

Integrated Oceans Management Planning in Canada: An Evaluation of the Pacific North Coast Integrated Management Area Process

**by
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Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

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or

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Abstract

Over the past decade, there has been a surge of interest around the world in marine planning as an innovative approach to balancing sustainable development and conservation of the marine environment. In 2009, a marine planning process was initiated for a region called the Pacific North Coast Integrated Management Area (PNCIMA) in British Columbia, Canada. The final integrated oceans management plan for the PNCIMA was officially endorsed in February 2017. The collaborative planning process used to prepare the PNCIMA plan was evaluated using a multi-criteria evaluation method. The results show that the PNCIMA process had strengths and weaknesses: three of the twenty-six best practice criteria were met, thirteen were moderately met, and nine were unmet. Further, stakeholders reached consensus on some but not all elements of the PNCIMA plan. Recommendations are identified for design and management of future collaborative marine planning processes based on the PNCIMA evaluation.

Keywords: collaborative planning, marine planning, integrated oceans management, resource and environmental planning, best practice evaluation.

Dedication

For my incredible family and the deep blue sea.

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Chapter 1. Introduction

Collaborative planning is a planning model that has grown in popularity in recent decades (Cullen et al., 2010; Morton et al., 2012). It promises numerous benefits, from strengthening stakeholder relationships to improving the quality of plans and the likelihood of successful plan implementation. The ability of collaborative planning to deliver these benefits, however, is highly dependent upon effective process design and management (Day & Gunton, 2003; Innis, 2004; Innes and Booher, 1999; Margerum, 2002). Consequently, there have been many recent empirical evaluations conducted to identify the strengths and weaknesses of collaborative planning processes (e.g., Astofooroff, 2008; Cullen et al., 2010; Frame et al., 2004; McGee, 2006; Morton, 2009; Kennedy, 2012). Insights gained through such evaluations can guide and inform future planning processes (Day & Gunton, 2003).

This paper provides a case study evaluation of the collaborative planning process used to develop a marine plan for the Pacific North Coast Integrated Management Area (PNCIMA) in British Columbia (BC), Canada. The research findings contribute to best practice literature on public participation in resource and environmental planning. Specifically, the findings have the potential to inform the design and management of collaborative planning processes for either marine or terrestrial environments in Canada and in other settings around the world. Additionally, they bring to light important considerations for the implementation of the PNCIMA plan. In the following sections, the context for the PNCIMA case study evaluation will be described, including the declining health of the marine environment, marine planning as a promising response, and Canada's unique experience developing marine plans.

1.1. State of the Marine Environment

Global interest in marine planning is largely driven by growing awareness of the importance of the marine environment and threats to its health (Douvere, 2008). Covering over 70% of the earth's surface, the marine environment includes some of the world's most diverse and productive ecosystems (Inniss et al., 2016). These ecosystems in turn provide services critical to human survival and well-being (UNCED, 1992; MEA, 2005). Marine ecosystem services include those that are part of the market economy, such as fisheries, aquaculture, minerals, energy, shipping, tourism and recreation, as well as tangible and intangible, non-

marketed ecosystem services. Examples of tangible ecosystem services include the following: phytoplankton produce atmospheric oxygen; salt marshes and sea grass meadows sequester carbon; and mangrove forests stabilize shorelines (Inniss et al., 2016). Constanza et al. (2014) estimate the economic value of these tangible ecosystem services at \$49.7 trillion dollars per year (in 2007 US dollars), over half of global GDP in 2007 (\$75.2 trillion). The marine environment also provides intangible, non-marketed ecosystem services, such as aesthetic, cultural, religious and spiritual benefits, which some argue are invaluable (Inniss et al., 2016; Martínez et al., 2007).

Human activities in the marine environment are increasing in number and intensity, resulting in greater conflict among marine users and impacts on marine ecosystems (Douvere, 2008). Halpern et al., (2008) found that 41 percent of marine ecosystems in the world are strongly impacted by human activities and only 4 percent remain unaffected. In fact, the UN Millennium Ecosystem Assessment found that ocean and coastal ecosystems are among the most threatened on earth (MEA, 2005). Key drivers of marine ecosystem degradation and biodiversity loss include overexploitation of living and non-living marine resources, coastal development, pollution, and climate-related impacts (Halpern et al., 2008; Inniss et al, 2016; MEA, 2005; Worm et al., 2006). As a result of these changes, the capacity of ecosystems to provide valued services is being reduced (Crowder & 2008; Levin & Lubchenco, 2008). For example, nearly 87% of fish stocks are either fully exploited or overexploited as a result of overfishing and destructive fishing methods (FAO, 2011).

The current state of the marine environment is largely due to the failure of existing governance structures and management systems (Crowder et al., 2006; Young et al., 2007). Management systems focussing on a single species, sector, or issue have not always proven capable of addressing complex interactions, cumulative effects, or overall ocean health (Guénette & Alder, 2007). Beginning with the United Nations Conference on Environment and Development in June 1992, a number of international forums have recommended a fundamentally shift in how marine activities are managed, from a reactive, piecemeal approach to a more proactive, comprehensive approach. Specifically, they have prescribed the adoption of an integrated, ecosystem based approach to the planning and management of multiple uses across sectors in the marine environment in order to maintain critical ecosystem services (Cicin-Sain et al., 1998). These concepts are not new, with early applications in land and resource management in the 1960s to 1970s (Grumbine, 1994) and coastal zone management in the 1980s to 1990s (Cicin-Sain et al., 1998). However, while widely recommended, a practical

means to achieve integrated, ecosystem based management is often not specified. Marine planning is a promising means to implement integrated, ecosystem based management in the marine environment (Douvere, 2008).

1.2. International Experience in Marine Planning

Over the past 10-15 years, there has been a surge of interest in marine planning around the world (Dickinson, Rutherford & Gunton, 2010; Douvere, 2008; Ehler & Douvere, 2009; Ehler, 2014; Collie et al., 2013). Marine planning is being instituted by governments as a way to balance the sustainable use and conservation of their ocean estates (Gunton & Rutherford, 2010). Over forty countries around the world are at various stages of developing and implementing marine plans at the national (exclusive economic zone), sub-national (territorial sea), and state or provincial levels (Ehler, 2014).

Marine planning was pioneered in high-use marine areas in Western Europe through the efforts of the United Kingdom, Belgium, the Netherlands, and Germany. Today, several countries (Canada, Australia, Sweden, and Poland) and one American state (Oregon) have successfully developed marine plans that will be implemented over the next several years. At least five countries (Belgium, Germany, China, The Netherlands and Norway) and two American states (Massachusetts and Rhode Island) have implemented government-approved marine plans, which are already in their second or third generation in The Netherlands and Norway (Ehler & Douvere, 2009; Ehler and Douvere, 2010). In July 2010, President Obama signed an executive order that formed the National Ocean Council to oversee and facilitate the development and certification of coastal and marine spatial plans for nine regions of the USA EEZ (Ehler and Douvere, 2010). There are also marine planning-related initiatives occurring at the international level, such as the National Oceanic and Atmospheric Administration (NOAA) Large Marine Ecosystem Program (Large Marine Ecosystems of the World, 2017).

What is referred to in this paper as marine planning is actually a variety of activities called different things in different settings around the world (Collie et al., 2013). Existing marine plans are heterogeneous in their attributes, with most plans having objectives, legal authority, and an information base, but varying in their utilization of public participation, decision-support tools, and monitoring and performance measures (Collie et al., 2013). While early marine planning focused on the integrated, ecosystem-based management of multiple activities in a specific place (i.e., integrated marine planning), the field has more recently shifted its focus to

“marine spatial planning”, which typically involves spatially explicit measures, such as ocean zoning (Jessen, 2011). Terms related to marine planning are defined in Table 1.1.

