



MARINE PLAN PARTNERSHIP FOR  
THE NORTH PACIFIC COAST

# REGIONAL ACTION FRAMEWORK

2016

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Dear Reader

As members of the Marine Working Group, we are pleased to present this Regional Action Framework document for the Regional Study Area (or region) addressed by the Marine Plan Partnership for the North Pacific Coast (MaPP). This document is based on the marine plans that were written to inform marine management activities and development in each of the four MaPP sub-regions: Haida Gwaii, North Coast, Central Coast and North Vancouver Island. In addition, this document reflects important findings of MaPP regional-scale studies that will benefit the MaPP region as a whole. We endorse implementation of the actions outlined in this document in order to complement work at the sub-regional level and to benefit collaborative efforts for the broader MaPP region.

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## ACKNOWLEDGEMENTS

The Regional Action Framework (RAF) reflects the advice and input received from the Regional Marine Advisory Committee (Appendix 1) and the MaPP Science Advisory Committee (Appendix 2). It was also informed by studies and reports commissioned by the MaPP initiative.

The RAF reinforces and contributes to the MaPP commitment to implement ecosystem-based management, both at the sub-regional and regional level across the MaPP region. The RAF was prepared as a cooperative effort by numerous people, including the MaPP Marine Coordination Team, First Nations and provincial government, MaPP Technical Team members, and MaPP contract support staff.

The MaPP initiative acknowledges the financial support of the Gordon and Betty Moore Foundation through the MaPP Support Project at Tides Canada.

## DISCLAIMER

The Regional Action Framework (RAF) is not intended to supersede, alter or otherwise amend recommendations made in the sub-regional plans developed for the Haida Gwaii, North Coast, Central Coast and North Vancouver Island MaPP sub-regions.

The RAF is not legally binding and does not create legally enforceable rights between British Columbia or First Nations. The RAF is not a treaty or land claims agreement within the meaning of sections 25 and 35 of the Canadian *Constitution Act, 1982*.

The RAF does not create, define, evidence, amend, recognize, affirm or deny any Aboriginal rights, Aboriginal title and/or treaty rights or Crown title and rights, and is not evidence of the nature, scope or extent of any Aboriginal rights, Aboriginal title or Crown title and rights.

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## ACRONYMS

BC	British Columbia
EBM	Ecosystem-Based Management
GMZ	General Management Zone
IUCN	International Union for Conservation of Nature
LOI	2011 Marine Plan Partnership Letter of Intent
MaPP	Marine Plan Partnership for the North Pacific Coast
MPA	Marine Protected Area
NVI	North Vancouver Island
PMZ	Protection Management Zone
PNCIMA	Pacific North Coast Integrated Management Area
RAF	Regional Action Framework
RMAC	Regional Marine Advisory Committee
SAC	Science Advisory Committee
SMZ	Special Management Zone



Photo by Scot Harris



# CHAPTER 1: INTRODUCTION

## 1.1 The Marine Plan Partnership for the North Pacific Coast

The Marine Plan Partnership for the North Pacific Coast (MaPP), launched in November 2011, is a collaborative government-to-government partnership between the Province of British Columbia, the Central Coast Indigenous Resource Alliance, the Coastal First Nations Great Bear Initiative, the Council of the Haida Nation, the Nanwakolas Council and the North Coast-Skeena First Nations Stewardship Society (collectively the “MaPP partners”).

Through MaPP, the provincial and First Nation governments have undertaken collaborative coastal and marine planning as stated in a 2011 Letter of Intent (LOI) on Collaborative Coastal and Marine Planning in the Pacific North Coast, which was signed by the MaPP partners. The LOI commits to a bilateral governance arrangement that includes an Executive Committee, a Working Group and sub-regional Technical Teams.

## 1.2 Purpose of the Regional Action Framework

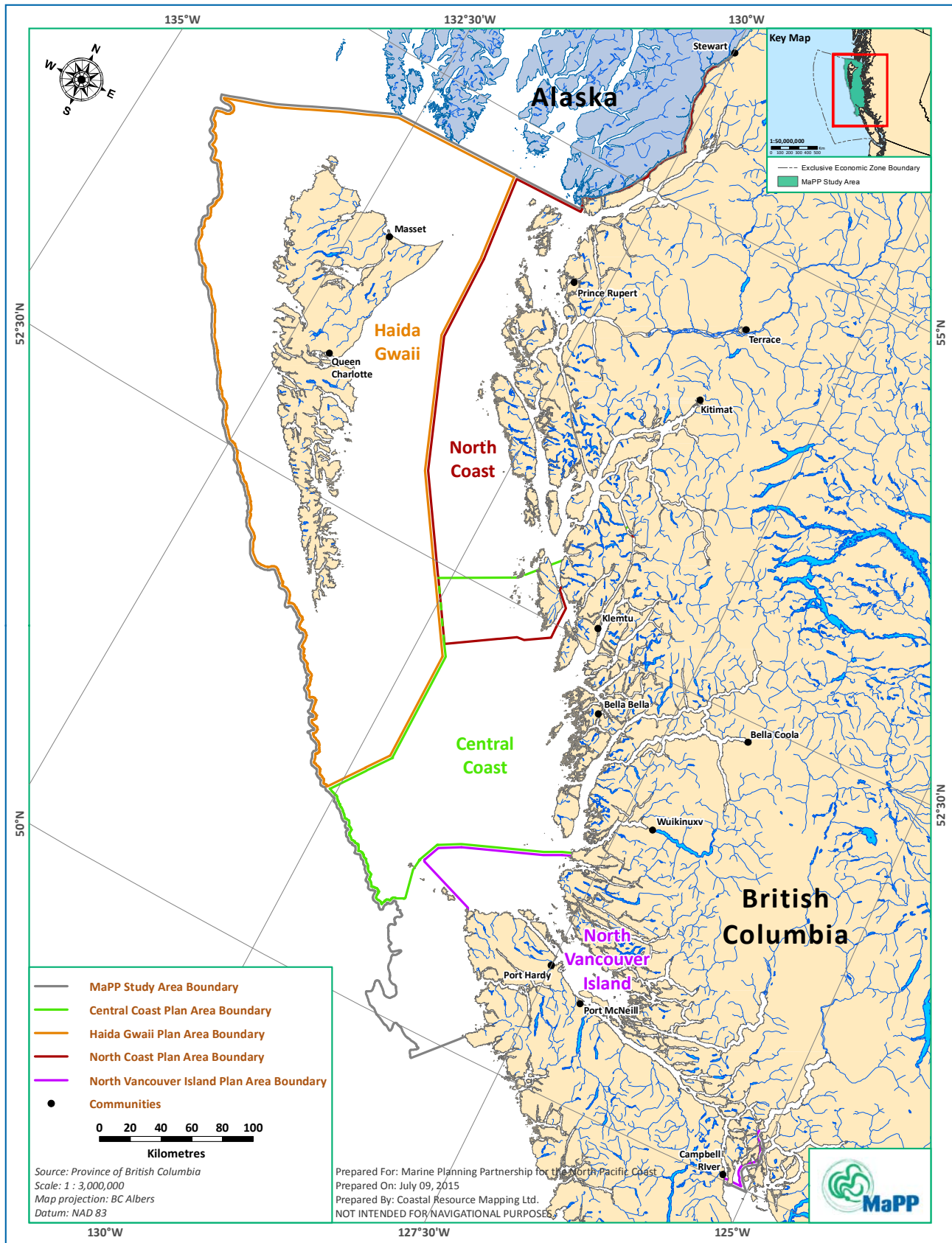
The purpose of the Regional Action Framework (RAF) is to establish regional MaPP actions that the provincial and First Nation governments have identified as being most appropriately implemented at a regional scale and that are consistent with, and support, sub-regional marine plan recommendations. For a summary of regional MaPP actions, refer to Appendix 3.

The RAF is not intended to supersede, alter or otherwise amend recommendations made in the marine plans developed for each of the four MaPP sub-regions: Haida Gwaii, North Coast, Central Coast and North Vancouver Island. The four sub-regional marine plans and the RAF all serve to reinforce an ecosystem-based management approach to marine resources.

## 1.3 MaPP Region and Jurisdictional Context

The MaPP region aligns with the Northern Shelf Bioregion boundary. This boundary is also being used in other tripartite (First Nations–British Columbia–Canada) marine planning work in the Pacific north coast area, such as the Pacific North Coast Integrated Management Area (PNCIMA) initiative. Figure 1 shows the MaPP regional and sub-regional boundaries. These boundaries follow the Northern Shelf Bioregion boundary, except for a small area around the western tip of North Vancouver Island.

Issues related to government-to-government management of marine spaces in the MaPP region are complex and have informed the scope of the RAF and have implications for RAF recommendations and implementation. Readers of this document are encouraged to consult the relevant sections of the sub-regional marine plans for more information on this topic.



