

Report to Committee

To:

Re:

General Purposes Committee

Date:

March 1, 2023

From:

Peter Russell

File:

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Director, Sustainability and District Energy BC's Proposed Coastal Marine Strategy

Staff Recommendation

That the comments outlined in the staff report titled, "BC's Proposed Coastal Marine Strategy", dated March 1, 2023, from the Director, Sustainability and District Energy be endorsed and submitted to the Province.

Peter Russell Director, Sustainability and District Energy (604-276-4130)

Att. 2

REPORT CONCURRENCE							
ROUTED TO: Parks Services Policy Planning Engineering Planning		RRENCE	CONCURRENCE OF GENERAL MANAGER Jh hing				
SENIOR STAFF REPORT REVIEW		INITIALS:	APPROVED BY CAO				

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Staff Report

Origin

At the June 22, 2020 Regular Council meeting it was resolved:

- 1. That Richmond request the BC Government to develop and enact a Coastal Strategy and Law to leverage and coordinate the work of provincial ministries, First nations, local communities, and stakeholders groups to preserve coastal and ocean health, halt coastal habitat loss, accelerate the completion of a network of marine protected areas to benefit fisheries, biodiversity and the economy, set marine environmental quality objectives, and help communities adopt ecosystem—based approaches to manage risk from flooding due to extreme weather events, sea level rise, climate change and ocean acidification; and
- 2. That the City of Richmond write a letter of support and requesting action to the Union of British Columbia Municipalities, BC Minister of Environment, Minister of Agriculture, Minister of Indigenous Affairs and Reconciliation, and the Premier of British Columbia in support of a Coastal Protection Strategy.

Since this time, the Province has been developing the proposed BC Coastal Marine Strategy to guide coastal marine management under the Ministry of Water, Land and Resource Stewardship. The strategy proposes a plan for addressing priorities for coastal marine ecosystem health and community well-being. The Province is currently in the process of collecting feedback from local governments, First Nations, non-government organizations, and businesses, among other stakeholders on the *Coastal Marine Strategy for British Columbia Intentions Paper: Policy Intentions Paper December 2022*.

This report provides an overview of the Province's proposed BC Coastal Marine Strategy and includes comments that, if endorsed, will be forwarded to the Province to support the development of BC's draft Coastal Marine Strategy.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous city.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.

Analysis

BC has an extensive 26,000- kilometre coastline that supports a diversity of ecosystems ranging from lush kelp forests and seagrass meadows to rocky intertidal shores. The ocean moderates the weather and provides important transportation, economic, and recreational opportunities. Three-quarters of the population live in the coastal zone. The ocean-based economy is over \$21 billion and directly employs 131,000 people full-time according to the Province. BC is one of a few coastal jurisdictions in North America without a comprehensive coastal and marine strategy. Coastal marine management currently relies on a variety of existing regulations overseen by different orders of government. The Province committed to developing a Coastal Marine Strategy (the Strategy) in 2020. The Strategy will focus on the coastal waters from the Alaskan border, south to the Washington State border. The Coastal Marine Strategy for British Columbia Intentions Paper: Policy Intentions Paper December 2022 (the Intentions Paper) is the initial stage of policy development that includes six outcomes and 30 policy intentions.

Coastal Management in BC

The management of BC's coastal areas is the responsibility of all levels of government. The federal government's coastal jurisdiction generally extends from the low watermark, out to 200 nautical miles, along Canada's coastline. A number of federal agencies are responsible for managing a wide range of activities in this area such as navigation, shipping and fisheries. The Province owns much of BC's foreshore and inland coastal water beds, administers land tenures, licensing, and also has a variety of management plans and policies dedicated to the protection of these areas. First Nations have jurisdiction over upland and aquatic lands within federal Indian Reserves. Traditional rights to marine resources outside of these areas are subject to ongoing Treaty Negotiations in BC. Local governments have the power to plan and regulate land use within municipal boundaries including regulating development along the shoreline, enacting zoning, restricting moorage, and managing private dock construction.

Coastal Protection in Richmond

Richmond's unique series of islands in the Lower Fraser River estuary requires special consideration for the development of regional policies. The proposed provincial Strategy must consider the City's unique characteristics and be compatible with the City's development objectives, including flood protection. Richmond has a number of bylaws, policies and strategies that protect Richmond's unique coastal ecosystems including:

- Environmentally Sensitive Areas the City has been managing development along Richmond's intertidal areas through its rezoning and development permit process since 1991. Under this development process, most activities including rezoning, subdivision, demolition, and construction within 30 metres of high water mark along Richmond's shoreline are subject for a review by staff. Richmond's Chapter 9 of Richmond's Official Community Plan (2041) also outlines various policies that protect the City's functioning Ecological Network;
- **Riparian Response Strategy** The City's Riparian Response Strategy was endorsed in 2006 and assigns setbacks on minor (5m) and major (15m) freshwater watercourses, through zoning, to protect local fish habitat form development;

- Ecological Network Management Strategy Richmond's Ecological Network Management Strategy was endorsed in 2015 and recognizes the important role healthy shorelines contribute to Richmond's functioning ecosystems.
- Flood Protection Management Strategy Richmond's Flood Protection Management Strategy was endorsed by Council in 2008. Updates to this initiative were approved by Council in 2019 to improve the City's ability to prevent floods and reduce damage caused by floods through the implementation of proactive policies and partnerships, upgrading flood protection infrastructure, and monitoring climate change. The City's Dike Master Plan outlines the process to upgrade the City's dike in advance of sea level rise and other climate change flood hazards. Accelerating the dike upgrade program will provide additional flood resilience for the City by raising the dikes well in advance of the current sea level rise projections used by the City for modelling. Dike Master Plan Phases 1, 2, 3, 4, and 5 have been endorsed.
 - O Habitat Enhancement Council endorsed a fish habitat bank in 2021 to support its Flood Protection Management Strategy. As a cornerstone of flood management, Richmond intends to enhance strategic areas of foreshore to support future offsetting requirements and maintain the City's Ecological Network.
- Bylaws The City regulates and manages the permitting of non-stormwater discharge through *Pollution Prevention and Clean-Up Bylaw No. 8475*, to prevent polluting substances from entering the City's drainage system and ultimately the Fraser River. The City also manages stormwater through various bylaws, including *Drainage*, *Dike and Sanitary Sewer System Bylaw No. 7551* and the *Watercourse Protection and Crossing Bylaw No. 8441*.

BC Coastal Strategy Intentions Paper and Staff Comments

Attachment 1 presents detailed comments, for Council endorsement, that considers Richmond's unique perspective and role in coastal management as a series of islands in the Lower Fraser River estuary. The proposed Strategy (Attachment 2) concentrates on activities, uses, and values that expand on existing programs alongside new concepts in which the Province is seeking feedback. When finalized, the broad Strategy will span a 20-year horizon to address future needs, priorities and emerging trends by incorporating 30 policy intentions under the following six policy outcomes:

- 1. A healthy and productive coast
- 2. Resilience to climate change
- 3. Trusting, respectful relationships
- 4. Holistic learning and knowledge sharing
- 5. Community well-being
- 6. A sustainable, thriving ocean economy.

The six outcomes and 30 policy intentions strongly align with many of the City's objectives listed in the aforementioned strategies, policies and bylaws. Staff have reviewed the Intentions Paper and acknowledge the comprehensiveness of the 30 proposed policy intentions.

The comments complement Richmond's related feedback for the proposed provincial Watershed Security Strategy and BC Flood Strategy that were endorsed in 2022. A summary of staff comments on the proposed strategy are as follows:

- 1. Future public engagement opportunities, led by the province, should encourage participation of Richmond residents.
- 2. The Coastal Marine Strategy must be compatible with City and regional objectives to mitigate climate change impacts over the next 100 years and beyond.
- 3. Future development of the strategy's framework should specifically include the identification, analysis and quantification of threats to the coastal ecosystem.
- 4. The proposed strategy must align with these efforts so as to complement and improve existing frameworks, including:
 - a. Consideration of the cumulative effects from coastal development;
 - b. Collaboration with local Diking Authorities;
 - c. Establishing a streamlined and coordinated system for more direct and clear lines of communication between all levels of government; and
 - d. The proposed Strategy will require the appropriate level of provincial resources including considerate levels of funding and staffing to support this initiative.
- 5. A proactive approach from the Province is required to resource and protect these areas from the affects of climate change.
- 6. Consideration through this strategy is needed to diversify the access to coastal areas for recreation and well-being.

The feedback will guide the development of a draft Coastal Marine Strategy that is expected in the fall of 2023. The City will be offered subsequent opportunities to review and comment on the draft Strategy at that time.

Financial Impact

None.

Conclusion

The Province is developing the BC Coastal Marine Strategy and has prepared the *Coastal Marine Strategy for British Columbia Intentions Paper: Policy Intentions Paper December 2022*, to support their initiative. Staff have reviewed the paper and outlined general feedback for Council's consideration. If endorsed, the comments will be forwarded to the Province to inform a future Draft Coastal Marine Strategy that is expected in mid-2023. Staff will remain engaged on this matter and will provide updates to Council accordingly.

Chad Paulin M.Sc., P.Ag.

(Vad fal)

Manager, Environment (604-247-4672)

Att. 1: Proposed Staff Comments

2: Coastal Marine Strategy for BC Intentions Paper

City of Richmond Attachment 1

Staff have reviewed the Intentions Paper and acknowledge the comprehensiveness of the 30 proposed policy intentions. Staff propose the following general comments, for Council endorsement, that considers Richmond's unique perspective and role in coastal management as a series of islands in the Lower Fraser River estuary:

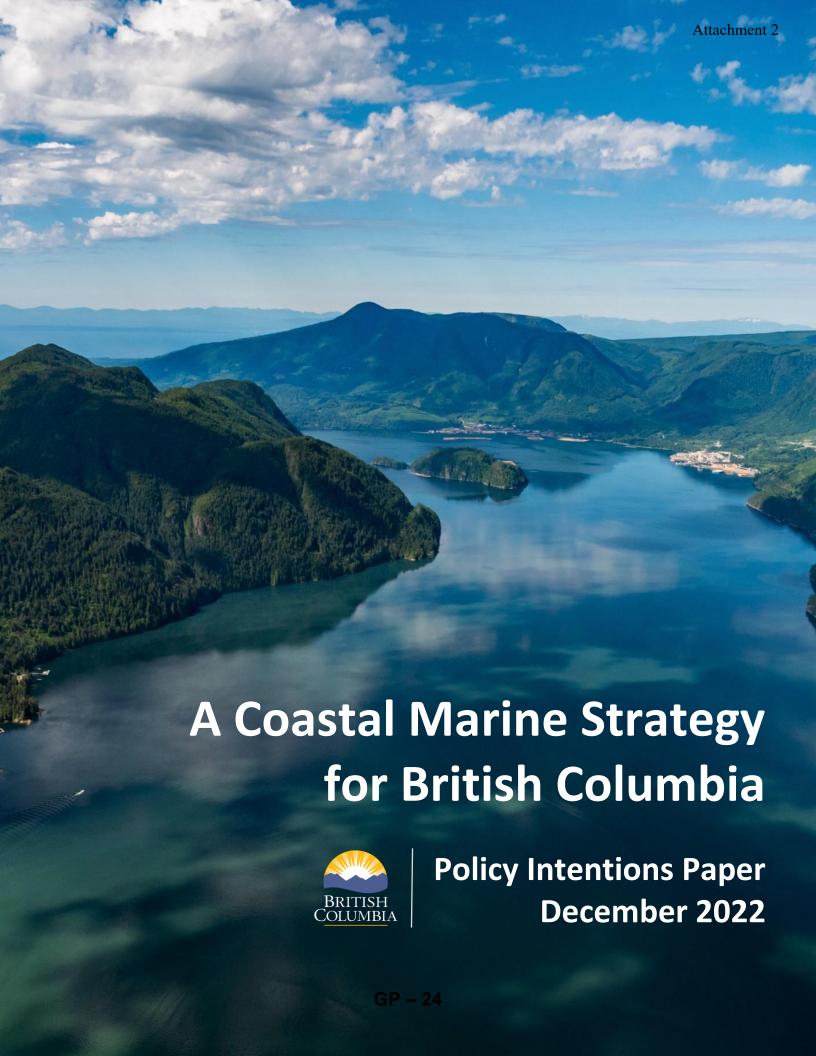
- 1. Future public engagement opportunities, led by the province, should encourage participation of Richmond residents and provide adequate response times and appropriate access to information.
- 2. The City has committed to enhancing its flood protection infrastructure to reduce the impacts of climate change. The Coastal Marine Strategy must be compatible with City and regional objectives to mitigate climate change impacts over the next 100 years and beyond. This includes considerations for Richmond and other communities with foreshore flood protection infrastructure including dikes and drainage pump stations, and plan for allowances to facilitate construction, operation and maintenance of this infrastructure.
- 3. The proposed strategy is currently broad and over-arching. Future development of the strategy's framework should specifically include the identification, analysis and quantification of threats to the coastal ecosystem such as vessel traffic, hardening of shorelines, spill management and migration of pollutants, invasive species and that environmental quality objectives be developed.
- 4. Including environmental management objectives from upland activities including urban development, agricultural, forestry, mining and oil and gas exploration including associated infrastructure for each that transfers materials and resources from upland activities to marine vessels such as jetties, pipelines and chemical production facilities.
- 5. There are a number of existing and proposed provincial laws, regulations and policies governing coastal areas in BC. The proposed strategy must align with these efforts so as to complement and improve existing frameworks such as:
 - a. Considering the cumulative effects from coastal development through other means than BC's Environmental Assessment process;
 - b. Collaboration with local Diking Authorities, including local governments, to develop and maintain applicable flood risk management plans and strategies; and
 - c. Establishing a streamlined and coordinated system for more direct and clear lines of communication between all levels of government with jurisdiction over coastal areas including inter-jurisdictional cooperation for significant foreshore rehabilitation projects.
 - d. The requirement to execute, establish and align the existing and proposed provincial laws, regulations and policies governing coastal areas in BC will require the appropriate level of provincial resources including considerate levels of funding and staffing to support this initiative.
- 6. The existing roles and responsibilities of local governments may vary depending on the location and the size of the administration. Smaller, more remote local governments may not have the adequate resources to protect marine ecosystem and/or enact viable policies and regulations to protect environmentally sensitive areas. A proactive approach from the

City of Richmond Attachment 1

Province is required to resource and protect these areas from the affects of climate change.

7. There is a growing desire among local residents to use and access coastlines more sustainably. Consideration through this strategy is needed to diversify the access to coastal areas for recreation and well-being.