Term	Definition
Marine Spatial Planning	The public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that are usually specified through a political process. Marine spatial planning should be ecosystem-based.
Ocean Zoning	An important regulatory measure to implement comprehensive marine spatial management plans usually through a zoning map or maps and regulations for some or all areas of a marine region. Ocean zoning is an effective tool of marine spatial planning.
Marine Ecosystem-Based Management	An integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the goods and services humans want and need. Ecosystem-based management differs from traditional approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors.

Adapted from Ehler & Douvère (2009).

Marine planning is still a relatively new approach, with few plans existing that have been fully implemented. Therefore, additional time is required to evaluate plan performance. However, lessons learned from progress to date allow us to identify characteristics that contribute to the successful completion of marine plans (Collie et al., 2013). Based on a review of marine planning initiatives around the world, several recent publications have generated specific recommendations, step-by-step guidelines, or near-term priorities that can be used to evaluate existing processes or to inform new ones (e.g., Beck et al., 2009; Ehler & Douvère, 2009; Foley et al., 2010; Gilliland & Laffoley 2008; Gold et al., 2011; Halpern et al., 2012). Collie et al. (2013) compared the attributes of 16 existing marine spatial plans from Europe, North America, China, and Australia against an idealized plan as defined in Ehler and Douvère (2009), Beck et al. (2009), Gold et al., (2011), and Halpern et al. (2012), and found that “there are essential ingredients, but no single recipe for success” (p.1). Similarly, Ehler and Douvère (2010) and Dickinson, Rutherford, and Gunton (2010) do not provide detailed guidance, instead identifying broader principles or essential characteristics for successful marine planning, which are aggregated as “best practices,” shown in Table 1.2.

Best Practices	Dickinson, Rutherford, and Gunton (2010)	Ehler and Douvère (2010)	Collie et al. (2013)
Legal authority and mandate		X	X
Operational objectives	X		X
Inclusive participation	X	X	X
Leadership and accountability	X		
Legal framework	X		
Monitoring and reporting	X		X
Adaptive management	X	X	X
Adequate information	X		
Adaptation to context	X		
Integration of multiple objectives	X	X	
Expectations match available resources			X
Ecosystem-based		X	
Future-oriented		X	

1.3. Canada’s Marine Planning System

Canada’s current marine planning system was established primarily through the *Oceans Act* (S. C. 1996, c. 31) and several supporting policy documents. The *Act* commits Canada to an integrated approach to oceans management. To accomplish this, the *Act* mandates the Minister of Fisheries and Oceans Canada to lead and facilitate the development and implementation of marine plans, referred to as “integrated management plans,” using a collaborative approach. The vision and objectives for marine planning are outlined in *Canada’s Oceans Strategy* (2002a) and five priority regions for marine planning are identified in its companion document, the *Oceans Action Plan* (2005). This legislative and policy framework for marine planning in Canada is described in greater detail in Chapter 2.

When Canada passed the *Oceans Act* two decades ago, it “established the foundation for a major reform of oceans planning and management in Canada” (Rutherford, Gunton, & Dickinson, 2010, p.49). In doing so, Canada was considered a global leader in oceans planning and management (Jessen, 2011). Since then, Canada has achieved some progress in the development and implementation of its marine plans, but progress has been slower than anticipated due to a number of challenges (DFO, 2012; Jessen, 2011). An internal evaluation of the integrated oceans management program found that delays in plan endorsement and inadequate funding are significant challenges. Additionally, it found that the resulting plans were weak in terms of specific actions, timelines, and accountabilities for implementation. Overall, this

evaluation concluded that Canada's marine plans will not impact government programs/ policies until implemented (DFO, 2012).

Similarly, Rutherford, Gunton, and Dickinson (2010) used principles for successful marine planning to evaluate Canada's marine planning system in 2010. At that time, these authors found that where marine planning processes were proceeding, substantial data had been gathered and diverse stakeholders engaged. However, they also found room for improvement in terms of greater commitment to marine planning at the most senior levels of government, dedicated long-term funding, comprehensive goals with measurable targets, effective strategies, progress monitoring and reporting, and adaptive management. Since this publication, all of Canada's marine plans have been finalized and publically released. With the last plan endorsed by governance partners in February 2017, two decades after the passage of the *Oceans Act*, there is an opportunity to evaluate the performance of Canada's current marine planning system and consider future directions.

1.4. Inclusive Participation in Marine Planning Processes

Inclusive participation is one of ten principles for successful marine planning cited by Dickinson, Rutherford, and Gunton (2010). A number of other authors have also highlighted the importance of public participation to successful marine planning (e.g., Gopnik et al., 2012; Olsen et al., 2014; Pomeroy & Douvère, 2008; Ritchie & Ellis, 2010; Rutherford, Herbert & Coffen-Smout, 2005). To evaluate the extent to which marine planning processes achieve inclusive participation, Gunton, Rutherford & Dickinson (2010) recommend the application of best practices in collaborative planning. These authors define collaborative planning as an approach to public participation that "engages stakeholders in an interactive dialogue to seek agreement on management decisions" (p.98). Best practices for the design and management of collaborative planning processes have been generated through empirical testing of factors that contribute to successful collaborative planning within a long-term, multiphase evaluation research project in the School of Resource and Environmental Management at Simon Fraser University. These best practices were adapted to fit the PNCIMA case study and are described in greater detail in Chapter 5.

1.5. Case Study: The Pacific North Coast Integrated Management Area Process

The Pacific North Coast Integrated Management Area (PNCIMA) is one of five priority regions called Large Ocean Management Areas for integrated oceans management planning identified in Canada's *Oceans Action Plan* (2005). It is also the first large-scale marine planning process initiated in British Columbia (BC). It encompasses 102,000 km² and approximately two-thirds of the BC coast. Formally launched in 2009, the collaborative planning process for the PNCIMA was led through a collaborative governance agreement between the Government of Canada, BC, and First Nations and contributed to by stakeholders and interested parties. Under the direction of a Steering Committee, an Integrated Oceans Advisory Committee (IOAC) developed an ecosystem-based management (EBM) framework for the region. In September 2011, the federal government made a unilateral decision to restructure the PNCIMA process, resulting in a reduction in plan scope. Following the release of the draft PNCIMA plan in 2013, there was a significant delay in plan endorsement (PNCIMA Initiative, 2017). On February 17, 2017, the plan was endorsed by all governance partners (Government of Canada, 2017). The PNCIMA plan is a high level, strategic plan that represents an important commitment to EBM in the region and is intended to serve as an umbrella initiative for other marine planning activities (PNCIMA Initiative, 2017b).

1.6. Research Overview

1.6.1. Purpose

The purpose of this study is to identify the strengths and weaknesses of the collaborative planning process used to prepare the integrated oceans management plan for the PNCIMA. Based on the performance of the PNCIMA process, recommendations will be proposed for the design and management of future collaborative planning processes.

1.6.2. Objectives

This report seeks to answer the following research questions:

1. What is the current status of Canada's integrated oceans management program?
2. What are the strengths and weaknesses of the PNCIMA process?

3. What lessons learned from the PNCIMA processes can inform the design and management of future multi-stakeholder, collaborative planning processes for the marine or terrestrial environment in other settings?
4. What are important considerations for PNCIMA plan implementation?

1.6.3. Methodology

The research methodology used to evaluate the PNCIMA process is based on the methodology developed and applied in Frame (2002) to evaluate the collaborative planning processes for preparing land and resource management plans (LMRPs) in BC. The methodology, adapted to the PNCIMA case study, consists of five steps outlined below:

1. Conduct a literature review, including a review of marine planning theory and practice, collaborative planning theory and practice, Canadian integrated oceans management planning policy, and PNCIMA publications.
2. Based on the literature review, develop a list of best practices, in this case adapting the set proposed in Frame (2002).
3. Design and administer a survey to PNCIMA participants comprised of questions that test the degree to which the process meets each best practice criterion.
4. Analyze survey results to understand participant perceptions of process strengths and weaknesses.
5. Make recommendations based on this analysis for the design and management of future collaborative planning processes.