**Figure 1. Marine Plan Partnership Region**

## 1.4 Regional Action Framework Development Process

The development of the RAF was informed by a Marine Coordination Team, sub-regional marine plan Technical Teams and a Regional Marine Advisory Committee (RMAC) (Appendix 1). The MaPP Science Advisory Committee (SAC) (Appendix 2) also provided input on various draft documents upon request.

The RMAC was comprised of representatives from coastal forestry, commercial tourism, finfish aquaculture, local government, marine conservation, public recreation, renewable energy, shellfish aquaculture, commercial fisheries, recreational fishing service providers, non-renewable energy, and infrastructure interests. Committee members provided advice based on their sector affiliation.

The SAC was an external pool of science and technical experts that was established to provide expert advice. SAC members contributed their knowledge of marine ecology, ecosystem services, fisheries science, spatial analysis, marine spatial planning, ecosystem-based management, economics, traditional ecological and local knowledge, and social sciences.

Throughout the MaPP process, engagement was pursued with First Nations who did not participate in MaPP. Similar efforts were made to discuss document progress and final priority recommendations with non-participating stakeholder groups.

In developing the RAF, key information and guidance was drawn from a variety of sources, including provincial government reports and policies; First Nations strategic marine use plans and relevant background documents; past and present coastal and marine planning initiatives and processes; international expertise in marine biology, marine planning and ecosystem-based management; and sub-regional marine plan objectives, strategies and implementation actions. Various internal regional reports were also prepared for key topics that MaPP identified as having regional importance.

Photo by Debbie Gardner





## 1.5 Sub-Regional Marine Plans

The MaPP sub-regional marine plans were prepared as part of the MaPP initiative; their purpose was to identify acceptable marine uses that support sustainable communities while protecting and, where necessary, restoring marine ecosystems. The development of the sub-regional marine plans took approximately 3.5 years from initiation to endorsement. The RAF is consistent with, and supports, recommendations in the sub-regional marine plans.

The four sub-regions encompass about 102,000 km<sup>2</sup> along two-thirds of British Columbia's coast. The North Vancouver Island sub-region is bounded by the Cape Scott Islands to the west, Smith Sound/ Cape Caution to the east, and the Quadra Island/Bute Inlet area to the south. The Central Coast sub-region extends from Laredo Channel and the northern tip of Aristazabal Island in the north to the southern limit of Rivers Inlet and Calvert Island. The North Coast sub-region extends from Portland Inlet in the north to the south end of Aristazabal Island, where it has a small overlap with the northern boundary of the Central Coast sub-region. The Haida Gwaii sub-region extends from the international border in the north to the toe of the continental slope in the west (Figure 1).

The North Vancouver Island (NVI) Marine Plan was jointly developed by the N̓anwak̓olas Council, which represented the Mamalilikulla-Qwe'Qwa'Sot'Em, Tlowitsis, Da'naxda'xw Awaetlatla, Gwa'sala-'Nakwaxda'xw, Wei Wai Kum, Kwiahkah and K'omoks First Nations, and the provincial government, with input and advice from an NVI Marine Plan Advisory Committee. The NVI Marine Plan was developed, in part, to update existing provincial marine plans for the area and to better reflect First Nations issues

Photo by Allan Wilson

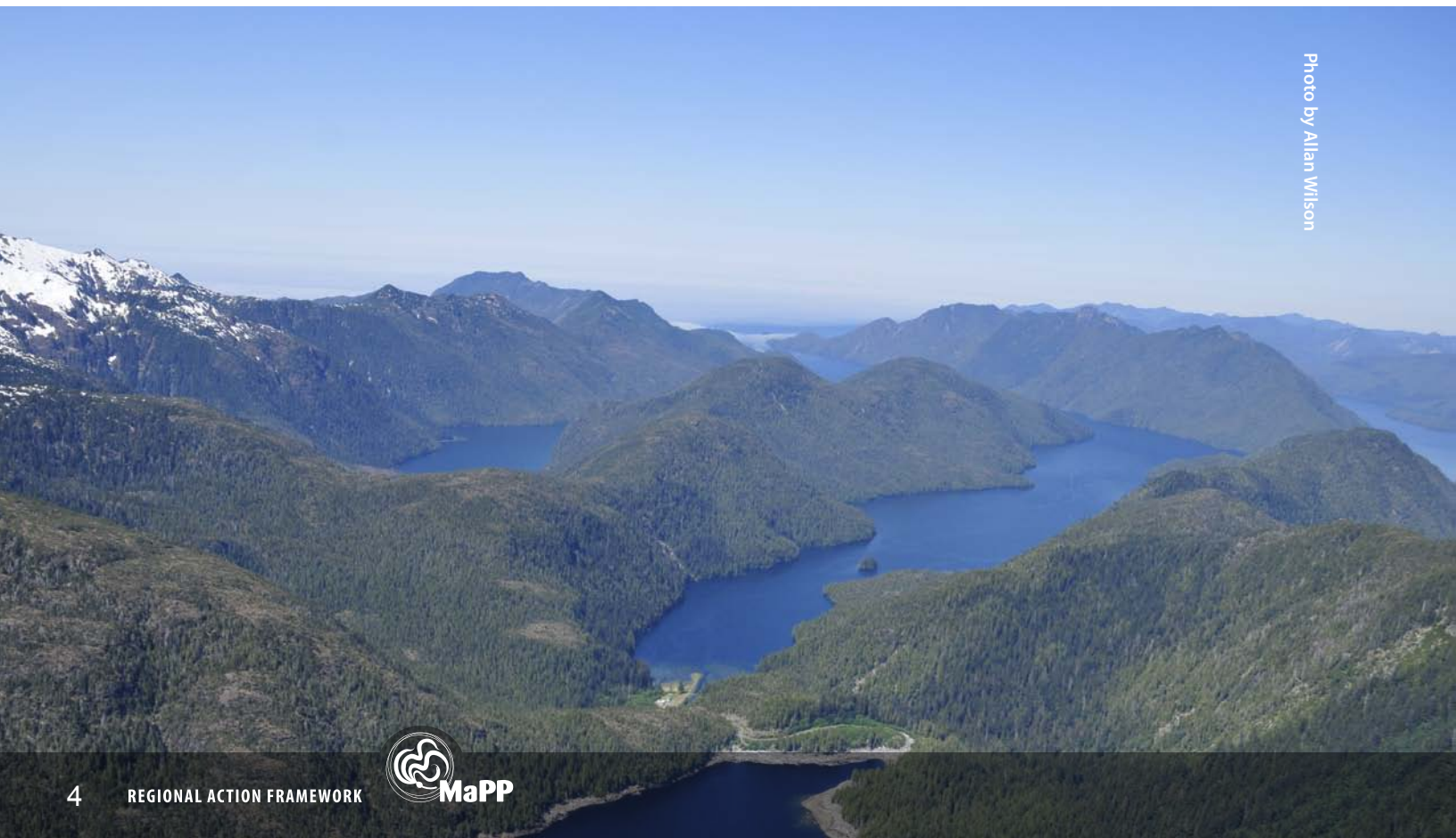




Photo by Charles Short

and priorities. Some of the key issues addressed in the plan include the high level of use in the area, pollution, lack of monitoring and enforcement, and potential conflict with activity expansion in the sub-region.

The Central Coast Marine Plan was jointly developed by the Heiltsuk, Kitasoo/Xai'Xais, Nuxalk and Wuikinuxv First Nations and the provincial government, with input and advice from a Central Coast Marine Plan Advisory Committee. The vision for the Central Coast Marine Plan includes a healthy marine ecosystem that supports human well-being, sustainable community prosperity and cultural resilience for future generations. The plan identified topic areas, issues and key outcomes, and priority actions for implementation. Priority actions are organized around the following topics: governance; monitoring and enforcement; economy and communities; protection; cumulative effects assessment; pollution; tenured activities; traditional, cultural and heritage resources; tourism and recreation; and the marine fisheries economy.

The North Coast Marine Plan was jointly developed by the Gitga'at, Gitxaala, Haisla, Kitselas, Kitsumkalum and Metlakatla First Nations, represented by the North Coast-Skeena First Nations Stewardship Society, and the provincial government, with input and advice from a North Coast Marine Plan Advisory Committee. The North Coast Marine Plan provides recommendations for developing and maintaining resilient marine ecosystems and sustainable economies for North Coast communities. The plan provides direction for managing marine areas, and uses and activities that are informed by First Nations strategic marine use plans and provincial strategic priorities. Key priorities in the North Coast Marine Plan include governance, collaboration and consultation, cumulative effects, stewardship, and sustainable economies.

