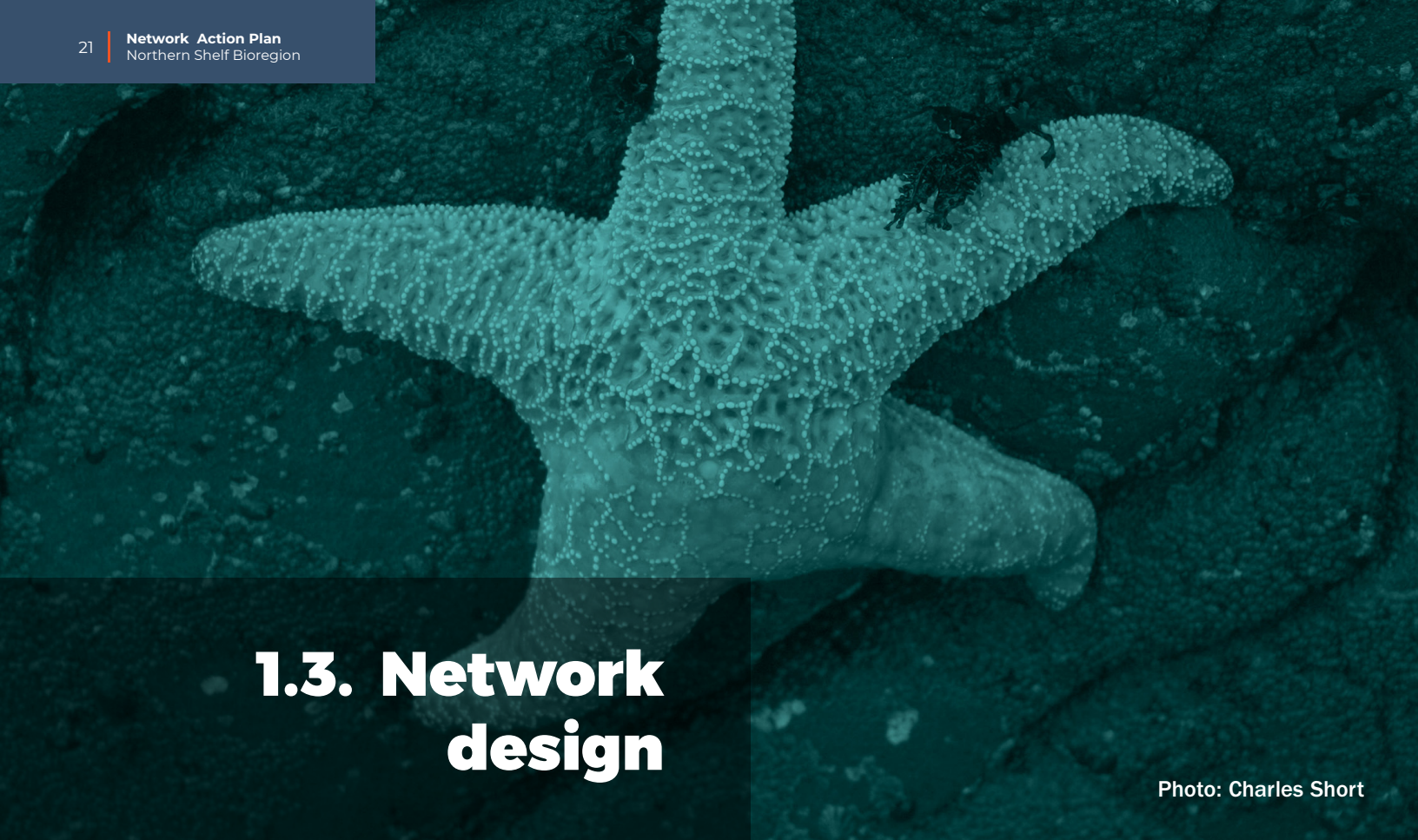
1. Meet the network definition of a marine protected area (above), including each of the key terms as described by the IUCN (see Canada & B.C., 2014, pp. 32–33).
2. Contribute to the *Network Strategy* Goal #1, “to protect and maintain marine biodiversity, ecological representation and special natural features” (Canada & B.C., 2014, p. 9).

3. Have a management plan or protection guidance explicitly specified in supporting legislation or regulations and be effectively managed for achievement of the MPA **Network goals**.

The *Network Strategy*, which was developed jointly by the governments of Canada and B.C., sets out to benefit present and future generations by providing guidance for the creation of MPA networks that provide social, community and economic stability, protect natural and cultural resources, and support opportunities to use, enjoy and better understand our marine environment (Canada & B.C., 2014). Likewise, many First Nations have comprehensive marine use plans and other strategic plans that articulate visions of healthy marine ecosystems supporting human wellbeing and cultural resilience, and that are managed with respect for the connections between people and the marine environment. As will be outlined in this Action Plan, the proposed NSB Network is designed to realize the partners’ complementary visions and goals.

¹⁴ When used generically, “MPA” or “marine protected area” should not be confused with *Oceans Act* MPAs, a specific type of MPA that is designated under the federal *Oceans Act* and administered by DFO (see Chapter 3, s. 3.1.2). If referencing these protected areas / this regulatory tool specifically in the Action Plan, “*Oceans Act* MPA” will always be used in full.

¹⁵ For more on MPA designation tools, see Chapter 3, s. 3.1.



1.3. Network design

Photo: Charles Short

Informed by the shared vision, goals and planning principles laid out in the Network Strategy, and input received from potentially affected First Nations, local governments, stakeholders and academics, the Network Action Plan proposes a Network design based on a set of overarching **Network objectives**, conservation priorities, and zone-specific conservation objectives, together with **Design guidelines and strategies** for meeting these objectives (Figure 2). These design elements, which are referred to throughout the Action Plan, are briefly described here. Further details can be found elsewhere in the Action Plan, and in Compendiums 1 and 2.

- **Network objectives** identify and focus management priorities and provide a context for finding solutions and resolving challenges, a rationale for decisions made in the development of the proposed Network design, and a means for assessing Network effectiveness. Developed with the scale of the NSB in mind, the Network objectives will also inform the future development of objectives for individual MPAs.¹⁶
- **Conservation priorities** are the features to be protected in an MPA network and prioritized during the identification of potential MPA **Sites** (Figure 2). They focus planning and management measures by identifying and, where possible, spatially delineating the specific features that need to be conserved to meet the Network objectives. By focusing spatial planning towards areas of high conservation value (e.g., areas where multiple conservation priorities overlap), the benefits of the MPA Network can be maximized. For the purpose of this Network planning process,

¹⁶ The full list of Network objectives is included in section 1.4, as well as Compendium 2.

conservation priorities have been defined as **ecological** (e.g., ecologically significant species, habitats or areas) or First Nations **cultural** priorities (e.g., species or sites of cultural significance).¹⁷

- **Zone-specific conservation objectives** are quantitatively or qualitatively measurable statements used to describe the desired outcomes for conservation priorities in a specific zone. They clarify what we are trying to protect and guide the development of regulations and management actions.¹⁸ Like conservation priorities, conservation objectives can be ecological or cultural.

- **Design guidelines** inform how the Network should be created to achieve Network objectives. They consider ecological, socio-economic, and cultural factors to support **Design scenarios**, which identify where MPAs should be located and how they should be zoned. The design guidelines for the NSB are underpinned by ecological principles and systematic conservation planning, and draw on key lessons from conservation science to match the ecological, social, and institutional context of the bioregion. Incorporating human uses, values and interests into decision making processes that are equitable, open, and accountable are also important elements of the guidelines. The design guidelines are operationalized by design strategies, which describe how specific conservation priorities should be protected within the Network. Design strategies include area-based **Ecological conservation targets** – quantitative estimates of how much of a feature (e.g., habitat type or species) should be included in the Network.¹⁹

¹⁷ For methods and list of E-CPs see DFO (2019a) and Gale et al. (2019). For the full list of E-CPs and target ranges see Compendium 2 (s. 2).

¹⁸ Zone-specific conservation objectives may also inform the development of monitoring indicators to determine whether MPA regulations and management actions are effective or need to be adapted.

¹⁹ The design guidelines are listed in full in Compendium 1. For more on the development of design strategies, see DFO (2019b) and Martone et al. (2021).

Canada-BC MPA Network Strategy



Figure 2. Network design elements

Designing the proposed Network followed an iterative process, whereby design ‘scenarios’ were created, evaluated using **Performance measures** and stakeholder and partner feedback, and then revised. Scenarios, which build upon existing marine protections in the NSB (see Chapter 2, s. 2.2), identify priority areas for conservation and provide options for possible configurations of MPAs in the Network. This process relied on the input of Indigenous governments and organizations, local government, resource users and other stakeholders, and the public, who will continue to be engaged and consulted through site-based establishment processes (Table 3).

Table 3. Iterative process of Network development

2014	Canada – BC MPA Network Strategy released with vision, goals, and planning principles to guide MPA network development in the Pacific region.
2015 – 2017	Design Guidelines developed by the Governance Partners with multiple rounds of stakeholder input to provide operational guidance on ecological, socio-economic, and cultural factors.
2016	Network Objectives for the NSB developed by the Governance Partners with stakeholder input. Ecological Conservation Priorities (E-CPs) – the species, habitats, areas, and other natural features prioritized for protection within the MPA Network) identified through Canadian Science Advisory Secretariat (CSAS) process.
2017	First Nations Cultural Conservation Priorities²⁰ (C-CPs) – areas that have cultural significance to First Nations) identified by each partner First Nation, including development of a methodology for identifying C-CPs. ²¹ Design Strategies developed to provide more specific guidance on how to conserve biodiversity; include conservation targets for E-CPs and other science advice regarding Network design; vetted through a CSAS process (DFO 2019b).
2017 – 2018	Spatial data on ecological and human uses compiled, and then reviewed by scientific experts, managers, Indigenous knowledge holders, and stakeholders.
2017 – Feb 2018	Contribution of existing MPAs and other spatial management areas to the Network (e.g., Provincial Marine Parks, Ecological Reserves, <i>Ocean Act</i> MPAs, Gwaii Haanas NMCAR, Haida Heritage Site and National Park Reserve) assessed through a Conservation Gaps Analysis (CGA) . ²²
2017 – Feb 2019	Performance measures developed through a series of bioregional workshops and stakeholder engagement sessions. Performance measures are quantitative and qualitative metrics that can be consistently used to evaluate and compare alternative Network design scenarios against Network goals, objectives, design guidance, and planning principles. ²³
Feb 2018 – July 2018	Areas for Consideration identified for MPA potential based on available data, early Marxan results, and local knowledge, considered in a series of sub-regional workshops with Governance Partners. Stakeholder input received through Integrated and Oceans Advisory Committees (I/OACs).
Aug 2018 – Jan 2019	Draft Scenario 1 developed through a series of sub-regional workshops with Governance Partners. The scenario included existing MPAs plus additional sites ²⁴ that build on existing spatial conservation efforts (e.g., RCAs, PMZs), as well as identification of additional E-CPs and C-CPs. Gaps in meeting targets identified, resulting in the addition of new, largely offshore sites to the Network.

20 Opportunities were provided during the public consultation period to share knowledge and views regarding non-Indigenous cultural values held for the marine environment.

21 Nanwakolas Nations used a subset of SMZs and PMZs only in the member Nation territories in the North Vancouver Island MaPP plan to identify culturally important areas.

22 See Compendium 2 (s. 3) for CGA details.

23 See Compendium 2 (s. 4) for details.

24 Sites are aggregations of zones, often adjacent to one another, that served as the basis for broader area descriptions, previous “site” profiles, and for the reporting of some performance metrics (e.g., size, replication).

Feb 2019- Feb 2020	Stakeholder engagement & internal review of Scenario 1. The draft scenario underwent a 12-month review period by Governance Partners and stakeholders. ²⁵
Mar 2020 – July 2021	Draft Scenario 2 iteratively developed based on: • refining Scenario 1 with stakeholder and partner feedback, • proposing zone-specific conservation objectives, • addressing inconsistencies between activities of concern and proposed conservation objectives, • applying categories for implementation (Chapter 3, s. 3.2), • introducing Working Draft Scenario 2 to stakeholders through I/OACs and bilateral sector meetings, and • identifying potential designation tools.
June 2021- June 2022	Network Action Plan drafted, and CGA and Socio-Economic Overview undertaken for draft Scenario 2. A report card on performance measures for the draft scenario was also produced. ²⁶
September – November 2022	Public and I/OAC and sector consultation on the draft Network Action Plan (based on Scenario 2) undertaken through a mix of in-person and virtual sessions for members of the public to share their perspectives and provide input on all aspects of the draft Action Plan.
August -November 2022	Canada and B.C. consultation with First Nations on the draft Network Action Plan (based on Scenario 2) was undertaken to understand their perspectives and provide input on all aspects of the draft Action Plan, including the proposed Network, and to identify whether and how they wish to further engage in the Network planning process on an ongoing basis (e.g., identification of proposed sites, participation in broader planning, etc.).
November 2022 - February 2023	Final Network Action Plan for endorsement by governance partners. The final steps to achieve an endorsed Action Plan and proposed Network included: • Refinement based on other First Nations, public and I/OAC and sector feedback, Socio-Economic Overview, and CGA (November - December 2022) • Internal Partner review and finalization (January 2023) • Endorsement (February 2023)
July 2022 - ongoing	Parallel work to support Network Implementation • Advancing opportunities to apply interim protection measures, on a site-by-site basis • Advancing a collaborative governance and management approach for constituent sites and network implementation.²⁷
February 2023 - ongoing	Network Implementation • the endorsed Action Plan can support statutory authorities undertaking establishment processes for new MPAs in the NSB. • develop monitoring framework and initiate monitoring of the Network and constituent MPAs to inform adaptive management.²⁸

25 See Compendium 1 for details on stakeholder engagement and consultation.

26 See Compendium 2 for report cards and further details on the CGA. See Compendium 3 for the Socio-Economic Overview of the Northern Shelf Bioregion.

27 See s. 4.1 for more detail.

28 See s. 4.6 for further details on Network monitoring.



1.4. Network goals and objectives

Photo: Alan Dolan

GOAL 1: TO PROTECT AND MAINTAIN MARINE BIODIVERSITY, ECOLOGICAL REPRESENTATION AND SPECIAL NATURAL FEATURES

- 1.1 Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments.
- 1.2 Protect natural trophic structures and food webs, including populations of upper-level predators, key forage species, nutrient importing and exporting species, and structure-providing species.
- 1.3 Conserve areas of high biological diversity (species, habitat and genetic diversity).
- 1.4 Protect representative areas of every marine habitat type in the bioregion.²⁹
- 1.5 Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats.
- 1.6 Conserve ecologically significant geological features and enduring/recurring oceanographic features.
- 1.7 Contribute to conservation of areas important for the life history of resident and migratory species.

²⁹ Specific representation targets, design strategies, and scales will be further defined, taking into consideration national and international best practices and commitments (e.g., Aichi Target 11).

GOAL 2: TO CONTRIBUTE TO THE CONSERVATION AND PROTECTION OF FISHERY RESOURCES AND THEIR HABITATS.

- 2.1 Maintain or improve stock stability and productivity of species important for commercial, recreational, and Aboriginal fisheries.
- 2.2 Maintain within protected areas the natural size and age structure of fished populations.
- 2.3 Conserve habitat important to ensuring that the productive capacity and harvestable biomass of commercial, recreational, and Aboriginal fisheries species are maintained within healthy and resilient ecological limits.

GOAL 3: TO MAINTAIN AND FACILITATE OPPORTUNITIES FOR TOURISM AND RECREATION.

- 3.1 Conserve sites compatible with, and of high value for sustainable tourism and recreation.

GOAL 4: TO CONTRIBUTE TO SOCIAL, COMMUNITY AND ECONOMIC CERTAINTY AND STABILITY.

- 4.1 Enable economic development opportunities that are compatible with achievement of conservation objectives contained within Goal 1.
- 4.2 Maintain or enhance the long-term productivity, resilience and reliability of marine ecosystem goods and services.
- 4.3 Support opportunities for local communities to benefit socially, culturally and economically from marine protected areas.

- 4.4 Strengthen participation and representation of communities and stakeholders in design, establishment and monitoring of the network.
- 4.5 Ensure that all marine protected areas have clearly defined objectives and effective and adaptive management including monitoring, evaluation and reporting.
- 4.6 Support effective MPA network governance and management that includes monitoring, evaluation and reporting.
- 4.7 Establish collaborative approaches to surveillance and compliance monitoring programs.

GOAL 5: TO CONSERVE AND PROTECT TRADITIONAL USE, CULTURAL HERITAGE AND ARCHAEOLOGICAL RESOURCES.

- 5.1 Increase awareness and understanding of First Nations use and stewardship of resources and territories.
- 5.2 Represent marine areas of high cultural or historical value.
- 5.3 Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security.

GOAL 6: TO PROVIDE OPPORTUNITIES FOR SCIENTIFIC RESEARCH, EDUCATION AND AWARENESS.

- 6.1 Increase awareness, understanding and stewardship of the marine environment.
- 6.2 Protect reference sites to support research and management.
- 6.3 Monitor and report on effectiveness of management actions across the network.



PROPOSED NETWORK

Photo: Barb Dinning



Photo: Barb Dinning

As outlined in Chapter 1, the proposed Network was developed through an iterative process whereby different configurations of MPAs – including the baseline of existing MPAs and alternative Network design ‘scenarios’ – were assessed against Network objectives and design guidelines. This chapter summarizes the results of that process: a proposed Network, based on design Scenario 2, that builds on the current baseline of existing MPAs with a recommended approach for greater protections for marine biodiversity in the NSB, thus advancing the ecological, social, economic, and cultural objectives of the proposed Network. It includes statistics from a subset of performance measures that were developed to assist with the Network design process. Where possible and applicable, these summary metrics are reported against the baseline of existing MPAs in the NSB.

The complete details of the proposed Network, including maps, proposed zone-specific conservation objectives, and preliminary activity assessment tables (where applicable), are given in Appendix 1. ‘Report cards’ for both the baseline and Scenario 2 can be found in Compendium 2, and an overview of socio-economic overlaps of the proposed Network Action Plan is provided in Compendium 3.

2.1. Network area

Photo: Charles Short

The total area of the NSB is approximately 102,000 km², of which the proposed Network encompasses 30,493 km² (30%) (Figure 3). Of this, 16,615 km² (or 16%) of the NSB is already protected in existing MPAs (this number increases to 18,760 km², or 19%, when **Rockfish Conservation Areas** – RCAs – are included). The proportion of each sub-region that is included in the proposed Network varies from 25% of Haida Gwaii, to 41% of the Central Coast (Table 4).³⁰ In comparison to the baseline case, the proposed Network captures additional inlet, nearshore, and offshore habitats, and improves the balance of representation of those broad habitat types across sub-regions, and regionally. The proposed Network comprises 357 zones, further aggregated into either existing MPAs or potential designation tools (the baseline case of existing MPAs comprises 137 zones).

Table 4. Area and proportion of NSB and sub-regions (SR) within the proposed Network³¹

Proposed Network	Proposed Network Area km ² (proportion of NSB)	Central Coast Area km ² (proportion of SR)	Haida Gwaii Area km ² (proportion of SR)	North Coast Area km ² (proportion of SR)	North Vancouver Island (NVI) Area km ² (proportion of SR)
Area in existing MPAs	16,615 (16%)	6,122 (28%)	5,204 (11%)	1,691 (9%)	3,599 (26%)
Area in proposed Network	30,493 (30%)	9,097 (41%)	11,692 (25%)	5,159 (26%)	4,546 (33%)

³⁰ Network analyses referenced in the Action Plan and Compendiums 2 and 3 were completed prior to the removal of the Glendale Keogh Site and do not reflect this change to the Network design.

³¹ The Central Coast and North Coast sub-regional boundaries overlap due to associated First Nations planning boundaries. To simplify analysis and outputs and avoid issues associated with double-counting, sub-regional 'assessment boundaries' (which do not overlap), were created to determine values for the Network analysis.

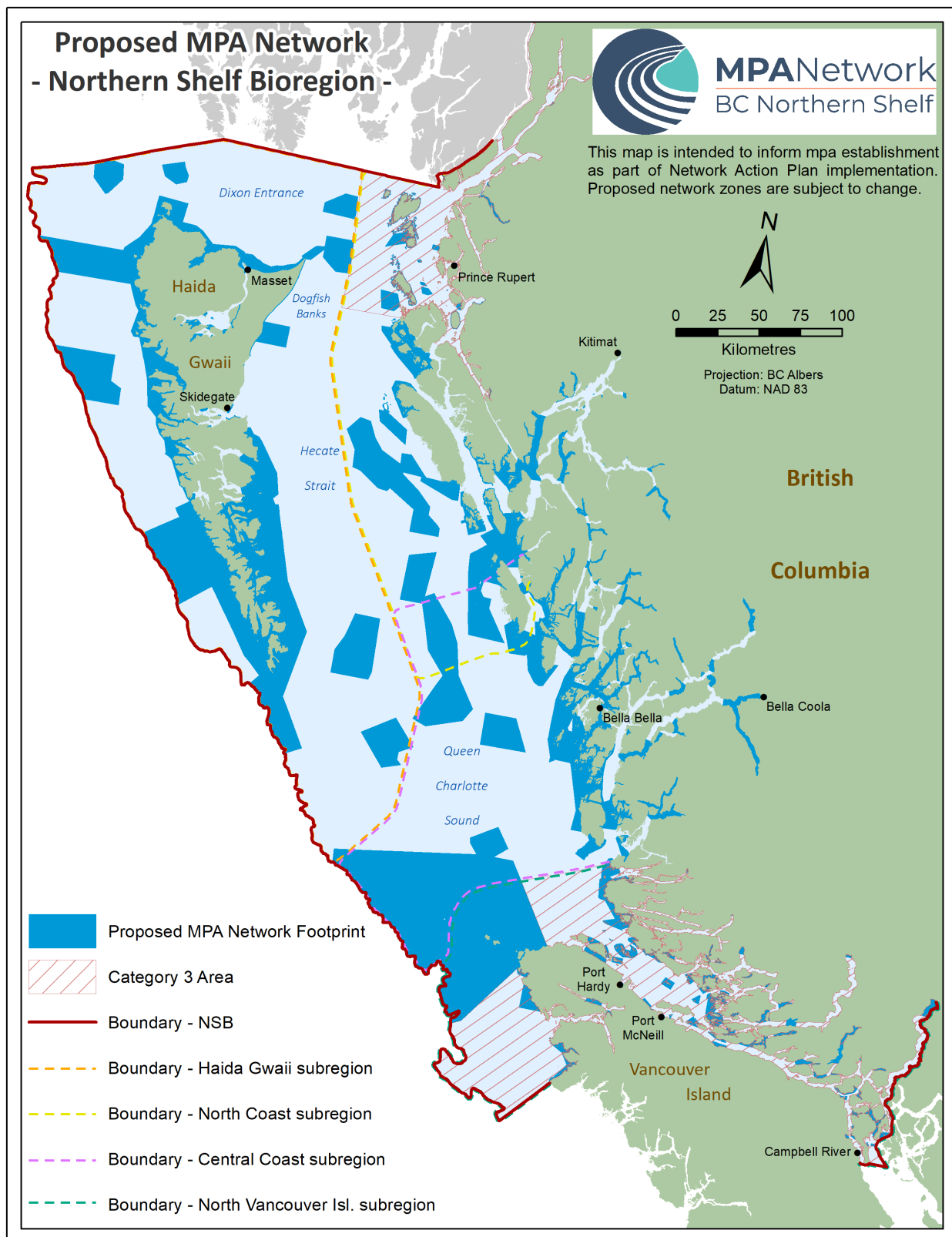


Figure 3. Overview of proposed Network with sub-regional boundaries and Category 3 areas (see Chapter 3, s. 3.2.2, for explanation of Category 3 areas).

2.2. Building from existing protection and other marine planning initiatives



Photo: Barb Dinning

Design guidelines for the MPA Network emphasize that the Network should be built from existing protections. 49.6% of the proposed Network is comprised of existing MPAs and RCAs, plus a further 11.9% of existing MPA/RCAs that could contribute to additional E-CP and/or C-CP targets if interactions with activities of concern are addressed (in addition to those already managed within the sites). 38.5% is new area, some of which overlaps with MaPP **Protection Management Zones (PMZs)** (Table 5).³² The proposed Network incorporates 100% of existing MPAs and RCAs, as well as 62% of the areas within MaPP PMZs. Figure 4 illustrates the extent to which the proposed Network builds upon existing MPAs and other marine conservation areas (e.g., RCAs). The final frame presents the proposed Network with a breakdown of underlying conservation inputs. It identifies the area of existing MPAs and/or RCAs (both with and without contributions to additional E-CP and C-CP targets) within the proposed Network, as well as ‘new’ areas that have been brought into the proposed Network. These areas as a proportion of the proposed Network are shown in Table 5. For a list of existing MPAs and RCAs, see Compendium 1.

Table 5. Existing and new protections within proposed Network (Scenario 2)

	Area (km ²)	Proportion of proposed Network	Proportion of NSB
Existing MPA/RCA - no change	15,140	49.6%	14.9%
Existing MPA/RCA – if modified	3,620	11.9%	3.6%
New area (with underlying PMZ only)	6,916	22.7%	6.8%
New area	4,817	15.8%	4.7%
Total	30,493	100%	30%

Design guidelines also suggest coupling terrestrial and marine protections. The coastline of the planning area is 29,385 km, of which 12,309 km (42%) is adjacent to terrestrial protected lands. The proposed Network incorporates 16,930 km (58%) of coastline, including 11,360 km (92%) of the coastline that is adjacent to terrestrial protected lands.

³² Although the assessment of overlap with MaPP zones was limited to PMZs, in some sub-regions there is also overlap with special management zones (SMZs) that are compatible with MPAs.

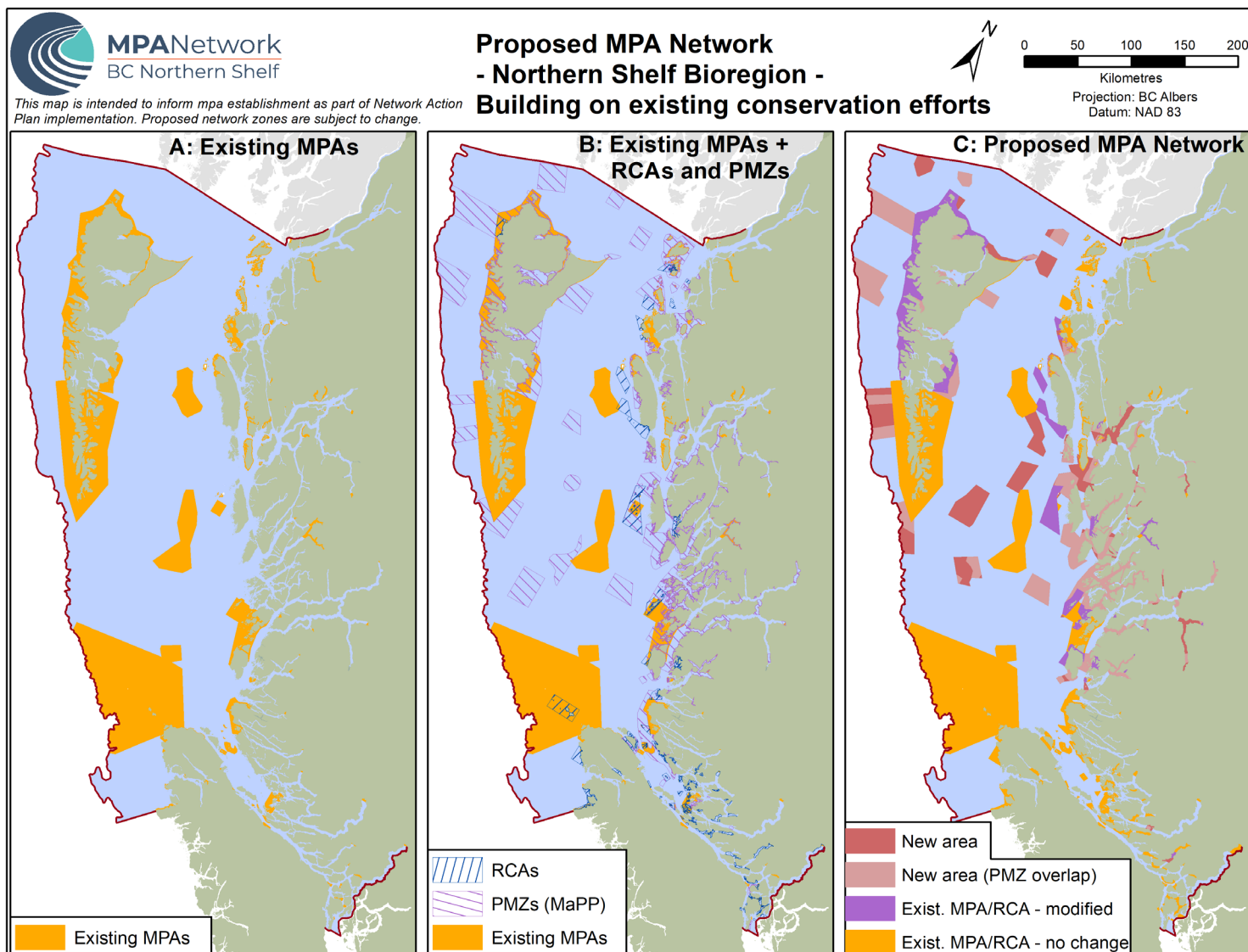


Figure 4. Development of proposed Network: Building on existing conservation efforts. (A) existing MPAs in the NSB prior to Network planning (baseline case); (B) Existing MPAs plus existing Rockfish Conservation Areas (RCAs) and MaPP Protection Management Zones (PMZs); and (C) proposed Network footprint indicating new protected areas and areas with connections to existing MPAs, RCAs, and PMZs. Although the assessment of overlap with MaPP zones was limited to PMZs, in some sub-regions there is also overlap with **Special management zones (SMZs)** that are compatible with MPAs.



2.3. Site size and spacing

Photo: Charles Short

MPAs should be of an adequate size to protect viable populations, habitats, and ecological processes within their boundaries. Based on the recommendations in the design strategies for the MPA Network, 99% of the proposed Network footprint is contained within zones, or clusters of adjacent zones, that meet the minimum recommended size for MPAs (12.6 km²) for species with smaller home ranges, and 95% of the proposed Network footprint is contained within zones, or clusters of adjacent zones, that meet the minimum recommended size (50 km²) for species with larger 'intermediate' home ranges.

There are a number of smaller existing or proposed zones or isolated portions of larger zones that fall below the 12.6 km² minimum threshold, and together cover over 300 km² of the proposed Network footprint, or a little over 1%. These results are in part due to the geography of the area (which includes many small and narrow inlets), the spatial extent of the proposed conservation objectives (e.g., estuaries), and the existence and inclusion of many small MPAs and RCAs. Further planning in Category 3 areas may lead to increases in the proportion of the proposed Network footprint that meets the size recommendations.

MPAs within a network should be spaced to enable ecological connectivity between locations, considering larval and nutrient transport and the movement of both adults and juveniles of various species. The design strategies recommend that the spacing of MPAs be between 40 and 200 km. Eighty-eight per cent (88%) of MPAs greater than 50 km² in the proposed Network are within 40 km of other MPAs greater than 50 km², and all 'clusters' greater than 50 km² within the proposed Network are within 200 km of each other.

2.4. Protection level

Photo: Charles Short

Areas in which little or no extractive uses are allowed have been shown to be more effective than those with partial protection or mixed use (Ban et al. 2014; Sciberras et al. 2013). The design strategies recommend that 20-50% of the *Network* (not the entire NSB) “be in no-take (generally thought to correspond to IUCN Level Ia) or at least limited-take (generally thought to correspond to IUCN Level Ib, II, III) reserves” (Martone et al., 2021, p. 52). The design strategies also note that the recommendation to have 20-50% of the network in what could be considered ‘high protection’ is a “key design strategy for the overall effectiveness of the network and should be considered separate from the application of a risk-based approach to evaluate and adjust the contribution of the MPA network configurations to the specific ecological conservation targets” (Martone et al., 2021, p. 51). The Governance Partners recognize the importance of this network design strategy and agree, in principle, to work toward establishing a Network that contains the recommended proportional amount of area in high protection.

At this time, the only zones that can be considered high protection are the core protection zones of the Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Area, the Restricted Access and Strict Protection Zones within the Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site, and inside the 300m vessel prohibition area surrounding the Anne Vallee (Triangle Island), Sartine, and Beresford BC Ecological Reserves within Scott Islands Marine National Wildlife Area. These zones cover 2,933 km² of the marine area and represent 18% of the footprint of the baseline case of existing MPAs and 10% of the proposed Network. Although it is anticipated that the amount of high protection will increase as a result of implementation of the Network, the exact location and size of the increase will be influenced by the results of finer scale risk assessments undertaken during implementation, and by any resulting mitigation measures identified and applied by management. As future MPAs are designated and associated management measures implemented, it will be critical to track the contribution of new sites towards the achievement of network objectives and alignment with network design recommendations, including increases in the area of high protection.

2.5. Representation and replication of ecological conservation priorities (E-CPs)

Photo: Barb Dinning

Goal 1 of the *Network Strategy* is to protect and maintain marine biodiversity, ecological representation, and special natural features. The MPA network design process assessed the presence of ecological conservation priorities (E-CPs) within the Network, which are the species, habitats, areas, and other natural features prioritized for protection. Target ranges were assigned to E-CPs to help guide the planning process with quantitative estimates of how much of a given feature should be included in the Network. Representation was reported in two ways: presence within a network scenario footprint, and ‘down-scaled’ presence within a network scenario footprint when considering potential interactions of human use activities.³³ An assessment of replication, focusing on habitats and a sub-set of species features, was also undertaken at the sub-regional scale.

A subset of ecological performance measures relates to the representation of overall biodiversity, as well as of specific habitat classes and species feature groupings within different network design scenarios.³⁴ While not all E-CP features meet their representation targets in the proposed Network (Scenario 2), all habitat classes and 91% of E-CP species fall within or exceed their target ranges. This compares to 80% of habitat classes and 74% of E-CP species within the baseline case of existing MPAs. Ten E-CP features of conservation concern, identified based on their conservation status and vulnerability, are underrepresented in the proposed Network, whereas 20 are underrepresented in the baseline case. Underrepresented E-CP features that play key ecological roles are fewer in every category in the proposed Network compared to the baseline case.

Using the Conservation Gaps Analysis (CGA) tool (see Compendium 2), representation was also evaluated by taking into consideration the potential interactions between human activities and E-CPs, producing ‘scaled’ representation totals for E-CPs within individual zones. For the baseline case this assessment was informed by a combination of existing management direction and occurrence of human activities within MPAs. For the proposed Network this was based on existing restrictions, likelihood of activity presence, and presumed mitigation between identified activities of concern and the E-CPs present within a zone.

³³ See Compendium 2 for more information.

³⁴ For the full list of performance measures see Compendium 2, s. 4.

Scaled values show 74% of species features meet or exceed representation target ranges in the proposed Network, compared to 42% of species in the existing MPA baseline case. In the proposed Network, 41 of 157 (26%) species features fall below the target range after consideration of potential interactions with human activities and of those, 17 are of conservation concern. In existing MPA baseline case, 93 of 159 (58%) species features fall below the target range after accounting for human activities, of which 34 are of conservation concern. Proportional representation within 'high protection' zones has been used as a proxy for features that are not scaled in the CGA, a group that includes many habitats. High protection zones are those with no commercial or recreational extraction (i.e., no-take or limited take), and no industrial activities, generally aligning with IUCN categories I-III as per generic guidance regarding acceptable activities (Day et al., 2019; IUCN-WCPA, 2008). As described in the preceding section, there are currently just under 3,000 km² of marine area that would be considered high protection, and 33% of habitat E-CP features are adequately represented (fall within their recommended target range) within these high protection zones. As additional MPAs within the Network are established over time, assessments of additional habitat captured within new high protection zones will be incorporated into ongoing network monitoring.

Spatially separated replicates of representative habitats can provide insurance against local disturbance, help capture natural variation, and mitigate uncertainty associated with capturing representative habitats. The design strategies for the NSB recommended replication be assessed at the sub-regional scale, with 2-3 replicates per sub-region where possible. Replication of habitats within the proposed Network increased in all subregions when

compared to the existing MPA baseline case. Habitat features with two to three replicates per subregion increased from 30-56% to 49-97% (range by subregion).

2.5.1. Future improvements to representation and replication of E-CPs

The proposed Network is intended to improve ecological conservation within the NSB across performance measures when compared to the baseline case of existing MPAs. However, it is important to note that the proposed Network does not yet fully achieve all of the desired overarching Network objectives. While it is expected that there will be adjustments and refinements to the Network during establishment processes, ongoing planning ahead of these processes aims to fill some of these gaps. With regard to representation and replication, target shortfalls will be evaluated on a feature-by-feature basis. This evaluation incorporates a number of considerations, including:

- potential future contributions from Category 3 areas.
- potential contribution of Network zones with known data gaps.
- mitigation measures.
- additional research.

It is anticipated that the results of this ongoing work, in parallel with feedback received from First Nations, stakeholders, and the public, will result in a revised Network that improves on meeting conservation objectives while reducing social and economic impacts. Furthermore, E-CPs that remain under-represented in the Network should be considered in Network and site level monitoring efforts.

A polar bear is shown from the side, standing on a dark, rocky shore. It is holding a large, dark fish in its mouth and appears to be eating it. The bear's fur is white and thick. The background is a dark, textured surface, possibly water or a rocky bank. The entire image has a teal-colored overlay.

2.6. Representation of First Nation cultural conservation priorities (C-CPs)

Photo: Jennifer Thomson

First Nations partners identified cultural conservation priorities (C-CPs) as one way of representing culturally important areas in the Network. Informed by Indigenous and cultural data collected by individual partner First Nations, C-CPs helped each Nation ensure that areas of high cultural value in their territories were considered as part of the Network planning process (Table 3). C-CPs include areas that are important for harvesting, for culturally significant species, and for culture and spirituality.

The area and proportion of 'high', 'very high', and 'critical' C-CPs captured in the proposed Network was examined. Representation of C-CP area is 60% in the proposed Network, compared to 12% in existing MPAs. 18% of C-CP area is proposed for high protection, whereas none is currently under high protection in existing MPAs. 73% of 'critical', 54% of 'very high', and 53% of 'high' C-CP area is represented in the proposed Network, and 7%, 12%, and 31% respectively is proposed for high protection.

2.7. Overlap with economic activities

Photo: Iain Robert Reid

The proposed Network overlaps with a range of economic activities in and near the NSB.³⁵

The proposed Network includes the geographic areas where roughly 30% of the landed value of current commercial fishing conducted within the NSB occurs, some portion of which may be affected by future MPA designation and management. There is the potential for decrease in harvest due to future fisheries restrictions, which could result in shifts in fishing patterns and lost harvest opportunities in many fisheries. Seafood processing operations may also experience a loss in profits associated with decreased harvest if processing inputs cannot be sourced elsewhere. If changes to availability of inputs causes processing plants in smaller communities to reduce employment, relocate, or close, the effects would be felt throughout the community as well as in the sector itself.

Recreational fishing also has overlaps with the proposed Network, especially in nearshore areas and areas closer to communities. The economic impact of any future restrictions to recreational fishing would depend on the extent to which anglers 'replace' those fishing days with trips in other fishing areas. A high proportion of angler days made up in open areas would mitigate the overall economic impacts. However, there could be effects at local levels near the closed areas if there is not sufficient remaining activity to support local businesses. Additionally, even if fishermen can relocate to open areas to compensate for lost access, implementation of the proposed Network may cause them to lose access to specific areas that are important to them, resulting in decreases in cultural, recreational, and social values that may not be reflected in changes to angler expenditures.

³⁵ Also see Compendium 2 (s. 4) for the full suite of estimated overlaps with human activities.

Commercial and recreational fishing have large footprints in the marine planning space compared to sectors such as forestry and aquaculture, in which activities are concentrated in smaller areas. The effects of the proposed Network on coastal forestry and aquaculture operations are also smaller, in part because of earlier planning initiatives and management regimes that account for these activities (e.g., provincial land use planning, provincial moratorium on marine finfish aquaculture in tidal waters north of Aristazabal Island, and marine plans developed through MaPP). The fact that these activities' use of marine areas is restricted to tenures also made it easier to avoid them when including potential new MPAs in the proposed Network. The proposed Network also overlaps with a number of other marine activities and features, including anchorages, kayak routes, and other recreational features, and to a lesser extent other infrastructure such as boat launches and moorages.

The implementation of the proposed Network is expected to have many economic and social benefits. These could include, for example, enhanced opportunities for local communities and organizations to participate in MPA monitoring; support for research and educational goals (e.g., by preserving natural conditions as reference points; providing locations for learning about marine ecosystems and marine resource uses across a range of habitats; encouraging research funding); and improved recreational values and associated business opportunities in the public recreation and tourism sectors (also see s.1.1). The greatest economic and social gains are expected to come from the ecological benefits of the proposed Network, such as increased fisheries yields (due to spillover effects) and greater carbon sequestration (through habitat protections).

For more information on human use of the NSB, refer to Compendium 3 (Socio-Economic Overview of the Northern Shelf Bioregion).



3

OPERATIONAL RECOMMENDATIONS



This chapter provides recommendations for regulators and jurisdictional authorities to implement the Network Action Plan, including:

- 1** potential legal **designation tool(s)** for achieving the proposed conservation objectives of individual zones (aggregated into potential MPAs),
- 2** **implementation approach**, whereby zones are categorized according to different levels of planning detail and timeline for implementation, and
- 3** **identification of activities of concern** for various human uses and activities within zones.

In addition to describing and summarizing these recommendations, this chapter also introduces other considerations for Network Action Plan implementation, including the use of interim protection measures, and the alignment of Network implementation with other marine management regimes in the NSB.

The image shows two albatrosses standing on a rocky, light-colored shore. The bird on the left is perched on a rock, facing right. The bird on the right is standing on the ground, also facing right. The entire image is covered with a semi-transparent teal overlay. The text '3.1. MPA designation tools' is written in white, bold, sans-serif font over the left side of the image.

3.1. MPA designation tools

Photo: Iain Robert Reid

There is no single overarching legal tool for establishing the MPA Network as a whole. Rather, a variety of Indigenous, federal, and provincial designation tools are being considered.

3.1.1. Indigenous Protected and Conserved Areas

First Nations along the Pacific coast have always had well developed and comprehensive societies that include many unique philosophies, principles, and specific traditions and laws with respect to resource management. The Governments of Canada and BC are working with Indigenous groups to explore new ways of working together to advance the recognition of Indigenous rights and self-determination. Indigenous Protected and Conserved Areas (IPCAs) have strong potential to contribute to Network goals.

In Canada, the term IPCA³⁶ was introduced by the Indigenous Circle of Experts (ICE) in 2018 to refer to a range of protected and conserved area approaches used by Indigenous Peoples (including some levels of resource use). The IPCA term draws on terminology and concepts developed through international and domestic forums and refined through a series of regional gatherings hosted by ICE in the four corners of Canada in 2017. The concept was also reinforced in recommendations of the 2018 Final Report of the National Advisory Panel on Marine Protected Area Standards to the Minister of Fisheries and Oceans, reflecting input from stakeholders and the public across Canada.

Regarding the application of this tool to the proposed Network, the Mamalilikulla First Nation declared an IPCA in November 2021 and the Kitasoo Xai'xais declared an MPA under their traditional law in June 2022, both of which overlap portions of the Network footprint.

By promoting recognition of rights, responsibilities, and priorities of Indigenous Peoples through IPCAs, significant progress can be made to support conservation while also contributing to a wider range of priorities that will benefit both Indigenous and non-Indigenous peoples located along the Pacific coast and the remainder of Canada. IPCAs can provide strong conservation outcomes but further exploration

³⁶ While the term IPCA is widely recognized, many other forms of Indigenous conservation (e.g., Tribal Parks, Indigenous Protected Areas, Heritage Sites) include the IPCA elements that are outlined in the ICE report (2018) without using the IPCA title. This section of the report is meant to be inclusive of all Indigenous-led marine protection within the NSB.

is required by Indigenous, provincial, and federal governments to clarify how best to achieve agreed upon objectives through an effective combination of Indigenous laws, and provincial and federal designations. This should be done in the spirit and practice of reconciliation; in ways that respect existing federal and provincial government legislation, policies, and practices; and in a manner and form consistent with Indigenous laws and responsibilities, upholding mutual commitments in reconciliation agreements, treaties, comprehensive land claims and self-government agreements, and other agreements, as required.

The implications of recent and potential future declaration of IPCAs by First Nations over MPA Network sites will require further discussion between First Nations and federal and provincial governments on a site-by-site basis.

3.1.2. Federal and provincial designation tools

The Government of Canada and Province of British Columbia possess a host of statutory tools for protecting marine and coastal areas. The Governance Partners considered the tools listed in Table 6 for potential use in the MPA Network.

Table 6. Federal and provincial designation tools for potential use in the Network

Designation Tool and enabling legislation	Tool objective/purpose	Example site
Federal tools		
Marine Protected Area (Oceans Act MPA) <i>Oceans Act</i>	Protect and conserve important fish and marine mammal habitats, endangered marine species, unique features and areas of high biological productivity or biodiversity.	Hecate Strait / Queen Charlotte Sound Glass Sponge Reefs MPA
National Marine Conservation Area Reserve³⁷ (NMCAR) <i>Canada National Marine Conservation Areas Act</i>	Protect and conserve representative examples of Canada's natural and cultural marine heritage and provide opportunities for public education and enjoyment. Parks Canada's goal is to protect each of 29 marine regions.	Gwaii Haanas
Marine National Wildlife Area (or 'Protected Marine Area') <i>Canada Wildlife Act</i>	Protect and conserve wildlife and their habitat, including for migratory birds and species at risk, for the purposes of conservation, research, and interpretation.	Scott Islands marine NWA
Marine Refuge <i>Fisheries Act</i>	Provide marine biodiversity conservation benefits to species, their habitats, and ecosystems. Fishery area closures, recognized under the Government of Canada's Marine Other Effective Area-Based Conservation Measures (OECMs) Guidance. Appropriate for areas not already contributing to Canada's Marine Conservation Targets, where fisheries are the primary source of risk to conservation objectives.	Offshore Pacific Seamounts and Vents Closure

37 Under the *NMCA Act and National Parks Act*, Reserves are established "where an area or a portion of an area proposed for a marine conservation area [or park] is subject to a claim in respect of aboriginal rights that has been accepted for negotiation by the Government of Canada" (*Canada National Marine Conservation Areas Act*, 2002; *Canada National Parks Act*, 2000).

Table 6. Federal and provincial designation tools for potential use in the Network (con't)

Designation Tool and enabling legislation	Tool objective/purpose	Example site
Provincial tools³⁸		
Class A Park <i>Park Act or Protected Areas of B.C. Act</i>	Preservation of natural environments for the inspiration, use and enjoyment of the public. Managed for important conservation values and are dedicated for the preservation of their natural environments, and the enjoyment of the public.	Octopus Islands Marine Park
Conservancy <i>Park Act or Protected Areas of B.C. Act</i>	Protect biodiversity, natural environments, and recreational values, and explicitly recognize social, ceremonial, and cultural uses by Indigenous people.	Hakai Luxvbalis Conservancy
Ecological Reserve <i>Ecological Reserve Act</i>	Areas selected to preserve representative and special natural ecosystems, plant and animal species, features, and phenomena. Scientific research and educational purposes are the principal uses of ecological reserves and provide a high degree of protection.	Robson Bight (Michael Bigg) Ecological Reserve
Protected area or conservation study area <i>Environment and Land Use Act and relevant sections of the Park Act</i>	A more flexible conservation approach that allows the province to restrict specific activities while allowing existing activities or new activities prohibited under other pieces of legislation such as the Park Act. It is to ensure that all aspects of the preservation and maintenance of the natural environment are fully considered in the administration of land use and resource development.	Small Inlet Protected Area
Reserves, Withdrawals and Notations <i>Land Act</i>	Prevent the short- or long-term disposition of land under the Land Act through a Section 15, 16, 17 or Notation of Interest (NOI) for specific uses incompatible with the ecological or cultural character of an area.	Shelter Bay Section 17 Designated Use Area
Wildlife Management Area <i>Wildlife Act</i>	Conserve and manage important habitat values for the benefit of regionally or internationally significant fish and wildlife species.	Cluxewe Wildlife Management Area

³⁸ Provincial MPA designation tools can only be used to manage provincially regulated activities and may therefore be limited in terms of the protections they can provide. For example, if fishing – a federally-regulated activity – poses a risk to conservation objectives within a provincial protected area, additional tools may be required to manage this activity.

3.1.3. Establishment processes

MPA establishment processes can vary widely depending on the designation tools selected. Implementing protected area legislation has specific statutory requirements and defined steps to be taken by the responsible Governance Partner. Generally, the establishment of MPAs will include some or all of the following steps: site identification; feasibility assessments; refinement/completion of overview and assessment reports (which consider the ecological/biophysical, social, cultural and economic aspects of the area); collaboration and consultation with First Nations; consultation and engagement with stakeholders and the public; designing management measures; reaching implementation agreements; and, finally, enacting the legal tools to formally designate the MPA. Management plan requirements, which also vary across designation tools, typically provide site details such as vision, conservation objectives, management measures, and compliance and enforcement considerations (also see Chapter 4, s. 4.2).

The process for establishing IPCAs will be unique to each Nation and may be guided by their Indigenous laws, governance structures, and management objectives. Some Nations are working to develop approaches for establishing and implementing IPCAs in their territories, and the role of IPCAs in Network implementation is still being determined. Presently, to bring them into effect, IPCAs should be explored in the context of broader integrated planning efforts. When agreements are reached, federal and provincial designation tools could be used to complement IPCAs and Indigenous laws that govern stewardship and resources use.

Where federal or provincial departments other than those responsible for an MPA establishment have a specific jurisdiction in the marine environment,³⁹ those departments often

maintain their authorities within protected areas and work collaboratively with the department responsible for the establishment and management of the protected area, and other partners. Through collaborative management agreements the intent is that relevant Governance Partners define their roles and responsibilities in site-level decision making, including the application of existing statutory authorities (see Chapter 4).

3.1.4. Anticipated implementation efficiencies

Developing this Action Plan involved significant research, refinement, and engagement. Much of this work can support the steps required to establish federal, provincial, and Indigenous designation tools, and will therefore assist in achieving more efficient establishment processes during Network implementation. Components of these processes that could benefit from consideration of the Action Plan include:

- Development of conservation objectives or purpose statements.
- Feasibility/risk assessment/cost-benefit analysis.
- First Nations consultation by Crown governments.
- Stakeholder and public engagement.
- Endorsement and approvals.
- Site establishment and legal designation.
- Management planning.

While it can support MPA establishment processes, the planning process for the Action Plan does not replace statutory requirements or First Nation leadership and community endorsements for the establishment of individual MPAs.

³⁹ Examples include DFO (fisheries), Transport Canada (shipping), and the Ministry of Forests (tenured activities).

3.2. Recommended implementation approach

Photo: Charles Short

3.2.1. Zone aggregation

The proposed Network design comprises 357 individual zones, including over 100 existing MPAs (designated under various statutory tools), a subset of areas zoned as PMZs/SMZs from the MaPP plans, RCAs, and new zones developed through the Network planning process. To simplify the proposed Network, similar zones were aggregated into larger areas that could potentially be designated as a single MPA (see Profiles, Appendix 1). Aggregation was performed using the following criteria:

- **Ecological alignment:** Ecological conservation objectives were assessed for common conservation priorities. This assessment was done qualitatively as well as quantitatively through a cluster analysis of ecological conservation priorities (E-CPs).⁴⁰
- **Cultural alignment:** Cultural conservation objectives were assessed qualitatively for similarities in the cultural conservation priorities (C-CPs).
- **Administrative and governance alignment:** To simplify Network governance, sub-regional and Nations' territorial boundaries were considered.
- **Geographic alignment:** While adjacency is not required for clustering zones under a single designation tool, geographic proximity was considered as a factor for aggregation.

⁴⁰ Zones were aggregated based on ecological conservation objectives. Conservation objectives relating to species and habitats were unpacked into basic elements for each zone. Data complexity (a matrix of binary data with zones and conservation objective elements) pointed to statistical analysis for clustering, in particular the hierarchical clustering procedure which computes the Euclidean distance between pairs of zones and produces tree-based representation of the observations called a dendrogram. This approach offers flexibility to further aggregate into fewer, larger sites or disaggregate into more, smaller sites. Zones were aggregated both within individual sites, if possible, and throughout the sub-region. For clustered zones, the conservation objectives common in all zones within the cluster were identified and provided the rationale for considering a particular designation tool, one that would adequately protect the common conservation objectives present throughout the cluster.

3.2.2. Implementation categories

Categories were applied to Network zones based on the level of agreement achieved among the Governance Partners and/or other First Nations. Three categories were developed (Figure 5), and the level of detail provided in the Action Plan reflects the corresponding implementation timelines. Category 1 zones

are recommended to be implemented first and are therefore described in the greatest amount of detail below and in the profiles (Appendix 1). Additional details for Category 2 and 3 zones and areas are expected to be developed during Action Plan implementation.

Category 1: implementation by 2025

Category 1 zone descriptions in the profiles include:

- proposed boundaries (of potential MPAs and their proposed constituent zones);
- proposed conservation objectives (the desired outcomes for conservation priorities);
- preliminary activity assessment tables that identify activities of concern that might pose a risk to conservation priorities, and
- potential designation tool(s) based on alignment with zone-specific conservation objectives; activities of concern, and Governance Partner discussions.

Category 2: implementation by 2030

Category 2 zone descriptions in the profiles include:

- proposed boundaries (of potential MPAs and constituent zones), and
- proposed conservation objectives.

Category 3

Category 3 is applied to areas within the NSB that are important ecologically and culturally, and that (along with any future zones within them) may contribute to the Network objectives, but further work is required to reach agreement among Governance Partners and/or other First Nations regarding how they (and their zones) will be described and implemented. Unlike Category 1 and 2 zones, proposed conservation objectives and other details have not been developed for Category 3 areas. They are included in the profiles as areas for further planning, with a description of the ecological and cultural values that could contribute to the Network targets.

Category 3 areas (and any future zones within them) do not have a timeframe for implementation. Where agreement is reached to advance planning for zones within a Category 3 area, the zones may be re-categorized as Category 1 or 2. This will need to take into consideration the practicality and available resources for advancing additional areas and zones under the Category 1 and 2 timelines.

Existing ‘as-is, where-is’ zones

Throughout the NSB there are a number of existing MPA designations and RCAs⁴¹ that contribute to the MPA Network but have no proposed changes in the Action Plan. As planning advances, changes may be explored for some of these sites, which are described collectively as Existing MPAs/RCAs – ‘as-is, where-is’, and have been sub-divided into the following types:

- **Type I:** existing MPAs where Governance Partners⁴² have reached agreement that no adjustments are proposed.
- **Type II (northern North Coast):** existing MPAs/RCAs in the Category 3 area of the North Coast sub-region where further work is required amongst Governance Partners and other First Nations before any agreements on possible adjustments are reached.
- **Type III (NVI):** existing MPAs/RCAs in the Category 3 area of the North Vancouver Island sub-region where any adjustments are pending discussions with other First Nations.
- **Type IV (NVI):** existing MPAs/RCAs in the Category 3 area of the North Vancouver Island sub-region where preliminary discussions have begun, and further work is required amongst Governance Partners and other First Nations.

3.2.2.1. Categorization criteria and methods

Building from the Network design guidelines, the following criteria were developed to identify Category 1 zones in design Scenario 2. They were applied at multiple scales and according to their applicability to each sub-region:

- 1 – Contribution and level of conservation concern / threat to **E-CPs**.
- 2 – Contribution and level of conservation concern / threat to **C-CPs**.
- 3 – **Level of engagement / support from other First Nations.**
- 4 – The **socio-economic contributions / impacts** of designating zones / proposed MPAs, including:
 - potential for ecosystem service provision,
 - potential implications (positive or negative) for First Nations’ socio-economic interests,
 - potential implications (positive or negative) for stakeholders’ socio-economic interests, and
 - degree of stakeholder support across sectors.
- 5 – **Network design considerations**, including:
 - complementarity with results of other planning / management processes, and
 - size and spacing and representation / equity across sub-regions.

41 While RCAs do not meet the definition of an MPA (see Chapter 1, s. 1.2), the Governance Partners recognize their conservation benefits and have agreed to work toward long-term collaborative governance, management, and monitoring of RCAs within the Network where appropriate (noting further discussion required for RCAs in Category 3 areas).

42 The Governance Partners are listed in s. 1.1.

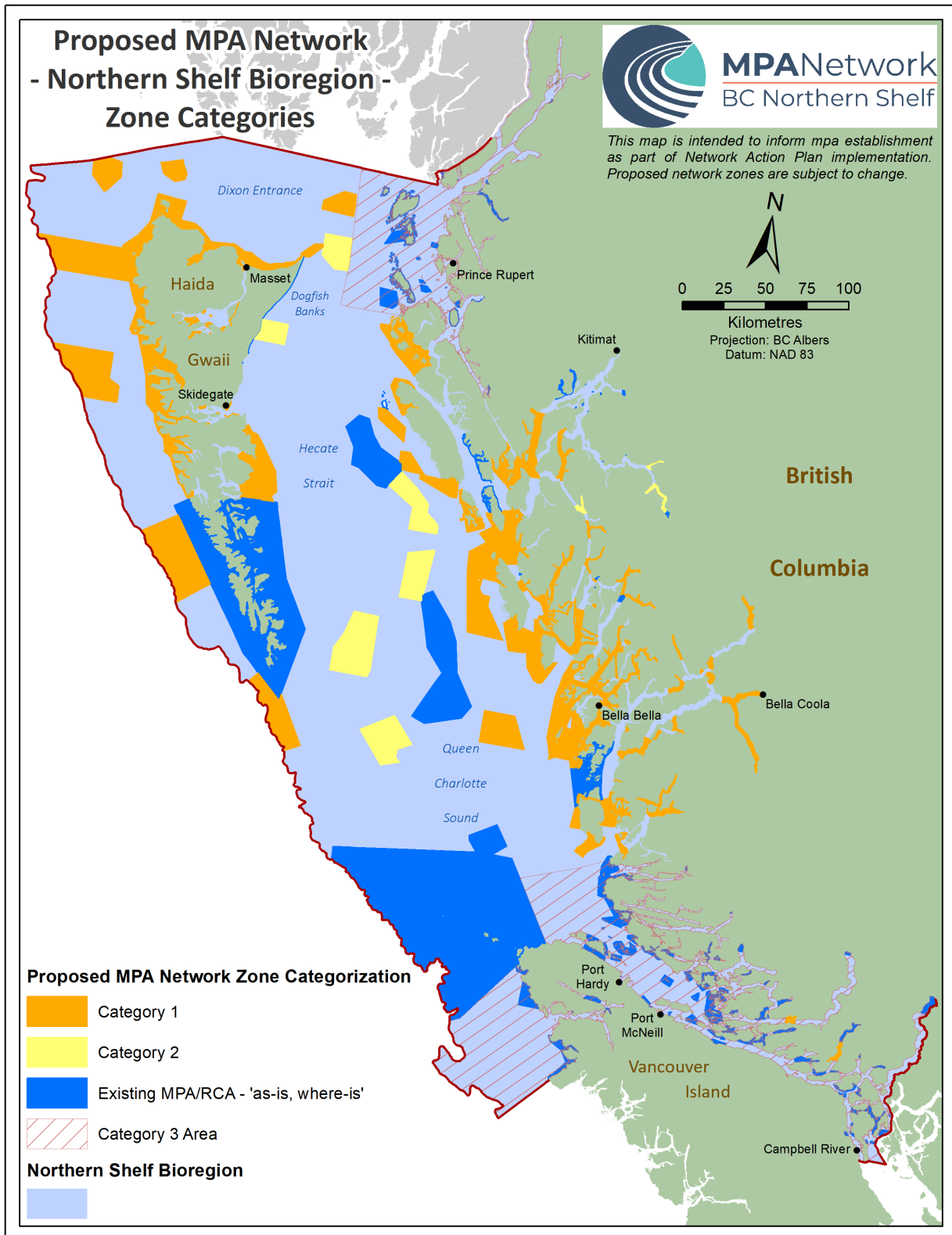


Figure 5. Map of proposed MPA Network (by Category)

3.2.3. Category 1 zones with potential MPA designation tools

Federal and provincial designation tools (see Table 6) were initially assessed for Category 1 zones at a sub-regional scale in order to consider sub-regional interests with respect to First Nations' territorial boundaries and governance. The zone aggregates proposed in each sub-region as potential Category 1 MPAs (to be implemented by 2025) are described below.

While many federal and provincial designations tools have flexibility in how they are applied, in practice and function different tools are better suited to different sites according to proposed conservation objectives, desired levels of protection, management approach, and the capacity, subject matter expertise, and jurisdictions of the responsible authorities.

Summarized in the following sections and illustrated in Figure 6, zone aggregates were matched with the most appropriate tool(s) for protecting the proposed conservation objectives of their constituent zones, based on the best information and technical subject matter expertise available at the time. For further details, including maps and zone-specific conservation objectives and preliminary activity assessment tables, see the profiles in Appendix 1. Where statutory authorities undertake site designation processes, further assessment and engagement is required to determine the applicability of these potential designation tools, the feasibility of their use, and the timelines by which a designation could be implemented. As a result of this more extensive and zone-specific analysis, there may be revisions to the designation tool(s) identified for a zone or zone aggregate and the timelines for implementation.