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Acknowledgment

The government of British Columbia acknowledges that our work spans many First Nation territories and Treaty areas, and we are grateful for the knowledge, teachings, and holistic worldviews contained within. These holistic worldviews were, and are, foundational to how First Nations Peoples steward the lands, water, seabed, air, and resources that sustain them, and to which we all now turn to likewise be sustained, thrive, and develop. Through strength and resiliency, the relationship between the ocean and coastal First Nations peoples remains unassailable. First Nations peoples know the coastal marine environment like no others, and they have much to share for the betterment of us all and future generations. The Coastal Marine Strategy Intentions Paper could not have been written without the participation of First Nations people, and the government of British Columbia looks forward to continuing collaboration and furtherance of government-to-government relationships through codevelopment of the Coastal Marine Strategy. Appreciation is expressed to all contributing authors, reviewers and those who supported the development of this Paper.

Summary

The Province is developing a Coastal Marine Strategy with First Nations that will lay out a plan for addressing priorities for coastal-marine ecosystem health and community well-being. The Coastal Marine Strategy will focus on areas closer to shore, where estuaries, kelp beds, eelgrass meadows, rocky shorelines, and sandy beaches support an abundance and diversity of marine life. These areas are also popular places for people to live, work, collect food, and connect with nature.

Indigenous ethics will provide a foundation for what we do. These ethics, shared with permission from the Nuu-chah-nulth, Haida, and Tsimshian speaking Nations, remind us of the connections between land, water and people, and o ur collective obligation and responsibility to care for and protect the ocean, and each other.

This Intentions Paper is the first step along the path towards a Coastal Marine Strategy. It presents a vision for protecting the ecological, cultural, and economic benefits provided by the coastal marine environment. The Intentions Paper was informed by First Nations knowledge, western science, existing planning and technical documents, and discussions with provincial staff across government. At a glance, the **6 outcomes** and **30 policy intentions** under consideration are listed below.

We want to hear from you. Your perspectives can help highlight shared concerns and priorities that will inform development of specific objectives, targets, and actions for the Coastal Marine Strategy. We thank you for taking the time to share your ideas.

hišuk ma c'awak^a (everything is one): Everything is connected, everything is one, everything depends on everything else. The well-being of communities is intricately tied to the well-being of the land and sea.

?iisaak^a (utmost respect): Respect for mother earth, for people, living things, the ocean. We take only what we need, we give thanks. Everything has a purpose, and that purpose must be respected.

'Laa guu ga kanhlins^b (responsibility): We accept the responsibility passed on by our ancestors to manage and care for our sea and land. We will ensure that our heritage is passed on to future generations.

?uu?ałuk^a (taking care of): Looking after, caring for the sea, the seabed, marine life, the land, our communities, and our people.

Giid tll'juus^b (balance): Balance is needed in our interactions with the natural world. If we aren't careful in everything we do, we can easily reach a point of no return. Our practices and those of others must be sustainable.

Isda ad diigii isda^b (giving and receiving): Reciprocity is essential in our interactions with each other and the natural world. We continually give thanks to the natural world for the gifts received.

syt güülm goot^c (being of one heart): Community-based sharing and distribution of resources from different areas of the territory, between families and lineages, ensures survival and nutritional balance, and sustainable harvest.

A - A HEALTHY AND PRODUCTIVE COAST

A healthy and productive coast that sustains ecosystems with abundant fisheries and marine wildlife is the foundation from which all our other aspirations for the coast evolve. We intend to:

- A-1 Boost efforts to recover wild salmon
- A-2 Monitor coastal ecosystem health
- A-3 Prevent and clean up marine pollution
- A-4 Protect and restore nearshore habitat
- A-5 Help recover southern resident killer whales and other marine species at risk

B-RESILIENCE TO CLIMATE CHANGE

Sea-level rise, coastal erosion, ocean acidification, warming seas, changing ocean currents, extreme weather events and shifting species distributions are impacting ecosystems and communities. We must work together to build resiliency to climate change. We intend to:

- B-1 Keep communities safe from harmful climate risks
- B-2 Support seafood harvesters, producers, and innovators
- B-3 Shift to nature-based solutions for coastal protection
- B-4 Develop an ocean acidification & hypoxia action
- B-5 Protect and restore kelp beds, eelgrass meadows, and other blue carbon sinks

C-TRUSTING, RESPECTFUL RELATIONSHIPS

Responsible governance starts with respect: for the natural environment, for the connections between people and place, and for the management and stewardship responsibilities of all parties who share a role in taking care of the ocean. We intend to:

- C-1 Respect and uphold First Nations rights
- C-2 Engage British Columbians in coastal marine management
- C-3 Advance collaborative stewardship
- C-4 Evaluate the need for comprehensive coastal zone legislation

D - HOLISTIC LEARNING AND KNOWLEDGE SHARING

We all share goals for stewardship of coastal marine values. These goals can only be achieved when we cocreate and share all forms of knowledge in a respectful way to make decisions. We intend to work in partnership with others to:

- D-1 Weave traditional knowledge with western science
- D-2 Assess the value of the ocean
- D-3 Enhance marine spatial data
- D-4 Improve availability of marine and coastal information

E - COMMUNITY WELL-BEING

The ocean underpins the cultural, social and economic fabric of coastal communities up and down the coast of B.C. These communities are undergoing continuous change, and how well they thrive will depend in part on employment opportunities, adequate coastal infrastructure, access to resources, and good planning. We intend to:

- E-1 Create jobs and support steady, rewarding employment
- E-2 Build a diverse coastal workforce
- E-3 Support First Nations' cultural revitalization and resilience
- E-4 Improve capacity of communities to respond to change
- E-5 Develop and implement marine use plans
- E-6 Improve access to nature, in a respectful way

F - A SUSTAINABLE, THRIVING OCEAN ECONOMY

B.C.'s ocean economy represents about 8% of provincial GDP, with the transportation, tourism and recreation, coastal forestry, and seafood sectors contributing more than \$17B. Emerging sectors, like the conservationbased economy, hold great promise. Realizing the full potential of the ocean demands responsible, sustainable approaches. We intend to:

- F-1 Invest in a diverse coastal and marine economy
- F-2 Co-develop enduring fiscal relations with First Nations governments
- F-3 Support the marine fisheries economy
- F-4 Advance sustainable aquaculture
- F-5 Support regenerative marine tourism
- F-6 Manage cumulative effects

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Minister's Message

British Columbia's western border meets the Pacific Ocean – and at this nexus are the islands, bays, inlets, fiords and estuaries central to our coastal landscape and our cultural fabric. Half of First Nations in B.C. and nearly three-quarters of people in this province live close to the coast. But for all of us, including those who live in the interior like myself, the ocean is integral to our health and well-being. It produces most of the oxygen we breathe, absorbs carbon dioxide, and helps regulate our climate and weather. The ocean takes us places, and the goods we buy and sell are transported on its waters. The ocean provides jobs in both rural and urban centres, offers food for our tables and is a place to recreate, relax and recharge. Our coastal marine environment is a unique home to thousands of plant and animal species, and attracts visitors from all over the world.

British Columbia is one of the few maritime jurisdictions in North America without a comprehensive coastal marine strategy. As we face increasing challenges from climate change, including warming and rising seas, it's incumbent on us to develop a way forward that builds ecosystem and community resilience. We are committed to developing B.C.'s first ever Coastal Marine Strategy to set priority actions to improve the health and stewardship of coastal marine environments, adapt to climate change, nurture a sustainable economy, and advance reconciliation with First Nations. Co-developed with coastal First Nations, this Intentions Paper sets out a vision for what that strategy should focus on and why.

The Ministry of Water, Land and Resource Stewardship was formed in February 2022 to take a holistic approach to stewarding natural resources, building sustainable economies, and advancing reconciliation with First Nations. With a renewed mandate from Premier David Eby, we'll continue to transform the stewardship of B.C. waters, lands and resources in partnership with First Nations, including work on wild salmon recovery, healthy watersheds, and codevelopment of the Coastal Marine Strategy.

A Coastal Marine Strategy will guide us for the next two decades - it needs to reflect the priorities and values of British Columbians.

I encourage you to read this Intentions Paper, to reflect on what you want to see in a Coastal Marine Strategy, and to provide your feedback to us GovTogetherBC.

NATHAN CULLEN Minister of Water, Land and Resource Stewardship



Introduction

The marine waters surrounding British Columbia are home to an impressive diversity of animals and plants, many of which are found only here. The Province's islands, bays, inlets and estuaries are central to our coastal landscape and cultural fabric. The coastal marine environment is vital to our health and well-being, and we must make sure it is cared for so that future generations can enjoy the enormous benefits it provides.

The Ministry of Water, Land and Resource Stewardship (the Ministry) is developing a Coastal Marine Strategy with First Nations whose identified territories include the marine environment. Together, we will set out a shared vision for healthy coastal marine ecosystems, community well-being, and a sustainable ocean economy.

The Coastal Marine Strategy will concentrate on activities, uses, and values that the Province of British Columbia is accountable for, while recognizing that we need strong collaboration and cooperation with other orders of government who share responsibility. The actions proposed in the Coastal Marine Strategy will expand on existing programs and initiatives and present new ideas and concepts. It will span a 20-year horizon, reflecting on where we are today, and address future needs, priorities and emerging trends. In developing the Coastal Marine Strategy, we will draw together expertise from within and outside governments.

We are in the early stages of policy development that begins with release of this Intentions Paper - a critical phase in developing British Columbia's first Province-wide coastal marine strategy and the beginning of our formal engagement with you.

The Intentions Paper outlines what we want to do and why. It describes the collaborative process adopted to engage coastal First Nations in identifying key strategic issues that should be addressed in the Coastal Marine Strategy. First Nations ethics and values, which are fundamental to their image of the world, serve as guiding principles. They help remind us of the connections between land, water and people, and our collective obligation and responsibilities around stewardship.

2022-2023

Intentions Paper

Describes the vision and policy concepts under consideration.



2023-2024

Coastal Marine Strategy

Describes specific short, medium, and long-term measurable actions the provincial government will take to look after coastal-marine values.



2024-2044

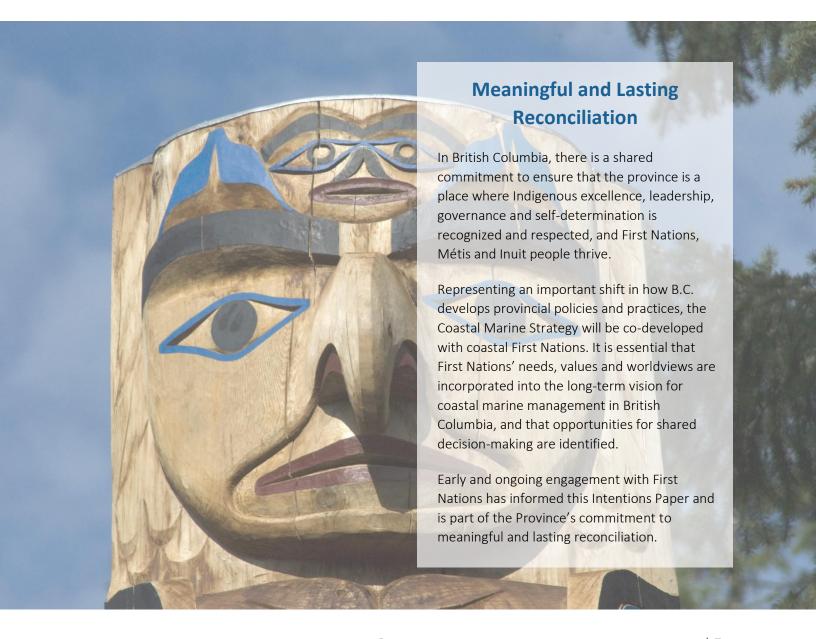
Implementation

Better outcomes for the environment, communities, and the economy will be achieved over a 20-year horizon.

As you read and consider this Intentions Paper, you will note that it does not attempt to identify specific projects, programs, or prescribed approaches to implementation of the Coastal Marine Strategy. These will take shape as the Coastal Marine Strategy is developed. There will be additional opportunities to comment on the Coastal Marine Strategy, particularly when a draft is completed around in 2024. In the meantime, we urge you to read this Intentions Paper and contribute your knowledge, insights

and observations. Visit **GovTogetherBC** for ways to provide feedback. We are particularly keen to receive feedback on areas of strategic focus including:

- The vision and outcome statements that will define the framework of the Coastal Marine Strategy;
- The priority opportunities and challenges the Coastal Marine Strategy should address.



What is the Coastal Marine Environment?

British Columbia has an extensive 26,000-kilometre coastline that supports a diversity of ecosystems ranging from lush kelp forests and seagrass meadows to rocky intertidal shores. These ecosystems are home to many plants and animals, including seaweeds, invertebrates, fishes, migratory birds, and marine mammals. The species that live here, like wild Pacific salmon and killer whales, form part of our collective identity. They are woven into the culture, histories and economies of communities throughout British Columbia.

The coastal marine environment is arguably one of the most complex environments because terrestrial, marine, and atmospheric processes all interact in shaping it. The physical shorelines in British Columbia are extremely diverse, and include sandy beaches, rocky headlands and reefs, and river deltas. The connections between life on land and life in the ocean are strong. The

Masset/Old Masset
Old Masset

Right

Bela

Bela

Bela

Bela

Bela

Cook

Bela

River

Coastal Marine Strategy
Marine Area of Interest

Cook

Manamo

Doublet

Vancouver

Tofino

Nanamo

Uduelet

Victoria

Figure 1: Map of the coastal marine waters of British Columbia

Fraser, Skeena, and the Nass river watersheds bring fresh water and minerals into the Pacific Ocean, together with hundreds of other rivers in the Province. Animals that rely on both terrestrial and marine habitats for feeding, breeding, rearing, resting, or migrating include five species of wild salmon, grizzly bears, wolves, marbled murrelets, and puffins.

The Coastal Marine Strategy for British Columbia will focus on the coastal waters from the Alaskan border south to the Washington State border (see Figure 1; the dark blue area illustrates the coastal environment for the purposes of the Strategy). When we refer to the coastal marine environment, we are talking about the transition area that connects the open ocean with the coastline and terrestrial watersheds – the intertidal zone, tidal wetlands, estuaries, bays, inlets, fjords, straits, channels, island archipelagos, shallow near-shore waters, pocket coves, and near-shore reef systems.