The Haida Gwaii Marine Plan was jointly developed by the Council of the Haida Nation and the provincial government, with input and advice from the Haida Marine Work Group and a Haida Gwaii Marine Advisory Committee. The plan provides for the protection and conservation of marine



ecosystems while enabling marine economic opportunities for future generations of Haida and other island residents. A key goal of the plan is to maintain and strengthen island connections to the ocean; this includes increasing local and other benefits that can be derived from ocean resources in a responsible and respectful manner. Key priorities in the Haida Gwaii Marine Plan include integrated governance; marine economic development; ecosystem-based management (EBM) monitoring and research; compliance and enforcement; Marine Protected Area (MPA) network planning; communication and education; and geographic response planning.

## 1.6 Marine Ecosystem-Based Management Framework

Marine ecosystem-based management is considered by the MaPP partners to be the preferred approach to effectively managing coastal and marine ecosystems and resources, and is the foundation of MaPP recommendations. EBM differs from sector-based resource management in that it defines



Photo by Jessica Hawyshyn



management strategies for entire systems, not individual components of the system, with humans as an explicit part of the marine ecosystem.

The MaPP initiative uses a peer-reviewed marine EBM framework, which was established through the recent PNCIMA planning initiative. The EBM framework was developed by First Nations, provincial and federal governments, and marine stakeholders who participated in the PNCIMA planning process. Ecosystem-based management in the marine EBM framework is defined as an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human well-being supported and improved. The marine EBM framework approach is consistent with the holistic and integrated approach to resource management that First Nations on the North Pacific Coast have practiced for millennia. An EBM approach also takes into account interactions among resource sectors and the cumulative effects of ocean uses and activities, and is consistent with adjacent land and resource management agreements.

The MaPP initiative uses scientific, local and traditional knowledge to advance EBM for healthy ecosystems, sustainable uses and delivery of ecosystem services to human communities. The implementation of the RAF is intended to advance an EBM approach in the MaPP region.

## EBM Principles and Assumptions

### EBM Principles

- » Seeks to ensure ecological integrity.
- » Includes human well-being.
- » Is precautionary.
- » Is adaptive.
- » Includes the assessment of cumulative effects.
- » Is equitable, collaborative, inclusive and participatory.
- » Respects Aboriginal rights, Aboriginal titles and treaty rights.
- » Is area-based.
- » Is integrated.
- » Is based on science and on wise counsel.

### EBM Assumptions

1. Ecosystem goods and services underlie and support human societies and economies; such goods and services can be direct or indirect.
2. Humans and their communities are part of ecosystems, and they derive social, cultural and economic value from marine ecosystem goods and services.
3. Human activities have many direct and indirect effects on marine ecosystems.
4. EBM informs the management of human activities.
5. Marine ecosystems exist on multiple spatial and temporal scales, and are interconnected.
6. Marine ecosystems are dynamic and subject to ongoing and sometimes unpredictable change.
7. Marine ecosystem states have limits to their capacity to absorb and recover from impacts.
8. Human understanding of marine ecosystems is limited.
9. Humans prefer some ecosystem states more than others.
10. Humans can manage some drivers of change better than others, and can adjust or respond to some changes better at the scale of MaPP planning.

There are three equally important elements of the marine EBM framework:

- » **Ecological integrity** – describes ecosystem connectivity and habitat and species diversity, and focuses on ecosystem structure, function and resilience
- » **Human well-being** – refers to the combination of social, economic and cultural aspects of human communities, including spiritual and cultural connections to the marine environment
- » **Governance (and collaborative management)** – refers to collaborative, effective, transparent and integrated governance and management, as well as public engagement

The following EBM goals are interconnected and cannot be taken as separate from one another:

1. Integrity of marine ecosystems, primarily with respect to their structure, function and resilience
2. Human well-being supported through societal, economic, spiritual and cultural connections to marine ecosystems
3. Collaborative, effective, transparent and integrated governance, management and public engagement
4. Improved understanding of complex marine ecosystems and changing marine environments



Photo by Scott Harris





## CHAPTER 2: REGIONAL GOVERNANCE

### 2.1 Introduction and Context

Governance is one of three elements included in the marine EBM framework and it is integral to the successful implementation of an EBM approach. In this document, governance is defined as structures and processes associated with leadership and management (including structured decision-making) of marine areas, marine resources and their use.

Integration and collaboration among all levels of government, as well as meaningful engagement with stakeholders and the public, are critical elements for effective governance in the MaPP region. More background information on specific governance arrangements can be found in the sub-regional marine plans. Information on conditions, trends and issues associated with governance can be found in both regional and sub-regional current conditions and trends documents.

The sub-regional marine plans and background documents consistently highlight the benefit of linkages with planning processes and programs involving the federal government, such as the PNCIMA initiative. In addition, the sub-regional marine plans make recommendations for improvements to federal-provincial-First Nations environmental assessments for proposed major projects, including opportunities for better collaboration. Marine economic development is a shared priority of the MaPP partners in the MaPP region; an improved working relationship with proponents and industry can enable sustainable development opportunities.

## 2.2 Regional Actions on Governance

The recommended regional actions on governance focus on collaborative management across the MaPP region, and are consistent with sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 2.2a** – Advance collaborative governance arrangements for marine management, including efficient and effective arrangements for implementing MaPP and other related recommendations and priorities (e.g., PNCIMA).
- » **Action 2.2b** – Continue to identify and advance opportunities for more effective and collaborative First Nations-provincial environmental assessment processes.
- » **Action 2.2c** – Review existing provincial government agency processes for encouraging proponents' effective engagement with First Nations, including relevant agreements, to improve working relationships.



Photo by Jags



## CHAPTER 3: ECOLOGICAL INTEGRITY AND HUMAN WELL-BEING

The following topics are highlighted in this chapter:

- » Regional climate change
- » Regional cumulative effects assessment
- » Regional economy and infrastructure
- » Regional marine pollution
- » EBM monitoring and indicators

These topics are based on provincial and First Nations priority interests at a regional level and were refined and scoped with input from stakeholders, advisory bodies and internal MaPP guidance.

### 3.1 Regional Climate Change

#### 3.1.1 Introduction and Context

Potential short-term and long-term effects of climate change on the biological and physical marine environment, human communities and economic activities are an important consideration for the successful implementation of MaPP EBM recommendations. Projected climate change impacts in the MaPP region include sea level rise, increases in sea surface temperatures, increasing frequency and severity of storm events, increased coastal flooding, and increased ocean acidification due to high rates of absorption of atmospheric CO<sub>2</sub>. Climate change impacts are also expected to affect First Nations traditional uses, coastal infrastructure and marine economic activities.

Many climate change effects have already been observed. For example, mean annual sea surface temperature has increased. Mean annual percent salinity is projected to continue to decline. Additionally, mean annual dissolved oxygen concentrations have been decreasing. Incidences of hypoxia (i.e., waters with low oxygen concentrations) have increased over continental shelf habitats, and the most severe incidences have occurred in fjord-like inlets. These trends could cause significant ecological impacts.

### 3.1.2 Regional Actions on Climate Change

The recommended regional actions on climate change focus on regional responsiveness, including adaptation, to climate change effects in the MaPP region, and support sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 3.1a** – Identify and monitor climate change indicators for the MaPP region, and incorporate data into a long-term and effective EBM monitoring program that will inform response strategies.
- » **Action 3.1b** – Develop and conduct a regional risk assessment for ocean climate change.
- » **Action 3.1c** – Engage in the Province of British Columbia's blue carbon assessment framework to estimate the potential for marine carbon sequestration in the MaPP region.
- » **Action 3.1d** – Develop regional educational tools for application that explain ocean climate change effects, their impacts on marine ecosystems, human communities and infrastructure, and adaptive capacity.
- » **Action 3.1e** – Increase public awareness of climate change, including applicable laws, policies and customs governing marine resource use, best management practices, and adaptive capacity.



Photo by Jessica Hawryshyn



## 3.2 Regional Cumulative Effects Assessment

### 3.2.1 Introduction and Context

In the context of the EBM approach, cumulative effects refer to the changes in environmental, social, economic, health and cultural values as a result of the combined effect of present, past and reasonably foreseeable human actions or natural events. Governments and other decision-makers are increasingly becoming interested in the assessment and management of cumulative effects because demands on resource values continue to increase.

As part of MaPP regional work, a preliminary cumulative effects assessment framework for the North Pacific Coast was developed. The framework is intended to inform management and regulatory processes in order to improve the stewardship of coastal and marine ecosystems and resources, and the human well-being of coastal communities.

Unintended cumulative effects may occur when only marginal effects of individual activities or events are considered in the evaluation of impacts. Although the effect of an individual activity may be very small, the additive, synergistic or antagonistic interaction of that effect with those of other past, present or future activities may result in unacceptable outcomes. The impacts of cumulative effects can be exacerbated by marine management decisions that lack a full understanding of the ecological, social, economic, health and cultural values (objectives) that will be affected by the combined effects of decisions. Marine management decisions that are made over time without an understanding of their combined effects on ecological and human well-being can add to the impacts of cumulative effects.