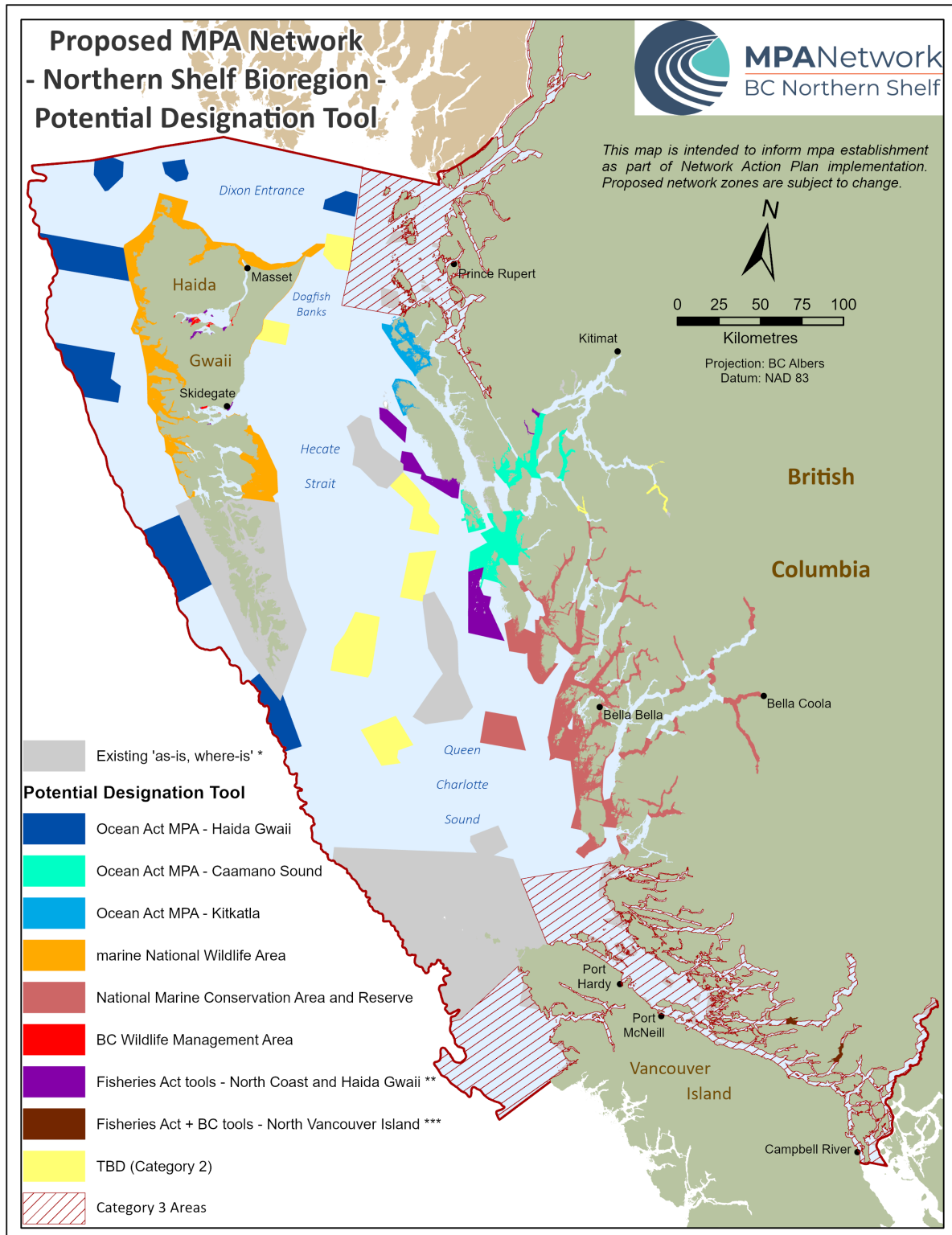


Figure 6. Map of proposed MPA Network (potential designation tools).

* Includes existing MPAs and RCAs.

** A Marine Refuge status may be pursued where appropriate. See Appendix 1 for more details.

*** See Appendix 1 (North Vancouver Island Profiles) for details on designation tools being considered.

3.2.3.1. Haida Gwaii

Based on E-CPs and C-CPs, two MPAs are proposed for consideration in the offshore and nearshore areas of Haida Gwaii: an Oceans Act MPA, and a marine National Wildlife Area, respectively. A mixture of Wildlife Management Areas and Fisheries Act tools are proposed in Masset Inlet and Skidegate Inlet.

Zones:	Nearshore zone aggregate: 430-434, 435-436, 440-447, 450-456, 460- 463, 470, 471- 477, 480- 490, 491-496 ⁴³
Potential tool:	Marine National Wildlife Area (<i>Canada Wildlife Act</i>).

There are a significant number of marine bird conservation priorities included in the objectives for the nearshore zones, and these populations are closely linked to many of the other habitat and species priorities within these zones. Conservation of wildlife habitat, marine bird populations, and the multiple marine bird features in these zones is well aligned with the purpose and criteria for a marine National Wildlife Area (NWA).

Further consideration is required during implementation to refine zones and proposed conservation objectives for migratory birds and their habitat in order to determine how best to protect other conservation priorities, such as fish and marine mammals, and to integrate fisheries management approaches. In addition, there is a need to determine how a potential marine NWA would complement existing Haida Heritage Sites, B.C. Conservancies, Ecological Reserves, and other designations.

Zones:	Offshore zone aggregate: 500-506
Potential tool:	Oceans Act MPA.

Based on the cluster analysis, the proposed conservation objectives of Zones 500-506 have good alignment, including common habitat features such as upwelling, corals, sponges, seamounts and multiple **Ecologically or Biologically Significant Marine Areas (EBSAs)**.⁴⁴ None of these zones are currently protected. The conservation of multiple habitat features and important fish populations is well-aligned with the purpose and criteria for an Oceans Act MPA.

To advance this potential MPA, further consideration is required during implementation to determine how best to protect other conservation priorities found in the zones, and which threats are better addressed with other, complementary management approaches (e.g., mitigation of acoustic disturbance to marine mammals).

Zones:	Skidegate and Masset Inlet zone aggregates Habitat aggregate: 400-404 and 416 (Masset Inlet), and 420 and 421 (Skidegate Inlet). Biodiversity aggregate: 410 ⁴⁵ -416 (Masset Inlet), and 422-424 (Skidegate Inlet).
Potential tool:	Habitat aggregate: Wildlife Management Area (B.C.'s <i>Wildlife Act</i>). Biodiversity aggregate: Marine Refuges (<i>Fisheries Act</i>).

The inlets have multiple small zones with various types of existing protections centred

⁴³ Offshore sites 437 and 439 have many marine bird values and align well with a potential marine NWA. However, these zones still require further work and are proposed as Category 2.

⁴⁴ The Network design strategies include feature-based targets for how much of a given feature should be included in the Network.

⁴⁵ 410 is partially protected through Haida Gwaii Heritage Sites / Conservancy and conservation lands. Fisheries Act tools will be explored to further protect the conservation priorities for this zone.

around sensitive habitats such as estuaries. A combination of Marine Refuges (*Fisheries Act* closures) and Wildlife Management Areas under B.C.'s *Wildlife Act* is recommended to achieve the desired protection.

3.2.3.2. Central Coast

Zones:	100-103, 110-114, 120-123, 130-134, 136-138, 140-146, 150-157, 160-166, 170-174, 180-188, 190-197, 200-206, 210-213.
Potential tool:	National Marine Conservation Area Reserve (NMCAR) (<i>Canada National Marine Conservation Areas Act</i>).

There are many features of the Central Coast that align it with the purposes of an NMCAR, including a complex set of near shore zones that have high biodiversity, are culturally significant, and have importance to tourism and recreation. Also, the Central Coast is part of Parks Canada's 29 marine regions, and the recommended use of an NMCAR in this area aligns with Parks Canada's goal to represent each of these regions within a national system of NMCAs.

There is a need to determine how a potential NMCAR would complement the existing B.C. Conservancies and Parks. In 2022, a feasibility study was initiated to determine whether establishing a NMCAR in the Central Coast would be practical and desirable.

3.2.3.3. North Coast

Zones:	Banks Aristazabal zone aggregate: Zones 300, 301, and 305-307.
Potential tool:	Marine Refuge (<i>Fisheries Act</i>) for 300 and 305-307. Fisheries Act tool for 301+ marine National Wildlife Area (<i>Canada Wildlife Act</i>) for zones 300 and 301. ⁴⁶

Four existing RCAs (300 and 305-307) already provide protections to many of the key conservation priorities, which could be enhanced through the establishment of a marine refuge through closures under Canada's *Fisheries Act*. Through the RCA review process DFO has started the marine refuge establishment process for these RCAs. Similarly, 301 is an Ecological Reserve, and protection in this zone could be further enhanced through *Fisheries Act* tools. Zones 300 and 301 also have important bird conservation priorities, protection of which could be increased through a marine NWA. Zones 300 and 301 were not developed with marine birds as a primary conservation priority, and it is recommended statutory authorities consider the boundaries of these zones to best protect those bird values when contemplating this site for potential designation as an MPA.

Zones:	Caamano Sound zone aggregate: 310, 311, 313, 314, 315 and 316.
Potential tool:	<i>Oceans Act</i> MPA

These zones have similar proposed ecological conservation objectives, including important cetacean habitats, the Mainland EBSA, and eelgrass and kelp forests (Zones 310, 311, 312), and there is good alignment with the proposed cultural conservation objectives. In addition, combining these zones simplifies anticipated future administration and governance arrangements with First Nations.

Further work is required to determine how to best provide protection to non-habitat-based conservation priorities that recognizes the full suite of E-CPs in all zones and incorporates the diverse set of conservation priorities between zones within a single proposed MPA.

46 If a marine NWA is pursued, conservation in 300 and 301 would be enhanced through *Fisheries Act* tools but a Marine Refuge status would not be pursued.

Zones:	Kitkiata (Lax Galts'ap) and Kishkosh Inlets: Zones 320, 321.
Potential tool:	Wildlife Management Area (B.C.'s <i>Wildlife Act</i>) + <i>Fisheries Act</i> tool.

These zones are in culturally significant inlets that represent important estuarine and nearshore ecosystems. A combination of Wildlife Management Area and *Fisheries Act* tools is proposed to achieve the overall biodiversity protection objectives for these zones.

Zones:	Kitkatla zone aggregate: Zones 330-333.
Potential tool:	<i>Oceans Act</i> MPA.

There is strong alignment among these zones in terms of the proposed ecological conservation objectives focused on habitat features and Northern abalone conservation; the proposed cultural conservation objectives, which emphasize the critical importance of this area for First Nations; and geographic proximity. The focus on habitat feature conservation aligns well with the purpose of *Oceans Act* MPAs.

There is a need to determine how a potential *Oceans Act* MPA could complement the existing B.C. Conservancies and RCAs in the area.

3.2.3.4. North Vancouver Island

There are two small Category 1 sites in the North Vancouver Island sub-region. Each of these sites is closely linked by cultural and ecological COs, as well as administrative, governance and geographic alignment. A combination of *Fisheries Act* and provincial tools is proposed, pending further discussions amongst First Nations.

Zones:	Heydon and Loughborough Site: Zones 1-4.
Potential tool:	<i>Fisheries Act</i> tool to enable “marine refuge” status (potentially a Variation Order and/or Condition of Licence) + <i>Land Act</i> Section 17 withdrawal, with potential for a longer-term provincial tool, such as a Wildlife Management Area (B.C.'s <i>Wildlife Act</i>), for enhancing protection.
Zones:	Gwaxdlala/Nalaxdlala (Lull/Hoeya) Site: Zones 15 and 16
Potential tool:	<i>Fisheries Act</i> tool to enable “marine refuge” status (potentially a Variation Order and/or Condition of Licence) + <i>Land Act</i> Section 17 withdrawal, with potential for a longer-term provincial tool, such as a Wildlife Management Area (B.C.'s <i>Wildlife Act</i>), for enhancing protection.



3.3. Preliminary activity assessment tables

Photo: Iain Robert Reid

The profiles in Appendix 1 include preliminary activity assessment tables, which show the potential negative interaction(s) between a select list of activities (see below, s. 3.3.2) and the E-CPs that are listed in proposed zone-specific conservation objectives (see Chapter 2, s. 2.7).⁴⁷ These tables provide information on four types of assessment outcomes (see key, Table 7). It is anticipated that all activities will be further assessed at a finer scale during the implementation stage, at which time any necessary mitigation measures (including restrictions/prohibitions) will be identified.

Table 7. Preliminary activity assessment table key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
p	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal Oceans Act Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

*Activity would be restricted as per Federal MPA Protection Standards.

⁴⁷ Interactions were assessed between human use activities and ecological conservation priorities (E-CPs) only. While cultural conservation priorities (C-CPs) often align with E-CPs, C-CPs can contain additional values that Nation partners feel are better conserved with non-MPA tools but which they still wish to see identified within the Network. See s. 2.7 for more information on representation of First Nation C-CPs.

3.3.1. Supplemental information

Supplemental information is found immediately after the standardized tables in the profiles, providing further specificity about an activity in the particular zone, or noting that specific conditions will be articulated in site-level MPA management plans or other related management plans and tools.

3.3.2. Activities included in preliminary activity assessment tables

Due to their prominence in the NSB and potential for negative interactions with E-CPs listed in proposed conservation objectives, the following activities are included in the preliminary activity assessment tables for each MPA zone:

- **Aquaculture** – finfish open net pens, shellfish off bottom, shellfish beach seeding, marine plants.
- **Commercial harvest** – bottom longline, bottom trawling, shrimp trawling, dive with pressure hose, SCUBA dive fishing, invertebrate trap, sablefish trap, intertidal digging picking by hand, gillnet, pelagic and midwater trawl, purse seine, and trolling with rod and reel (salmon and tuna).
- **Recreational harvest** – fishing with hook and line, invertebrate trap, intertidal digging, picking by hand, trolling with rod and reel, dive (SCUBA) fishing.
- **Forestry** – log storage and handling.
- **Industrial Projects** – including activities not supported within MPA boundaries pursuant to Federal MPA Protection Standards (oil and gas activities, mining,

and dumping), and including but not limited to dredging, underwater pipelines, seismic surveys, desalination, industrial water use, near water construction, in-water construction, construction of marine infrastructure, and tidal barrage energy.⁴⁸

Detailed descriptions of these activities, and those listed below in section 3.3.3, are provided in Compendium 1, and standardized tables with preliminary activity assessment tables for these activities are included as part of the profiles in Appendix 1.

3.3.3. Considerations for activities not included in preliminary activity assessment tables

In addition to aquaculture, forestry, commercial and recreational harvest, and industrial activities, a number of other activities in the NSB were assessed. Where higher potential consequence interactions with proposed conservation objectives were identified, 'Additional Considerations' for detailed management plans are also provided in Appendix 1 (following preliminary activity assessment tables).

As noted above, in many cases the impacts of human uses and activities on conservation objectives will depend on precisely where, when, or how they occur. The additional considerations statements provide a starting point for further assessment where site-based establishment processes are undertaken, when the potential impacts of activities – including but not limited to the higher potential consequence interactions identified during Network development – can be assessed and addressed at the appropriate scale.

48 Where such activities are not prohibited by federal MPA Protection Standards or other regulations these projects will be subject to review by the appropriate authorities.

3.3.3.1. Renewable energy

Renewable energy, including tidal stream, wave, and wind, is an emerging sector in the NSB. Structures that require foundations to be built on the ocean floor can shift habitat types, from soft to hard bottom, and impact species assemblages. Renewable energy infrastructure, such as wind turbines, can also lead to avoidance behaviours, habitat displacement, and collision impacts for multiple taxa. This activity is assessed in the MaPP sub-regional marine plans, which should be reviewed during the development of detailed MPA management plans. In addition, there are higher potential consequence interactions between renewable energy installations and soft bottom habitats, and staging, wintering, and feeding areas for marine birds.

3.3.3.2. Submarine cables

Submarine cables are used to carry electricity or telecommunication signals between two land masses. The laying or removal of such cables can present risks to conservation objectives, particularly those related to sensitive benthic areas. However, these activities were not identified as having a higher potential consequence for conservation priorities. The MaPP sub-regional marine plans assess submarine cables, and this direction should also be reviewed during the development of MPA management plans.

3.3.3.3. Non-extractive tourism and recreation

Commercial and public recreation and tourism in the marine environment include activities such as whale watching and nature viewing, cruising, scuba diving, and kayaking or canoeing. While these non-extractive activities may be compatible with the objectives of the Network, there are a number of higher potential

consequence interactions with conservation priorities, such as highly sensitive First Nations cultural areas. These interactions primarily occur in fixed locations and can be managed spatially within an MPA. The MaPP sub-regional marine plans assess non-extractive tourism and recreation, and this direction should also be reviewed during the development of MPA management plans.

3.3.3.4. Infrequently used fishing gear types

There are a number of commercial and recreational fishing gear types that are used infrequently in the NSB. These include but are not limited to commercial and recreational beach seine, cast nets, and dip nets; fish wheels; recreational spearfishing; and recreational midwater gillnet. While uncommon, these gear types can have localized impacts on target species, bycatch species, and habitat features; their use and risk to conservation objectives should be assessed where site-based designations are undertaken. Commercial and recreational beach seine, cast nets, and dip nets can have a higher potential consequence for eulachon and may be restricted, as noted in the Additional Consideration statements for applicable zones.

3.3.3.5. Marine Transportation

Marine shipping corridors along the Pacific Coast, including within the NSB, are transited by vessels ranging from small recreational vessels to large commercial carriers. The NSB is also home to three active ports, including the Port of Prince Rupert, the Port of Stewart, and the Port of Kitimat. Vessel traffic within the NSB includes large commercial cargo vessels, fishing vessels, passenger vessels, tug and barge, and pleasure craft.

Noting that several initiatives under the Oceans Protection Plan and the Whales Initiative already provide opportunities to address these impacts, further management measures may be considered during the implementation phase to help protect whales from vessel strike and acoustic disturbance, intertidal harvest activities from wake, and reduce small/large vessel interactions.

3.3.3.6. Anchorages and Private Moorage

Anchoring of private and commercial vessels and the establishment of private moorages can lead to pollution and physical damage to environmentally sensitive areas. In areas where these activities could compromise conservation objectives, localized restrictions may be identified during MPA establishment.

3.3.4. Activities not addressed in the Action Plan

Finally, several uses and activities that could also have negative consequences for conservation objectives in the Network are beyond the scope of the Action Plan. Activities of concern have not been identified for these activities, therefore, but their impacts – and opportunities to mitigate them – should be considered during site-specific MPA establishment and ongoing management. Activities beyond the scope of the Action Plan include, but are not limited to, those described below.

3.3.4.1. Events related to oil pollution

While oil spills and pollution are outside the scope of the Action Plan, many existing initiatives, including those under the Oceans Protection Plan (OPP), offer opportunities to mitigate the risks.

3.3.4.2. Ballast water and other vessel discharge

Ballast water is a known pathway for invasive species and pollutants. While consideration of ballast water was outside the scope of the Action Plan, it is important to note that Canada's *Ballast Water Regulations* address the spread of invasive species throughout Canada's waters, including the NSB. Strict controls on discharges from vessels in the course of routine operations – such as oily mixtures, sewage, and wastewater – are covered by the *International Convention for the Prevention of Pollution from Ships* (MARPOL) and regulated in Canada under the *Vessel Pollution and Dangerous Chemicals Regulations*.

3.3.4.3. Sonar

Sonar is used in naval operations, mapping, fishing, and navigation, and has negative interactions with many marine animals, but in particular cetaceans. The prevalence of interactions between sonar and cetaceans in the NSB was not assessed and the appropriateness of the activity within the Network was not considered for the Action Plan.

3.3.4.4. Aircraft

Aircraft are used to access remote areas of the coast in the NSB. Interactions between aircraft and wildlife are documented and have been shown to disturb birds and other wildlife. Birds are also a known potential hazard to aircraft.

3.3.4.5. Oceans enhancement

There are a number of enhancement activities that can occur in the marine environment, such as salmon hatchery production, eelgrass and salt marsh restoration, artificial reef construction, and substrate additions, which may interact with conservation objectives.

3.3.4.6. Research

Research and monitoring are important components of MPA network implementation, and research interests are also likely to extend beyond network monitoring. Research activities will be assessed against the conservation objectives for each MPA and will include consideration of the potential benefits of research to individual MPAs, the Network as a whole, and other programs.

3.3.4.7. Indigenous harvest and traditional use

Indigenous harvest and traditional uses, including practices for food, social, and ceremonial (FSC) purposes, will continue in accordance with legal rights and obligations. Where potential interactions between conservation objectives and the traditional uses are identified, these will be discussed through bilateral consultation between Crown and Indigenous governments during implementation. After requirements for conservation, Indigenous FSC requirements and treaty obligations have first priority.

3.3.4.8. Recreational and commercial wild marine plant harvest

Recreational wild marine plant harvest is an extractive activity. No higher consequence interactions with conservation objectives have been identified, but specific harvest activities should be further assessed in areas where they could compromise the conservation objectives of an MPA. Recreational marine plant harvest is subject to all applicable laws, policies, and relevant agreements.



3.4. Interim protection measures

Photo: Iain Robert Reid

Jessen et al. (2011, p. 28) define interim protection as “a mechanism to protect the values of a proposed MPA site to ensure that ecological and cultural values are secured while planning and establishment processes are initiated and completed.” Efforts to implement the Action Plan could take many years, during which time a site’s conservation priorities may remain at risk. Interim protections are commonly used for proposed terrestrial protected areas in Canada, but have been less widely applied to MPAs (Jessen et al., 2011).

Interim protections in the marine environment may be achieved using statutory and non-statutory tools. It is recommended that interim protections be considered on a site-by-site basis. For human uses and activities related to provincial jurisdiction, a number of tools could be considered, including tenure conditions and regulations under B.C.’s *Land Act*. For interim protections to mitigate risk from fisheries related activities, federal *Fisheries Act* closures are recommended.



3.5. Network alignment with other marine resource management regimes

Photo: Barb Dinning

3.5.1. Fisheries management

The proposed Network does not replace or duplicate existing approaches to fisheries management under the Fisheries Act, its associated regulations, the Sustainable Fisheries Framework policies,⁴⁹ or international treaties. Existing fisheries management measures and agreements (e.g., fisheries resource reconciliation agreements) may contribute to the Network objectives, just as the proposed Network may contribute to fisheries management objectives through an integrated approach to MPA establishment.

3.5.1.1. Incorporation of existing fisheries management approaches in the Network design

The scientific literature advises that 20-50% of the ocean space or planning area be highly protected through full commercial and recreational fisheries closures (Martone et al., 2021). However, it is also recognized that existing management for various activities outside MPAs can influence the amount of highly protected MPA coverage required. In the NSB, existing and future fisheries management measures may contribute to conservation objectives and complement the new spatial protection measures proposed in the Action Plan. Recognizing that the Network is being proposed in an area of existing fisheries management and other conservation initiatives, the design strategies recommend that 20-50% of the Network (not the entire NSB) be captured in areas of high protection (Martone et al., 2021).

During site-based establishment processes, the relationship between the MPA, the MPA Network and fisheries management approaches should be assessed and aligned through management processes at the site and fishery level. Complementary agreements such as fisheries resource reconciliation agreements, which facilitate an enhanced role for First Nations in collaborative governance and fisheries management and decision-making processes, should also be integrated.

49 <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/overview-cadre-eng.htm>

3.5.1.2. Integrating fisheries management with MPA establishment

Fisheries management measures may be more fully integrated with spatial management tools during processes to establish sites. This will require consideration of the contribution of existing spatial and non-spatial management measures to conservation objectives, depending on the requirements of the designation tool and any new or additional information brought forward during the establishment phase.

3.5.2. Other management regimes

In addition to fisheries management, other coastal management processes may influence MPA and MPA Network performance. For example, the Species at Risk Act (SARA) requires the identification and protection of critical habitat⁵⁰ for species listed as extirpated, endangered, and threatened. If a human use is not identified as an activity of concern in the Action Plan (see Table 7), but that activity might be harmful to a critical habitat feature, function or attribute in a specific zone, it may still be managed via other statutory mechanisms.

Decisions about land use and development, the management of terrestrial and freshwater resources (including resulting runoff to marine waters), regulation of land-based industries that support coastal areas, and coastal access, can also have profound effects on MPAs by influencing the cumulative impacts of stressors on ocean ecosystems (Halpern et al., 2010). For example, the Great Bear Rainforest (GBR) agreement is an ecosystem-based management (EBM) land use plan that borders the majority of the terrestrial land base adjacent to the MPA Network. The implementation of this plan will impact the nearshore environment and the effectiveness of MPAs. So too will the decisions of local governments with respect to zoning and bylaws within their boundaries in some areas. When implementing the Network, the multiple layers of interest and jurisdiction that influence the coastal zone will be important to consider, and coordination between the Network and these other regimes on the land base will be paramount. Where misalignments between the Action Plan and other management regimes are identified, work will be undertaken as needed to amend and adjust the management approach, as appropriate (also see Chapter 4, s. 4.8).

⁵⁰ Critical habitat is the habitat required for the survival or recovery of a listed wildlife species and is defined by features and attributes within a geographic area that provide for necessary functions (e.g., foraging, resting, socialising, rearing of offspring) to occur.



NETWORK GOVERNANCE AND MANAGEMENT

The Governance Partners are committed to developing a collaborative governance and management approach to Network implementation and MPA site establishment and management. This chapter outlines elements of that approach, including negotiated governance and management agreements, implementation funding, effective management, monitoring, and enforcement, and ongoing communication and engagement.

4.1. Collaborative governance and management agreements

The governance model currently in development for Network implementation would involve collaborative governance and management agreements between the Government of Canada, the Province of B.C., and any participating First Nation for all MPA sites within a Nation's territory that contribute to the Network (including RCAs).⁵¹ The model also contemplates the use of a forum where Governance Partners could come together to collaborate on the management of the Network.

The approach to collaborative governance and management is actively being negotiated, and it is anticipated that future agreements will:

- create structures and processes to inform establishment and management of MPAs (including monitoring and management plan development).
- support establishment of collaborative governance forums where partners will work together on matters of common interest and on matters that are at regional and subregional network levels, where appropriate.
- provide opportunities for meaningful engagement of Indigenous governments and organizations, local government, and stakeholders.

4.2. Approaches to management planning

The Action Plan does not contain the appropriate level of management details required for statutory purposes. Rather, it provides both Network implementation guidance and site-specific operational recommendations to meet the proposed conservation objectives. The Action Plan will inform the establishment processes for individual sites and the development of management plans (or their amendment for existing sites), where applicable, to meet the objectives of the site and the Network as a whole (also see Chapter 3, s. 3.1.3).

While site-level analysis of socio-economic impacts will be undertaken as required by the relevant establishment processes, the cumulative socio-economic impacts across the Network (i.e., the total costs and benefits of multiple protected areas) have also been identified as a concern. Assessing these impacts requires information on site management, which will become available over time. It is recommended that, where feasible, cumulative impacts be considered during site-level establishment processes.

It is expected that network and site-level management will follow adaptive management practices. Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and new information from science and other sources.

51 Processes will be needed to recognize MPA sites for which collaborative governance agreements already exist, including sites with terrestrial components.

In MPA networks this is achieved by comparing the results of MPA network monitoring against network objectives. Should the network be found to not be meeting the objectives, there are numerous adaptive measures that can be undertaken.

4.3. Network implementation funding

A key consideration for Network feasibility, designation tools (Chapter 3, s. 3.1.3), and zone categorization (s. 3.2.2) is funding to support the governance, establishment, and ongoing management of new and existing MPAs within the Network, as well as the Network as a whole. This will require conventional federal or provincial funding, as well as seeking new sources of funding (e.g., non-governmental sources). For federal designation tools, Federal Budget 2021 commits close to \$1 billion over 5 years to help Canada achieve its goal of protecting 25% of Canada's oceans by 2025. Funding details for specific sites will depend on a number of factors outside the scope of Network Action Plan and will be discussed further at the MPA establishment stage.

4.4. Progress reporting

Adaptive management of the Network requires regular reporting on the progress of actions and outcomes associated with MPA management. Reporting should be done at regular intervals to ensure that the appropriate authorities are able to make informed management decisions to support the achievement of site and Network objectives. Long-term monitoring is required to provide information on the ecological,

social, cultural, governance and management aspects of the Network (see below). The monitoring and reporting approach and adaptive management process should be co-developed and implemented at the level of both sites and Network.

4.5. Communications & Engagement

The success of the MPA Network rests on awareness of and support for the Network and its constituent MPAs among resource users and other interested groups. Early and ongoing communication and engagement is therefore essential. Participatory engagement has occurred, and will continue to occur through bilateral meetings, webinars, in-community open houses, and informal discussions between the Governance Partners and marine users. Throughout the ongoing Network implementation process and establishment of individual MPAs, a variety of communication tools and participatory engagement approaches will continue to be used to share information about the Network, including a website, social media, mobile applications, web-based maps, and community-based monitoring initiatives.

To support MPA objectives and comply with restrictions on activities, marine users need to have an understanding of where MPAs are located, what is allowed within them, and (most importantly) why conservation measures are in place. As during the Network planning phase, advisory boards, committees, or comparable structures are expected to be used to receive input during individual site establishment processes, and to share information with interested First Nation communities, stakeholders, and the public.

4.6. Network monitoring

Monitoring for performance against conservation objectives will be an important and ongoing part of a strong MPA network⁵² by improving our understanding of marine ecosystems and human pressures in the NSB and evaluating the effectiveness of management actions over time. Early in the Network implementation phase a detailed framework, strategy, and monitoring plan will be developed with principles, indicators, and methods for monitoring MPAs within the Network and other reference sites. These components should be developed through engagement with stakeholders, technical experts, communities, and other members of the broader public to help lay the foundation for a robust, collaborative, and effective network monitoring program. The success of the Network monitoring program will depend on a number of core elements, including monitoring partnerships (e.g., Guardian programs), contributions of Indigenous and local knowledge, clear pathways from monitoring outcomes to management decisions, attention to climate change, long-term funding, and standardized data collection and long-term data management and assessment.

4.7. Compliance and enforcement

Compliance with MPA regulations and associated measures (e.g., management plans) will be critical for the Network to achieve its conservation goals. Insufficient enforcement is a key driver of non-compliance associated with MPAs (Iacarella et al., 2021). Long-term

resources in terms of staffing, funding, capital assets, tools and technology, and training will be required for effective enforcement. In addition, monitoring enforcement effort, complexity of boundaries and potential management measures, and other factors that influence compliance, such as lack of awareness or insufficient public engagement and support, should be an important element of the Network monitoring program (above). This could include collecting quantitative human pressure data (e.g., vessel traffic) as well as qualitative data (e.g., marine user surveys) to improve understanding of (non-)compliance. Monitoring outputs should be used to promote compliance through stakeholder and public outreach and education.

4.8. Plan amendment and Network adjustments

The Action Plan represents a significant step towards realizing an MPA Network for the NSB and provides guidance for Network implementation. However, it is expected that there will be adjustments and refinements to the Network as this Action Plan is implemented at both the site and Network scale. As noted in Chapter 3 (s. 3.2.2), more specific technical planning will also be advanced as Category 3 areas are resolved. A process to acknowledge these developments, for example through amendments to the Action Plan or describing adjustments in regular reporting, is required.

⁵² Monitoring of individual MPAs will be determined during the development of site-specific management plans.



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Photo: Charles Short

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APPENDIX 1 – PROFILES

Photo: Doug Biffard

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Introduction

Profiles provide zone-specific details and identify activities of concern to inform further planning, establishment, and ongoing management of existing and potential new MPAs in the Network. Depending on the implementation timeframe (Table A- 1), details in the profiles may include the proposed conservation objectives and preliminary assessment of activities of concern for each zone, boundaries for proposed MPAs and their constituent zones, and the potential designation tool(s) recommended for those proposed MPAs. All zone details in the profiles are preliminary and subject to review and change during implementation of sites.

The proposed Network is comprised of 357 zones, including existing MPAs, RCAs, and new areas proposed for inclusion in the Network. Zones are assigned implementation categories, and for the planning process were aggregated into larger areas suitable to consider for designation as single MPAs.¹ Organized by sub-region, each profile begins with a description of the ecological and cultural values within these aggregated areas. This is followed by the zone-specific details for Category 1 and 2 zones. For practicality and presentation purposes, profiles with many zones (Nearshore Haida Gwaii, Central Coast) are further sub-divided into groups. Index maps for each sub-region show the locations of the zones in each profile or group.

Table A- 1. Profile details by zone category

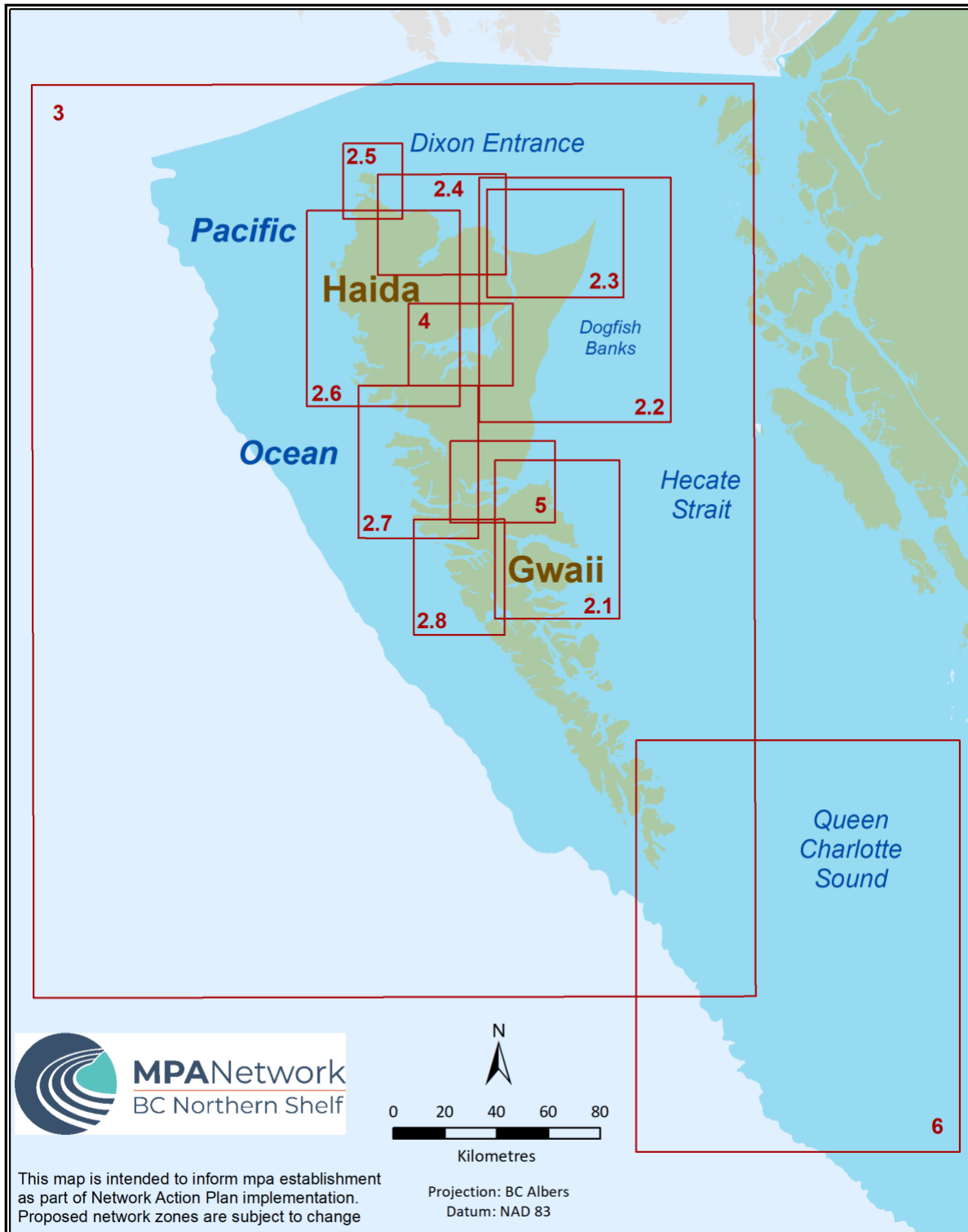
Zone descriptions in the profiles	Zone Category (Implementation timeframe)		
	1 (2025)	2 (2030)	3 (n/a)
Description of ecological and cultural values in zone aggregates	✓	✓	✓
Proposed boundaries (potential MPAs and constituent zones)	✓	✓	
Proposed conservation objectives	✓	✓	
Preliminary activity assessment tables	✓		
Potential designation tool(s)	✓		

¹ See Chapter 3, sections 3.2.1 and 3.2.2 for explanations of zone aggregation and categorization.

HAIDA GWAI

List of Maps

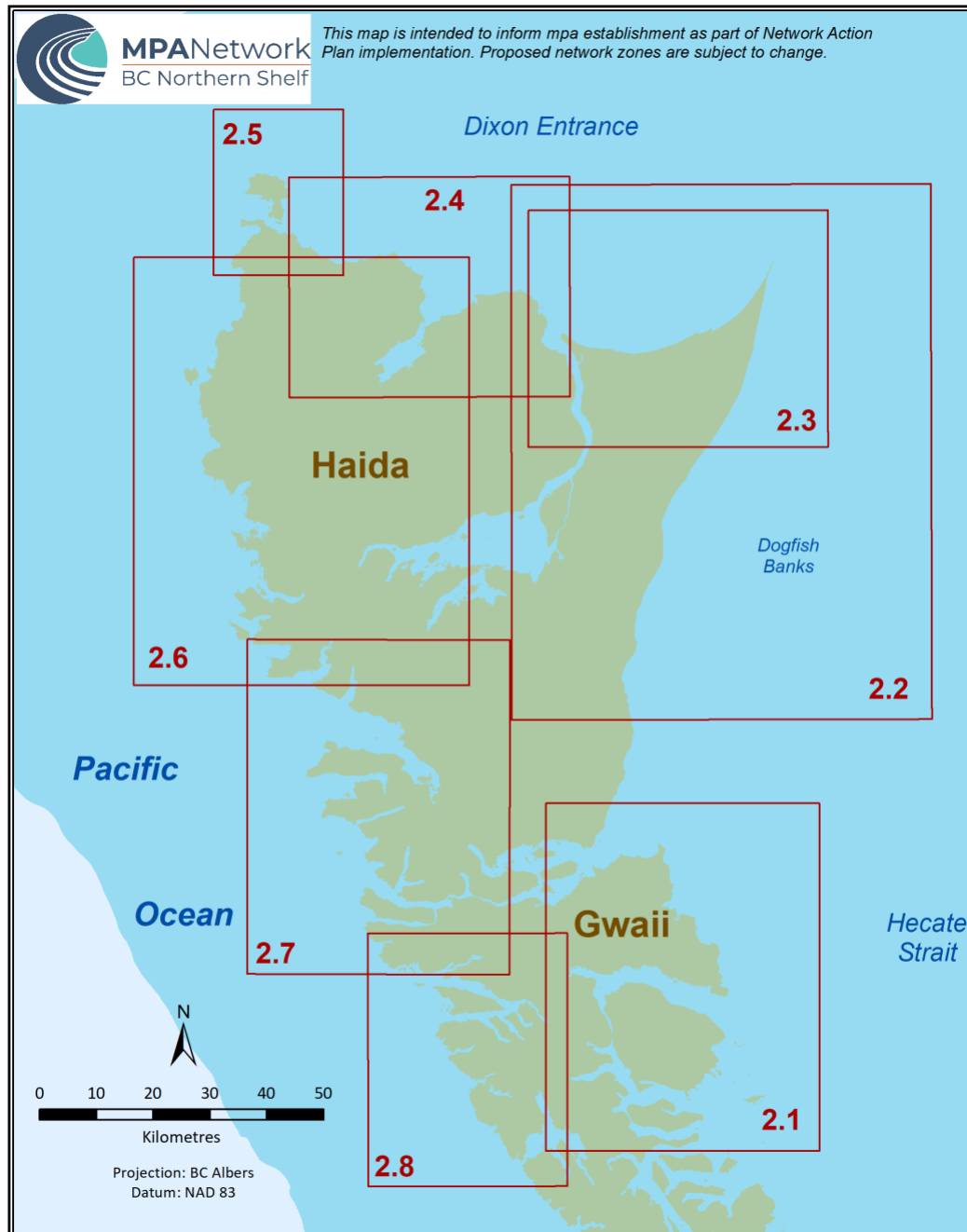
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Map 1. Haida Gwaii Index Map

Nearshore Haida Gwaii Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.



Map 2. Index map for Haida Gwaii Nearshore groups

Sub-region: Haida Gwaii

Category: 1 and 2

Potential designation tool(s): marine National Wildlife Area

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 2,788.0 km²

Zones included in this profile: 430-434, 437, 439-447, 450-456, 460-463, 470, 471-477, 480-490, 491-496

Zone Details

East Coast: Five Mile Group (Map 2.1) & Dogfish Bank Group (Map 2.2)

Context

Ecological Context

This site includes the areas south of Sandspit to Cumshewa Inlet, then further south to the northern Gwaii Haanas marine boundary. These areas support large kelp forests, eelgrass beds, and the species that rely on these habitats. There are many exposed and sheltered shorelines, rocky and sandy beaches, reefs and corals, and small islands and islets. There are many important fish-bearing estuaries and marine habitats, such as Fairbairn Shoals, which supports potential sea otter habitat and has unique benthic features. Other areas, such as Copper Bay, are important salmon estuaries.

The site supports many different species of conservation concern, species at risk, and unique species, including significant colonies of marine birds and breeding habitats, marine mammals, salmon, rockfish, leatherback sea turtle habitat, transient killer whales, harbor porpoises, and a high diversity of marine invertebrates.

Cultural Context

This site has high cultural and historic value, including Haida Village sites and seasonal camps, and important areas for learning traditional practices. Historically and presently the nearshore area provides an important travel route for Haida to access fishing grounds and other village sites.

Moreover, the site contributes to the conservation of species significant to First Nations and coastal communities, including those important for cultural use and food security. These species include, but are not limited to, nesting sites and foraging habitats for marine birds, harvesting of seaweeds and kelp, herring and herring roe on kelp, marine invertebrates, and fish.

Human-Use Context

The site overlaps with three Haida Heritage Sites and B.C. Conservancies (Damaxyaa, Kunxalas and K'uuna Gwaay), as well as aligning with the northeastern boundary of the Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve and Haida Heritage Site. Communities in

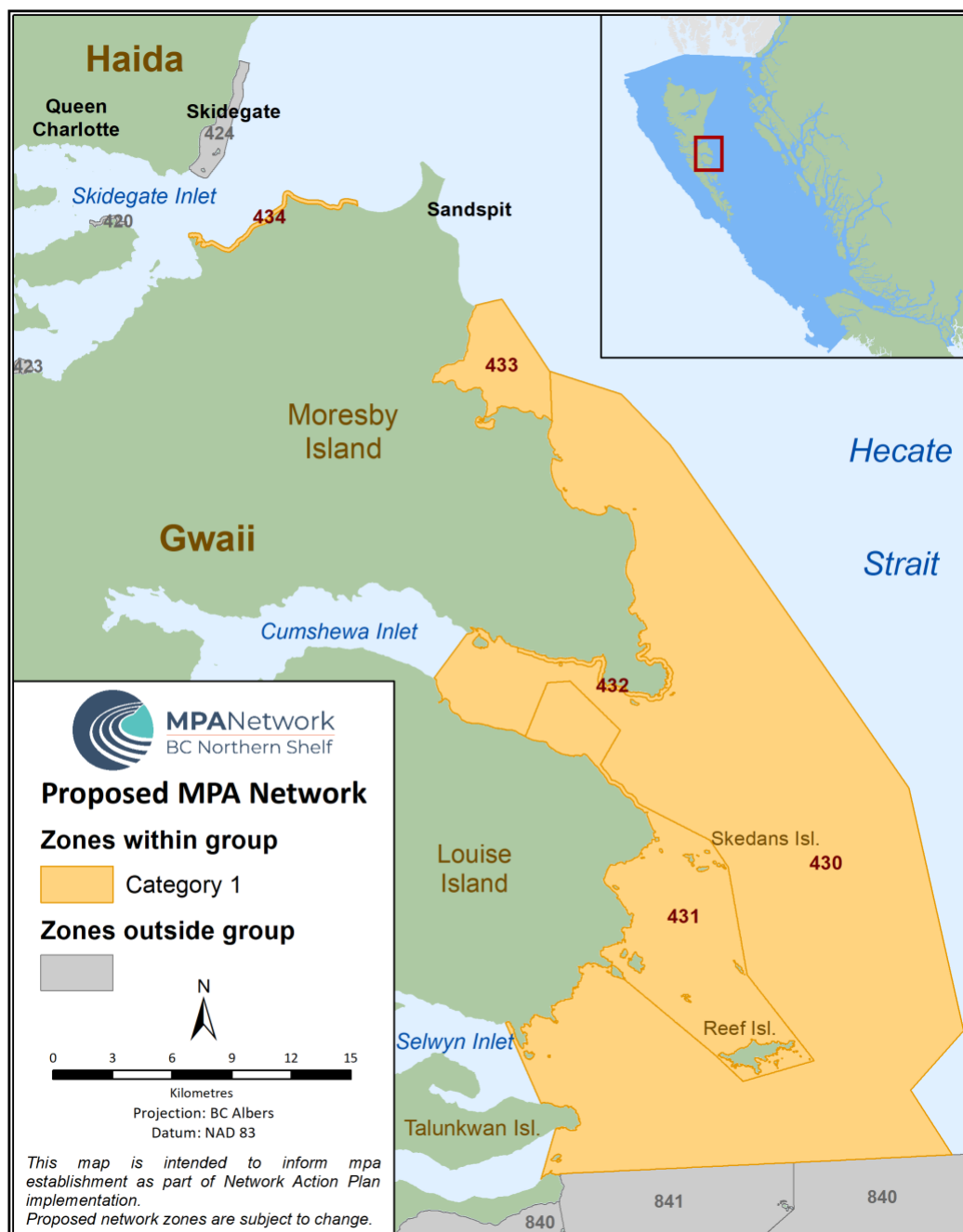
close proximity to this region include the Haida community of HIGaagilda *Skidegate*, and the municipalities of Daajing Giids *the Village of Queen Charlotte* and K'il Kun *Sandspit*.

Close proximity to Damaxyaa, Kunxalas, K'uuna Gwaay and Gwaii Haanas permits marine and backcountry accessible camping in sheltered inlets, some of which can be accessed via kayak and small recreational boats. Tourists frequent the area via chartered groups or self-guided trips operating out of Moresby Camp or traveling from one of the communities around Sandspit. Haida Watchmen take care of and facilitate tours in K'uuna.

There are multiple anchorage areas for small recreational boats and commercial fishing vessels. Other marine users include researchers on Limestone Island, which supports many unique marine bird colonies; as well as logging and associated tug and barge traffic from Louise Island. Additional commercial activities include but not limited to a number of fisheries such as salmon, red sea urchin, geoduck and horse clam, halibut, and prawn.

Five Mile Group

Zones: 430-434



Map 2.1. Five Mile Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
430	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Leatherback Sea turtle areas, Transient Killer Whale habitats, Harbour porpoise areas, and breeding colonies and foraging habitat of marine bird species (Ancient Murrelet, Loon/Grebe, sea duck, Double crested and pelagic cormorant, Marbled Murrelet, Small Alcids and Murres/Large Alcids).
430	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Leatherback sea turtles, Transient Killer whales, and multiple marine bird breeding colonies.
430	1.3	Conserve areas of high biological diversity including kelp distributions, leatherback sea turtle areas, Transient Killer Whale habitat, and marine birds (Ancient Murrelet, Pigeon Guillemot, Loon/Grebe, sea duck, Double Crested and pelagic cormorant, Marbled Murrelet, Small Alcids and Murres/Large Alcids).
Zone	Network Objective	Cultural Conservation Objective
430	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
430	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging areas for marine bird species.

Zone	Network Objective	Ecological Conservation Objective
431	1.3	Conserve areas of high biological diversity including eelgrass habitats, kelp distribution, rockfish (Yelloweye, Quillback and Canary), salmon streams for multiple species, marine invertebrate habitats (Horse clam, Geoduck, urchins), Leatherback Sea turtles, Steller Sea Lion Haulouts, Humpback Whale habitat, Sea Otter areas, and shorebird and marine bird breeding colonies (Pigeon Guillemot, Ancient Murrelet, Pelagic Cormorant, Double-Crested Cormorant, Marbled Murrelet, Black Oystercatcher, sea duck and Loon/Grebe) and their foraging habitat.
431	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Leatherback Sea turtles, Humpback Whales, and marine bird breeding colonies.
431	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species (Ancient Murrelet, Pelagic Cormorant, Double-Crested Cormorant, Marbled Murrelet, sea duck and Loon/Grebe), Rockfish assemblages, Steller Sea Lion Haulouts and Humpback Whale habitat, Leatherback Sea turtles and Sea Otter areas.

Zone	Network Objective	Cultural Conservation Objective
431	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
431	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to colonies of marine bird species, Rockfish habitat, marine invertebrate habitats and eelgrass areas.

Zone	Network Objective	Ecological Conservation Objective
432	1.3	Conserve areas of high biological diversity including Giant Kelp areas, marine invertebrate habitat (Horse clam, Geoduck), and marine bird breeding colonies (Loon/Grebe, sea duck, Cormorant species, Pigeon Guillemot) and foraging habitats.
432	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for multiple marine bird species at risk (Loon/Grebe, sea duck, and Cormorant species).
432	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
432	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
432	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine invertebrates (multiple species), seaweed areas, and marine birds.

Zone	Network Objective	Ecological Conservation Objective
433	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including leatherback sea turtles and breeding colonies and foraging habitat for marine bird species (sea duck, Great Blue Heron, Goose/Swan and Loon/Grebe).
433	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies and leatherback sea turtles.
433	1.3	Conserve areas of high biological diversity including multiple salmon species, leatherback sea turtles, marine birds (sea duck, Great Blue Heron, Goose/Swan and Loon/Grebe), and foraging habitat.

Zone	Network Objective	Cultural Conservation Objective
433	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
433	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to multiple salmon species and marine bird habitats.

Zone	Network Objective	Ecological Conservation Objective
434	1.3	Conserve areas of high biological diversity including Pigeon Guillemot colonies, Black Oystercatcher nesting sites, Pacific Herring spawn habitat, diversity hotspots for salmon (Chum, Pink (even), Pink (odd)), shorebirds (Loon, Grebe, Sea duck, Shorebird, Cormorant (unspecified)), and seabirds (Murre, Large Alcid).
434	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds (Loon, Grebe, Sea duck, Shorebird, Cormorant (unspecified)) and seabirds (Murre, Large Alcid).
434	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine bird colonies and nesting sites.
Zone	Network Objective	Cultural Conservation Objective
434	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of H̱G̱aagilda Skidegate.
434	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, salmon (Chum, Pink, Coho) and Pacific Herring.

Preliminary Activity Assessment Table

Group Name:		Five Mile				
Zone Number		430	431	432	433	434
Overlap with existing MPA/RCA		yes	yes	yes	yes	no
Aquaculture	Finfish – open-net pens	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!
	Marine plants	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	!	!	!	!

	Invertebrate trap	✓	!	!	!	!
	Sablefish trap	✓	!	!	!	!
	Intertidal hand picking/digging	✓	!	!	!	!
	Gill nets	!	!	!	!	!
	Pelagic and mid-water trawl	✓	!	!	!	!
	Purse seine	✓	!	!	!	!
	Trolling - salmon	✓	!	!	!	!
	Trolling - tuna	✓	!	!	!	!
	Scuba dive fishing	✓	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	!	!	!	✓
	Invertebrate trap	✓	!	!	!	✓
	Intertidal hand picking/digging	✓	!	!	✓	✓
	Trolling - rod and reel	✓	!	!	✓	✓
	Scuba dive fishing	✓	!	!	✓	✓
Forestry	Log Storage and Handling	!	!	!	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P
	Mining*	P	P	P	P	P
	Dumping*	P	P	P	P	P
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • bottom trawl = zones outside the frozen footprint • shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
430	K'uuna Gwaay and Kunxalas Heritage Site/Conservancies overlap a portion of this zone.
431	K'uuna Gwaay and Kunxalas Heritage Site/Conservancies overlap this entire zone.
432	Kunxalas Heritage Site/Conservancy overlaps this entire zone.
433	Kunxalas Heritage Site/Conservancy overlaps a portion of this zone.

Supplemental information

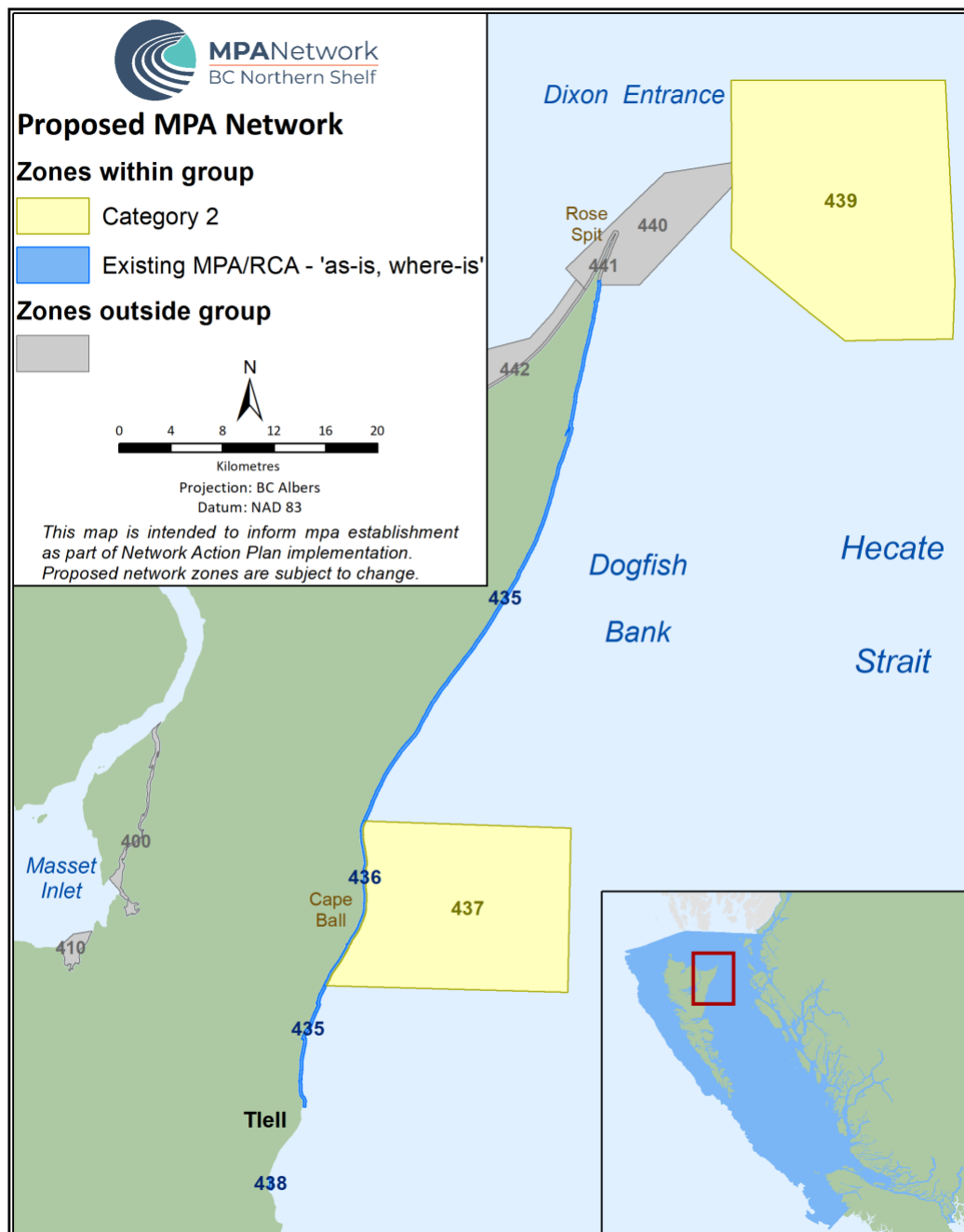
None identified for these zones.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	430, 433, 434	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	430, 431, 432	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	431	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	430, 431	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Dogfish Bank Group

Zones: 437, 439



Map 2.2. Dogfish Bank Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
437	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Dogfish Banks EBSA.
437	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies and associated foraging habitat, and killer whales.
437	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including important species assemblages associated with the Dogfish Banks EBSA, marine birds (Sea duck, Shearwaters and Fulmars, Loon/Grebe, Storm Petrel and Pigeon Guillemot) and foraging habitat, Dungeness crab, harbour porpoise, grey whale, Killer whale (transients), corals (sea pens) and sponges.
437	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including colonies and foraging habitat of marine birds (sea duck, Loon/Grebe, Shearwaters and Fulmars and storm petrels), harbour porpoise, grey whale, killer whale (transients)
Zone	Network Objective	Cultural Conservation Objective
437	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Dungeness crab.

Zone	Network Objective	Ecological Conservation Objective
439	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including species assemblages associated with the Hecate Strait EBSA, marine birds (Sea duck, Pigeon Guillemot, Loon/Grebe, Shearwaters and Fulmars, Murres/Large Alcids, and Storm petrels) and their foraging habitats, Pacific Sand Lance, eulachon, Dungeness crab, Grey Whale, Sunflower sea star, corals (sea pens) and sponges, harbour porpoise, Sandpaper skate, Big skate, rock sole, dover sole, Walleye Pollock and opal squid.
439	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including colonies and foraging habitat of marine birds (Sea ducks, Shearwaters and Fulmars, Murres/Large Alcids).
439	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Hecate Strait EBSA.
439	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine birds, grey whale and eulachon.

Dixon Entrance/North End: McIntyre Bay Group (Map 2.3), Naden Harbour Group (Map 2.4), Langara Group (Map 2.5)

Context

Ecological Context

This region includes the areas north of Sadler Point to Langara Island, eastward to Virago Sound and Naden Harbour, then eastward to Rose Spit, including a portion of Masset Sound. The areas represent a variety of geomorphic features, including unique structures such as Pillar Rock. There are many exposed and sheltered shorelines rocky, shale, and sandy beaches, reefs and corals, kelp forests and eelgrass beds, and small islands and islets. Additionally, there are many estuaries that are important salmon rearing streams.

The nearshore sites along the north coast support many different species of conservation concern, including a variety of marine birds, fish, marine mammals, phytoplankton and chlorophyll concentrations, and sunflower sea stars.

Cultural Context

This region has high cultural and historic value, including Haida Village sites, seasonal camps, and an important area for learning traditional practices. Haida Gwaii Watchmen have cabins set up at both Sk'aaws and K'yuusda. Historically and presently this area is an important travel route for Haida to access fishing grounds, seasonal camps and village sites on both the north and west coasts of Haida Gwaii.

The area also supports species that are significant to First Nations and coastal communities, including those important for cultural use and food security such as nesting sites and foraging habitats for multiple marine bird species, harvesting of seaweeds and kelp, shellfish, giant Pacific octopus, marine invertebrates, and fish.

Human-Use Context

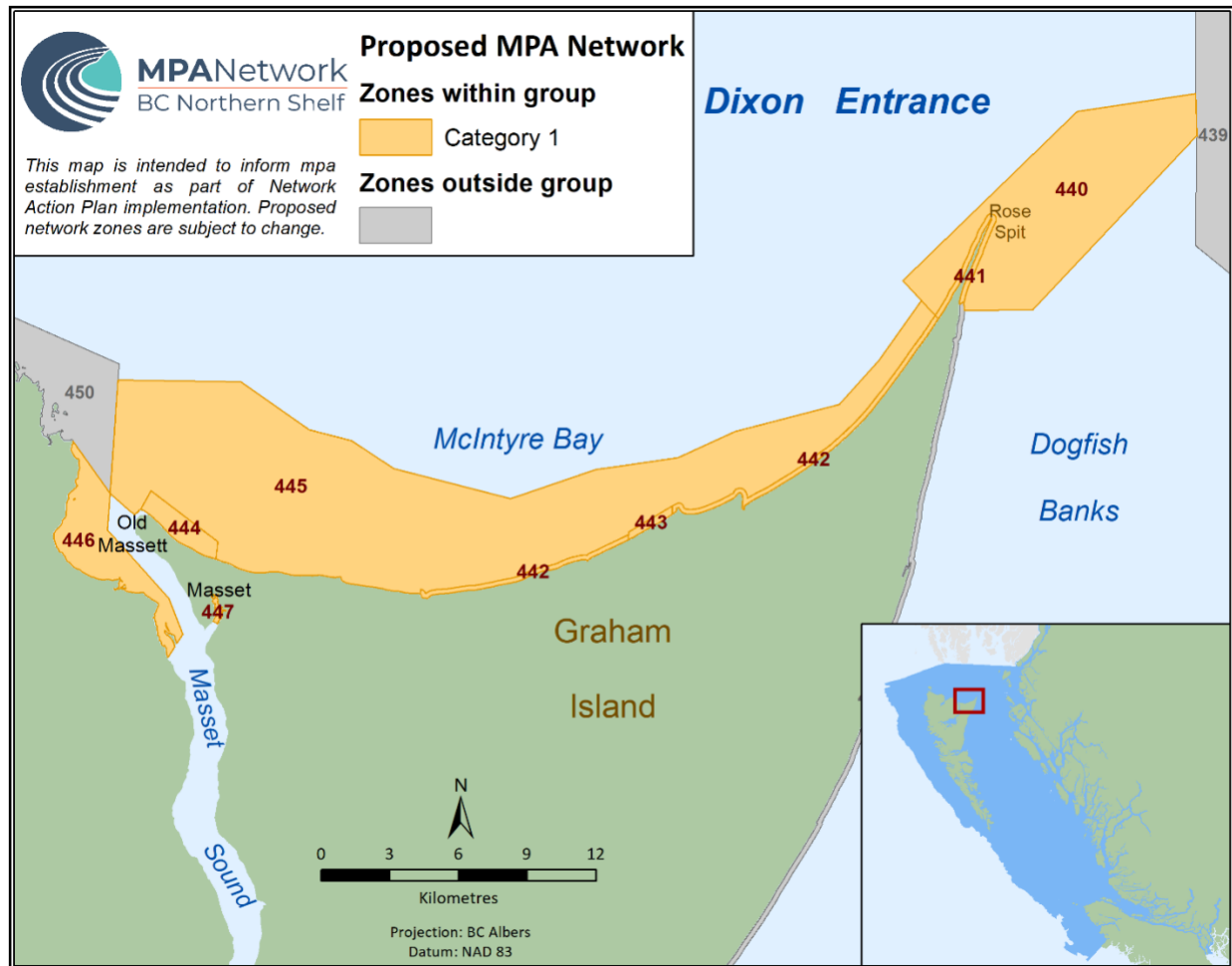
The north coast of Haida Gwaii supports a variety of commercial and recreational activities. Portions of the group overlaps with two Haida Heritage Sites and B.C. Conservancies, Duu Guusd and Nang Xaldangaas. Other overlapping protections in the area are the B.C. and Council of the Haida Nation Naikoon Provincial Park, and the Tow Hill Ecological Reserve. Communities in close proximity to this region include the Haida community of Gaw Tlagee *Old Masset*, Village of Masset and Tow Hill.

There are multiple anchorage areas between Langara Island and Masset Sound for small recreational boats and commercial fishing vessels. Close proximity to Duu Guusd permits marine and backcountry accessible camping in sheltered inlets, some of which can be accessed via kayak. There are currently five active sports fishing lodges operating on Langara Island and in Naden Harbour, along with local charter companies operating out of Masset.

Current commercial fishing activity includes, but is not limited to, salmon, crab, rockfish, halibut, red sea urchin and geoduck. The site is in close proximity to commercial shipping routes for large vessel traffic transiting through to the Port of Prince Rupert, Port of Stewart and Kitimat LNG facility, as well as cruise vessels transiting to south-east Alaska.

McIntyre Bay Group

Zones: 440-447



Map 2.3. McIntyre Bay Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
440	1.3	Conserve areas of high biological diversity including phytoplankton chlorophyll A blooms for primary production, Walleye Pollock, Dungeness crab, whale populations (Grey, Northern Resident and Transient Killer), and breeding colonies and foraging habitat for marine bird species (sea duck, Murres/Large Alcids and Loon/Grebe).
440	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species (sea duck, Murres/Large Alcids and Loon/Grebe) and Grey Whale, Northern Resident and Transient Killer Whale populations.
440	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including whale populations (Grey, Northern Resident and Transient Killer) and multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
440	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
440	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to the protection of unique geologic and benthic features, and Dungeness crab areas.