1.6.4. Report Outline

Chapter 2 provides an overview of the status of integrated oceans management planning in Canada. Chapter 3 is a detailed description of the PNCIMA case study. Chapter 4 introduces the collaborative planning model and provides a brief history of its use in BC leading up to the PNCIMA process. Chapter 5 describes the participant survey used to evaluate the PNCIMA process and summarizes the results of that survey. Based on this analysis, chapter 6 discusses the results and provides recommendations for future collaborative planning processes.

Chapter 2. Integrated Oceans Management Planning and Policy in Canada

Canada has made numerous national and international commitments to the sustainable development of its ocean estate (Gunton & Rutherford, 2010). However, the Government of Canada shares responsibility for oceans management with the provinces and territories, local governments, and Indigenous peoples (Canada, 2005). For areas that are within the boundaries of the province of BC, the Government of Canada has legislative jurisdiction over fisheries, marine transportation, marine pollution and other matters assigned to it under the *Constitution Act, 1867*, whereas the Government of BC has legislative jurisdiction over the matters assigned to it in the *Constitution Act* and also owns most public or crown coastal lands. Additionally, a Supreme Court of Canada decision in 1984 (the Strait of Georgia Reference) held that the province owns the waters and submerged lands of the straits between Vancouver Island and the mainland, and between major headlands in the province (i.e., bays, estuaries and fjords) (Government of Canada, 2009). Local governments also influence the management of coastal areas through by-laws, zoning, and by other means (Green Shores, 2009). First Nations have Aboriginal rights and title recognized and affirmed by Section 35(1) of the *Constitution Act, 1982* that extend to coastal areas and potentially offshore areas and resources (Jessen et al., 2011). Several First Nations have traditional territories encompassing coastal areas, some of which have signed or are currently negotiating comprehensive land claims agreements that cover these areas (Government of Canada, 2009). Many First Nations have also developed coastal and marine use plans for their traditional territories (CFN, 2008). This jurisdictional complexity necessitates collaboration among multiple parties in order to achieve integrated oceans governance (Canada, 2005).

2.1. International Commitments

Developments at the international level have been an important part of the context in which Canada has developed and implemented its integrated oceans management legislation and policy over the past two decades. Among the plethora of international agreements and “soft-law” documents, the 1982 *United Nations Convention on the Law of the Sea* (UNCLOS) is central to oceans management. Considered the “world’s constitution for the oceans” (Ricketts & Harrison, 2007 p. 13), *UNCLOS* provides the foundation for the development of national ocean

policy and legislation by (1) delineating offshore zones over which nations may exercise jurisdiction and (2) specifying their rights and obligations with respect to the protection and sustainable development of the marine environment and its resources (Ricketts & Harrison, 2007).

Canada has made international commitments to the integrated management and sustainable development of its ocean territory. At the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Canada pledged to adopt the goals of Agenda 21, a non-binding, voluntarily action plan to achieve sustainable development around the world. Chapter 17 of Agenda 21 committed coastal states to the integrated management and sustainable development of coastal and ocean areas (UNCED, 1992). Related to integrated oceans management planning, an objective under Programme Area A is for nations to “provide for an integrated policy and decision-making process, including all involved sectors, to promote compatibility and a balance of uses” (UNCED, 1992, para. 17.5). The need for integrated management and planning of coastal and ocean areas was also endorsed at the 2002 World Summit on Sustainable Development (Douvere and Ehler, 2009).

In addition to these commitments to integrated management and sustainable development are commitments made to marine ecosystem protection and conservation. At the World Parks Congress in 2003, Canada committed to protect 20% - 30% of its marine ecosystems by 2012. It also committed to establish a system of Marine Protected Areas (MPAs), at the 2002 World Summit on Sustainable Development, the 2004 Convention on Biological Diversity (CBD), and the 2010 Conference of the Parties to the United Nations Convention on Biological Diversity (CBD) (Gunton and Rutherford, 2010). At the 2010 CBD Conference of the Parties, Canada agreed to adopt the Aichi Biodiversity Targets, which included Target 11 to conserve 10 per cent of coastal and marine areas by 2020. Target 11 supersedes the previous target adopted at the 2004 CBD Conference of the Parties of having 10% of each of the world’s ecological regions conserved by 2010 (ECCC, 2016).

Finally, Canada has international obligations guiding its relationship with Indigenous peoples in all areas, including oceans management. These international obligations include article 27 of the 1966 International Covenant on Civil and Political Rights, 1989 International Labour Organization Convention No. 169, specific provisions in the 1992 International Conventions on Biological Diversity, and the 2006 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (Jessen et al., 2011). The UNDRIP is a document that describes

“both individual and collective rights of Indigenous peoples around the world” and “offers guidance on cooperative relationships with Indigenous peoples” (Government of Canada, 2017e, para.2). In November 2010, the Harper government issued a statement of support endorsing the principles of the UNDRP while expressing concerns with various provisions of the declaration, including free, prior and informed consent when used by Indigenous communities as a veto (Government of Canada, 2014). In the November 2015 mandate letter, Prime Minister Justin Trudeau asked the Minister of Indigenous and Northern Affairs (INAC) to implement UNDRIP. In May 2016, the Minister announced that Canada is now “a full supporter, without qualification, of the declaration” (Government of Canada, 2017e, para. 3). To fulfill Canada’s commitments to implementing UNDRIP, the Minister of Justice and Attorney General of Canada released a set of Principles Respecting the Government of Canada’s Relationship with Indigenous Peoples in July 2017, which “will guide the review of laws, policies and operational practices and form a foundation for transforming how the federal government partners with and supports Indigenous peoples and governments” (Government of Canada, 2017d, para. 2).

2.2. Federal Legislative and Policy Framework

In the following sections, the federal legislative and policy framework that has guided marine planning in Canada over the last fifteen years is described. Within this framework, marine planning is referred to as “integrated ocean management planning”. The key components of this framework are:

- *The Oceans Act* (1997);
- *Canada’s Oceans Strategy* (2002);
- and the *Oceans Action Plan* (2005).

2.2.1. The Oceans Act

The Government of Canada brought the *Oceans Act* into force in January 1997, making Canada “the first country in the world to have comprehensive oceans management legislation” (DFO, 2002a, p. iii). The *Oceans Act* provided the basis for a major reform of oceans management in Canada by (1) legally defining its maritime territory or ocean boundaries in accordance with *UNCLOS*; (2) affirming the leadership role of the Minister of Fisheries and Oceans in oceans stewardship; (3) assigning responsibility to the Minister of Fisheries and Oceans for new ocean-related activities; and (4) clarifying other federal oceans management

responsibilities. The *Oceans Act* is based on three principles: (1) sustainable development, (2) the precautionary approach, and (3) integrated management (DFO, 2002a; Rutherford, Dickinson & Gunton, 2010). It grants little regulatory authority aside from the designation and management of marine protected areas (MPAs) and the development of guidelines associated with Marine Environment Quality (DFO, 2012).

A key commitment under the *Oceans Act* is integrated oceans management planning (DFO, 2002a). Section 31 of the *Oceans Act* mandates the Minister of Fisheries and Oceans Canada to lead and facilitate the development and implementation of integrated oceans management plans for Canada's estuarine, coastal and marine waters in collaboration with other ministers, boards and agencies of the Government of Canada, provincial and territorial governments and affected aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements. Section 32 provides authority for implementing integrated oceans management plans, including the authority to collaboratively develop policies and programs; establish or recognize existing advisory boards or management bodies; and establish marine environmental quality guidelines, objectives, and criteria (Government of Canada, 1997).

2.2.2. Canada's Oceans Strategy

Canada's Oceans Strategy (2002a) is a national policy statement that provides overall strategic direction to oceans-related programs in Canada. The overarching goal of *Canada's Oceans Strategy* is "to ensure healthy, safe and prosperous oceans for the benefit of current and future generations of Canadians" (DFO, 2002a, p.10). To support this goal, the strategy identifies three policy objectives: (1) understanding and protecting the marine environment, (2) supporting sustainable economic opportunities, (3) and demonstrating international leadership in oceans management (DFO, 2002a). Consistent with the *Oceans Act*, the Strategy also identifies the precautionary approach, sustainable development, and integrated management as key principles. Further, the Strategy states that these principles should be applied in accordance with scientific and traditional knowledge (DFO, 2002a).