Research and policy to address cumulative effects is being developed globally. Recent discussions on cumulative effects have focused on how to shift toward management processes in which environmental impact assessments for individual projects are incorporated into regional or strategic cumulative effects assessments that are overseen by governments and regulatory agencies.



### 3.2.2 Regional Actions on Cumulative Effects

The recommended regional actions on cumulative effects assessment are developed from sub-regional strategies. The actions support common strategies identified in the sub-regional marine plans and focus on the application of cumulative effects assessment in marine management and decision-making processes. The order of listing does not imply or reflect a priority:

- » **Action 3.2a** – Continue to refine the draft MaPP marine cumulative effects assessment framework in collaboration with the Province of British Columbia’s cumulative effects project.
- » **Action 3.2b** – Collaborate with sub-regions to select and implement an appropriate pilot(s) to test the cumulative effects framework for marine uses and activities.
- » **Action 3.2c** – Advance dialogue on a common approach to integrate cumulative effects assessments into marine decision-making processes.



Photo by Doug Neasloss



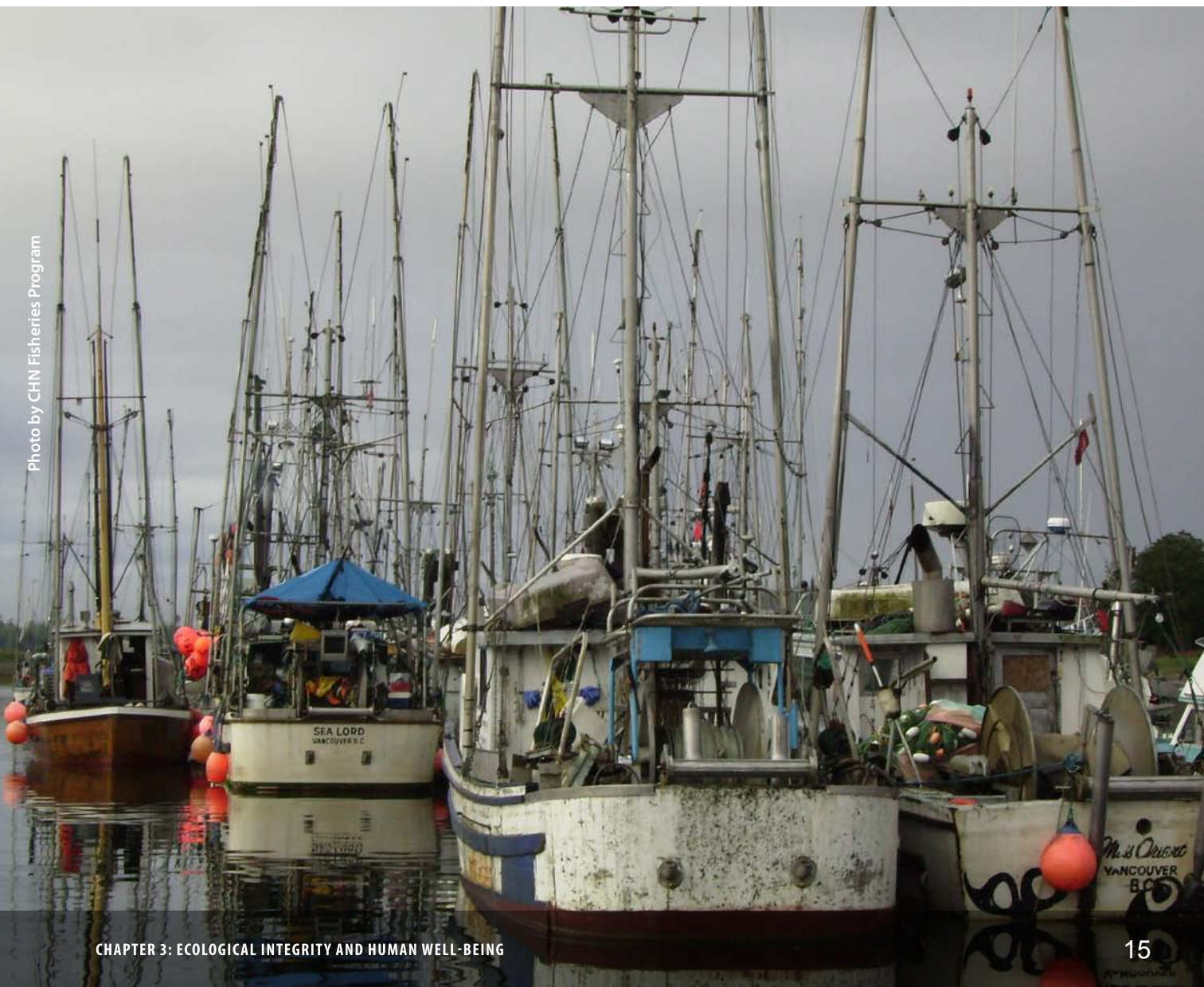
## 3.3 Regional Economy and Infrastructure

### 3.3.1 Introduction and Context

The economy of the MaPP region is closely linked to the marine ecosystem through a number of key economic activities. Marine infrastructure is an important component of these economic activities and is an important consideration for human well-being. Marine infrastructure includes facilities, structures and associated services that support marine uses and activities for commercial, public, First Nations and community purposes.

Many marine sectors contribute to the regional economy in the MaPP region. Infrastructure and economic development needs and gaps were identified as part of the MaPP planning process although further assessment is required. More information on economic activities and infrastructure is provided in the MaPP regional and sub-regional current conditions and trends documents.

Photo by CHN Fisheries Program





The aquaculture sector (finfish, shellfish and marine plant) is a major marine employer and economic contributor in some parts of the MaPP region. Most aquaculture is concentrated in the southern portion of the region. There is a provincial moratorium on new finfish aquaculture applications for tidal waters north of Aristazabal Island and on new salmon net-pen aquaculture in the Discovery Islands until September 2020. Some First Nations also have moratoria on finfish aquaculture within their territories. All sub-regions are actively pursuing or are already engaged in marine plant and shellfish aquaculture.

Commercial fisheries are a mainstay of the economy in the MaPP region, and the industry plays a key role in coastal and First Nations communities. The MaPP region is a significant catch area for many commercial fisheries and is well placed to serve growing international and domestic markets. Seafood processing services both fisheries and aquaculture sectors. It has growth potential for production of certified and value-added products.

Public recreation and commercial tourism are important components of the economy in the MaPP region and comprise 5–11% of community income in the region. The focus is shifting from pure angling to a broader marine recreation experience that encompasses cultural tourism and nature viewing (ecotourism).

All sub-regional marine plans indicate support for marine-based renewable energy generation. Currently, there are no marine-based energy projects in the MaPP region, but several investigative permits and licences have been issued. Although the region has potential for hydrocarbon development, there have been *de facto* moratoria in place since the 1970s.

Forestry is an important mainstay of coastal communities. Operations include log handling and storage as well as helicopter drop sites.

The various harbour facilities and other types of infrastructure in the MaPP region are important for maintaining a “coastal services highway” and current and future economic activities. Service gaps and infrastructure needs were identified as part of the planning process; they include lack of fuel facilities and lack of recreational fishing-related facilities.

Marine transportation, including ferry services, is important to coastal communities for public transportation and commercial activity. BC Ferry Services Inc. is the major ferry service provider in the MaPP region. Service cuts to ferry routes may have a significant impact on the industries and communities within the MaPP region.