Zone	Network Objective	Ecological Conservation Objective
441	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including marine bird breeding colonies for Loon/Grebe and Murres/Large Alcids and foraging habitat.
441	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species Loon/Grebe and Murres/Large Alcids.
441	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
441	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
441	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Dungeness crab.

Zone	Network Objective	Ecological Conservation Objective
442	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Marbled Murrelet, cormorants (multiple species) and Alcids breeding colonies and foraging habitat.
442	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
442	1.3	Conserve areas of high biological diversity including salmon, shorebirds, marine birds (Alcids, Marbled Murrelet, Loon/Grebe and Cormorants), shorebirds and foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
442	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
442	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (multiple species).

Zone	Network Objective	Ecological Conservation Objective
443	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Marbled Murrelet, cormorants (multiple species) and Alcids breeding colonies and foraging habitat.
443	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
443	1.3	Conserve areas of high biological diversity including salmon, shorebirds, and marine birds (Alcids, Marbled Murrelet, Loon/Grebe and Cormorants (multiple species)).
Zone	Network Objective	Cultural Conservation Objective
443	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
443	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (multiple species).

Zone	Network Objective	Ecological Conservation Objective
444	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including sea otter habitat and breeding colonies and foraging habitat for marine bird species (Murres/Large Alcids, Loon/Grebe and sea duck).
444	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
444	1.3	Conserve areas of high biological diversity including Giant Kelp, razor clams, sea otter habitat, and breeding colonies and foraging habitat for marine bird species (Goose/Swan, Murres/Large Alcids, Loon/Grebe and sea duck).
Zone	Network Objective	Cultural Conservation Objective
444	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Old Masset and an important area for learning traditional practices.
444	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Giant Kelp Habitat, Dungeness crab and clams (multiple species).

Zone	Network Objective	Ecological Conservation Objective
445	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Northern Resident Killer Whales and breeding colonies and foraging habitat for marine bird species at risk (Alcids, Marbled Murrelet, sea duck, Cormorants and Loon/Grebe).
445	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including habitats for Northern Resident Killer Whales, migration routes for Grey Whales, and multiple marine bird breeding colonies.
445	1.3	Conserve areas of high biological diversity including Giant kelp, phytoplankton chlorophyll A concentrations for primary production, salmon, Pacific Halibut, Northern Resident Killer Whales, Grey Whales, marine bird breeding colonies (Alcids, Marbled Murrelet, sea duck, Loon/Grebe, Cormorant) and foraging habitat, and hard and stony corals.
Zone	Network Objective	Cultural Conservation Objective
445	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
445	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Dungeness crab, salmon (multiple species), Giant Pacific Octopus, Pacific Halibut, and Giant Kelp.

Zone	Network Objective	Ecological Conservation Objective
446	1.3	Conserve areas of high biological diversity including kelp, Dungeness crab habitat, Harbour Seal haulouts, and breeding colonies and foraging habitat for marine bird species (Great Blue Heron, Pigeon Guillemot, sea duck and Goose/Swan).
446	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for Great Blue Heron and sea duck.
446	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
446	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Old Masset.
446	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Giant Kelp Habitat, Dungeness crab and clams (multiple species).

Zone	Network Objective	Ecological Conservation Objective
447	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including breeding colonies and foraging habitat for marine bird species (Great Blue Heron and Goose/Swan) and shorebirds.
447	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species (Great Blue Heron) and shorebirds.
447	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
447	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site such as Daal Kahlui and Old Masset.
447	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to migratory bird breeding and foraging areas.

Preliminary Activity Assessment Table

Group Name:		McIntyre Bay							
Zone Number		440	441	442	443	444	445	446	447
Overlap with existing MPA/RCA		no	yes	yes	yes	no	no	yes	no
Aquaculture	Finfish – open-net pens	X	X	X	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	X	!	!	!	n/a
	Shellfish - off bottom	!	!	!	X	!	!	!	n/a
	Marine plants	!	!	!	X	!	!	!	n/a
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!	!	!	n/a
	Bottom trawling*	P	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	!	!	!	!	!	n/a
	Invertebrate trap	!	!	!	!	!	!	!	n/a
	Sablefish trap	!	!	!	!	!	!	!	n/a
	Intertidal hand picking/digging	!	!	✓	!	!	✓	!	n/a
	Gill nets	!	!	!	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!	!	!	n/a
	Purse seine	!	!	!	!	!	!	!	!
	Trolling - salmon	!	!	!	!	!	!	!	!
	Trolling - tuna	!	!	!	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!	!	!	n/a
Recreational Harvest	Demersal hook and line (jigging)	!	!	✓	!	!	✓	!	n/a
	Invertebrate trap	!	!	✓	!	!	✓	!	n/a
	Intertidal hand picking/digging	!	!	✓	!	!	✓	!	n/a
	Trolling - rod and reel	!	!	✓	!	!	✓	!	!
	Scuba dive fishing	!	!	✓	!	!	✓	!	n/a
Forestry	Log Storage and Handling	!	!	!	X	!	!	!	n/a
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
441	Naikoon Provincial Park (marine) overlaps this entire zone.
442	Naikoon Provincial Park (marine) overlaps this entire zone.
443	Tow Hill Ecological Reserve aligns with the boundaries of this zone.
446	Nang Xaldangaas Heritage Site/Conservancy overlaps this entire zone.

Supplemental Information

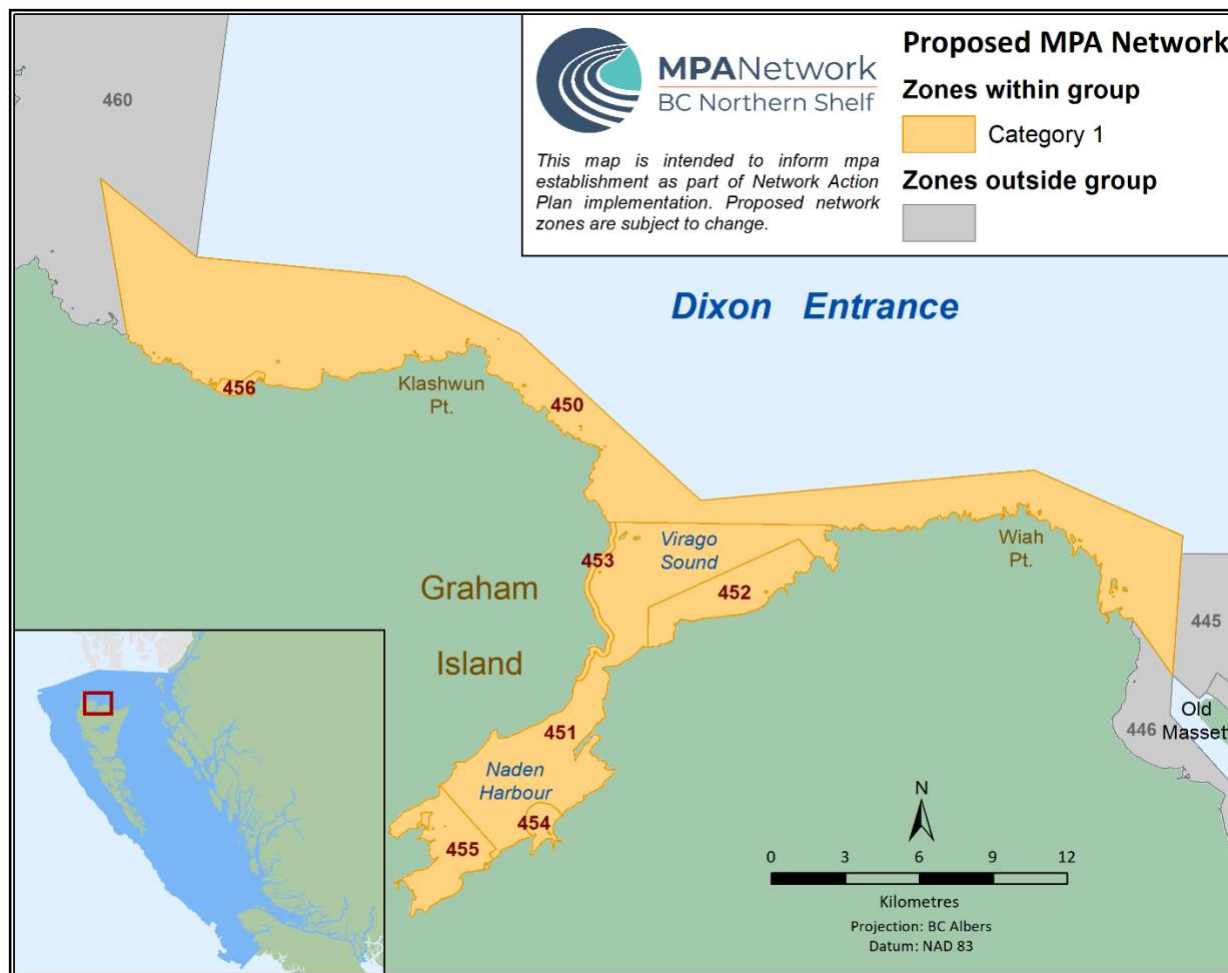
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	442, 443, 447	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	444, 445, 446	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	446	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	440, 445	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Naden Site Group

Zones: 450-456



Map 2.4. Naden Harbour Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
450	1.3	Conserve areas of high biological diversity (species, habitat, and genetic diversity) including but not limited to species assemblages associated with the McIntyre Bay EBSA, Northern Resident and Transient Killer Whale, kelp beds, Harbour Seal Haulouts, and multiple marine bird species.
450	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Northern Resident and Transient Killer Whales, multiple marine bird species.
450	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Northern Resident and Transient Killer Whales, multiple marine bird species.

Zone	Network Objective	Cultural Conservation Objective
450	5.2	Represent marine areas of high cultural or historical value, including adjacency to multiple seasonal camps, ancient Haida village sites and proximity to the community of Old Masset, and important areas for teaching traditional practices.
450	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security including but not limited to kelp beds.

Zone	Network Objective	Ecological Conservation Objective
451	1.3	Conserve areas of high biological diversity including eelgrass, Bull kelp and Giant Kelp distributions, Dungeness crab areas, Northern Resident Killer Whale habitat, and marine bird breeding colonies (Goose/Swan, Great Blue Heron, sea duck, Loon/Grebe and Murres/Large Alcids) and foraging habitat.
451	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Northern Resident Killer Whale habitat and breeding colonies and foraging habitat for multiple marine bird species at risk (sea duck, Great Blue Heron, Loon/Grebe and Murres/Large Alcids).
451	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including habitats for Northern Resident Killer Whales and multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
451	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, and an important area for learning traditional practices.
451	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to the protection of important estuaries, eelgrass, kelp habitat, locations of significant historical herring spawn and marine bird colonies, Dungeness crab and urchin habitats.

Zone	Network Objective	Ecological Conservation Objective
452	1.3	Conserve areas of high biological diversity including eelgrass, Giant Kelp and Bull Kelp distributions, estuaries, Dungeness crab habitat, and breeding colonies and foraging habitat for marine bird species (Loon/Grebe, Great Blue Heron and sea duck).
452	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species (Loon/Grebe, Great Blue Heron and sea duck).

452	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
452	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Old Masset.
452	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to multiple salmon streams, estuary, kelp and eelgrass beds, seabird habitats, and Dungeness crab areas.

Zone	Network Objective	Ecological Conservation Objective
453	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for multiple marine bird species at risk (sea duck, Goose/Swan, Great Blue Heron and Loon/Grebe) and shorebirds.
453	1.3	Conserve areas of high biological diversity including shellfish habitats (Cockles, Butter clam and Littleneck clam) and shorebird and marine bird breeding colonies (sea duck, Goose/Swan, Great Blue Heron and Loon/Grebe) and their foraging habitat.
453	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
453	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and the Ancient Haida village site of Kung and an important area for learning traditional practices.
453	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to the protection of productive nearshore areas, marine bird habitats and shellfish areas.

Zone	Network Objective	Ecological Conservation Objective
454	1.3	Conserve areas of high biological diversity including eelgrass, salmon streams (Chum, Coho, Pink-even, Pink-odd, Sockeye), shellfish (Cockles, Butter clam, Littleneck clam, and Horse clam), and breeding colonies and foraging habitat for shorebirds and Goose/Swan.
454	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for shorebird and Goose/Swan.

454	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon and marine bird breeding colonies.
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Zone	Network Objective	Cultural Conservation Objective
454	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
454	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to the protection of the Lignite Estuary and surrounding waters, which are important habitat for Chum, Sockeye, Coho and Pink Salmon, eelgrass habitats and shellfish areas.

Zone	Network Objective	Ecological Conservation Objective
455	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for shorebirds and Loon/Grebe and sea duck.
455	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon streams, estuaries, and multiple marine bird breeding colonies.
455	1.3	Conserve areas of high biological diversity including eelgrass, Pacific Herring spawning and rearing habitats, salmon habitats, and marine birds (Loon/Grebe, Goose/Swan and sea duck) and foraging habitats.
Zone	Network Objective	Cultural Conservation Objective
455	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and an important area for learning traditional practices.
455	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to estuary protection, important salmon habitat, eelgrass habitat and significant historical herring spawn locations.

Zone	Network Objective	Ecological Conservation Objective
456	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for sea duck and Loon/Grebe.

456	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including estuaries, salmon streams, and multiple marine bird breeding colonies.
456	1.3	Conserve areas of high biological diversity including estuaries, salmon, and marine birds (Loon/Grebe, sea duck and Goose/Swan).
Zone	Network Objective	Cultural Conservation Objective
456	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
456	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to estuary protection and salmon streams (multiple species).

Preliminary Activity Assessment Table

Group Name:		Naden Harbour						
Zone Number		450	451	452	453	454	455	456
Overlap with existing MPA/RCA		yes	yes	yes	yes	yes	yes	yes
Aquaculture	Finfish – open-net pens	X	X	X	X	X	X	X
	Shellfish - beach seeding	!	✓	!	!	!	!	!
	Shellfish - off bottom	!	✓	!	!	!	!	!
	Marine plants	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	!	!	!	!	!
	Bottom trawling*	P	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	!	!	!	!	!	!
	Invertebrate trap	✓	!	!	!	!	!	!
	Sablefish trap	✓	!	!	!	!	!	!
	Intertidal hand picking/digging	✓	!	!	!	!	!	!
	Gill nets	✓	!	!	!	!	!	!
	Pelagic and mid-water trawl	✓	✓	!	!	!	!	!
	Purse seine	✓	!	!	!	!	!	!
	Trolling - salmon	✓	✓	!	!	!	!	!
	Trolling - tuna	✓	✓	!	!	!	!	!
Recreational Harvest	Scuba dive fishing	✓	!	!	!	!	!	!
	Demersal hook and line (jigging)	✓	✓	!	!	!	!	!
	Invertebrate trap	✓	✓	!	!	!	!	!
	Intertidal hand picking/digging	✓	✓	!	!	!	!	!
	Trolling - rod and reel	✓	✓	!	!	!	!	!
	Scuba dive fishing	✓	✓	!	!	!	!	!

Forestry	Log Storage and Handling	!	✓	!	!	!	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> - bottom trawl = zones outside the frozen footprint - shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
450	Duu Guusd and Nang Xaldangaas Heritage Site/Conservancies (marine) overlaps this entire zone.
451	Duu Guusd and Nang Xaldangaas Heritage Site/Conservancies (marine) overlaps this entire zone.
452	Nang Xaldangaas Heritage Site/Conservancy (marine) overlaps this entire zone.

453	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
454	Naden Harbour Conservation (Reserve) Lands aligns with the boundaries of this zone.
455	Naden Harbour Conservation (Reserve) Lands aligns with the boundaries of this zone.
456	Duu Guusd Heritage Site/Conservancy overlaps this entire zone.

Supplemental Information

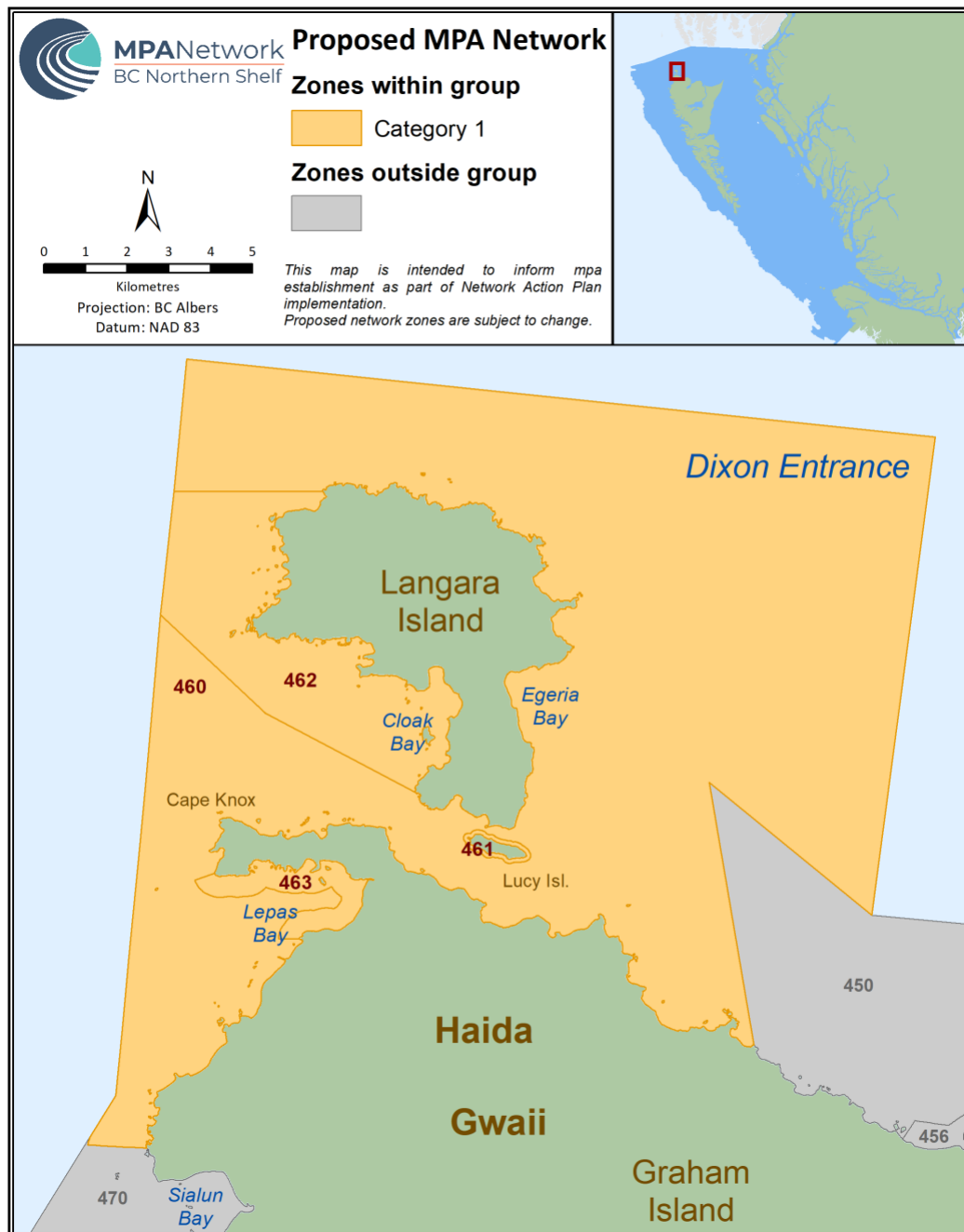
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	450, 453, 454, 455, 456	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	451, 452, 454, 455	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating	451	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Langara Group

Zones: 460-463



Map 2.5. Langara Group.

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
460	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including eulachon, shorebirds, and nesting sites and foraging habitat for multiple marine bird species (Pelagic cormorant, Ancient Murrelet, Common Murrelet, Tufted Puffin, Pigeon, Guillemot, Rhinoceros Auklet, Storm Petrel, Sea duck and Cassin's Auklet).
460	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including eulachon, shorebirds, and foraging habitat for marine bird species (Pelagic cormorant, Ancient Murrelet, Common Murrelet, Tufted Puffin, Sea duck and Cassin's Auklet).
460	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eulachon and multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
460	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida Village Sites and seasonal camps and an important area for learning traditional practices.
460	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to nesting sites and foraging habitat for multiple marine bird species (Pelagic cormorant, Ancient Murrelet, Common Murrelet, Tufted Puffin, Pigeon, Guillemot, Rhinoceros Auklet, Storm Petrel, Sea duck and Cassin's Auklet).

Zone	Network Objective	Ecological Conservation Objective
461	1.3	Conserve areas of high biological diversity including kelp forests and multiple marine bird breeding colonies (Pelagic Cormorant, Tufted Puffin, Ancient Murrelet) and foraging habitat.
461	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including kelp forests and an Ancient Murrelet breeding colony and foraging habitat.
461	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including an Ancient Murrelet breeding colony and foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
461	5.2	Represent marine areas of high cultural or historical value, including proximity to Ancient Haida Villages Sites and seasonal camps and an important area for learning traditional practices.

461	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds and their eggs and species assemblages associated with kelp forests.
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Zone	Network Objective	Ecological Conservation Objective
462	1.3	Conserve areas of high biological diversity including bull and giant kelp, Eulachon, Pacific Herring, multiple flatfish species, harbour seals, multiple species of whale, red and green sea urchin, and multiple marine bird breeding colonies (Common Murre, Rhinoceros Auklet, Tufted Puffin, Ancient Murrelet, Pelagic Cormorant, Storm Petrel, Cassin's Auklet) and foraging habitat.
462	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Bocaccio, Rougheye, and Yelloweye), Pacific Herring, Leatherback Sea Turtle Important Area, Killer Whale important area (Northern Residents and Transients), and breeding colonies and foraging habitat of marine birds at risk (Ancient Murrelet, Cassin's Auklet).
462	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a migration corridor for salmon and multiple marine bird breeding colonies and foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
462	5.2	Represent marine areas of high cultural or historical value, including adjacency to multiple Ancient Haida Village Sites and seasonal camps and an important area for learning traditional practices.
462	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (multiple species), rockfish (multiple species), Pacific halibut, Giant Pacific octopus, clams and cockles, marine invertebrates, seaweed, seabirds and their eggs.

Zone	Network Objective	Ecological Conservation Objective
463	1.3	Conserve areas of high biological diversity including kelp forests, rockfish (multiple species), Pacific Halibut, invertebrate populations (Dungeness Crab, red sea urchin), sea ducks, geese, and swans, and multiple marine bird breeding colonies (Pelagic Cormorant, Pigeon Guillemot, Marbled Murrelet, Ancient Murrelet, Tufted Puffins, Storm Petrel, Black Oystercatcher, Cassin's Auklet, Rhinoceros Auklet) and foraging habitat.
463	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including kelp forest, rich exposed nearshore habitat, and multiple marine bird breeding colonies.
463	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Yelloweye rockfish and multiple marine bird breeding

		colonies (Marbled Murrelet, Ancient Murrelet, Cassin's Auklet) and foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
463	5.2	Represent marine areas of high cultural or historical value, including adjacency to an ancient village site, seasonal camps, and a rediscovery camp for Haida Youth and an important area for learning traditional practices.
463	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (various species), rockfish (multiple species), clams and cockles, Pacific Halibut, Dungeness Crab, Giant Pacific Octopus.

Preliminary Activity Assessment Table

Group Name:		Langara			
Zone Number		460	461	462	463
Overlap with existing MPA/RCA		yes	yes	yes	yes
Aquaculture	Finfish - open-net pens	X	X	X	X
	Shellfish - beach seeding	✓	!	!	!
	Shellfish - off bottom	✓	!	!	!
	Marine plants	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	!	!
	Bottom trawling*	P	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	!	!	!
	Invertebrate trap	✓	!	!	!
	Sablefish trap	✓	!	!	!
	Intertidal hand picking/digging	✓	!	!	!
	Gill nets	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!
	Purse seine	✓	!	!	!
	Trolling - salmon	✓	!	!	!
	Trolling - tuna	✓	!	!	!
	Scuba dive fishing	✓	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	!	!	!
	Invertebrate trap	✓	!	!	!
	Intertidal hand picking/digging	✓	!	!	!
	Trolling - rod and reel	✓	!	!	!
	Scuba dive fishing	✓	!	!	!
Forestry	Log Storage and Handling	✓	!	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P

	Mining*	P	P	P	P
	Dumping*	P	P	P	P
	Other industrial projects	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> - bottom trawl = zones outside the frozen footprint - shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
460	Duu Guusd Heritage Site/Conservancy (marine) overlaps a portion of this zone.
461	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
462	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
463	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.

Supplemental Information

None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	460, 462	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	460, 462	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	461, 462, 463	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating	460	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

West Coast: Beresford to Hippa Group (Map 2.6), Renell to Kitgoro Group (Map 2.7), Englefield to Tasu Group (Map 2.8)

Context

Ecological Context

This region includes the areas South of Sadler Point to Cartwright Sound, the western side of Skidegate Narrows, and further south to Tasu Sound. The areas represent a variety of unique geomorphic features, including volcanic outcrops, and some of the oldest rock formations on Haida Gwaii. There are many exposed and sheltered shorelines, rocky, shale and sandy beaches, reefs and corals, kelp forests, eelgrass beds, and small islands and islets. There are many important fish bearing estuaries and marine habitats, such as Port Chanal, a unique sheltered bay, which protects an important salmon estuary, and a unique marine ecosystem northwest of Kindaken rock.

The nearshore sites along the west coast support many different species of conservation concern, species at risk, and unique species, including significant colonies of marine birds, marine mammals, salmon, rockfish, leatherback sea turtle habitat, corals, sponges and reefs, phytoplankton and chlorophyll concentrations, and sea stars.

Cultural Context

This site has high cultural and historic value, including Haida Village sites and seasonal camps, and important areas for learning traditional practices. Historically and presently the nearshore area provides an important travel route for southern Haida to access fishing grounds on the west coast, and for travel to the north coast.

Moreover, the nearshore sites contribute to the conservation of species significant to First Nations and coastal communities, including those important for cultural use and food security. These species include, but are not limited to, nesting sites and foraging habitats for marine birds, harvesting of seaweeds and kelp, shellfish, giant Pacific octopus, marine invertebrates, and fish.

Human-Use Context

The site currently overlaps with two Haida Heritage Sites and B.C. Conservancies (Duu Guusd, and Daawuuxusda), as well as other protections, such as the Fredrick Island Rockfish Conservation Area, and the Vladimir J Krajina Ecological Reserve. Communities in close proximity to this region include the Haida community of HIGaagilda Skidegate, and the municipalities of Daajing Giids *the Village of Queen Charlotte* and K'il Kun *Sandspit*.

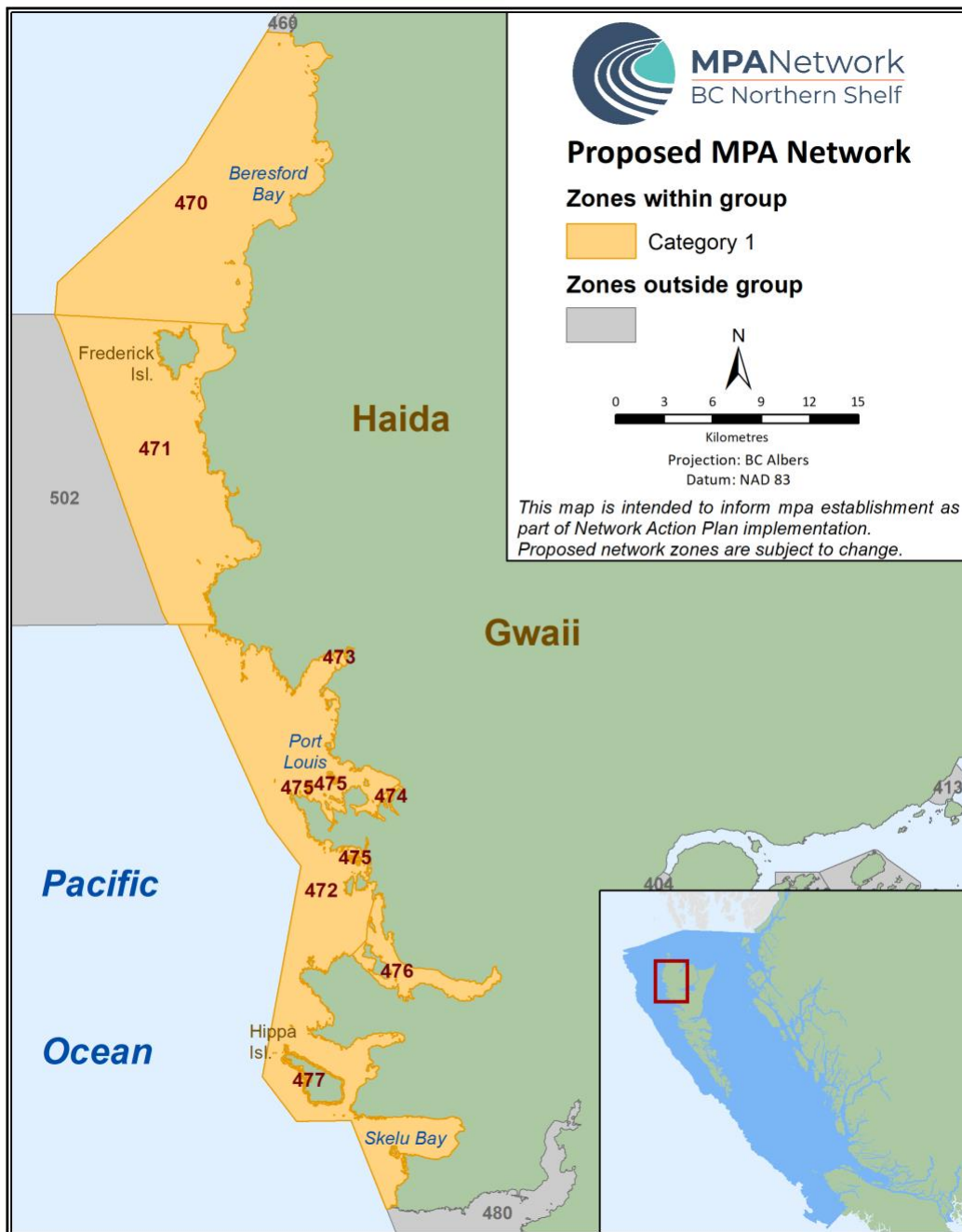
Close proximity to Duu Guusd and Daawuuxusda permits marine and backcountry accessible camping in sheltered inlets, some of which can be accessed via kayak. There is currently one active sports fishing lodge operating in Port Louis, along with local charter companies operating out of Skidegate, Queen Charlotte and Sandspit. Rennell Sound and Skidegate Narrows are two access points for Haida, locals, and tourists to access the west coast for fishing, campsites, and trails on the west coast.

There are multiple anchorage areas between Fredrick Island and Tasu Sound for small recreational boats and commercial fishing vessels and large commercial vessels. Rennell Sound is an identified place of refuge in the event of a marine emergency requiring a ship to anchor. The Council of the Haida Nation, Transport Canada, and the shipping industry implemented the trial Voluntary Protection Zone for Shipping on the West Coast of Haida Gwaii. Shipping and cruise traffic in this region transit along a Pacific Northwest Route (Southeast Alaska, Washington, and B.C. ports) or along a Great Circle Route to Asia.

Current commercial fishing activities include, but are not limited to, salmon, red sea urchin, geoduck, lingcod, rockfish, halibut, and sablefish fisheries. Log sort and log storage area tenures are active in Rennell Sound and accessed via tug and barge and/or trucks.

Beresford to Hippa Group

Zones: 470-477



Map 2.6. Beresford to Hippa Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
470	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including foraging habitat and nesting sites for marine bird species (Cassin's Auklet, Ancient Murrelet, Sea duck, Marbled Murrelet, Storm Petrel, Black Oystercatcher, Pelagic cormorant, and Pigeon Guillemot).
470	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (Cassin's Auklet, Ancient Murrelet, Sea Duck, Marbled Murrelet and Pelagic cormorant).
470	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
470	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat and nesting sites for marine bird species (Cassin's Auklet, Ancient Murrelet, Sea duck, Marbled Murrelet, Storm Petrel, Black Oystercatcher, Pelagic cormorant, and Pigeon Guillemot).

Zone	Network Objective	Ecological Conservation Objective
471	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a significant estuary, inshore rockfish habitat, breeding colonies of marine birds, and a Steller Sea Lion Haulout.
471	1.3	Conserve areas of high biological diversity including inshore rockfish habitat and associated species assemblages, a significant estuary, Bull and Giant Kelp habitat, a Steller Sea Lion Haulout, shorebirds, seaducks, and seabirds (Ancient Murrelet, Cassin's Auklet).
471	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Yelloweye, Canary, Quillback, Bocaccio, Yellowmouth), Big Skate, Leatherback Sea Turtle important areas, transient Killer Whale habitat of special importance, humpback whales, a Steller Sea Lion Haulout, sea otter modelled habitat, seabird breeding colonies (Ancient Murrelet, Cassin's Auklet and Pelagic Cormorants), and foraging habitat for shorebird, sea duck, Marbled Murrelet, and Double Crested Cormorant.
Zone	Network Objective	Cultural Conservation Objective
471	5.2	Represent marine areas of high cultural or historical value, including an ancient Haida village site at Tian Island, an important bad weather area, and seasonal camps throughout the area.
471	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including marine birds and their eggs, species assemblages associated with

		exposed nearshore habitat, pacific halibut, salmon (multiple species – interception fisheries), rockfish (multiple species).
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Zone	Network Objective	Ecological Conservation Objective
472	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including foraging habitat and nesting sites for marine bird species (Storm Petrel, Pelagic cormorant, Ancient Murrelet, Cassin's Auklet, Black Oystercatcher, Pigeon Guillemot, Tufted Puffin, Marbled Murrelet, Sea duck, and Goose/Swan).
472	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (Pelagic cormorant, Ancient Murrelet, Cassin's Auklet, Tufted Puffin, Marbled Murrelet, and Sea duck).
472	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
472	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat and nesting sites for marine bird species (Storm Petrel, Pelagic cormorant, Ancient Murrelet, Cassin's Auklet, Black Oystercatcher, Pigeon Guillemot, Tufted Puffin, Marbled Murrelet, Sea duck, and Goose/Swan).

Zone	Network Objective	Ecological Conservation Objective
473	1.3	Conserve areas of high biological diversity including a herring spawning area and an important estuary supporting multiple species of salmon (Pink (even), Pink (odd), Coho, Chum), Goose/Swan, rocky shorebird, and Sea duck.
473	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including a herring spawning area, Shorebird, and Sea duck.
473	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a herring spawning area and an important estuary supporting multiple species of salmon.
Zone	Network Objective	Cultural Conservation Objective
473	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to herring, herring spawn, and multiple species of salmon.

Zone	Network Objective	Ecological Conservation Objective
474	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including a herring spawning area and foraging habitat for marine bird species at risk (Sea duck, Shorebird).
474	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a herring spawning area, foraging habitat for marine bird species, and an important estuary supporting multiple species of salmon.
474	1.3	Conserve areas of high biological diversity including a herring spawning area, eelgrass, an important estuary supporting multiple species of salmon (Pink (odd), Coho, Chum), rockfish (Vermillion, Tiger), foraging habitat for marine bird species (Goose/Swan, Sea duck, Shorebird), Storm Petrel colonies, and Black Oystercatcher.
Zone	Network Objective	Cultural Conservation Objective
474	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to herring, herring spawn, marine birds, and multiple species of salmon.

Zone	Network Objective	Ecological Conservation Objective
475	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including shorebirds and pelagic cormorant colonies.
475	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including an area of high sea bird density, multiple sea bird breeding colonies (Storm Petrel, Pigeon Guillemot, Pelagic Cormorant), nesting sites (Black Oystercatcher), and their foraging habitat.
475	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple sea bird breeding colonies (Storm Petrel, Pigeon Guillemot, Pelagic Cormorant) and nesting sites (Black Oystercatcher) and their foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
475	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds and their eggs and species assemblages associated with exposed nearshore habitat.

Zone	Network Objective	Ecological Conservation Objective
476	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including locations of historical herring spawn, rockfish (Canary, Quillback, Yelloweye), Big Skate, transient Killer Whale habitat of special importance, Leatherback Sea Turtle important areas, shorebirds, and seabird colonies (Pelagic cormorant and Cassin's Auklet).
476	1.3	Conserve areas of high biological diversity including estuaries and streams supporting multiple salmon species and locations of historical herring spawn.
476	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including an estuary important to the life history of multiple salmon species and locations of historical herring spawn.
Zone	Network Objective	Cultural Conservation Objective
476	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to multiple species of salmon and herring and herring spawn.

Zone	Network Objective	Ecological Conservation Objective
477	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including important nearshore habitat, seabird breeding colonies (Ancient Murrelet, Storm Petrel, and Pelagic Cormorant) and foraging habitat.
477	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Bocaccio, Yelloweye, Canary, Quillback), Big Skate, and seabird colonies and foraging habitat (Ancient Murrelet's, Pelagic Cormorant, and Tufted Puffin).
477	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple seabird breeding colonies and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
477	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds and their eggs and species assemblages associated with exposed nearshore habitats.

Preliminary Activity Assessment Table

Group Name:		Beresford to Hippa							
Zone Number		470	471	472	473	474	475	476	477
Overlap with existing MPA/RCA		yes	yes	yes	yes	yes	yes	yes	yes
Aquaculture	Finfish – open-net pens	X	X	X	X	X	X	X	X
	Shellfish - beach seeding	✓	!	✓	!	!	!	!	!
	Shellfish - off bottom	✓	!	✓	!	!	!	!	!
	Marine plants	✓	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	✓	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	!	✓	!	!	!	!	!
	Invertebrate trap	✓	!	✓	!	!	!	!	!
	Sablefish trap	✓	!	✓	!	!	!	!	!
	Intertidal hand picking/digging	✓	!	✓	!	!	!	!	!
	Gill nets	!	!	!	!	!	!	!	!
	Pelagic and mid-water trawl	✓	!	✓	!	!	!	!	!
	Purse seine	✓	!	✓	!	!	!	!	!
	Trolling - salmon	✓	!	✓	!	!	!	!	!
	Trolling - tuna	✓	!	✓	!	!	!	!	!
	Scuba dive fishing	✓	!	✓	!	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	!	✓	!	!	!	!	!
	Invertebrate trap	✓	!	✓	!	!	!	!	!
	Intertidal hand picking/digging	✓	!	✓	!	!	!	!	!
	Trolling - rod and reel	✓	!	✓	!	!	!	!	!
	Scuba dive fishing	✓	!	✓	!	!	!	!	!
Forestry	Log Storage and Handling	✓	!	!	!	!	!	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
470	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
471	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone. Frederick Island RCA is contained within the boundaries of this zone.
472	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
473	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
474	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
475	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.
476	Vladimir J. Krajina Ecological Reserve is contained within the boundaries of this zone. Duu Guusd Heritage Site/Conservancy (marine) overlaps a portion of this zone.
477	Duu Guusd Heritage Site/Conservancy (marine) overlaps this entire zone.

Supplemental Information

None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	474, 475, 476	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	471, 474	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	471	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	471, 476	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Rennell to Kitgoro Group

Zones: 480-490



Map 2.7. Rennell to Kitgoro Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
480	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including but not limited to Leatherback Sea Turtles, Ochre Sea Star, and multiple marine bird species.
480	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Leatherback Sea Turtles, Ochre Sea Star, and multiple marine bird species.
480	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Leatherback Sea Turtles and multiple marine bird species.
Zone	Network Objective	Cultural Conservation Objective
480	5.2	Represent marine areas of high cultural or historical value, including adjacency to multiple seasonal camps, ancient Haida village sites, and important areas for teaching traditional practices.
480	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security including but not limited to multiple salmon and rockfish species.

Zone	Network Objective	Ecological Conservation Objective
481	1.3	Conserve areas of high biological diversity, including kelp beds, inshore rockfish habitat (copper rockfish, vermillion rockfish, red sea urchin), harbour seal haulouts, marine bird breeding colonies (pigeon guillemot, black oystercatcher).
481	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including kelp beds, inshore rockfish habitat, and marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
481	5.2	Represent marine areas of high cultural or historical value, including the only point of west coast road access for the HIGaagilda Skidegate Haida community, adjacent to multiple seasonal camps and an Ancient Haida Village Site, and an important area for learning traditional practices.
481	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including rockfish (multiple species), marine invertebrates (multiple species), Pacific Halibut, Lingcod.

Zone	Network Objective	Ecological Conservation Objective
482	1.3	Conserve areas of high biological diversity, including transient killer whale habitats of special importance, leatherback sea turtle important areas, seabird important areas, moulting grounds for sea ducks, nesting sites for black oystercatchers, pigeon guillemot breeding colonies, salmon (chum, coho, pink (even), pink (odd), sockeye), rockfish (bocaccio, canary, china, greenstriped, quillback, rosethorn, roughey/blackspotted, shortraker, silvergrey, tiger, vermillion, yelloweye, yellowtail, longspine thornyhead, shortspine thornyhead, widow), arrowtooth flounder, big skate, dover sole, longnose skate, pacific halibut, rex sole, roughtail skate), lingcod, pacific cod, pacific hake, pacific perch, dungeness crab, geoduck, green sea urchin, horse clams, red sea urchins, great blue heron, double-crested cormorant, loons, grebes, sea ducks, shorebirds.
482	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (bocaccio, roughey/blackspotted, yelloweye, canary, quillback, longspine thornyhead, shortspine thornyhead), big skate, transient killer whales, leatherback sea turtles, great blue herons, double-crested cormorants, cormorants, loons, grebes, sea ducks, small alcids, and shorebirds.
482	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including inshore rockfish habitat, eelgrass meadows, and kelp beds.
Zone	Network Objective	Cultural Conservation Objective
482	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including salmon (multiple species), Pacific halibut, Pacific herring, marine invertebrates (multiple species), rockfish (multiple species).

Zone	Network Objective	Ecological Conservation Objective
483	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including habitats of special importance (transient killer whales, leatherback sea turtles), and marine bird breeding colonies and foraging areas.
483	1.3	Conserve areas of high biological diversity, including transient killer whale habitats of special importance, leatherback sea turtle important areas, harbour seal haulouts, marine bird breeding colonies (horned puffins, tufted puffins, rhinoceros auklets, ancient murrelets, Cassin's auklets, pigeon guillemots, pelagic cormorants, double-crested cormorants, small alcids), moulting areas for sea ducks, pacific hake, walleye pollock, pacific cod, sablefish, shorebirds, seabirds, and soft corals.
483	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including transient killer whale habitats of special importance, leatherback sea turtle important areas, marine bird breeding colonies (horned puffins, tufted puffins, ancient murrelets, Cassin's auklets, pelagic cormorants,

		double-crested cormorants, small alcids), loons, grebes, sea ducks, and shorebirds.
Zone	Network Objective	Cultural Conservation Objective
483	5.2	Represent marine areas of high cultural or historical value, including adjacency to multiple seasonal camps and an important site for learning traditional practices. This area is critically important to Southern Haida food security as access through Skidegate Narrows makes this the most accessible fishing spot on the west coast of the island.
483	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including), Pacific Herring, marine invertebrates (multiple species).

Zone	Network Objective	Ecological Conservation Objective
484	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including nearshore rockfish habitat, marine mammal haulouts, kelp beds, and seabird colonies.
484	1.3	Conserve areas of high biological diversity, including inshore rockfish habitats (vermillion, copper, bocaccio, longspine thornyhead, china, shortraker, quillback, yelloweye, canary, tiger, shortspine thornyhead, widow, silvergray, greenstriped, rosethorn), haulouts (harbour seals, Steller sea lions), foraging habitat for marine bird colonies (double-crested cormorants, horned puffins, pelagic cormorants, tufted puffins, rhinoceros auklets, ancient murrelets, pigeon guillemots, black oystercatchers, Cassin's auklets, small alcids, loons, grebes), big skate, rougtail skate, pacific halibut, lingcod, rock sole, and pacific perch.
484	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including inshore rockfish habitats (bocaccio, longspine thornyhead, quillback, yelloweye, canary, tiger, shortspine thornyhead), Steller sea lion haulouts, foraging habitat for marine bird colonies (double-crested cormorants, horned puffins, pelagic cormorants, tufted puffins, ancient murrelets, Cassin's auklets, small alcids, loons, grebes), and big skates.
Zone	Network Objective	Cultural Conservation Objective
484	5.2	Represent marine areas of high cultural or historical value, including an important site for learning traditional practices. This area is critically important to Southern Haida food security as access through Skidegate Narrows makes this the most accessible fishing spot on the west coast of the island.
484	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security.

Zone	Network Objective	Ecological Conservation Objective
485	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (horned puffins, pelagic cormorant, tufted puffins, ancient murrelets, Cassin's auklets, small alcids, loons, grebes, and sea ducks).
485	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine bird breeding colonies.
485	1.3	Conserve areas of high biological diversity, including foraging habitat for marine bird species (horned puffins, pelagic cormorants, tufted puffins, rhinoceros auklets, ancient murrelets, pigeon guillemots, Cassin's auklets, black oystercatchers, small alcids, loons, grebes, sea ducks, and shorebirds).
Zone	Network Objective	Cultural Conservation Objective
485	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida Village Sites and seasonal camps, and an important site for learning traditional practices.
485	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat for marine bird species (Horned Puffin, Pelagic cormorant, Tufted Puffin, Rhinoceros Auklet, Ancient Murrelet, Small Alcids, Pigeon, Guillemot, Sea duck, Cassin's Auklet, Loon/Grebe and Black Oystercatcher).

Zone	Network Objective	Ecological Conservation Objective
486	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including nearshore rockfish habitat, kelp beds, and seabird colonies.
486	1.3	Conserve areas of high biological diversity, including nearshore rockfish habitats (vermillion, copper, china, bocaccio, quillback, tiger, yelloweye, greenstriped, rosethorn), foraging habitat for marine bird colonies (pelagic cormorants, horned puffins, tufted puffins, rhinoceros auklets, ancient murrelets, pigeon guillemots, black oystercatchers, Cassin's auklets), big ksate, longnose skate, pacific halibut lingcod, rock sole, and pacific cod.
486	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including nearshore rockfish habitat (boccacio, quillback, canary, yelloweye), foraging habitat for seabird colonies (pelagic cormorants, horned puffins, rhinoceros auklets, ancient murrelets, Cassin's auklets), and big skates.
Zone	Network Objective	Cultural Conservation Objective
486	5.2	Represent marine areas of high cultural or historical value, including an important site for learning traditional practices. This area is critically important to Southern

		Haida food security as access through Skidegate Narrows makes this the most accessible fishing spot on the west coast of the island.
486	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including marine birds and their eggs, rockfish (multiple species), and multiple other fish species.

Zone	Network Objective	Ecological Conservation Objective
487	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including transient killer whale habitats of special importance, and pelagic cormorants.
487	1.3	Conserve areas of high biological diversity, including transient killer whale habitats of special importance, eelgrass meadows, estuaries, giant pacific octopus, geoduck, horse clams, spot prawns, red sea urchins, pelagic cormorants, geese, and swans.
487	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, and estuaries.
Zone	Network Objective	Cultural Conservation Objective
487	5.2	Represent marine areas of high cultural or historical value, including adjacency to multiple Ancient Haida Village Sites and seasonal camps, and an important site for learning traditional practices.
487	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including herring spawn and marine invertebrates (multiple species).

Zone	Network Objective	Ecological Conservation Objective
488	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including inshore rockfish habitats, salmon streams, and estuaries.
488	1.3	Conserve areas of high biological diversity, including inshore rockfish habitat, salmon streams, estuaries, rockfish (widow, bocaccio, redstripe, yelloweye, canary, shortraker, shortspine thornyhead, silvergrey), pacific halibut, arrowtooth flounder, longnose skate, big skate, rougtail skate, lingcod, sablefish, walleye pollock, pacific perch, red sea urchin, and shorebirds.
488	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (yelloweye, bocaccio, canary, shortspine thornyhead), big skate, and shorebirds.

Zone	Network Objective	Cultural Conservation Objective
488	5.2	Represent marine areas of high cultural or historical value, including adjacency to an Ancient Haida Village Site.
488	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including salmon (all species), rockfish (multiple species), seaweed, Pacific Halibut and other flatfish, Lingcod.

Zone	Network Objective	Ecological Conservation Objective
489	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including sea duck staging ground.
489	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including an important salmon stream and estuary.
489	1.3	Conserve areas of high biological diversity including an estuary, eelgrass, giant kelp, salmon diversity hotspot (Chum, Sockeye, Pink (even), Pink (odd), Coho and Pacific), and sea duck staging ground.
Zone	Network Objective	Cultural Conservation Objective
489	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of HIGaagilda Skidegate.
489	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (Chum, Sockeye, Pink, Coho).

Zone	Network Objective	Ecological Conservation Objective
490	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds (Great Blue Heron, Sea duck, Shorebird, Loon, Grebe).
490	1.3	Conserve areas of high biological diversity including kelp beds (Giant, Bull), and shorebirds (Great Blue Heron, Goose, Swan, Sea duck, Loon, Grebe).
Zone	Network Objective	Cultural Conservation Objective
490	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of HIGaagilda Skidegate.
490	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds.

Preliminary Activity Assessment Table

[illegible]

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • bottom trawl = zones outside the frozen footprint • shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
480	Duu Guusd Heritage Site/Conservancy (marine) overlaps a portion of this zone. Daawuuxusda Heritage Site/Conservancy (marine) overlaps a portion of this zone.
481	Duu Guusd Heritage Site/Conservancy (marine) overlaps a portion of this zone. Daawuuxusda Heritage Site/Conservancy (marine) overlaps a portion of this zone.
482	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
483	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
484	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
485	Daawuuxusda Heritage Site/Conservancy (marine) overlaps a portion of this zone.
486	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.

487	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
488	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
489	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.

Supplemental Information

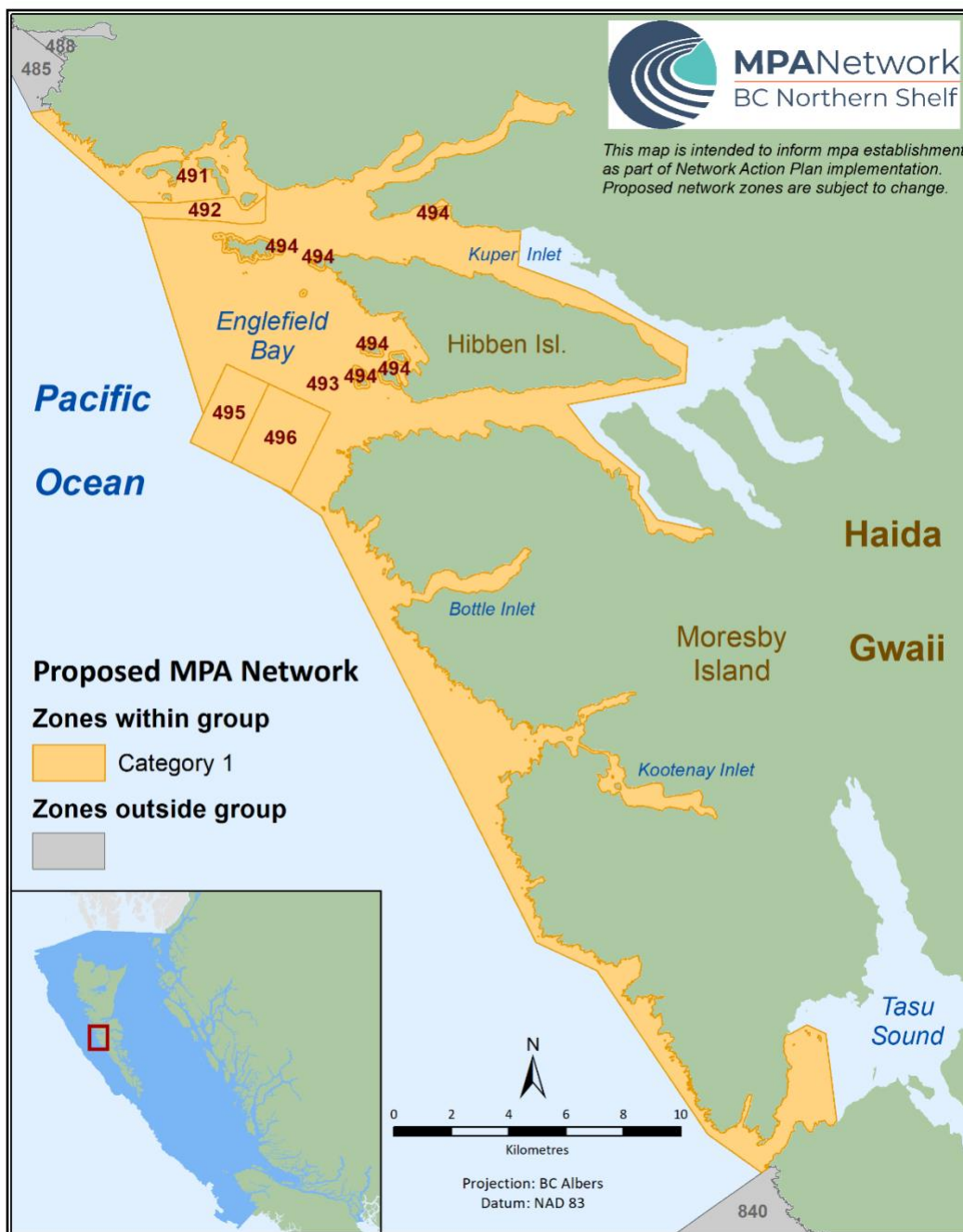
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	480-490	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	481, 482, 484, 486, 487, 489, 490	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	481, 483, 484	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	482, 487	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Englefield to Tasu Group

Zones: 491-496



Map 2.8. Englefield to Tasu Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
491	1.3	Conserve areas of high biological diversity including species assemblages associated with nearshore rockfish habitat, an important salmon stream, marine bird breeding colonies (Rhinoceros Auklet, Ancient Murrelet, Cassin's Auklet, Tufted Puffin, Pigeon Guillemot, Storm Petrel, Black Oystercatcher, Pelagic Cormorant) and foraging habitat.
491	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Bocaccio, Yelloweye, Canary, Longspine Thornyhead, Quillback, Shortspine Thornyhead, Rougheye/Blackspotted), Big Skate, Leatherback Sea Turtle Important Areas, Transient Killer Whale habitat of special importance, Sea duck, and breeding colonies and foraging habitat for multiple marine bird species at risk (Ancient Murrelet, Cassin's Auklet, Tufted Puffin, Pelagic Cormorant).
491	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including nearshore rockfish habitat, an important salmon stream, and multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
491	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Kaisun.
491	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Pacific halibut, salmon (multiple species), rockfish.

Zone	Network Objective	Ecological Conservation Objective
492	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including foraging habitat for marine bird species (Rhinoceros Auklet, Ancient Murrelet, Tufted Puffin, Pelagic cormorant, Pigeon Guillemot, Cassin's Auklet, Black Oystercatcher and storm Petrel).
492	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (Ancient Murrelet, Tufted Puffin, Pelagic cormorant and Cassin's Auklet).
492	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
492	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Kaisun.

492	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat for marine bird species (Ancient Murrelet, Tufted Puffin, Pelagic cormorant and Cassin's Auklet).
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Zone	Network Objective	Ecological Conservation Objective
493	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including foraging habitat for marine bird species (Rhinoceros Auklet, Ancient Murrelet, Tufted Puffin, Pelagic cormorant, Pigeon Guillemot, Cassin's Auklet, Black Oystercatcher and storm Petrel).
493	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (Ancient Murrelet, Tufted Puffin, Pelagic cormorant, Double Crested cormorant, Great Blue Heron, Small Alcids and Cassin's Auklet).
493	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
493	5.2	Represent marine areas of high cultural or historical value, including adjacent Ancient Haida village site of Kaisun.
493	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat for marine bird species (Rhinoceros Auklet, Ancient Murrelet, Tufted Puffin, Pigeon Guillemot, Double Crested cormorant, Pelagic cormorant, Cassin's Auklet, Marbled Murrelet, Great Blue Heron, Small Alcids, Black Oystercatcher and Storm Petrel).

Zone	Network Objective	Ecological Conservation Objective
494	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including marine bird nesting colonies (Rhinoceros Auklet, Ancient Murrelet, Storm Petrel, Cassin's Auklet, Pigeon Guillemot, Tufted Puffin, Pelagic Cormorant, Storm Petrel, Black Oystercatcher) and adjacent foraging habitat.
494	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird nesting colonies and associated foraging habitat.
494	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Bocaccio rockfish, a Steller Sea Lion haulout, and marine bird nesting colonies (Ancient Murrelet, Cassin's Auklet, Tufted Puffin, Pelagic Cormorant) and adjacent foraging habitat.

Zone	Network Objective	Cultural Conservation Objective
494	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds and their eggs.

Zone	Network Objective	Ecological Conservation Objective
495	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including foraging habitat for marine bird species (Ancient Murrelet, Cassin's Auklet, Small Alcids and Tufted Puffin).
495	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for marine bird species (Ancient Murrelet, Cassin's Auklet, Small Alcids and Tufted Puffin).
495	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
495	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to foraging habitat for marine bird species (Rhinoceros Auklet, Ancient Murrelet, Tufted Puffin, Pigeon Guillemot, Cassin's Auklet, Small Alcids and Storm Petrel).

Zone	Network Objective	Ecological Conservation Objective
496	1.3	Conserve areas of high biological diversity including species assemblages associated with inshore rockfish habitat (Bocaccio, Yelloweye, Longspine Thornyhead, Rougheye/Blackspotted, Canary) and marine bird breeding colonies (Rhinoceros Auklet, Ancient Murrelet, Cassin's Auklet, Storm Petrel) and foraging habitat.
496	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including multiple marine bird breeding colonies and inshore rockfish habitat.
496	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Bocaccio, Yelloweye, Longspine Thornyhead, Rougheye/Blackspotted, Canary), transient Killer Whale habitat of special importance, and seabirds (Ancient Murrelet and Cassin's Auklet breeding colonies and foraging habitat, Small Alcids, Murres/Large Alcids).

Zone	Network Objective	Cultural Conservation Objective
496	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites.
496	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, Pacific halibut, salmon (multiple species), cod, and an important site for inshore rockfish harvesting (multiple species).

Preliminary Activity Assessment Table

Group Name:		Englefield to Tasu					
Zone Number		491	492	493	494	495	496
Overlap with existing MPA/RCA		yes	yes	yes	yes	yes	yes
Aquaculture	Finfish – open-net pens	X	X	X	X	n/a	n/a
	Shellfish - beach seeding	!	!	✓	!	n/a	n/a
	Shellfish - off bottom	!	!	✓	!	n/a	n/a
	Marine plants	!	!	✓	!	n/a	n/a
Commercial Harvest	Bottom longline/demersal h&l	!	!	✓	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	✓	✓	n/a	n/a
	Invertebrate trap	!	!	✓	!	!	!
	Sablefish trap	!	!	✓	!	!	!
	Intertidal hand picking/digging	!	n/a	✓	!	n/a	n/a
	Gill nets	!	!	✓	!	!	!
	Pelagic and mid-water trawl	!	✓	✓	!	✓	!
	Purse seine	!	✓	✓	!	✓	!
	Trolling - salmon	!	✓	✓	!	✓	!
	Trolling - tuna	!	✓	✓	!	✓	!
Recreational Harvest	Scuba dive fishing	!	!	✓	✓	n/a	n/a
	Demersal hook and line (jigging)	!	!	✓	!	!	!
	Invertebrate trap	!	!	✓	!	!	!
	Intertidal hand picking/digging	!	n/a	✓	!	n/a	n/a
	Trolling - rod and reel	!	✓	✓	!	✓	!
Forestry	Scuba dive fishing	!	!	✓	!	n/a	n/a
	Log Storage and Handling	!	n/a	✓	!	n/a	n/a
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl = zones outside the frozen footprint</i> • <i>shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).</i>
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
491	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
492	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
493	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
494	Daawuuxusda Heritage Site/Conservancy (marine) overlaps this entire zone.
495	Daawuuxusda Heritage Site/Conservancy (marine) overlaps a portion of this zone.
496	Daawuuxusda Heritage Site/Conservancy (marine) overlaps a portion of this zone.

Supplemental Information

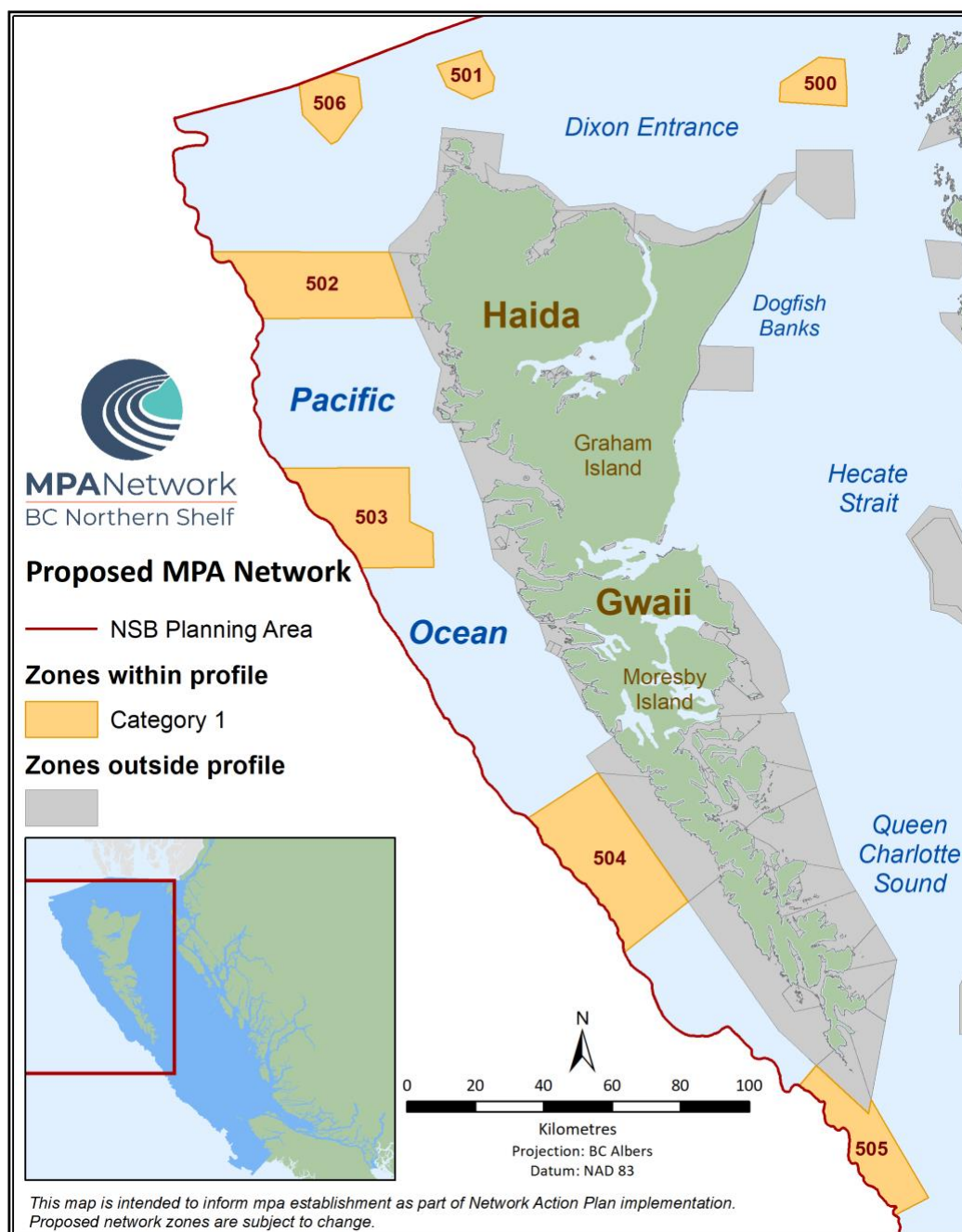
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	496	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	494	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	491	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Offshore Haida Gwaii Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.