Our Shared Challenges and Opportunities

The Pacific Ocean is essential to the culture, economy, and identity of British Columbians. Three-quarters of the population live in the coastal zone. The ocean moderates the weather and provides important transportation, economic, and recreational opportunities. The ocean-based economy is over \$21 billion (about 8% of the province's gross domestic product) and directly employs 131,000 people full-time². The marine-based tourism and recreation industry alone generates over \$5 billion every year. Commercial fishing, coastal forestry, and marine transportation are other key marine industries driving economic prosperity in the Province.

First Nations have a deep-rooted relationship with the ocean that has existed since time immemorial. More than half of First Nations in B.C. have identified territories that include a marine component. At their core, they are water people.

Coastal First Nations govern according to their rights, traditional laws, ethics, values, and teachings (Appendix 1). Marine animals, plants, and ecosystems are vital to First Nations identities, cultures, languages, communities, economies, and knowledge systems³. For coastal First Nations, the ocean is the primary source of healthy food for community members and is the highway that keeps people in touch with relatives and neighbours.

The future of British Columbia is interwoven with the health of the ocean. Rising ocean

temperatures, acidic waters, pollution, habitat loss, shifts in species distribution, and declining fish and wildlife populations are all signals that we need to do more to ensure that future generations can enjoy the benefits we enjoy today. We need to reduce the pressures that threaten marine life, community well-being, and economic stability.

Coastal marine management currently relies on a patchwork of regulations and laws overseen by different orders of government (Table 3). For example, the Province is responsible for managing and authorizing activities and uses that require access to the seabed and/or the coastline, such as aquaculture, clean energy, docks and wharves, log handling sites, and underwater utilities.

The B.C. government is also accountable for land use planning and management (e.g., parks and protected areas), environmental assessments for large projects, seafood development, and aquatic plant harvesting. Habitat conservation and restoration, monitoring, and emergency management are some of the ways B.C. takes care of the coastal marine environment. Federal departments manage fisheries, transportation, species at risk, and maritime safety. First Nations apply traditional knowledge, ethics, values, and systems of governance to guide how communities interact with the environment. Appendix 2 provides a more fulsome description of how governments, stakeholders, research institutions, and academia contribute to stewardship of the marine environment in B.C.

Table 1: Stewardship Responsibilities

Federal	Provincial	Indigenous	Local
Government	Government	Governments	Government
 Fishing Shipping Navigation Oil spills Search & rescue Migratory birds Environmental assessments Protected areas 	 Tenures over seabed Tourism and recreation licensing Seafood safety Marine spatial plans Protected areas Aquatic plants Flood management Heritage conservation Protected areas 	Exercise systems of governance, and stewardship practices through: • Indigenous law • Treaties • Constitution Act Section 35 • Ethics and values	 Zoning (e.g., regulating shoreline development) Permits

British Columbia is one of a few coastal jurisdictions in North America without a comprehensive coastal and marine strategy.4 Over the past decade, there has been significant interest by the Province, First Nations, local governments, stakeholders, and the public in the development of a cohesive and comprehensive provincial strategy to better govern and protect coastal and marine values. There are regional-specific plans and policies that provide guidance for coastal marine management. For example, on the north coast of British Columbia the implementation of the Regional Action Framework and sub-regional marine plans developed under the Marine Plan Partnership for the North Pacific Coast (MaPP)⁵

support better outcomes for ecosystems, communities, and the economy. However, there is no overarching, made-in-B.C. policy that sets out a coast-wide vision for the future.

In 2020, the B.C. government committed to developing a Coastal Marine Strategy that articulates priorities and lays out actions to improve the health and stewardship of coastal marine environments, mitigate and adapt to climate change, nurture a sustainable "blue economy," foster resilience in coastal communities, and create opportunities to advance reconciliation with First Nations. This Intentions Paper is a first step towards fulfilling this promise.



How We Got Here

As part of its commitment to co-develop a Coastal Marine Strategy with First Nations, the B.C. government recognizes that codevelopment means that the process is as important as the product, and that collaboration is needed from conception through to implementation. The relationships we build together will set the foundation for developing and implementing the Coastal Marine Strategy.

The Province has worked with some First Nations leadership and technical staff to frame the process and to draft this Intentions Paper. In December 2021, the B.C. government invited 95 coastal First Nations to a series of meetings to discuss the future of ocean management in B.C. and to present the opportunity for codevelopment. The conversation started with the distribution of an online survey and a series of dialogue sessions with elected and hereditary leadership.

These early discussions were built upon in a series of technical sessions with First Nations staff in various stewardship roles. Participation by Nations varied depending on the nature of existing relationships and governance arrangements. For example, First Nations involved in MaPP worked through their governance structures to identify shared interests and recommendations for ocean management. The Province met with eight modern treaty Nations separately, and the First Nations Fisheries Council of B.C. facilitated discussions with Nations that reside primarily on Vancouver Island and the southern mainland. A "What We Heard" report was developed from these sessions that outlines the key points of discussion under specific themes, as well as recommendations developed on how First

Nations and the Province may collaboratively move forward.

Following early engagement, a team of First Nations and Ministry staff was established to cowrite the Intentions Paper. Co-writing this paper helps to ensure that knowledge brought forward is articulated in an authentic way, with the Province and First Nations sharing control over its narrative and content. This collaborative approach is guided by commitments made through the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)⁶ and the Truth and Reconciliation Calls to Action⁷, and is part of a broader shift away from status-quo practices that have limited the inclusion of Aboriginal rights-holder perspectives in policy development and played a significant role in reinforcing colonial power dynamics. It helps recognize the thousands of years of First Nations economic activity, knowledge (modern and traditional), traditions, and culture that have evolved with the ocean. It also provides an opportunity to develop partnerships that establish holistic, equitable, and sustainable governance structures and processes for bringing healing and achieving the overarching goals of fostering resilient ecosystems and communities.

Preparation of this Intentions Paper also involved a review of relevant First Nations, provincial government, federal government, stakeholder, and local government policies, plans, and positions (Appendix 3). Reviews of consultation reports prepared for other initiatives were also helpful and provided a way to honour the knowledge and perspectives that have already been shared.

Vision For The Future

As stewards of coastal ecosystems on behalf of current and future generations, we aim to nurture healthy and productive ecosystems. We will manage them together in a good way to support sustainable prosperity and human health and well-being, while investing back into the ecosystems that sustain us all.

The key elements of this vision, which was jointly created by the Ministry and coastal First Nations, are ecosystem health, good management, and prosperity (Figure 2). They offer an overarching framework for the Coastal Marine Strategy. The next section describes these outcomes and proposed policy intentions in some detail.

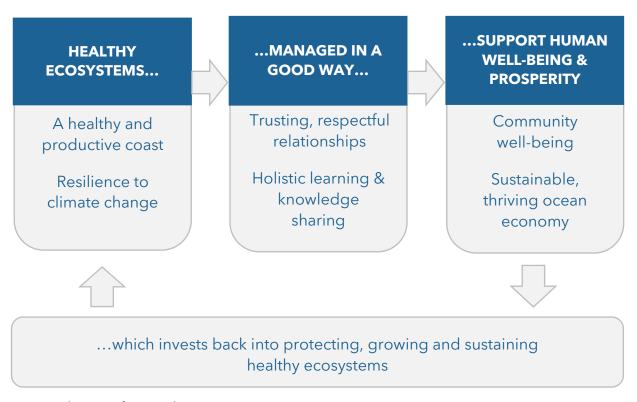


Figure 2: Elements of a Coastal Marine Strategy Vision

A HEALTHY AND PRODUCTIVE COAST Α.

A healthy and productive coast that sustains abundant fisheries and marine wildlife is the foundation from which all our other aspirations for the coast evolve. Healthy and biodiverse coastal marine ecosystems are stable, vibrant, and full of life, predictably deliver a range of benefits to people, and are resilient to change⁸. Ecosystems and species send signals when things aren't functioning "normally," and these signals help us understand when we need to take corrective action. Examples of serious warning signs include low ocean oxygen levels or "dead zones," sudden die-offs of animals, seafood harvesting closures, barren kelp forests, high toxin loads in killer whales, smaller and smaller fish, and plastic patches riding ocean currents. In British Columbia, where population density and development pressures are lower compared to other coastal jurisdictions around the world, the general state of B.C.'s marine waters are relatively healthy; however, there are several areas of concern along with significant opportunities for improvement.9 In collaboration with First Nations, the federal government, stewardship organizations, and stakeholders, the Province will take stronger action to keep the coast abundant and productive.

POLICY INTENTIONS

A-1: Boost efforts to recover wild salmon: The overall abundance of wild Pacific salmon and steelhead has declined since the 1950s. 10 Wild salmon have shown average declines of 20-45% on the north and central coasts, while sockeye has declined by 43% and chum by 14% in southern B.C.¹¹ Wild salmon declines have been attributed to a variety of factors, including poor marine survival rates, changing ocean con ditions from climate change, water

quality/quantity, harvesting, predation, aquaculture, industrial use in nearshore environments, and land use decisions that have impacted salmon-spawning watersheds (e.g., riparian areas).

Wild salmon are a foundation species, and their declines have cascading effects for animals and people across the coast. For many First Nations, wild salmon are irreplaceable and core to their identities and ways of life. They are integral to family structures, community cohesion, gatherings and ceremonies, and practices of giving, trading, and sharing. Wild salmon are needed for food and economic security, for sustaining human and ecosystem health, and for teaching traditions and cultural practices. 12

Recommendations from the Wild Salmon Advisory Council (WSAC) led to the launch of the B.C. Salmon Restoration and Innovation Fund (BCSRIF), in partnership with the federal government. Since its inception in 2019, Phase 1 of BCSRIF funded 97 projects totalling over \$126 million. Projects include restoration of freshwater and marine habitats, kelp production, modernizing catch monitoring and reporting, invasive green crab control, forage fish assessments, climate action planning, and cumulative effects modeling. BCSRIF also funded an Indigenous Monitoring and Inspection Program that monitors and oversees operations at salmon farms in the Broughton Archipelago. In August 2022, B.C. and Canada announced a doubling of BCSRIF and an extension of the program to 2026, bringing the total amount committed to \$285.7 million. Also stemming from WSAC recommendations include updates to the Riparian Areas Protection Regulation. The Province will continue to implement WSAC recommendations and develop and implement new strategies with First Nations, the federal



government, and stakeholders to protect and revitalize wild salmon populations.

A-2: Monitor coastal ecosystem health: Kelp forests, eelgrass meadows, rocky shores and other critical nearshore habitats are hotspots for biodiversity. They are also popular places for people to collect food, work, and connect with nature. Monitoring these sensitive nearshore environments is essential. Investments in monitoring allow us to acquire baseline information, which in turn allows us to document changes and understand what's driving them. In several parts of British Columbia, inventory projects led by First Nations, stewardship organizations, academic institutions, and/or the B.C. government, have greatly improved our understanding of the

abundance and distribution of these habitats and their resilience to climate change, stress and disturbance.

To help keep coastal communities, economies, and ecosystems healthy, we must keep track of how coastal areas are changing. From tracking contaminants in the water and the spread of alien invasive species, to monitoring sea-level rise and surveying the coastline, observations help us all make the best decisions for coastal communities and for the environment. Careful and consistent observation, along with conservation targets and indicators of ecosystem health, is critical for responsible stewardship of the coastal marine environment.

In many parts of the coast, First Nations are the eyes and ears on the water. Through First

Nations-led programs such as Guardians, Watchmen, and stewardship officers, First Nations engage at a local level with communities in conversations about conservation and responsible use, and work to engage with the provincial, federal and local governments to improve management decisions. They observe and record changes in the health of habitats and the coastal species that rely on them, such as whales, grizzly bears, herring, and wild salmon.

First Nations-led monitoring systems have a strong record of success in British Columbia. Given the chance, they can do more. Additional training programs co-developed with First Nations are needed, and stable, predictable funding is required to build and maintain program capacity. To empower First Nations stewardship, the Province will explore delegating ecosystem monitoring roles and responsibilities to interested coastal First Nations, and seek to establish longer term funding support mechanisms, such as community-benefit sharing agreements. We will partner with First Nations to weave Indigenous knowledge and western science together to paint a picture of historical conditions against which we can establish trends that inform management decisions.

The B.C. government will look for opportunities to shore up provincial monitoring of habitats critical for maintaining biodiversity. B.C. will continue to work with the federal government, First Nations, and stakeholders to develop and implement a robust program to monitor the ecological and socio-economic benefits of protected areas in the marine environment. We will continue to work with non-governmental stewardship organizations to monitor the effects of climate change in nearshore ecosystems, trace the spread of nearshore alien invasive species (e.g., Spartina), and strengthen our efforts to observe and understand ocean acidification.

A-3: Prevent and clean up marine pollution:

Marine and coastal pollution is a growing problem with negative impacts on marine life and human health and safety. Common forms of pollution include polystyrene foam (like Styrofoam), fishing gear, industrial waste, derelict infrastructure, runoff from agricultural land, sewage, chronic "mystery" spills, loghandling debris, underwater noise, abandoned boats, and single-use plastics. Microplastic pollution continues to attract public attention. Microplastics are now pervasive in the ocean system, posing threats to people and wildlife. Once in the environment, they are consumed by marine animals and passed from prey to predator and, eventually, humans. They have been found in salmon, tuna, halibut and oysters.