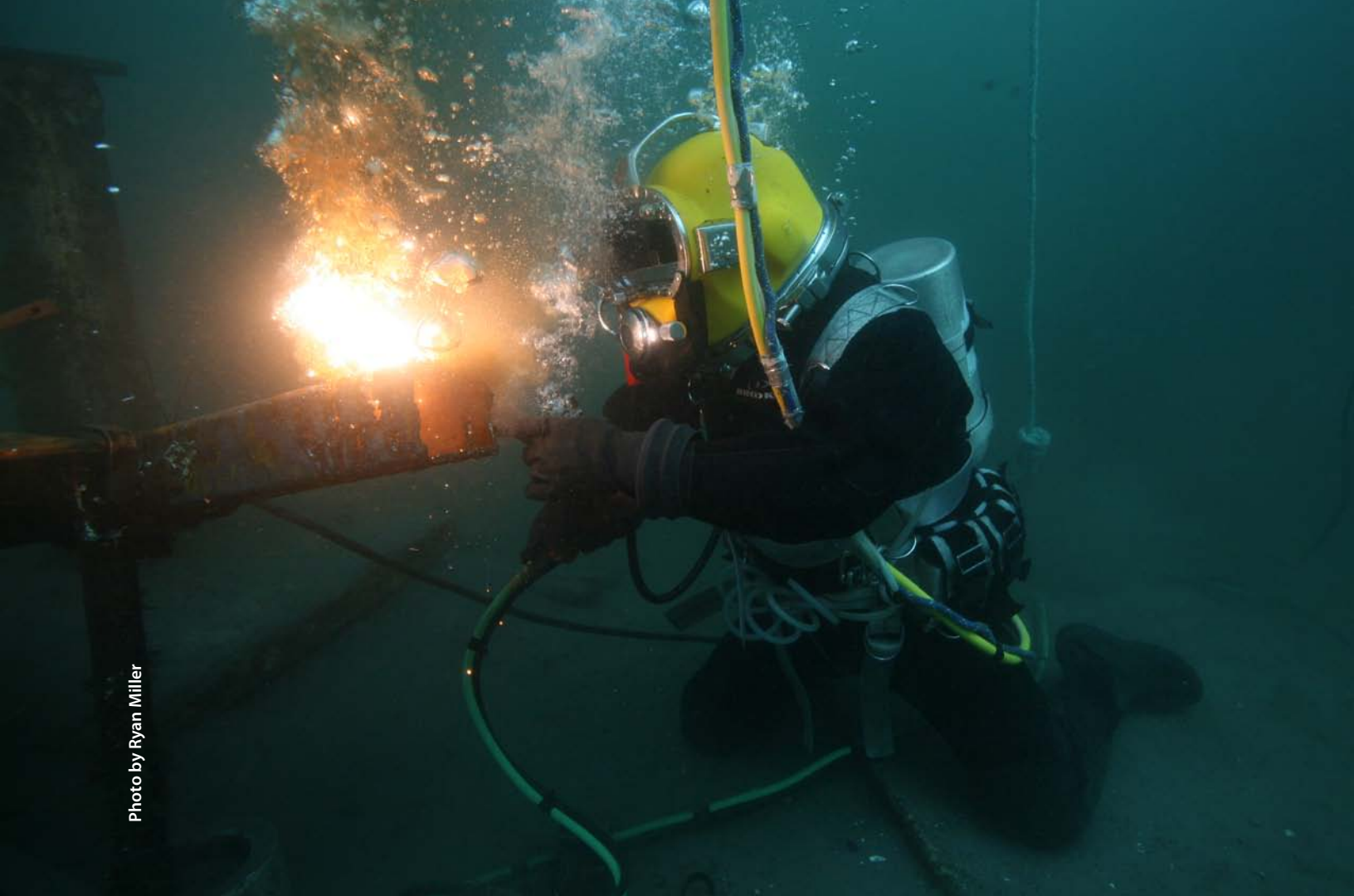


Photo by Ryan Miller

### 3.3.2 Regional Actions on Economy and Infrastructure

The recommended actions on regional economy and infrastructure focus on economic diversification at both local and regional scales, and are consistent with sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 3.3a** – Confirm specific gaps in regional and coastal community marine infrastructure and services, and initiate action to address them to improve economic development and human well-being.
- » **Action 3.3b** – Enhance regional collaboration and improve local economic benefits related to shellfish aquaculture and fisheries, including developing and marketing value-added products, identifying potential economic incentives, identifying and promoting new or niche markets, promoting the viability of shellfish aquaculture to attract investment, and encouraging new regional investment in seafood processing.
- » **Action 3.3c** – Enhance collaboration between the sub-regions to attract and better integrate new and emerging industries that are consistent with provincial government and First Nations economic priorities.



Photo by Jessica Hawryshyn

## 3.4 Regional Marine Pollution

### 3.4.1 Introduction and Context

Marine pollution is defined here as the introduction of substances directly or indirectly into the marine environment as a result of marine or land-based uses and activities. Pollution occurs in a wide variety of forms, including organic and inorganic discharges, marine debris, waste or materials (e.g. biological, chemical, hydrocarbon), light, acoustic energy (ocean noise), and thermal inputs. Upland activities also contribute to marine pollution; the sub-regional marine plans integrate issues related to upland sources of marine pollution by making recommendations to work with agencies responsible for regulating terrestrial and marine pollution.

Pollution may impact marine ecosystem resilience, ecological integrity, species survival, and habitat quality and quantity. Marine pollution can also affect human well-being by causing loss of livelihood, changes in health, and negative effects on human values.

Options for successful management of marine pollution include prevention, response, remediation, and mitigation. Improved pollution management practices will better respond to potential degradation to the marine environment.

There is critical need for industry, provincial and First Nation governments, local governments and communities to plan and prepare for emergency responses to spills and other types of pollution from marine vessels. Currently, there is a need to develop comprehensive Geographic Response Plans for vessel incidents and casualties in the MaPP region.

Marine debris is an important issue in the MaPP region. Large-scale events like earthquakes and tsunamis (e.g., the 2011 Tōhoku Tsunami) can deposit increased amounts of debris on shorelines. Derelict vessels and abandoned fishing gear are also problematic forms of marine debris.



### 3.4.2 Regional Actions on Marine Pollution

The recommended regional actions on marine pollution focus on prevention, reduction and mitigation of marine pollution, and management of associated ecosystem effects. These regional actions are consistent with sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 3.4a** – Coordinate a review of environmental standards, best management practices and guidelines for minimizing pollution from marine and terrestrial sources throughout the MaPP region, and where appropriate, work with relevant agencies and departments to improve those standards.
- » **Action 3.4b** – Support and coordinate pollution response through the use of tools such as data sharing agreements, common decision-support tools, and Geographic Response Plans.
- » **Action 3.4c** – With relevant agencies and departments, review existing funding mechanisms for pollution prevention and response, and explore opportunities to improve existing policy and bolster funding, as necessary.
- » **Action 3.4d** – Develop partnerships to implement a regional education program that will raise public awareness of marine pollution regulations, policies and best management practices.

Photo by Matthew Justice



## 3.5 Ecosystem-Based Management Monitoring and Indicators

### 3.5.1 Introduction and Context

Each sub-regional marine plan has a long-term vision of improved ecosystem health and associated human well-being. Therefore, the selection and monitoring of EBM indicators of ecosystem health and human well-being are an important part of MaPP implementation to determine whether the plans are achieving their desired improvements, and to adapt plans as required. Potential EBM indicators were identified and a framework monitoring plan for ecosystem health and human well-being was developed for the MaPP region. Interest in EBM indicator development and monitoring is increasing. Resource management agencies are increasingly adopting an EBM approach because they recognize that ecological, social and economic changes occur in uncertain, unpredictable and interconnected ways. On the Pacific Coast, EBM indicators are used across multiple levels of government and by marine sectors, organizations and communities.

### Examples of EBM Indicators

EBM indicators can be used to measure the status of systems and the pressures that affect them. The following are some examples of EBM indicators:

#### Ecological component – Habitat: Estuaries

Functional estuarine habitat – Many species of birds, invertebrates, fish and marine mammals use estuarine habitat during various life stages.

Multiple indicators can be used to monitor this key marine habitat. Some of the recommended indicators are the change in area of the estuary (i.e., tidal marshes and swamps, eelgrass bed), area of protected habitat, freshwater inflow, and/or water quality. Spawning and nursery area status and the extent of intertidal marsh habitat are other potential indicators for this ecological component. This is a practical indicator for community-based monitoring, and has direct links to sub-regional MaPP objectives regarding the protection and monitoring of this habitat.



#### Human well-being realm – Social, Physical

Indicator theme: human connections to place and environment (market connections)

Market connections are important to sense of place because they describe the extent to which people interact with their environment.

An example indicator is number of active fishing boats and number of boat trips per year. This indicator is meaningful to communities because it represents both cultural and social identities, it is a proxy for human marine connections, and it can be used directly in decision-making. There currently are no monitoring programs for tracking the number of active fishing boats and trips per year in the MaPP area. However, a number of sources of relevant data are available from federal agencies (e.g., Fisheries and Oceans Canada, Transport Canada), First Nations, the Province of British Columbia and non-governmental organizations.



Currently, monitoring of indicators tends to be segregated, which can lead to incomplete or discontinuous data sets and an incomplete picture of the entire system and the progress made in achieving broader EBM goals. Data standards, collection methods, storage, accessibility, analysis, end use and presentation also vary by program, which sometimes results in inefficiencies and duplication of effort.

EBM monitoring requires training, capacity and sufficient resourcing. Refinement of indicators will be coordinated with other ongoing initiatives, such as the Oceans Tipping Point project on Haida Gwaii, the Oceans Health Index and the Puget Sound Partnership.