Map 3. Offshore Haida Gwaii profile

Sub-region: Haida Gwaii

Category: 1

Potential designation tool(s): Oceans Act MPA

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 3976.0 km²

Zones included in this profile: 500-506

Context

Ecological Context

This site encompasses the offshore areas along the west coast of Haida Gwaii, running as far north as Fredrick Island and south to Cape St. James. This represents portions of the Dixon Entrance, Continental Slope, Transitional Pacific, and Subarctic Pacific ecosections, and is an Ecologically and Biologically Significant Area (EBSA). The continental slope experiences an upwelling current and is characterized by many oceanic ridges, steep sloping walls, troughs, and one of the only known seamounts in the NSB. The offshore sites along the west coast support many different species of conservation concern, species at risk, and unique species, including Pacific halibut, various rockfish and groundfish, various whales, leatherback sea turtles, Steller sea lions, Pacific white-sided dolphins, marine birds, and corals and sponges.

Cultural Context

This site has high cultural and historic value, such as important travel routes for Haida from northern and southern communities to access fishing grounds along the west coast. These areas will contribute to the conservation of species significant to First Nations communities, including those important for cultural use and food security, such as rockfish and groundfish.

Human-Use Context

The offshore area on the west coast of Haida Gwaii supports commercial activities, including shipping, tourism, and fisheries. The southern zones (504 and 505) along the west coast continental shelf extend off the Gwaii Haanas Strict Protection Zones.

Shipping and cruise traffic in this region transit a Pacific Northwest Route (Southeast Alaska, Washington, and B.C. Ports), or along a Great Circle Route to Asia. Current management tools being implemented include the *Tanker Traffic Moratorium Act*, the Voluntary Tanker Exclusion Zone and the trial Voluntary Protection Zone for Shipping on the West Coast of Haida Gwaii. Fisheries in the area have included crab, halibut, lingcod, rockfish, sablefish, salmon, and tuna.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
500	1.4	Protect representative areas of every marine habitat type in the bioregion including Dixon Entrance Ecoregion, Trough and Shelf Biophysical Units (PMECS), a range of Geomorphic units (PMECS), Dixon Entrance Coastal Flow Region (Upper Ocean Sub-region), corals and sponges.
500	1.3	Conserve areas of high biological diversity including species assemblages associated with Celestial Reef and shelf hotspots, including rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Darkblotched), groundfish (Dover sole, Rex sole, Pacific Cod, Sablefish, Pacific Halibut), Big Skate, whales (Northern Resident Killer Whales, Blue, Fin), marine birds (Storm Petrel, Shearwaters and Fulmars, small Alcids), corals, and sponges.
500	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including various rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Darkblotched), whales (Northern Resident Killer Whales, Blue, Fin), and marine birds (Storm Petrel, Shearwaters and Fulmars, small Alcids).
Zone	Network Objective	Cultural Conservation Objective
500	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including Pacific Halibut, and various rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Darkblotched).

Zone	Network Objective	Ecological Conservation Objective
501	1.3	Conserve areas of high biological diversity including species assemblages associated with the Learmonth Bank EBSA, including rockfish (Tiger, Rougheye/Blackspotted, Rosethorn, Yellowmouth, Yelloweye, Silvergray, Yellowtail), Lingcod, Pacific Halibut, whales (Minke, Blue, Fin), marine birds (Albatross, Storm Petrel, Puffins), and corals.
501	1.4	Protect representative areas of every marine habitat type in the bioregion including Dixon Entrance ecoregion, Shelf and Trough Biophysical Units (PMECS), a range of Geomorphic units (PMECS), SE Alaska Mixing Region (Upper Ocean Sub-region), corals and sponges.
501	1.5	Contribute to the protection of rare, unique, threatened, and/or endangered species and their habitats including various rockfish (Rougheye/Blackspotted, Yellowmouth, Yelloweye, Quillback), whales (Blue and Fin), and marine birds (Albatross, Storm Petrel, Puffins).
501	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Learmonth Bank EBSA.

Zone	Network Objective	Cultural Conservation Objective
501	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including various rockfish (Tiger, Rougheye/Blackspotted, Rosethorn, Yellowmouth, Yelloweye, Silvergray, Yellowtail) and Lingcod.

Zone	Network Objective	Ecological Conservation Objective
502	1.3	Conserve areas of high biological diversity including species assemblages associated with the Shelf Break EBSA and an identified area of high biomass of shelf fish species, including rockfish (Longspine Thornyhead, Shortraker, Shortspine Thornyhead, Darkblotched, Widow), groundfish (Pacific Ocean perch, Rex Sole, Sablefish, Pacific halibut), whales (Sperm, Sei, Blue, Fin, Humpback), Albatross, and corals.
502	1.4	Protect representative areas of every marine habitat type in the bioregion including Continental Slope ecosection, Slope, Shelf and Trough Biophysical Units (PMECS), a range of Geomorphic units (PMECS), SE Alaska Mixing and Coastal Mixing Regions (Upper Ocean Sub-regions), corals and sponges, and the only known seamount in the NSB.
502	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Shelf Break EBSA, and the only known seamount in the NSB (SAUP 5494).
502	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Longspine Thornyhead, Shortspine Thornyhead, Bocaccio, Rougheye/Blackspotted), Leatherback Sea Turtle, whales (Sperm, Sei, Blue, Fin, Humpback), and marine birds (Albatross, small Alcids, Puffins).
Zone	Network Objective	Cultural Conservation Objective
502	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including Pacific Halibut, various rockfish (Longspine Thornyhead, Shortraker, Shortspine Thornyhead, Darkblotched, Widow) and Sablefish.

Zone	Network Objective	Ecological Conservation Objective
503	1.3	Conserve areas of high biological diversity including species assemblages associated with the Shelf Break EBSA and an identified area of high biomass of shelf fish species, including rockfish (Longspine Thornyhead, Shortspine Thornyhead, Shortraker, Widow, Yellowmouth, Rougheye/Blackspotted), groundfish (Sablefish, Dover sole), whales (Sperm, Sei, Blue, Fin, Humpback), corals and sponges.

503	1.4	Protect representative areas of every marine habitat type in the bioregion including the Continental Slope Ecoregion, Slope and Trough Biophysical Units (PMECS), a range of Geomorphic units (PMECS), Coastal Mixing Region (Upper Ocean Sub-region), corals and sponges.
503	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Longspine Thornyhead, Shortspine Thornyhead, Yellowmouth, Rougheye/Blackspotted, Bocaccio, Darkblotched), Leatherback Sea Turtle, and whales (Sperm, Sei, Blue, Fin, Humpback).
503	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Shelf Break EBSA.
Zone	Network Objective	Cultural Conservation Objective
503	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including Pacific Halibut, various rockfish (Longspine Thornyhead, Shortspine Thornyhead, Shortraker, Widow, Yellowmouth, Rougheye/Blackspotted), and Sablefish.

Zone	Network Objective	Ecological Conservation Objective
504	1.4	Protect representative areas of every marine habitat type in the bioregion including the Continental Slope Ecoregion, Slope Biophysical Unit (PMECS), a range of Geomorphic units (PMECS), and the West Coast QCI Upwelling Region (Upper Ocean Sub-region).
504	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including various whales (Sperm, Sei, Blue, Fin, Humpback), Leatherback Sea Turtle, and marine birds (Gulls, small Alcs, Storm Petrel, Murres/large Alcs).
504	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portion of the Shelf Break EBSA.
Zone	Network Objective	Cultural Conservation Objective
504	5.2	Represent marine areas of high cultural or historical value, including important spiritual relationship to area.

Zone	Network Objective	Ecological Conservation Objective
505	1.3	Conserve areas of high biological diversity including species assemblages associated with the Shelf Break and Cape St. James EBSAs, including rockfish (Shortspine Thornyhead, Yellowmouth, Darkblotched), groundfish (sablefish, Pacific ocean perch, Pacific halibut, Arrowtooth flounder, Spiny dogfish), marine mammals (Sperm, Fin, Sei, Blue, and Humpback whales; Northern Right Whale dolphin, Steller Sea Lion, Pacific White-sided dolphin, Dall's Porpoise), Leatherback Sea Turtle, Albatross, corals and sponges.

505	1.4	Protect representative areas of every marine habitat type in the bioregion including the Continental Slope Ecoregion, Slope and Trough Biophysical Units (PMECS), a range of Geomorphic units (PMECS), the Cape St James Tidal Mixing Region (Upper Ocean Sub-region), corals and sponges.
505	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including whales (Sperm, Fin, Sei, Blue, Humpback), other marine mammals (Steller Sea Lion), rockfish (Shortspine Thornyhead, Yellowmouth, Darkblotched, Rougheye/Blackspotted, Yelloweye, Bocaccio, Canary), Leatherback Sea Turtle, and marine birds (Albatross, Gulls, small Alcids, Storm petrels, and Shearwaters and Fulmars).
Zone	Network Objective	Cultural Conservation Objective
505	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including Pacific Halibut and various rockfish (Shortspine Thornyhead, Yellowmouth, Darkblotched).

Zone	Network Objective	Ecological Conservation Objective
506	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including high biomass of shelf invertebrate and fish species. Important species include various rockfish (darkblotched, widow, shortraker, shortspine thornyhead, redstripe, yellowmouth, rosethorn, rougheye/blackpotted, bocaccio, yelloweye), corals, sponges, Pacific Ocean perch, Rex sole, Dover sole, Walleye Pollack, Pacific Cod, Lingcod, Pacific halibut, big skate, Fin Whale, Blue whale, marine birds (Albatross), Leatherback Sea turtles, and prawns and shrimp (Smooth pink, sidestripes, and spot prawn).
506	1.5	Conserve areas of high biological diversity (species, habitat and genetic diversity) including high biomass of shelf invertebrate and fish species. Important species include various rockfish (darkblotched, widow, shortraker, shortspine thornyhead, redstripe, yellowmouth, rosethorn, rougheye/blackpotted, bocaccio, yelloweye), corals, sponges, Pacific Ocean perch, Rex sole, Dover sole, Walleye Pollack, Pacific Cod, Lingcod, Pacific halibut, big skate, Fin Whale, Blue whale, marine birds (Albatross), Leatherback Sea turtles, and prawns and shrimp (Smooth pink, sidestripes, and spot prawn).
506	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine birds, whales (Blue whale, Fin whale), and Leatherback sea turtles.
Zone	Network Objective	Cultural Conservation Objective
506	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Lingcod, Pacific Halibut, Spot prawn, and Yelloweye rockfish.

Preliminary Activity Assessment Table

Profile Name:		Offshore Haida Gwaii						
	Zone Number	500	501	502	503	504	505	506
	Overlap with existing MPA/RCA	no	no	no	no	no	no	no
Aquaculture	Finfish – open-net pens	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shellfish - beach seeding	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shellfish - off bottom	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine plants	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!	!	!
	Bottom trawling*	P	n/a	P	P	n/a	P	P
	Shrimp trawling*	P	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Invertebrate trap	!	!	!	!	!	!	!
	Sablefish trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Gill nets	!	!	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!	!	!
	Purse seine	!	!	!	!	!	!	n/a
	Trolling - salmon	!	!	!	!	!	!	!
	Trolling - tuna	!	!	!	!	✓	✓	!
	Scuba dive fishing	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!	!	!
	Invertebrate trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Trolling - rod and reel	!	!	!	!	!	!	!
	Scuba dive fishing	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Forestry	Log Storage and Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.

X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Supplemental Information

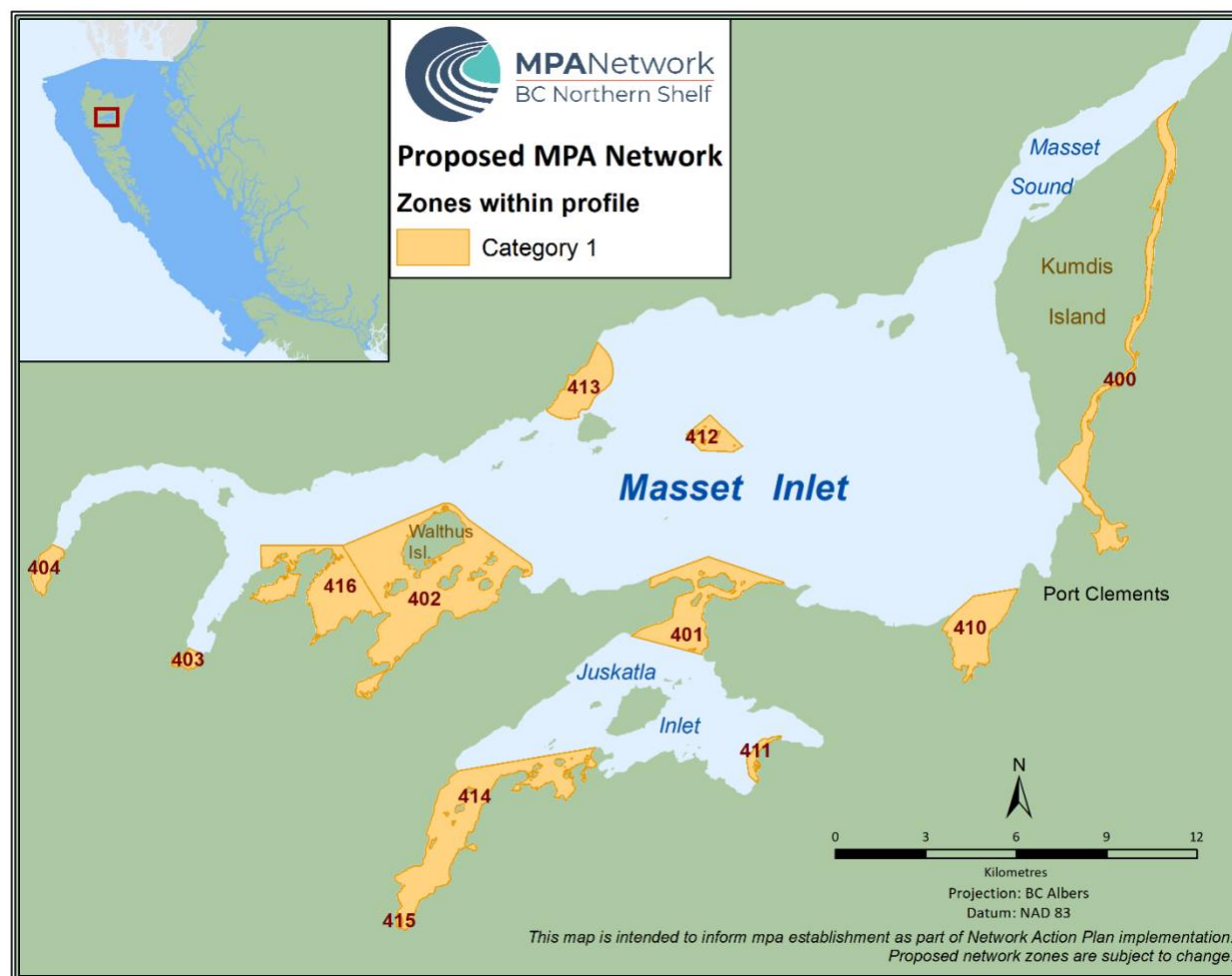
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating	501, 502, 504-506	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation). Boating may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating	500-506	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Masset Inlet Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.



Map 4. Masset Inlet Profile

Sub-region: Haida Gwaii

Category: 1

Potential designation tool(s):

- Wildlife Management Area: zones 400-404
- Marine Refuge: zones 411-416
- Fisheries Act tool: zone 410

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 47.7 km²

Zones included in this profile: 400–404, 410–416

Context

Ecological Context

Masset Inlet has unique oceanography that supports eelgrass beds, a variety of salmon estuaries, and herring spawn, and is an important region for many migratory bird species. Masset Sound is dominated by warm, shallow, sandy and flat bottom with high currents and exposure. Shorelines are exposed to winds and wave action, whereas further within the inlet it is more protected and large eelgrass and kelp beds are found.

Masset Inlet supports many different species of conservation concern, species at risk, and unique species, including significant colonies of marine birds and breeding habitat, marine mammals, salmon (including an endemic run of chinook salmon), harbor seals, herring, eulachon habitat, killer whale rubbing habitat, halibut, rockfish, and a high diversity of marine invertebrates.

Cultural Context

The area has high cultural and historic value, including multiple Haida Village sites and seasonal camps, and important areas for learning traditional practices. There are multiple travel routes throughout the region to access various estuaries and Dixon Entrance. Moreover, the nearshore sites contribute to conservation of species significant to First Nations and coastal communities, including those important for cultural use and food security. These species include, but are not limited to, nesting sites and foraging habitats for marine birds, harvesting of seaweeds and kelp, herring and herring roe on kelp, marine invertebrates, and various species of fish.

Human-Use Context

The area overlaps with the Nang Xaldangaas and Yaaguun Gandlaay Haida Heritage Sites and B.C. Conservancies. Communities in close proximity to this region include the Haida community of Gaw Tlagee, and the municipalities of Gamadiis Village of *Port Clements*, Village of Masset and rural communities on Nadu Road.

Close proximity to Nang Xaldangaas and Yaaguun Gandlaay permits marine and backcountry accessible camping, most of which can be accessed via kayak, small recreational boats, and logging roads. Tourists frequent the area via chartered groups or self-guided trips operating out of Gamadiis and Gaw Tlagee. Logging activity is active in the surrounding watersheds, with much of the wood being transported via barges and trucks. Many commercial fisheries in Masset Inlet are closed, but some, such as pink salmon, have limited access. Sports fishing is common in the area with multiple lodges and charter companies operating out of Gamadiis and Gaw Tlagee.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
400	1.3	Conserve areas of high biological diversity including eelgrass beds, an estuary, salmon (Pink, Coho), and marine birds (Goose/Swan and Loon/Grebe).
400	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species (Loon/Grebe).
400	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon and marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
400	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, proximity to the community of Gaw Tlagee Old Masset.
400	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to waterfowl (geese, ducks), salmon (Pink), and Kumdis Creek estuary.

Zone	Network Objective	Ecological Conservation Objective
401	1.3	Conserve areas of high biological diversity including eelgrass beds, kelp beds, Pacific Herring spawning habitat, Harbour Seal haulouts, shorebirds and marine birds (Great Blue Heron, Goose/Swan, Sea Duck, Pigeon, Guillemot and Black Oystercatcher).
401	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass beds, kelp beds, Pacific Herring spawning habitat, and Harbour Seal haulouts.
401	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for marine bird species.
Zone	Network Objective	Cultural Conservation Objective
401	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, proximity to the community of Gaw Tlagee Old Masset.
401	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, and Pacific Herring.

Zone	Network Objective	Ecological Conservation Objective
402	1.3	Conserve areas of high biological diversity including eelgrass areas, Pacific Herring habitat, Harbour Seal haulouts, Transient Killer Whale habitat (rubbing area), and marine birds (Sea Duck, Pigeon Guillemot, Black Oystercatcher and Goose/Swan).
402	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for Transient Killer Whales and sea ducks.
402	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Transient Killer Whales.
Zone	Network Objective	Cultural Conservation Objective
402	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Gaw Tlagee Old Masset.
402	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, Pacific Herring.

Zone	Network Objective	Ecological Conservation Objective
403	1.3	Conserve areas of high biological diversity (species, habitat and genetic diversity) including shorebird and marine birds (Sea Duck and Goose/Swan), multiple salmon species (Pink, Coho and Chum), Cockles and McClinton Creek Estuary.
403	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including marine bird species (Sea Duck and Goose/Swan).
403	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a salmon river.
Zone	Network Objective	Cultural Conservation Objective
403	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, proximity to the community of Gaw Tlagee Old Masset.
403	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, multiple salmon species (Pink, Coho and Chum) and McClinton Creek Estuary.

Zone	Network Objective	Ecological Conservation Objective
404	1.3	Conserve areas of high biological diversity including Pacific Herring spawning habitat, an estuary, shellfish (Cockles and Littleneck clam), and shorebirds.

404	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds.
404	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including habitat for Pacific Herring and shorebirds.
Zone	Network Objective	Cultural Conservation Objective
404	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida Village Sites, proximity to the community of Gaw Tlagee Old Masset.
404	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Pacific Herring, and estuaries.

Zone	Network Objective	Ecological Conservation Objective
410	1.3	Conserve areas of high biological diversity including an estuary, salmon (Pacific, Chinook, Pink, Sockeye, Coho and Chum), cockles, shorebirds, and marine bird breeding colonies (Great Blue Heron and Goose/Swan) and their foraging habitat.
410	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including marine bird species (Great Blue Heron).
410	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including an important salmon river and estuary.
Zone	Network Objective	Cultural Conservation Objective
410	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, proximity to the community of Gaw Tlagee Old Masset, and an important site for learning traditional practices.
410	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to multiple salmon species (Chinook, Pink, Sockeye, Coho and Chum), and Yakoun River estuary.

Zone	Network Objective	Ecological Conservation Objective
411	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a salmon stream, estuary and marine bird foraging habitat.
411	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including foraging habitat for shorebirds and marine bird species at risk.

411	1.3	Conserve areas of high biological diversity including an estuary, Pacific salmon biodiversity hotspot (Sockeye, Pink, Coho, Chum), shorebirds, and marine birds (Sea Duck and Goose/Swan).
Zone	Network Objective	Cultural Conservation Objective
411	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida Village Sites, proximity to the community of Gaw Tlagee Old Masset.
411	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited marine birds, multiple salmon species (Sockeye, Pink, Coho, Chum), Mamin Creek Estuary.

Zone	Network Objective	Ecological Conservation Objective
412	1.3	Conserve areas of high biological diversity including Harbour Seal haulouts and Pigeon Guillemot breeding colonies and their foraging habitat.
412	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine bird breeding colonies.
Zone	Network Objective	Cultural Conservation Objective
412	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Gaw Tlagee Old Masset.
412	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to nesting seabirds.

Zone	Network Objective	Ecological Conservation Objective
413	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds.
413	1.3	Conserve areas of high biological diversity including an estuary, Pacific salmon biodiversity hotspot (Sockeye, Pink, Coho, Chum) and sea duck and their foraging habitat.
413	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a salmon river and associated estuary.
Zone	Network Objective	Cultural Conservation Objective
413	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites, proximity to the community of Gaw Tlagee Old Masset.

413	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to colonies of marine bird species, multiple salmon species (Sockeye, Pink, Coho, Chum), and the Ain River Estuary.
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Zone	Network Objective	Ecological Conservation Objective
414	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Ochre sea starts, shorebirds, and marine bird species (Sea duck, Goose/Swan, Pigeon Guillemot, Black Oystercatcher and Loon/Grebe).
414	1.3	Conserve areas of high biological diversity including invertebrates (cockles, butter clams, and ochre sea star), shorebirds, and marine birds (Sea duck, Goose/Swan, Pigeon Guillemot, Black Oystercatcher and Loon/Grebe).
Zone	Network Objective	Cultural Conservation Objective
414	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Gaw Tlagee Old Masset.
414	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds (Sea duck, Goose/Swan, Pigeon Guillemot, Black Oystercatcher and Loon/Grebe) and shellfish (Cockles, Butter clams).

Zone	Network Objective	Ecological Conservation Objective
415	1.3	Conserve areas of high biological diversity including estuaries, salmon (Sockeye, Pink, Coho, Chum), Leatherback sea turtles, and marine bird foraging habitat (sea duck, Great Blue Heron, Goose/Swan and Loon/Grebe).
415	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Leatherback sea turtles and foraging habitat for marine bird species (sea duck, Great Blue Heron, Loon/Grebe).
415	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a salmon stream and estuary.
Zone	Network Objective	Cultural Conservation Objective
415	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Gaw Tlagee Old Masset.
415	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to multiple salmon species (Sockeye, Pink, Coho, Chum), marine birds, and the Datlamen Creek Estuary.

Zone	Network Objective	Ecological Conservation Objective
416	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including breeding colonies and foraging habitat for shorebirds and marine bird species (Sea duck).
416	1.3	Conserve areas of high biological diversity including an estuary, Pacific Salmon biodiversity hotspot (Sockeye, Pink, Coho, Chum), shellfish (Cockles, Butter clam, Littleneck clam), Harbour Seal haulouts, shorebird and marine bird breeding colonies (Sea Duck and Goose/Swan) and their foraging habitat.
416	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including a salmon river and estuary.
Zone	Network Objective	Cultural Conservation Objective
416	5.2	Represent marine areas of high cultural or historical value, including areas adjacent to seasonal camps and Ancient Haida village sites and proximity to the community of Gaw Tlagee Old Masset.
416	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, Pacific Halibut, multiple salmon species (Sockeye, Pink, Coho, Chum) and the Awun River Estuary.

Preliminary Activity Assessment Table

Group Name:		Masset Inlet - potential WMA				
Zone Number		400	401	402	403	404
Overlap with existing MPA/RCA		yes	no	no	no	no
Aquaculture	Finfish – open-net pens	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!
	Marine plants	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	n/a	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	!	!	!
	Invertebrate trap	!	!	!	!	!
	Sablefish trap	!	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!	!
	Gill nets	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	!	!	!	!	!
	Trolling - salmon	!	!	!	!	!

	Trolling - tuna	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	✓	✓	!	!
	Invertebrate trap	!	✓	✓	!	!
	Intertidal hand picking/digging	✓	✓	✓	!	!
	Trolling - rod and reel	!	✓	✓	!	!
	Scuba dive fishing	✓	✓	✓	!	!
Forestry	Log Storage and Handling	!	!	!	!	!
Industrial Projects	Oil and gas activities*	!	!	!	!	!
	Mining*	!	!	!	!	!
	Dumping*	!	!	!	!	!
	Other industrial projects	!	!	!	!	!

		Masset Inlet - potential Marine Refuge or Fisheries Act tool						
Group Name:								
Zone Number		410	411	412	413	414	415	416
Overlap with existing MPA/RCA		yes	no	no	no	no	no	no
Aquaculture	Finfish – open-net pens	X	X	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!	!	!
	Marine plants	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	!	!	!	!	!
	Invertebrate trap	!	!	!	!	!	!	!
	Sablefish trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!	!	!	!
	Gill nets	!	!	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!	!	!
	Purse seine	!	!	!	!	✓	!	!
	Trolling - salmon	!	!	!	!	!	!	!
	Trolling - tuna	!	!	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	✓	!	!
	Invertebrate trap	!	!	!	!	✓	!	!
	Intertidal hand picking/digging	!	!	!	!	✓	!	!

	Trolling - rod and reel	!	!	!	!	✓	!	!
	Scuba dive fishing	!	!	!	!	✓	!	!
Forestry	Log Storage and Handling	!	!	!	!	!	!	!
Industrial Projects	Oil and gas activities*	!	!	!	!	!	!	!
	Mining*	!	!	!	!	!	!	!
	Dumping*	!	!	!	!	!	!	!
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- *bottom trawl* = zones outside the frozen footprint
- *shrimp trawl* = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
400	Kamdis Heritage Site/Conservancy (marine) overlaps this entire zone.
410	Yaaguun Gandlaay Heritage Site/Conservancy (marine) is contained within the boundaries of this zone. Yakoun River Estuary Conservation Lands overlaps a portion of this zone.

Supplemental Information

None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	400-404, 410, 411, 413, 414, 416	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	400-402	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	401, 402, 412, 416	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	402	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Skidegate Inlet Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: Haida Gwaii

Category: 1

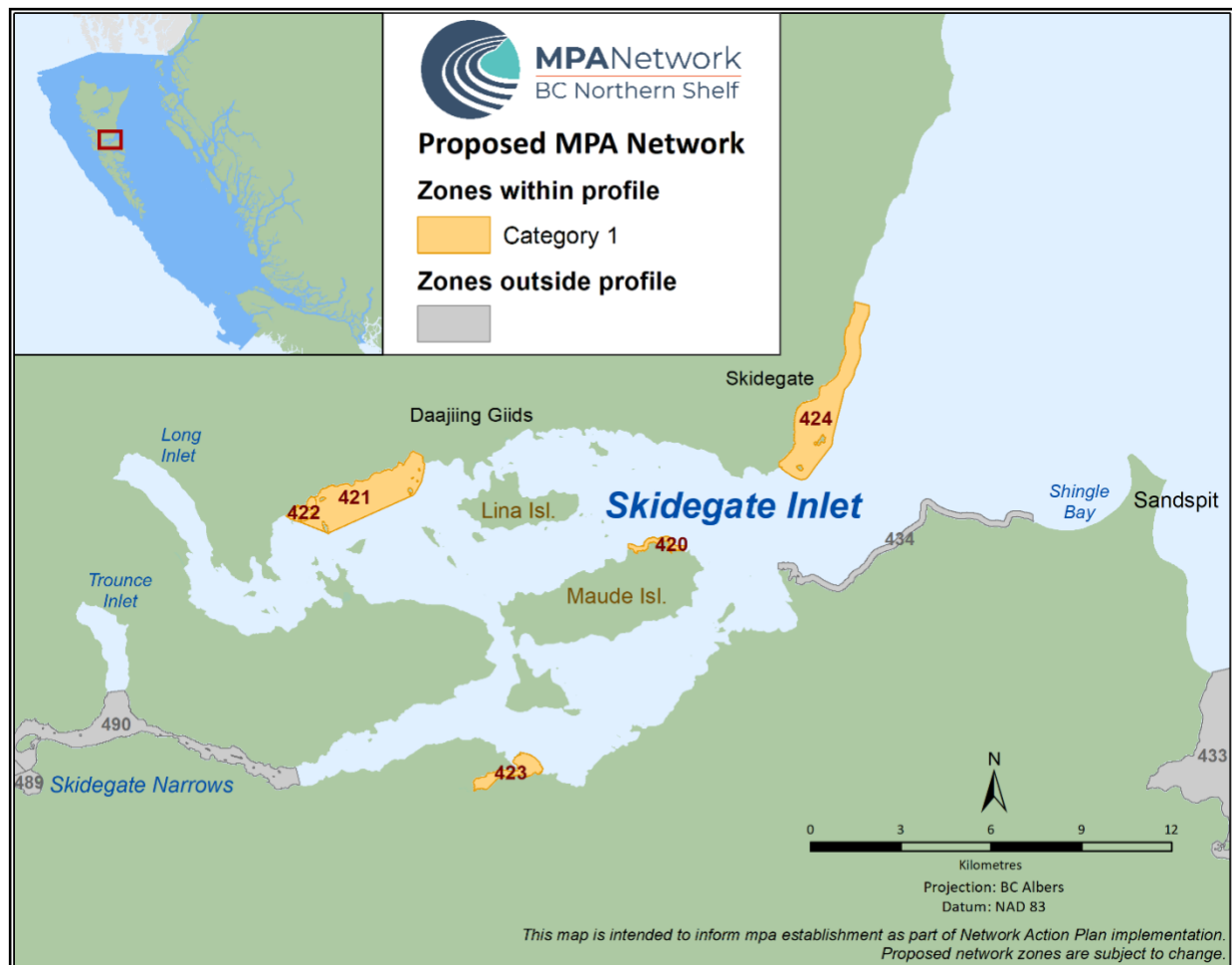
Potential designation tool(s):

- Wildlife Management Area: 420-421
- Marine Refuge: zones 422-424

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 11.4 km²

Zones included in this profile: 420-424



Map 5. Skidegate Inlet Profile

Context

Ecological Context

This site includes a variety of zones throughout Skidegate Inlet that supports eelgrass beds, is an important region for many migratory species, and for nesting sites for many marine birds. There are many exposed and sheltered shorelines, rocky and sandy beaches, and small islands and islets. Unique currents and tidal influence from the Pacific, and inflow of fresh water from the many creeks and rivers as well as the Hecate Strait create a unique environment abundant with life. There are many important fish bearing estuaries and marine habitats, such as Maude Island, which supports has unique benthic features, and Government Creek, an important salmon estuary.

Skidegate Inlet supports many different species of conservation concern, species at risk, and unique species, including significant colonies of marine birds and breeding habitat, marine mammals, salmon, corals, spot prawns, leatherback sea turtles, transient killer whales, Dungeness crab, and a high diversity of marine invertebrates.

Cultural Context

This site has high cultural and historic value, including multiple Haida Village sites and seasonal camps, and important areas for learning traditional practices. Historically and presently the nearshore area provides an important travel route for Haida to access fishing grounds and other village sites to the south, west, and north of the inlet. During the pandemics of smallpox, influenza and the Spanish Flu, Haida from other villages in the south were forced to migrate to HIGaagilda as population numbers rapidly declined; Skidegate Inlet became an increasingly important place for food security. Moreover, the nearshore sites contribute to conservation of species significant to First Nations and coastal communities, including those important for cultural use and food security. These species include, but are not limited to, nesting sites and foraging habitats for marine birds, harvesting of seaweeds and kelp, herring and herring roe on kelp, marine invertebrates, and various species of fish.

Human-Use Context

The site overlaps with the Damaxyaa Haida Heritage Site and B.C. Conservancy on the southern side of the inlet. Communities in close proximity to this site include the Haida community of HIGaagilda Skidegate, and the municipalities of Daajing Giids *the Village of Queen Charlotte* and K'il Kun Sandspit. This region is an important transportation hub, being the marine extension of Highway 16 via B.C. Ferries and connecting the community of K'il Kun with Graham Island.

Close proximity to Damaxyaa permits marine and backcountry accessible camping in sheltered inlets, most of which can be accessed via kayak and small recreational boats. Tourists frequent the area via chartered groups or self-guided trips operating out HIGaagilda, Daajing Giids and K'il Kun. Logging activity is active in Bearskin Bay via barges and trucks. Many commercial fisheries in Skidegate Inlet are closed to support access for Haida and other local communities. Shellfish aquaculture tenures are active in select areas in Skidegate inlet outside of the proposed protected areas.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
420	1.3	Conserve areas of high biological diversity including eelgrass, kelp beds, shore birds (Loon, Grebes), and seabirds (Murre, Large Alcid).
420	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds (Loon, Grebe), shorebirds (Murre, Large Alcid).
Zone	Network Objective	Cultural Conservation Objective
420	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of HIGaagilda Skidegate.
420	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to Pacific Herring.

Zone	Network Objective	Ecological Conservation Objective
421	1.3	Conserve areas of high biological diversity including a diversity hotspot for salmon, Pigeon Guillemot colonies, Black Oystercatcher nesting sites, eelgrass meadows, salmon (Sockeye, Chum, Pink (even), Pink (odd), Coho, Pacific Herring), invertebrates (Butter Clams, Littleneck Clams, Cockles, Sunflower Sea Star), shorebirds (Marbled Murrelet, Sea duck, Goose, Swan, Great Blue Heron, Loon, Grebe) and sea birds (Sea duck, Murre, Large Alcid).
421	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including sunflower sea stars, shorebirds (Great Blue Heron, Loon, Grebe, Sea Duck) and seabirds (Sea duck, Murre, Large Alcid).
421	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine bird colonies, nesting sites and eelgrass meadows.
Zone	Network Objective	Cultural Conservation Objective
421	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of HIGaagilda Skidegate.
421	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to eelgrass beds and nesting sea bird colonies, salmon (Sockeye, Chum, Pink, Coho), and shellfish (multiple species).

Zone	Network Objective	Ecological Conservation Objective
422	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including sunflower sea stars, shorebirds (Great Blue Heron, Loon, Grebe, Sea Duck) and seabirds (Murre, Large Alcid).
422	1.3	Conserve areas of high biological diversity including a diversity hotspot for salmon, eelgrass, estuaries, invertebrates (Butter Clams, Littleneck Clams, Cockles, Sunflower Sea Star, Green Sea Urchin, Dungeness crab), shorebirds (Seaduck, Goose, Swans, Great Blue Heron, Loon, Grebe), and seabirds (Murre, Large Alcid).
422	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including an important salmon stream and estuary.
Zone	Network Objective	Cultural Conservation Objective
422	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Hl'gaagilda Skidegate.
422	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (Sockeye, Chum, Pink, Coho), shellfish (multiple species) and marine birds.

Zone	Network Objective	Ecological Conservation Objective
423	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including shorebirds (Loon, Grebe, sea duck).
423	1.3	Conserve areas of high biological diversity including a diversity hotspot for salmon (Chinook, Chum, Coho, Pink - even, Pink - odd, Sockeye), eelgrass, estuary, shore birds (Loon, Grebe, Goose, Swan, Sea duck).
423	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including an important estuary.
Zone	Network Objective	Cultural Conservation Objective
423	5.2	Represent marine areas of high cultural or historical value, including proximity to the community of Hl'gaagilda Skidegate.
423	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to salmon (Chinook, Sockeye, Chum, Pink (even), Pink (odd), Coho), marine birds.

Zone	Network Objective	Ecological Conservation Objective
424	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Black Oystercatcher nesting sites, shorebirds (cormorant (unspecified and Double Crested), Loon, Grebe, Sea duck) and seabirds (Murre, Large Alcids, Albatross).
424	1.3	Conserve areas of high biological diversity including Pigeon Guillemot colonies, Black Oystercatcher nesting sites, eelgrass, Giant Kelp, Pacific herring, Dungeness crab, shorebirds (Loon, Grebe, Sea duck, Cormorants (unspecified and double crested) and seabirds (Murre, Large Alcids, Albatross).
424	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine bird species and nesting sites.
Zone	Network Objective	Cultural Conservation Objective
424	5.2	Represent marine areas of high cultural or historical value, including adjacency to the community of H̱aagilda Skidegate.
424	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited to marine birds, Dungeness Crab, Pacific Herring, shellfish (multiple species).

Preliminary Activity Assessment Table

	Profile Name:	Skidegate Inlet				
	Zone Number	420	421	422	423	424
	Overlap with existing MPA/RCA	no	no	no	no	no
Aquaculture	Finfish – open-net pens	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!
	Marine plants	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	!	!	!
	Invertebrate trap	!	!	!	!	!
	Sablefish trap	!	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!	!
	Gill nets	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	!	!	!	!	!
	Trolling - salmon	!	!	!	!	!

	Trolling - tuna	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	✓	!	!	!
	Invertebrate trap	✓	✓	!	!	!
	Intertidal hand picking/digging	✓	✓	!	!	!
	Trolling - rod and reel	✓	✓	!	!	!
	Scuba dive fishing	✓	✓	!	!	!
Forestry	Log Storage and Handling	!	!	!	!	!
Industrial Projects	Oil and gas activities*	!	!	!	!	!
	Mining*	!	!	!	!	!
	Dumping*	!	!	!	!	!
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- bottom trawl = zones outside the frozen footprint
- shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Supplemental Information

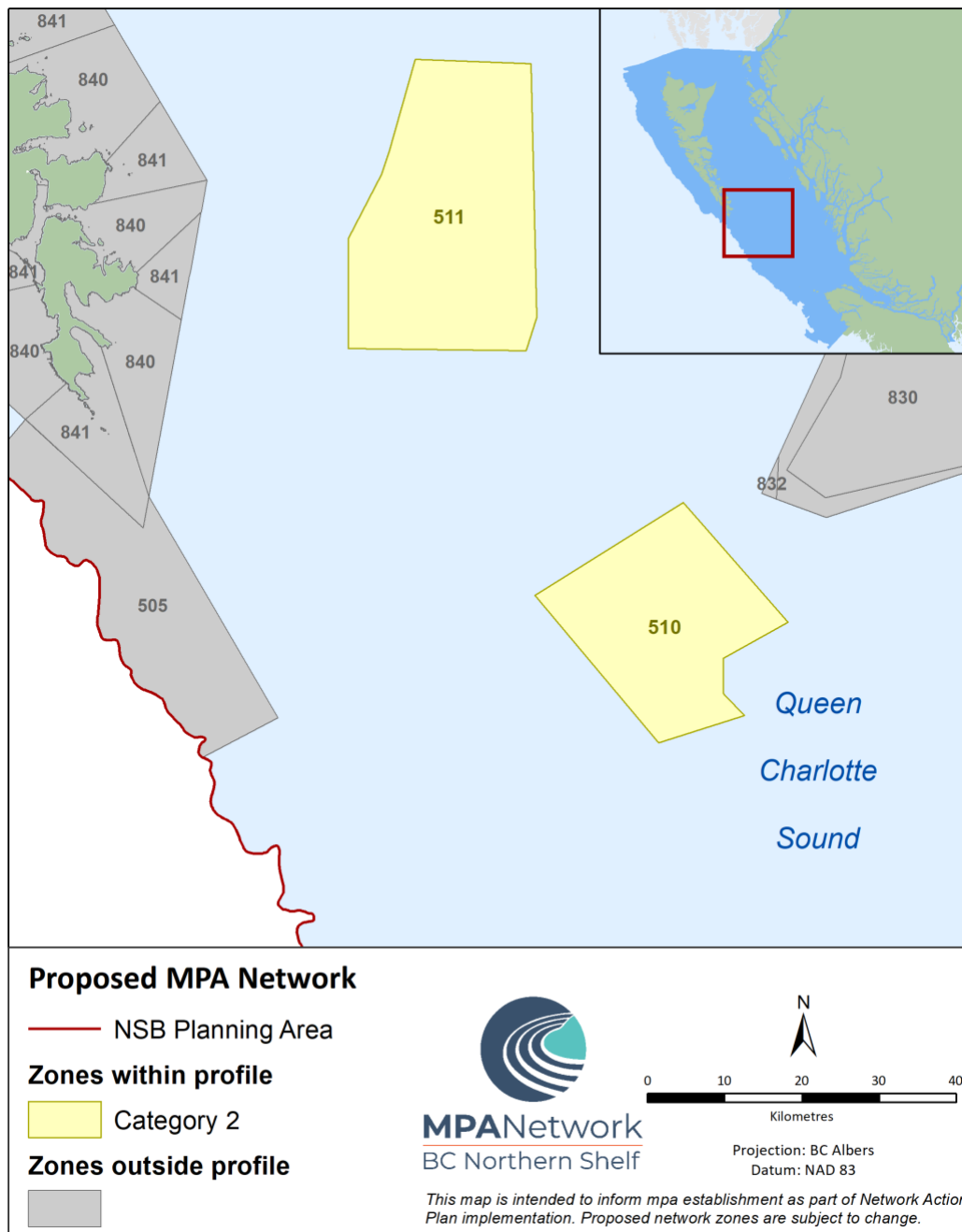
None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	420-424	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	420, 422-424	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.

Queen Charlotte Sound – Haida Gwaii Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.



Map 6. Queen Charlotte Sound – Haida Gwaii Profile

Sub-region: Haida Gwaii

Category: 2

Size (Category 1 and 2 only): 1,313.7 km²

Zones included in this profile: 510-511

Context

These zones are located in the Queen Charlotte Sound region, southeast of Haida Gwaii and the Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site. The area captures a portion of the Shelf Break EBSA, known to support the aggregation of macrozooplankton. The general area supports a variety of groundfish and rockfish species, as well as habitat-forming corals and sponges.

This area has cultural and spiritual value for the Haida Nation, is used for the traditional harvest of marine resources, and supports multiple culturally significant species.

These offshore areas see activity from a number of commercial fisheries. Commercial fisheries occurring within the zones identified include those targeting halibut, rockfish, sablefish, and species caught by trawl (bottom and/or mid-water).

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
510	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including various rockfish (Darkblotched, Yellowmouth, Widow, Shortspine Thornyhead, Rougheye/Blackspotted, Bocaccio), marine mammals (Fin whales), and marine birds (Albatross, Shearwaters and Fulmars).
510	1.3	Conserve areas of high biological diversity including species assemblages associated with the Shelf Break EBSA, including various rockfish (e.g., Darkblotched, Yellowmouth, Widow, Shortspine Thornyhead, Rougheye/Blackspotted, Bocaccio), groundfish (e.g., Pacific ocean perch, Dover sole), skates e.g. (Sandpaper, Longnose), and corals and sponges.
511	1.3	Conserve areas of high biological diversity including shelf benthic fish diversity and shelf invertebrate biomass hotspots as well as associated species assemblages including various rockfish (e.g. Shortraker, Shortspine Thornyhead, Rougheye/Blackspotted, Widow, , Darkblotched, Redstripe, Rosethorn, Yellowmouth), groundfish (e.g. Pacific ocean perch, Dover sole, Sablefish, Rex sole, Walleye Pollock), skates e.g. (Sandpaper, Longnose), forage fish (e.g. eulachon – summer), marine mammals (Fin whale), marine birds (Albatross), and corals, sponges and sea pens.
511	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including various rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Yellowmouth, Darkblotched, Bocaccio), eulachon, marine mammals (Fin whales), and marine birds (e.g. Albatross, Shearwaters and Fulmars).

CENTRAL COAST

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Central Coast Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: Central Coast

Categories: 1²

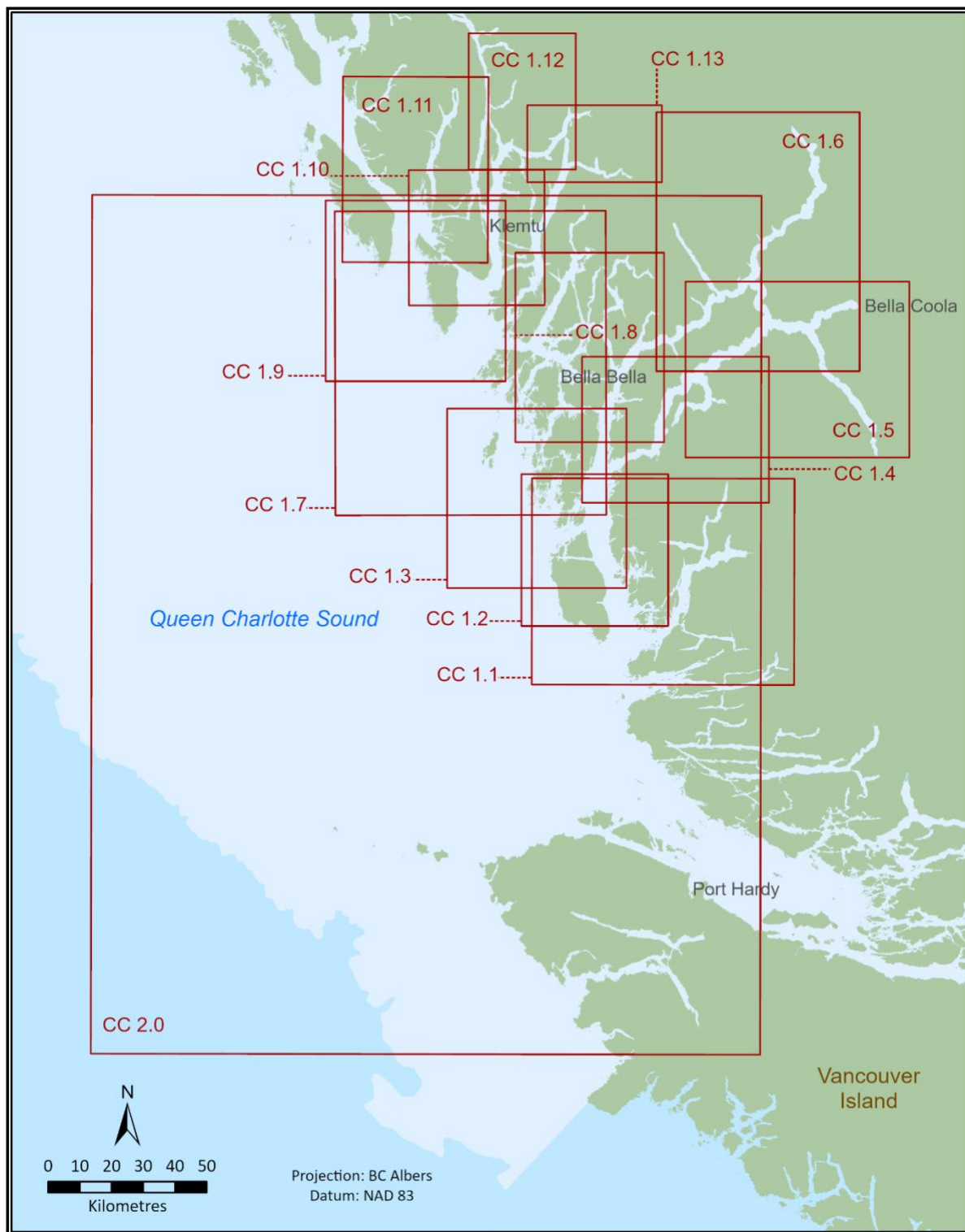
Potential designation tool(s): National Marine Conservation Area Reserve

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 3,497.5 km²

Zones included in this profile: 100-103, 110-114, 120-123, 130-134, 136-138, 140-146, 150-157, 160-166, 170-174, 180-188, 190-197, 200-206, 210-213

² The intention of the Central Coast Nations and Parks Canada is to designate all zones in the Central Coast sub-region within the timeline for Category 1 zones. This will be reflected in maps and analyses for the NAP version that is released for public engagement.



Map 1. Index map for Central Coast groups

Context

Ecological Context

Hundreds of islands, exposed rocky headlands, nearshore kelp forests, and the shelf waters of Queen Charlotte Sound characterize the Central Coast sub-region's marine and coastal areas. Within the sub-region, the exposed outer coast meets an intricate nearshore with large-bodied sponge assemblages, structural corals, and a shoreline that is cut by narrow channels and steep-walled fjords containing ecologically complex estuaries, calm inlets, and pocket coves.

Marine life thrives in the diverse habitats of the Central Coast. Coral and sponge reefs, kelp forests, and eelgrass beds support invertebrate and fish communities including juvenile Pacific halibut, eulachon, salmon, crab, prawn, and numerous rockfish species. Herring spawn in the intertidal zone and shallow waters on eelgrass, kelp, rock, and other substrates. In addition, the sub-region is home to some of the biggest salmon runs on the coast.

Marine birds rely on the rich marine feeding grounds of the Central Coast. Globally significant nesting populations of fork-tailed storm-petrels, Cassin's auklets, rhinoceros auklets, tufted puffins, marbled murrelet, and black oystercatchers are found in the area, including approximately one third of the world's population of breeding Cassin's auklets.

Numerous marine mammals are found in Central Coast waters. Grey and humpback whales migrate through the region, sometimes stopping to feed for prolonged periods. Pacific harbour seals are widely distributed throughout the sub-region, and Steller sea lion haulouts dot the outer coast. Killer whales, fur seals, porpoises, and Pacific white-sided dolphins are sighted on a regular basis throughout the Central Coast. Reintroduction of sea otters on the Central Coast has helped restore healthy kelp forest ecosystem dynamics.

The adjacent terrestrial area has become well-known as the Great Bear Rainforest. Here, many terrestrial animals, including black bears, the geographically unique spirit bears, grizzly bears, and wolves forage extensively in the intertidal zone of the sub-region, and create a vital link between marine and terrestrial ecosystems.

Cultural Context

For millennia, the wellbeing of the Heiltsuk, Kitasoo Xai'xais, Nuxalk, and Wuikinuxv has been linked, inextricably, to the health of the marine environment. Management and utilization of abundant marine resources, particularly salmon, supported ancient civilizations and allowed rich and complex cultures and societies to develop. Archaeologists have dated the origins of village sites on the Central Coast to as far back as 11,000 years, making them some of the oldest continually occupied sites in Canada. Pre-contact, the Central Coast supported some of the highest population concentrations in North America.

Historically, abundant herring and eulachon populations also characterized the Central Coast. These species were once the cornerstone of trade between coastal and inland First Nations in the region, and an important economic driver for First Nations and local communities. Groundfish such as

rockfish, halibut, sablefish, sole, and Pacific cod have been managed and harvested for many generations by the Central Coast Nations, and today are important to the modern commercial fishing industry. Declines in salmon, Dungeness crab, eulachon, herring and some groundfish species have impacted the Heiltsuk, Kitasoo Xai'xais, Wuikinuxv, and Nuxalk people's way of life and their ability to rely upon and practice traditional marine management and harvesting for this and future generations.

The nearshore and inlets currently support geoduck, sea cucumber and sea urchin dive fisheries as well as Dungeness Crab and prawn fisheries. These valuable fisheries, which the Heiltsuk, Kitasoo Xai'xais, Wuikinuxv, and Nuxalk have used for generations, continue to support both commercial and traditional fisheries. Northern abalone was once abundant in the region but is now an endangered species.

Within each of the zones of the Central Coast sub-region First Nations have identified C-CPs that include areas important for harvesting, areas important for culturally significant species, and areas important for culture and spirituality.

Human Use Context

In the last several decades the population of the Central Coast has risen and fallen despite consistent growth in the B.C. population as a whole over same period. Today, approximately 3,500 people live in the sub-region. Close to two-thirds of area residents are of Heiltsuk, Kitasoo Xai'xais, Nuxalk, or Wuikinuxv ancestry. Bella Coola, Bella Bella, Ocean Falls, Wuikinuxv, Shearwater, and Klemtu are the main communities, all of which can be reached by boat and air/float plane. Bella Coola, Bella Bella, Ocean Falls, Shearwater and Klemtu are also served by B.C. Ferries. Bella Coola is the only community that is accessible by road.

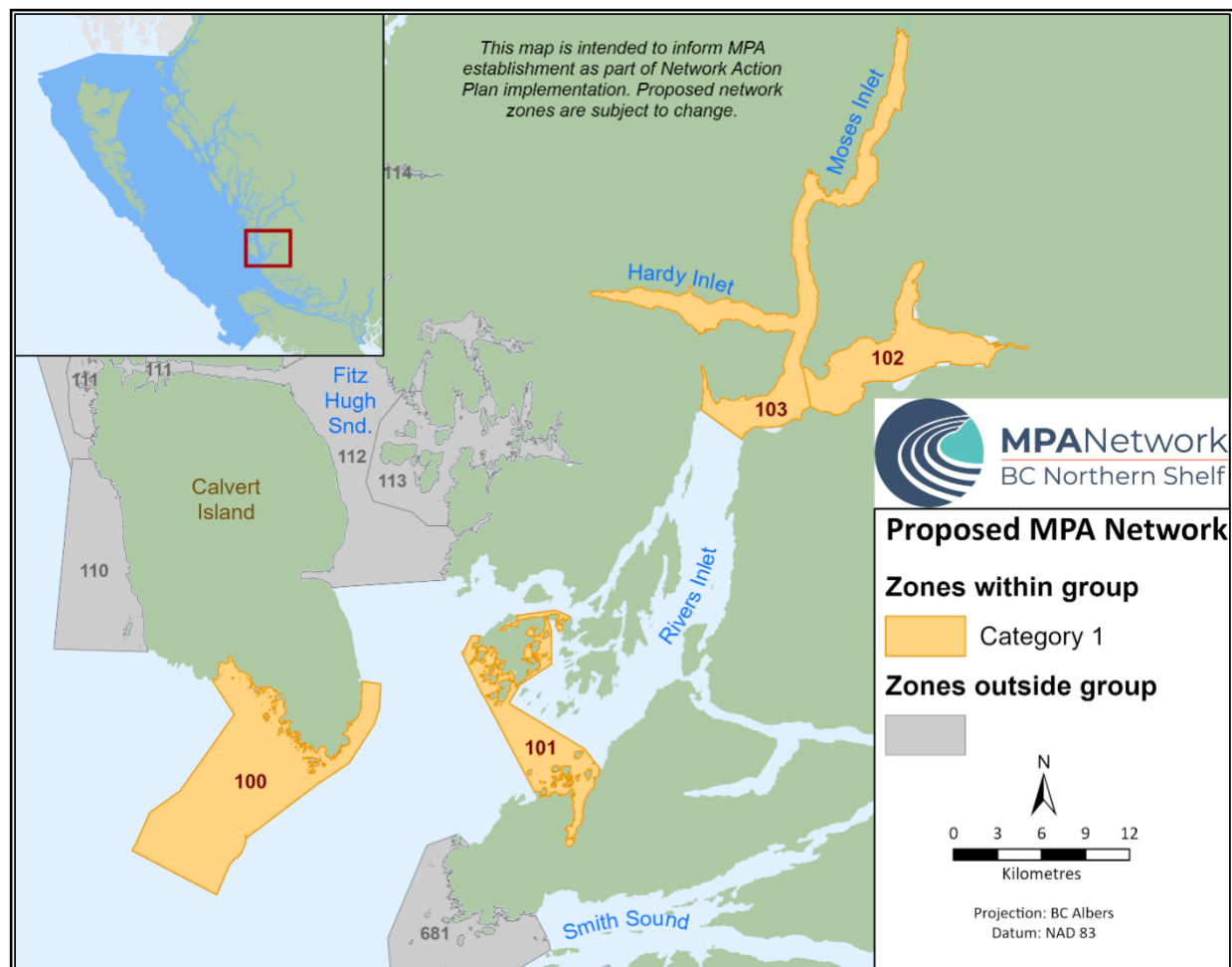
The Central Coast economy has always been tied to the ocean. Post-European contact the industrial market economy was built largely on fishing and fish processing. More recently forestry activities, which have a significant marine component, have been an important employer, and finfish aquaculture and processing have become a significant economic driver for the Kitasoo Xai'xais Nation. Resource cycles and overharvesting have adversely impacted the health of these industries and have led to downturns in related fishing sectors. Emerging marine sectors, including shellfish and marine plant aquaculture, marine tourism, monitoring and research, and marine renewable energy could each play an important role in healthy First Nation and local communities. Over the last century Central Coast economies relied primarily on commercial logging and fishing industries, including commercial fisheries and recreational fishing service providers. While these industries are still critical, local economies are also becoming more diversified, with a recent focus on aquaculture, and tourism and other service sectors.

Other human uses include shipping (the Central Coast is an important part of the inside passage shipping corridor), public recreation (with activities such as sailing, powerboating, kayaking and recreational fishing), and research activities.

Zone Details

Penrose, Rivers Inlet, and Calvert South Group

Zones: 100-103



Map 1.1. Penrose, Rivers Inlet, and Calvert South Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
100	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows, kelp beds, and estuaries, including seaweed, Sockeye salmon holding area, Benthic fish diversity (Rock sole, Dover sole, Pacific cod, Lingcod), rockfish (Canary, China, Quillback, Tiger, Vermillion), shellfish (multiple species), Gorgonians, and coral and Glass and Boot sponges.
100	1.4	Protect representative areas of every marine habitat type in the bioregion, the Eastern Queen Charlotte Sound Upper Ocean Sub-region, Shelf wall sloping geomorphic unit, and Gravel flat coastal classes.

100	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Canary, Quillback) and Northern abalone.
100	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Steller sea lion haulouts and Small alcids winter density.
Zone	Network Objective	Cultural Conservation Objective
100	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps, multiple of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
100	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including groundfish, salmon, seaweed, and shellfish. Abalone recovery area, Sockeye holding area, very high diversity of rockfish species, very high abundance of long-lived rockfishes (including canary rockfish), very high habitat complexity, Gorgonians, and Boot sponges present.

Zone	Network Objective	Ecological Conservation Objective
101	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows, kelp beds, and rocky reefs, including salmon (Coho), groundfish (Lingcod), rockfish (Canary, Quillback), and invertebrates (Dungeness crab, Sidesripe shrimp, Giant pacific octopus, Geoduck, Ochre sea stars, Butter clams, Cockles).
101	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Shelf wall sloping geomorphic unit, and Rock cliff coastal classes.
101	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary, Quillback), Northern abalone, Sea otters, and Marbled murrelet year-round density.
101	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawning habitat, Sea otter modelled habitat, marine bird colonies (Pigeon guillemot, Pelagic cormorant).
Zone	Network Objective	Cultural Conservation Objective
101	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps and reserve, multitude of cultural features and sites present, important spiritual relationship with area, and area used for teaching traditional practices.
101	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including crab, salmon, coho salmon, steelhead, herring, herring spawn, marine mammals, cockles, mussels, clams, shellfish, geoduck, abalone, groundfish, marine birds, seagull eggs. Unique site for clam harvest, unique site for herring spawn, crab, geoduck, and abalone, salmon rearing, herring spawn traditionally, abalone restoration, clam bed production, high diversity of rockfish species, long-

		lived rockfishes (including canary rockfish) present, and very high habitat complexity.
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Zone	Network Objective	Ecological Conservation Objective
102	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows, kelp beds, and estuaries, including Steelhead, salmon diversity hotspot (all species), groundfish, rockfish, and invertebrates (Dungeness crab, Spot prawn, Sidesripe shrimp).
102	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Shelf wall sloping geomorphic unit, and Rock cliff coastal classes.
102	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Eulachon important areas - spawn, and marbled murrelets.
102	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawn, marine birds (Gull density – year-round, Great blue heron density in winter, Goose/swan density in winter).
Zone	Network Objective	Cultural Conservation Objective
102	5.2	Represent marine areas of high cultural or historic value, including Adjacent to Wuikinuxv village, reserves and seasonal camps, area is important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship with area, and area used for teaching traditional practices.
102	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including birds, forage fish, groundfish, marine mammals, marine waterfowl, salmon, shellfish, crab, eulachon, and prawns. Unique site for eulachon (multiple runs), juvenile salmon, bird nesting habitat, Eulachon and halibut spawning area, and adequate habitat and long-lived rockfishes present but limited sampling.

Zone	Network Objective	Ecological Conservation Objective
103	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows and estuaries, including salmon diversity hotspot (chinook, coho, pink (odd), pink (even), sockeye), and invertebrates (shellfish, Dungeness crab, Spot prawns, Giant pacific octopus).
103	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Rock cliff coastal classes, Fjord steep wall geomorphic unit, and Fjord crest geomorphic unit.
103	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon spawning areas and Marbled murrelet at sea habitat.

103	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific halibut spawning area, and marine birds (Shorebird (sand) year-round density and Goose/swan winter density).
Zone	Network Objective	Cultural Conservation Objective
103	5.2	Represent marine areas of high cultural or historic value, including area adjacent to Wuikinuxv village, reserves and seasonal camps, area is important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship with area, and area used for teaching traditional practices.
103	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including birds, forage fish, groundfish, marine mammals, marine waterfowl, salmon, shellfish, crab, eulachon, and prawns. Unique site for eulachon (multiple runs), juvenile salmon, bird nesting habitat, and Eulachon and halibut spawning area.