The Province, in collaboration with First Nations and the federal government are taking action to prevent, clean up, and monitor pollution. Some highlights include:

- The Clean Coast, Clean Waters Initiative has funded the removal of over 100 derelict vessels and over 1,000 tonnes of marine debris and plastics from the B.C. coastline since 2020.
- The Clean B.C. Plastics Action Plan is working to reduce and/or eliminate certain single-use and plastic items from waste streams and to create a new regulation that would further reduce single-use plastics pollution. Through the CleanBC Plastics Action Fund, the Province is dedicating funds to projects that will reduce the use of new plastic, expand reuse of plastics, and increase the use of post-consumer recycled plastic.
- B.C. has partnered with the federal Fisheries and Aquaculture Clean Technology Adaptation Program to work with private companies and non-profits to replace expanded polystyrene marine floats

- with environmentally friendly alternatives such as air-filled or pouch systems.
- The Tsleil-Waututh Nation and Ministry of **Environment and Climate Change Strategy** (Ministry of ENV) approved a set of water quality objectives in 2021, for the marine waters of Burrard Inlet. Benchmarks inform the management of water quality for protecting human consumption of shellfish, human consumption of finfish, aquatic life, wildlife, cultural practices, recreational uses, and institutional uses.
- The Ministry of ENV oversees an Environmental Emergency Program to prepare for, and respond to, spills of hazardous materials and substances. As part of that program, the Province has developed a B.C. Marine Oil Spill Response Plan for coastal marine and estuarine waters. B.C. takes an active leadership and participatory role in coastal resource identification and protection and cleanup

- of the inter-tidal shoreline and the seabed in the event of an oil spill.
- The Ministry of ENV is developing a Public Interest Bonding Strategy aimed at ensuring that owners of industrial projects pay the full cost of environmental clean-up and reclamation - even if their projects are abandoned.
- Clean up of hazardous waste from an abandoned cannery and fish processing facility at Namu near Bella Bella in the Central Coast has begun. Restoration of this site – which is culturally important to the Heiltsuk Nation, was identified as a priority in the MaPP Central Coast Marine Plan. Full restoration of Namu will require further investments¹³.
- Under the Fisheries and Aquaculture Clean Technology Adoption Program, the Ministry of ENV is partnering with the B.C. Shellfish Growers Association to set up a foam billet replacement project to address old foam



- docks, a common source of plastic pollution in the marine environment.
- Agricultural runoff is a significant ecological problem for many coastal zones around the world, where the increase in nutrients creates harmful algal blooms, zones of hypoxia or anoxia, and loss of biodiversity.¹⁴ To reduce the risk of environmental impacts from agricultural operations, in February 2019, the Province amended the Code of Practice for Agricultural Environmental Management. Changes include minimum setbacks from watercourses; proper storage and use of manure and other nutrient sources; the prevention of water quality impacts from contaminated run-off; the prohibition of direct discharges to water, and; nutrient management planning.
- In 2021, the Ministry of ENV released updated water quality guidelines for aquatic life, wildlife and agriculture. The guidelines use the best available science to aid in the management of water resources. Clean water from streams and rivers that flow into estuaries is essential for maintaining healthy coastal ecosystems.

The Province will continue to collaborate with First Nations, local government, the federal government, industry, non-governmental organizations, and scientists to prevent and clean up marine pollution. We intend to work with others to raise awareness and change consumption behaviours, address local concerns around outflow and contaminants from historical industrial uses (e.g., mines, forestry operations), support development of better dock materials and construction practices, and accelerate technology and innovation to reduce and clean up plastic pollution. Additional coastal cleanups of plastics and other debris, as well as further action to address derelict and abandoned boats in the intertidal zone, are

other actions the Province can take in partnership with others. We will also explore the need for better infrastructure along the coast to provide a place for boats to take marine debris for safe disposal and recycling on land.

A-4: Protect and restore nearshore habitat:

Biologically rich and highly productive coastal habitats, such as kelp forests, estuaries, and seagrass meadows, are critical. They are migrating, feeding, breeding, and sheltering grounds for hundreds of unique species. They cycle nutrients, offer protection from erosion and storms, store carbon dioxide, and offer opportunities to appreciate and understand nature. These important habitats are at risk from climate change and the cumulative effects of human use, but fortunately, they can respond



well to management intervention. Through partnerships and collaboration with First Nations, federal and local governments, stewar dship organizations, and stakeholders, the B.C. government intends to:

- A-4-1 Characterize the status of estuaries, seagrass meadows, salt marshes, kelp forests and their associated ecosystem values.
- A-4-2 Prioritize protection and/or restoration of habitats identified as having high ecological and cultural value (e.g., habitats important for Pacific wild salmon).
- A-4-3 Boost support for stewardship initiatives aimed at protecting, restoring, or monitoring nearshore habitats (e.g., projects funded through BCSRIF, MaPP's regional kelp monitoring initiative, B.C. Parks seagrass and kelp monitoring and restoration projects, North Island University's research on kelp habitat banks).

- A-4-4 Improve alignment of nearshore habitat restoration and protection with watershed restoration plans and the Watershed Security Strategy and Fund.
- A-4-5 Prevent further loss of habitat from shoreline armouring by incentivizing the use of natural marine shoreline design guidelines (e.g., Green Shores).
- A-4-6 Complete and implement the first ever marine protected area (MPA) network in Canada with 17 partner First Nations and the federal government.
- A-4-7 Plan, establish, and manage MPAs in a way that delivers local benefits and that advances implementation of the UNDRIP.
- A-4-8 Explore innovative protected-area models including the designation of Indigenous Protected and Conserved Areas, in collaboration with interested First Nations and the federal government.



A-5: Help recover resident killer whales and other marine species at risk: The Province works with the federal government to coordinate recovery of species listed under the federal Species At Risk Act (SARA). There are a number of marine species found on the coast of British Columbia that are endangered, threatened, or of special concern including Northern abalone, Olympia oysters, eulachon, several rockfish species¹⁵, and northern and southern resident killer whales.

Northern and southern resident killer whales are emblematic of B.C. and the people who live here, but they are in trouble. From a population of around 200 whales in the 1940s and 100 whales in the mid-1990s, the southern resident killer whale population now stands at just 75.¹⁶ As they travel the waters of the Salish Sea, they struggle to find enough salmon to eat and are vulnerable to contaminants, boat disturbance, and noise pollution.

Northern and southern resident killer whales were SARA listed in 2003, as threatened and

endangered, respectively. Canada approved an action plan in 2017 and an amended recovery strategy for these whales in 2018.¹⁷ Since then, the federal government has acted to restore chinook salmon (these whales' preferred prey), reduce noise and vessel speed in areas designated as critical habitat, reduce the threat of contaminants, monitor whale presence and activity, and educate people about how they can help protect the whales. As partners in the Killer Whale Task Force and participants in the federal government-led whale technical working groups that include First Nations, other federal departments, and the state of Washington, the Province remains committed to doing its part to recover these charismatic top predators. We will continue to provide sound information and appropriate measures for the conservation and protection of other marine species at risk, consistent with our commitments in the *Accord* for the Protection of Species at Risk. 18 Working together at federal, provincial, and local levels is essential to protect at-risk species, their habitats and biodiversity overall.



В. **RESILIENCE TO CLIMATE CHANGE**

The climate is changing. Sea levels are fluctuating, and sea surface temperatures are rising. Ocean waters are becoming more acidic while carrying less oxygen. Wind and precipitation patterns are more variable, and droughts, floods, and other extreme weather events are occurring more frequently. These shifts in climate are impacting marine life and people.

Communities and businesses across B.C. will experience the effects of climate change differently. First Nations and coastal communities are disproportionally affected since their cultures, livelihoods, and food security are intertwined with the ocean. Damage to, disappearance of, or loss of access to sacred and cultural sites, food gathering areas, and coastal access routes due to extreme weather events and rising sea levels are matters of deep concern to coastal First Nations, as are changes in quantity, quality, and timing of harvested foods.

As climate changes, marine species and habitats respond differently. There is also variability in how the same species and habitats respond in different parts of the coast. Underwater kelp forests, for instance, are one of the main habitats threatened by warming sea temperatures, as kelp thrives in cooler waters. Kelp in inner coastal waters suffered more from recent heat events than kelp in cooler, deeper outer waters farther from shore.¹⁹

Work is underway to prepare for climate change. In May 2022, the Province released the CleanBC Roadmap to 2030 and the Climate Preparedness and Adaptation Strategy.²⁰ Together, these documents lay out a clear plan to achieve 100% of provincial emissions targets and help address sources of climate change

while preparing us for its impacts. The Climate *Preparedness and Adaptation Strategy* outlines actions to take place from 2022-25 and is supported by more than \$500 million. It is part of a broader suite of investments from Budget 2022 totalling more than \$2.1 billion allocated to support people and communities recover from recent disasters and prepare for future climate impacts.

In November 2022, the federal government released Canada's first national Adaptation Action Plan that outlines federal adaptation objectives and targets to address immediate and future climate risks to Canada.²¹ Federal funding totalling \$8 billion will be spent on five priority areas of Canada's National Adaptation Strategy:

- Improving health and well-being
- Building and maintaining resilient public infrastructure
- Protecting and restoring nature and biodiversity
- Supporting the economy and workers
- Reducing the impacts of climate-related disasters

The B.C. First Nations Leadership Council developed a Climate Change Strategy and Action *Plan* that sets priorities for First Nations' climate action and resilience.²² Additionally, many municipalities, regional districts, and First Nations have climate action strategies that align with federal and provincial initiatives and policy directives. Yet, we need to do more, because the impacts of climate change are expected to become more severe over the coming decades. We must work together to protect sensitive marine ecosystems and coastal communities exposed to climate change impacts in an inclusive, equitable, and holistic way.

POLICY INTENTIONS

B-1: Keep communities safe from harmful climate change impacts: Communities are the first line of response to severe weather events and disasters and play a critical role in applying policies and strategies to help prevent and manage climate risks. While some impacts of climate change will affect all communities, other changes pose different levels of risk based on where we live. At the same time, the needs and capacities of rural, remote, and coastal communities are different from those of urban centres.

In 2019, MaPP released an assessment of projected climate changes, sectoral impacts, and recommendations for adaptation strategies across the North Pacific Coast.²³ The report emphasized the uncertainty surrounding global climate change projections for coastal regions, and the associated vulnerabilities and risks. This uncertainty is attributed to limited access to reliable and continuous data sources and the unpredictability of humans and their actions. According to the authors, improved climate projections and finer scale vulnerability and risk assessments would improve integrated coastal decision making and planning, in turn supporting healthy coastal communities and economies.24

The Province, in partnership with First Nations, and federal and local governments will continue to expand a collective understanding of climate risks to coastal communities, ecosystems, and economies with ongoing investments in research, modeling, and monitoring. We will help provide the information needed to develop and update regional climate action plans in response to monitoring data and scientific advice. Climate action plans can help incorporate climate change vulnerability and adaptation considerations into marine spatial

plans, economic development plans, official community plans, and zoning bylaws that can help keep many forms of development out of atrisk shorelines. We will also work with the federal government to support the development of better short-range and long-range forecasting and early warning systems for climate change stressors such as extreme weather events and storm surges.

B-2: Support seafood harvesters, producers, and innovators: Food and climate change are closely linked. Climate change can affect food availability, access and use, leading to food insecurity. We are already experiencing these challenges in British Columbia. Record temperatures during 2021's dangerous heatwave caused a mass die-off of marine animals such as sea snails, sea stars, clams, and mussels – possibly as many as a billion animals.²⁵ The average sea surface temperature has risen by 0.7°C, and this persistent, higher than normal ocean temperature stresses species that depend on colder water, such as kelp and salmon.²⁶ Higher ocean temperatures combined with low, unusually warm rivers pose a dual threat to wild salmon.

Ongoing ocean acidification is having "osteoporosis-like" effects on shellfish, making it hard for them to build and maintain shells. Falling oxygen levels (deoxygenation) are affecting commercial fish species by reducing high quality fish habitat – most fish prefer oxygen-rich waters. Oxygen levels in the waters of the North Pacific have declined by 15% over the last 60 years.²⁷ A period of severe hypoxia (unusually low levels of oxygen in the water) in the Saanich Inlet from 2015 to 2017, led to the absence of spot prawn and other commercial shrimp species. 28 Aquaculture operations for vulnerable species, such as Dungeness crab and spot prawns, are also affected by deoxygenation.



Sometimes marine life shifts in response to changing ocean conditions, perhaps to deeper waters or towards other shores, changing where seafood can be harvested. Some hypoxia tolerant species (e.g., some squid, jellyfish) may increase in abundance and/or distribution, potentially outcompeting less tolerant species (e.g., finfish).²⁹ These shifts can create new opportunities for seafood development. For example, Humboldt squid are now a common sighting in the waters surrounding Vancouver Island, but 20 years ago, these giant squid were unheard of in Canadian waters.³⁰

Ocean food collection and production must adapt to a changing climate to meet local, provincial, and national needs for nutrition, food security, and jobs. Seafood harvesters and producers need more support to better anticipate and adapt to the impacts of ocean acidification, ocean warming, deoxygenation, and heatwaves. We intend to work with First Nations, the federal government, research institutions, and industry to enhance our understanding of when, where, and how marine resources are changing. Harvesters and

producers can then take advantage of future opportunities, and we can increase the resilience of fishing and seafood farming communities. The Province can support a transition away from severely impacted fisheries and aquaculture species to more resilient species. We can also work with the federal government and industry to support the use of technology and technological innovation to improve productivity and profitability.

B-3: Develop an ocean acidification and **hypoxia plan:** Ocean acidification is a global problem with local impacts that threaten industries such as crab fisheries and shellfish aguaculture. We need to assess risks to species, communities, archaeological sites, and economies, and work together to adapt. The Province is developing an ocean acidification and hypoxia plan to determine the state of knowledge related to ocean acidification and hypoxia in coastal waters. The plan will include addressing knowledge gaps and developing adaptation and mitigation strategies to support the fisheries and aquaculture sectors, including food-fish harvesters.

As a member of the International Alliance to Combat Ocean Acidification,³¹ the B.C. government will continue, in partnership with the other governments and academia, to address ocean acidification and hypoxia and to strengthen nearshore monitoring to better understand and predict conditions and seek adaptive measures.

B-4: Shift to nature-based solutions to coastal **protection:** Extreme storms and shifting wave patterns combined with sea-level rise increase coastal erosion and pose risks to coastal infrastructure. Property owners often attempt to stabilize coastal land and protect residential and commercial infrastructure along the coast by building seawalls, breakwaters, riprap, and other armoring structures to hold back the sea and prevent the loss of sediment. These structures are costly to build and maintain, they degrade over time, and disrupt natural shoreline processes.

Many shoreline protection systems in place today were not designed with the thought of protecting infrastructure and communities from climate change risks.³² Nature-based solutions that rely on existing or enhanced coastal landscapes can help improve climate change resiliency by reducing impacts from hazards such as rising sea levels, storm surge, and "nuisance" flooding (such as high tide or windblown flooding). Nature-based solutions are cost effective, prevent pollution, attract and sustain marine life, add recreational benefits, and increase property values.³³ Examples of nature-based solutions include living shorelines (e.g., native beach grass and sedges), wetland and estuary restoration, and green infrastructure for stormwater management.

Local governments across coastal B.C. are increasingly exploring the use of nature-based solutions. For example, Cowichan Valley's



official community plan outlines the use of soft shoreline protection tools for enhancing shellfish harvesting and protecting properties from climate change impacts, while the city of Campbell River is actively replacing hard armouring with soft alternatives.³⁴ The B.C. government can work with First Nations, local governments, business, and stewardship organizations to help make the shift towards relying on nature-based solutions to improve climate change preparedness and adaptation. We intend to help raise awareness, support development of shoreline management plans, and continue to replace armoured shorelines in provincial marine parks and protected areas with soft, natural ones.

B-5: Protect and restore kelp, eelgrass meadows, and other blue carbon sinks: Nearshore ecosystems such as eelgrass meadows, kelp beds, and salt marshes play a valuable role in climate change mitigation. They can absorb significant carbon from the atmosphere and can protect the coastline from erosion, storms, and flooding.³⁵ Prioritizing protection and restoration of these nearshore ecosystems can help build resilience to climate change.