Canada's Oceans Strategy is accompanied by the *Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada* (2002b). The Operation Framework is a more detailed working document that includes a (1) proposed

geographic framework, (2) governance model, and (3) six stage planning process (DFO, 2002b). These components are described below.

Geographic Framework

The geographic framework for integrated oceans management is based primarily on Large Ocean Management Areas (LOMAs) and smaller Coastal Management Areas. LOMAs are pilot sites for implementing integrated oceans management that cover a large portion of Canada’s three oceans or coastal zones. They were intended to be large enough to support ecosystem-based management, with boundaries set based on a mix of ecological and administrative considerations (DFO, 2002a; PNCIMA Initiative, 2013).

Governance Model

The governance model for integrated oceans management is based on collaboration. It aims to maximize the participation of diverse interests throughout the integrated oceans management planning process. The Operational Framework suggests that participation could take various forms, including multi-stakeholder advisory bodies, management or decision-making bodies, and in some cases, co-management bodies (i.e., in areas under settled land claims agreements). Section 32(c) of the *Oceans Act* empowers the minister to establish such advisory or management bodies or to recognize existing advisory or management bodies. The function of these bodies was intended to vary over time and according to the particular stage of the planning process (DFO, 2002b).

Six Stage Planning Process

The integrated management planning process for each LOMA was to consist of six interrelated stages (Table 2.1).

Step 1	Defining and assessing a management area.
Step 2	Engaging affected interests.
Step 3	Developing the plan.
Step 4	Endorsement of the plan by decision-making authorities.
Step 5	Implementing the plan.
Step 6	Monitoring and evaluating planning outcomes.

Adapted from DFO (2002b).

2.2.3. The Oceans Action Plan

The *Oceans Action Plan* was announced in 2005, following extensive consultation (Ricketts & Harrison, 2007). The Oceans Action Plan is a federal multi-year, multi-sector plan that provides further details to support integrated oceans management implementation. It proposed a phased approach to implementation, with Phase 1 involving a series of interrelated initiatives to be completed within 2 years (2005-2007). These initiatives fall under four pillars: (1) international leadership, (2) integrated oceans management, (3) health of the oceans, and (4) oceans science and technology (DFO, 2005).

Under the integrated management pillar, the Plan identified five LOMAs to serve as pilot sites in Phase 1:

1. The Pacific North Coast Integrated Management Area (PNCIMA)
2. The Eastern Scotian Shelf Integrated Management area (ESSIM)
3. The Beaufort Sea Integrated Management area
4. The Gulf of St. Lawrence Integrated Management area (GOSLIM)
5. The Placentia Bay/ Grand Banks Integrated Management area (PB/GB)

These LOMAS range from 88,000 to 503,600 square kilometers in size and are characterized by:

- important living and non-living marine resources;
- high biological diversity and productivity; and
- many stakeholders competing for ocean space and resources (DFO, 2005).

2.3. Progress in Integrated Oceans Management Planning

Generally speaking, integrated oceans management has been implemented in accordance with the federal legislative and policy framework outlined above (DFO, 2012). However, the development, endorsement and implementation of integrated oceans management plans for the five designated LOMAs has been much slower than anticipated (DFO, 2012). Canada did not, for example, meet the target set out in its *2005-2010 Strategic Plan: Our Waters, Our Future* (2005) to establish integrated oceans management plans for all five designated LOMAs by year 3 (March 2008). In addition to these delays, some argue that the integrated oceans management plans themselves are too high level and lack the type of tangible goals that would lead to concrete actions being taken towards improving the sustainable management of the marine environment (DFO, 2012).

In 2012, an internal evaluation of the integrated oceans management program concluded that there was little evidence to suggest mandated authorities had begun adjusting their activities to deliver on their responsibilities for integrated oceans management plan implementation (DFO, 2012). Due to a lack of implementation, integrated oceans management planning was at the time of the evaluation considered to be having a limited impact on policies, practices, or decisions related to oceans activities. However, integrated oceans management planning was considered to be successful in engaging multiple interests, promoting knowledge sharing, advancing science, and raising awareness of the benefits of integrated management across multiple sectors (DFO, 2012).

Since 2012, integrated oceans management planning has progressed. Progress can be illustrated by situating each LOMA within the six stage integrated management planning process set out in the Operational Framework (Table 2.2). As of December 2016, integrated oceans management plans had been developed for each of the five LOMAs (Step 3). The ESSIM plan was finalized in 2006, Beaufort Sea in 2009, PB/GB in 2012 and GOSLIM in 2013. The PNCIMA plan was the last integrated oceans management plan to be finalized, on February 17, 2017 (Government of Canada, 2017). The level at which plans have been formally endorsed varies across plans, with only the Beaufort Sea and PNCIMA plan being endorsed at the ministerial level. All plans have initiated implementation of some form, but only the Beaufort Sea and ESSIM plans have released a performance evaluation.

To date, only one federal budget has included funding designated for integrated oceans management planning. Budget 2005 allocated \$28 million over two years for the four initiatives identified for Phase 1 of the *Oceans Action Plan*. This funding was spread over eight departments. In 2007, \$42.5 million was allocated to the Health of the Oceans initiative (HOTO) to improve the health of the marine environment, which included funding for MPAs, but no new funding for integrated oceans management planning. Budgets 2008 through 2012 contained no new funding designated for integrated oceans planning and the budgets 2012 through to 2015 resulted in organizational changes within the DFO, with Budget 2015 announcing that the department would have to cut spending by \$33 million a year (Jessen, 2011). The new Liberal Government's Budget 2016 proposed to provide \$81.3 million in funding over five years (2016-2021) to the DFO and Natural Resources Canada to support marine conservation activities, including the designation of new MPAs under the *Oceans Act* (Government of Canada, 2016a). However, no new funding was identified in Budget 2016 for integrated oceans management planning. While integrated oceans management activities may be covered under other budget

lines, these trends in federal budgets subsequent to the 2005 federal budget suggest a deprioritization of integrated oceans management planning over time.

	The Beaufort Sea	The Scotian Shelf (ESSIM)	Placentia Bay and the Grand Banks (PB/GB)	The Gulf of St. Lawrence (GOSLIM)	The Pacific North Coast (PNCIMA)
Step 1: Defining and Assessing the Management Area	The process was formally launched in February 2006 with the formation of the Beaufort Sea Partnership.	1998 - 2005. The process was formally launched in December 1998 through an announcement made by the Minister of Fisheries and Oceans.	The process was formally launched in 2006.	The process was formerly launched in May 2005. However, the process was initiated in 2000 with the development of foundational supporting document, which continued through to 2010.	The process was formally launched in 2009 with first Forum in Richmond, BC.
Step 2: Engaging Affected Interests	2006 - 2009. Some stakeholders were also previously engaged in the designation process for the Tarium Niryutait Marine Protected Area beginning in 2000.	1998 - 2006. Some stakeholder participation continued after 2006.	2007-2008. A government and stakeholder based PB/GB LOMA Committee was established.	2005 - 2012.	2008 - 2013. A Collaborative Governance MOU was signed by First Nations and the federal government in 2008.
Step 3: Plan Development	2006 - 2009. The plan was released in 2009 (3 years for development)	2002 – 2006. The plan was released in 2006 (8 years for development).	2008 – 2012. An outline for the plan was created by the PB/GB LOMA Committee during a Strategic Objectives Session held in 2008, and the plan was released in 2012 (4 years for development).	2013 – 2018. The plan was released in 2013 (5 years for development).	2009 - 2016. A draft version of the PNCIMA plan was released in May 2013 (3 years for development).
Step 4: Plan Endorsement	The plan was formally endorsed by Minister of Fisheries and Oceans in 2010.	The plan was endorsed by federal and provincial departments in RCCOM, but has not yet been endorsed by the Minister of Fisheries and Oceans.	The plan was endorsed by federal and provincial departments in RCCOM, but has not yet been endorsed by the Minister of Fisheries and Oceans.	The plan was endorsed by federal and provincial departments in RCCOM, First Nation organizations in all three Regions, and was publicly released in 2013 with the endorsement of the three DFO Regional Directors-General (Gulf,	The plan was endorsed by the Minister of Fisheries and Oceans, the BC Minister of Forests, Lands and Natural Resource Operations, and