Preliminary Activity Assessment Table

Group Name:		Penrose, Rivers Inlet, and Calvert South			
Zone Number		100	101	102	103
Overlap with existing MPA/RCA		no	yes	yes	yes
Aquaculture	Finfish – open-net pens	!	!	!	!
	Shellfish - beach seeding	!	!	!	!
	Shellfish - off bottom	!	!	!	!
	Marine plants	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a
	Shrimp trawling*	P	P	P	n/a
	Dive with pressure hose	✓	!	n/a	n/a
	Invertebrate trap	!	!	!	!
	Sablefish trap	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!
	Gill nets	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!
	Purse seine	!	!	!	!
	Trolling - salmon	!	!	!	!
	Trolling - tuna	!	!	!	!
	Scuba dive fishing	✓	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!
	Invertebrate trap	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!

	Trolling - rod and reel	!	!	!	!
	Scuba dive fishing	!	!	!	!
Forestry	Log Storage and Handling	! ¹	!	!	! ¹
Industrial Projects	Oil and gas activities*	P	P	P	P
	Mining*	P	P	P	P
	Dumping*	P	P	P	P
	Other industrial projects	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • bottom trawl = zones outside the frozen footprint • shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
101	Penrose Island Marine Provincial Park is contained within the boundaries of this zone.
102	Kilbella Estuary Conservancy (marine) is contained within the boundaries of this zone.
103	Clyak Estuary Conservancy (marine) is contained within the boundaries of this zone.

Supplemental Information

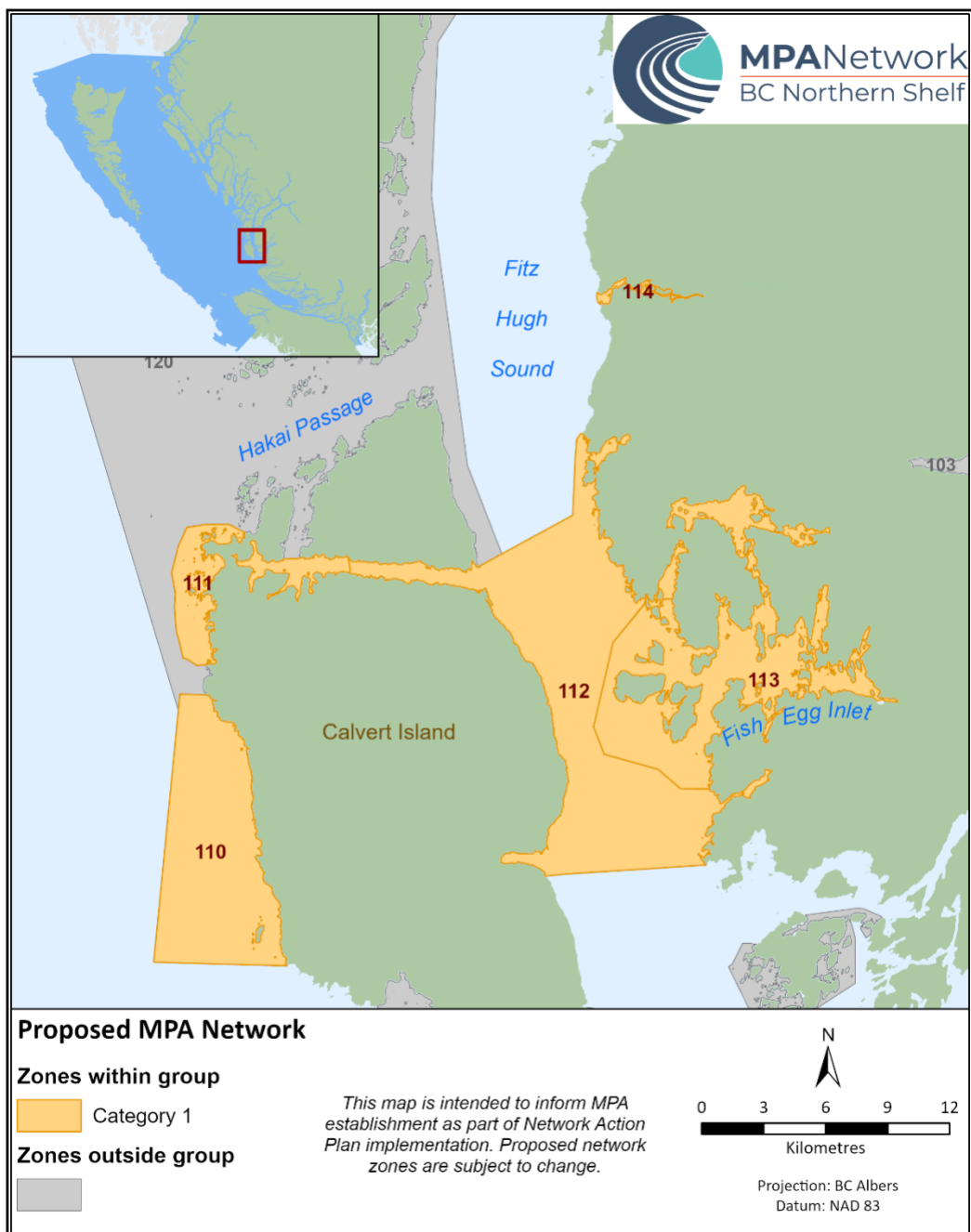
!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	102	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	101-103	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	100-102	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	100	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and/or shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Shared Territory	100	Gwa'sala-Nakwaxda'xw Nations and Wuikinuxv First Nations have shared interests in this site. Gwa'sala-Nakwaxda'xw Nations are not currently a partner in the planning process but should be included in future site planning between Wuikinuxv, Parks Canada, and other Governance Partners.

Hakai Pass Group

Zones: 110-114



Map 1.2. Hakai Pass Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
110	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass, Bull kelp, and Giant kelp ecosystems, including Steelhead, salmon (Sockeye), benthic fish diversity (Lingcod, Rocksole), rockfish (China, Quillback, Tiger, Yelloweye), invertebrates (barnacle, Spot prawn, Dungeness Crab, Sea cucumber), and Boot and cloud sponges.
110	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean Sub-region, Shelf crest geomorphic unit, Hard substrate bottom patches, soft substrate bottom patches, Gravel flat coastal classes, Queen and Charlotte sound ecosections.
110	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Northern abalone larval site, rockfish (Quillback, Yelloweye), and Marbled murrelet at sea habitat.
110	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Eel grass, Bull and Giant kelp, Pacific herring spawn, Killer Whale – northern residents important areas, Harbour seal haulouts, and marine birds (Shorebird (rocky) density – year round, Double-crested cormorant density – year round, Seagull-nesting).
Zone	Network Objective	Cultural Conservation Objective
110	5.2	Represent marine areas of high cultural or historic value, including: seasonal camps, area important for seaweed during poor weather periods, and multiple cultural features and sites are present.
110	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: abalone, barnacle, geoduck, groundfish, rockfish, salmon, seal, seagull eggs, steelhead, sea lion, seaweed, prawn, crab, and sea cucumber. Important as larval site for abalone, has complex habitats with boot and cloud sponges present.

Zone	Network Objective	Ecological Conservation Objective
111	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including: Seaweed, Steelhead and salmon (Sockeye), Groundfish (multiple species. inc. Lingcod), rockfish (Bocaccio, Canary, China, Tiger, Widow), invertebrates (Cockles, Butter and Littleneck clams, Mussels, Geoduck, Red sea urchin, Spot prawn, Ochre sea star), whales, and Gorgonians.
111	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Eastern Queen Charlotte Sound Upper Ocean Sub-region, Sand beach coastal classes, Gravel flat coastal classes, and Sand and gravel flat or fan coastal classes.

111	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Boccaccio and Canary), Northern abalone, and Marbled murrelet density in winter.
111	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Eel grass, bull kelp, and giant kelp forests, Pacific herring spawn habitat, marine birds - winter density (Great blue heron, unspecified cormorant, Goose/swan), marine birds (Loon/grebe density, Sea duck staging, Sea gull nesting), and Harbour seal haulouts.
111	1.3	Conserve areas of high biological diversity including species assemblages associated with Sandy bottom, eel grass, bull kelp, and nearshore Cloud sponge reefs, including Seaweed, benthic fish diversity, (Halibut, Lingcod), rockfish (Bocaccio, Quillback, Yelloweye), invertebrates (barnacles, clams, Olympia oyster, Dungeness crab, Spot prawn, Opal squid, Sea cucumber), and Glass sponge.
Zone	Network Objective	Cultural Conservation Objective
111	5.2	Represent marine areas of high cultural or historic value, including: Seasonal camps, area important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
111	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: barnacle, cockle, clams, mussels, abalone, urchin, prawn, duck, goose, salmon, dolly varden, crab, prawn steelhead, rockfish, groundfish, seal and sea gull eggs. Unique site for early sockeye salmon, herring spawn and seaweed, highest diversity of rockfish species (canary rockfish), gorgonians, very high habitat complexity, large schools of juvenile widow rockfish, very large sizes of lingcod, subadult bocaccio (30 cm lengths), including large schools.

Zone	Network Objective	Ecological Conservation Objective
112	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-regional, multiple geomorphic units, and North coast ecosections.
112	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Boccaccio, Quillback, Yelloweye), and Northern abalone.
112	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawn, Pacific halibut breeding, and Pacific white-sided dolphin density.
112	1.3	Conserve areas of high biological diversity including species assemblages associated with Eelgrass and bull kelp ecosystems, including: Seaweed, benthic fish diversity (multiple species, Halibut rearing), rockfish (multiple species), invertebrates (Olympia oyster, Butter and Littleneck clams, Ochre Sea star, Humpback shrimp and Coonstripe/dock shrimp, Dungeness crab) and sponges (Boot, Cloud, Glass).

Zone	Network Objective	Cultural Conservation Objective
112	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including a high diversity of species harvested.
112	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
112	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: barnacle, clams, crab, prawn, groundfish, seaweed, herring, abalone, marine mammals, maritime mammals, and sea cucumber. Halibut breeding area, critical importance for nearshore cloud sponge reefs, very high species diversity of rockfish, quillback and yelloweye rockfish present, high abundance of shorter-lived rockfish, and habitat complexity very high.

Zone	Network Objective	Ecological Conservation Objective
113	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord mound geomorphic unit, multiple coastal classes, and North coast fjords ecosections.
113	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish and Northern abalone.
113	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Halibut rearing site, Pacific herring spawn, and Killer whale – northern residents potential critical habitat.
113	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including seaweed, steelhead, salmon (all species), groundfish (multiple species, inc. Lingcod), rockfish (Bocaccio, Silvergray, Widow), invertebrates (barnacle, cockle, clams, mussels, Red sea urchin, Spot prawn, Dungeness crab), seal, and whales.
Zone	Network Objective	Cultural Conservation Objective
113	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude of cultural features and sites present, and important spiritual relationship to area.
113	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including groundfish, rockfish, herring spawn, clams, seaweed, abalone, and crab and their habitat in particular, important for halibut rearing, juvenile rockfish, Herring spawn, Eelgrass habitat and abalone, boot and cloud sponge.

Zone	Network Objective	Ecological Conservation Objective
114	1.3	Conserve areas of high biological diversity including species assemblages associated with a network of estuaries, including Pacific salmon biomass hotspot, and salmon diversity hotspot (Chinook, Chum, Coho, Pink (even and odd), Sockeye).
114	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord wall steep geomorphic unit, Fjord depression geomorphic unit, and multiple coastal classes.
114	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Boccaccio and Canary), Northern abalone, and Marbled murrelet at sea habitat.
114	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including estuaries, Pacific herring spawn, marine bird density (Goose/Swan (winter and year-round) Shorebird (rocky year-round)), and Seagull nesting.
Zone	Network Objective	Cultural Conservation Objective
114	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps, area important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
114	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: barnacle, cockle, clams, mussels, abalone, urchin, prawn, duck, goose, salmon, dolly varden, crab, prawn, steelhead, rockfish, groundfish, seal, seagull eggs. Unique site for early sockeye, herring spawn and seaweed, highest diversity of rockfishes (canary rockfish), Gorgonians, habitat complexity very high, large schools of juvenile widow rockfish, very large sizes of lingcod, subadult bocaccio (30 cm), including large schools, high whale abundance.

Preliminary Activity Assessment Table

	Group Name:	Hakai Pass				
	Zone Number	110	111	112	113	114
	Overlap with existing MPA/RCA	yes	yes	yes	yes	yes
Aquaculture	Finfish – open-net pens	!	!	!	!	!
	Shellfish - beach seeding	!	!³	✓	!	!
	Shellfish - off bottom	!	!³	✓	!	!
	Marine plants	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	P	P	n/a
	Dive with pressure hose	n/a	!	✓	!	n/a
	Invertebrate trap	!	!	✓	!	!
	Sablefish trap	!	!	!	!	!
	Intertidal hand picking/digging	!	!	✓	!	!
	Gill nets	!	!	✓	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	!	!	✓	!	!
	Trolling - salmon	!	!	✓	!	!
	Trolling - tuna	!	!	✓	!	!
	Scuba dive fishing	n/a	!	✓	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!
	Invertebrate trap	!	!	!	!	!
	Intertidal hand picking/digging	!	!	✓	!	!
	Trolling - rod and reel	!	!	✓	!	!
	Scuba dive fishing	n/a	!	✓	!	!
Forestry	Log Storage and Handling	!	!³	✓	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P
	Mining*	P	P	P	P	P
	Dumping*	P	P	P	P	P
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • bottom trawl = zones outside the frozen footprint • shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
110	West Calvert RCA aligns with the boundaries of this zone. Hakai Lúxvbálís Conservancy (marine) overlaps a portion of this zone.
111	Hakai Lúxvbálís Conservancy (marine) overlap this entire zone.
112	Hakai Lúxvbálís Conservancy (marine) overlaps a portion of this zone.
113	Fish Egg Inlet RCA is contained within the boundaries of this zone.
114	Koeye Conservancy (marine portion) is contained within the boundaries of this zone.

Supplemental Information

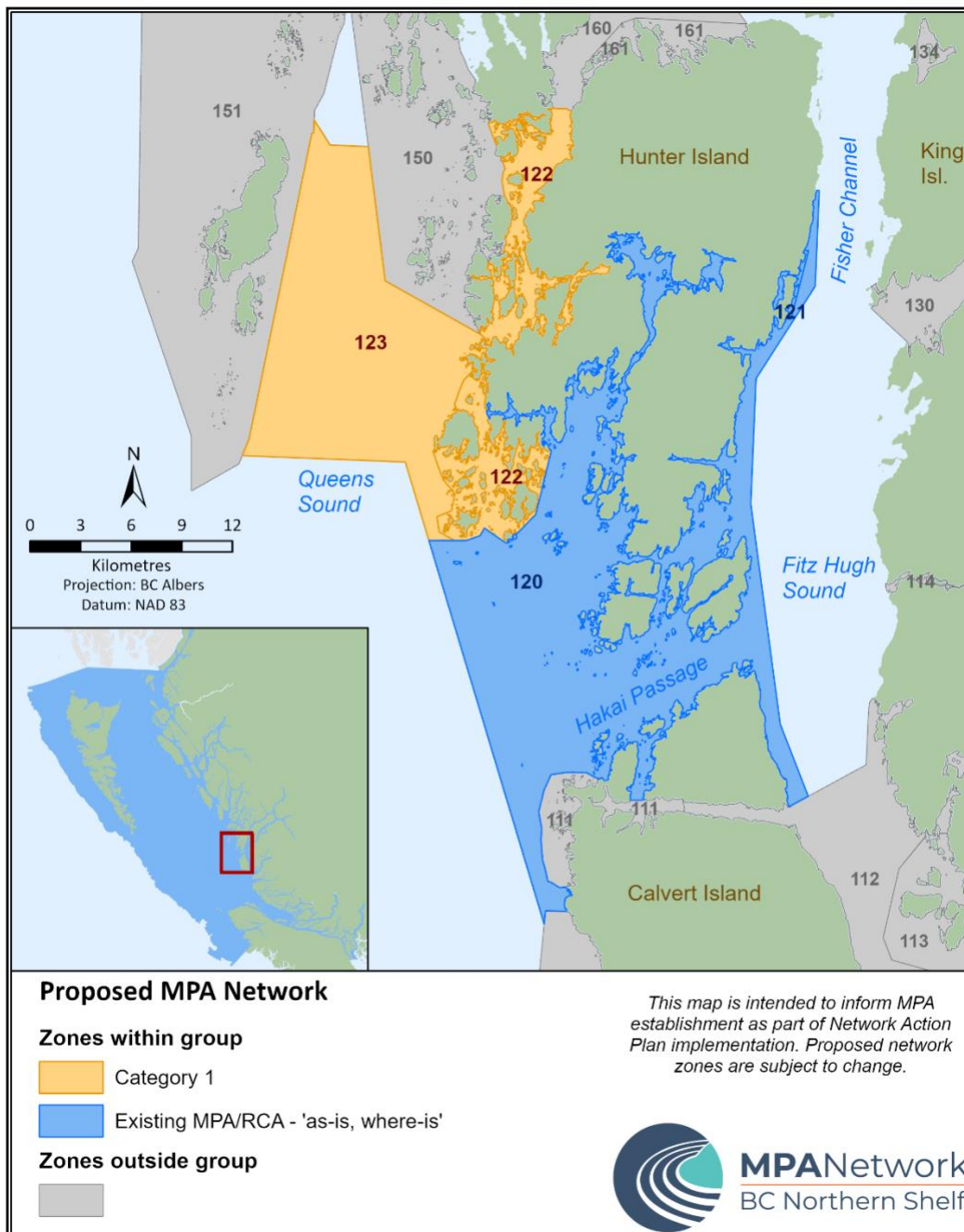
!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	110, 111, 114	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	110-113	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	110-111	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	110, 111, 113, 114	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Hakai South Group

Zones: 120-123



Map 1.3. Hakai South Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
122	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, nearshore habitat richness, Eel grass, Bull and Giant kelp, and high rugosity, including salmon (multiple species), benthic fish diversity (multiple species, inc. Lingcod), rockfish (Canary, China, Tiger, Yelloweye), Butter clam, and Cloud sponges.
122	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean Sub-region, and Rock ramp coastal classes.
122	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary and Yelloweye), and Northern abalone.
122	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Steller sea lion haulouts – year-round.
Zone	Network Objective	Cultural Conservation Objective
122	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
122	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: groundfish, rockfish, salmon, and molluscs. Abalone recovery, very high diversity of rockfish species, high abundance of long-lived rockfishes (including canary rockfish), habitat complexity very high, Cloud sponges present, and a unique site for clam.

Zone	Network Objective	Ecological Conservation Objective
123	1.4	Protect representative areas of every marine habitat type in the bioregion, including the Queen Charlotte Sound ecosection, the Eastern Queen Charlotte Sound Upper Ocean Sub-region, and Shelf depression geomorphic unit (PMECS).
123	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon and sea otter.
123	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features including portions of the Bella Bella nearshore EBSA.
123	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eulachon, and marine area near Steller sea lion rookeries, and Harbour seal haulouts.

Zone	Network Objective	Cultural Conservation Objective
123	5.2	Represent marine areas of high cultural or historic value, including Community and seasonal camps, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
123	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Barnacles, clams, mussels, cockles, crab, crustaceans, ducks, goose, eulachon, rockfish, ground fish, sea lions, seal, marine birds, waterfowl, prawn, salmon, sea gull eggs, steelhead, and seaweed. Very high diversity of rockfish species, very high abundance of shorter-lived rockfishes, habitat complexity very high, and Cloud sponges present.

Preliminary Activity Assessment Table

	Group Name:	Hakai South	
	Zone Number	122	123
	Overlap with existing MPA/RCA	yes	yes
Aquaculture	Finfish – open-net pens	!	!
	Shellfish - beach seeding	✓	!³
	Shellfish - off bottom	✓	!³
	Marine plants	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	✓
	Bottom trawling*	n/a	n/a
	Shrimp trawling*	n/a	P
	Dive with pressure hose	✓	✓
	Invertebrate trap	!	✓
	Sablefish trap	!	✓
	Intertidal hand picking/digging	!	✓
	Gill nets	!	✓
	Pelagic and mid-water trawl	!	!
	Purse seine	!	✓
	Trolling - salmon	!	✓
	Trolling - tuna	!	✓
	Scuba dive fishing	✓	✓
Recreational Harvest	Demersal hook and line (jigging)	!	✓
	Invertebrate trap	!	✓
	Intertidal hand picking/digging	!	!
	Trolling - rod and reel	!	✓
	Scuba dive fishing	!	✓
Forestry	Log Storage and Handling	!¹	!³

Industrial Projects	Oil and gas activities*	P	P
	Mining*	P	P
	Dumping*	P	P
	Other industrial projects	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> - bottom trawl = zones outside the frozen footprint - shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
122	Hakai Lúxvbálís Conservancy (marine) overlap this entire zone.
123	Hakai Lúxvbálís Conservancy (marine) overlap this entire zone.

Supplemental Information

!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

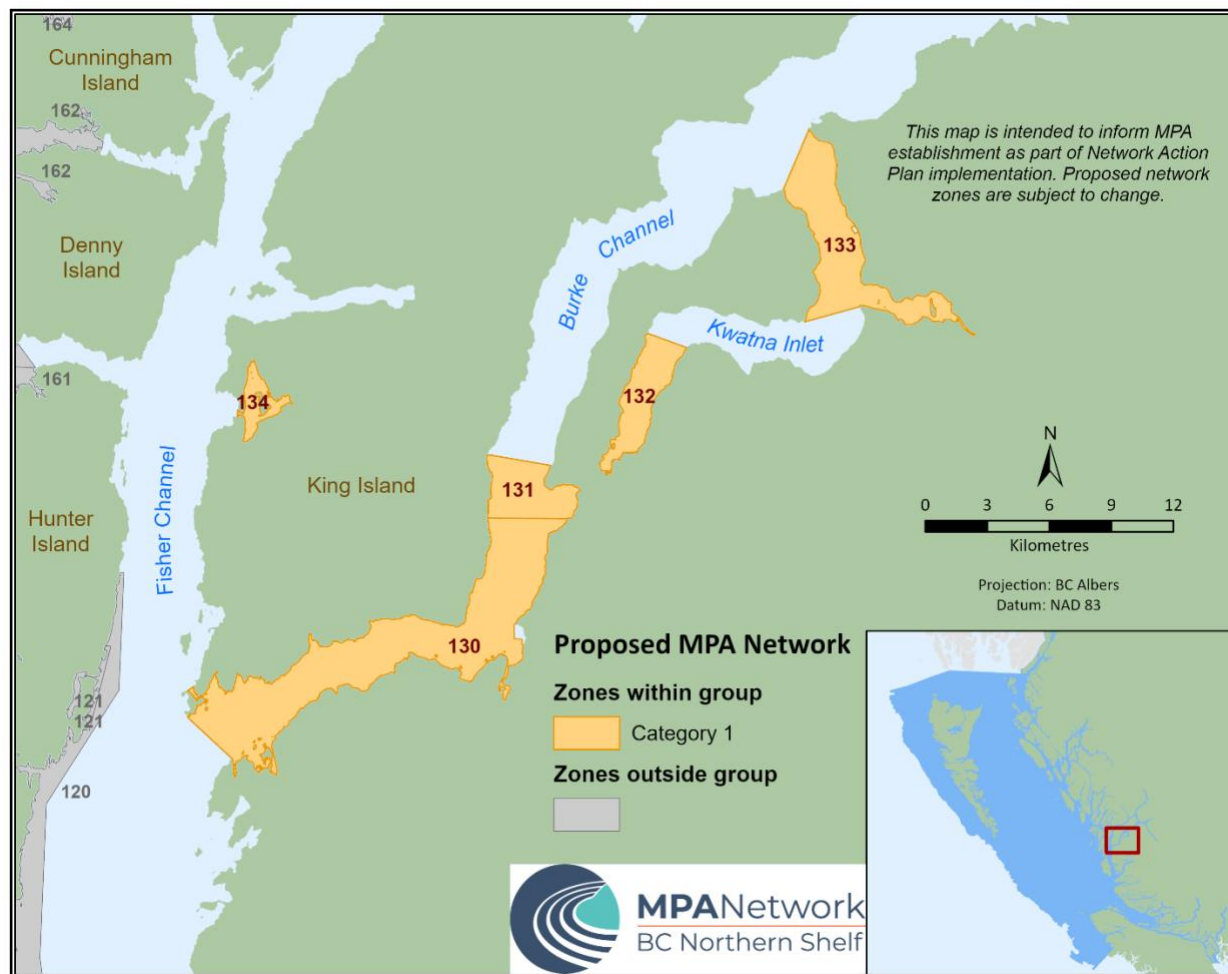
!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	123	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	122, 123	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	122, 123	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and/or shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.

Burke, and Codville Lagoon Group

Zones: 130-134



Map 1.4. Burke, and Codville Lagoon Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
130	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows, kelp beds, and estuaries, including juvenile salmon (Chum, Coho, Pink, Sockeye), Benthic fish Diversity (multiple species), rockfish (Yelloweye), and invertebrates (Dungeness crab, Spot prawn, Butter and Littleneck clams, Green urchin, cockles, Giant pacific octopus).
130	1.4	Protect representative areas of every marine habitat type in the bioregion, including: the Mainland Fjords Upper Ocean Sub-region, and multiple geomorphic units and coastal classes.

130	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including Marbled murrelet at sea habitat.
130	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including potential northern resident killer whale critical habitat and marine birds (Murrets/large alcids density year-round, Sea duck moulting).
Zone	Network Objective	Cultural Conservation Objective
130	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps and a multitude cultural features and sites present in area.
130	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, groundfish, prawn, crab, duck, goose, and sea lion. Unique site for sea urchin, sea cucumber, and clam as well as Yelloweye and other rockfishes.

Zone	Network Objective	Ecological Conservation Objective
131	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass meadows, kelp beds, and estuaries, including out-migrating salmon, Pacific herring spawn, groundfish and rockfish (multiple species), and invertebrates (Dungeness crab, Giant pacific octopus, shrimp (Humpback, Coonstripe, Dock), Spot prawns, Green sea urchins).
131	1.4	Protect representative areas of every marine habitat type in the bioregion, including: the Mainland Fjords Upper Ocean Sub-region, and multiple geomorphic units and coastal classes.
131	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Yelloweye rockfish and Marbled murrelet sea habitat.
131	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: potential northern resident killer whale important/critical habitat, Humpback whale density, and Sea duck moulting.
Zone	Network Objective	Cultural Conservation Objective
131	5.2	Represent marine areas of high cultural or historic value, including: Seasonal camps and a multitude cultural features and sites present in area.
131	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, sea urchin, sea cucumber, Yelloweye and other rockfishes groundfish, prawn, crab, duck, and sea lion.

Zone	Network Objective	Ecological Conservation Objective
132	1.3	Conserve areas of high biological diversity including species assemblages associated with large estuaries, including salmon diversity hotspots (chum, coho,

		pink (odd, even)), pacific salmon diversity, groundfish, and invertebrates (Dungeness crab, Sport prawn, shrimp (humpback, coonstripe, sidestripe, smooth pink)).
132	1.4	Protect representative areas of every marine habitat type in the bioregion, including: the Mainland Fjords Upper Ocean Sub-region, and multiple geomorphic units and coastal classes.
132	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon.
132	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawning area, potential northern resident killer whale critical habitat and Goose/swan density in winter.
Zone	Network Objective	Cultural Conservation Objective
132	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including a high diversity of species harvested.
132	5.2	Represent marine areas of high cultural or historic value, including Seasonal camps and a multitude cultural features and sites present in area.
132	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: herring spawn, crab, salmon, prawn, and groundfish. Unique site for herring and eulachon spawn and juvenile life stages.

Zone	Network Objective	Ecological Conservation Objective
133	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass meadows, and kelp beds, including salmon (all species), groundfish (multiple species, rockfish (Quillback, Silvergray), and invertebrates (Dungeness crab, Spot prawn, clam, shrimp (coonstripe, dock), Green urchin, Giant pacific octopus).
133	1.4	Protect representative areas of every marine habitat type in the bioregion, including: the Mainland Fjords Upper Ocean Sub-region, and multiple geomorphic units and coastal classes.
133	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Eulachon important area - spawn, Quillback rockfish, and Marbled murrelet year round density.
133	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: potential northern resident killer whale critical habitat, and Goose/swan density in winter.
Zone	Network Objective	Cultural Conservation Objective
133	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.

133	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: migratory birds, crab, salmon, and clams. Unique site for eulachon, Quillback rockfish, Lingcod, and estuary habitat.
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Zone	Network Objective	Ecological Conservation Objective
134	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, estuaries and eelgrass, including: invertebrates (Cockles, Dungeness crab, Humpback shrimp).
134	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, and multiple coastal classes.
134	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Harbour seal haulouts, and Killer whale northern residents potential critical habitat.
Zone	Network Objective	Cultural Conservation Objective
134	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, area important for accessing resources during poor weather conditions, and multitude cultural features and sites present in area.
134	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: marine birds, crabs and clams.

Preliminary Activity Assessment Table

Group Name:		Burke, Codville Lagoon				
Zone Number		130	131	132	133	134
Overlap with existing MPA/RCA		no	no	no	no	yes
Aquaculture	Finfish – open-net pens	!	!	!	!	X
	Shellfish - beach seeding	!	!	!	!	X
	Shellfish - off bottom	!	!	!	!	X
	Marine plants	!	!	!	!	X
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	✓
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	P	P	P	n/a	n/a
	Dive with pressure hose	!	✓	n/a	!	✓
	Invertebrate trap	!	!	!	!	!4
	Sablefish trap	!	!	!	!	✓
	Intertidal hand picking/digging	!	✓	!	!	✓
	Gill nets	!	✓	!	!	✓
	Pelagic and mid-water trawl	!	✓	!	!	✓

	Purse seine	!	n/a	!	!	✓
	Trolling - salmon	!	n/a	!	!	✓
	Trolling - tuna	!	✓	!	!	✓
	Scuba dive fishing	!	n/a	!	!	✓
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	✓
	Invertebrate trap	!	!	!	!	!
	Intertidal hand picking/digging	!	✓	!	!	!
	Trolling - rod and reel	!	!	!	!	✓
	Scuba dive fishing	!	✓	!	!	✓
Forestry	Log Storage and Handling	! ¹	✓	! ¹	! ¹	X
Industrial Projects	Oil and gas activities*	P	P	P	P	P
	Mining*	P	P	P	P	P
	Dumping*	P	P	P	P	P
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- bottom trawl = zones outside the frozen footprint
- shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
134	Codville Lagoon Marine Provincial Park aligns with the boundaries of this zone.

Supplemental Information

!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

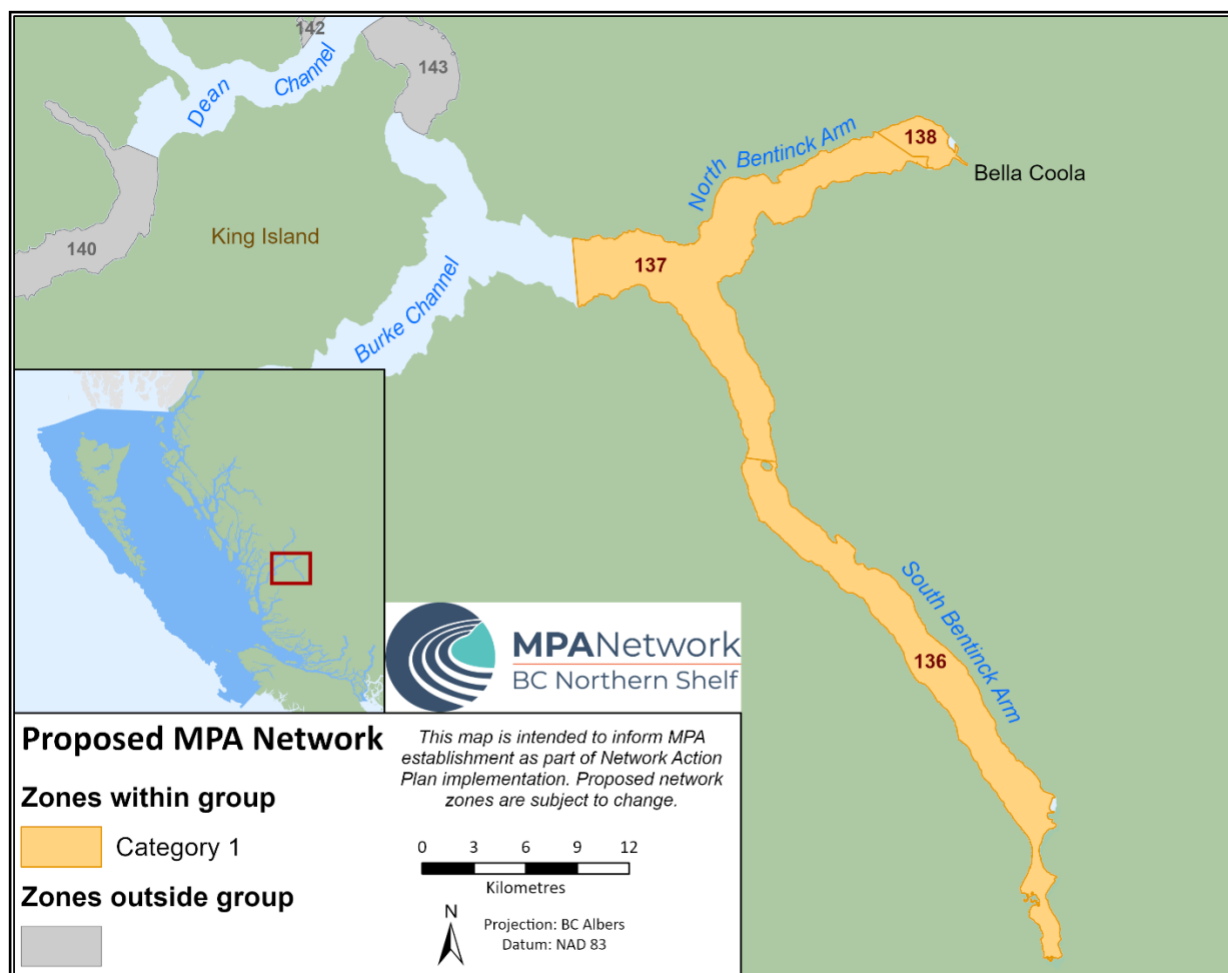
!⁴ : Harvest of crab by trap has been identified as an activity of concern, but harvest of prawn by trap has not.

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	132, 133	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	130	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	130, 131, 133	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	134	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	130-134	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Bentick Arm Group

Zones: 136-138



Map 1.5. Bentick Arm Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
136	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including salmon diversity hotspots (Chum, Chinook, Coho, Pink (odd)), and invertebrates (Dungeness crab, Spot prawns, Sea cucumber, shrimp (Humpback, Coonstripe, Dock).
136	1.4	Protect representative areas of every marine habitat type in the bioregion, including the Mainland Fjords Upper Ocean Sub-region, and multiple coastal classes.
136	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon spawning areas.

136	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine birds (Goose/swan density – year-round, Goose/swan density – winter, Great blue heron density - winter, Sea duck staging)
Zone	Network Objective	Cultural Conservation Objective
136	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including the high diversity of species harvested: crab, prawn, sea cucumber, salmon, estuarine medicinal plants, sweet grass, and rice root.
136	5.2	Represent marine areas of high cultural or historic value, including seasonal camps and Indian Reserve, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
136	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: crab, prawn, sea cucumber, salmon, estuarine medicinal plants, sweet grass, and rice root. Unique site for herring and eulachon, Dungeness crab, important estuaries, salmon holding, eulachon spawning, and herring spawning.

Zone	Network Objective	Ecological Conservation Objective
137	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and high rugosity habitat including eulachon, lingcod, and invertebrates (Spot prawn, humpback shrimp).
137	1.4	Protect representative areas of every marine habitat type in the bioregion including fjord depression floor geomorphic units, mainland fjord upper ocean subregion, north coast fjord ecosections, gravel beach and mud flat coastal classes.
137	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon (spawn).
137	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including killer whale-transient habitat of special importance and harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
137	5.2	Represent marine areas of high cultural or historic value, including: permanent village and seasonal villages, multitude of cultural features and sites present, important spiritual relationship to area including spiritual/healing site.
137	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Dungeness crab, salmon (chum, coho, pink), eulachon, spot prawn, humpback shrimp, yellow eye rockfish, lingcod.

Zone	Network Objective	Ecological Conservation Objective
138	1.3	Conserve areas of high biological diversity including species assemblages associated with large estuaries, including salmon diversity hotspots (Chum, Coho, Pink (odd), Pink (even), Pacific halibut, and invertebrates (spot prawn, Dungeness crab, urchins).
138	1.4	Protect representative areas of every marine habitat type in the bioregion, including: the Mainland Fjords Upper Ocean Sub-region and multiple coastal classes.
138	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon spawning areas.
138	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawning habitat, and marine birds (Goose/swan density in winter, Goose/swan density year-round Sea duck staging).
Zone	Network Objective	Cultural Conservation Objective
138	5.2	Represent marine areas of high cultural or historic value, including Community camps, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, area used for teaching traditional practices.
138	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Unique site for migratory birds and urchin, Salmon holding, herring, Spot prawn, eulachon, crab, and Pacific halibut.

Preliminary Activity Assessment Table

Group Name:		Bentick Arm		
Zone Number		136	137	138
Overlap with existing MPA/RCA		yes	no	yes
Aquaculture	Finfish – open-net pens	!	!	!
	Shellfish - beach seeding	!	!	!
	Shellfish - off bottom	!	!	!
	Marine plants	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	n/a
	Bottom trawling*	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a
	Dive with pressure hose	!	✓	n/a
	Invertebrate trap	!	!	!
	Sablefish trap	!	!	n/a
	Intertidal hand picking/digging	!	✓	!
	Gill nets	!	✓	!

	Pelagic and mid-water trawl	!	!	!
	Purse seine	!	✓	!
	Trolling - salmon	!	✓	!
	Trolling - tuna	!	✓	!
	Scuba dive fishing	n/a	✓	n/a
Recreational Harvest	Demersal hook and line (jigging)	!	!	n/a
	Invertebrate trap	!	!	!
	Intertidal hand picking/digging	!	✓	!
	Trolling - rod and reel	!	✓	!
	Scuba dive fishing	!	✓	!
Forestry	Log Storage and Handling	! ¹	✓	!
Industrial Projects	Oil and gas activities*	P	P	P
	Mining*	P	P	P
	Dumping*	P	P	P
	Other industrial projects	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> - bottom trawl = zones outside the frozen footprint - shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
136	Asseek Estuary (DUA) Conservation Lands overlaps a portion of this zone.
138	Bella Coola Estuary Conservancy (marine) is contained within the boundaries of this zone. Bella Coola Estuary Conservation Lands overlaps a portion of this zone.

Supplemental Information

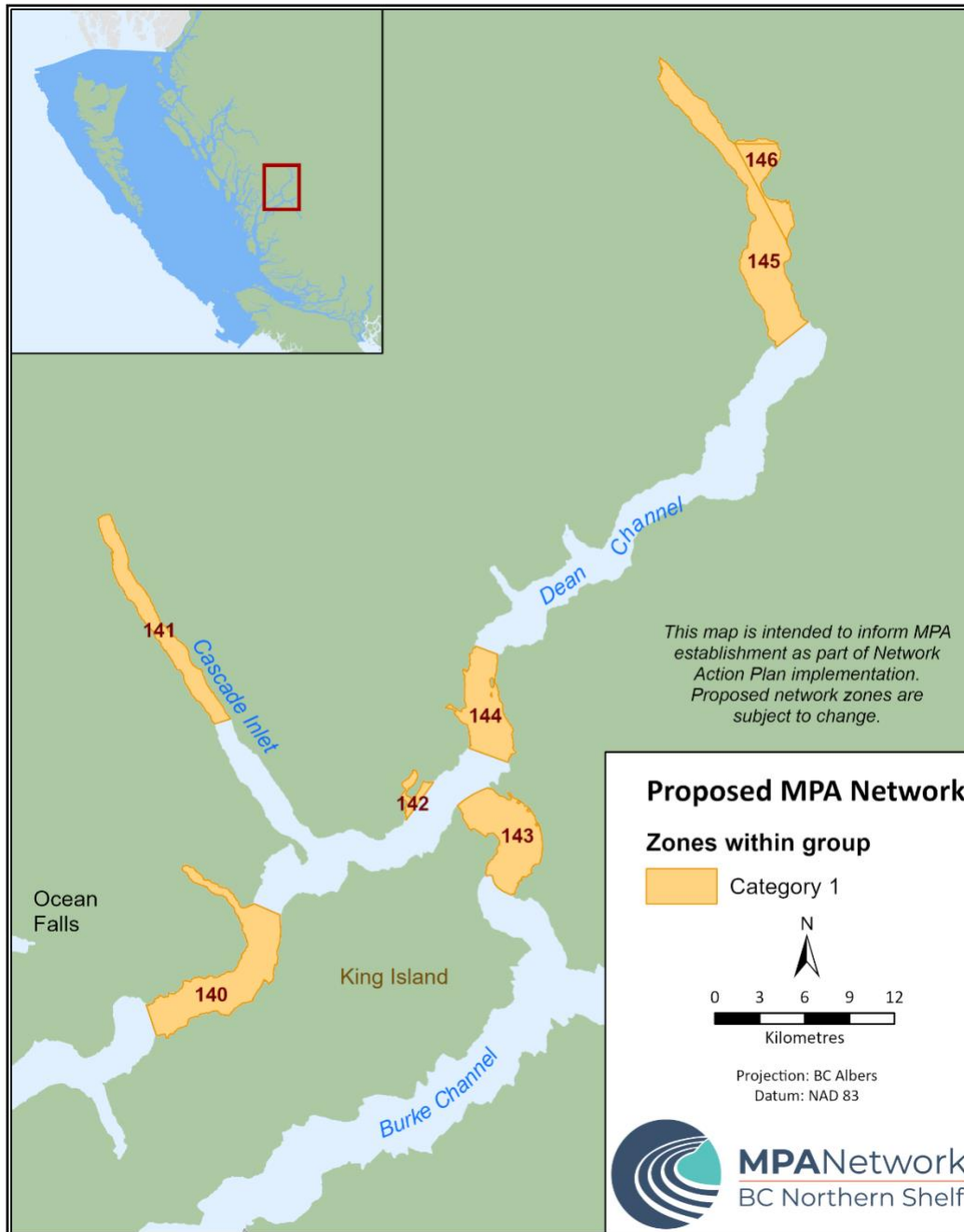
!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	136, 137, 138	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	136, 137, 138	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	137	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	137	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Dean, Cascade, Labouchere, and Kimsquit Group

Zones: 140-146



Map 1.6. Dean, Cascade, Labouchere, and Kimsquit Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
140	1.3	Conserve areas of high biological diversity including species assemblages associated with estuarine habitat, fjord, and benthic fish habitat, including: Quillback rockfish, Pacific halibut, invertebrates (Spot prawn, coonstripe/dock shrimp, humpback shrimp, and Giant pacific octopus), killer whale northern resident important area and potential critical habitat, Dall's porpoise and pacific white-sided dolphin density, and marine birds (marbled murrelet, sea duck, goose/swan density).
140	1.4	Protect representative areas of every marine habitat type in the bioregion: estuary polygons, fjord mound, depression and floor geomorphic units, mainland fjord upper region ocean sub-region, north coast fjord eco-sections, sand and gravel, rock cliff beach classes.
140	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: quillback rockfish, and killer whale northern resident important area.
140	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: killer whale-northern resident important habitat.
Zone	Network Objective	Cultural Conservation Objective
140	5.2	Represent marine areas of high cultural or historic value, including: permanent village and seasonal villages, multitude of cultural features and sites present, important spiritual relationship to area including origin story area.
140	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: invertebrates (Dungeness crab, Spot prawn, coonstripe/ dock shrimp, humpback shrimp, butter clams), salmon (chum, coho, pink, sockeye), quillback rockfish, halibut.

Zone	Network Objective	Ecological Conservation Objective
141	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and high rugosity, including salmon (Coho, Chum, Pink), and invertebrates (Spot prawn, Dungeness crab, Humpback shrimp, Giant Pacific octopus).
141	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, soft substrate bottom patches, Mixed substrate bottom patches, and multiple coastal classes.
141	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Harbour seal haulouts, Killer whale transients habitat of special importance, and Sea duck (unspecified density – staging).

Zone	Network Objective	Cultural Conservation Objective
141	5.2	Represent marine areas of high cultural or historic value, including: past permanent village, and two seasonal sites, area important for accessing resources, multitude cultural features and sites present in area, important spiritual relationship to area.
141	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Salmon (Coho, Chum, Pink), Eulachon, Spot Prawn.

Zone	Network Objective	Ecological Conservation Objective
142	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including eelgrass, salmon (Coho, Chum, Pink systems), Halibut, rockfish (Quillback, Redstripe), and invertebrates (Dungeness crab, Spot prawn, Humpback shrimp, Giant Pacific octopus).
142	1.3	Conserve areas of high biological diversity, including estuaries and benthic fish diversity.
142	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord mound geomorphic unit, soft substrate bottom patches, multiple coastal classes, and North coast fjords ecosections.
142	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish, Marbled murrelet at sea habitat.
142	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring spawn, Pacific halibut rearing, Killer whale northern residents (potential critical habitat, important areas).
Zone	Network Objective	Cultural Conservation Objective
142	5.2	Represent marine areas of high cultural or historic value, including: Seasonal camps, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
142	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: crab, groundfish, prawn, herring spawn, marine mammals, and salmon. Crab and halibut rearing area, and unique site for redstripe rockfish.

Zone	Network Objective	Ecological Conservation Objective
143	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including salmon (multiple species), Pacific halibut, Pacific white-sided dolphin density.
143	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, Gravel beach coastal classes, North coast fjords ecosections, and Rock cliff coastal classes.
143	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Killer whale northern residents (potential critical habitat, potential important area), and marine birds (Goose/swan density - year-round, sea duck - staging/moulting).
Zone	Network Objective	Cultural Conservation Objective
143	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including the high diversity of species harvested: groundfish, marine mammals, and salmon.
143	5.2	Represent marine areas of high cultural or historic value, including seasonal camps and Indian Reserve, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
143	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: groundfish, marine mammals, and salmon, a halibut rearing area and Spot prawn.

Zone	Network Objective	Ecological Conservation Objective
144	1.3	Conserve areas of high biological diversity including species assemblages associated with high rugosity and estuaries, including Sockeye salmon, benthic fish diversity (Halibut), rockfish (Quillback, Redstripe), and invertebrates (Dungeness crab, Spot prawn, Humpback shrimp, Giant Pacific octopus).
144	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, North coast fjords ecosections, and Gravel beach coastal classes.
144	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish.
144	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Pacific herring spawn, Harbour seal haulouts, and marine birds (Sea duck, unspecified density - moulting, Goose/swan density).

Zone	Network Objective	Cultural Conservation Objective
144	5.2	Represent marine areas of high cultural or historic value, including: Seasonal camps and Indian Reserve, area important for accessing resources during poor weather periods, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
144	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Crab, groundfish, prawn, herring spawn, marine mammals, and salmon. Crab and halibut rearing area, and a unique site for Redstripe rockfish.

Zone	Network Objective	Ecological Conservation Objective
145	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including Steelhead, Pacific salmon biomass hotspot, Chum salmon diversity hotspots, invertebrates (Dungeness crab, Spot prawn, Giant pacific octopus), and marine birds (Goose/swan - density year-round, Pigeon guillemot density – year-round, Sea duck, unspecified density – staging).
145	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, and multiple coastal classes.
145	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon important area – spawn and Marbled murrelet at sea habitat.
145	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including saltwater shore spawning chum salmon.
Zone	Network Objective	Cultural Conservation Objective
145	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
145	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, steelhead, eulachon, and crab. Unique site for saltwater spawning chum salmon, salmon holding, Eulachon spawning.

Zone	Network Objective	Ecological Conservation Objective
146	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including Steelhead, Pacific salmon biomass hotspot, salmon diversity hotspots (Chinook, Chum, Coho, Pink (even and odd), Sockeye), invertebrates (Dungeness crab, Humpback shrimp, Coonstripe/dock shrimp), and Goose/swan - density year-round.

146	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, and multiple coastal classes.
146	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon important area – spawn, and Marbled murrelet at sea habitat.
146	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including saltwater shore spawning chum salmon, and Pacific herring spawn.

Zone	Network Objective	Cultural Conservation Objective
146	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including: Multiple species harvested including: salmon, steelhead, eulachon, and crab.
146	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
146	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, steelhead, eulachon, and crab. Unique site for saltwater spawning chum salmon, Salmon holding and Eulachon spawning.

Preliminary Activity Assessment Table

Group Name:		Dean, Cascade, Labouchere, Kimsquit						
Zone Number		140	141	142	143	144	145	146
Overlap with existing MPA/RCA		no	no	no	no	no	yes	no
Aquaculture	Finfish – open-net pens	!	!	!	!	!	X	X
	Shellfish - beach seeding	!	!	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!	!	!
	Marine plants	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!	!	n/a
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	n/a	n/a	n/a	!	n/a
	Invertebrate trap	!	!	!	!5	!	!	!
	Sablefish trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!	!	!	!
	Gill nets	!	!	!	✓	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!	!	!
	Purse seine	!	!	!	!	n/a	!	!
	Trolling - salmon	!	!	!	!	!	!	!

	Trolling - tuna	!	!	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!	!	n/a
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!	!	✓
	Invertebrate trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	!	!	!	!	!	!	!
	Trolling - rod and reel	!	!	!	!	!	!	!
	Scuba dive fishing	!	!	!	!	!	!	!
Forestry	Log Storage and Handling	! ¹	! ¹	! ¹	! ³	! ¹	! ¹	! ¹
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
145	Kimsquit Estuary Conservancy (marine) is contained within the boundaries of this zone.

Supplemental Information

!1 : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

!3 : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

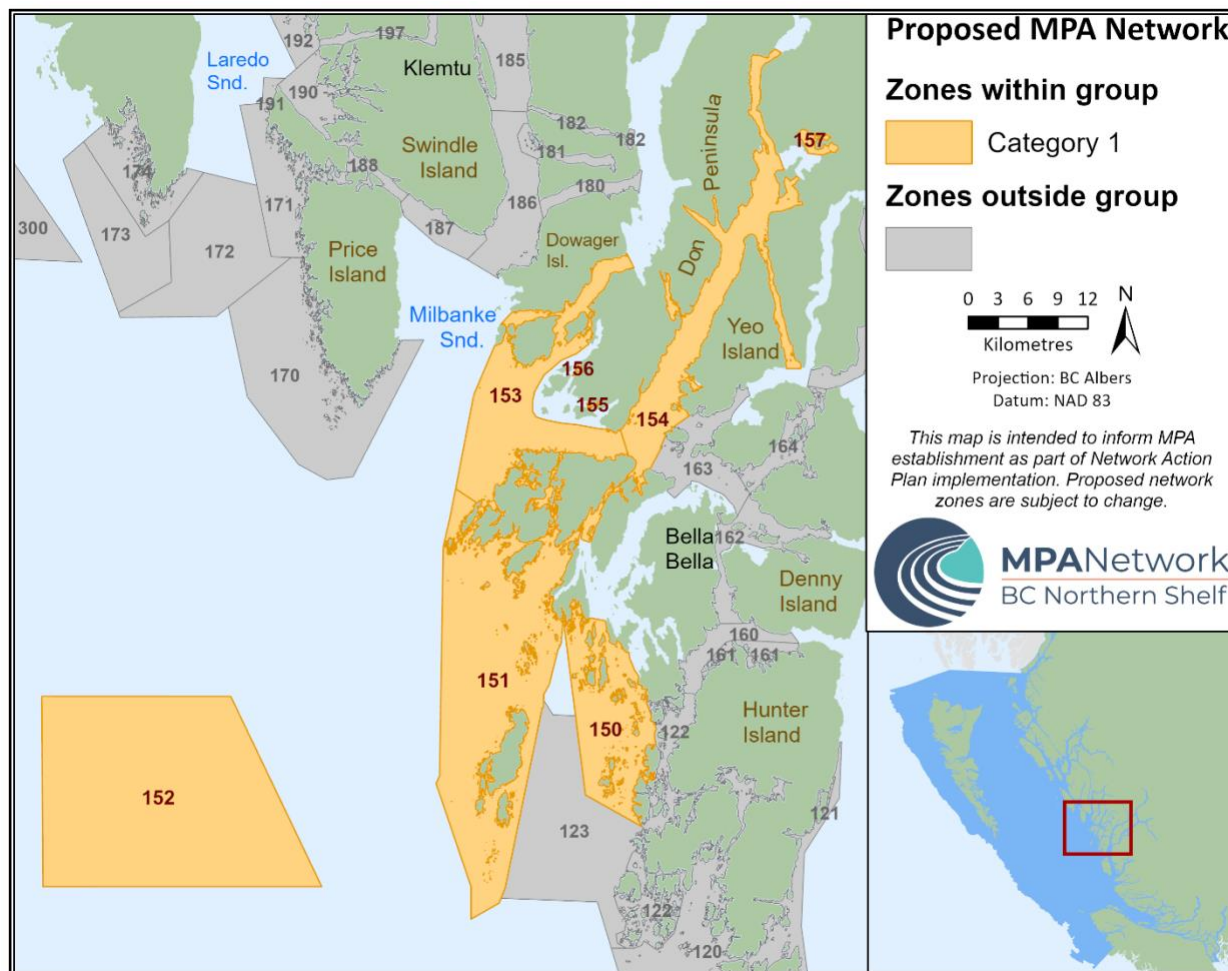
!5 : Harvest of prawn by trap has been identified as an activity of concern, but harvest of crab by trap has not.

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	145, 146	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	140, 143, 144, 145	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	141, 144	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	140, 142, 143	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Goose Bank, Spiller Outer, and Spiller North Group

Zones: 150-157



Map 1.7. Goose Bank, Spiller Outer, and Spiller North Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
150	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella Nearshore EBSA, exposed shoreline habitat, rocky reefs, strong tidal currents, nearshore richness, and high rugosity habitat, including seaweed, salmon (multiple species), benthic fish diversity (multiple species), rockfish (Canary, Bocaccio, Quillback, Yelloweye), invertebrates (clam, Dungeness crab, Green sea urchin, Geoduck, Horse clam, Opal squid), and Boot sponges.
150	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Eastern Queen Charlotte Sound Upper Ocean Sub-region.

150	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Rockfish (Bocaccio, Quillback, Yelloweye), Northern abalone, Sea otter.
150	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass, Bull kelp, and Sea otter important areas and modelled habitat.
Zone	Network Objective	Cultural Conservation Objective
150	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present, and area used for teaching traditional practices.
150	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, rockfish, groundfish, clam, crab, and seaweed. Abalone recovery in area, very high diversity of rockfish species, long-lived rockfishes present (including Canary rockfish), high abundance of short-live rockfish species, critical habitat complexity, and Boot sponges present.

Zone	Network Objective	Ecological Conservation Objective
151	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, Submarine bank and exposed shoreline/rocky reef habitat, including: Seaweed, Steelhead, Benthic fish diversity (Lingcod) rockfish (Canary, China, Tiger), invertebrates (Barnacles, clams, mussels, cockles, Olympia oyster, Dungeness crab), Seals, and marine birds (Sea duck- staging, Goose, Gulls).
151	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean Sub-region, Shelf crest geomorphic unit, and Hard substrate bottom patches.
151	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Giant kelp distribution, Bull kelp distribution, Steller sea lion haulouts, and Great blue heron nest and foraging areas.
Zone	Network Objective	Cultural Conservation Objective
151	5.2	Represent marine areas of high cultural or historic value, including Community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
151	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: barnacles, clams, mussels, cockles, crab, ducks, goose, rockfish, ground fish, sea lions, seal, marine birds, sea gull eggs, steelhead, and seaweed. Very high diversity of rockfish species, very high abundance of shorter-lived rockfishes and habitat complexity very high.

Zone	Network Objective	Ecological Conservation Objective
152	1.3	Conserve areas of high biological diversity including species assemblages associated with shelf mounds, including Pacific sand lance, benthic fish diversity (Petrale Sole, Rock sole, Halibut rearing), Redstripe rockfish, invertebrates (Dungeness crab), and sponges.
152	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean Sub-region, Coastal Mixing Region Upper Ocean Sub-region, Shelf mounds geomorphic unit, Shelf biophysical units, other banks biophysical units, and Queen Charlotte Sound ecosections.
152	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Eulachon important areas – summer, Northern fur seal important areas, and Fin whale habitat of special importance.
152	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Grey whale migration route, Pacific white-sided dolphin density, and Cassin's auklet colony.
Zone	Network Objective	Cultural Conservation Objective
152	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: crab and halibut, and Halibut rearing ground.

Zone	Network Objective	Ecological Conservation Objective
153	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, submarine bank and exposed shoreline/rocky reef habitat, including benthic fish diversity (multiple species inc. Lingcod), rockfish (Canary, Quillback, Silvertail, Tiger, Yelloweye), invertebrates (Olympia oyster), mammals (Steller seal lion, Sea otter important areas), multiple marine bird species, and Glass sponge.
153	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean Sub-region and Channel coastal classes.
153	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary, Quillback, Yelloweye) and Sea otter.
153	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, Kelp beds, Steller seal lion haulouts, and Sea otter important areas.
Zone	Network Objective	Cultural Conservation Objective
153	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, area used for teaching traditional practices.

153	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including rockfish, herring spawn, sea lions, and marine birds. Unique for critical rocky reef hotspots at smaller spatial scales, very high diversity of rockfish species, very high abundance of long-lived rockfishes (including canary rockfish) and habitat complexity is very high.
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Zone	Network Objective	Ecological Conservation Objective
154	1.2	Protect natural trophic structures and food webs, including populations of upper-level predators, key forage species, nutrient importing and exporting species, and structure-providing species, including herring spawning events that support significant wildlife aggregations.
154	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, Eelgrass meadows, kelp beds, estuaries, Dundavin cloud sponge reef, including Steelhead, groundfish (multiple species), rockfish (Silvergray, Yelloweye), invertebrates (Cockles, Spot prawn, Sea cucumber), and sea lion.
154	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, Mud flat coastal classes, Sand and gravel beach coastal classes, and North Coast fjords ecosections.
154	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Yelloweye rockfish.
154	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass beds, Bull kelp, Pacific herring spawn, Harbour seal haulout, and Goose/Swan (winter density).
Zone	Network Objective	Cultural Conservation Objective
154	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
154	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: cockle, sockeye salmon, salmon, prawn, sea cucumber, herring spawn, crab, duck, goose, swan, seal, sea lion, rockfish, groundfish, steelhead. Sockeye salmon spawning, salmon spawning, salmon restoration in progress, dundavin cloud sponge reef, significant aggregations associated with herring spawn at Spiller, critical habitat complexity, and presence of long-lived rockfishes.

Zone	Network Objective	Ecological Conservation Objective
155	1.3	Conserve areas of high biological diversity including species assemblages associated with Seafloor of high rugosity, including: Benthic fish diversity (Lingcod, Pacific cod, Halibut), rock fish diversity (Canary, China, Copper, Quillback, Rougheye-Blackspotted, Silvergray), invertebrates (butter clams, cockles, manila clams, littleneck clams), and marine birds.
155	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary).
155	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, including: Gravel flat coastal classes, and sand and gravel flats.
155	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass biobands, salmon rearing (multiple species and adjacent sockeye system), Pacific herring spawn habitat, and Sea lions.
Zone	Network Objective	Cultural Conservation Objective
155	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, area used for teaching traditional practices.
155	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: rockfish, herring spawn, sea lions, and marine birds. Has very high habitat complexity, critical rocky reef areas, very high diversity of rockfish species, and very high abundance of long-lived rockfishes (Canary).

Zone	Network Objective	Ecological Conservation Objective
156	1.3	Conserve areas of high biological diversity including species assemblages associated with Seafloor of high rugosity and estuaries, including: Benthic fish diversity (Lingcod, Pacific cod, Halibut), rock fish diversity (Canary, China, Copper, Quillback, Rougheye-Blackspotted, Silvergray), invertebrates (butter clams, cockles, manila clams, littleneck clams, geoducks, Dungeness crabs), and Birds (marbled murrelet, gulls year-round, loon and grebe year-round).
156	1.4	Protect representative areas of every marine habitat type in the bioregion including estuary (organics/fines).
156	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including herring spawning areas, rockfish (Canary); marbled murrelet.
156	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Northern Resident Killer Whale (moderate) and sealions.

Zone	Network Objective	Cultural Conservation Objective
156	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, area used for teaching traditional practices.
156	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: rockfish, herring spawn, sea lions, and marine birds. Has very high habitat complexity, critical rocky reef areas, very high diversity of rockfish species, and very high abundance of long-lived rockfishes (Canary).

Zone	Network Objective	Ecological Conservation Objective
157	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including juvenile salmon, invertebrates (Dungeness crab, bivalves), Sea duck, unspecified density – staging, and Goose/Swan density – year-round.
157	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord mound geomorphic unit, Fjord wall steep geomorphic unit, multiple coastal classes, North Coast fjords ecosections.
157	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon holding area, and Sea otter.
157	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass biobands, Salmon rearing (multiple species), and Pacific herring spawn habitat.
Zone	Network Objective	Cultural Conservation Objective
157	5.2	Represent marine areas of high cultural or historic value, including some cultural features and sites present in area, important spiritual relationship to area, and area used for teaching traditional practices.
157	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including salmon, crab, and bivalves. Unique site for salmon rearing, and small eulachon holding area.

Preliminary Activity Assessment Table

	Group Name:	Goose Bank, Spiller Outer, Spiller North							
	Zone Number	150	151	152	153	154	155	156	157
	Overlap with existing MPA/RCA	Yes	Yes	No	No	No	No	Yes	Yes
Aquaculture	Finfish – open-net pens	!	!	n/a	!	!	!	!	!
	Shellfish - beach seeding	!	!³	n/a	✓	✓	!	!	!
	Shellfish - off bottom	!	!³	n/a	✓	✓	!	!	!
	Marine plants	!	!	n/a	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!	!	✓	n/a
	Bottom trawling*	n/a	n/a	P	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	P	P	n/a	P	P	n/a	n/a	n/a
	Dive with pressure hose	!	✓	n/a	✓	✓	n/a	✓	n/a
	Invertebrate trap	!	!⁴	!	!⁴	!⁵	!	✓	!
	Sablefish trap	!	!	!	!	!	!	✓	!
	Intertidal hand picking/digging	!	✓	n/a	✓	✓	!	✓	!
	Gill nets	!	✓	!	✓	✓	!	✓	!
	Pelagic and mid-water trawl	!	!	!	!	!	!	✓	n/a
	Purse seine	!	✓	!	✓	✓	!	✓	!
	Trolling - salmon	!	!	!	!	!	!	✓	!
	Trolling - tuna	!	!	!	✓	!	!	✓	!
	Scuba dive fishing	!	✓	n/a	✓	!	n/a	✓	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!	!	✓	n/a
	Invertebrate trap	!	!	!	!⁴	!	!	✓	!
	Intertidal hand picking/digging	!	✓	n/a	!	!	!	!	!
	Trolling - rod and reel	!	!	!	✓	!	!	✓	n/a
	Scuba dive fishing	!	✓	n/a	✓	!	n/a	✓	!
Forestry	Log Storage and Handling	!	!	n/a	✓	!¹	!	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
<i>First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.</i>	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
150	Hakai Lúxvbálís Conservancy overlaps a portion of this zone.
151	McMullin Group and Goose Island RCAs are contained within the boundaries of this zone. Hakai Lúxvbálís Conservancy overlaps a portion of this zone.
156	Oliver Cove Marine Provincial Park aligns with the boundaries of this zone.
157	Ellerslie-Roscoe Conservancy (marine) is contained within the boundaries of this zone.