We intend to expand on recent work that has identified localized climate refugia in marine and coastal systems, and incorporate these areas into marine spatial planning, protection, and conservation strategies (e.g., MPA network planning, MaPP plans, marine spatial planning in the south coast). We will also review provincial policies to identify where improvements can be made to address protection and management of blue carbon habitats in addition to working with federal partners to address blue carbon policy gaps.



C. TRUSTING, RESPECTFUL RELATIONSHIPS

How we govern and interact with the environment influences how we generate benefits for society and how we can sustain these benefits. Good management begins with respect: for the natural environment, for the connections between people and place, and for responsible stewardship by all parties. These respectful relationships, in turn, underpin effective integrated management and help build trust among governments, stakeholders, and citizens.

Managing coastal and marine ecosystems along the B.C. coast is complex, with many actors having a role in different ocean activities and values (Appendix 2). Inevitably, such a system creates management silos and gives rise to jurisdictional gaps, overlaps, and uncertainties. With the recent creation of the Ministry, the Province has taken a big step towards dismantling internal silos and bridging gaps between processes and structures to support more holistic, integrated, and effective ocean governance.³⁶ However, successful governance requires more.

The historic displacement of Indigenous governance authorities and stewardship responsibilities created a gap in the management and stewardship of coastal and marine resources. As a key element in our commitment to good management, the Province and First Nations will work together to re-establish integrated land-sea management grounded in deep ecological and traditional knowledge, and the best available science. We will also rebuild trusting and respectful relationships as partners in governance and stewardship and commit to improving collaboration and cooperation.

POLICY INTENTIONS

C-1: Respect and uphold Indigenous rights:

First Nations were once the sole stewards of their territories and resources. They governed, made, and enforced laws and managed lands, resources, and institutions. Colonial policies eroded their authorities and their capacity to practise those authorities and to exercise stewardship responsibilities. Building government-to-government relationships with First Nations based on recognition of rights, respect, co-operation, and partnership is key to reconciliation. Building these relationships is part of recognizing and implementing treaty rights, First Nations' distinct laws, policies, and stewardship responsibilities, First Nations' management systems for marine and coastal habitats, and implementing UNDRIP.

First Nations want to be empowered to establish and enforce rules in their traditional territories. In June 2022, B.C. Parks and the Kitasoo-Xai'xais and Nuxalk First Nations entered a Shared Compliance and Enforcement Pilot Project that is the first of its kind. The project could lead to shared compliance and enforcement responsibilities between First Nations guardians and B.C. Parks rangers. The Province will continue to explore initiatives that empower First Nations to monitor and enforce Provincial legislation, regulations, and management plans associated with the coastal and marine environment, recognizing that longer term funding will be needed.

We will also work with First Nations and other governing authorities to advance joint and consent-based management and decision-making with Indigenous rights holders on a government-to-government basis with individual First Nations or among multiple Nations. We will need to co-identify measures to

fully recognize and support treaties through engagement with treaty Nations. This will strengthen collaborative coastal management and decision-making consistent with treaty rights and provisions.

Consistent with UNDRIP, provincial laws, policies and practices will be updated and aligned over time to recognize and respect the distinctionsbased rights of Indigenous Peoples. As part of the Coastal Marine Strategy, the B.C. government intends to identify strategies to address institutional and systemic racism and build awareness of Indigenous rights, management authorities, and jurisdictions, particularly as they relate to managing marine values.

C-2: Engage British Columbians in coastal marine management: Local communities and stakeholders need more opportunities to contribute meaningfully to coastal marine management. Their participation can unlock

additional knowledge that improves the quality and credibility of decisions, enhance compliance with rules, and reduce conflict.³⁷ Understanding the underlying values held by different stakeholder groups is important for building trust and informed decision making. When marine planning processes consider local interests and concerns at an early stage, there is a greater chance of meeting local needs and priorities.

The B.C. government will continue to offer and invest in participatory structures that bring a diversity of voices and interests into marine management and stewardship discussions. To build a foundation for effective public engagement, we will continue to promote education and communication about coastal marine values, benefits, issues, and potential solutions. We will strive to reduce engagement fatigue and the strain placed on participants responding to engagement requests, and will





consider how the Province can better support locally driven initiatives.

C-3: Advance collaborative stewardship: The provincial and federal governments, First Nations, local governments, and stakeholders all have a role to play in nurturing healthy marine ecosystems and coastal economies. The authority to make decisions is shared between governments (Appendix 2), and sometimes this division of responsibility creates barriers to achieving good outcomes for people and the marine environment. Everyone has a strong interest in decisions and how they are made. For example, marine shipping is managed by Transport Canada and international regulations, but everyone who lives along the coast of B.C. can appreciate the importance of shipping and shares concern for the potential risks that

activity can pose (e.g., spills, noise pollution, vessel strikes on marine mammals).

Collaborative stewardship is a collective process involving multiple and diverse groups who act together to take care of natural resources by sharing knowledge, risks, capacity, and accountability. The new Ministry reflects the Province's commitment to improving collaborative stewardship of the coastal marine environment by bringing together staff responsible for creating policies and plans related to managing the coastal marine environment, watersheds, and marine fisheries. The Ministry has a mandate to strengthen partnerships, advance engagement with First Nations in the stewardship of natural resource values, and increase the number of cogovernance and shared decision-making models that support integrated resource management.

There are several models of collaboration to build from, including:

- Reconciliation Framework Agreements on Bioregional Ocean Management and Protection: These agreements, signed by several First Nations and Canada, advance collaborative ocean governance in the Northern Shelf Bioregion.³⁸
- MaPP: In 2011, the Province and 17 coastal First Nations joined together to create integrated marine plans that guide collaborative stewardship of marine values in the Northern Shelf Bioregion. Stakeholders and local governments lend their voices through advisory committees established to support marine plan implementation.
- The Environmental Stewardship Initiative (ESI): In 2014, the ESI was established as a partnership between the Province and First Nations focused on ecosystem assessment and monitoring, ecosystem restoration and enhancement, ecosystem research and knowledge exchange, and stewardship education and training.
- The Collaborative Stewardship Framework (CSF): In 2018, the CSF was initiated as a pilot to test how information reflecting western science and First Nations knowledge can enhance natural resource decision-making through a collaborative land stewardship approach between the Province and more than 30 First Nations.
- shíshálh / British Columbia Foundation Agreement: In 2018, shíshálh Nation and the Province signed an agreement committing the parties to shared decisionmaking for land and resource authorizations throughout the swiya (lands, birthplace, world, "Territory" of the shíshálh Nation). shíshálh and B.C. are currently implementing the Agreement, beginning with applications for all moorage

types within the swiya. Eventually, all Provincial authorization decisions related to land and resources within the shishalh swiya will be incorporated into the shared decision-making process.

The B.C. government, in collaboration with First Nations, will continue to look for opportunities to enhance existing and develop new innovative structures, agreements, and tools to facilitate collaborative stewardship of coastal marine values in a manner that implements UNDRIP and ensures provincial decision-making aligns with the Declaration Act. We will pay close attention to the implementation of existing agreements and structures to ensure progress is on track.

We will look for opportunities to improve collaboration with the federal government, particularly where harmonized approaches to stewardship are required for effective management (e.g., aquaculture). We may also look to improve coordination and alignment with neighbouring jurisdictions such as Washington State and California to support cross-border collaboration in managing migratory fish and wildlife, monitoring water quality, reducing flood risks, and planning for climate change impacts. We will also continue to look for innovative ways to partner with nongovernmental organizations eager to share their expertise and capacity.

C-4: Evaluate the need for comprehensive coastal zone legislation: A key challenge to coastal management is the absence of a legal framework specifically designed to govern and manage coastal marine areas in British Columbia. Such a framework, developed in partnership with First Nations, could establish clear and consistent guidance for developing, implementing, and enforcing integrated coastal zone plans, and would help to define and track progress towards environmental and socioeconomic objectives. Specifically, new legislation could:

- C-4-1 Protect vital foreshore and nearshore habitats from shoreline modification.
- C-4-2 Ensure critical coastal marine habitats are regularly monitored.
- C-4-3 Bring integrated marine use plans into law, to increase clarity and certainty.
- C-4-4 Strengthen coordination with coastal flood management activities.
- C-4-5 Provide a framework for local governments to work together to address shared coastal infrastructure needs.
- C-4-6 Update building standards to ensure new developments are safe from sea-level rise and extreme weather events.
- C-4-7 Include incentive systems to drive and encourage investments that protect and conserve ecosystems, build natural capital, and support healthy communities and resilient coastal economies.
- C-4-8 Provide a framework to guide decisions about emerging industries, such as

- seabed mining and ocean-based renewable energy.
- C-4-9 Support a tenure system that advances the authority of First Nations to steward their territories, considers cumulative effects, and acknowledges the qualities that distinguish marine ecosystems from terrestrial ones.
- C-4-10 Recognize the role of First Nations in marine stewardship and outline cogovernance and shared decision-making accountabilities.
- C-4-11 Better address concerns related to siting and management of marine-based industrial use, such as log handling and storage and aquaculture.

In addition to exploring the development of new legislative tools, we are committed to evaluating the legal instruments and designations currently available (e.g., Water Sustainability Act, Land Act, Environmental Management Act, Riparian Areas Protection Act, and Wildlife Act) to support implementation of marine plans (e.g., MaPP), policy and land use decisions.



D. HOLISTIC LEARNING AND KNOWLEDGE SHARING

How can we revitalize wild salmon populations? How can we best address the individual and combined effects of multiple stressors on marine ecosystems and communities? How should we respond to ocean acidification and climate change? To answer these kinds of questions, we need to co-create and share knowledge.

There is a wealth of knowledge and experience held by First Nations, multi-generational coastal families, and marine stakeholders such as commercial fishers, shellfish growers, wildlife tourism operators, environmental groups, and research institutions. Their insights should inform research and policy formation.

When we gather and mobilize different sources and forms of information about the environmental status of the ocean, how it is or could be used, and how it can be sustainably managed, we make better decisions. When we integrate ocean science with First Nations traditional knowledge, our understanding of ecosystems and other cultures is enriched. Better stewardship of all coastal marine values can only be achieved when everyone brings knowledge and information to the table as equals working together in an atmosphere of trust and respect.³⁹ The Province is committed to working in partnership with others to improve our knowledge and understanding of the coastal marine space while recognizing and valuing Indigenous knowledge.

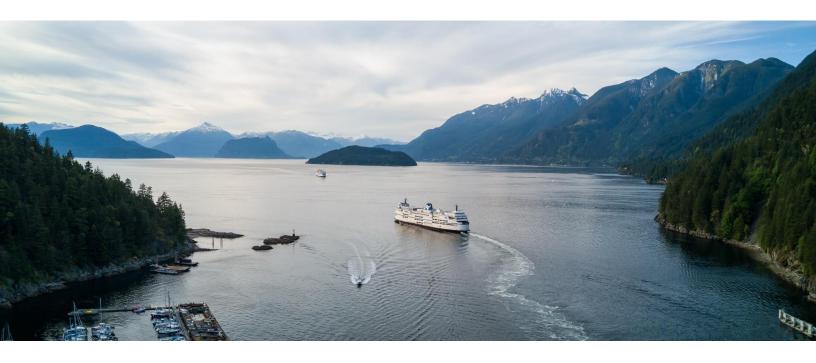
POLICY INTENTIONS

D-1: Weave traditional knowledge with western science: Indigenous knowledge holders have in-depth understanding of coastal environmental and socio-economic systems, contribute valuable information about historical conditions, and share vital observations about

current conditions observed first-hand.⁴⁰ Marine life is featured in First Nation traditions, knowledge, ceremonies, stories, and songs passed through generations. The relationships formed with the sea from generation to generation have gifted First Nations with a deep understanding of marine life and habitats and their interrelationships within their territories. This deep understanding is a balance of traditional and modern knowledge.

The B.C. government is committed to pairing Indigenous knowledge systems with western scientific and local community insights to inform decision-makers about resource use in a respectful way. There are successful change models to build on, including MaPP, the Great Bear Rainforest Agreement, and the West Coast Aquatic⁴¹ experiences. These initiatives paired knowledge systems in ways that were consistent with First Nations' distinct protocols, laws, processes, and protections. We will continue to build public understanding of the value and importance of including First Nations' traditional and informed knowledge and experience when developing and implementing marine policy.

D-2: Assess the value of the ocean: Over the last two decades, the provincial and federal governments have twice assessed the value of British Columbia's ocean-based economy (2006, 2020) using "traditional" indicators such as contribution to provincial gross domestic product and employment. These indicators are essential for understanding monetary trends in the ocean sector and sub-sectors (fisheries, tourism, shipping, transportation, etc.), but they do not account for the value of our natural or social capital to support socio-economic health and well-being. GDP-based valuations ignore many of the concepts of well-being that are important to Indigenous people.⁴²



To measure progress towards sustainability of the provincial ocean economy, we must account for the status of the natural wealth of the ocean and for the status of coastal communities including social, cultural, mental, and physical health. This will ensure that decisions are based on a holistic understanding of the value of, and impacts on, marine economic sectors and the ocean's natural and cultural capital. Future assessments of the value of the ocean economy will push beyond the traditional metrics and include holistic evaluations of worth that incorporate Indigenous values.

D-3: Enhance marine spatial data: The ocean is a busy place, and it is getting busier. Increased activity comes with potential economic benefits, but also with risks to public safety and the health of potentially vulnerable marine life, such as humpback and killer whales. As these mammals move through the water column and along the coastal shelf, there is a high risk of interacting with vessels of all sizes and speeds.⁴³ Ship strikes are a leading cause of mortality for some whales, putting their recovery at risk.

We can't protect whales and other sensitive animals, important resources, sensitive marine habitat – or ourselves – without knowledge of what's out there. Spatial data is a key component of integrated planning and is very important when it comes to making sound decisions about using the marine environment.

Maps of ecological and human use values can help decision-makers avoid potential conflicts (e.g., shipping lanes and marine mammal feeding grounds) and harmonize different activities (e.g., herring runs and wildlife tourism). Maps are also important visualization and communications tools for involving members of the public in planning processes. In recent years, the federal and provincial governments, First Nations and academic and research institutions have been working together to make information available in spatial formats. For example, through planning and stewardship initiatives on the north coast,⁴⁴ regional characteristics of marine life and habitat, as well as patterns of human use, have been mapped spatially. Similarly, the federal government is leading the development of a



province-wide marine atlas that will support ocean planners, managers, and users.