				Quebec and Newfoundland-Labrador), but has not yet been endorsed by the Minister of Fisheries and Oceans.	three First Nations organizations on February 17, 2017.
Step 5: Plan Implementation	2009 - present. Some components of the plan are being implemented. Implementation is funded by the DFO.	2006 - 2012. Some components of the plan have been implemented in the first 5-year period. Implementation was funded by the DFO.	2012 - 2017. Implementation is funded by the DFO	Two of the eight identified priorities are currently being implemented under the plan. Implementation is funded by the DFO	Implementation of some strategies initiated.
Step 6: Plan Monitoring and Evaluation	A performance evaluation of the plan was completed in 2013.	A formal review and performance evaluation of the plan was completed in 2013	An assessment of plan outcomes is currently underway.	An evaluation of the plan is to occur in 2018-2019 fiscal year.	Plan not yet evaluated.

2.4. Progress in the Establishment of Marine Protected Areas

A second element of Canada's integrated oceans management program is the designation of marine protected areas (MPAs) (DFO, 2005). The designation of MPAs was a key objective of the HOTO Initiative, one of four pillars of the Oceans Action Plan (Rutherford, Dickinson, Gunton, 2010). Three federal authorities have mandates to establish and manage MPAs in Canada. Parks Canada is mandated to establish National Marine Conservation Areas to protect and conserve representative examples of Canada's natural and cultural marine heritage, while Environment and Climate Change Canada is mandated to establish Marine National Wildlife Areas to protect habitat for a variety of wildlife, including migratory birds and species at risk. DFO can establish individual *Oceans Act* MPAs and is also tasked with leading and coordinating the development of a national (federal-provincial-territorial) system of MPAs on behalf of the Government of Canada. In 2011, the Canadian Council of Fisheries and Aquaculture Ministers developed a National Framework for Canada's Network of Marine Protected Areas to guide development of Canada's MPA network (ECCC, 2016).

Canada has a long way to go in meeting its marine conservation targets. As a signatory to the UNCBD, Canada agreed to an international target of conserving 10% of marine areas by 2020 through systems of protected areas and other effective area-based conservation measures (Aichi Target 11). However, according to a report by the Canadian Parks and Wilderness Society (CPAWS), only 0.11% of Canada's ocean estate is protected. Of this area under protection, 0.03% is in the Arctic, 0.00% in the Pacific¹ and 0.08% in the Atlantic (Jessen et al., 2016). To date, eleven MPAs have been designated, including the Bowie Seamount, Endeavour Hydrothermal Vents, and Hecate Strait MPAs in British Columbia, and six Areas of Interest (AOI) have been identified (DFO, 2017).

Like progress in marine planning, progress in the designation of new MPAs under the *Oceans Act* has been slower than anticipated. The HOTO Initiative goal of

¹ This study classifies Gwaii Haanas National Marine Conservation Area Reserve and Bowie Seamount MPA as "partially implemented" due to their lack of full management plans and indicates that the Endeavour Hydrothermal Vents MPA is too small to register in terms of percentage of the total area of Canada's Pacific ocean estate.

establishing six new *Oceans Act* MPAs by 2012 was not met. A number of reasons have been identified for delays in the establishment of new MPAs, including insufficient resources, delays in funding approvals, and protracted multi-stakeholder consultation processes (DFO, 2012). The management of existing *Oceans Act* MPAs has also encountered a number of challenges. In particular, DFO Science has had difficulties translating high-level conservation objectives into practical indicators and monitoring protocols to guide their management and assess the effectiveness of existing MPAs (DFO, 2012). Based on its evaluation of MPA regulations and management plans, CPAWS argues that many of Canada's existing MPAs offer only limited protection, resulting in just 0.01% of Canada's ocean estate being fully protected and the remainder open to commercial fishing, shipping, and other industrial activities (Jessen et al., 2016).

Under the Trudeau government, a number of recent actions have been taken to advance marine conservation in Canada. On May 15, 2015, the National Conservation Plan was launched to provide \$252 million over five years to advance progress in three priority areas, including conserving Canada's ocean estate. In the 2016 Joint Statement on Climate, Energy, and Arctic Leadership, Prime Minister Justin Trudeau and former U.S. President Barack Obama reaffirmed their commitment to meet Aichi Target 11. On June 8, 2016, the Minister of Fisheries, Oceans and the Canadian Coast Guard announced the Government of Canada's commitment to put in place a plan to reach its domestic and international marine conservation targets of protecting 5 percent of Canada's marine and coastal areas by 2017 and 10 percent by 2020. This plan is comprised of five action areas, including establishing MPAs faster (Government of Canada, 2016b). As part of this plan, the Minister tabled Bill C-55 to amend the *Oceans Act* and the *Canada Petroleum Resources Act*. The changes proposed in Bill C-55 include a new *Oceans Act* instrument called a Ministerial Order to designate an Interim Protection MPA (IP MPA) and "freeze the footprint" by providing some level of protection while regulations for an *Oceans Act* MPA are developed (Government of Canada, 2017f)

2.5. Future Directions

Two decades after the *Oceans Act* was enacted, what does the future hold for integrated oceans management policy and planning in Canada? While oceans management reform drew a great deal of excitement when it was introduced by the Chrétien government, implementing integrated oceans management planning has

proven challenging, especially given varying levels of political will (Jessen, 2011). While the federal government has renewed its commitments to meeting its marine conservation targets, there has been comparatively little discussion of integrated oceans management planning. A focus on sectoral initiatives, such as MPA network planning and the recently announced Oceans Protection Program suggest a possible shift away from integrated oceans management as a priority.

Chapter 3. Collaborative Planning

It is widely recognized that stakeholder participation is an important aspect of successful resource and environmental planning. With inclusive stakeholder engagement, plans are more likely to balance multiple objectives and gain stakeholder acceptance, thereby increasing the likelihood of successful implementation (Day & Gunton, 2003; Gunton, Rutherford & Dickinson, 2010; Susskind et al. 2003; Wondolleck & Yaffee, 2000). One model of stakeholder participation that has grown in popularity in the last several decades is collaborative planning. Early applications of collaborative planning were to terrestrial environments in the US, Canada, and Australia, including forest, watershed, and land use planning (Gunton & Day, 2003). Collaborative planning was also the approach used to develop land and resource management plans (LRMPs) in British Columbia (BC) (Frame et al., 2004; Cullen et al., 2010).

As with other types of resource and environmental planning, stakeholder participation is important to successful marine planning (Dickinson, Rutherford & Gunton, 2010; Gopnik et al., 2012; Olsen et al., 2014; Pomeroy & Douvere, 2008; Ritchie & Ellis, 2010; Rutherford, Herbert & Coffen-Smout, 2005). Due to the public nature of the marine environment and the complex interactions among marine uses and with marine ecosystems, the proper identification and engagement of stakeholders in marine planning is particularly important (Pomeroy & Douvere, 2008). This is reflected in efforts to include stakeholders in the planning processes for all but one of the sixteen marine plans from around the world reviewed by Collie et al. (2013). Of these sixteen marine planning processes, Collie (2013) found that seven encouraged active stakeholder participation (i.e., stakeholders played active roles in developing goals, synthesizing data etc.), while nine had “limited or more passive stakeholder engagement” (Collie et al., 2013, p. 5).