Supplemental Information

!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

!⁴ : Harvest of crab by trap has been identified as an activity of concern, but harvest of prawn by trap has not.

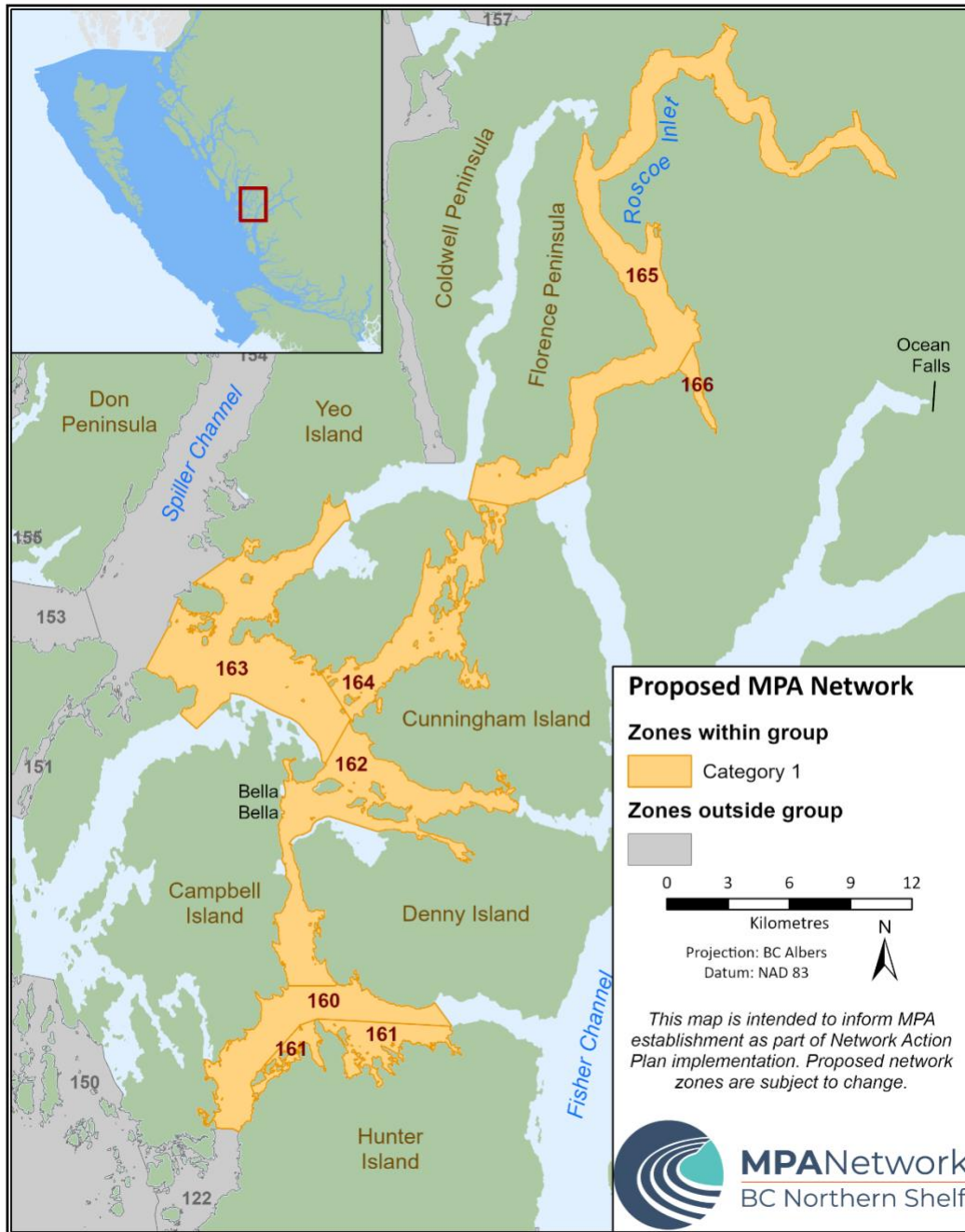
!⁵ : Harvest of prawn by trap has been identified as an activity of concern, but harvest of crab by trap has not.

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	152, 157	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	151, 153, 155, 156	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	150, 151, 153, 154	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	151, 153	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	152, 156	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Spiller East Group

Zones: 160-166



Map 1.8. Spiller East Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
160	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, estuaries, multiple eelgrass and kelp beds, and high rugosity, including salmon (multiple species), benthic fish diversity (multiple species), rockfish (multiple species), invertebrates (shellfish, Dungeness crab, Giant Pacific octopus), marine birds, and Glass and Boot sponge.
160	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, and multiple geomorphic units and coastal classes.
160	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish.
160	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including estuaries, eelgrass beds, kelp beds, Sockeye salmon spawning and restoration, and Pacific herring - important areas.
Zone	Network Objective	Cultural Conservation Objective
160	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, area important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
160	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: High diversity of species harvested including waterfowl, shellfish, crab, salmon, groundfish, rockfish and marine birds. Sockeye salmon spawning system, long-lived rockfishes and adequate habitat present, and Boot sponges present.

Zone	Network Objective	Ecological Conservation Objective
161	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, estuaries and eelgrass including salmon diversity hotspots (Pink (even and odd), Chum), salmon spawning (Sockeye), invertebrates (Cockles, Butter clams, Littleneck clams, Dungeness crab), Harbour porpoise density, and marine birds.
161	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic unit, and multiple coastal classes.
161	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish.
161	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Sockeye salmon spawning and restoration.

Zone	Network Objective	Cultural Conservation Objective
161	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, area important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
161	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: waterfowl, shellfish, crab, salmon, and marine birds. Sockeye salmon spawning system.

Zone	Network Objective	Ecological Conservation Objective
162	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella Nearshore EBSA, Eelgrass bioband, Bull kelp beds and a tidal system, including Steelhead, groundfish (multiple species), invertebrates (Barnacle, Mussels, Ochre sea star, Dungeness crab, Spot prawn), Harbour porpoise, and marine birds (Double-crested cormorant density – year round, Gulls density – year round, Sea duck unspecified density – staging).
162	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression floor geomorphic unit, Fjord mound geomorphic unit, Channel coastal classes, Sand and gravel flat or fan coastal classes.
162	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
162	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, area important for accessing resources during poor weather periods, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
162	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: crab, groundfish, prawn, steelhead, barnacle, clams, mussels, marine birds, ducks, and seals.

Zone	Network Objective	Ecological Conservation Objective
163	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, Bella Bella Nearshore EBSA, high rugosity, and benthic fish habitat, including: Seaweed, Steelhead, salmon diversity hotspots (Chum, Coho, Pink, Sockeye), groundfish (Halibut, Sablefish, Lingcod), rockfish (Quillback), invertebrates (Cockles, Barnacles, Mussels, Purple-hinged rock scallop, Green sea urchin, Sunflower and Ochre sea star, Dungeness crab, Spot prawn), mammals (seals, sea lions), marine birds (Sea duck, Goose, Gulls, Loon/grebe year round

		density, Double-crested cormorant year round density) and glass and Boot sponges.
163	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression floor geomorphic unit, Fjord wall steep geomorphic unit, Fjord crest geomorphic unit, North coast fjords ecosections.
163	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish.
163	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Steller sealions.
Zone	Network Objective	Cultural Conservation Objective
163	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
163	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: barnacle, cockle, clams, mussels, groundfish, crab, duck, goose, sea gull eggs, prawns, seal, sea lions, salmon, steelhead, and seaweed. Long-lived rockfish habitat and Boot sponges.

Zone	Network Objective	Ecological Conservation Objective
164	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, estuaries and eelgrass, including Steelhead, salmon (multiple species) groundfish (multiples species incl. Lingcod), rockfish (multiples species), invertebrates (Mussels, Humpback shrimp, Spot prawn, Dungeness crab), Seal, Harbour porpoise density, Goose, and Glass and Cloud sponge.
164	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord mound geomorphic unit, and multiple coastal classes.
164	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish.
164	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including significant salmon systems – holding and rearing areas.
Zone	Network Objective	Cultural Conservation Objective
164	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, area important for accessing resources during poor weather periods, and important spiritual relationship to area.
164	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: rockfish, groundfish, crab, cockle, clams, mussels, duck, goose, prawn,

		salmon, steelhead, and seals. Significant salmon systems – holding and rearing areas, long-lived rockfishes and adequate habitat present, Cloud sponges, and an important crab recovery site.
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Zone	Network Objective	Ecological Conservation Objective
165	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella nearshore EBSA, estuaries, and eelgrass beds, including Steelhead, groundfish (multiple species), invertebrates (Cockles, Mussels), Harbour seal haulouts, and marine birds (Sea duck, Goose).
165	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, Fjord mound geomorphic unit, and multiple coastal classes.
Zone	Network Objective	Cultural Conservation Objective
165	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude of cultural features and sites are present in area, important spiritual relationship to area, and area used for teaching traditional practices.
165	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: cockles, mussels, steelhead, groundfish, ducks, goose, and seal. Unique site for long-lived rockfishes and habitat.

Zone	Network Objective	Ecological Conservation Objective
166	1.3	Conserve areas of high biological diversity including species assemblages associated with Bella Bella Nearshore EBSA and estuaries, including: Steelhead, salmon (multiple species), groundfish and rockfish (multiple species), invertebrates (Cockles, Mussels, Littleneck clams, Dungeness crab, Spot prawn, Humpback shrimp, Smooth pink shrimp), and marine birds (Sea duck, Goose, Loon/grebe density - year-round).
166	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression geomorphic unit, multiple coastal classes, and North coast fjords ecosections.
166	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Marbled murrelet density - year-round.
166	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon spawning and nursery areas.
Zone	Network Objective	Cultural Conservation Objective
166	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude of cultural features and sites are present in area, important spiritual relationship to area, and area used for teaching traditional practices.

166	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security. High diversity of species harvested including cockles, mussels, salmon, steelhead, crab, groundfish, ducks, goose, prawn, and seal. Salmon rearing and long-lived rockfishes habitat.
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Preliminary Activity Assessment Table

Group Name:		Spiller East						
Zone Number		160	161	162	163	164	165	166
Overlap with existing MPA/RCA		No	No	No	No	No	No	No
Aquaculture	Finfish – open-net pens	!	!	!	!	!	!	!
	Shellfish - beach seeding	✓	! ³	✓	!	✓	!	!
	Shellfish - off bottom	✓	! ³	✓	!	✓	!	!
	Marine plants	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	P	P	P	n/a
	Dive with pressure hose	✓	!	✓	!	!	n/a	n/a
	Invertebrate trap	! ⁴	!	!	!	!	✓	!
	Sablefish trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	✓	✓	✓	✓	✓	!	!
	Gill nets	!	!	✓	✓	!	! ⁶	!
	Pelagic and mid-water trawl	!	!	✓	!	!	!	n/a
	Purse seine	!	!	✓	✓	! ⁹	! ⁸	!
	Trolling - salmon	!	!	n/a	!	!	!	!
	Trolling - tuna	!	!	✓	!	!	!	!
	Scuba dive fishing	✓	!	✓	✓	✓	!	n/a
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!	!	n/a
	Invertebrate trap	!	!	!	!	!	!	!
	Intertidal hand picking/digging	!	!	✓	!	!	!	!
	Trolling - rod and reel	!	!	✓	!	!	!	n/a
	Scuba dive fishing	!	!	✓	!	!	!	n/a
Forestry	Log Storage and Handling	! ¹	! ¹	! ¹	! ¹	! ¹	! ³	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Supplemental Information

¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

⁴ : Harvest of crab by trap has been identified as an activity of concern, but harvest of prawn by trap has not.

⁶ : Harvest of herring by gillnet has been identified as an activity of concern, but harvest of salmon by gillnet has not.

⁸ : Harvest of herring by seine has been identified as an activity of concern, but harvest of salmon by seine has not.

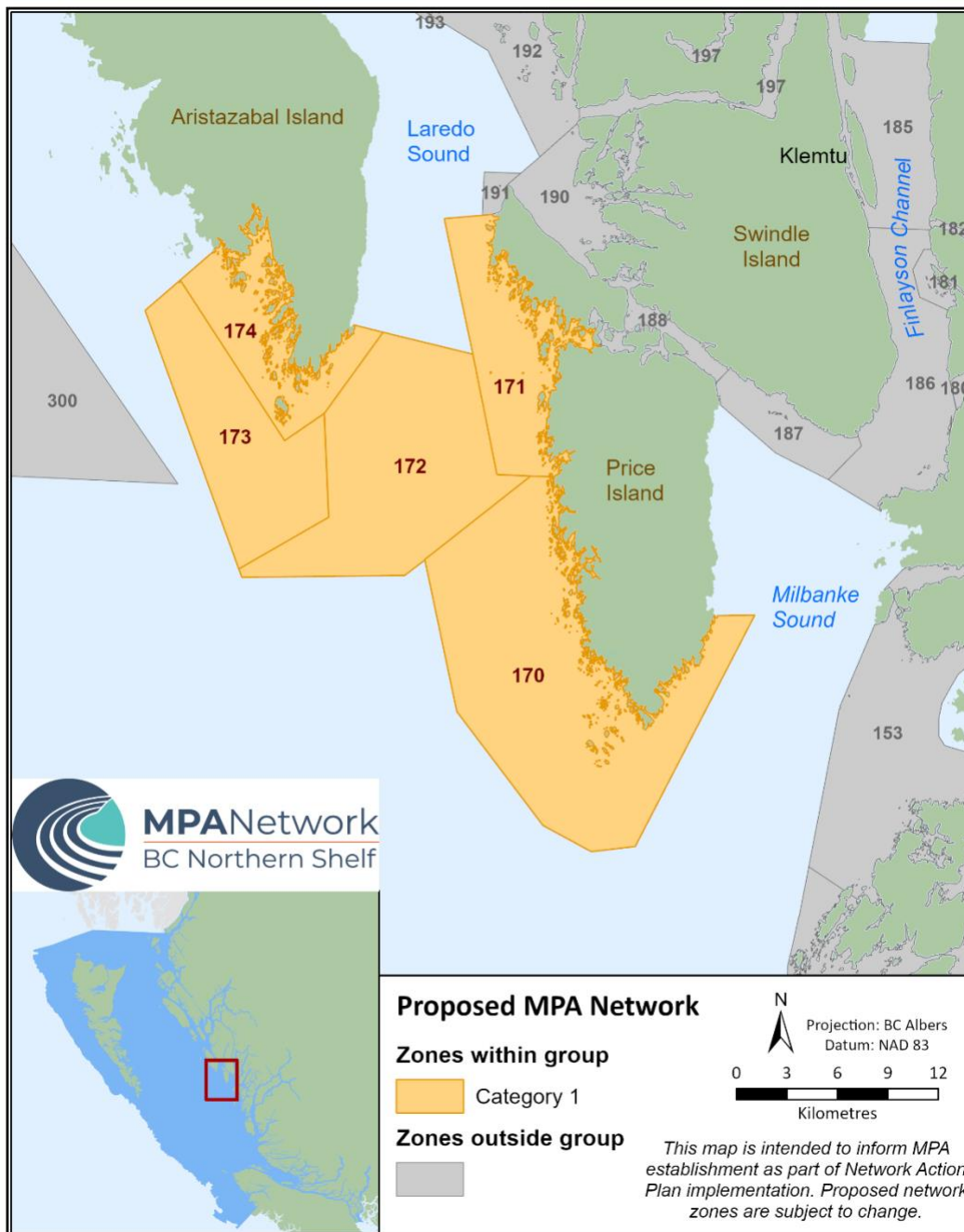
⁹ : Harvest of salmon by seine has been identified as an activity of concern, but harvest of herring by seine has not.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	160, 161, 162, 163, 165	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	160, 162	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	162, 163, 165	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.

Kitasu-Price, and Kitasu-Aristazabal Group

Zones: 170-174



Map 1.9. Kitasu-Price, and Kitasu-Aristazabal Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
170	1.3	Conserve areas of high biological diversity including species assemblages associated with surfgrass biobands, Kelp beds, Estuaries, and rocky reefs including salmon (multiple species), Pacific herring and herring spawn, Lingcod, rockfish (Canary, China, Rougheye/blackspotted, Tiger, Vermillion, Yelloweye), and invertebrates (Northern abalone, Giant Pacific octopus).
170	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean sub-region.
170	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary, China, Rougheye/blackspotted, Tiger, Vermillion, Yelloweye), eulachon (summer), northern abalone, and gray whale (density).
170	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including estuaries, Pacific herring spawning areas, gray whale density, Steller sea lion haulouts, killer whales (northern resident; important area), and double-crested cormorant (year-round density).
Zone	Network Objective	Cultural Conservation Objective
170	5.2	Represent marine areas of high cultural or historic value, including a multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
170	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including multiple species of groundfish harvested and abalone. Important habitat for abalone and rock scallop, Steller sea lion haulouts, diversity of rockfish with abundance of long-lived (including Canary) and very high abundance of shorter-lived rockfishes, high abundance of lingcod, spot prawn.

Zone	Network Objective	Ecological Conservation Objective
171	1.3	Conserve areas of high biological diversity including species assemblages associated with Eelgrass, surfgrass, sea floor of high rugosity, rocky reef, and habitat complexity including benthic fish diversity, salmon (Sockeye), groundfish (Pacific halibut, Lingcod, Longnose skate), rockfish (Canary, China, Quillback, Silvergray), invertebrates (Cockles, Littleneck clam), Dall's porpoise (density), Sponges, and Gorgonians.
171	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean Sub-region, Rock platform coastal classes, Gravel beach coastal classes, and Shelf depression floor geomorphic units.
171	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon (summer), rockfish (Canary, Quillback), and Pacific dogfish.

171	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, including: Diverse exposed shoreline habitat, and area of high rugosity.
171	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass, surfgrass, Pacific herring spawn, Steller sea lion haulouts, and Goose/Swan (year round).
Zone	Network Objective	Cultural Conservation Objective
171	5.2	Represent marine areas of high cultural or historic value, including: Major community and seasonal camps, multitude of cultural features and sites, important spiritual relationship to area, and area used for teaching traditional practices
171	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: steelhead, salmon, halibut, duck, seal, seaweed, rockfish, and halibut. Critical rocky reef areas, unique site for herring and sockeye salmon, critical diversity of rockfish, high abundance of long-lived and very high abundance of shorter-lived rockfishes, high abundance of lingcod, habitat complexity critical, wildlife aggregations during herring spawn are outstanding, significant halibut, longnose skate, and Pacific dogfish, Steller sea lion haulouts, sponges and Gorgonians.

Zone	Network Objective	Ecological Conservation Objective
172	1.3	Conserve areas of high biological diversity including species assemblages associated with Seafloor of high rugosity, including: Benthic fish diversity (Lingcod), rock fish diversity (China, Quillback, Yelloweye, Vermillion), invertebrates (Spot prawn, Giant Pacific octopus), and sponges.
172	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean Sub-region, and Shelf depression floor geomorphic units.
172	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon (summer), and rockfish, and rocky reefs.
172	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, including sea floor of high rugosity, and rocky reefs.
172	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eulachon important areas – summer, Dall's and Harbour porpoise, and Killer Whale Northern Resident (important area).
Zone	Network Objective	Cultural Conservation Objective
172	5.2	Represent marine areas of high cultural or historic value, including important spiritual relationships.
172	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security (harvest

		of multiple species including a diversity of rockfish species, lingcod and habitat including sponge).
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Zone	Network Objective	Ecological Conservation Objective
173	1.3	Conserve areas of high biological diversity including species assemblages associated with high rugosity, diverse exposed shoreline habitat, hard substrate bottom patches, and glass sponge including: groundfish (Lingcod, Halibut) and rockfish diversity (Canary, China, Copper, Darkblotched, Tiger, Quillback, Vermilion, Yelloweye).
173	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean Sub-region, and Shelf crest geomorphic unit.
173	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon important areas – summer, and rockfish (Canary, Quillback, Yelloweye).
173	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Steller sealion haulouts.
Zone	Network Objective	Cultural Conservation Objective
173	5.2	Represent marine areas of high cultural or historic value, including major community and seasonal camps, and important spiritual relationship to area
173	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: seaweed, rockfish and halibut. Critical rocky reef areas, critical diversity of rockfish, high abundance of long-lived and very high abundance of shorter-lived rockfishes, high abundance of lingcod, habitat complexity critical, Steller sea lion haulouts, and sponges.

Zone	Network Objective	Ecological Conservation Objective
174	1.3	Conserve areas of high biological diversity including species assemblages associated with Nearshore habitat richness, high rugosity, and diverse exposed shoreline habitat, including seaweed, Benthic fish diversity (Pacific halibut, Lingcod), rockfish (Canary, China, Quillback), Invertebrates (Horse clam, Puget Sound king crab, Ocher sea star) and Sea otter.
174	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean Sub-region, and sand and gravel flat or fan coastal classes.
174	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Canary, Quillback), and sea otter.

174	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass biobands, surfgrass biobands, Giant kelp biobands, Pacific herring spawn habitat, and Steller sealion haulouts.
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Zone	Network Objective	Cultural Conservation Objective
174	5.2	Represent marine areas of high cultural or historic value, including major community and seasonal camps, and important spiritual relationship to area.
174	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: steelhead, seaweed, and halibut. Critical rocky reef areas, critical diversity of rockfish, high abundance of long-lived and very high abundance of shorter-lived rockfishes, high abundance of lingcod, habitat complexity critical, Steller sea lion haulouts, and sponges.

Preliminary Activity Assessment Table

	Group Name:	Kitasu-Price, Kitasu-Aristazabal				
	Zone Number	170	171	172	173	174
	Overlap with existing MPA/RCA	No	No	No	No	No
Aquaculture	Finfish – open-net pens	!	!	n/a	!	!
	Shellfish - beach seeding	!	!³	n/a	!	!
	Shellfish - off bottom	!	!³	n/a	!	!
	Marine plants	!	!	n/a	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	!	n/a	n/a	!
	Invertebrate trap	✓	!	!	!	!
	Sablefish trap	!	!	!	!	!
	Intertidal hand picking/digging	✓	!	n/a	!	!
	Gill nets	!⁷	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	!	!	!	!	!
	Trolling - salmon	!	!	!	✓	!
	Trolling - tuna	!	!	!	!	!
Recreational Harvest	Scuba dive fishing	✓	!	!	✓	!
	Demersal hook and line (jigging)	!	!	!	!	!
	Invertebrate trap	✓	!	!	!	!
	Intertidal hand picking/digging	✓	!	n/a	n/a	!
	Trolling - rod and reel	!	!	!	✓	!
Forestry	Scuba dive fishing	✓	!	!	✓	!
	Log Storage and Handling	!³	!	n/a	n/a	!

Industrial Projects	Oil and gas activities*	P	P	P	P	P
	Mining*	P	P	P	P	P
	Dumping*	P	P	P	P	P
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Supplemental Information

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

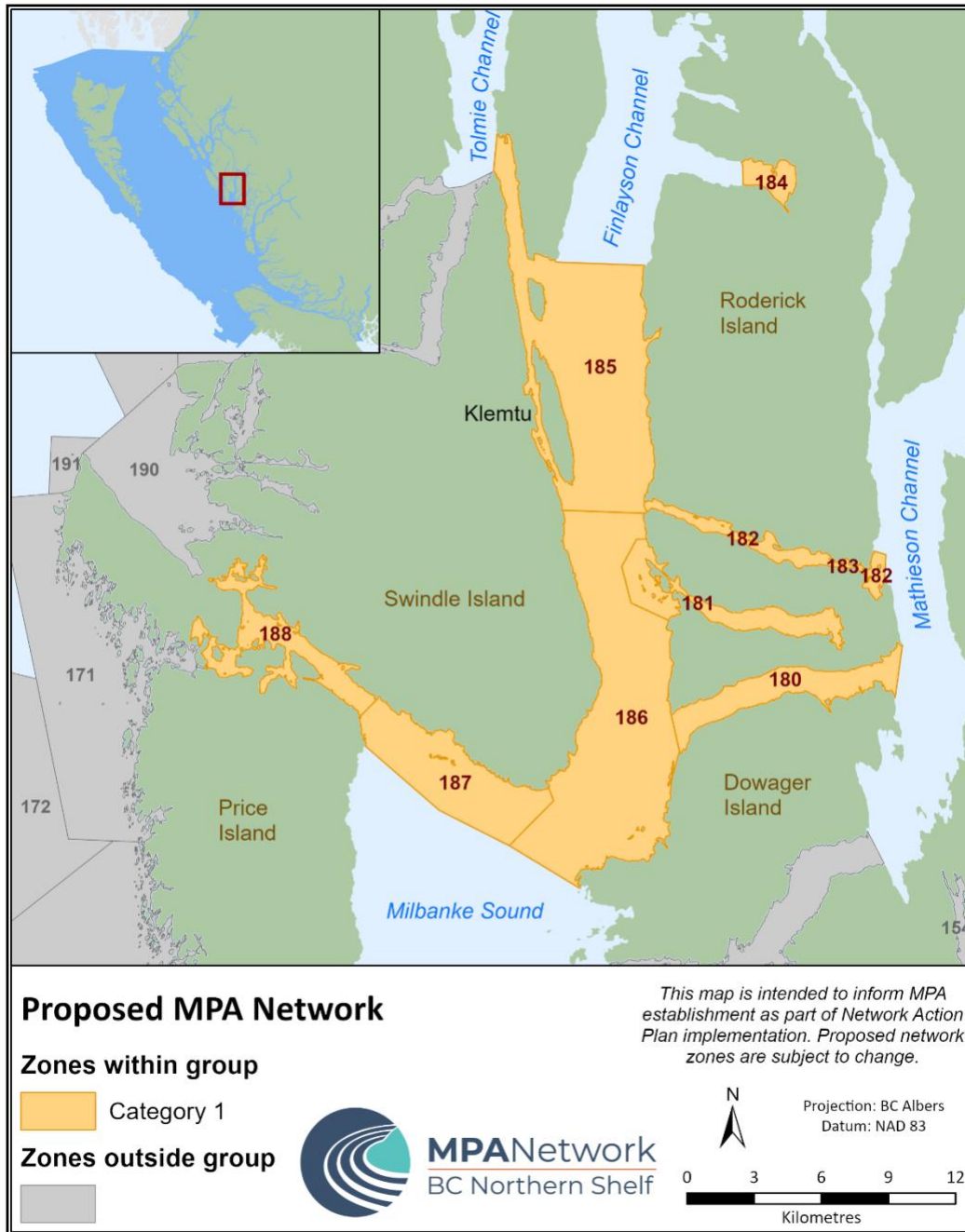
!7 : Harvest of salmon by gillnet has been identified as an activity of concern, but harvest of herring by gillnet has not.

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	170, 171, 172, 173	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	170, 174	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	170, 171, 173, 174	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	170, 172	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Kitasu-Jackson, and Millbanke Group

Zones: 180-188



Map 1.10. Kitasu-Jackson, Millbanke

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
180	1.3	Conserve areas of high biological diversity including species assemblages associated with nutrient rich areas of high current, Bull kelp biobands, and rocky reefs including seaweed, Benthic fish diversity (Lingcod, Sablefish), rockfish (mid-lived rockfish, Yelloweye), and invertebrates (Spot prawn, Sea cucumber, Red sea urchin, Green sea urchin, Giant Pacific octopus).
180	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, rock cliff coastal classes, and gravel beach coastal classes.
180	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Yelloweye rockfish, and Northern abalone.
Zone	Network Objective	Cultural Conservation Objective
180	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
180	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: groundfish, prawn, red urchin, seaweed, and spring salmon. Unique site for blackcod, abalone, seaweed, area important for accessing resources during poor weather periods, critical rocky reef hotspots, very high diversity of rockfish species, high abundance of long-lived and other rockfishes, and very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
181	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, rocky reefs, and areas of high rugosity, including seaweed, salmon (Chinook, Coho), benthic fish diversity (halibut, lingcod, sablefish), rockfish (Quillback, Yelloweye), and invertebrates (spot prawn, geoduck, Giant Pacific octopus, Opal squid).
181	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord wall steep geomorphic unit, and Rock cliff coastal classes.
181	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Quillback, Yelloweye) and Northern abalone.
181	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, Bull kelp beds and biobands, Harbour Seal haulouts, and Humpback whales.

Zone	Network Objective	Cultural Conservation Objective
181	5.2	Represent marine areas of high cultural or historic value, including major community and seasonal camps, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
181	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including groundfish, barnacles, prawn, red urchin, geoduck, seaweed, and spring salmon. Coho salmon spawning area, high Yelloweye rockfish density, unique site for blackcod, abalone, seaweed, area important for accessing resources during poor weather periods, habitat for abalone, critical rocky reef hotspots, very high diversity of rockfish species, high abundance of long-lived and other rockfishes, and very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
182	1.1	Conserve areas of high biological diversity including species assemblages associated with eelgrass and high tidal areas including eelgrass biobands and invertebrates (Butter and Littleneck clams, Box crabs, Spot prawn, Sea cucumber Coonstripe/dock and Humpback shrimp, Giant Pacific octopus).
182	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord mound geomorphic unit, and multiple coastal classes.
182	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish and Marbled murrelet density – year-round.
182	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including sea duck, unspecified density – staging.
Zone	Network Objective	Cultural Conservation Objective
182	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, some cultural features and sites are present, and area used for teaching traditional practices.
182	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Spot prawn, Butter and Littleneck clams.

Zone	Network Objective	Ecological Conservation Objective
183	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and high tidal areas, including rockfish (Silvergray, Quillback), invertebrates (Butter and Littleneck clams, Box crabs, Spot prawn,

		Coonstripe/dock and Humpback shrimp, Sea cucumber, Giant Pacific octopus), and sea duck staging.
183	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord mound geomorphic unit, and multiple coastal classes.
183	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish and Marbled murrelet density (year-round).
Zone	Network Objective	Cultural Conservation Objective
183	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, some cultural features and sites are present, and area used for teaching traditional practices.
183	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security (Spot prawn, Butter and Littleneck clams).

Zone	Network Objective	Ecological Conservation Objective
184	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass beds and high rugosity and glass sponges, including Pacific halibut, invertebrates (Spot prawn), and marine birds (Loon/Grebe, Marbled Murrelet).
Zone	Network Objective	Cultural Conservation Objective
184	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camp, important spiritual relationship to area, area used for teaching traditional practices.
184	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Salmon, Rockfish (multiple species), Halibut, and Shellfish (butter clams, littleneck clams, cockles, spot prawn).

Zone	Network Objective	Ecological Conservation Objective
185	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and rocky reefs, including: Seaweed, salmon holding area (multiple species), Sablefish, rockfish (Silvergray, Quillback), salmon (Chum, Pink), and invertebrates (prawn, red sea urchin, geoduck, clam, cockles, Dungeness crab).
185	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units,

		North coast fjords ecosections, Gravel beach coastal classes, Rock cliff coastal classes, and high rugosity.
185	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish, Northern abalone, Humpback whale, and Marbled murrelet density (year-round).
185	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Eelgrass meadows, Pacific herring important area, humpback whales, and Pacific white sided dolphin density.
Zone	Network Objective	Cultural Conservation Objective
185	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
185	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: crab, clam, cockles, groundfish, prawn, red urchin, geoduck, seaweed, and spring salmon. Pink and chum spawning areas, humpback whales, unique site for black cod, abalone, seaweed, area important for accessing resources during poor weather periods, habitat for abalone, critical rocky reef hotspots, very high diversity of rockfish species, high abundance of long-lived and other rockfishes, and very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
186	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass, rocky reefs and areas of high rugosity, including seaweed, salmon (Chinook), groundfish (multiple species inc. Lingcod), and rockfish (Canaray, China, Copper, Quillback, Roughey/blackspotted, Silvergray, Tiger, Yelloweye).
186	1.4	Protect representative areas of every marine habitat type in the bioregion including Mainland Fjords Upper Ocean Sub-region, Fjord floor depression geomorphic unit, Fjord crest geomorphic unit, Rock cliff coastal classes, and Fjord wall steep geomorphic unit.
186	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including mixed stock holding areas for salmon, and Northern abalone.
186	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, kelp beds and Bull kelp biobands, and Pacific herring important area.
Zone	Network Objective	Cultural Conservation Objective
186	5.1	Increase awareness and understanding of First Nations use and stewardship of resources and territories, including the high diversity of species harvested: groundfish, seaweed, and spring salmon.

186	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, multitude of cultural features and sites are present, area important for accessing resources during poor weather periods, important spiritual relationship to area, and area used for teaching traditional practices.
186	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: groundfish, seaweed, and spring salmon. Unique site for black cod, abalone, seaweed, habitat for abalone, critical rocky reef hotspots, very high diversity of rockfish species, high abundance of long-lived and other rockfishes, and very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
187	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, kelp beds and rocky reefs, including seaweed, salmon (Chinook, mixed holding area), benthic fish diversity (Lingcod, Sablefish), Sandpaper skate, rockfish (China, Quillback, Rougheye/blackspotted, Silvergray, Tiger), and invertebrates (Spot prawn, Geoduck, Sunflower sea star, Giant Pacific octopus).
187	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region and Rock cliff coastal classes.
187	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Quillback, Rougheye) and Northern abalone.
187	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Pacific herring important area, Humpback whale, and Murres/large Alcides (year-round density).
Zone	Network Objective	Cultural Conservation Objective
187	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
187	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security (including groundfish, prawn, geoduck, seaweed, and spring salmon). Unique site for black cod, abalone, seaweed, area important for accessing resources during poor weather periods, critical rocky reef hotspots, very high diversity of rockfish species, high abundance of long-lived and other rockfishes, and very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
188	1.3	Conserve areas of high biological diversity, including species assemblages associated with estuaries and nearshore richness, including salmon (Coho, Sockeye), groundfish and rockfish (multiple species), invertebrates (Littleneck and

		Butter clams, Cockles, Ochre sea star, Dungeness crab), and marine birds (Sea duck, Goose/Swan year round density, Seagull nesting).
188	1.4	Protect representative areas of every marine habitat type in the bioregion including Mainland Fjords Upper Ocean Sub-region, multiple coastal classes, and Fjord mound geomorphic units.
188	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Eelgrass meadows, Bull and Giant kelp forests, salmon spawning (Coho, Sockeye), Pacific herring spawn, and Harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
188	5.2	Represent marine areas of high cultural or historic value, including major community and seasonal camps, important spiritual relationship to area, and area used for teaching traditional practices.
188	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, (including salmon, herring, clam, crab, duck, goose, groundfish, rockfish, and sea). Unique site for herring spawn, sockeye salmon, coho salmon, seagull eggs, important for life stages of herring spawn, crabs, sockeye spawn, and predator aggregations on spawning herring.

Preliminary Activity Assessment Table

[illegible]

	Trolling - tuna	!	!	!	!	!	!	!	!	!
	Scuba dive fishing	!	✓	✓	✓	✓	!	✓	✓	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	!	!	!	!	✓	!	!
	Invertebrate trap	!	!	! ⁵	! ⁵	! ⁵	!	✓	!	!
	Intertidal hand picking/digging	!	!	!	!	!	!	✓	✓	!
	Trolling - rod and reel	✓	!	!	!	!	!	✓	!	!
	Scuba dive fishing	!	✓	✓	✓	✓	!	! ¹⁰	✓	!
Forestry	Log Storage and Handling	! ³	! ³	! ³	X	! ³	! ³	! ³	! ³	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- bottom trawl = zones outside the frozen footprint
- shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
183	Jackson Narrows Marine Provincial Park is aligns with the boundaries of this zone.

Supplemental Information

!3 : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

!5 : Harvest of prawn by trap has been identified as an activity of concern, but harvest of crab by trap has not.

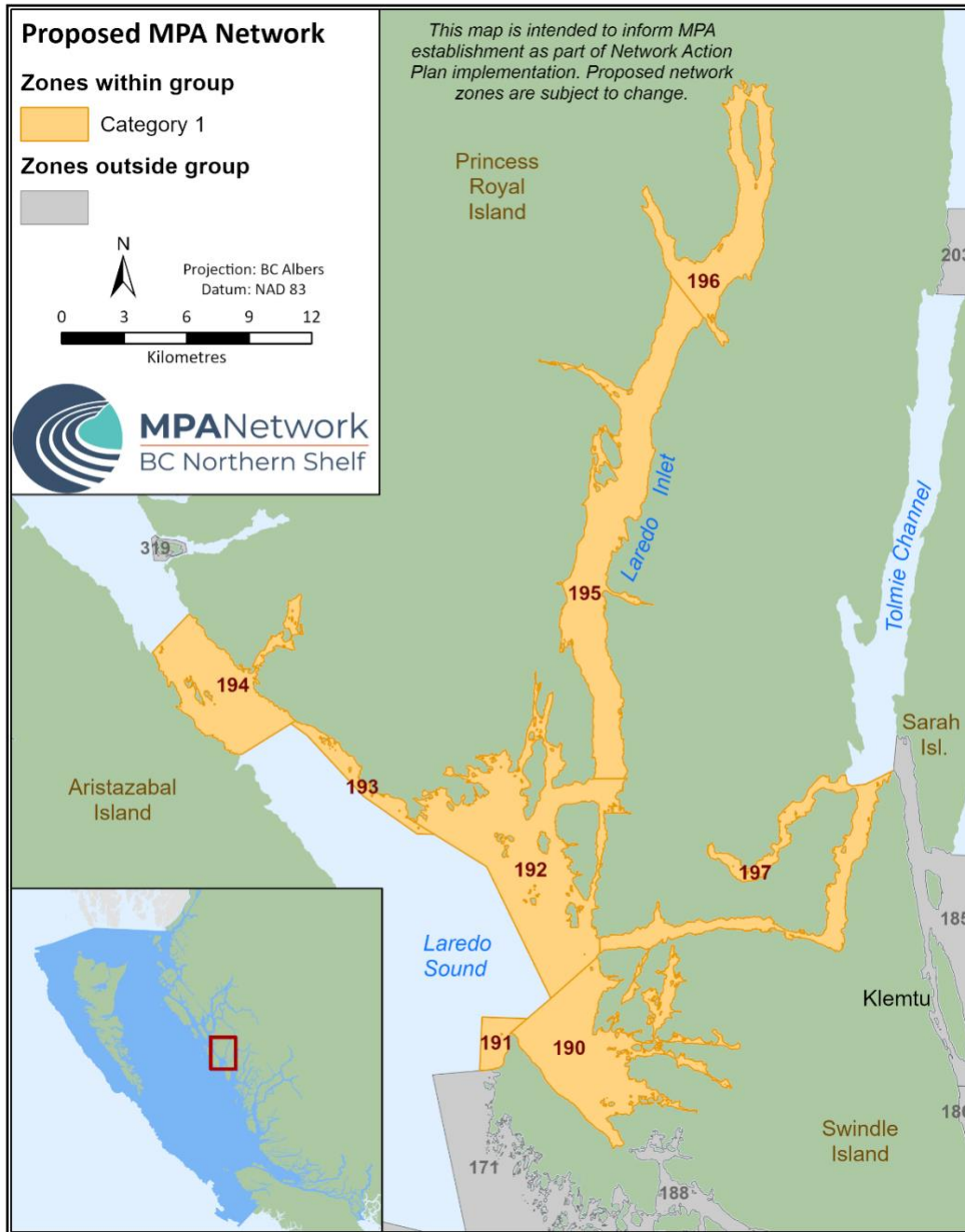
!10 : Harvest of species by dive has been identified as an activity of concern, but harvest of red sea urchin has not.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	184, 188	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	180, 181, 186, 187, 188	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	181, 188	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	181, 185, 187	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Kitasu-Laredo Group

Zones: 190-197



Map 1.11. Kitasu-Laredo Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
190	1.2	Protect natural trophic structures and food webs, including populations of upper-level predators, key forage species, nutrient importing and exporting species, and structure-providing species, including herring spawning events that support significant wildlife aggregations.
190	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass, Glass sponge, Gorgonian coral and nearshore habitat richness, including salmon (Chum, Coho, Pink, Sockeye), Benthic fish diversity (Pacific halibut), Longnose skate, Pacific dogfish, rockfish (China, Quillback, Tiger), invertebrates (Butter and Littleneck clams, Geoduck and Horse clams, Sea cucumber, Prawn), and Sea duck (staging density).
190	1.4	Protect representative areas of every marine habitat type in the bioregion, including Eastern Queen Charlotte Sound Upper Ocean sub-region, multiple coastal classes.
190	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Sockeye salmon juvenile habitat and Quillback rockfish.
190	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass, Pacific herring spawn, salmon spawning habitat (Coho, Pink, and Chum), and Harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
190	5.2	Represent marine areas of high cultural or historic value, including major area of community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
190	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Species harvested: salmon, duck, seal, halibut, rockfish, and herring. High diversity of rockfish species including long-lived species, significant area for halibut, longnose skate, Pacific dogfish, habitat complexity high, Gorgonian coral habitat, and wildlife aggregations during herring spawn.

Zone	Network Objective	Ecological Conservation Objective
191	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass, surfgrass, sea floor of high rugosity, rocky reef, and habitat complexity including: groundfish (Pacific halibut, Longnose skate), Pacific dogfish, China rockfish, invertebrates (horse clam, geoduck), Dall's porpoise (density), large-bodied and glass sponges hotspot, and gorgonians.
191	1.4	Protect representative areas of every marine habitat type in the bioregion including Eastern Queen Charlotte Sound Upper Ocean Sub-region, Rock platform

		coastal classes, Gravel beach coastal classes, and Shelf depression floor geomorphic units.
191	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including eulachon (summer), and Pacific dogfish.
191	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, including: Diverse exposed shoreline habitat, and area of high rugosity.
191	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass, surfgrass, Pacific herring spawn, goose/swan (year-round).
Zone	Network Objective	Cultural Conservation Objective
191	5.2	Represent marine areas of high cultural or historic value, including major community and seasonal camps, multitude of cultural features and sites, important spiritual relationship to area, and area used for teaching traditional practices.
191	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: groundfish (halibut, longnose skate), Pacific dogfish, seal, seaweed, China rockfish, pacific herring, sockeye salmon, lingcod.

Zone	Network Objective	Ecological Conservation Objective
192	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, habitat complexity, high current areas, and rocky reefs, including salmon (Sockeye), benthic fish diversity (lingcod), rockfish (Bocaccio, Canary, China, Quillback, Tiger), invertebrates (geoduck, Coonstrip/Dock shrimp), and Boot sponges.
192	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Eastern Queen Charlotte Sound Upper Ocean Sub-region and multiple coastal classes.
192	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Sockeye salmon diversity hotspot, rockfish (Bocaccio, Quillback), and Marbled murrelet at-sea habitat.
192	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass beds, kelp beds, surfgrass bioband, Pacific herring spawn area, and small alcids winter density.
Zone	Network Objective	Cultural Conservation Objective
192	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, important spiritual relationship to area, and area used for teaching traditional practices.
192	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security,

		including: salmon, lingcod, halibut, rockfish, and prawn. High diversity of species harvested, habitat complexity high, unique site and important for life stages of sockeye salmon, critical rocky reef areas, very high diversity of rockfish species, high abundance of long-lived rockfish (including Canary) and shorter-lived rockfish species, and Boot sponge habitat.
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Zone	Network Objective	Ecological Conservation Objective
193	1.3	Conserve areas of high biological diversity including species assemblages associated with habitat complexity, high current areas, and rocky reefs, including kelp beds, salmon (multiple species) benthic fish diversity (Lingcod), rockfish (canary, china, quillback, tiger), invertebrates (geoduck, spot prawn, chiton, sea urchin), and marine birds (Marbled Murrelet, small alcids, seagulls).
193	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Eastern Queen Charlotte Sound Upper Ocean Sub-region and multiple coastal classes.
193	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (quillback), and Marbled murrelet at-sea habitat.
193	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass beds, kelp beds, surfgrass bioband, pacific herring spawn area, and small alcids winter density.
Zone	Network Objective	Cultural Conservation Objective
193	5.2	Represent marine areas of high cultural or historic value, including major area of community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area, and area used for teaching traditional practices.
193	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: sole, flounder, seaweed, sea gull, salmon, sea urchin, kelp, gumboot chiton, black chiton, ling cod.

Zone	Network Objective	Ecological Conservation Objective
194	1.2	Protect natural trophic structures and food webs, including populations of upper-level predators, key forage species, nutrient importing and exporting species, and structure-providing species including kelp distribution, and boot sponges which partially comprise the structurally complex habitats in this area.
194	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, kelp beds and high rugosity, including rockfish (including Canary), groundfish (Pacific halibut, lingcod), invertebrates (red and green sea urchin; Northern abalone), Killer whale, marine birds (loon/grebe, shorebirds, gulls, double-crested cormorant, goose/swan).

194	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Rock fish (including Canary), Northern abalone, and Boot sponges.
194	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including kelp beds, Killer whale, marine bird habitat (loon/grebe, shorebirds, gulls, double-crested cormorant, goose/swan).
Zone	Network Objective	Cultural Conservation Objective
194	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camp, Important spiritual relationship to area, areas used for teaching traditional practices.
194	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including high diversity of species harvested including rockfish, Pacific halibut, lingcod, and salmon.

Zone	Network Objective	Ecological Conservation Objective
195	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass beds, and kelp beds, including: Sockeye salmon, Pacific dogfish, Sea cucumber, and marine bird winter density (gulls, loon/grebe, murre / large alcids).
195	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, multiple coastal classes, and North coast ecosections.
195	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Estuaries, Eelgrass beds, Kelp beds, Sockeye salmon spawning habitat, and marine bird winter density (Gulls, Loon/grebe, Murre/large alcids).
Zone	Network Objective	Cultural Conservation Objective
195	5.2	Represent marine areas of high cultural or historic value, including a multitude of cultural features and sites and an important spiritual relationship to area.
195	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, (including Coho and Sockeye salmon, halibut). Spawning habitat for sockeye salmon.

Zone	Network Objective	Ecological Conservation Objective
196	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and eelgrass, including salmon diversity hotspots (Chinook, Chum, Coho, Pink (even and odd), Sockeye), and invertebrates (Littleneck clam, Spot prawn, Giant Pacific octopus).

196	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord wall steep geomorphic unit, Fjord mound geomorphic unit, multiple coastal classes, and North coast fjords ecosections.
Zone	Network Objective	Cultural Conservation Objective
196	5.2	Represent marine areas of high cultural or historic value, including seasonal camps, multitude of cultural features and sites present, and important spiritual relationship to area.
196	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Spot prawn and unique site, spawning site for sockeye salmon.

Zone	Network Objective	Ecological Conservation Objective
197	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass and kelp forests including purple and green sea urchin and sea cucumber.
197	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Marbled Murrelet at-sea habitat.
197	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including marine birds (multiple species).
Zone	Network Objective	Cultural Conservation Objective
197	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, Important spiritual relationship to area, Area used for teaching traditional practices, Multitude of cultural features and sites are present.
197	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Groundfish, Shellfish (incl. Butter clam, Spot prawn, shrimp, cockle, Dungeness crab), Purple sea urchin.

Preliminary Activity Assessment Table

	Group Name:	Kitasu-Laredo							
	Zone Number	190	191	192	193	194	195	196	197
	Overlap with existing MPA/RCA	Yes	No	Yes	No	No	No	No	No
Aquaculture	Finfish – open-net pens	!	!	!	!	!	!³	!	!
	Shellfish - beach seeding	!³	!³	!	!³	!	✓	!	!
	Shellfish - off bottom	!³	!³	!	!³	!	✓	!	!
	Marine plants	!	!	!	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	✓	!	✓	!	!	!	✓
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	P	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	✓	!	✓	!	✓	!	✓
	Invertebrate trap	!	✓	!⁵	✓	!⁵	!⁵	!⁵	✓
	Sablefish trap	!	!	!	!	!	!	!	✓
	Intertidal hand picking/digging	!	✓	!	✓	!	✓	!	✓
	Gill nets	!	✓	!	✓	!	✓	!	✓
	Pelagic and mid-water trawl	!	!	!	!	!	!	!	!
	Purse seine	!	✓	!	✓	!	✓	!	✓
	Trolling - salmon	!	✓	!	✓	!	✓	!	✓
	Trolling - tuna	!	✓	!	✓	!	✓	!	✓
	Scuba dive fishing	!	✓	✓	✓	!	✓	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	✓	!	✓	!	!	!	✓
	Invertebrate trap	!	✓	!⁵	✓	!⁵	!⁵	!⁵	✓
	Intertidal hand picking/digging	!	✓	!	✓	!	✓	!	✓
	Trolling - rod and reel	!	✓	!	✓	!	✓	!	✓
	Scuba dive fishing	!	✓	✓	✓	!	✓	!	!
Forestry	Log Storage and Handling	!	!	!	!	!³	!	!	!³
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • bottom trawl = zones outside the frozen footprint • shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
190	Kitasu Bay RCA overlaps a portion of this zone.
192	Kitasu Bay RCA overlaps a portion of this zone.

Supplemental Information

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

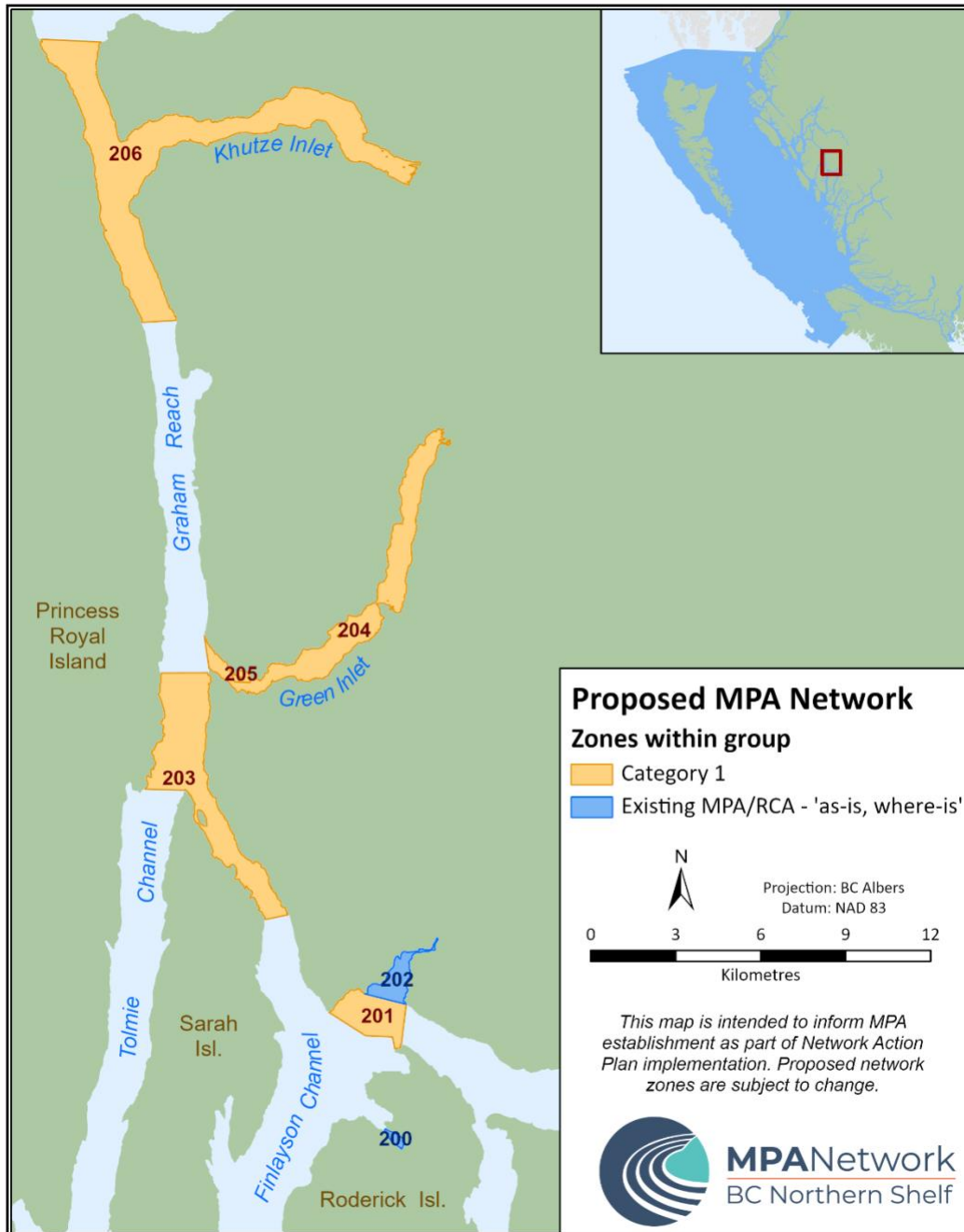
!⁵ : Harvest of prawn by trap has been identified as an activity of concern, but harvest of crab by trap has not.

Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	191	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	193, 194, 195, 197	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	190-197	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	190	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	194	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Green Inlet, and Khutze Group

Zones: 200-206



Map 1.12. Green Inlet, and Khutze Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
201	1.3	Conserve areas of high biological diversity including species assemblages associated with rocky reef and corals including: Rockfish (Silvergray, Yelloweye, Bocaccio, Quillback), groundfish (Pacific halibut, Lingcod), and invertebrates (Spot prawn).
201	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: rockfish (Silvergray, Yelloweye, Bocaccio, Quillback) and corals.
Zone	Network Objective	Cultural Conservation Objective
201	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, multitude of cultural features and sites present, important spiritual relationship to area.
201	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Diversity of species harvested including rockfish (Bocaccio Yelloweye, Silvergray, Quillback), Pacific halibut, lingcod, and sea cucumber.

Zone	Network Objective	Ecological Conservation Objective
203	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, high currents and upwelling, including: Seaweed, Steelhead and salmon (multiple species), Groundfish (multiple species), rockfish (Quillback), Pacific herring spawn, invertebrates (barnacles, clams, mussels, cockles, Dungeness crab, Spot prawn), Mammals (sea lions, seals), marine birds (Sea duck staging, Goose, Gull density – year round, Loon/Grebe density – year round), corals, and Boot sponges.
203	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, multiple geomorphic units, North coast fjords ecosections, and multiple coastal classes.
203	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Quillback rockfish and Marbled murrelet density – year-round.
203	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, kelp beds, Bull kelp biobands, Pacific herring important area, Humpback whale density, and important forage area for seabirds.
Zone	Network Objective	Cultural Conservation Objective
203	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camp, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.

203	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for culture and food security, including: barnacles, clams, mussels, cockles, crab, ducks, goose, rockfish, groundfish, herring spawn, sea lions, seal, marine birds, prawn, salmon, sea gull eggs, steelhead, and seaweed. Boot sponges, structurally complex habitats.
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Zone	Network Objective	Ecological Conservation Objective
204	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass meadows, kelp beds, high currents, and upwelling, including: seaweed, Steelhead, salmon diversity hotspots (Chinook, Sockeye), Groundfish (multiple species), rockfish (Quillback), Pacific herring spawn, invertebrates (barnacles, clams, mussels, cockles, crab, prawn, sea cucumber), marine birds (sea duck – staging), gull density – year-round, loon/grebe density – year-round), and Boot sponges.
204	1.4	Protect representative areas of every marine habitat type in the bioregion, including: Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord wall steep geomorphic unit, North coast fjords ecosections, Mixed substrate bottom patches, Rock cliff coastal classes, and Gravel beach coastal classes.
204	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Sockeye salmon, Quillback rockfish, and Marbled murrelet density.
204	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Eelgrass meadows, Kelp beds, Sea cucumber larval source for adjacent areas, Harbour seal haulouts, and important forage area for seabirds.
Zone	Network Objective	Cultural Conservation Objective
204	5.2	Represent marine areas of high cultural or historic value, including: Community and seasonal camps, cultural features and sites, spiritual areas, and areas used for teaching traditional practices.
204	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, steelhead, salmon (multiple species), herring spawn, ground fish (multiple species), rockfish (quillback), invertebrates (barnacles, clams, mussels, cockles, crab, prawn), marine birds (ducks, goose, sea gull eggs), marine mammals (sea lion, seal).

Zone	Network Objective	Ecological Conservation Objective
205	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, eelgrass meadows, kelp beds, high currents, and upwelling, including seaweed, Steelhead, salmon diversity hotspots (Chinook, Chum, Coho, Sockeye), Groundfish (multiple species), rockfish (Quillback), Pacific herring spawn, invertebrates (barnacles, clams, mussels), and marine birds (sea duck (staging), Gull density – year-round, Loon/Grebe density – year-round).

205	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord crest geomorphic unit, Fjord wall steep geomorphic unit, North coast fjords ecosections, Mixed substrate bottom patches, Rock cliff coastal classes, and Gravel beach coastal classes.
205	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Sockeye salmon and Quillback rockfish.
205	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, Kelp beds, Sea cucumber larval source for adjacent areas, Harbour seal haulouts, and important forage area for seabirds.
Zone	Network Objective	Cultural Conservation Objective
205	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camps, some cultural features and sites are present, and area used for teaching traditional practices.
205	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Salmon, clam, cockles.

Zone	Network Objective	Ecological Conservation Objective
206	1.3	Conserve areas of high biological diversity including species assemblages associated with high rugosity, kelp beds, estuaries, and eelgrass, including salmon (all species), rockfish (multiple species), Pacific halibut, lingcod, and Dungeness crab.
206	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including Northern abalone and Marbled murrelet density – year-round.
206	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including Sockeye spawning habitat and marine birds (Marbled murrelet density – year-round).
Zone	Network Objective	Cultural Conservation Objective
206	5.2	Represent marine areas of high cultural or historic value, including community and seasonal camp, Important spiritual relationship to area, Area used for teaching traditional practices.
206	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: High diversity of species harvested including rockfish, Pacific halibut, lingcod, all 5 species of salmon, Dungeness crab.

Preliminary Activity Assessment Table

	Group Name:	Green Inlet, Khutze				
	Zone Number	201	203	204	205	206
	Overlap with existing MPA/RCA	No	No	No	Yes	Yes
Aquaculture	Finfish – open-net pens	!	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!
	Shellfish - off bottom	!	!	!	!	!
	Marine plants	!	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a	n/a
	Dive with pressure hose	!	!	!	!	!
	Invertebrate trap	!	!	✓	✓	! ¹¹
	Sablefish trap	!	!	!	!	!
	Intertidal hand picking/digging	✓	!	!	!	!
	Gill nets	✓	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	✓	!	!	!	!
	Trolling - salmon	!	!	!	!	!
	Trolling - tuna	✓	!	!	!	!
	Scuba dive fishing	✓	!	✓	✓	!
Recreational Harvest	Demersal hook and line (jigging)	!	!	✓	✓	!
	Invertebrate trap	!	!	✓	✓	! ¹¹
	Intertidal hand picking/digging	✓	!	!	!	!
	Trolling - rod and reel	!	!	!	!	!
	Scuba dive fishing	✓	!	✓	✓	!
Forestry	Log Storage and Handling	! ³	! ³	! ³	!	!
Industrial Projects	Oil and gas activities*	P	P	P	P	P
	Mining*	P	P	P	P	P
	Dumping*	P	P	P	P	P
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
205	Green Inlet Marine Park aligns with the boundaries of this zone.
206	K'ootz/Khutze Conservancy is contained within the boundaries of this zone.

Supplemental Information

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

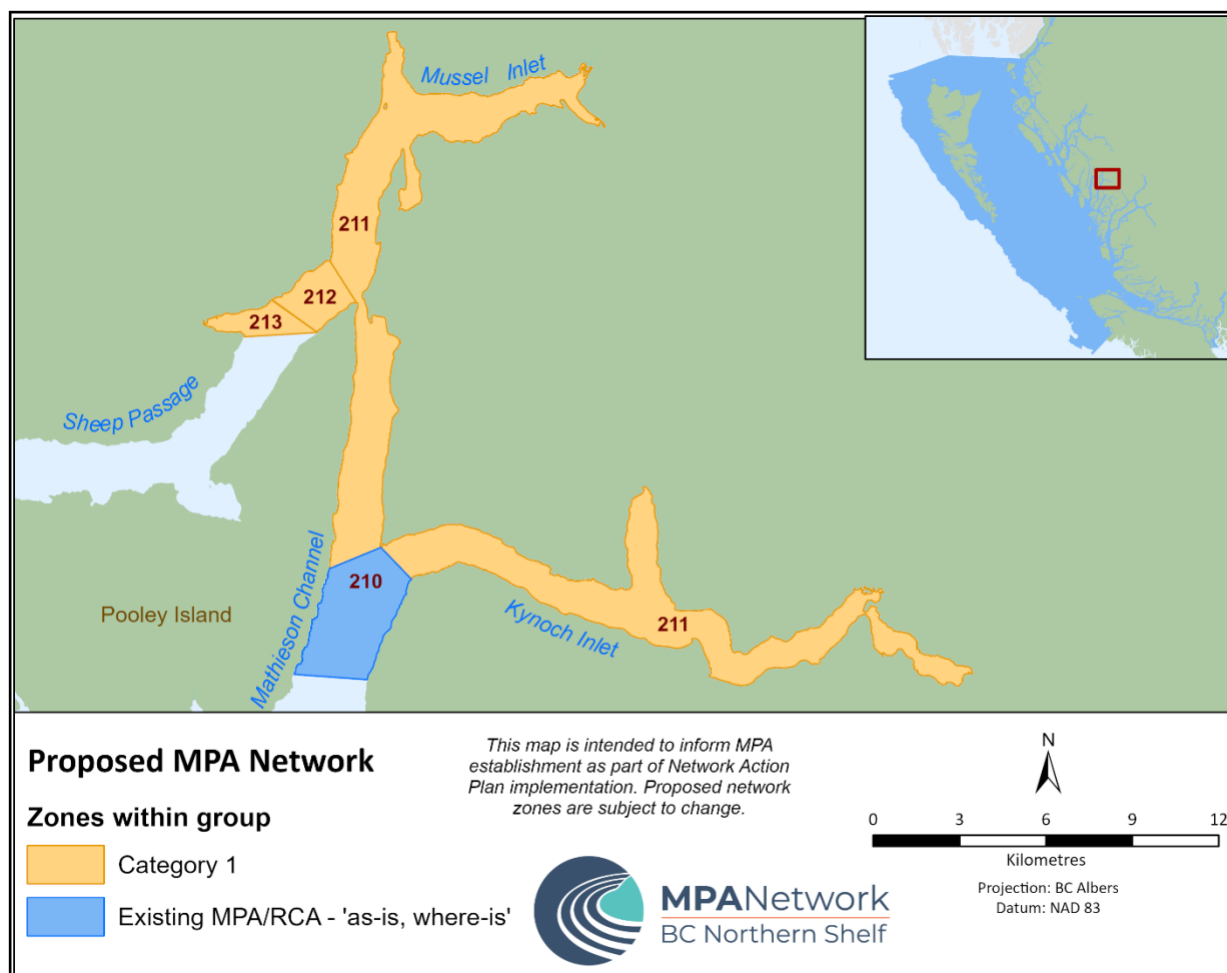
!¹¹ : Harvest of prawn by trap is identified as an activity of concern, but harvest of crab by trap is not, with the exception of the existing commercial and recreational closure at the head of the inlet(s) to facilitate First Nations FSC harvest as described in the Crab Integrated Fishery Management Plan (IFMP).