### 3.5.2 Regional Actions on Ecosystem-Based Management Monitoring and Indicators

The recommended regional actions on EBM monitoring and indicators focus on monitoring ecosystem health and human well-being over time to inform management and decision-making at the regional and sub-regional scales. These actions are consistent with sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 3.5a** – Based on existing and ongoing work, establish a regional suite of indicators and initiate monitoring and analyses.
- » **Action 3.5b** – Coordinate the development of information-sharing protocols where appropriate.
- » **Action 3.5c** – Assess existing programs associated with marine EBM monitoring for potential opportunities for public involvement in monitoring activities.
- » **Action 3.5d** – Maintain and enhance a comprehensive and publicly accessible data portal to more effectively share EBM indicator monitoring data, spatial data, and other relevant data and reports (e.g., cumulative effects, climate change and marine pollution).
- » **Action 3.5e** – Develop and implement training and other programs to increase First Nations involvement in EBM monitoring activities.
- » **Action 3.5f** – Review existing funding mechanisms for monitoring, and explore opportunities to improve those mechanisms and bolster funding at the sub-regional and regional scales, as necessary.

# CHAPTER 4: COMPLIANCE AND ENFORCEMENT

## 4.1 Introduction and Context

The sound management of marine areas, species, and cultural and heritage resources requires the monitoring of human activities and compliance with applicable laws, policies and customs governing marine use. Enforcement actions are also necessary to encourage compliance by resource users. Together, compliance and enforcement actions, as well as improved public awareness, will protect marine resources, marine areas and coastal communities.

Several provincial and federal government agencies have marine monitoring, compliance and enforcement responsibilities, and First Nations in all four sub-regions also play an important role in monitoring and compliance activities. Efforts by provincial, federal and First Nation governments are supplemented by monitoring activities conducted by some commercial or non-profit organizations.

Compliance and enforcement programs can be challenging to implement effectively in large, remote areas, and government agencies lack resources for conducting frequent patrols over all coastal and marine areas. Surveillance costs are high, and budgets may be insufficient. In many parts of the MaPP region, First Nations' monitors or guardians are most likely to be in the area when and where activities occur, but they generally lack the necessary resources for comprehensive monitoring and they currently have limited enforcement capability. First Nations intend to increase their role in enforcement activities in their traditional territories.

Compliance and enforcement programs can also be limited by inadequate training for enforcement officers, by the inability to verify compliance, and by weak consequences for violator behaviour.

## 4.2 Regional Actions on Compliance and Enforcement

The recommended regional actions on compliance and enforcement focus on improving capacity and increasing marine user compliance. These actions are consistent with sub-regional marine plan objectives and strategies. The order of listing does not imply or reflect a priority:

- » **Action 4.2a** – Identify and coordinate new and existing initiatives associated with increasing First Nations involvement in compliance and enforcement.
- » **Action 4.2b** – Review existing compliance and enforcement funding sources and explore opportunities to support and bolster activities in the region and sub-regions, as necessary.
- » **Action 4.2c** – Develop and implement a regional outreach and education program to improve public awareness and appreciation of marine planning objectives, and thus encourage compliance with applicable laws and policies governing marine activities.





Photo by Julie Carpenter



Photo by Jessica Hawryshyn



# CHAPTER 5: ZONING RECOMMENDATIONS

## 5.1 Introduction and Context

The MaPP initiative included development of a Zoning Framework that uses EBM goals and principles to provide consistent guidance in the development and implementation of sub-regional marine plan zones and recommended uses and activities.

The sub-regional marine plans apply the zoning framework and allocate space to three types of zones: General Management Zone (GMZ), Special Management Zone (SMZ) and Protection Management Zone (PMZ). Associated with the zones are recommended uses, activities and general conditions or provisions to provide guidance for decision-making processes. The three zones will be managed according to the marine EBM framework.

The GMZ is an area where multiple uses and activities can be accommodated.

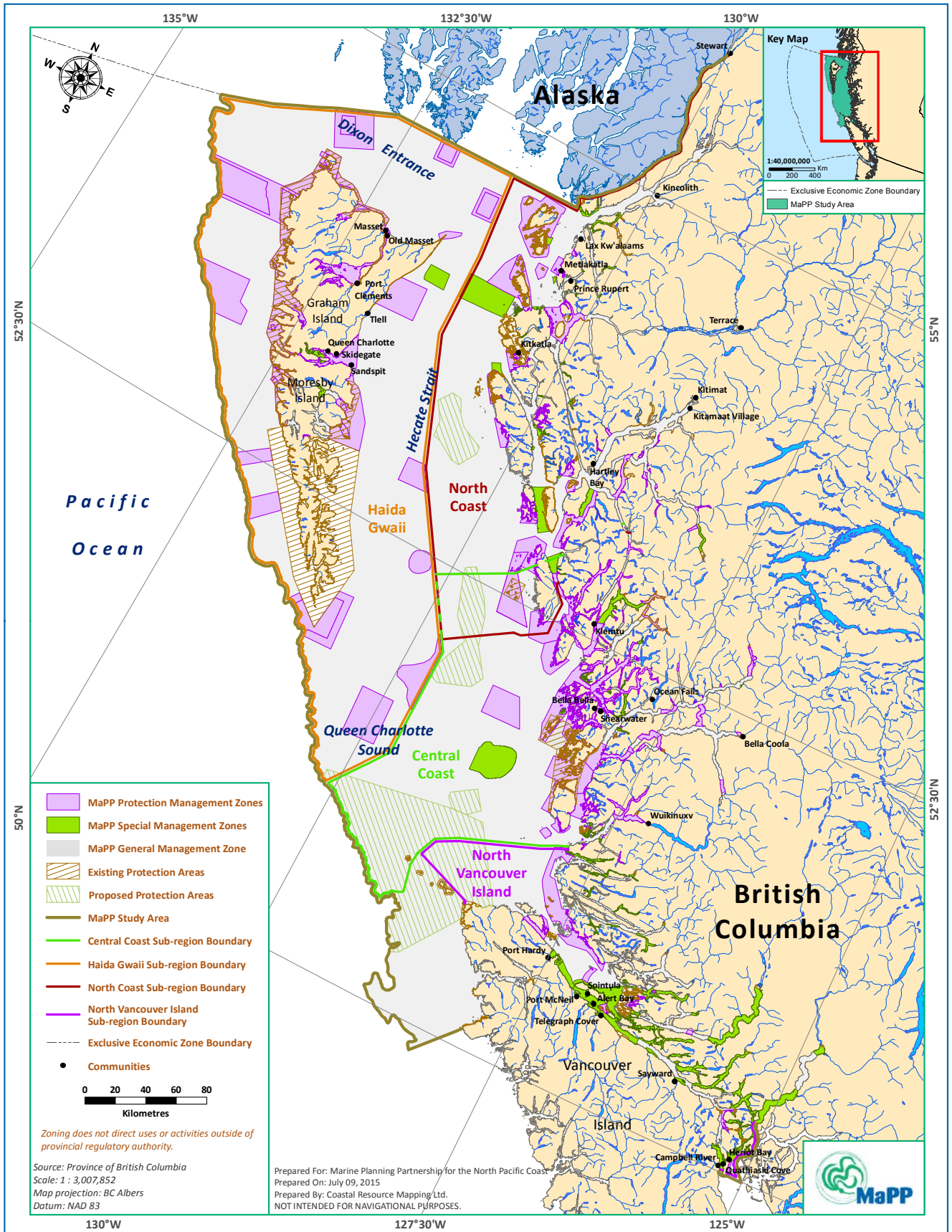
The SMZ designates space for high priority and high potential marine uses and activities. The sub-regional marine plans have generally associated SMZs with a specific management emphasis: cultural, cultural/economic, recreation and tourism, community, aquaculture, shellfish aquaculture, and renewable (alternative) energy. Not all sub-regional marine plans use each type of SMZ.

Areas zoned as PMZs are intended to help maintain marine biodiversity, ecological representation and resilience, and special features in the MaPP region. The PMZ prioritizes conservation objectives and uses that are compatible with those objectives.

Application of the Zoning Framework is shown in Figure 2 and Table 1.



Photo by Ken Cripps



**Figure 2. Zone Designations in the MaPP Region**



Most of the MaPP region is zoned as GMZ (62%); PMZ comprises 16%, and SMZ comprises about 4%. A small section of the MaPP region is outside the sub-regional boundaries and was therefore not zoned in the sub-regional marine plans (see Figure 2). This is a reflection of the boundary complexities associated with the NVI plan area. Existing and proposed protected areas not within PMZs account for approximately 14% of the MaPP region. The Haida Gwaii and Central Coast sub-regional marine plans included existing protected areas within PMZ boundaries. A small area of North Coast zoning also overlaps existing protected areas.