Canada’s legislative and policy framework makes an explicit commitment to a collaborative approach to marine plan development and implementation that engages other levels of governments and stakeholders. A collaborative, consensus-based approach is described in the marine plans for all five priority regions identified in Canada’s *Oceans Action Plan*. A collaborative, consensus-based approach was only a requirement during the first half of the Pacific North Coast Integrated Management Area

(PNCIMA) process, after which point the process adopted a more consultative approach to stakeholder engagement (described in Section. 4.5.3.) (PNCIMA Initiative, 2017).

This chapter briefly describes the origins of collaborative planning and lists its potential benefits and common challenges. To provide context to the PNCIMA case study evaluation, it then describes the expansion of the collaborative planning approach in BC from land to sea by summarizing the collaborative planning processes used to develop LRMPs for BC crown lands. The chapter concludes by describing a long-term, multiphase research project at the School of Resource and Environmental Management at Simon Fraser University that has evaluated the large-scale application of the collaborative planning model in BC.

3.1. The Origins of Collaborative Planning

Since the 1950s, resource and environmental planning has undergone a major paradigm shift from a scientific model controlled by experts to a more collaborative model based on stakeholder participation (Day & Gunton, 2003; Susskind et al., 2003; Wondoleck and Yaffee, 2000). Under the scientific model, the planner prepares and implements plans independently of stakeholders. This model viewed planning as a value-free, technical exercise and assumed that planners, as independent experts, have the ability to perform objective, scientific analysis to identify the best means for achieving public objectives free from political interference and unbiased by their own values (Day & Gunton, 2003).

Beginning in the 1960s, technocratic planning came under increasing criticism across sectors for its failure to acknowledge planning as a value-laden, highly political process. From urban renewal projects that disproportionately impacted poor neighborhoods to timber harvest activities that failed to protect environmental values, there were numerous cases demonstrating how land and resource allocations have the potential to create winners and losers (Gunton, 2006). In response to criticism, planners began to restrict their role to determining the appropriate means of achieving goals set by citizens through democratic processes, rather than setting goals themselves (Gunton, 2006; Day & Gunton, 2003; Susskind et al., 2003). While science continues to play an important role in providing information necessary for rational decision-making, planners

recognized that “science cannot determine social goals or value-based trade-offs between competing goals” (Gunton, Rutherford, Dickinson, 2010, p. 97).

Recognition of the highly political, value-laden nature of planning led to the adoption of various mechanisms to integrate stakeholder views into the planning process, such as public forums, open houses, workshops, advisory committees, and task forces (Day & Gunton, 2003). This shift in focus also fuelled debate on the appropriate level of “citizen participation” in planning (Arnstein, 1969). Recognizing that participation can take many forms, Arnstein (1969) developed a highly influential typology of citizen participation in which the extent of citizens’ power in decision-making corresponds to eight rungs on a ladder. Gunton, Rutherford, and Dickinson (2010) propose a simpler typology based on three categories: information-sharing, consultation, and collaboration. Unlike consultation, which seeks stakeholder input without an obligation to incorporate it, there is an expectation that collaboration will lead to the incorporation of stakeholder views in management decisions (Gunton, Rutherford & Dickinson, 2010).

In seeking to improve stakeholder participation in planning, planners were confronted with diverse and often competing interests. This led to the development of two new planning models: advocacy and mediation (Day & Gunton, 2003). Advocacy planning proposed that planners act like lawyers, advocating on behalf of specific stakeholder groups, especially those with less power. Mediation or alternative dispute resolution (ADR) proposed that planners act as mediators, helping stakeholders resolve conflicts in a mutually beneficial way (Day & Gunton, 2003). Day and Gunton (2003) suggest that advocacy and mediation models go hand-in-hand: “advocacy planning empowers stakeholders, which is a necessary condition for successful ADR, and ADR creates a forum for resolving stakeholder disputes” (p. 7). Collaborative planning draws from both models. Recognizing the existence of competing interests, it engages stakeholders in a negotiation process that seeks mutually acceptable outcomes (Day & Gunton, 2003).

3.2. Collaborative Planning Theory

Collaborative planning emerged as a distinct planning paradigm in the 1990s (Cullen et al, 2010). While there are many definitions of collaborative planning,

collaborative planning typically engages stakeholders in an interactive dialogue to seek consensus agreement on management decisions (Gunton, Rutherford & Dickinson, 2010, p. 98). Collaborative planning involves a higher level of collaboration than other participatory approaches, such as consultation, because there is at least some level of decision-making authority delegated to stakeholders. The use of consensus as a decision-making rule is another unique characteristic of collaborative planning (Table 3.1). The collaborative, consensus-based approach represents a significant departure from the aforementioned technocratic model controlled by experts who, at best, made decisions based on consultation with the public (Day & Gunton, 2003; Gunton, Rutherford & Dickinson, 2010).

Elements	Consultation	Consensus
Participants	Advocates	Decision-makers
Objectives	Hear the voices of many interests	Search for a single voice that speaks for all interests
Activity	Make representations	Find trade-offs
Approach	Positional	Interest-based
Process	Predetermined by decision-maker	Participant-designed
Interaction	Contact between parties varies	Relationships develop among parties through reoccurring contact
Negotiation	Implicit – if at all, in the “back room” and consensus is not required	Explicit – “above board”, but may include consultation
Outcomes	Many inputs to ultimate decision-maker	“one output” – either the actual decision or consensus recommendation to ultimate decision-maker
Timelines	Prescribed	Participant-driven, sometimes within parameters

Adapted from Cormick et al. (1996).

3.2.1. Benefits

There are many alleged benefits of collaborative planning cited by its proponents (Table 3.2). One of the benefits of collaborative planning most consistently achieved across cases, regardless of the planning outcomes, is the creation of social capital among participants (Frame et al., 2004; Cullen et al., 2010). Through ongoing interactions, participants typically develop new or stronger relationships with other participants through trust-building, knowledge-sharing, and an improved understanding of alternative interests and values (Day & Gunton, 2003).

Human and social capital built	Participants gain improved skills and knowledge (human capital) and develop new or stronger relationships with other participants through trust-building, knowledge-sharing, and an improved understanding of alternative interests and values (social capital). Together, human and social capital can benefit a community in ways beyond the preparation of a specific plan, such as new projects and partnerships for more effective decision-making and collective action (second-order effects).
Shared-knowledge base developed	Substantial data, analyses, and reports are required to inform plan development. Collaborative processes provide an opportunity for stakeholders to agree on the information that should inform future decision-making in the planning area.
Legitimacy/ buy-in secured	A wider range of affected stakeholders are engaged in finding a solution to the issue and are therefore more likely to see that solution as credible and fair.
Lower cost than alternatives	The cost, while still significant, is lower relative to the costs of adversarial, court-based 'winner-takes-all' scenarios or delays in plan implementation resulting from public opposition.
Stakeholder conflict reduced	Conflict among competing stakeholders is more likely to be reduced because solutions are sought that meet their mutual interests using consensus rules.
Innovative solutions produced	Innovative solutions not previously considered by planners emerge through the dynamic interchange between stakeholders with diverse knowledge, experiences, and perspectives. By pooling their resources, stakeholders can develop solutions for mutual gain that they could not have individually.
Public interest reflected in outcomes	A just outcome that benefits the community at large is more likely to result because the process includes stakeholders representing a broad spectrum of societal interests.
Implementation success more likely	Stakeholders are more likely to support plan implementation if they were involved in plan development because they gain a sense of ownership over the plan through their individual contributions, especially if they have clear roles in plan implementation. Further, by taking into account a broad spectrum of societal interests, plans are less likely to generate public opposition (public protest or legal disputes), making them easier to implement and more durable.

Compiled from Day & Gunton, 2003; Cullet et al., 2010; Frame et al., 2004; Innes, 1996; Margerum, 2002; Morton, 2009.

3.2.2. Challenges

While collaborative planning has many potential benefits, certain challenges can limit its effectiveness (Table 3.3). A particularly salient challenge for collaborative planning is power imbalances among stakeholders, which can be political, financial, or organizational in nature. If a collaborative planning process is unable to address power imbalances, some more powerful stakeholders may be allowed to dominate the process and generate inequitable outcomes (Brower, 2016; Brower et al., 2001). Power imbalances can also lead to other challenges, such as a lack of incentive to participate (Frame et al., 2004).