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	201, 203, 205, 206	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	203, 205, 206	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	205	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	203	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Kynoch Group

Zones: 210-213



Map 1.13. Kynoch Group

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
211	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, and areas of high mixing and high current, including: Steelhead, salmon biomass hotspot (Chum, Coho, Pacific), Benthic fish diversity (multiple species inc. Lingcod), rockfish (Bocaccio, Quillback, Silvergray, Yelloweye), forage fish, invertebrates (cockles, clams Green sea urchin, Dungeness crab, Spot prawn, Sea cucumber), mammals (sealion and Harbour seal haulouts), marine birds (Goose/Swan density – winter, Sea duck - staging), and Crinoids and sponges.
211	1.4	Protect representative areas of every marine habitat type in the bioregion, including Mainland Fjords Upper Ocean Sub-region, Fjord depression floor geomorphic unit, Fjord crest geomorphic unit, and Rock cliff coastal classes.

211	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Bocaccio, Quillback, Yelloweye), Eulachon (spawning), and Marbled murrelet density – year-round.
211	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, kelp beds, and Harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
211	5.2	Represent marine areas of high cultural or historic value, including Oatswish seasonal camp, multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
211	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for culture and food security, including: clams, crab, duck, goose, cockles, cucumber, eulachon, all species of salmon, seal, sealion, groundfish, prawns, rockfish, and steelhead. Crab restoration, outstanding abundances of yelloweye and quillback rockfish, lingcod, and crinoids and sponges.

Zone	Network Objective	Ecological Conservation Objective
212	1.3	Conserve areas of high biological diversity including species assemblages associated with Seafloor of high rugosity, including: Steelhead, salmon biomass hotspot (Chum, Coho, Pacific), Benthic fish diversity (multiple species inc. Lingcod), rockfish (Bocaccio, Quillback, Silvergray, Yelloweye), forage fish, invertebrates (cockles, clams Green sea urchin, Dungeness crab, Spot prawn, Sea cucumber), mammals (sealion and Harbour seal haulouts), marine birds (Goose/Swan density – winter, Sea duck - staging), and Crinoids and sponges.
212	1.4	Protect representative areas of every marine habitat type in the bioregion including Mainland Fjords Upper Ocean Sub-region, Fjord depression floor geomorphic unit, Fjord crest geomorphic unit, and Rock cliff coastal classes.
212	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including rockfish (Bocaccio, Quillback, Yelloweye), Eulachon (spawning), and Marbled murrelet density – year-round.
212	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass meadows, kelp beds, and Harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
212	5.2	Represent marine areas of high cultural or historic value, including: multitude of cultural features and sites are present, important spiritual relationship to area, and area used for teaching traditional practices.
212	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: clams, crab, duck, goose, cockles, cucumber, eulachon, all species of salmon, seal, sealion, groundfish, prawns, rockfish, and steelhead. Crab

		restoration, outstanding abundances of yelloweye and quillback rockfish, lingcod, and Crinoids and sponges.
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Zone	Network Objective	Ecological Conservation Objective
213	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, kelp and high rugosity, including rockfish (multiple species), eulachon, invertebrates (butter and little neck clam, Dungeness crab, spot prawn), Crinoid sponge, and Marbled murrelet.
213	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: Yelloweye rockfish, Bocaccio, Humpback whale, and Marbled murrelet.
213	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including eelgrass, eulachon, marine birds (including Marbled murrelet).
Zone	Network Objective	Cultural Conservation Objective
213	5.2	Represent marine areas of high cultural or historic value, including important spiritual relationships.
213	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Dungeness crab, rockfish including yelloweye and bocaccio, lingcod, spot prawn, butter clam.

Preliminary Activity Assessment Table

Group Name:		Kynoch		
Zone Number		211	212	213
Overlap with existing MPA/RCA		Yes	Yes	No
Aquaculture	Finfish – open-net pens	!	!	!
	Shellfish - beach seeding	!	!	!
	Shellfish - off bottom	!	!	!
	Marine plants	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!	!
	Bottom trawling*	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a
	Dive with pressure hose	!	!	!
	Invertebrate trap	!11	✓	✓
	Sablefish trap	!	!	!
	Intertidal hand picking/digging	!	!	!
	Gill nets	!	!	!
	Pelagic and mid-water trawl	!	!	!
	Purse seine	!	!	!

	Trolling - salmon	!	!	!
	Trolling - tuna	!	!	!
	Scuba dive fishing	!	✓	✓
Recreational Harvest	Demersal hook and line (jigging)	!	✓	✓
	Invertebrate trap	! ¹¹	✓	✓
	Intertidal hand picking/digging	!	✓	✓
	Trolling - rod and reel	!	✓	✓
	Scuba dive fishing	!	✓	✓
Forestry	Log Storage and Handling	!	!	! ³
Industrial Projects	Oil and gas activities*	P	P	P
	Mining*	P	P	P
	Dumping*	P	P	P
	Other industrial projects	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- bottom trawl = zones outside the frozen footprint
- shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
211	Fiordland Conservancy overlaps this entire zone.
212	Fiordland Conservancy overlaps this entire zone.

Supplemental Information

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

!¹¹ : Harvest of prawn by trap is identified as an activity of concern, but harvest of crab by trap is not, with the exception of the existing commercial and recreational closure at the head of the inlet(s) to facilitate First Nations FSC harvest as described in the Crab Integrated Fishery Management Plan (IFMP).

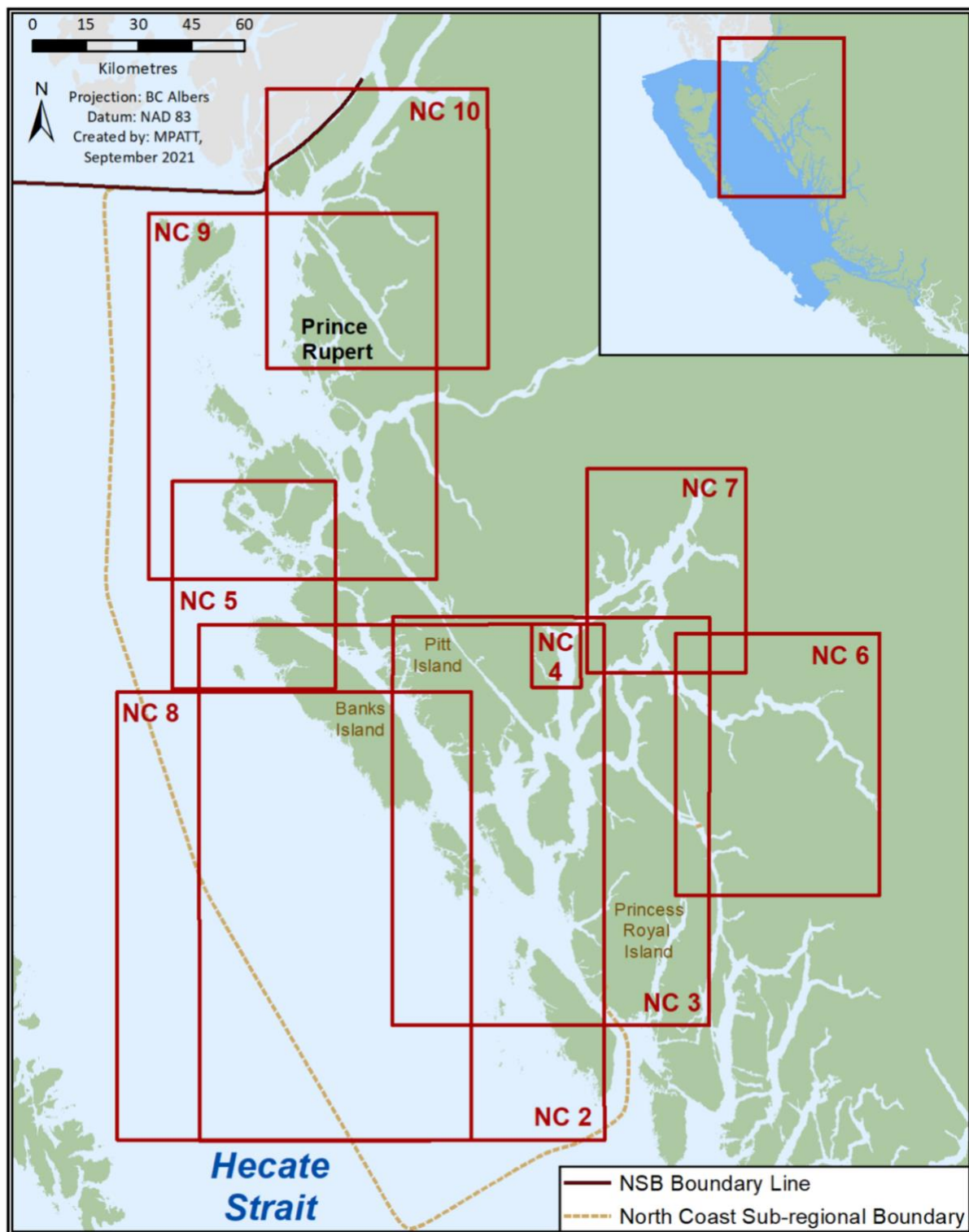
Additional Considerations

Activity	Zone(s)	Considerations
Commercial and recreational beach seine, cast net, and dip nets	211, 212, 213	There are potential interactions between commercial beach seine, cast net, and dip nets and eulachon. These activities may be subject to restrictions in the regulations and/or the management plan.
Boating & shore use / intertidal exploration	211, 212	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	211, 212, 213	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	211, 212	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	213	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

NORTH COAST

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Map 1. Index map of North Coast Groups

Banks Aristazabal Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

Category: 1

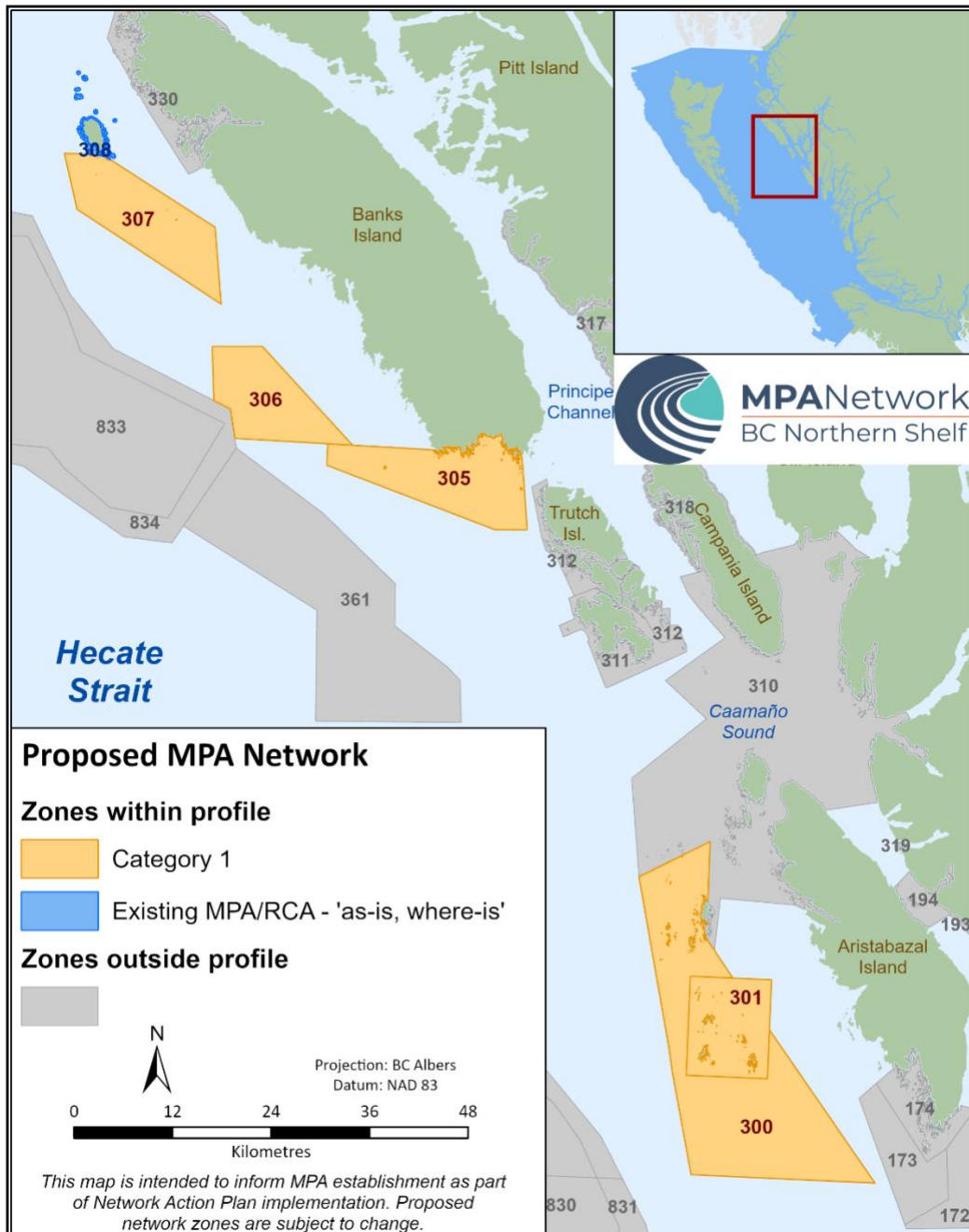
Potential designation tool(s):

- Marine refuge for 300, 305, 306 and 307
- Fisheries Act tool for 301
- marine National Wildlife Area for 300 and 301

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 942.4 km²

Zones included in this profile: 300, 301, and 305-307



Map 2. West of Banks and Aristazabal Profile * Note: "Existing MPA/RCA - 'as-is, where-is'" are included on map for reference but are not considered part of the profile when considering potential designation tool(s).

Context

This profile includes several non-contiguous existing RCAs and an Ecological Reserve off the west coast of Banks Island and Aristabazal Island. The rocky shorelines on the southern end of Banks Island and the multiple archipelagos in this area support many intertidal species and promote extensive canopy-forming giant kelp and bull kelp stands providing important habitat for a diversity

of rockfish and invertebrates. The zones off the west coast of Aristazabal Island and the surrounding area are also important for rockfish as well as the life history of multiple marine birds and peregrine falcons. The zones also include multiple sealion haulouts. Zone 305 includes important coral or sponge assemblages.

The area is critically important to local First Nations, both culturally and spiritually, and for the harvest of sealion, marine and seabird resources. There are many sites of cultural and spiritual importance to First Nations, including the Gander Island IR.

The primary use of the area is by commercial fishers; however, because of the RCAs many types of fishing are already restricted. There are currently no tenured activities within the proposed zones.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
300	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA and areas of high rugosity, including: salmon (all species), Benthic fish diversity, Groundfish (multiple species incl. Pacific halibut and Lingcod), Rockfish (multiple species), shelf invertebrate diversity, and marine birds (alcids, storm-petrel, oystercatcher, gull, puffin, scoter, and sea ducks), and peregrine falcon.
300	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: rockfish (many species) and Northern abalone.
300	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon (all species), Steller Sealion haulouts, and marine birds (alcids, storm-petrel, oystercatcher, gull, puffin, scoter, and sea ducks), and peregrine falcon and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
300	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
300	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (all species), Groundfish (multiple species including Pacific halibut and lingcod), Rockfish (multiple species), Northern abalone, Steller sea lion, and scoter.

Zone	Network Objective	Ecological Conservation Objective
301	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: marine birds (alcids, storm-petrel, oystercatcher, gull, puffin, and sea ducks), and peregrine falcon.

Zone	Network Objective	Ecological Conservation Objective
305	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA, Bull kelp biobands, and surfgrass, including: Seaweed, Pacific halibut, Rockfish (multiple species), and invertebrates (chiton and sea stars (ochre and sunflower)).
305	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (multiple species), Northern abalone and whales (Killer - Northern resident important area, Fin - habitat of special importance).
305	1.7	Contribute to conservation of areas important for the life history of resident and migratory species including Steller Sea Lion haulout, Harbour seal haulout, and marine birds (Loons, seagulls, Oyster catchers) and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
305	5.2	Represent marine areas of high cultural or historic value, including: cultural sites.
305	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Seaweed, Pacific halibut, Rockfish (multiple species), invertebrates (Northern abalone, Red urchin, chiton, sea stars (ochre and sunflower) and Sea cucumber), whales (Killer, Fin), Steller sealion, Harbour seal, and marine birds and their eggs (Loons, seagulls, Oyster catchers).

Zone	Network Objective	Ecological Conservation Objective
306	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA and general kelp biobands, including: groundfish (Pacific halibut, Lingcod), rockfish (multiple species) and invertebrates (urchins and chitons).
306	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: rockfish (multiple species) and Northern abalone.
306	1.7	Contribute to conservation of areas important for the life history of resident and migratory species including Steller sea lions (including rookeries and haul outs), seals, seabird colonies (including Oyster catchers) and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
306	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
306	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: groundfish (Pacific halibut, Lingcod), rockfish (multiple species) and invertebrates (Northern abalone, urchins and chitons), Steller sea lions, seals, seabirds and their eggs (including Oyster catchers).

Zone	Network Objective	Ecological Conservation Objective
307	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA, Bull kelp biobands, and surfgrass, including seaweed, Pacific halibut, rockfish (multiple species), and invertebrates (chiton and sea stars (ochre and sunflower)).
307	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (multiple species), Northern abalone and whales (Killer - Northern resident important area, Fin - habitat of special importance).
307	1.7	Contribute to conservation of areas important for the life history of resident and migratory species including Steller Sea Lion haulout, Harbour seal haulout, and marine birds (Loons, seagulls, Oyster catchers) and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
307	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Seaweed, Pacific halibut, Rockfish (multiple species), invertebrates (Northern abalone, Red urchin, chiton, sea stars (ochre and sunflower) and Sea cucumber), whales (Killer, Fin), Steller sealion, Harbour seal, and marine birds and their eggs (Loons, seagulls, Oyster catchers).

Preliminary Activity Assessment Table

Profile Name:		West of Banks and Aristazabal				
Zone Number		300	301	305	306	307
Overlap with existing MPA/RCA		Yes	Yes	Yes	Yes	Yes
Aquaculture	Finfish – open-net pens	X	X	X	n/a	X
	Shellfish - beach seeding	!	X	!³	n/a	!³
	Shellfish - off bottom	!	X	!	n/a	!³
	Marine plants	!	X	!	n/a	!
Commercial Harvest	Bottom longline/demersal h&l	X	!	X	X	X
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	X	P	n/a	n/a	n/a
	Dive with pressure hose	✓	!	✓	n/a	!
	Invertebrate trap	!	!	!	!	!
	Sablefish trap	X	!	X	X	X
	Intertidal hand picking/digging	!	!	!	n/a	✓
	Gill nets	!	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!	!
	Purse seine	!	!	!	!	!
	Trolling - salmon	X	!	X	X	X

	Trolling - tuna	X	!	X	X	X
	Scuba dive fishing	! ¹⁰	!	✓	n/a	X
Recreational Harvest	Demersal hook and line (jigging)	X	!	X	X	X
	Invertebrate trap	!	!	!	!	✓
	Intertidal hand picking/digging	!	!	!	n/a	✓
	Trolling - rod and reel	X	!	X	X	X
	Scuba dive fishing	! ¹⁰	!	✓	n/a	✓
Forestry	Log Storage and Handling	!	X	!	n/a	! ³
Industrial Projects	Oil and gas activities*	P	P	!	!	!
	Mining*	P	P	!	!	!
	Dumping*	P	P	!	!	!
	Other industrial projects	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.

P Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal *Oceans Act* Marine Protected Area, *Canada Wildlife Act* National Wildlife Area, or *National Marine Conservation Act* Area Reserve.

n/a Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:

- *bottom trawl* = zones outside the frozen footprint
- *shrimp trawl* = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).

Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.

First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.

* Activity would be restricted as per Federal MPA Protection Standards.

Overlap with existing MPA/RCA

Zone	Description of overlap
300	West Aristazabal RCA overlaps this entire zone.
301	West Aristazabal RCA overlaps a portion of this zone. Byers-Conroy-Harvey-Sinnett Islands Ecological Reserve aligns with the boundaries of this zone.
305	Otter Passage RCA aligns with the boundaries of this zone.
306	North Danger Rocks RCA overlaps this entire zone.
307	West Banks Island RCA aligns with the boundaries of this zone. Lax Kul Nii Łuutiksm/Bonilla Conservancy overlaps a portion of this zone.

Supplemental Information

!⁹ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

!¹⁰ : Harvest of species by dive has been identified as an activity of concern, but harvest of red sea urchin has not.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	300, 301	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.
Boating & shore use / intertidal exploration	305, 306	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating & shore use / intertidal exploration	300, 305	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be restricted around pinniped haulouts and rookeries in regulations and/or the management plan.
Boating	305	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan.

Caamano Sound Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Gitga'at, Gitxaala, Haisla, and Kitasoo Xai'xais First Nations share interests in the Caamano sound site and have identified a need for further discussions about collaborative governance and the configuration of this proposed MPA. These interests will be discussed further with Canada and B.C. in future steps for site designation and may result in changes to the proposed protection tools and site description, including the boundaries and site name.

Sub-region: North Coast

Category: 1

Potential designation tool(s): Oceans Act MPA

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 1291.2 km²

Zones included in this profile: 310, 311, 312, 313, 314, 315 and 316.



Map 3. Union Pass, Ursula, Trutch, Hartley Bay, and Caamaño Sound Profile. * Note: "Existing MPA/RCA - 'as-is, where-is'" are included on map for reference but are not considered part of the profile when considering potential designation tool(s).

Context

The largest zone in this profile is located between Gil Island, Campania Island, and Estevan Group, and extends to Kettle Inlet on the coast of Aristazabal Island. It also includes zones around Trutch Island, within Union Pass, lower Douglas Channel and Ursula Channel. The zones in this profile encompass important habitat for humpback, fin, and killer whale populations, and also have

numerous Dall's porpoises and Pacific sided dolphins. The area includes an important mixing area at the mouth of Moresby Trough. Coastal tidal mixing and upwelling drives productivity, and the area is important to a diversity of fish, invertebrate, and sea mammal species. There are numerous tidal channels, protected bays, sandy beaches, rocky intertidal areas, and kelp beds.

The area is critically important to local First Nations, both culturally and spiritually, and for the harvest of marine resources, including seabirds. There are many sites of cultural and spiritual importance to First Nations, including fishing camps and archaeological sites.

Recreational values include saltwater fishing (including excellent recreational fishing opportunities for salmon and groundfish), wildlife viewing, scuba diving, and boating. The area overlaps with a Recreational Fishing Important Area for salmon and shellfish. Sheltered anchorages in the area support opportunities for wilderness-based boating, kayaking, and angling. There are commercial groundfish (halibut, rockfish, lingcod, sablefish), shellfish (red sea urchin, geoduck, horse clam, sea cucumber, prawn, crab), salmon (troll, seine, gillnet), and tuna fisheries. There is a whale research station (Cetacea Lab) located in Taylor Bight at the south end of Gil Island. This area is part of the shipping lane into and out of Kitimat, and the nearby Inside Passage is used extensively by cruise ships, cargo ships and ferries. Log handling tenures exist in some of the zones within the fjords.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
310	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA and invertebrates (e.g., clams, cockles, chitons, mussels, and barnacles).
310	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: whales (Killer, Fin, Humpback), marine birds (e.g., Tufted Puffin), and Northern abalone.
310	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: whales (Killer - potential critical habitat, Fin, Humpback), and marine birds (e.g., Scoter and associated foraging habitat).
Zone	Network Objective	Cultural Conservation Objective
310	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
310	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, Groundfish (Pacific halibut, Lingcod) and invertebrates (Clams, Cockles, Northern abalone, chitons, mussels, and barnacles), Killer whale, Tufted Puffin and Scoter.

Zone	Network Objective	Ecological Conservation Objective
311	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA, nearshore habitat richness, Giant and Bull kelp distribution, and eelgrass, including: seaweed, salmon (all species), rockfish (multiple species), groundfish (Pacific halibut, Lingcod) and invertebrates (Cockles, Butter Clams, mussels, chitons).
311	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: rockfish (multiple species) Northern abalone, and whales (Killer, Fin, Humpback).
311	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon (all species), herring, whales (Killer, Fin, Humpback), and seabird colonies (shorebirds, Sea ducks, Pigeon Guillemot, Black oystercatcher) and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
311	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area including origin story.
311	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Salmon diversity (sockeye, chum, pink, coho and chinook) and Dungeness crab.

Zone	Network Objective	Ecological Conservation Objective
312	1.3	Conserve areas of high biological diversity including species assemblages associated with the Central Mainland EBSA and nearshore habitat richness, including: marine plants (e.g., Bull and Giant kelp, seaweed) and invertebrates (e.g., mussels and chitons).
312	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: salmon (all species), herring, seabird colonies, and associated foraging habitat.
Zone	Network Objective	Cultural Conservation Objective
312	5.2	Represent marine areas of high cultural or historic value, including cultural sites
312	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, herring, salmon (all species), rockfish (multiple species), Pacific halibut, and invertebrates (mussels and chitons), whales (Killer, Fin), seabirds and their eggs.

Zone	Network Objective	Ecological Conservation Objective
313	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including eelgrass beds and associated species assemblages, marine mammals, and invertebrates (e.g., Sea cucumbers, Clams, Cockles).
313	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Northern abalone, Eulachon and whales (Killer - northern resident potential critical habitat, Humpback - critical habitat, Fin - habitat of special importance).
313	1.7	Contribute to conservation of areas important for the life history of resident and migratory species including: Eel grass beds and salmon (Chinook) and whales (Killer - northern resident potential critical habitat, Humpback - critical habitat, Fin - habitat of special importance).
Zone	Network Objective	Cultural Conservation Objective
313	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
313	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Salmon (all species), Pacific halibut and invertebrates (Northern abalone, Sea cucumbers, Clams, Cockles).

Zone	Network Objective	Ecological Conservation Objective
314	1.3	Conserve areas of high biological diversity including species assemblages associated with areas of high rugosity, eelgrass meadows and kelp beds, including: salmon (Chinook), groundfish (multiple species incl. Pacific halibut), and invertebrate populations (Dungeness crab, cockles, clams, Sea cucumber and Geoduck).
314	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Eulachon, Humpback, Fin and Killer Whales.
314	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including critical habitat for salmon (Chinook), and whales (Northern Resident Killer, Humpback, Fin).
Zone	Network Objective	Cultural Conservation Objective
314	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
314	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security (salmon, halibut, groundfish, crab, cockles, clams, sea cucumber, and geoduck).

Zone	Network Objective	Ecological Conservation Objective
315	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including Pacific halibut, and invertebrates (Sea cucumbers, Clams, Cockles).
315	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Northern abalone and whales.
315	1.7	Contribute to conservation of areas important for the life history of resident and migratory species including eelgrass beds and salmon (all).
Zone	Network Objective	Cultural Conservation Objective
315	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
315	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security (salmon (all species) Pacific halibut, and invertebrates (Northern abalone, Sea cucumbers, Clams, Cockles)).

Zone	Network Objective	Ecological Conservation Objective
316	1.3	Conserve areas of high biological diversity including species assemblages associated with rugosity and estuaries, including: fishes (salmon, halibut, rockfish, sablefish), sharks (Pacific Sleeper, Six-gill), invertebrates (Dungeness crab, bivalves, octopus, sea cucumber, shrimp, prawn), and Humpback whales.
316	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon (multiple species), and Humpback whales.
Zone	Network Objective	Cultural Conservation Objective
316	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
316	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including but not limited salmon (all species), halibut, sablefish, rockfish (multiple species), and invertebrates (Dungeness crab, bivalves, octopus, sea cucumber, shrimp and Spot prawn).

Preliminary Activity Assessment Table

	Profile Name:	Caamano Sound						
	Zone Number	310	311	312	313	314	315	316
	Overlap with existing MPA/RCA	Yes	No	No	Yes	Yes	Yes	Yes
Aquaculture	Finfish – open-net pens	X	X	X	X	X	X	X
	Shellfish - beach seeding	!	!	!	!	!	X	!³
	Shellfish - off bottom	!³	!	!³	!³	!³	X	!³
	Marine plants	!	!	!	!	!	X	!
Commercial Harvest	Bottom longline/demersal h&l	✓	!	✓	✓	!	!	!
	Bottom trawling*	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Shrimp trawling*	P	n/a	n/a	n/a	n/a	n/a	P
	Dive with pressure hose	✓	!	✓	!	!	!	!
	Invertebrate trap	✓	!	!	✓	!⁴	✓	!
	Sablefish trap	!	!	!	✓	✓	!	!
	Intertidal hand picking/digging	!	!	!	!	!	!	!
	Gill nets	✓	!	!	✓	✓	n/a	!
	Pelagic and mid-water trawl	!	!	!	!	!	n/a	!
	Purse seine	✓	!	!	✓	✓	n/a	!
	Trolling - salmon	✓	!	✓	!	!	!	!
	Trolling - tuna	!	!	✓	!	!	!	!
	Scuba dive fishing	✓	!	✓	!	!	!	!
Recreational Harvest	Demersal hook and line (jigging)	✓	!	✓	✓	!	!	✓
	Invertebrate trap	✓	!	✓	✓	!	!	✓
	Intertidal hand picking/digging	!	!	!	!	!	!	!
	Trolling - rod and reel	✓	!	✓	✓	!	!	✓
	Scuba dive fishing	!	!	✓	!	!	!	✓
Forestry	Log Storage and Handling	!³	!	!	!³	!³	X	!³
Industrial Projects	Oil and gas activities*	P	P	P	P	P	P	P
	Mining*	P	P	P	P	P	P	P
	Dumping*	P	P	P	P	P	P	P
	Other industrial projects	!	!	!	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl = zones outside the frozen footprint</i> • <i>shrimp trawl = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).</i>
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
310	Lax Ka'gaas/Campania Conservancy (marine) overlaps a portion of this zone.
313	K'distsausk/Turtle Point and Monckton Nii Łuutiksm Conservancies overlap a portion of this zone. Lax Kwil Dziidz/Fin and Maxtaksm'aa/Union Passage Conservancies (marine) are contained within the boundaries of this zone.
314	K'distsausk/Turtle Point Conservancy overlaps a portion of this zone.
315	Union Passage Marine Provincial Park aligns with the boundaries of this zone.
316	Bishop Bay - Monkey Beach Conservancy (marine) is contained within the boundaries of this zone.

Supplemental Information

Statements may be modified based on technical review of management measures (see above).

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	312	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan
Boating & shore use / intertidal exploration	311, 312, 314	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.
Boating	310-316	There are potential interactions (acoustic disturbance, strikes) between whales and all boating activities (including tourism and public recreational boating and fishing). Safe distance and/or seasonal measures may be considered to reduce the potential for physical and acoustic disturbance by vessels in regulations and/or the management plan

Kitkiata (Lax Galts'ap) and Kishkosh Inlets Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

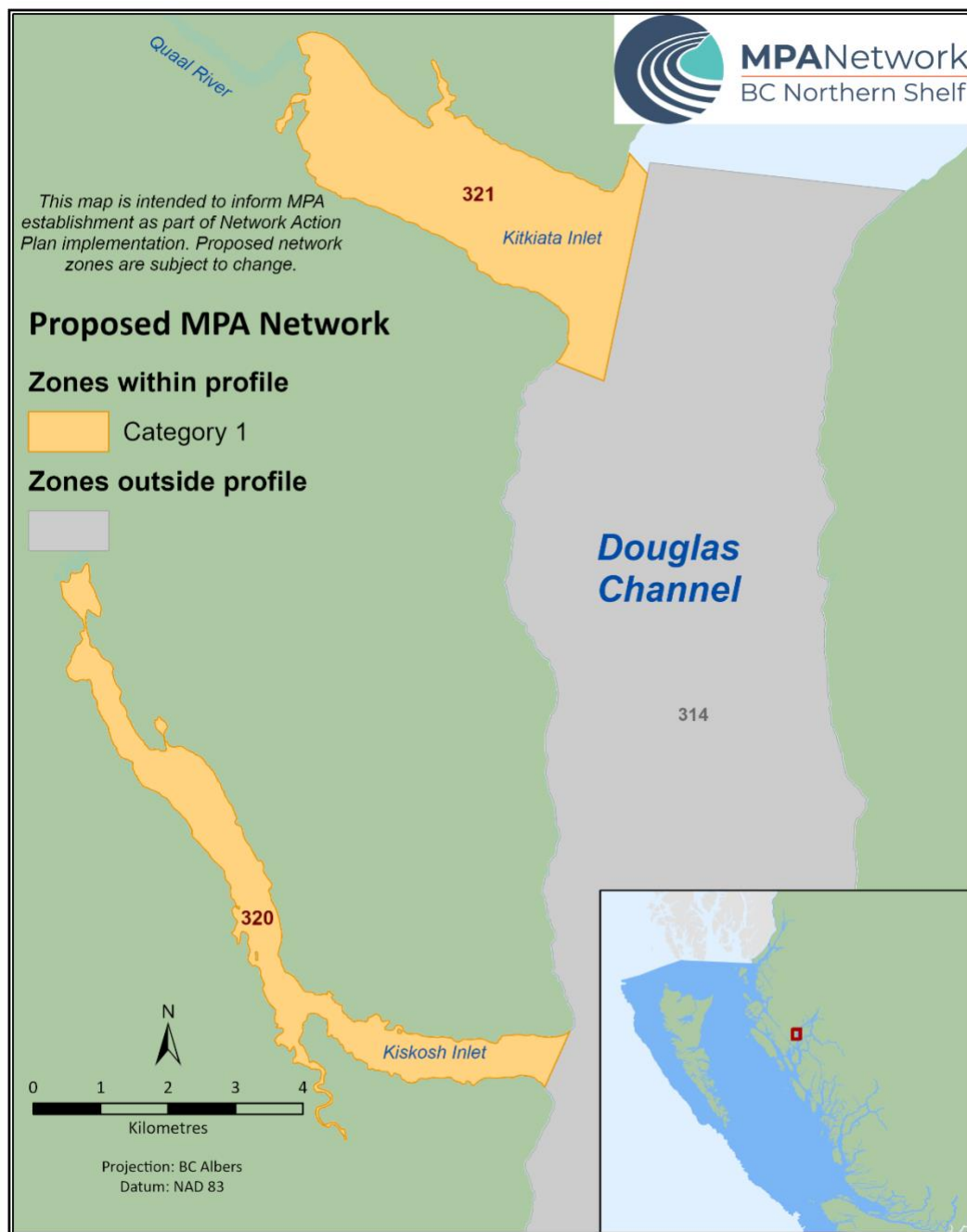
Category: 1

Potential designation tool(s): Wildlife Management Area + Fisheries Act tool

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 16.8 km²

Zones included in this profile: 320, 321



Map 4. Kitkiata (Lax Galts'ap) and Kishkosh Inlets Profile

Context

This profile includes two small but important inlets off Douglas Channel: Kitkiata (Lax Galts'ap), and Kishkosh. These inlets are critically important to local First Nations and support a diverse range of marine species including several bivalves, crab, groundfish, salmon, prawn, and a large number of seabirds. The inlets are socially and culturally important to First Nations who inhabit the area, and includes a village site on an island in the estuary.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
320	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including salmon (multiple species), groundfish (multiple species), invertebrates (bivalves, Dungeness crab, Spot prawn), shorebirds (goose/swan, loons/grebes) and seabirds (sea ducks).
320	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including critical habitat for salmon, shorebirds (goose/swan, loons/grebes) and seabirds (sea ducks).
Zone	Network Objective	Cultural Conservation Objective
320	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
320	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (multiple species), groundfish (multiple species), invertebrates (bivalves, Dungeness crab, Spot prawn), shorebirds (Goose/swan, Loons/grebes) and seabirds (Sea duck).

Zone	Network Objective	Ecological Conservation Objective
321	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including: salmon (multiple species), groundfish (multiple species), invertebrates (bivalves, Dungeness crab, Spot prawn), shorebirds (goose/swan, loons/grebes) and seabirds (sea ducks).
321	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including critical habitat for salmon, shorebirds (goose/swan, loons/grebes) and seabirds (sea ducks).
Zone	Network Objective	Cultural Conservation Objective
321	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
321	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (multiple species), groundfish (multiple species), invertebrates (bivalves, Dungeness crab, Spot prawn), shorebirds (Goose/swan, Loons/grebes) and seabirds (Sea duck).

Preliminary Activity Assessment Table

	Profile Name:	Hartley Bay	
	Zone Number	320	321
	Overlap with existing MPA/RCA	Yes	Yes
Aquaculture	Finfish – open-net pens	X	X
	Shellfish - beach seeding	!	!
	Shellfish - off bottom	!	!
	Marine plants	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!
	Bottom trawling*	n/a	n/a
	Shrimp trawling*	n/a	n/a
	Dive with pressure hose	!	!
	Invertebrate trap	!	!
	Sablefish trap	!	!
	Intertidal hand picking/digging	!	!
	Gill nets	!	!
	Pelagic and mid-water trawl	!	!
	Purse seine	!	!
	Trolling - salmon	!	!
	Trolling - tuna	!	!
	Scuba dive fishing	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	!
	Invertebrate trap	!	!
	Intertidal hand picking/digging	!	!
	Trolling - rod and reel	!	!
	Scuba dive fishing	!	!
Forestry	Log Storage and Handling	!	!
Industrial Projects	Oil and gas activities*	!	!
	Mining*	!	!
	Dumping*	!	!
	Other industrial projects	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.

✓ Activity has not been identified as a concern.

! Activity has been identified as a concern.

X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
320	Alty Conservancy (marine) is contained within the boundaries of this zone.
321	K'waal Conservancy (marine) is contained within the boundaries of this zone.

Supplemental Information

None identified for these zones

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	320-321	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or the management plan.

Kitkatla Inlet Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

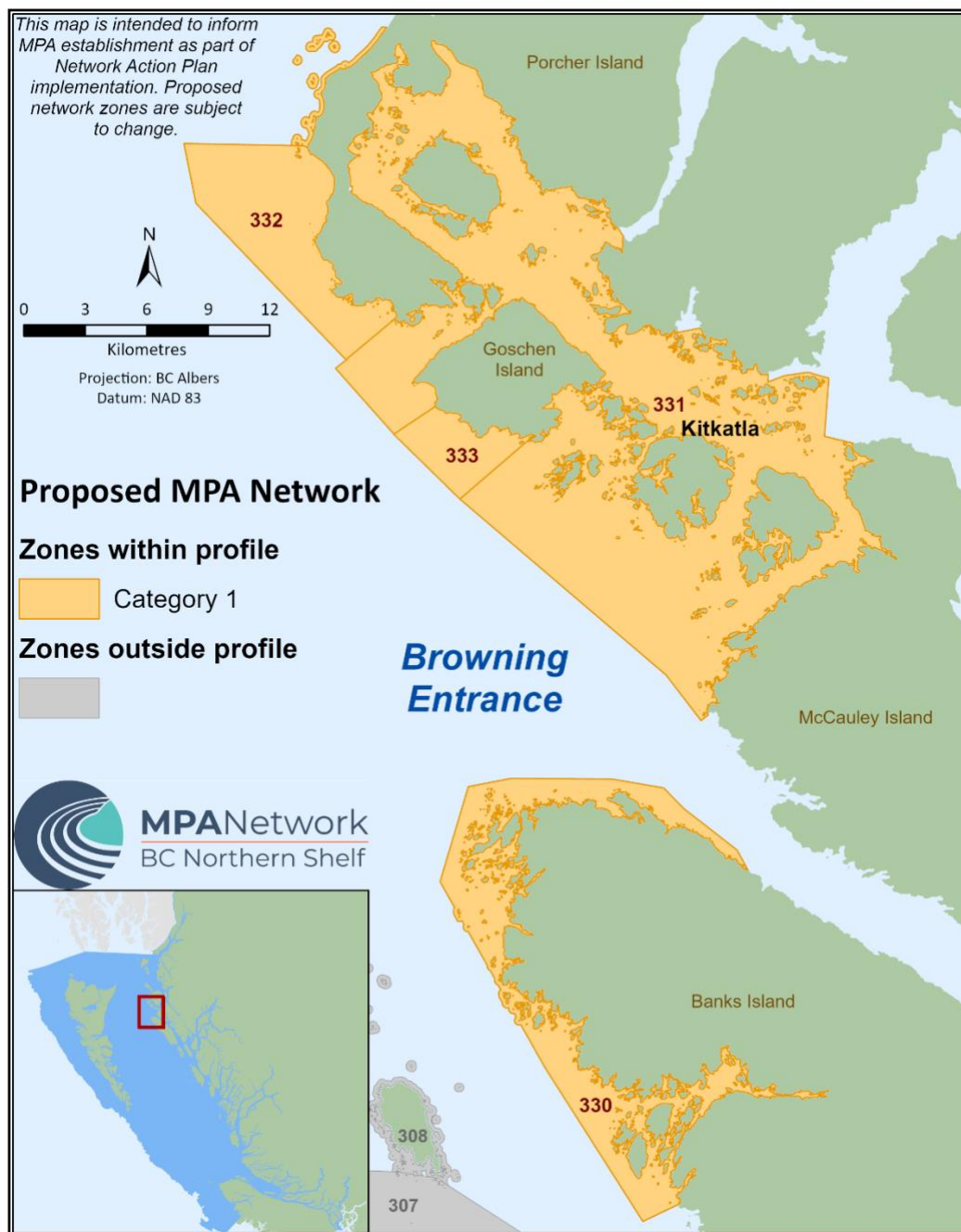
Category: 1

Potential designation tool(s): Oceans Act MPA

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 440.4 km²

Zones included in this profile: 330-333.



Map 5. Kitkatla Inlet Profile

Context

The zones in this profile stretch from the top of MacAuley Island to the western coast of the Porcher Peninsula, including Kitkatla Inlet, and the islands and marine areas surrounding the village of the Lach Klan (Kitkatla) on Dolphin Island. It also includes the northwest coast of Banks Island. The area includes a variety of habitats and both exposed and sheltered shorelines, which are important to Northern abalone, herring, Pacific sand lance, and salmon. The northern and western marine coastline of Banks Island promotes extensive canopy-forming giant kelp and bull kelp stands, and

provides important habitat for a diversity of marine fish and invertebrates. This area is of critical importance to the Gitxaala Nation. Because of the cultural importance of a broad suite of species, overall biodiversity in the area and the interest in dynamically and sustainably managing species in these zones, the cultural conservation objectives identify multiple species within these zones that are of importance to the Gitxaala Nation. The ecological conservation objectives focus on those habitats and habitat features to be protected in the potential MPA.

Gitxaala Nii Luutiksm/Kitkatla Conservancy provides safe boat anchorages for boaters travelling along the North Coast, and good opportunities for recreation activities and wildlife viewing. The many inlets can be sheltered and calm, with landing beaches available. With the ecological diversity present in this area comes opportunities for several fisheries. Salmon, herring spawn, groundfish (halibut, rockfish, lingcod) and shellfish (sea cucumber, geoduck, crab, shrimp, and red sea urchin) can be found throughout the area and contribute towards Gitxaala, commercial, and recreational fisheries.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
330	1.3	Conserve areas of high biological diversity including species assemblages associated with the Bull and Giant kelp biobands, and nearshore habitat richness, including: Pacific herring spawn habitat.
330	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Northern abalone.
Zone	Network Objective	Cultural Conservation Objective
330	5.2	Represent marine areas of high cultural or historic value, including: cultural sites.
330	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, salmon (all species), Pacific herring, Pacific halibut, rockfish (multiple species), and invertebrates (King crab, chitons, urchins, Sea Cucumbers, Littleneck Clams, Butter Clams and Cockles, Northern abalone).

Zone	Network Objective	Ecological Conservation Objective
331	1.3	Conserve areas of high biological diversity including species assemblages associated with: Pacific herring spawn habitat, Pacific sand lance habitat, estuaries important for salmon (all species), Chatham Sound EBSA, nearshore habitat richness, areas of high rugosity, eelgrass, and Bull and Giant kelp forests and biobands, and sand and gravel beaches.
331	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Northern abalone.

Zone	Network Objective	Cultural Conservation Objective
331	5.2	Represent marine areas of high cultural or historic value, including: cultural sites.
331	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, salmon (all species), pacific herring spawn, groundfish (Pacific halibut, Lingcod), rockfish (multiple species), invertebrates (Giant pacific octopus, Chitons, Gumboots chitons, Green urchins, Red urchins, Purple urchins, Sea cucumbers, Clams, Cockles and Mussels, Dungeness crab, Northern Abalone), Steller sea lion, Harbour seal, and marine birds (Sea ducks- foraging/winter density, geese - winter density).

Zone	Network Objective	Ecological Conservation Objective
332	1.3	Conserve areas of high biological diversity including species assemblages associated with Bull kelp and Giant kelp biobands and the Chatham Sound EBSA, including: rockfish (multiple species).
332	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (all species) and Northern abalone.

Zone	Network Objective	Cultural Conservation Objective
332	5.2	Represent marine areas of high cultural or historic value, including: cultural sites.
332	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (all species), seaweed, groundfish (Pacific halibut, Lingcod), rockfish (multiple species), invertebrates (Northern abalone, Giant pacific octopus, Dungeness crab, Gumboots chitons, Red urchins, green urchins, purple urchins, Sea cucumbers, Clams, Cockles and Mussels), Steller sea lions, and Harbour seal.

Zone	Network Objective	Ecological Conservation Objective
333	1.3	Conserve areas of high biological diversity including species assemblages associated with Bull kelp beds, Pacific sand lance habitat, and the Chatham Sound EBSA, including: Rockfish (multiple species).
333	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (multiple species) and Northern abalone.

Zone	Network Objective	Cultural Conservation Objective
333	5.2	Represent marine areas of high cultural or historic value, including: cultural sites.
333	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: seaweed, salmon (all species), groundfish (Pacific halibut, Lingcod), rockfish (multiple species), invertebrates (Giant pacific octopus, Dungeness crab, Chitons, Gumboot chitons, Green urchins, Red urchins, Purple urchins, Sea cucumbers, Clams, Cockles and Mussels, Northern Abalone), Steller sea lions, and Harbour seal haulouts and associated foraging habitat.

Preliminary Activity Assessment Table

Profile Name:		Kitkatla			
Zone Number		330	331	332	333
Overlap with existing MPA/RCA		Yes	Yes	Yes	Yes
Aquaculture	Finfish – open net pens	X	X	X	X
	Shellfish - beach seeding	!³	!³	!³	!³
	Shellfish - off bottom	!³	!³	!³	!³
	Marine plants	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	✓	✓	X	X
	Bottom trawling*	n/a	n/a	n/a	n/a
	Shrimp trawling*	n/a	n/a	n/a	n/a
	Dive with pressure hose	✓	✓	✓	✓
	Invertebrate trap	✓	!	!	!
	Sablefish trap	✓	✓	X	X
	Intertidal hand picking/digging	✓	!	✓	✓
	Gill nets	!	!	✓	✓
	Pelagic and mid-water trawl	✓	✓	!	!
	Purse seine	!	!	✓	✓
	Trolling - salmon	✓	✓	X	X
	Trolling - tuna	✓	✓	X	X
	Scuba dive fishing	✓	✓	✓	✓
Recreational Harvest	Demersal hook and line (jigging)	✓	✓	X	X
	Invertebrate trap	✓	!	!	!
	Intertidal hand picking/digging	✓	✓	✓	✓
	Trolling - rod and reel	✓	✓	X	X
	Scuba dive fishing	✓	✓	✓	✓
Forestry	Log Storage and Handling	!³	!	!³	!³
Industrial Projects	Oil and gas activities*	P	P	P	P
	Mining*	P	P	P	P

	Dumping*	P	P	P	P
	Other industrial projects	!	!	!	!

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal <i>Oceans Act</i> Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or <i>National Marine Conservation Act</i> Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions. <i>Note: Bottom trawling and shrimp trawling have utilized 'n/a' to denote:</i> • <i>bottom trawl</i> = zones outside the frozen footprint • <i>shrimp trawl</i> = zones outside recent activity footprint (2007-2016) and outside priority areas identified through CFC shrimp trawl survey (May 2021).
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
330	Banks Nii Luutiksm Conservancy (marine) is contained within the boundaries of this zone.
331	Gitxaala Nii Luutiksm/Kitkatla Conservancy (marine) overlaps a portion of this zone.
332	Gitxaala Nii Luutiksm/Kitkatla Conservancy (marine) overlaps a portion of this zone. Porcher Peninsula RCA overlaps this entire zone.
333	Gitxaala Nii Luutiksm/Kitkatla Conservancy (marine) overlaps a portion of this zone. Goschen RCA overlaps this entire zone.

Supplemental Information

!3 : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	331	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or management plan development.

Kiltuish Butedale Profile

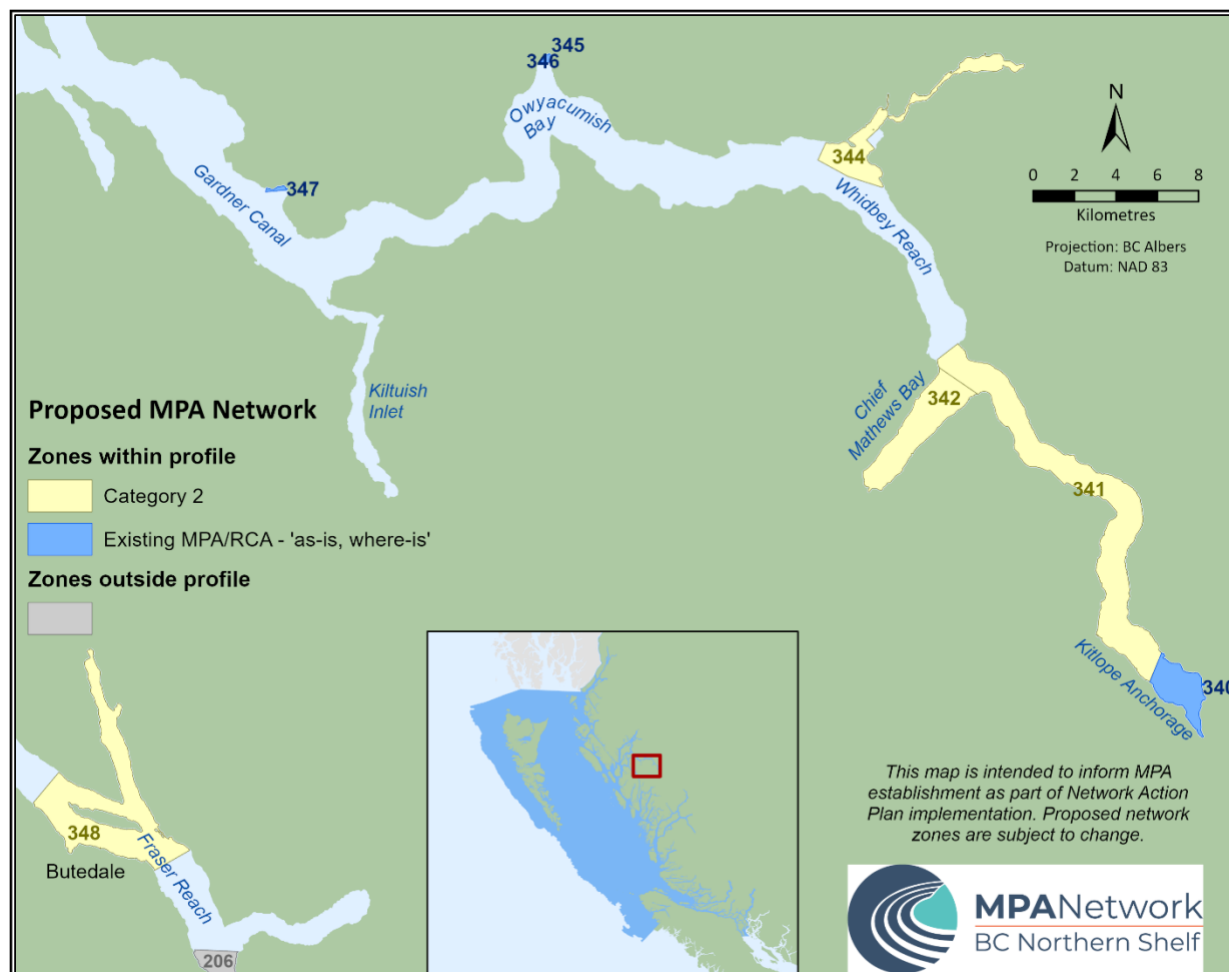
The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

Category: 2

Size (Category 1 and 2 only): 65.1 km²

Zones included in this profile: 341, 342, 344, 348



Map 6. Kiltuish and Butedale Profile. * Note: "Existing MPA/RCA - 'as-is, where-is'" are included on map for reference but are not considered part of the profile when considering potential designation tool(s).

This profile includes a number of small bays and heads of inlets containing estuaries and habitat of high rugosity, which supports a diverse range of marine species, including salmon, eulachon, rockfish, invertebrates, and marine birds.

The area is important to local First Nations, both culturally and spiritually, and for the traditional harvest of marine resources, and includes multiple cultural and village sites.

Uses in the area include commercial and recreational fishing (prawn, sea cucumber, crab, halibut, and rockfish), recreational boating, kayaking, and wildlife viewing. There is an old cannery site in Butedale.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
341	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries and habitat of high rugosity, including salmon (all species), rockfish (multiple species), Pacific herring, Eulachon, and invertebrates (spot prawn, Humpback and Coonstripe shrimp).
341	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: rockfish (multiple species), salmon (all species), Pacific herring and Eulachon.
341	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon (all species), Pacific herring and Eulachon.
Zone	Network Objective	Cultural Conservation Objective
341	5.2	Represent marine areas of high cultural or historic value, including cultural sites.
341	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (all species), rockfish (multiple species), Pacific herring, Eulachon, and invertebrates (spot prawn, Humpback and Coonstripe shrimp).

Zone	Network Objective	Ecological Conservation Objective
342	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including: salmon (Chinook, Pink odd and even, Chum, Coho), rockfish (multiple species), Pacific herring, Eulachon, and invertebrates (spot prawn, Humpback and Coonstripe shrimp).
342	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: Salmon (Chinook, Pink odd and even, Chum, Coho), rockfish (multiple species), Pacific herring and Eulachon.

342	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: Salmon (Chinook, Pink odd and even, Chum, Coho), Pacific herring and Eulachon.
Zone	Network Objective	Cultural Conservation Objective
342	5.2	Represent marine areas of high cultural or historic value, including cultural and village sites.
342	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Salmon (Chinook, Pink odd and even, Chum, Coho), rockfish (multiple species), Pacific herring and Eulachon.

Zone	Network Objective	Ecological Conservation Objective
344	1.3	Conserve areas of high biological diversity including species assemblages associated with estuaries, including salmon (all species), rockfish (multiple species), Pacific herring, Eulachon, and invertebrates (spot prawn, Humpback shrimp).
344	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including: rockfish (multiple species), salmon (all species), Pacific herring and Eulachon.
344	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including salmon (all species), Pacific herring and Eulachon.
Zone	Network Objective	Cultural Conservation Objective
344	5.2	Represent marine areas of high cultural or historic value, including cultural and village sites.
344	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: Salmon (all species), rockfish (multiple species), Pacific herring, Eulachon, and invertebrates (spot prawn, Humpback shrimp).

Zone	Network Objective	Ecological Conservation Objective
348	1.3	Conserve areas of high biological diversity including species assemblages associated with eelgrass and estuaries, including salmon (diversity hotspot for all species), rockfish (Yelloweye), invertebrates (spot prawn, sea cucumber), and marine birds (goose/swan, Marbled murrelet).
348	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats including rockfish (Yelloweye) and salmon (all species).

348	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: salmon (all species), and marine birds (goose/swan, Marbled murrelet).
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Zone	Network Objective	Cultural Conservation Objective
348	5.2	Represent marine areas of high cultural or historic value, including cultural and village sites.
348	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security: salmon (all species), rockfish (Yelloweye), and invertebrates (spot prawn and sea cucumber).

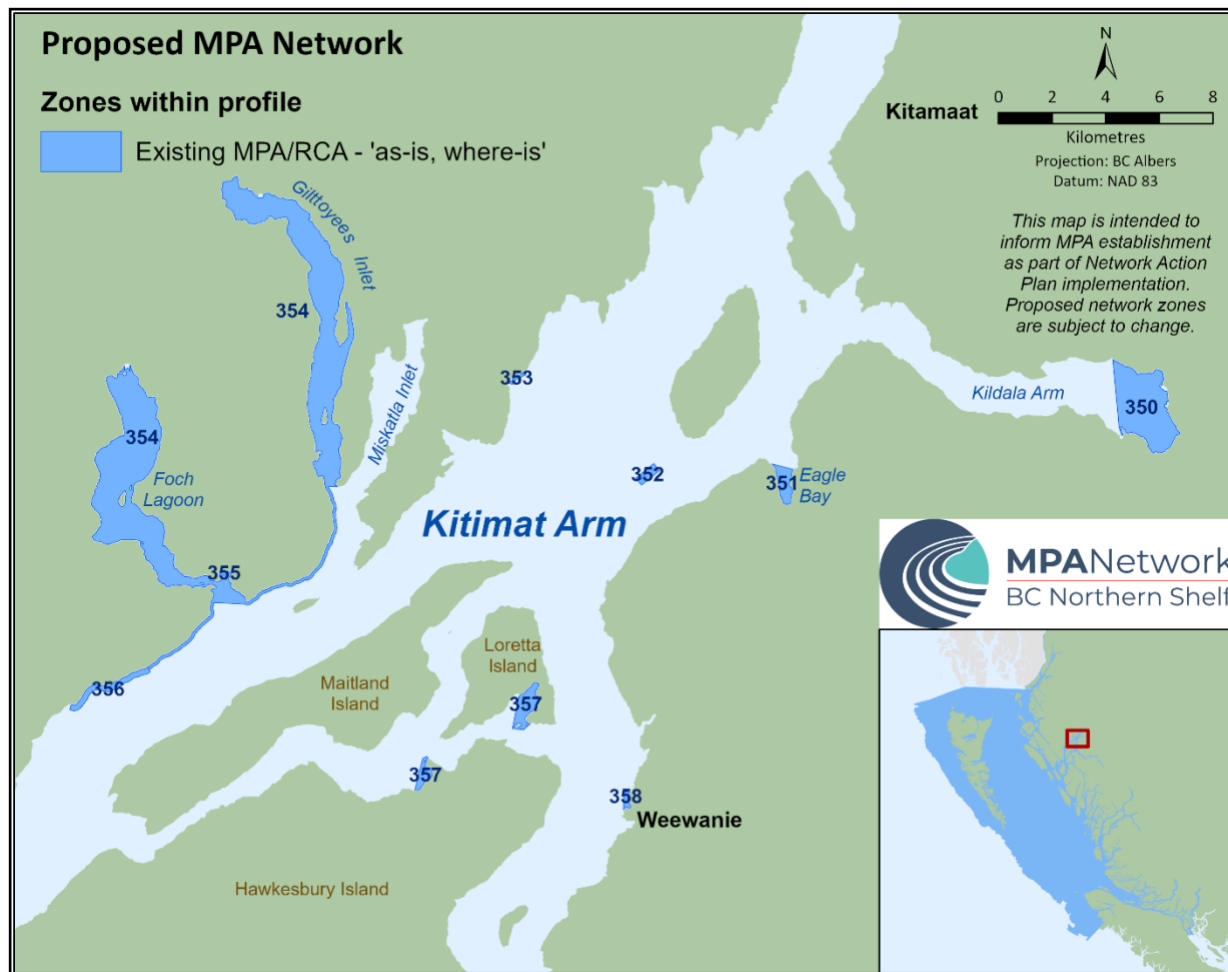
Douglas Channel Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

Category: Existing MPAs (as is, where is)

Zones included in this profile: 350-358



Map 7. Douglas Channel Group

Context

This profile is composed of multiple existing sites, including two fjords off the northeast side of Douglas Channel (Foch Lagoon and the Giltoyees/Miskatla complex), plus the shoreline area between the mouth of the fjords and adjacent to them. These zones support a diverse range of marine species including salmon, prawns, and crab. Fjord heads are characterized by deltaic/estuarine areas providing complex habitats for salmon, seabirds, various intertidal invertebrates, and foraging for bears.

The area is highly important to local First Nations, both culturally and spiritually, and for the traditional harvest of marine resources.