**Table 1. Zoning Summary Table**

Zone Type	Total Area (km <sup>2</sup> )	Percent of the MaPP Region	Shoreline* Length (km)	Percent of MaPP Region Shoreline
Protection Management Zone (PMZ)	16,278	16%	10,850	37%
Special Management Zone (SMZ)	3,786	4%	4,004	14%
General Management Zone (GMZ)	63,292	62%	8,271	28%
Existing and proposed protected areas not within PMZs	14,050	14%	5,573	19%
Areas without zoning	4,118	4%	753	2%
Total	101,524	100%	29,451	100%

*\*Shoreline is the intersection of the apparent high water line with the land (including islands).*





The four sub-regional marine plans collectively identify 241 PMZs. The PMZs are associated with different International Union for Conservation of Nature (IUCN) categories in order to provide a consistent, internationally recognized approach to expressing the range of management approaches required to conserve a diversity of marine values. However, alignment of the PMZs with IUCN categories does not indicate MaPP partners' full acceptance of IUCN recommended uses for a category. Interpretation of the IUCN categories does not imply management direction for marine uses and activities outside of provincial regulatory authority.

The PMZs may be designated through different processes and mechanisms. For example, a Marine Protected Area (MPA) network for the Northern Shelf Bioregion is being developed by the Province of British Columbia, the Government of Canada and First Nations, in discussion with stakeholder groups and local governments. PMZs will make important contributions to this planning process and are subject to further consultation and evaluation through that process.

Existing and proposed protected areas in the MaPP region (e.g., Gwaii Haanas, Hecate Strait/Queen Charlotte Sound Glass Sponge Reefs, Scott Islands) were considered in MaPP analyses (Table 1) and are shown in Figure 2 for illustrative purposes.

## 5.2 Regional Actions on Zoning

The recommended regional actions for zoning focus on supporting coordinated implementation of spatial management direction described in sub-regional marine plans. The order of listing does not imply or reflect a priority:

- » **Action 5.2a** – Assess management and designation tools, including identification of gaps and potential new tools, to implement zoning recommendations identified in MaPP sub-regional marine plans.
- » **Action 5.2b** – Develop and coordinate an outreach strategy to inform provincial, First Nations, federal, and local government managers and decision-makers about MaPP spatial management recommendations and implementation requirements.
- » **Action 5.2c** – Coordinate involvement in the tripartite (First Nations-British Columbia-Canada) regional MPA network process, including defining and applying MPA network design criteria and collectively evaluating MaPP sub-regional marine plan recommendations, data and analysis for their contributions to a regional network.

# CHAPTER 6: IMPLEMENTATION OF THE REGIONAL ACTION FRAMEWORK

## 6.1 Introduction and Context

The RAF is based on issues and priorities in the MaPP region and sub-regions. The RAF will be adaptive to changes that may become apparent during (or occur as a result of) implementation, or resulting from formal amendments to sub-regional marine plans.

Work plans will be developed to guide implementation of both the sub-regional marine plans and the RAF. Implementation agreements will be developed between the MaPP partners in each sub-region, and will define sub-regional governance structures. The bilateral governance structure used for MaPP plan development is anticipated to continue for sub-regional and regional activities. Stakeholder engagement will be an important component for the implementation of sub-regional marine plans and the RAF.

As part of the broader MaPP implementation financing initiative, MaPP is raising funds from a variety of sources for the implementation of regional actions.

## 6.2 Regional Actions on Implementation

The recommended regional actions on implementation are designed to facilitate effective and efficient implementation at a regional scale, and support sub-regional implementation activities, where appropriate. They also reflect consideration of the mechanisms for engagement of local government, stakeholders, and the general public in RAF implementation. The order of listing does not imply or reflect a priority:

- » **Action 6.2a** – Coordinate the involvement of sub-regional provincial government and First Nations staff in the implementation of regional actions, as appropriate.
- » **Action 6.2b** – Coordinate efforts to engage federal government agencies, local government, stakeholders, non-participating First Nations, and the general public in the implementation of MaPP regional actions, as appropriate.
- » **Action 6.2c** – Develop a regional work plan, in conjunction with sub-regional work plans, and review progress in achieving regional actions annually.
- » **Action 6.2d** – Seek and secure resources for implementation of regional actions.





Photo by Julie Carpenter



## SELECTED REFERENCE DOCUMENTS

Government of Canada and Government of British Columbia. 2014. Canada–British Columbia Marine Protected Area Network Strategy, 2014. Available at: [www.for.gov.bc.ca/tasb/slrp/pdf/ENG\\_BC\\_MPA\\_LOWRES.pdf](http://www.for.gov.bc.ca/tasb/slrp/pdf/ENG_BC_MPA_LOWRES.pdf)

Marine Planning Partnership Initiative for the North Pacific Coast. 2015. Central Coast Marine Plan.

Marine Planning Partnership Initiative for the North Pacific Coast. 2015. Haida Gwaii Marine Plan.

Marine Planning Partnership Initiative for the North Pacific Coast. 2015. North Coast Marine Plan.

Marine Planning Partnership Initiative for the North Pacific Coast. 2015. North Vancouver Island Marine Plan.

Pacific North Coast Integrated Management Area (PNCIMA) Initiative. 2013. Pacific North Coast Integrated Management Area Plan (DRAFT May 27, 2013). Available at: <http://www.pncima.org/media/documents/pdf/draft-pncima-plan-may-27--2013.pdf>



Photo by Bart DeFietas

## APPENDIX 1: REGIONAL MARINE ADVISORY COMMITTEE

**Table 2. Regional Marine Advisory Committee (RMAC) Membership (Note: some sector representatives changed during the process)**

Name	Sector	Role	Participation Period
Bruce Storry	Coastal Forestry	Member	December 2012 – October 2014
Jim McIsaac	Commercial Fisheries	Member	December 2012 – February 2012, October 2013 – October 2014
Loreena Hamer	Commercial Fisheries	Alternate	December 2012 – February 2013
Dan Edwards	Commercial Fisheries	Alternate	October 2013 – October 2014
Evan Loveless	Commercial Tourism	Member	December 2012 – October 2014
Mairi Edgar	Commercial Tourism	Alternate	January 2014 – October 2014
Richard Opala	Finfish Aquaculture	Member	December 2012 – October 2014
Dave Minato	Finfish Aquaculture	Alternate	December 2012 – October 2014
Kim Wright	Marine Conservation	Member	December 2012 – June 2014
Bill Wareham	Marine Conservation	Alternate	December 2012 – November 2013
Anu Rao	Marine Conservation	Alternate Member	December 2013 – June 2014 June 2014 – October 2014
Nick Heath	Public Recreation	Member	December 2012 – October 2014
George Cuthbert	Recreational Angling	Member	January 2013 – October 2014
Jim Abram	Strathcona Regional District	Member	December 2012 – October 2014
Jude Schooner	Strathcona Regional District	Alternate	December 2012 – October 2014
Heidi Soltau	Mount Waddington Regional District	Member	December 2012 – October 2014
Doug Aberley	Mount Waddington Regional District	Alternate	December 2012 – October 2014
Ian Gould	Regional Government Skeena-Queen Charlotte RD (Haida Gwaii)	Alternate  Member	December 2012 – December 2013 December 2013 – October 2014
Evan Putterill	Regional Government Skeena-Queen Charlotte RD (Haida Gwaii)	Member	December 2012 - December 2013
Karl Bergman	Regional Government Skeena-Queen Charlotte RD (Mainland)	Member	December 2012 – October 2014

Name	Sector	Role	Participation Period
Brian Lande	Regional Government Central Coast RD	Member	December 2012 – October 2014
Alison Sayers	Regional Government Central Coast RD	Alternate	July 2014 – October 2014
Andrew Webber	Regional Government Central Coast RD	Member	December 2012 – October 2014
Sam Bowman	Shellfish Aquaculture	Member	December 2012 – October 2014
Kim Johnson	Non-renewable Energy	Member	February 2013 – October 2014
Greg Hayden	Non-renewable Energy	Alternate	May 2014 – October 2014
Adrian Rowland	Marine Transportation/ Infrastructure	Member	February 2013 – October 2014

**Table 3. RMAC Meeting Dates and Topics**

Meeting Number	Date	Topics
1a	December 10, 2012	Structure, workflow, EBM and zoning
1b (workshop)	December 11-12, 2012	Regional Cumulative Effects Assessment Framework
2	March 4, 2013	Regional compliance, monitoring and enforcement
3	October 30-31, 2013	Marine Response. Pollution Management, Integrated Economic Strategies, Marine Policy, Cumulative Effects
4	February 4-5, 2014	Updates
5	April 29, 2014	MaPP process and timelines
6	June 9, 2014	Review and status update of the draft Regional Action Framework
7	July 24, 2014	MaPP Process and timelines, Review and status update on Regional Action Framework, EBM indicators
8	September 15, 2014	Review of draft Regional Action Framework
9	August 13, 2015	Review of final draft Regional Action Framework