Power imbalances among stakeholders	Political and financial differences, as well as differences in the level of organization, cohesion or consensus on interests within a stakeholder group, can create power imbalances among stakeholders.
Lack of incentive to participate	If stakeholders do not like the direction a collaborative process is taking, they may not be motivated to reach an agreement or may even seek to undermine the process by using delaying tactics or pursuing their BATNA ('best alternative to a negotiated agreement'). Further, if a stakeholder's BATNA is strong, they may not be willing to participate in the process in the first place.
Negotiation skill and resource imbalances	Even if all stakeholders are motivated to participate, the asymmetrical distribution of negotiation skills and/or resources can result in an inequitable outcome.
Tendency toward second-best solutions	Consensus rules may encourage stakeholders to settle for vague or second-best solutions that exclude difficult issues in order to reach an agreement. The resulting plans will not only be challenging to implement, but will have minimal impact on the issue.
Significant time and resources required, restricting access	Collaborative planning poses serious logistical challenges, notably the significant time and resources required to coordinate a process for a large group of potentially antagonistic stakeholders. Given the length of time required for collaborative processes to be successful, they may be affected by participant burnout and/or changes in personnel that can reduce process continuity.
Lack of support from government	If governments are reluctant to abdicate decision-making power to stakeholders, they may contribute insufficient time and resources to the processes.
Weak accountability to constituents and the general public	By delegating their legally prescribed responsibilities to manage resources to unelected stakeholders, governments risk becoming less accountable to the broader public. The broader public is further excluded if stakeholders negotiate strictly in their own narrow interests and not in the interest of their constituency/ membership or the broader public.
Fundamental ideological or value differences among stakeholders	Collaborative planning may not be appropriate or feasible in resource and environmental planning situations involving fundamental, and sometimes irreconcilable, value differences.

Compiled from Day & Gunton, 2003; Cullet et al., 2010; Frame et al., 2004; Innes, 1996; Margerum, 2002; Morton, 2009.

3.3. Collaborative Planning in Practice in British Columbia: from Land to Sea

The extent of the application of collaborative planning in BC is unprecedented globally (Frame et al., 2004). While the marine environment represents a relatively “new frontier” for planning, First Nations and stakeholders have been engaged in collaborative planning for the terrestrial environment since the early 1990s. At that time, BC had

officially adopted a collaborative planning approach to develop land and resource management plans for almost the entire land base. More recently, a similar collaborative, consensus-based model was applied to the development of the Pacific North Coast Integrated Management Area (PNCIM) plan.

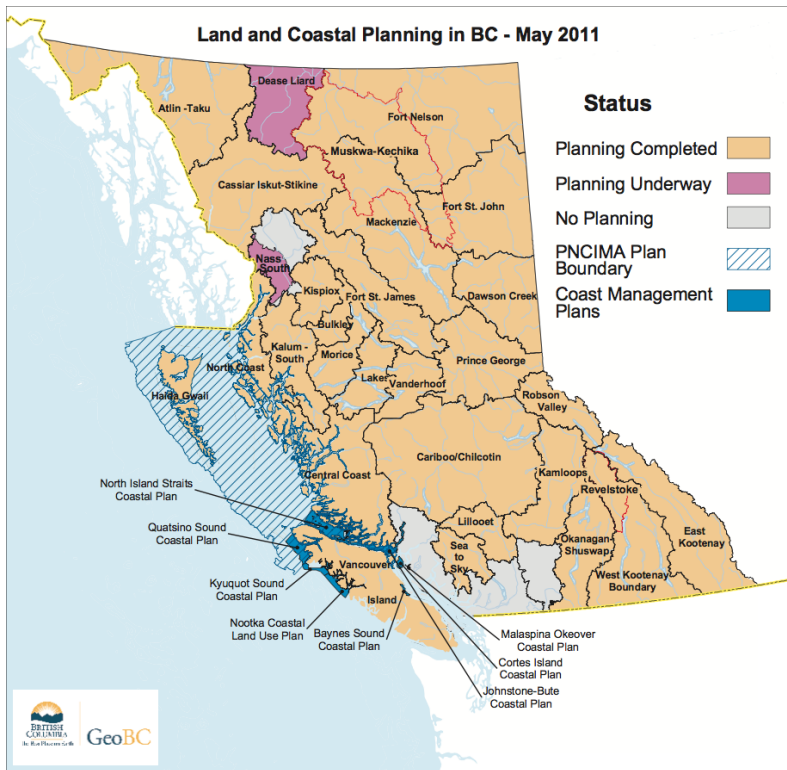
3.3.1. Land and Resource Management Planning

For most of BC history, the BC Ministry of Forests made land use and management decisions with some involvement of the forest industry, but provided very little opportunity for public input. During the 1980s and early 1990s, a strong environmental ethic took root in BC and a series of court cases led to greater recognition of Aboriginal rights and title, with many First Nation traditional territories overlapping provincial Crown lands. The lack of consideration of non-timber values and limited opportunity for public input in the BC government's expert-driven, technocratic planning system led to a period of conflict between resource extraction and preservation interests involving blockades, protests, and international boycott campaigns against BC forest products. This so called "war in the woods" prompted the BC government to make changes to its land-use planning system (Cullen et al., 2010; Frame et al., 2004).

In 1992, a new agency called the Commission on Resources and the Environment (CORE) was established through legislation to initiate a regional scale collaborative planning process in BC that allowed stakeholders to participate directly. CORE adopted a collaborative planning model termed "shared decision making" in which multi-stakeholder tables engaged in consensus-based negotiations to prepare Regional Land Use Plans (RLUPs). CORE was tasked with implementing this new model in the four regions of the province experiencing the highest level of conflict. While these CORE processes failed to achieve consensus, other benefits from the process entrenched shared decision making in BC's institutional framework. By this time, a similar process was underway at the regional level for some of the remaining areas of the province not already undergoing strategic land use planning. These regional plans became known as Land and Resource Management Plans (LRMPs) (Morton, 2009). Building on lessons learnt through the CORE process, the LRMP process "modif[ied] the structure, scope and timeline of the [CORE] process to be more accountable, transparent and effective" (Astofooroff, 2008, p. 22).

Between 1996 and 2009, CORE’s strategic planning role was transferred from one agency to the next in what seemed like “administrative musical chairs” (Morton, 2009, p.59); however, the collaborative planning model was still used successfully during this time to develop 21 LRMPs (Cullen et al., 2010; Frame et al., 2004). After 2001, the rate of regional scale planning approvals slowed, while sub-regional and landscape scale planning intensified (BC Government, 2011). By 2010, 85% of the provincial land base (80,011,236 hectares) was covered by twenty-four approved regional scale Strategic Land and Resource Plans (SLRPs), including seventeen LRMPs and five regional land use plans (RLUPs). The LRMPs were developed by consensus or near consensus agreement of the stakeholders (Table 3.5) (Cullen et al., 2010). The most recently approved LRMP is the Atlin-Taku LRMP in 2013, which accounts for 3.46% (3,072,469 hectares) of the land base. This process did not use a collaborative, consensus-based approach (Morton, 2009). Approval of the Lillooet LRMP has been deferred indefinitely. With the exception of the Lillooet LRMP, BC’s SLRPs are now in various stages of implementation and have resulted in significant changes to land use in the province (Figure 3.1) (Government of BC, 2011).

Figure 3.1. Map of Land and Coastal Planning Areas in British Columbia



Source: Charlie Short, Manager, Marine Initiatives, Ministry of Forests, Lands and Natural Resource Operations.