The Province intends to work in partnership with others to keep spatial data current and fill key gaps. For example, we will continue to work with research institutes and First Nations to map the location and extent of kelp forest beds, linking to work already underway by B.C. Parks, Hakai Institute, and MaPP. We will also devote more attention to the different domains of coastal community health (e.g., ocean use patterns, features of well-being) and mapping approaches that can create multiple ways of knowing places.

D-4: Improve availability of marine and coastal **information:** Too often, data can be challenging to find or inaccessible to certain groups. When information is shared broadly, others are empowered to make better decisions. We need to support open access to current data and encourage other levels of government to do the same, while respecting the rights of knowledge holders. Some First Nations are advocating principles of ownership, control, access and possession of their own data. 45 Hand-in-hand

with creating trust to share data is building trust in the decisions being made and ensuring that First Nations are part of that decision-making process. It is critical to respect and protect Indigenous traditional knowledge, as some information is culturally and community sensitive.

Provincial datasets for marine values need to be updated, starting with data already compiled and validated (e.g., the British Columbia Marine Conservation Analysis⁴⁶). Many organizations are also collecting and compiling data for various uses. Strengthening collaborations across organizations that collect data will also strengthen our collective depth and breadth of information that can be used to support decisions. We may also need to update Provincial platforms or tools for gathering and sharing knowledge to support collaborative decision-making, with privacy protection measures in place, as needed. These platforms need to be easy to use, accessible by everyone, and kept relevant with current social, economic, and ecological information.

E. **COMMUNITY WELL-BEING**

Many of the 150-plus communities that dot the coastline of British Columbia are dependent on the ocean and its resources for their survival and well-being. Thriving, healthy coastal communities can strengthen rural economies and rural-urban dynamics, support robust food systems and economies, and maintain an active presence on the coast. 47 However, change is constant for these communities. They face many challenges that affect their well-being, including increasing competition over marine space, climate change, pollution, the decline of traditional resource-based industries, and disconnection from decision-making processes. 48 The impacts of these pressures include loss of livelihood, declining economies, out-migration of youth, food insecurity, and health problems.

Fishing, marine tourism and recreation, aquaculture, water transportation, coastal forestry operations, research and monitoring, and boatbuilding and repair provide a way of life and a sense of place for rural communities.

Coastal economies rely heavily on the movement of goods via cargo ships, barges, ports and harbours to support the export of products and ensure reliable and cost-effective delivery of critical inputs. The health and wellbeing of coastal communities depends on their capacity to proactively respond to external change and challenges. Access to education and employment opportunities, a stable economy, communications, transportation, safety, and community engagement are signs that a community is thriving. The Province will work with partners to ensure that First Nations and coastal communities can be resilient to change and position themselves to take advantage of established and emerging ocean industries.

POLICY INTENTIONS

E-1: Create jobs and support steady, rewarding **employment:** A healthy ocean has the potential to deliver sustainable growth and new jobs. Jobs related to the sustainable use of ocean resources have wide-ranging educational requirements from fish biology, water quality



testing, mechanics, and marine vessel operation to diver training, systems engineering, and data analysis. Advances in aquaculture, ocean technology, offshore resources, shipping, and marine resources are expected to contribute to the growth of Canada's blue economy. To ensure that B.C. remains globally competitive and achieves the full potential of ocean-related industries, it is vital to prepare the workforce. The Province will work with First Nations, the federal government, industry, stakeholders, and academia to:

- E-1-1 Support workforce planning
- E-1-2 Support capacity building, training, and innovation in new and existing industries
- E-1-3 Facilitate the transition of workers to emerging jobs and growth areas
- E-1-4 Help to create a positive perception of the ocean sector and the opportunities it presents to youth and those seeking opportunities to "upskill"
- E-1-5 Identify and reduce skills gaps between education on offer and labour market needs now and into the future

Our next steps are to share the results of labour market needs assessments, continue to build partnerships with organizations interested in supporting rewarding employment in the ocean sector (e.g., communities, NGOs, governments, universities), and seek additional funding to further develop and implement projects that create jobs. Through our efforts, we hope to continue to support coastal communities in their efforts to promote local well-being and thrive amidst change.

E-2: Build a diverse coastal workforce: The ocean is important for everyone, yet access to ocean resources and sectors is not equitably distributed. For example, there are visible gender gaps in ocean science and technology⁴⁹

and in traditionally male-dominated industries such as commercial fishing, coastal forestry, and marine shipping. Similarly, First Nations are under-represented in some ocean-based industries (e.g., ocean high-tech) and the public sector – particularly in decision-making positions.

Individuals of all genders, races, backgrounds, and experiences bring different perspectives that lead to innovative solutions and new discoveries. Without their voices, management decisions cannot consider all knowledge of, and effects on, marine ecosystems and people. Equity is central to achieving sustainable economies and attracting the brightest and best people. The Province will look at ways to increase and diversify participation in B.C.'s ocean economy, starting with a gender-based analysis plus (GBA+) to help determine what actions are needed to make space for everyone.

E-3: Support First Nations cultural

revitalization and resilience: Many First Nations have been vocal about the challenges they experience in preserving and revitalizing their cultural heritage and strong connection to place. These challenges include food insecurity; access to areas and resources important for harvesting, teaching, and healing; language revitalization; loss of Indigenous place names; use of traditional resource management and harvesting methods (e.g., harvest wheels, fish traps and weirs, estuarine root gardens); and transfer of critical cultural knowledge and practices to younger generations.

There are opportunities to support First Nations cultural revitalization and resilience. For example, the Province is embarking on a Heritage Conservation Act Transformation project to reform the Act to align with UNDRIP, with the goal of improving protection of Indigenous cultural and spiritual heritage sites



and objects. This work, in addition to collaborative enforcement and climate risk assessment inventories, will better protect coastal First Nations' sites such as burial caves, petroglyphs, and middens.

In the Northern Shelf Bioregion, there are several community-led initiatives that support cultural resurgence and resilience. For example, First Nations community members identified areas critically important for First Nations' cultural use and management recommendations were put in place to protect them. 50 The Supporting Emerging Aboriginal Stewards program helps build Indigenous leadership through "on the water learning" that cultivates a deeper understanding of traditional cultural beliefs and marine values.⁵¹ Over thousands of vears. First Nations constructed and nurtured clam gardens to enhance shellfish production and feed people, and some First Nations are reclaiming these traditional mariculture practices as a means to enhance food security and reconnect with and revive ancestral practices.⁵² Access to the shoreline is required

to support clam gardens and other traditional food gathering and cultivating practices.

The Province will work closely with coastal First Nations to identify a suite of practical actions we can take together to revive traditional stewardship and support opportunities for knowledge to be shared across generations.

E-4: Improve capacity of communities to respond to change: In 2019, a team of collaborators and coastal partners gathered to discuss the current status of community wellbeing. 53 Across several domains of well-being, including social, health, food, cultural, governance, infrastructure, and economic development, the trends indicate change – for better and for worse. For example:

- Food security
- Local stewardship effort
- Research on the coast
- Connection to place



- Connection to central decisionmaking processes and decisionmakers
- Climate change impacts
- ↑ Unemployment and very seasonal employment
- Recruitment human resource surplus, availability of skilled workers
- Community infrastructure for fisheries (e.g., wharves)
- Communications infrastructure

Coastal communities are preparing for change – but they need more help from the B.C. government to take advantage of emerging opportunities and reduce threats to well-being. We can better work with First Nations, academia, local governments, and nongovernmental organizations to identify bridges and barriers to improving the well-being of coastal communities, fill gaps in our understanding of the impacts of change on wellbeing, and to identify specific actions that will help coastal communities thrive. The Province will also support efforts to narrow gaps in our understanding of how coastal community wellbeing is changing across space and time.

E-5: Develop and implement marine use plans:

Multi-use or "integrated" planning is a key part of the Province's approach to strengthening the economy, improving collaborative stewardship of land and water, and supporting well-being of coastal communities. The development and implementation of marine plans can: deliver important social, environmental, and economic benefits; streamline approval processes; reduce conflicts among ocean users, and; increase certainty for users and investors. Marine plans can also help governments and industry take advantage of new opportunities and respond to rapidly changing environmental conditions.

The benefits of integrated planning have been demonstrated here in B.C. with the implementation of marine plans developed under MaPP. These plans, developed in partnership with 17 coastal First Nations and in collaboration with stakeholders, cover 102,000 km² of marine waters from northern Vancouver Island to the B.C.–Alaska border.⁵⁴ The plans provide management direction for a range of values, uses, and activities, including governance, monitoring and enforcement, economy and communities, tourism and recreation, coastal forestry and the marine fisheries economy. The plans also include zones that provide recommendations to decision makers for uses and activities in spaces allocated for general use, high-priority and/or high-potential marine uses and activities, and protection of local conservation values.

The Province intends to partner with First Nations and collaborate with stakeholders and others to advance planning in areas of the coast where it is needed most, and where there is shared interest. We will also boost support for implementation of existing marine use plans and work hard to address challenges (e.g., long-term durable funding, sector-based policies and procedures) that have made it difficult to

achieve some key ecosystem-based management⁵⁵ objectives. The strong connections between watersheds and coastal ecosystems require more holistic approaches to planning, and we will look for opportunities to incorporate adjacent land use plans into marine planning initiatives (e.g., Great Bear Rainforest land use orders, MaPP plans).

As partners in the federally led marine spatial planning initiative in the Salish Sea, we remain committed to sharing our perspectives and expertise in the best interest of First Nations and British Columbians and building relationships with all partners and participants.

E-6: Improve access to nature, in a respectful way: The marine and coastal environment in B.C. provides natural, cultural, spiritual, recreational, and economic values and opportunities. To maintain these values, we need to ensure coastal use and development is sustainable and fosters respect for nature, people, and archaeological and historical sites. Access to the coast allows us to enjoy activities





like swimming, paddle sports, boating, diving, nature viewing, learning and exploring.

As B.C.'s population grows, more people are choosing to visit, live and work along the coast. For example, Desolation Sound Marine Provincial Park is a very popular kayak and boating destination with high visitor use. The popularity of the park brings with it impacts to water quality, ecological values, and archaeological sites. In other parts of the coast, access to shorelines can be limited by docks, floating structures, shoreline armouring, and development, which can negatively impact ecological, social, and cultural values and create conflict between users. Unlike other coastal jurisdictions, B.C. does not have a comprehensive strategy to manage coastline development and access issues.

B.C. Parks recently completed a Marine Recreation Action Plan to ensure that high quality and sustainable recreational

opportunities are available in protected areas up and down the coast. This plan provides guidance on managing marine recreation and includes actions such as monitoring visitor use and impacts on marine habitats, strengthening shared stewardship with First Nations, implementing visitor use management strategies (e.g., camping reservations/area closures), and developing opportunities for expanding marine recreation where feasible.

Expanding on this work, the Province intends to partner with First Nations and local governments to explore a comprehensive framework for authorizing responsible and sustainable foreshore and shoreline development. A key focus of this intention is ensuring that marine and coastal Crown land is accessible and allows for a range of recreation and tourism experiences, while protecting environmental and cultural values now and into the future.

F. A SUSTAINABLE, THRIVING OCEAN ECONOMY

The ocean-based economy holds great promise for helping rebuild British Columbia's postpandemic economy. Building a sustainable ocean economy is an important task. A sustainable economy is more than jobs and gross domestic product (GDP); it means that benefits from resource development are invested in local communities in ways that support equity and human well-being, including physical, mental, and family health. A sustainable economy also grows natural and human capital for the future. Natural capital is grown through incentives and regulatory measures that ensure ongoing investment back into healthy, abundant ecosystems, while human capital is grown by encouraging education, innovation, creativity, entrepreneurship, and strong governance and administration.

A sustainable economy must also be resilient in the face of unpredictability. The last two years have shown that unforeseen events can cause challenging situations for ocean-based sectors, including supply chain challenges, shifts in consumer behaviour, poor market conditions, and declines in employment levels. The tourism industry was disproportionally affected by the COVID-19 pandemic. Pre-pandemic, the industry contributed over \$20 billion to the provincial economy, and about one-quarter of annual revenues came directly from marine-based tourism.⁵⁶ Post-pandemic, revenues dropped by an estimated 50–70%. Some tourism businesses adapted, while others closed or faced the prospect of closure. The B.C. government will explore ways to recover from these, and other losses while building for the future.

A more sustainable future for B.C.'s ocean economy will require: regulatory and policy reform; good governance; strategic investments in emerging and existing sectors; marine spatial planning, respect for Indigenous knowledge, wisdom and practice, and; alignment with the federal government's vision for Canada's three oceans.⁵⁷ It will also be critical to engage fully with First Nations and include all British Columbians (e.g., women, minorities, members of the LGBTQ+ community). Through the Coastal Marine Strategy, the Province will take steps to nurture an ocean economy that is more equitable, resilient, and balanced. We will invest in people, communities, and businesses, better manage cumulative effects, and do the work needed to share with coastal First Nations the wealth that's generated through the ocean economy.

POLICY INTENTIONS

F-1: Invest in a diverse coastal and marine

economy: The world is seeing a major shift in investment, research, and development towards a "blue economy" - socially equitable, environmentally sustainable and economically viable ocean industries.⁵⁸ B.C. is well positioned to lead and benefit from this transition. In many coastal communities the Indigenous population is growing and represents a significant future labour force pool. At the same time, some coastal communities face challenges with rural to urban migration, securing new capital, accessing infrastructure and services, and reaching markets in Canada and around the world.

The Province intends to expand investment in sustainable marine sectors, including renewable energy, blue carbon, aquaculture, value-added processing, regenerative tourism, and governance and administration, along with the coastal infrastructure and services needed to support new businesses. Sectors will need to be prioritized carefully to ensure that the blue

economy delivers. Pathways of sustainable development will need to be mindful of local social objectives and preferences in the pursuit of an appropriate economic mix.

We can build on lessons from the "conservation economy" that is emerging in the Great Bear Rainforest and Haida Gwaii. In these regions, First Nations have worked with provincial and federal governments, industry, and private funders to create new opportunities in industries such as ecotourism, fisheries, manufacturing and processing, forestry, and transportation that diversify local economies while protecting the environment. The benefits for communities and ecosystems are significant - job creation, economic prosperity, social empowerment, cultural vitality, and conservation of important habitats and species are just some of the documented outcomes. Building on the success of this initiative, the B.C. government intends to partner with First Nations and work with industry, investors, and communities to develop ways to grow the conservation economy in coastal B.C.