## APPENDIX 2: MAPP SCIENCE ADVISORY COMMITTEE

**Table 4. MaPP Science Advisory Committee Membership**

Name	Affiliation	Area of Expertise
Natalie Ban	University of Victoria	cumulative effects, biodiversity
Rosaline Canessa	University of Victoria	spatial analysis, conservation planning, coastal zone management, tourism, recreation, interdisciplinary
Charles (Bud) Ehler	Ocean Visions	marine planning, integrated coastal and ocean management
Wolfgang Haider	Simon Fraser University	social and economic research, protected areas planning and management, nature conservation, outdoor recreation and tourism, human dimensions of recreational fishing and wildlife, landscape perception
Phil Levin	NOAA National Marine Fisheries Service	ecosystem science, ecological processes, fisheries, EBM
Gordon Munro	Clark, Munro and Associates; University of British Columbia (emeritus)	economics, fisheries, natural resources
Nancy Turner	University of Victoria	traditional knowledge, ethnobotany, ethnoecology
Frank Whitney	Retired, Fisheries and Oceans Canada	oceanography, nutrient transport, multi-decadal ecosystem processes, hypoxia, climate change
Spencer Wood	Natural Capital Project - Stanford University	socioecological interactions, models, ecosystem services, marine biodiversity

## APPENDIX 3: SUMMARY OF REGIONAL MAPP ACTIONS

**Table 5. Summary of Regional Actions Presented in the MaPP Regional Action Framework**

REGIONAL GOVERNANCE	
<b>Regional Governance</b>	<b>Regional Actions on Governance</b>
	Action 2.2a - Advance collaborative governance arrangements for marine management, including efficient and effective arrangements for implementing MaPP and other related recommendations and priorities (e.g., PNCIMA).
	Action 2.2b - Continue to identify and advance opportunities for more effective and collaborative First Nations-provincial environmental assessment processes
	Action 2.2c - Review existing provincial government agency processes for encouraging proponents' effective engagement with First Nations, including relevant agreements, to improve working relationships.
ECOLOGICAL INTEGRITY AND HUMAN WELL-BEING	
<b>Regional Climate Change</b>	<b>Regional Actions on Climate Change</b>
	Action 3.1a – Identify and monitor climate change indicators for the MaPP region, and incorporate data into a long-term and effective EBM monitoring program that will inform response strategies.
	Action 3.1b – Develop and conduct a regional risk assessment for ocean climate change.
	Action 3.1c – Engage in the Province of British Columbia's blue carbon assessment framework to estimate the potential for marine carbon sequestration in the MaPP region.
	Action 3.1d – Develop regional educational tools for application that explain ocean climate change effects, their impacts on marine ecosystems, human communities and infrastructure, and adaptive capacity.
	Action 3.1e – Increase public awareness of climate change, including applicable laws, policies and customs governing marine resource use, best management practices, and adaptive capacity.
<b>Regional Cumulative Effects Assessment</b>	<b>Regional Actions on Cumulative Effects</b>
	Action 3.2a – Continue to refine the draft MaPP marine cumulative effects assessment framework in collaboration with the Province of British Columbia's cumulative effects project.
	Action 3.2b – Collaborate with sub-regions to select and implement an appropriate pilot(s) to test the cumulative effects framework for marine uses and activities.
	Action 3.2c – Advance dialogue on a common approach to integrate cumulative effects assessments into marine decision-making processes.

<b>Regional Economy and Infrastructure</b>	<b>Regional Actions on Economy and Infrastructure</b>
	Action 3.3a – Confirm specific gaps in regional and coastal community marine infrastructure and services, and initiate action to address them to improve economic development and human well-being.
	Action 3.3b – Enhance regional collaboration and improve local economic benefits related to shellfish aquaculture and fisheries, including developing and marketing value-added products, identifying potential economic incentives, identifying and promoting new or niche markets, promoting the viability of shellfish aquaculture to attract investment, and encouraging new regional investment in seafood processing.
	Action 3.3c – Enhance collaboration between the sub-regions to attract and better integrate new and emerging industries that are consistent with provincial government and First Nations economic priorities.
<b>Regional Marine Pollution</b>	<b>Regional Actions on Marine Pollution</b>
	Action 3.4a – Coordinate a review of environmental standards, best management practices and guidelines for minimizing pollution from marine and terrestrial sources throughout the MaPP region, and where appropriate, work with relevant agencies and departments to improve those standards.
	Action 3.4b – Support and coordinate pollution response through the use of tools such as data sharing agreements, common decision-support tools, and Geographic Response Plans.
	Action 3.4c – With relevant agencies and departments, review existing funding mechanisms for pollution prevention and response, and explore opportunities to improve existing policy and bolster funding, as necessary.
	Action 3.4d – Develop partnerships to implement a regional education program that will raise public awareness of marine pollution regulations, policies and best management practices.
<b>Ecosystem-Based Management Monitoring and Indicators</b>	<b>Regional Actions on Ecosystem-Based Management Monitoring and Indicators</b>
	Action 3.5a – Based on existing and ongoing work, establish a regional suite of indicators and initiate monitoring and analyses.
	Action 3.5b – Coordinate the development of information-sharing protocols where appropriate.
	Action 3.5c – Assess existing programs associated with marine EBM monitoring for potential opportunities for public involvement in monitoring activities.
	Action 3.5d – Maintain and enhance a comprehensive and publicly accessible data portal to more effectively share EBM indicator monitoring data, spatial data, and other relevant data and reports (e.g., cumulative effects, climate change and marine pollution).
	Action 3.5e – Develop and implement training and other programs to increase First Nations involvement in EBM monitoring activities.
	Action 3.5f – Review existing funding mechanisms for monitoring, and explore opportunities to improve those mechanisms and bolster funding at the sub-regional and regional scales, as necessary.



COMPLIANCE AND ENFORCEMENT	
<b>Compliance and Enforcement</b>	<b>Regional Actions on Compliance and Enforcement</b>
	Action 4.2a – Identify and coordinate new and existing initiatives associated with increasing First Nations involvement in compliance and enforcement.
	Action 4.2b – Review existing compliance and enforcement funding sources and explore opportunities to support and bolster activities in the region and sub-regions, as necessary.
	Action 4.2c – Develop and implement a regional outreach and education program to improve public awareness and appreciation of marine planning objectives, and thus encourage compliance with applicable laws and policies governing marine activities.
ZONING RECOMMENDATIONS	
<b>Zoning Recommendations</b>	<b>Regional Actions on Zoning</b>
	Action 5.2a – Assess management and designation tools, including identification of gaps and potential new tools, to implement zoning recommendations identified in MaPP sub-regional marine plans.
	Action 5.2b – Develop and coordinate an outreach strategy to inform provincial, First Nations, federal, and local government managers and decision-makers about MaPP spatial management recommendations and implementation requirements.
	Action 5.2c – Coordinate involvement in the tripartite (First Nations–British Columbia–Canada) regional MPA network process, including defining and applying MPA network design criteria and collectively evaluating MaPP sub-regional marine plan recommendations, data and analysis for their contributions to a regional network.
IMPLEMENTATION OF THE REGIONAL ACTION FRAMEWORK	
<b>Implementation of the Regional Action Framework</b>	<b>Regional Actions on Implementation</b>
	Action 6.2a – Coordinate the involvement of sub-regional provincial government and First Nations staff in the implementation of regional actions, as appropriate.
	Action 6.2b – Coordinate efforts to engage federal government agencies, local government, stakeholders, non-participating First Nations, and the general public in the implementation of MaPP regional actions, as appropriate.
	Action 6.2c – Develop a regional work plan, in conjunction with sub-regional work plans, and review progress in achieving regional actions annually.
	Action 6.2d – Seek and secure resources for implementation of regional actions.

## APPENDIX 4: SUB-REGION PLAN CONTACTS

Province of British Columbia

Ministry of Forests, Lands and Natural Resource Operations

Phone: 250.387.1772

[www.gov.bc.ca/for](http://www.gov.bc.ca/for)

Nanwakolas Council

1441 16 Ave, Campbell River, BC V9W 2E4

Phone: 250.286.7200

[www.nanwakolas.com](http://www.nanwakolas.com)

Central Coast Indigenous Resource Alliance

PO Box 535, Bella Coola, BC V0T 1C0

Email: [info@ccira.ca](mailto:info@ccira.ca)

[www.ccira.ca](http://www.ccira.ca)

North Coast-Skeena First Nations Stewardship Society

612 2 Avenue West, Prince Rupert, BC V8J 1H2

Phone: 250.624.8614

[www.northcoastskeenafirstnations.ca](http://www.northcoastskeenafirstnations.ca)

Council of Haida Nation

Secretariat of the Haida Nation

Box 98 Queen Charlotte Haida Gwaii V0T 1S0

Phone: 1.888.638.7778 or 250.626.5252

[www.haidanation.ca](http://www.haidanation.ca)



Photo by Doug Neasloss







## WHERE TO GO FOR MORE INFORMATION

The Marine Plan Partnership:  
<http://mappocean.org/>