Queen Charlotte Sound – North Coast Profile

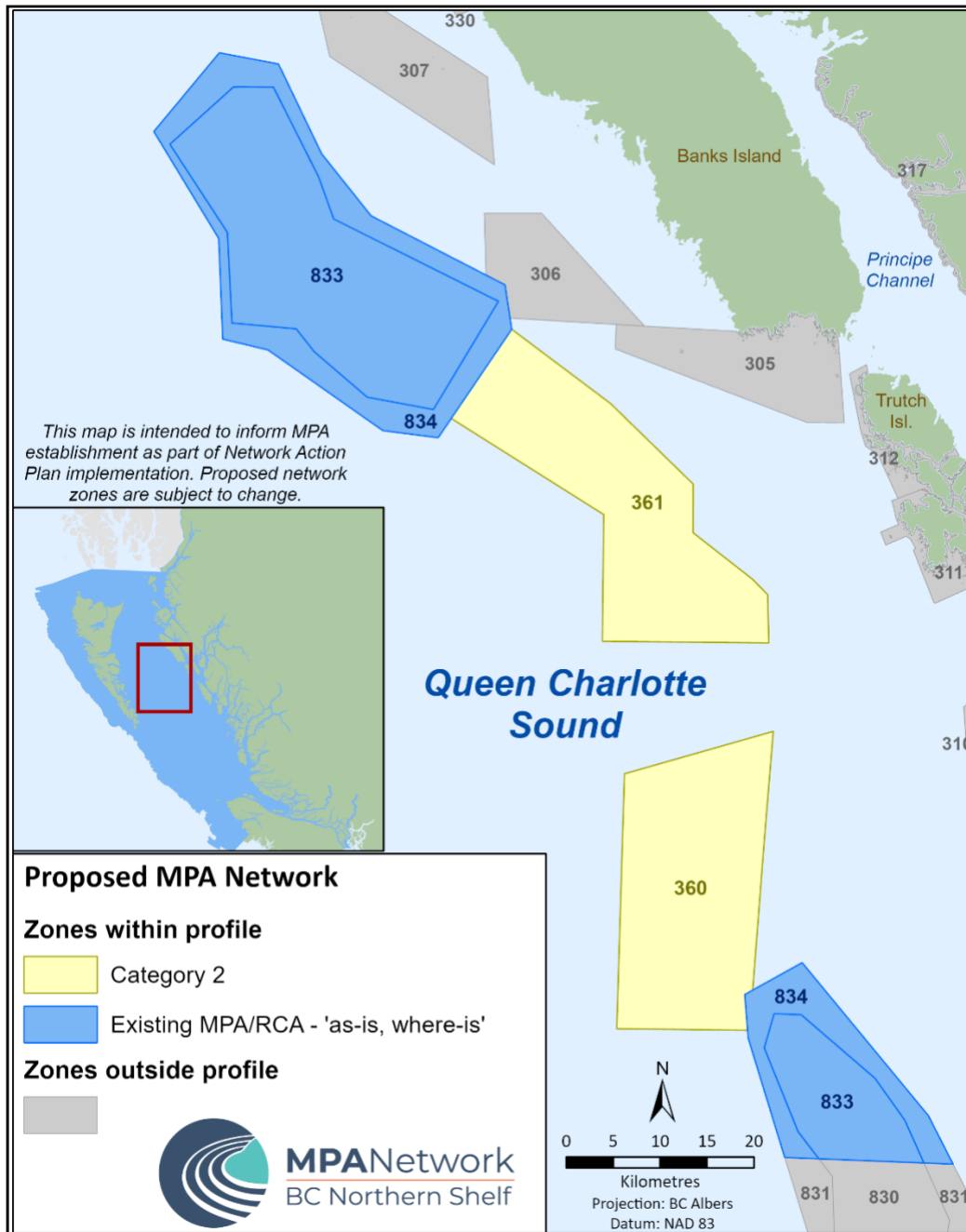
The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Coast

Category: 2

Size (Category 1 and 2 only): 880.1 km²

Zones included in this profile: 360-361



Map 8. Queen Charlotte Sound – North Coast Profile * Note: "Existing MPA/RCA - 'as-is, where-is'" are included on map for reference but are not considered part of the profile when considering potential designation tool(s).

Context

These zones are located between the northern and central portions of the Hecate Strait / Queen Charlotte Sound Glass Sponge Reefs MPA. The zones capture portions of areas identified as having a high diversity of both fish and invertebrate species.

This area has cultural and spiritual value for First Nations, is used for the traditional harvest of marine resources, and supports multiple culturally significant species.

These offshore areas see activity from a number of commercial fisheries. Commercial fisheries occurring within the zones identified include those targeting halibut, rockfish, sablefish, and species caught by trawl (bottom and/or mid-water).

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
360	1.3	Conserve areas of high biological diversity including fish and invertebrate diversity hotspots, as well as associated species assemblages including various rockfish (e.g., Shortspine Thornyhead, Rougheye/Blackspotted, Yellowmouth, Darkblotched), groundfish (e.g., Dover sole, Pacific ocean perch, Rex sole), skates e.g. (Sandpaper, Longnose), marine mammals (Grey and Fin whales), and corals and sponges.
360	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: various rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Yellowmouth, Darkblotched, Bocaccio), and marine mammals (Fin and Grey whales).
361	1.3	Conserve areas of high biological diversity including the Central Mainland and Glass Sponge Reef EBSAs, and fish and invertebrate diversity hotspots, as well as associated species assemblages including various rockfish (e.g. Shortraker, Shortspine Thornyhead, Rougheye/Blackspotted, Yellowmouth), groundfish (e.g. Dover sole, Pacific ocean perch, Arrowtooth flounder), skates e.g. (Sandpaper, Longnose), forage fish (e.g. eulachon – summer), marine mammals (Grey and Fin whales), and corals and sponges.
361	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including: various rockfish (Shortspine Thornyhead, Rougheye/Blackspotted, Yellowmouth, Bocaccio), and marine mammals (Fin and Grey whales).

Northern North Coast Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

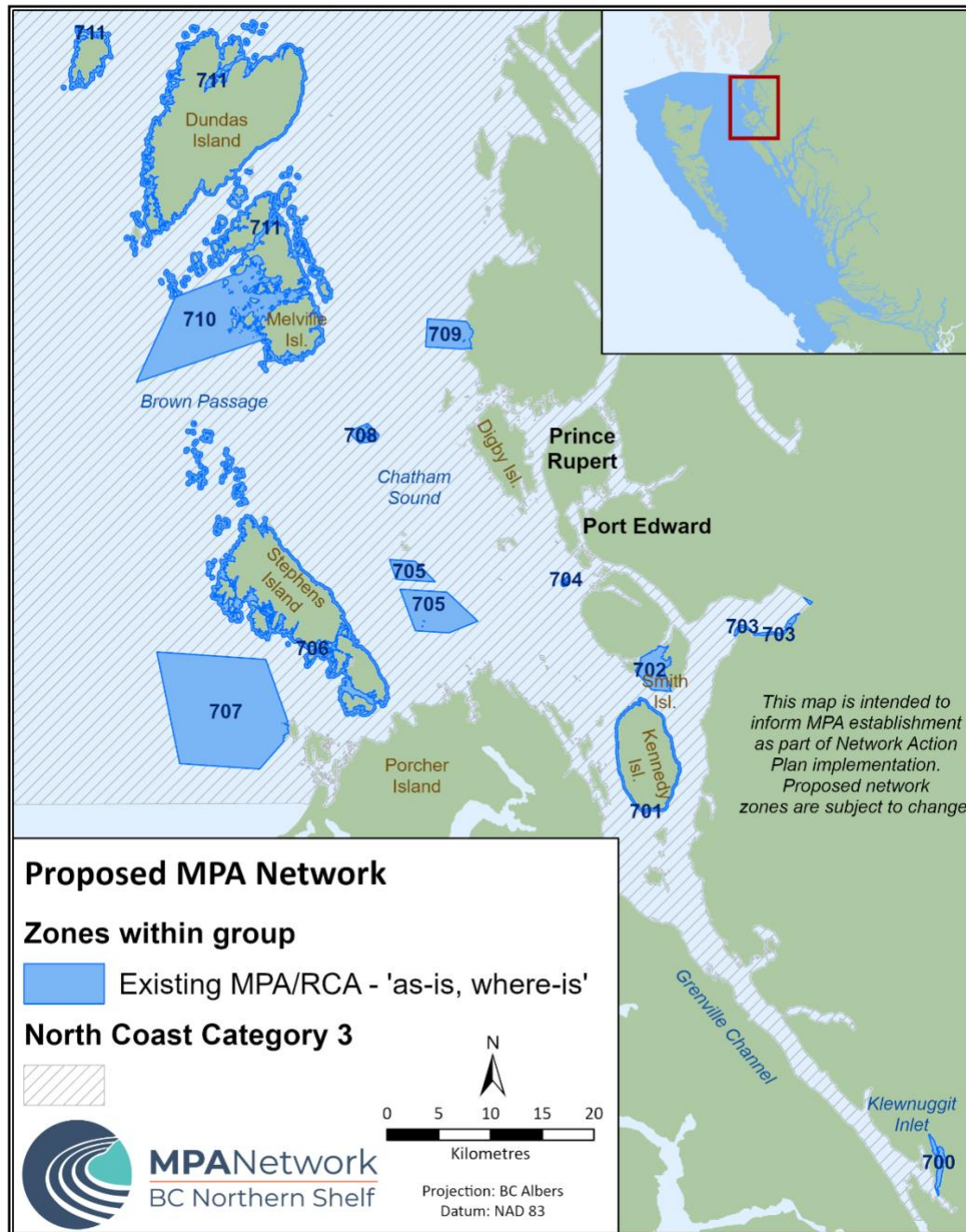
Sub-region: North Coast

Category: 3*

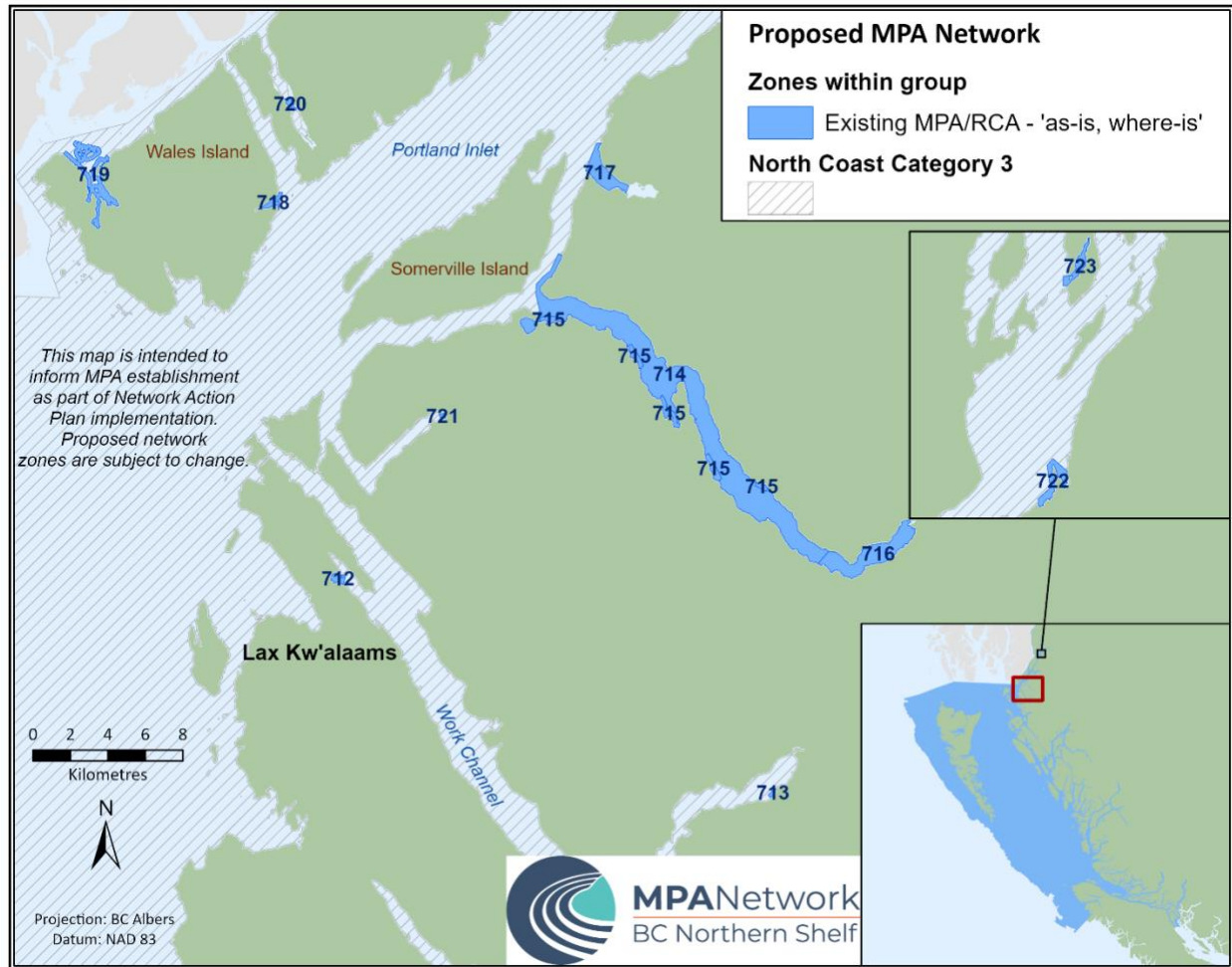
*This area is important ecologically and culturally and may contribute to the Network objectives but further work is required to reach agreement among governing partners regarding how it will be described and implemented (see Chapter 3, s. 3.2.2).

Existing sites included in this profile: TBD*

*Existing MPA/RCA – ‘as-is, where-is’ zones are existing MPA designations and Rockfish Conservation Areas that contribute to the Network but have *no proposed changes* to either boundaries or associated management measures at this time. The protections provided by these existing designations may be limited due to jurisdiction and the applicable regulations in which they were established (outside the MPA Network planning process). Therefore, further assessment is required with Governance Partners to determine what refinements may be needed to boundaries or management measures to improve their contribution to the Network objectives.



Map 9. Northern North Coast – Southern Group



Map 10. Northern North Coast – Northern Group

Context

Ecological context

This large area extends from Caamano Passage in the West to Alice Arm in Portland Inlet in the East, and parts of Grenville Channel in the South. It encompasses ecologically diverse and unique habitats, including but not limited to the Skeena Estuary (B.C.'s second largest river/estuary system), large eelgrass beds providing critical nursing areas for salmonids, kelp forests, ecologically and biologically significant areas (e.g., Chatham Sound), glass sponge reefs, important bird areas, high rugosity areas and sandy bottom habitat, and deep fjords, harboring lagoons, salmon bearing streams, intertidal areas, small bays, and important anchorages. In addition, this area supports a diversity of species that are ecologically important, including all five Pacific salmon species, Pacific herring, eulachon, groundfish and rockfish, benthic and intertidal invertebrates, marine birds, and a multitude of marine mammals, including harbour porpoises, Pacific white-sided dolphins, northern resident killer whales and humpback whales, and Steller sea Lion haulouts.

Since this is a large area in the North Cost sub-region it is important to note that, while we have highlighted some important ecological contributions, there are many additional ecological features in the area.

First Nations Cultural context

The area is highly important to local First Nations, both culturally and spiritually (e.g., oral sites, story sites, and historical sites) and has high value for the traditional harvest of marine resources, including eulachon, groundfish (e.g., halibut and rockfish), invertebrates (e.g., urchins, clams and crab), marine mammals (e.g., seals and sea lions), water-fowl, herring, seaweeds, and salmon.*

*Species lists for harvest areas are focused on only the primary species for the areas and are not to be understood as being comprehensive.

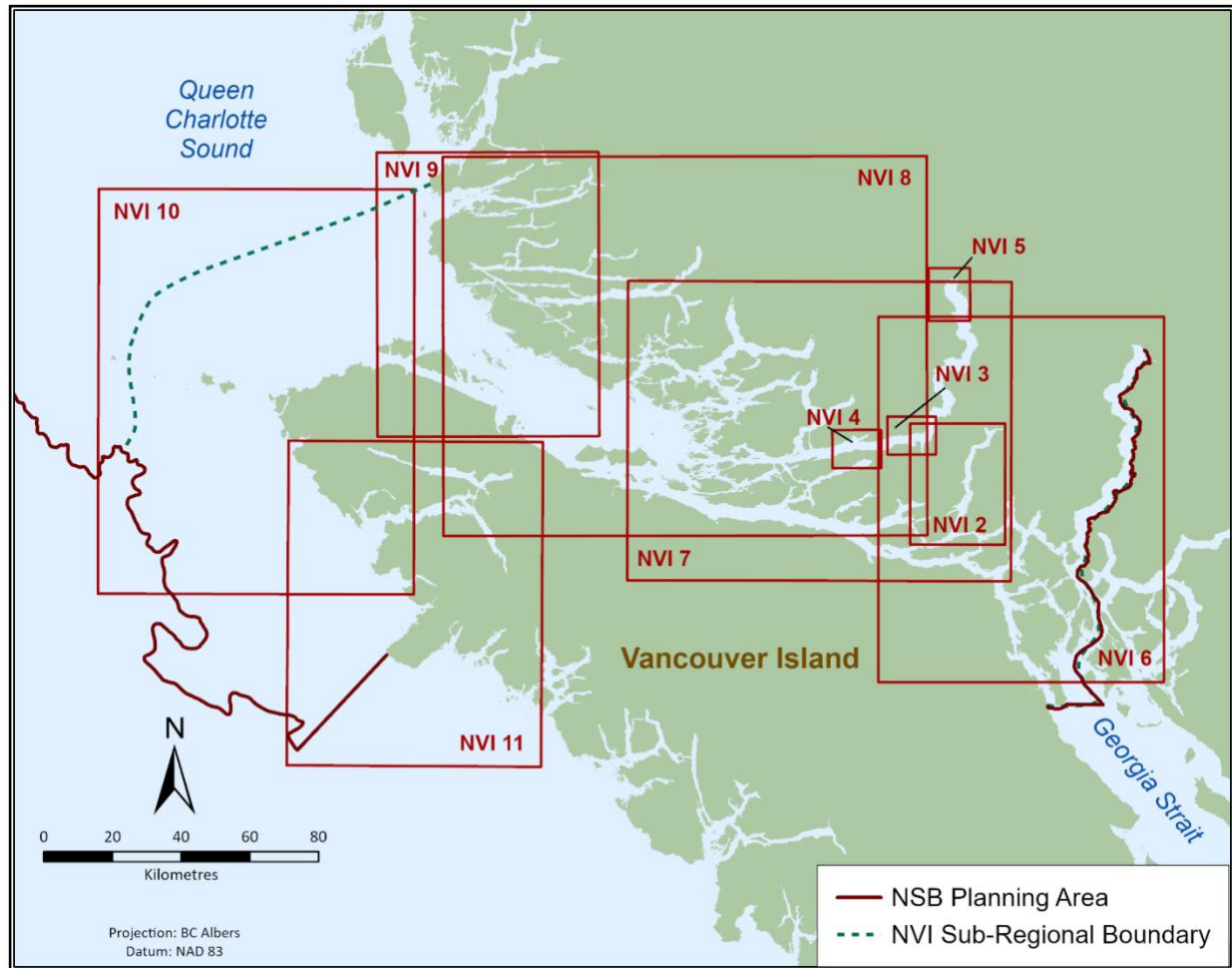
Human use context

Given the large extent of the area, there are many current uses. These include industrial activities, tourism and recreation, Port of Prince Rupert operations and development, shipping, log handling, shellfish aquaculture, marine aquatic plant harvest, and recreational and commercial fisheries (such as salmon, herring, halibut, crab, prawn, shrimp, urchin, and sea cucumber).

NORTH VANCOUVER ISLAND

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Map 1. Index map of NVI groups

Heydon and Loughborough Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Both Wei Wai Kum and We Wai Kai First Nations have interests in the Heydon and Loughborough inlet site. The nations are contemplating an agreement to advance discussions about site governance, monitoring, and management collaboratively. We Wai Kai First Nation is not currently a partner in the planning process but has expressed interest in participating in the site designation and management process for this area.

Sub-region: North Vancouver Island

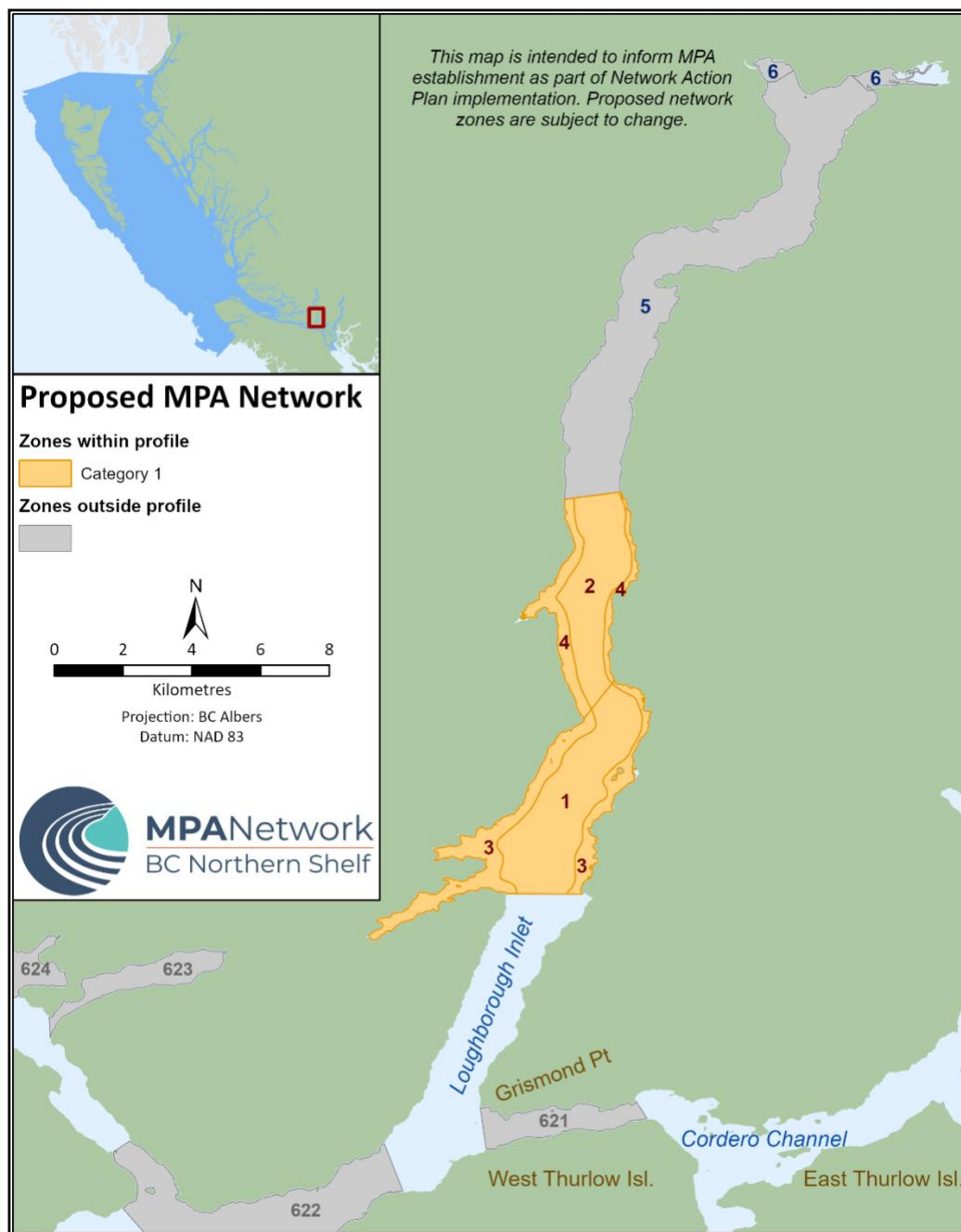
Category: 1

Potential designation tool(s): *Fisheries Act* tool to enable “marine refuge” status (potentially a Variation Order and/or Condition of Licence) + *Land Act* Section 17 withdrawal, with potential for a longer-term provincial tool, such as a Wildlife Management Area, for enhancing protection.

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 28.2 km²

Zones included in this profile: 1 - 4



Map 2. Heydon and Loughborough Profile

Context

This site is comprised of a variety of habitats supporting a wide range of biologically diverse species. Rock cliffs and ramps, sandy and rocky bottom, sand and gravel flats and beaches, mainland fjord with steep fjord walls, high rugosity, eelgrass beds, kelp forests, and estuaries support species such as marine birds, five species of salmon, rockfish (including copper and quillback), and a variety of invertebrates, such as clams, Dungeness crab, urchin, sponges and healthy sunflower sea stars. The

estuaries and associated species also offer critical habitat for sustaining healthy grizzly bear populations.

The site is of high cultural and spiritual importance to the Wei Wai Kum, and other local First Nations. The area is home to over thirty documented archaeological sites, including ancient village sites. It continues to be used for traditional food harvest and cultural practices with the Nation focusing on restoration of species and habitats.

The site is zoned as a Special Management Zone (SMZ) – Cultural/Economic emphasis – in the NVI sub-region MaPP plan and is intended to reinforce high value for cultural value protection, food security, and related aboriginal economic development activities. There has been considerable effort in the area by the Wei Wai Kum, with DFO and A'Tlegay on fish inventory work in Heydon Creek and clam garden restoration. Portions of the proposed area overlap with commercial fishing activity including for prawn, sea cucumber, and rockfish. Several log handling sites exist within the site and support forest company interests in the adjacent watersheds.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
1	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including: shrimp: coonstripe/dock shrimp, humpback, spot prawn, and salmon.
1	1.3	Conserve areas of high biological diversity including species associated with Seafloor of high rugosity including salmon, rockfish, lingcod, shrimp, and prawn.
1	1.5	Contribute to protection of rare, unique threatened, and/or endangered species and their habitats: copper and quillback rockfish, and lingcod.
1	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: steep fjord wall, mainland fjord, fjord crest, and fjord depression floor.
1	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including fjord ecosystems, rockfish habitat, and salmon.
Zone	Network Objective	Cultural Conservation Objective
1	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area, area known for fishing and used for teaching traditional practices.
1	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, invertebrates (shrimp, prawn), very high habitat complexity, very high diversity of rockfish species and lingcod.

Zone	Network Objective	Ecological Conservation Objective
2	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including: shrimp: coonstripe/dock shrimp, humpback, and spot prawn.
2	1.3	Conserve areas of high biological diversity including species associated with Seafloor of high rugosity including salmon, rockfish, lingcod, shrimp and prawn.
2	1.5	Contribute to protection of rare, unique threatened, and/or endangered species and their habitats: copper and quillback rockfish, and lingcod.
2	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: steep fjord wall, mainland fjord, fjord crest, and fjord depression floor.
2	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including fjord ecosystems, rockfish habitat, and salmon.
Zone	Network Objective	Cultural Conservation Objective
2	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area, area known for fishing and used for teaching traditional practices.
2	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon, invertebrates (shrimp, prawn), very high habitat complexity, very high diversity of rockfish species and lingcod.

Zone	Network Objective	Ecological Conservation Objective
3	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including: salmon (sockeye, chum, pink, coho and chinook), invertebrates (bivalves: cockles, littlenecks, butters, horse; Dungeness crab; giant pacific octopus, red and green sea urchin), and seabirds (cormorant, double-crested cormorant, sea duck, loon/grebe, marbled murrelet).
3	1.3	Conserve areas of high biological diversity including estuaries, eelgrass beds and rockfish habitat.
3	1.5	Contribute to protection of rare, unique threatened, and/or endangered species and their habitats: copper and quillback rockfish, lingcod, sponges (cloud and sharp lipped boot), sunflower sea stars, orange sea pens, clams, cockles, giant Pacific octopus, red and green sea urchin, eelgrass, and marbled murrelets.
3	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: mud flat, gravel beach, rock cliff, rock ramp, sand and gravel flat or fan; estuary; and steep fjord wall.
3	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: estuaries, rockfish habitat, salmon, salmon spawning areas, marbled murrelet, eelgrass beds and harbour seal haulouts.

Zone	Network Objective	Cultural Conservation Objective
3	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area, multitude of cultural features and sites present, area known for harvesting and settlements, and used for teaching traditional practices.
3	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon (all), invertebrates (Dungeness crab, clams, cockles), estuaries and associated keystone species, eelgrass beds, grizzly bear habitat and food sources, very high habitat complexity, very high diversity of rockfish species and lingcod.

Zone	Network Objective	Ecological Conservation Objective
4	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments including: salmon (sockeye, chum, pink, coho and chinook), invertebrates (bivalves: cockles, littlenecks, butters, horse; Dungeness crab; giant pacific octopus, red and green sea urchin), and seabirds (cormorant, double-crested cormorant, sea duck, loon/grebe, marbled murrelet).
4	1.3	Conserve areas of high biological diversity including estuaries, eelgrass beds and rockfish habitat.
4	1.5	Contribute to protection of rare, unique threatened, and/or endangered species and their habitats: copper and quillback rockfish, lingcod, sponges (cloud and sharp lipped boot), sunflower sea stars, orange sea pens, clams, cockles, giant Pacific octopus, red and green sea urchin, eelgrass, and marbled murrelets.
4	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: mud flat, gravel beach, rock cliff, rock ramp, sand and gravel flat or fan; estuary; and steep fjord wall.
4	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including: estuaries, rockfish habitat, salmon, salmon spawning areas, marbled murrelet, eelgrass beds and harbour seal haulouts.
Zone	Network Objective	Cultural Conservation Objective
4	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area, multitude of cultural features and sites present, area known for harvesting and settlements, and used for teaching traditional practices
4	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: salmon (all), invertebrates (Dungeness crab, clams, cockles), estuaries and associated keystone species, eelgrass beds, grizzly bear habitat and food sources, very high habitat complexity, very high diversity of rockfish species and lingcod.

Human Wellbeing Objectives for all zones³

3.1 Conserve sites compatible with, and of high value for sustainable tourism and recreation through sustainable ecotourism opportunities and sustainable cultural tourism opportunities.

6.2 Protect reference sites to support management and scientific research on a number of species and habitats.

Preliminary Activity Assessment Table

	Profile Name:	Heydon - Loughborough			
	Zone Number	1	2	3	4
	Overlap with existing MPA/RCA	no	yes	no	yes
Aquaculture	Finfish – open-net pens	!	!	!	!
	Shellfish - beach seeding	n/a	n/a	!	!
	Shellfish - off bottom	!	!	!	!
	Marine plants	!	!	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	X	!	X
	Bottom trawling*	!	!	!	!
	Shrimp trawling*	!	!	!	!
	Dive with pressure hose	!	!	!	!
	Invertebrate trap	!	!	!	!
	Sablefish trap	!	X	!	X
	Intertidal hand picking/digging	n/a	n/a	!	!
	Gill nets	!	!	!	!
	Pelagic and mid-water trawl	!	!	!	!
	Purse seine	!	!	!	!
	Trolling - salmon	!	X	!	X
	Trolling - tuna	!	X	!	X
	Scuba dive fishing	n/a	n/a	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	X	!	X
	Invertebrate trap	!	!	!	!
	Intertidal hand picking/digging	n/a	n/a	!	!
	Trolling - rod and reel	!	X	!	X
	Scuba dive fishing	n/a	n/a	!	!
Forestry	Log Storage and Handling	✓	✓	!	!
Industrial Projects	Oil and gas activities*	! ¹²	! ¹²	! ¹²	! ¹²
	Mining*	! ¹²	! ¹²	! ¹²	! ¹²
	Dumping*	! ¹²	! ¹²	! ¹²	! ¹²
	Other industrial projects	! ¹²	! ¹²	! ¹²	! ¹²

³ For Category 1 sites, NVI identified Human wellbeing objectives to acknowledge the contribution these sites can make to the achievement of human wellbeing objectives.

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal Oceans Act Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or National Marine Conservation Act Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Overlap with existing MPA/RCA

Zone	Description of overlap
2	Loughborough Inlet RCA overlaps this entire zone.
4	Loughborough Inlet RCA overlaps this entire zone.

Supplemental Information

!¹² : Proposals for industrial projects and development projects should be avoided in MPAs. If such projects, including infrastructure projects, are proposed, specific activities will be vetted against the stated conservation objectives for the protected area and direction provided in a jointly approved detailed MPA management plan.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	3, 4	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or in a jointly approved detailed MPA management plan.
Boating & shore use / intertidal exploration	3, 4	There are potential interactions between estuary habitat and all boating activities (including tourism and public recreation) and shore access. Anchoring and shore access guidelines and/or restrictions may be identified during regulation and/or in a jointly approved detailed MPA management plan.
Boating & shore use / intertidal exploration	3, 4	There are potential interactions between pinniped associated with haulouts and rookeries and all boating activities (including tourism and public recreation) and shore access. Boating and/or shore access may be restricted around pinniped haulouts and rookeries in regulations and/or in a jointly approved detailed MPA management plan.

GWAXDLALA/NALAXDLALA (LULL/HOEYA) Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Vancouver Island

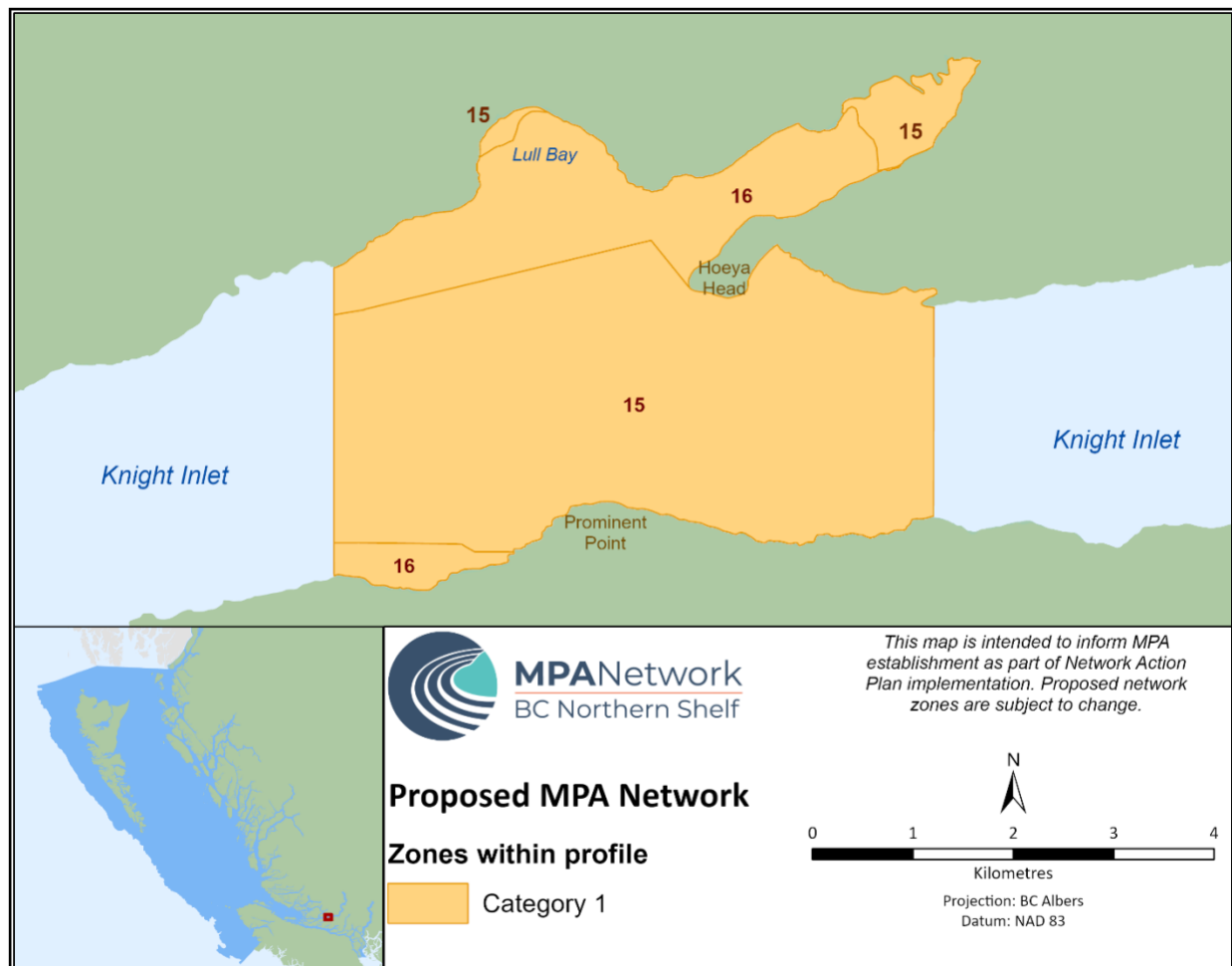
Category: 1

Potential designation tool(s): Fisheries Act tool to enable “marine refuge” status (potentially a Variation Order and/or Condition of Licence) + Land Act Section 17 withdrawal, with potential for a longer-term provincial tool, such as a Wildlife Management Area, for enhancing protection.

Note: Tools will be subject to further analysis for feasibility and appropriateness during the establishment phase.

Size (Category 1 and 2 only): 21.2 km²

Zones included in this profile: 15, 16



Map 3. GWAXDLALA/NALAXDLALA (LULL/HOEYA) Profile

Context

This highly diverse and unique site contains a wide range of habitats, including a shallow sill ecosystem, two estuaries, eelgrass beds, kelp forests, gravel and sand beaches, rock cliffs and steep fjord walls. The area has high biological diversity as seen in the variety of marine birds, salmon species, and rockfish, while the shallow sill ecosystem is home to rare coral and sponges, including gorgonian corals, basket stars, glass boot sponges, soft goblet sponge, cloud sponge, and brain sponge, gunpowder star, cookie star, and healthy sunflower sea stars. The estuaries and associated species also offer critical habitat for sustaining healthy grizzly bear populations.

The site is of high cultural and spiritual importance to the Mamalilikulla First Nation and is known as the Nation's homeland and place of origin. The area is also known for its rich marine resources, hunting and timber activities, and hosts several ancient village sites and numerous other archaeological features. The area continues to be used for traditional food harvesting and cultural practices.

The Hoeya Sill (sponge reef) component of Zone 15 is zoned as a Protection Management Zone (PMZ) in the MaPP plan. The entire area lies within DFO Fisheries Management Area 12-27 and is wholly covered by existing groundfish-trawl and tuna closures. Several log handling sites exist within the area and continue to support upland forestry activities. The entire area appears to be utilized by the commercial salmon gillnet fishery, while areas within Zone 16 are used for recreational salmon fishing (all species), according to a 2017-18 Sports Fishing Institute/DFO Survey.

Zone Details

Proposed Conservation Objectives

Zone	Network Objective	Ecological Conservation Objective
15	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including fish (salmon: sockeye, chum, pink, coho; groundfish; rockfish), invertebrates (multiple shrimp species, Dungeness crab, giant pacific octopus, corals/sponges, sea stars); and sea birds (loon/grebe, marbled murrelet, goose/swan).
15	1.3	Conserve areas of high biological diversity (species, habitats, and genetic diversity) including bull and giant kelp forests, high current EBSA; estuaries; shallow sill ecosystems of rare coral and sponges including gorgonian corals, basket stars, glass boot sponges, soft goblet sponge, cloud sponge, and brain sponge; high sea star diversity like gunpowder star, cookie star, and sunflower star showing little sea star wasting disease.
15	1.5	Contribute to protection of rare, unique, threatened, and/or endangered species and their habitats, including shallow sill ecosystem; rockfish (quillback, yellowtail (including young-of-the-year), copper); glass sponges and coral; sea stars, including sunflower; marbled murrelet.
15	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: shallow sill ecosystem; estuaries; steep fjord

		walls, mainland fjord, fjord crest, fjord depression; rock cliff, sand and gravel beach, and gravel beach.
15	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including fjord ecosystems, shallow sill ecosystem, and nursery habitat for juvenile rockfish.
Zone	Network Objective	Cultural Conservation Objective
15	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area including origin story, multitude of cultural features and sites present, area known for harvesting and seasonal and permanent villages, area used for teaching traditional practices.
15	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Salmon diversity (sockeye, chum, pink, coho and chinook), halibut, invertebrates (cockles, clams, shrimp, prawn and Dungeness crab), Estuaries and associated keystone species, Grizzly bear habitat and food sources, Very high habitat complexity.

Zone	Network Objective	Ecological Conservation Objective
16	1.1	Contribute to the conservation of the diversity of species, populations, and ecological communities, and their viability in changing environments, including: fishes (salmon: sockeye, chum, pink, coho) and Dungeness crab.
16	1.3	Conserve areas of high biological diversity (species, habitats, and genetic diversity) including bull and giant kelp forests, salmon (all) and Dungeness crab.
16	1.6	Conserve ecologically significant geological features and enduring/recurring oceanographic features, such as: rock cliff, sand and gravel beach, sand and gravel beach.
16	1.7	Contribute to conservation of areas important for the life history of resident and migratory species, including sand and gravel beaches; salmon, marbled murrelets, loon/grebe, and goose/swan.
Zone	Network Objective	Cultural Conservation Objective
16	5.2	Represent marine areas of high cultural or historic value, including: important spiritual relationship to area including origin story.
16	5.3	Contribute to conservation of species significant to First Nations and coastal communities including those important for cultural use and food security, including: Salmon diversity (sockeye, chum, pink, coho and chinook) and Dungeness crab.

Human Wellbeing Objectives for all zones⁴

3.1 Conserve sites compatible with, and of high value for sustainable tourism and recreation through sustainable ecotourism opportunities and sustainable cultural tourism opportunities.

6.2 Protect reference sites to support management and scientific research on a number of species and habitats.

Preliminary Activity Assessment Table

	Profile Name:	GWAXDLALA/NALAXDLALA (LULL/HOEYA)	
	Zone Number	15	16
	Overlap with existing MPA/RCA	no	no
Aquaculture	Finfish – open-net pens	!	!
	Shellfish - beach seeding	!	!
	Shellfish - off bottom	!	!
	Marine plants	!	!
Commercial Harvest	Bottom longline/demersal h&l	!	!
	Bottom trawling*	!	!
	Shrimp trawling*	!	!
	Dive with pressure hose	!	!
	Invertebrate trap	!	!
	Sablefish trap	!	!
	Intertidal hand picking/digging	!	!
	Gill nets	!	!
	Pelagic and mid-water trawl	!	!
	Purse seine	!	!
	Trolling - salmon	!	!
	Trolling - tuna	!	!
	Scuba dive fishing	!	!
Recreational Harvest	Demersal hook and line (jigging)	!	!
	Invertebrate trap	!	!
	Intertidal hand picking/digging	!	!
	Trolling - rod and reel	!	!
	Scuba dive fishing	!	!
Forestry	Log Storage and Handling	!	!
Industrial Projects	Oil and gas activities*	! ¹²	! ¹²
	Mining*	! ¹²	! ¹²

⁴ For Category 1 sites, NVI identified Human wellbeing objectives to acknowledge the contribution these sites can make to the achievement of human wellbeing objectives.

	Dumping*	! ¹²	! ¹²
	Other industrial projects	! ¹²	! ¹²

Key

Activities have undergone preliminary assessment for potential negative consequences for one or more of the identified conservation objectives of the zone. Activity will be further assessed during the implementation stage, and if deemed appropriate restrictions and/or mitigation measures identified at that time.	
✓	Activity has not been identified as a concern.
!	Activity has been identified as a concern.
X	Activity is currently restricted. Management direction restricting this activity throughout the zone exists either via current conservation designation (e.g., BC Marine Park or Ecological Reserve, Rockfish Conservation Area) or, for finfish aquaculture, the existing provincial moratorium as per Order in Council #174.
P	Activity would be restricted under Federal MPA Protection Standards, if protections are provided using a federal Oceans Act Marine Protected Area, <i>Canada Wildlife Act</i> National Wildlife Area, or National Marine Conservation Act Area Reserve.
n/a	Not applicable. The activity could not occur in the area, has never been known to occur in the area, or has not occurred in the area for a long time (20+ years) and there is no reason to think it would occur given local conditions.
Supplemental information for some activities in certain zones is available below and denoted by superscript number in the Preliminary Activity Assessment Table above.	
First Nations Access: Indigenous rights, including practices for food, social and ceremonial purposes, will continue to be undertaken in accordance with legal obligations.	
* Activity would be restricted as per Federal MPA Protection Standards.	

Supplemental Information

!¹² : Proposals for industrial projects and development projects should be avoided in MPAs. If such projects, including infrastructure projects, are proposed, specific activities will be vetted against the stated conservation objectives for the protected area and direction provided in a jointly approved detailed MPA management plan.

Additional Considerations

Activity	Zone(s)	Considerations
Boating & shore use / intertidal exploration	15, 16	There are potential interactions between seabird breeding colonies and all boating activities (including tourism and public recreation) and shore access. Boating and shore access may be subject to restrictions and/or disturbance avoidance guidelines around seabird colonies in regulations and/or in a jointly approved detailed MPA management plan.

NVI – Category 3 Area Profile

The proposed Network includes zones with proposed conservation objectives and identified activities of concern (where applicable). Refinements are anticipated at multiple stages, including future site level establishment processes and subsequent management planning.

Sub-region: North Vancouver Island

Category: 3*

*This area is important ecologically and culturally, but further work is required to reach agreement among/with First Nations in the area regarding the development of proposed modifications to existing designations or proposed new zones which may contribute to the Network objectives (see Chapter 3, s. 3.2.2).

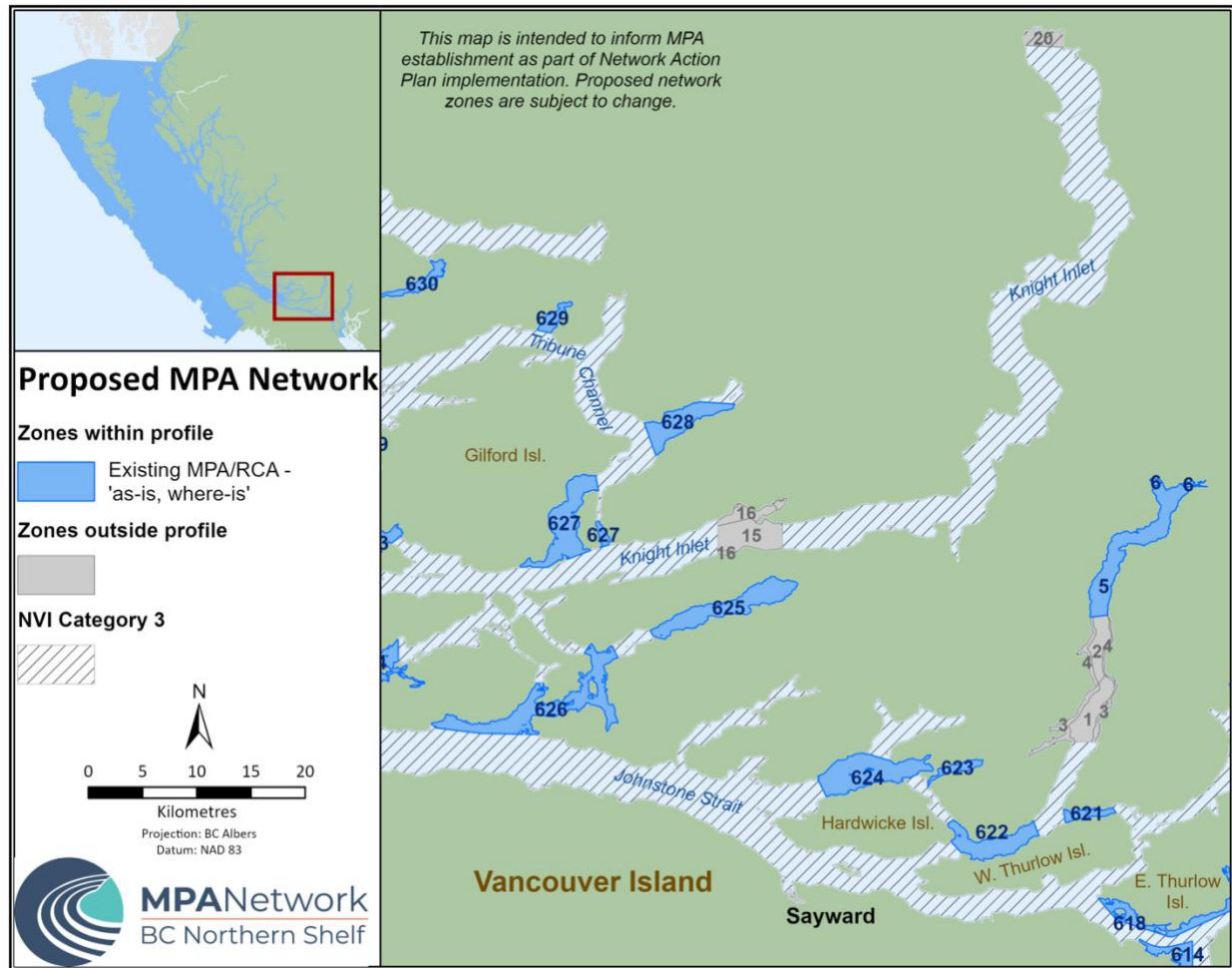
Existing sites included in this profile: TBD*

*Existing MPA/RCA – ‘as-is, where-is’ zones are existing MPA designations and RCAs that contribute to the Network but have *no proposed changes* to either boundaries or associated management measures at this time. The protections provided by these existing designations may be limited due to jurisdiction and the applicable regulations in which they were established (outside the MPA Network planning process). Therefore, further assessment is required with Governance Partners to determine what refinements may be needed to boundaries or management measures to improve their contribution to the Network objectives.

The following map series presents Existing MPA/RCA – ‘as-is, where-is’ locations that fall within the Category 3 area and are contained within this profile. In an effort to effectively present the entire area, the same Existing MPA/RCA may appear on multiple maps.



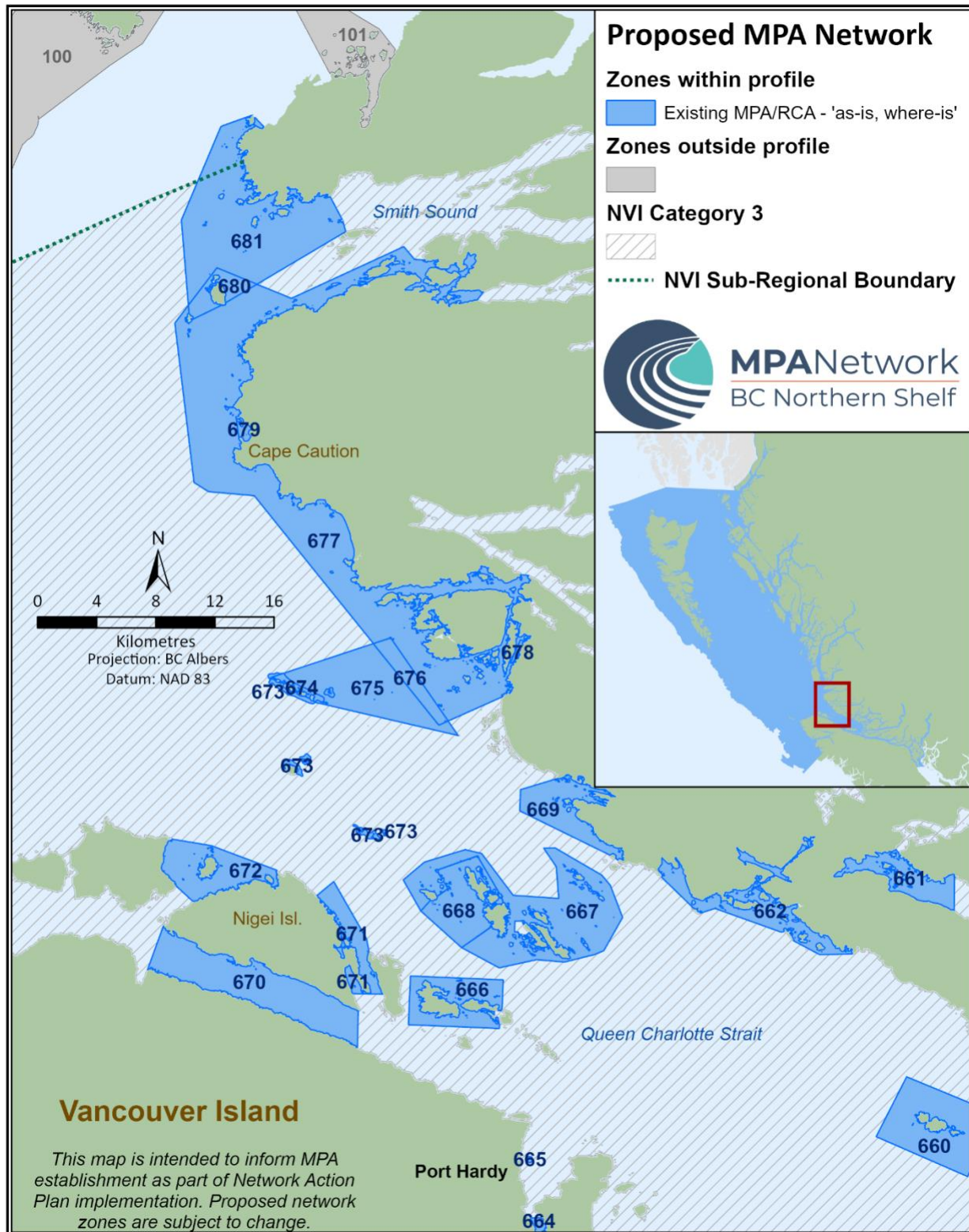
Map 4. East Vancouver Island, West Thurlow Isl. to Bute Inlet area



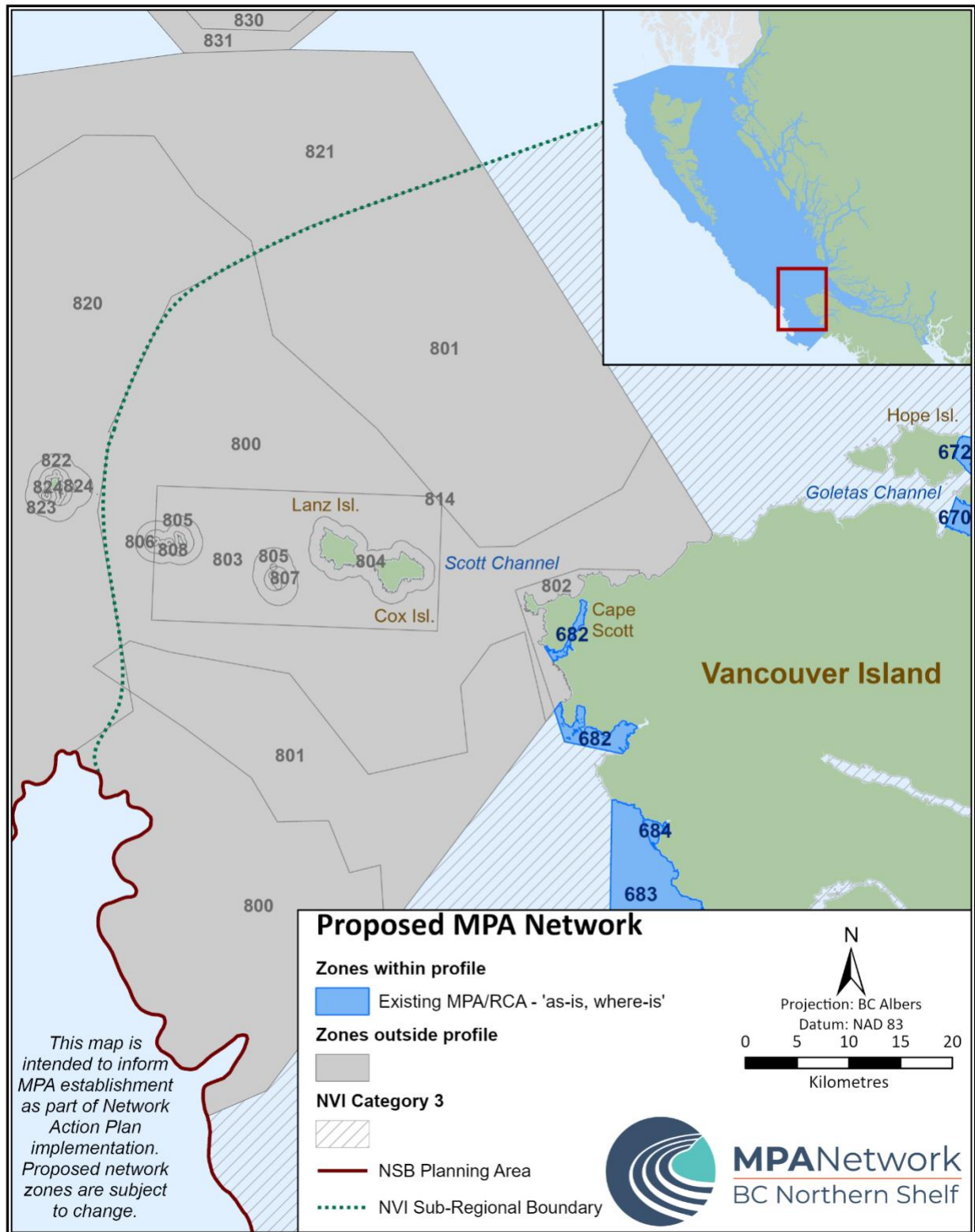
Map 5. Johnstone Strait, Gilford Isl. To West Thurlow Island area



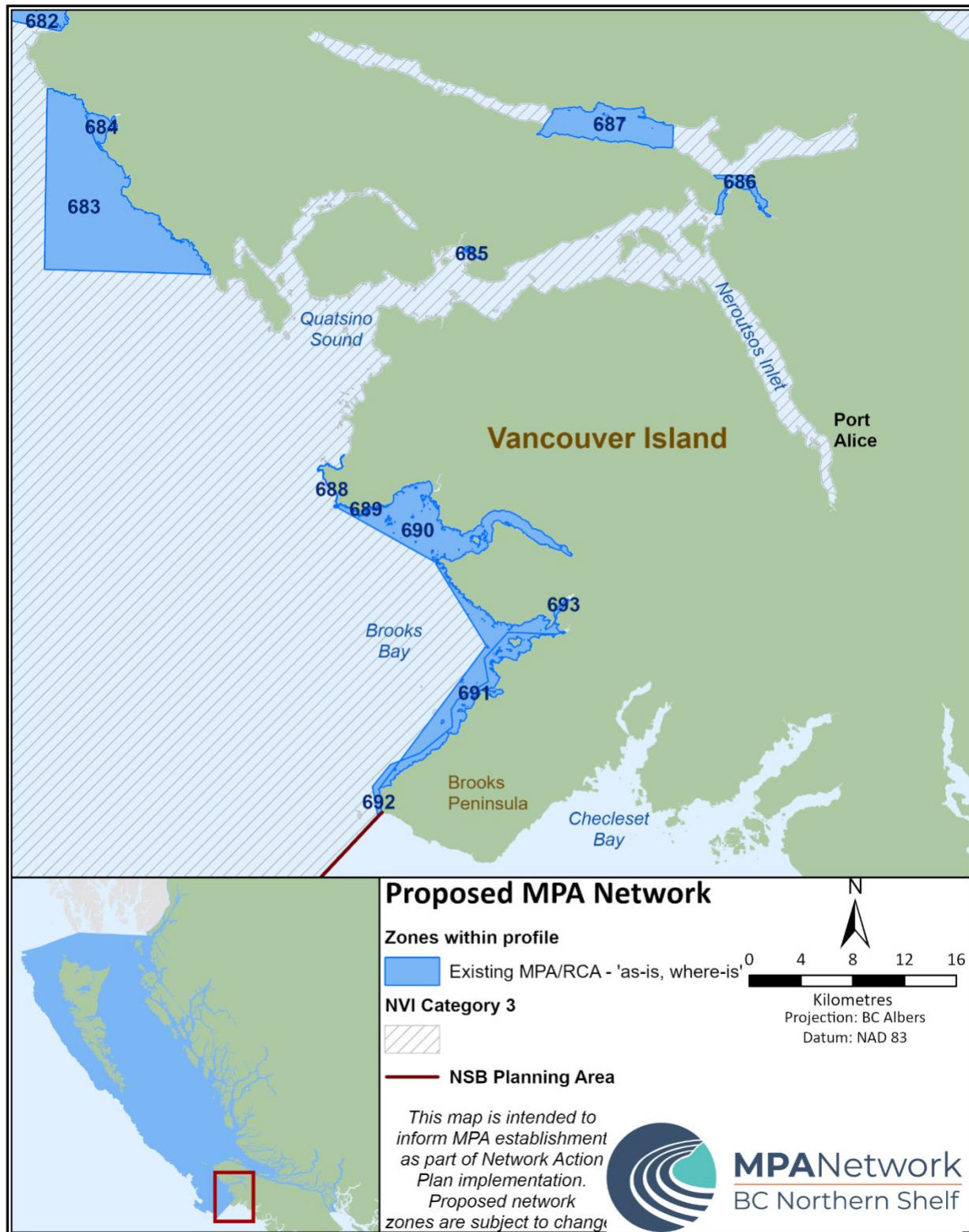
Map 6. Southern Queen Charlotte Strait including the Broughton Archipelago



Map 7. Northern Queen Charlotte Strait including Cape Caution area



Map 8. North Vancouver Island, Cape Scott and Scott Islands area



Map 9. Northwest Vancouver Island, Quatsino Sound and Brooks Bay

Context

Ecological context

This area encompasses the western portion of Vancouver Island from Brooks Bay north, and eastern portions from Campbell River north. It also encompasses islands including Quadra Island, Read Island, and the Broughton in the south, and north to Hope and Nigei Islands. The many inlets on the mainland, including Bute Inlet and Phillips Arm in the south, and north to Smith Sound, are also within this area, with the exception of portions within Loughborough Inlet and Knight Inlet (where Category 1 zones are proposed).

With its diverse characteristics of highly productive estuaries, high quality aquatic environments that support both spawning salmon and resident fish species, sandy beaches, steep mainland fjords, sheltered bays, and strong tidal currents, this area provides a variety of ecological uniqueness. NVI is an interface of two major bodies of water and complex shorelines, which affords a rich and diverse marine environment with rare species and migratory birds utilizing the variety of habitats for spawning, breeding, or rearing.

First Nation Cultural context

The area is critically important to local First Nations, both culturally and spiritually, and for the harvest of marine resources including eelgrass, birds, crabs, salmon, shellfish, and herring. There are many sites of cultural and spiritual importance to First Nations in the area, including several historical and present village sites, fishing and hunting grounds, and locations for collection of various plants and medicines used throughout the seasons.

Human use context

This site is a regionally important destination area for marine recreation. Recreational opportunities include scuba diving, kayaking, fishing, wildlife viewing, beachcombing, and boating. There is significant recreational salmon fishing in the area and several sheltered anchorages for small boats. This is also a significant area for commercial uses, including various fisheries, aquaculture, and tourism. It is important for gillnet, seine, and troll salmon fisheries, and some rockfish and shellfish (prawn, urchin, crab, sea cucumber, scallop) fisheries. Industrial uses include log handling and storage and transportation, among others.

Master List of Supplemental Information Statements

!¹ : Log handling and storage is conditional based on MaPP plans (an aspect of this activity is either not allowed or only conditionally recommended in at least part of this zone, see Central Coast MaPP plan for more detailed direction on this activity).

!³ : In situations with existing designations, see current management plan (if available) for specific direction on this activity in the area.

!⁴ : Harvest of crab by trap has been identified as an activity of concern, but harvest of prawn by trap has not.

!⁵ : Harvest of prawn by trap has been identified as an activity of concern, but harvest of crab by trap has not.

!⁶ : Harvest of herring by gillnet has been identified as an activity of concern, but harvest of salmon by gillnet has not.

!⁷ : Harvest of salmon by gillnet has been identified as an activity of concern, but harvest of herring by gillnet has not.

!⁸ : Harvest of herring by seine has been identified as an activity of concern, but harvest of salmon by seine has not.

!⁹ : Harvest of salmon by seine has been identified as an activity of concern, but harvest of herring by seine has not.

!¹⁰ : Harvest of species by dive has been identified as an activity of concern, but harvest of red sea urchin has not.

!¹¹ : Harvest of prawn by trap is identified as an activity of concern, but harvest of crab by trap is not, with the exception of the existing commercial and recreational closure at the head of the inlet(s) to facilitate First Nations FSC harvest as described in the Crab Integrated Fishery Management Plan (IFMP).

!¹² : Proposals for industrial projects and development projects should be avoided in MPAs. If such projects, including infrastructure projects, are proposed, specific activities will be vetted against the stated conservation objectives for the protected area and direction provided in a jointly approved detailed MPA management plan.

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