F-2: Co-develop enduring fiscal relations with **First Nations governments:** Indigenous rights and economic systems are a fundamental component of self-determination and critical to the well being of a Nation.⁵⁹ Since time immemorial, Indigenous people in B.C. had wellestablished trade networks based on cultural, social, and economic ties. Participation in the economic landscape of British Columbia as equal partners and leaders is a central part of reconciliation between the Province and First Nations.

Tools currently used by B.C. to reconcile First Nation interests and provide certainty for investors, industry, and Indigenous communities include: treaties, incremental treaty agreements, revenue-sharing agreements, land base decision-making and consultation

agreements, forestry agreements, and cleanenergy project development funding. Revenue sharing provides a percentage of what the Province receives from resource development on First Nations' traditional territories directly back into the communities. It can stimulate investment, create jobs, and narrow the socioeconomic gap between Indigenous peoples and non-Indigenous British Columbians. Revenue and benefit sharing by the provincial government has increased over time, but these arrangements are largely based on provincial principles and objectives. New revenue streams that support self-government and selfdetermination, strong healthy Indigenous communities and services that make life better for Indigenous families, are needed.⁶⁰

We will honour our commitments and obligations to reconciliation by continuing to codevelop and co-implement policy frameworks to strengthen First Nations resource-based decision making and explore new tools that can help transform the status quo of fiscal relations between the Province and First Nations. We will explore a variety of revenue streams to support First Nations' governments and the delivery of services to their citizens. 61 Recognizing that there are different solutions for different priorities, First Nations must be able choose what is right for them, and we will work with First Nations on a government-to-government basis to understand distinct needs and aspirations.

We intend to partner with coastal First Nations to lead the development of an ocean-based economy, workforce, and business climate that supports greater leadership, inclusion and participation of First Nations. And we will continue support for First Nations-owned ocean-based companies to start up and thrive through programs, training, and funding.



F-3: Support the marine fisheries economy:

The fish, shellfish, and marine plants harvested in the waters of B.C. are an important source of jobs, community benefits, and food. Many fisheries – such as wild salmon, herring, eulachon, crab, and kelp – are at the centre of coastal First Nations' diets, language, ceremony, and song. Food security, economic security, empowerment, human health and well-being, knowledge transfer, and capacity building are some of the individual and societal benefits tied to the marine fisheries economy.

Getting seafood products from a boat or farm to the plate involves the hard work of about 11,000 directly employed people. 62 This industry value chain includes harvesters, aquaculture producers, seafood processors, marketers, and distributors. Aside from wild marine plants and algae (kelp, seaweed, etc.), the harvest and production of fish and other aquatic animals are managed by the federal government, and the Province provides advice and support. The

provincial government is accountable for supporting, and in some cases regulating, the processing, marketing, and distribution of seafood, and for ensuring seafood safety and quality through legislation and regulations.

Many commercial fisheries in B.C. face challenges that threaten the viability of fleets and individual fishers. First Nations experience multiple barriers to participation in all aspects of the value chain, such as cost of licenses, access to investment capital, insufficient labour and experience, depressed stocks and impacts from climate change. In support of a sustainable, equitable, and diverse marine fisheries economy, the Province intends to:

- F-3-1 Amplify participation with the federal government in managing and conserving fisheries.
- F-3-2 Advocate for First Nations' and industry interests to federal agencies and support

- the realization of economic development objectives.
- F-3-3 Secure fair domestic allocations of stocks managed under international treaty, such as wild salmon, halibut, hake, and tuna, in collaboration with the federal government, First Nations, and industry.
- F-3-4 Help to address barriers to First Nations' equitable participation in the fisheries economy.
- F-3-5 Provide support to fishers to adapt to regulatory changes.
- F-3-6 Address fish species declines, such as forage fish and wild salmon, with a combination of programs and tools, including restoration of terrestrial, riparian, and coastal habitats; protection of key fish spawning and rearing habitat; and management of cumulative effects.

- F-3-7 Boost processing and marketing of highvalue seafood products for increased profit margins and ensure equitable eligibility and share of federal programs.
- F-3-8 Assess fisheries-related infrastructure needs. Explore the expansion of infrastructure to allow domestic processing of locally harvested species.
- F-3-9 Facilitate harmonization of labeling/ traceability requirements across federal and provincial governments.
- F-3-10 Develop a regionally relevant ocean acidification and hypoxia action plan to develop sector-specific climate change mitigation and adaptation strategies.
- F-4: Advance sustainable aquaculture: Marine aquaculture – the growing of finfish, shellfish, and marine plants in the ocean - makes important contributions to B.C.'s economy as



well as to food and nutrition security. Aquaculture also provides year-round employment in rural communities up and down the coast of British Columbia.

Fish and shellfish are an important part of a healthy diet for many people. Some communities do not have access to enough safe and nutritious food. Food insecurity is a serious public health issue, with an estimated one in every ten households experiencing hunger.⁶³ The B.C. Ministry of Health considers a safe, nutritious, culturally acceptable diet obtained through a just and sustainable food system to be the foundation of healthy eating.

First Nations' interests and concerns related to aguaculture are diverse. Many First Nations in B.C. own/operate aquaculture operations, including freshwater enhancement, shellfish farms, open and closed-containment farms, finfish operations, and marine plant-based farms. These operations directly support Indigenous food security and economic opportunities. Meanwhile, other First Nations opposed to finfish aquaculture are engaged in processes with Fisheries and Oceans Canada and industry to address the impacts of open net-pen farms on wild Pacific salmon stocks.⁶⁴

The Province intends to work with the aquaculture industry, First Nations, and the federal government to develop and implement a growth and diversification strategy for finfish, shellfish, and marine plant aquaculture. Bivalve shellfish and marine plants have a particularly high development potential,⁶⁵ and key species of promise include native cockles, scallops, and kelp.66

The Province will promote healthy and resilient mixes of food sources, take action to create the conditions needed to attract investors, and build skills in aquatic farming. We will continue to work with First Nations, the federal government and industry to advance and use innovative

solutions to ensure environmental sustainability and address the challenges of growing seafood under changing ocean conditions due to climate change. We will strive to reduce barriers to investment and business planning by providing responsive, open, and effective tenuring processes for new and modified applications. We will continue to inform transition plans for open net-pen fish farms, participate in the federal government's piloted approach to advance area-based aquaculture management, and advocate for First Nations' and coastal community interests and involvement.

F-5: Support regenerative marine tourism:

British Columbia has a well-deserved reputation as a world-class destination for tourists. Tourism plays an important role in improving the quality of life of the people and communities in B.C. and increasing the support and celebration of First Nations cultures. Tourism can also have undesirable effects on people and ecosystems. The COVID-19 pandemic prompted a number of industry leaders around the world to question the status quo, calling for transformative change in the relationship of tourism with nature, the climate, people, and the economy.⁶⁷

"Regenerative tourism" represents a sustainable way of travelling and discovering new places. Its main goal is for visitors to have a positive impact on their destination, leaving it in a better condition than how they found it. Regenerative tourism is a concept that goes beyond "not damaging" the environment to looking at how tourists can actively revitalize and regenerate it, resulting in positive impacts for local communities and economies. The B.C. Marine Trails Network (BCMT) is one example of regenerative tourism in action. The BCMT, in partnership with First Nations, builds coastal trails for paddling the coastline. This non-profit organization created numerous projects to take care of the coast, including site maintenance,



shoreline clean-ups, codes of conduct, invasive species removal, and public education.

The Province intends to work with First Nations and industry to develop, and gradually implement, strategies and standards of practice that can define and nurture a regenerative marine tourism industry.

F-6: Manage cumulative effects: Finding a healthy balance between conservation and sustainable economic development requires an understanding of the cumulative effects of large and small activities on the values we care about. Once the effects are understood, we can develop appropriate management responses.

Over the past five years, the Province and partner First Nations have worked together to address cumulative effects through the North Coast Cumulative Effects Program, guided by the collaboratively developed MaPP Cumulative Effects Framework.⁶⁸ The program weaves together western science and Indigenous

knowledge to create a holistic understanding of the current condition and cumulative effects on an initial suite of four core values: estuaries, food security, access to resources, and wild salmon. The goal of this work is to effectively monitor, assess, and manage the combined effects of past, present, and potential future human activities. It is complex and important work that will inform the broader efforts to collaborate with coastal First Nations on building a co-managed stewardship regime that can effectively address cumulative effects.

In 2016, the provincial government released a Cumulative Effects Framework Interim Policy, which includes policy, procedures and decisionsupport tools that complement current land management achieved through B.C.'s legislative framework, land use plans and various best practices and processes. Some values (e.g., old growth forests, aquatic ecosystems, forest biodiversity) are assessed across the province, while others are assessed on a regional basis



due to importance in certain parts of the Province (e.g., marbled murrelet, fish and fish habitat). The Province intends to work in partnership with First Nations and in collaboration with stakeholders to select coastal marine values at provincial and regional scales for assessment of current condition using a

standard approach. Results of assessments will be used to support development of new marine plans and implementation of existing ones, aid in the environmental assessment of major projects, and inform permits, licenses and tenures in the marine environment.

First Nations' Relationships To The Sea

The Pacific coast gave rise to many different Indigenous cultures. There is not one story - there are hundreds that must be heard to begin to understand and appreciate the relationship between First Nations and the sea, and First Nations' invaluable contribution to coastal marine management. You can read about some of those stories here. Notice how the sea unites them all.

Coast Salish 69 70

The Coast Salish culture is dynamic and diverse but bounded through shared values and the recognition of the interconnectedness and spirit within all things. The Coast Salish culture is expressed through the importance of, amongst other things, their fisheries. The Coast Salish continue to honour the legacy for their ancestors as stewards for the protection and enhancement of the Salish Sea ecosystem and lands for innumerable generations.

Ditidaht 71

The Ditidaht take pride and comfort between the traditional and modern worlds. The land, the waters, and their resources have always been a source of life, culture, and spirituality for the Ditidaht. The Ditidaht understand that everything is one (dubayaax a ts'awalk); a teaching that has guided the Ditidaht for thousands of years, as the Ditidaht have cared for and been nurtured by the rich natural and spiritual worlds of the land and sea.

Kwakwaka'wakw 72

For the Kwakwaka'wakw, the "good life" is about the way one expresses their connection to living things, and their appreciation of those things that sustain them physically and spiritually. The Kwakwaka'wakw believe the animals, rivers, and trees are powerful beings and through coexistence the Kwakwaka'wakw came to be related to animal spirits such as salmon. This connection to the spirit beings—the sea life, particularly the salmon— is reflected within their culture.

Gitxaała 73

"Respect for the environment and respect for the resources has been the foundation of the ecologically sustainable approach to resource management that we have always practiced. We are part of the land, part of the ecosystem and therefore our survival as a Nation depends on balancing the complex interactions between conservation, utilization, enhancement, and protection of resources. Our land defines who we are as a Nation. The names our Chiefs bear come from our land."

Haida 74

As coastal people, the connection to the land and sea defines the culture and identity of the Haida. The Haida culture is rooted on respect (Yahguudang) for each other and all living things and their interconnectedness (Gina 'waadluzan gud ad kwaagiida). The Haida understand balance is needed to preserve the coastal waters that support livelihood of the Haida, and reciprocity (Isa ad diigii isda) is essential in their interactions with each other and the natural world.

Haisla 75

"The First Salmon Ceremony celebrates the return of the first salmon to a territory each spring. After the salmon are eaten, the bones and remains are returned to the river to show respect. The Haisla believe that "if all is done properly, the spirit of the salmon will tell the rest of the salmon people that they were well treated, so that more salmon will come upriver the same and future years."

Nisga'a 76

The Nisga'a, "people of the Nass River", believe everything is alive and wishes to communicate. The Nisga'a talk to the salmon and listen to the salmon talking in a language of their own as the animals are the helpers and messengers of the Creator. Through this understanding the Nisga'a continue to live with an understanding that everything has a rightful and meaningful place, deserving of respect, and we are all interdependent. For the Nisga'a it is the connection between the Nass River—the lifeblood of the Nisga'a —and the sea.

Nuu-chah-nulth 77

The Nuu-chah-nulth, "All along the Mountains and the Sea," Nations are many. The Nuu-chah-nulth way of life was crafted through thousands of years of connecting with the ocean—they are people of the ocean—it is the ocean that has guided and will continue to guide their way of life. With care and gentleness, Nuu-chah-nulth carry forth their obligation to add to the wisdom and strength of their ancestral teachings along with their role as stewards over their lands and waters so future generations can thrive.

Tsimshian 78 79

Tsimshian, "inside the Skeena River", continue to be dependent on the health of the marine environment to survive and flourish. Their relationship with the salmon that the sea brings to them cannot be overstated. The strength of the Tsimshian comes from their culture, ancestors, and history which has shaped their traditional resource management practices for the spiritual and cultural values of the salmon and to support consumption of traditionally harvested marine foods.

Tlingit 80 81

In the Tlingit "People of the Tides" worldview, everything is alive—the animals, the land, the sky—and connected. This worldview guides and shapes the Tlingit ways of being. The Tlingit recognize the value of and retain reverence and respect for all life of the land and sea that they harvest for strength and sustenance. The Tlingit demonstrate this respect by returning the bones of the salmon to the ocean so they can come back to life as more Salmon people.

Have Your Say

We invite your feedback and suggestions on this Intentions Paper and the potential solutions and policies the Province can implement to achieve better outcomes for marine life and people. To complete a survey and/or share your comments visit GovTogetherBC.

Once engagement on this Intentions Paper is complete, all feedback will be compiled and released in a What We Heard report. The Province and First Nations will convene over the next six months to carefully consider feedback received on the Intentions Paper as we work together to draft specific actions for the Coastal Marine Strategy. Federal and local governments, industry, environmental non-governmental organizations, research institutes, and other interest groups will help shape and inform the development of the Coastal Marine Strategy through consultation. There will be opportunities for the public to comment on the Coastal Marine Strategy when a draft is completed in 2024.



Appendix 1: Reconciliation And The Rights of Indigenous Peoples

A key element of the path ahead is the Province's commitment to advance true and lasting reconciliation with Indigenous Peoples in B.C., founded on the respect of Aboriginal rights.

Indigenous Peoples govern in accordance with their traditional knowledge, laws, culture, and oral traditions. The right to govern grows from Indigenous People's inherent rights – rights that existed long before colonization and are distinct and separate from the rights of non-Indigenous people. There is no specific definition for inherent rights as each Indigenous Nation has a unique cultural identity. Inherent rights can include the right to self-government, the right to the land, and the right for Indigenous people to practise their culture and associated customs.

The rights of Indigenous Peoples are recognized and affirmed under Section 35 of the Constitution Act, 1982 (the Constitution). The Constitution does not define Indigenous rights under section 35, but these rights can include:

- Aboriginal title (ownership rights to land)
- rights to occupy and use lands and resources, such as hunting and fishing rights
- self-government rights
- cultural and social rights

Indigenous rights under section 35 vary from Indigenous group to Indigenous group depending on the customs, practices and traditions that have formed part of their distinctive cultures. Section 35 of the Constitution also recognizes and affirms Treaty rights. Treaties define specific rights, benefits and obligations for the signatories that vary from treaty to treaty. Treaties with Indigenous peoples include both historic treaties and modern treaties.

Historic Treaties 82

Between 1850 and 1854, Sir James Douglas concluded 14 treaties with coastal First Nations living on Vancouver Island. Altogether, the treaties cover approximately 22,000 hectares of land on Vancouver Island, including the area surrounding Victoria. These treaties are constitutionally protected and are focussed on land, fishing, hunting and harvesting rights. Under these historic treaties, First Nations have retained the right to carry on fisheries as formerly and to hunt over unoccupied lands,

Modern Treaties

Modern treaty nations possess a unique space within the constitutional fabric of this country for the recognition and expressions of Indigenous rights protected and affirmed by the Constitution. Modern treaties provide one way for Indigenous Peoples an opportunity to bring clarity and precision to their Section 35 rights in a way that provides meaningful and practical benefits for their traditional, cultural, governance, social and economic needs. Some of the Modern treaty Nations, such as the Maanulth, have specific law- making authorities over foreshore areas fronting treaty settlement lands. These authorities are similar to that of a local government and can include land use, planning, zoning, and development. Modern treaties are comprehensive in scope and cover a wide variety of subjects from land ownership and rights to governance and fiscal relationships with the federal and provincial governments. Eight First Nations in British Columbia have modern treaties:

- Huu-ay-aht First Nations
- Ka:'yu:'k't'h'/Che:k'tles7et'h' First **Nations**
- Nisga'a Nation

- Tla'amin Nation
- Toquaht Nation
- Tsawwassen First Nation
- Uchucklesaht Tribe
- Yuułu?ił?atḥ Government (Ucluelet First Nation)

Together, the above Indigenous governments have formed the Alliance of B.C. Modern Treaty Nations, also referred to as the "Alliance".

Honouring Indigenous Rights

The provincial government has committed to implementing UNDRIP and adopted the Truth and Reconciliation Commission of Canada's Calls to Action. The Ministry is demonstrating this

commitment by collaborating on the development of the Coastal Marine Strategy with coastal First Nations. To date, this ministry has conducted engagement on a variety of levels and worked with First Nations leadership and technical staff to frame the process and draft this Intentions Paper.

Part of the B.C. government's work towards reconciliation will focus on enabling the opportunity for shared decision-making. The intentions outlined in this paper reflect the steps needed to ensure Indigenous Peoples have meaningful opportunities to partner in cogovernance and co-management of the marine environment and to participate in the ocean-based economy.



Appendix 2: Stewards of the Coastal Marine Environment In B.C.

First Nations

First Nations exercise their own laws and traditions, systems of governance, and stewardship practices that uphold their inherent responsibilities to the land and water, including the sea and seabed, rivers, lakes, streams, estuaries, marine areas, watersheds, and the

wild salmon, plant, and animal life these aquatic systems sustain. For many First Nations, managing the lands and waters of the ancestors is a responsibility, a duty not to be taken lightly, all in service of sustaining a way of life for future generations to come.

Federal Government

Federal authorities with primary responsibility for ocean management include Fisheries and Oceans Canada, Transport Canada, the Canadian Coast Guard, and Environment and Climate Change Canada. Through legislation, regulation, policy, and program development, these departments and agencies are accountable for:

- Fisheries and aquaculture
- Habitat protection
- Ocean science and technology
- Ports, harbours, anchorages
- Prevention, mitigation or elimination of the risks caused by wrecked, abandoned, or hazardous vessels
- Preventing and responding to environmental emergencies, including ship source oil spills
- Overseeing safe navigation and maritime search and rescue
- Pollution and waste management
- Recovering species at risk (e.g., resident killer whales)
- Shellfish and water quality
- Disposal of waste into the ocean
- Vessel design, construction, and maintenance
- Preventing, detecting, monitoring, and managing aquatic invasive species

- Protecting and managing migratory birds
- Monitoring and enforcement
- Maritime sovereignty and security
- Climate change (mitigation & adaptation)
- Negotiating and implementing international agreements and commitments (e.g., United Nations)

Other federal departments, such as Natural Resources Canada, the Canadian Environmental Assessment Agency, and Agriculture and AgriFood Canada, are responsible for regulating energy production and distribution, undertaking environmental assessments for major projects, and ensuring safe seafood for domestic and international markets, respectively. Parks Canada Agency, in fulfillment of their mandate to 'protect nationally significant examples of Canada's natural and cultural heritage and foster public education and enjoyment of these areas', establishes and manages National Marine Conservation Areas in partnership with Indigenous governments. Pacific Economic Development Canada supports the growth and diversification of B.C.'s economy through programs and initiatives that assist communities (e.g., infrastructure development) and sectors (e.g., seafood producers).

Provincial Government

The B.C. government holds considerable authority over the marine and coastal zone. The Province also manages activities on the land base that can impact the health of coastal habitats and species, like estuaries and wild salmon.

The ministries of Water, Land and Resource Stewardship, Forests, Environment and Climate Change Strategy, Transportation and Infrastructure, Energy, Mines and Low Carbon Innovation, and Agriculture and Food have regulatory and non-regulatory accountabilities that include:

- Marine spatial planning
- Managing Crown-administered land tenures for activities on the seabed (e.g., aquaculture, float homes, fishing lodges, marinas, private moorage, telecommunications infrastructure, wind power, ocean energy)
- Licensing tourism and recreation operators
- Managing kelp, seaweed, and other aquatic plants

- Marine-based log handling and storage
- · Protected area establishment and management
- · Climate change mitigation and adaptation (including ocean acidification and sea-level rise)
- Waste prevention and waste management
- Seafood safety and seafood licensing
- Water quality and water quantity
- Watershed protection
- Coastal ferry service delivery
- Infrastructure development and maintenance (e.g., marine vehicle and passenger terminal facilities)
- Habitat restoration
- Flood risk management
- Forestry
- Riparian area management
- Alternative energy
- Mineral exploration and mine permitting
- Sector and market development (e.g., seafood, vessel construction, energy

Local Government

Local governments in coastal B.C. include 74 municipalities, 16 regional districts, and the Islands Trust, a special purpose government covering 13 major islands and 450 islets in the Salish Sea. Wherever settlement and development exist, local governments are key players in coastal zone management. Many regional districts have estuaries, wetlands, and other types of sensitive shorelines that are under continued pressure from climate change and industrial, urban, and agricultural use. While the federal and provincial governments have more comprehensive powers to regulate coastal and marine areas, local government's responsibilities can include:

- Exercising coastal and ocean protection authority over land use
- Regulating development along the shoreline
- Enacting zoning over the surface of the water and the foreshore as long as they do not interfere with provincial and federal jurisdiction⁸³
- Restricting moorage
- Managing private dock construction
- Managing the use of beaches

Local government is also responsible for other stewardship roles⁸⁴ such as climate change mitigation and adaptation via:

- Land use planning and management
- **Financing**
- Infrastructure and asset management
- Recreation
- Health and safety
- Emergency management
- Protection from hazards

Each local government may have official community plans that outline a vision and

objectives, and how it conducts its stewardship responsibilities. These plans are not mandatory, but once a local government assumes an official community plan, all bylaws must then adhere to that plan. 85 However, local governments are not bound to projects under the plan, and the plan may be influenced by federal and provincial policies.

Stakeholders, Research Institutions, Academia

Stakeholders, research institutions, and academics who have an interest in coastal stewardship are diverse and manifold. These are groups of citizens who are often affiliated by geographic proximity, interests, or sector/industry to address issues affecting their well-being, values, and interests and include groups such as aquaculture, commercial fishing, marine transportation and shipping, forestry, seafood processing, and tourism. Although these groups hold no legislative authority, they play an integral role in supporting policymakers. Their roles include but are not limited to:

- Contributing to the ocean-based economy
- Conserving and restoring marine habitats and species
- Collecting, sharing, and validating data and information
- Informing policy and program development through independent research
- Participating in planning processes and advisory tables
- Lobbying for change
- Educating the public
- Investing in coastal infrastructure
- Driving innovation and research



Appendix 3: Other Initiatives

Preparation of this Intentions Paper involved a review of relevant policies, plans and agreements. Some examples are provided here.

The Declaration On The Rights of Indigenous Peoples Act Action Plan, which outlines significant actions the B.C. government will undertake in consultation and cooperation with Indigenous Peoples over 2022-2027 to achieve objectives of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

The Shared Priorities Framework, which renews a commitment to timely, effective and appropriately resourced implementation of modern treaties.

The Marine Plan Partnership, which defined regional spatial plans and strategies that address the unique needs of Haida Gwaii, North Vancouver Island, the Central Coast, and North Coast sub-regions. The marine plans and Regional Action Framework are a model for sound coastal planning.

What We Heard on Marine Debris, from coastal crown governments, First Nations, industry, and environmental organizations.

The Watershed Security Strategy and Fund Discussion Paper. The Province is developing a Watershed Security Strategy to ensure B.C. water and watersheds are healthier and more resilient.

B.C.'s Economic Plan: A plan for today, a vision for tomorrow, is focused on inclusive and clean growth as the overarching goals. The Plan commits to developing a Goods Movement Strategy, led by the Ministry of Transportation and Infrastructure. This strategy will have three strategic pillars: strengthen the B.C.

transportation and logistics sector; support B.C. exporters; and accelerate the adoption of B.C. innovation and advance climate objectives.

The Wild Salmon Advisory Council's recommendations for a made-in-B.C. wild salmon strategy.

The Climate Preparedness and Adaptation Strategy, which details potential actions that could be implemented over 2022-2025 to better prepare for climate change.

The <u>CleanBC Roadmap to 2030</u> which contains measures to reach greenhouse gas emissions targets by 2030. CleanBC commits to fully electrifying B.C.'s inland ferry fleet by 2040.

The Environmental Stewardship Initiative, which was developed in 2014 as an innovative form of collaboration and partnership between B.C. and First Nations, designed to produce high-quality, accessible, and trusted environmental information.

The draft B.C. Flood Strategy, which is intended to outline the strategic vision, principles, and outcomes for flood management in the Province in alignment with the United Nation's Sendai Framework for Disaster Risk Reduction. Core themes of the engagement toward a B.C. Flood Strategy are focused on: understanding flood risk, strengthening flood risk governance, enhancing flood preparedness, response and recovery, and investing in flood resilience.

B.C.'s Cumulative Effects Framework, which includes policy, procedures and decisionsupport tools that complement current land management achieved through B.C.'s legislative framework, land use plans and various best practices and processes.

The CleanBC Plastics Action Plan has a goal of reducing plastic pollution through reuse and the use of recycled plastic. This includes the Ministry of ENV's proposal to develop a new waste prevention regulation to reduce the impacts of single-use and plastic waste on the environment. The Extended Producer Responsibility Five-Year Action Plan and the Summary of Feedback Report on regulating more products for recovery and ensuring Province-wide recycling systems.

The Clean Coast, Clean Waters Initiative, which is helping create jobs and support coastal communities as they recover from the COVID-19 economic downturn and loss of tourism.

The Ministry of ENV's proposal to develop a new waste prevention regulation to reduce the impacts of single-use and plastic waste on the environment.

The Future of B.C.'s Food System, Findings and Recommendations from the B.C. Food Security Task Force.

The Strategic Framework for Tourism 2022– 2024: A Plan for Recovery and Resiliency. This is a roadmap for rebuilding tourism in the Province and an integral part of our B.C. government's economic recovery from the COVID-19 pandemic.

A draft ocean acidification and hypoxia action plan, that includes strategies for strengthening nearshore monitoring, investing in adaptive measures in partnership with industry or seafood dependent communities, and advancing information sharing strategies that help policy makers respond.

The North Coast Cumulative Effects Program, which is working towards the monitoring,

assessment, and management of cumulative effects on core coastal and marine values, with an initial focus on aquatic habitats (estuaries), food security, access to resources, and wild salmon.

Modernized BC Emergency Management Legislation with stronger connections to climate change, the Sendai Framework, disaster risk management and disaster risk reduction.

Stewardship initiatives, such as the Átl'ka7tsem/Howe Sound Marine Stewardship <u>Initiative</u> and the <u>Coastal Restoration Society</u>.

Assessments developed by First Nations, for example Tsleil-Waututh Nation Assessment of the Trans Mountain Pipeline and Tanker Expansion Proposal.

Engaging on Canada's Blue Economy Strategy: What We Heard, the Government of Canada's summary of feedback from Indigenous peoples and Canadians on how best to shape a national Blue Economy Strategy.

Policy and legislative initiatives, including updates to the Agricultural Environmental Management Code of Practice, Agricultural Environmental Management - Province of British Columbia (gov.bc.ca).

The Canada-BC Marine Protected Area Network Strategy, a coast-wide strategy outlining governments' approach to protecting the full suite of marine biodiversity through the establishment and management of MPAs.

The Canadian Council of Ministers of the Environment (CCME) Strategy on Zero Plastic <u>Waste</u>. The Strategy, approved in principle in 2018, is focused on preventing plastic waste, collecting all plastics (including through cleanup), and recovering value from plastics. In Phase

2 of this initiative, CCME is supporting national work to evaluate best policy options to increase collection and end-of-life management of fishing and aquaculture gear.

The Pacific Coast Collaborative Statement of Cooperation on Leading the Transition to an Equitable and Prosperous Low-Carbon Resilient Future was signed by the governments of B.C., Washington, California, and Oregon to support an equitable and just transition to a low carbon and climate resilient future, investments in climate infrastructure, such as green ports, and a clean and reliable; and to protect communities and natural and working lands from wildfire, drought, heat waves, ocean acidification and flooding.

MaPP North Vancouver Island Fisheries Economy Workshop Report and Recommendations. The workshop, held in March 2022 focused on identifying issues, stressors, trends, and opportunities in the marine fisheries economy. The report includes a suite of recommendations from industry, First Nations, stakeholder, local and regional government, and B.C. government participants.

B.C. Parks' Green Plan, which lays out objectives for Parks infrastructure and operations to mitigate emissions and maximize resilience to climate change effects. The Green Plan has a public education component that includes partnerships with the private sector, NGOs, and community groups on climate change-related projects.

End Notes

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