3.3.2. Design Changes

The design of the collaborative planning processes used to develop strategic land and resource plans in BC has “evolved considerably” (BC Government, 2010, p. 62). When it was adopted in the early 1990s, the collaborative planning model sought to provide greater opportunities for public participation in planning, representing a “deliberate, and large scale move away from technocratic planning practice” (Morton, 2009, p. 161). At this time, there was little distinction between First Nation and non-First Nation stakeholders, both of which were expected to participate at a single multi-stakeholder negotiation table that presented LRMP agreements directly to BC for approval and ratification (Morton, 2009). With the development of subsequent LRMPs, decisions in the Canadian court system with respect to the definition of Aboriginal rights and title and confirmation of BC’s legal obligations to consult and accommodate First Nations produced a new, complex stakeholder environment in BC. In this new environment, a single negotiation table proved to be an inadequate means of engaging First Nations, who were demanding that they be negotiated with on a government-to-government basis (Cullen et al., 2010).

Design changes were introduced in an attempt to meet BC’s legal obligations to consult and accommodate First Nations prior to making land use decisions in their traditional territories and to support reconciliation, while also satisfying non-First Nation stakeholders. One key innovation was the adoption of a two-tiered model, which was used to prepare the North Coast, Central Coast, Haida Gwaii, Morice, and Sea-to-Sky LRMPs (Morton, 2009). The two-tiered model was comprised of one negotiation table involving all stakeholders, including First Nations, and a second negotiation table involving only First Nations and the provincial government. The first negotiation table provided recommendations to the second table, which made decisions on the plan through government-to-government negotiations. The final plan was then submitted for ratification by the provincial government, which retained final decision-making authority (Cullen et al., 2010). According to the provincial government, LRMPs developed using this model had “a much higher level of meaningful First Nations engagement”, resulting in government-to-government strategic land use agreements and partnerships (BC Government, 2010, p.62).

Table 3.4. Relevant Dates and Agreement Status for Approved CORE, LRMP, and Marine Planning Processes					
Process	Initiated	Completed	Tier #1	Tier #2	Approved
CORE					
Cariboo-Chilcotin	1992	1994	No agreement	n/a	1994
West Kootenay – Boundary	1993	1994	No agreement	n/a	1995
East Kootenay	1993	1994	No agreement	n/a	1995
Vancouver Island	1992	1994	No agreement	n/a	2002
LRMP					
Kispiox	1989	1994	Consensus	n/a	1996
Kamloops	1989	1995	Consensus	n/a	1995
Fort Nelson	1993	1996	Consensus	n/a	1997
Fort St. John	1993	1996	Consensus	n/a	1997
Vanderhoof	1993	1996	Consensus	n/a	1997
Bulkley	1992	1996	Consensus	n/a	1998
Robson Valley	1993	1997	Partial consensus	n/a	1999
Lakes District	1994	1997	Consensus	n/a	2000
Dawson Creek	1992	1998	Consensus	n/a	1999
Fort St. James	1992	1998	Consensus	n/a	1999
Prince George	1992	1998	Consensus	n/a	1999
MacKenszie	1996	2000	Consensus minus one	n/a	2000
Cassiar-Iskut-Stikine	1997	2000	Consensus	n/a	2000
Okanagan-Shuswap	1995	2000	Consensus	n/a	2001
Kalum South	1991	2001	Consensus	n/a	2001
Government-to-Government LRMP					

Central Coast ²	1996	2004	Consensus	Agreement	2006
North Coast	2002	2004	Consensus	Agreement	2006
Morice	2002	2004	Consensus with one abstention	Agreement	2007
Sea to Sky	2002	2004	Partial agreement	Agreement	2008
Haida Gwaii ³	2003	2004	Partial agreement	Agreement	2007
Atlin-Taku ⁴		2013	Partial agreement	Agreement	2012
Marine planning					
Pacific North Coast Integrated Management Area Process	2009	2013	Partial consensus	Agreement	2017
Marine Planning Partnership	2011	2015	Collaborative planning was not used	Agreement	2015

Adapted from Morton (2009), with additions informed by Government of BC (2011), PNCIMA Initiative (2017b), and MaPP (2017a).

3.4. Evaluating Collaborative Planning

As mentioned previously, collaborative planning has a number of alleged benefits and challenges (Section 3.2.). Given that collaborative planning remains a relatively new planning paradigm, there is widespread agreement on the need for comprehensive empirical evaluation of case studies to: (1) assess the strengths and weaknesses of collaborative processes and (2) determine whether barriers to the success of collaborative planning can be overcome through improvements to process design and management. Empirical evaluations can also test and refine a common set of evaluative criteria (Day & Gunton, 2003; Innis, 2004; Innes and Booher, 1999; Margerum, 2002).

A long-term, multiphase research project at the School of Resource and Environmental Management at Simon Fraser University has evaluated the large-scale application of the collaborative planning model in BC. The first phase of this research

² The Coast Land Use Decision encompasses what were originally the North and Central Coast LRMP areas. The North and Central Coast LRMP areas are therefore not included in the province's total count of LRMPs as show in BC Government (2011).

³ The Haida Gwaii LRMP area is categorized as a Strategic Land Use Decision in Government of BC (2011) and is therefore not included in the province's total count of LRMPs.

⁴ Collaborative planning was not used for this area; stakeholders were consulted/ engaged, but not empowered to make decisions (Morton, 2009).

project generated the knowledge base for the initial policy orientation and implementation of collaborative planning for RLUPs (Gunton & Vertinsky 1991; Gunton & Flynn, 1992). The second phase was the evaluation of four land use plans completed before 1996 (Vancouver Island, Caribou-Chilcotin, West-Kootney, and East Kootney-Boundary). Findings from these evaluations informed improvements to collaborative planning processes in the province. The third phase was the evaluation of 17 completed LRMPs completed before 2002 using participant surveys and a standard evaluation framework (Frame, 2002; Frame et al., 2004). The fourth phase of the research project was the completion of single detailed case study evaluations of the five LRMPs completed since 2002, which include the Central Coast LRMP (Cullen, 2006), the North Coast LRMP (McGee, 2006), Lillooet LRMP (Peter, 2007), Haida Gwaii (Astofooroff, 2008), and Morice (Morton, 2009) and the Sea-to-Sky LRMP (Kennedy, 2012).

Each of the collaborative planning processes used to prepare LRMPs were considered successful by their evaluators because the processes (1) achieved consensus agreement or near consensus agreement among participants on the resulting plan and (2) met the majority of best practice process and outcome criteria. Additionally, the results of the LRMP case study evaluations affirm the aforementioned strengths and weakness of collaborative planning. While the LRMP processes were found to deliver a number of benefits, such as increases in social capital, they also faced challenges, such as power imbalances. The PNCIMA case study uses the same methodological and evaluation framework employed in the other LRMP case study evaluations and should therefore be viewed as an extension of this previous research.

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Table 3.5. Evaluation of CORE and LRMP Processes in British Columbia	
Process	Evaluation
CORE	
Cariboo-Chilcotin	Penrose, 1996.
West Kootenay – Boundary	n/a
East Kootenay	n/a
Vancouver Island	Wilson, 1995
LRMP	
Kispiox	Duffy et al., 1998; Frame, 2002
Kamloops	Albert, 1990; Tamblyn, 1996; Fuffy et al., 1998; Parker, 1998; Frame, 2002
Fort Nelson	Duffy et al., 1998; Frame, 2002
Fort St. John	Duffy et al., 1998; Frame, 2002
Vanderhoof	Duffy et al., 1998; Frame, 2002
Bulkley	Duffy et al., 1998; Frame, 2002
Robson Valley	Duffy et al., 1998; Frame, 2002
Lakes District	Duffy et al., 1998; Frame, 2002
Dawson Creek	Duffy et al., 1998; Frame, 2002
Fort St. James	Frame, 2002
Prince George	Duffy et al., 1998; Frame, 2002
MacKensie	Frame, 2002
Cassiar-Iskut-Stikine	Frame, 2002
Okanagan-Shiswap	Duffy et al., 1998; Frame, 2002
Kalum South	Duffy et al., 1998; Frame, 2002
LRMP with government-to-Government Negotiations	
Lillooet	Duffy et al., 1998; Frame, 2002; Peter, 2007
Central Coast	Frame, 2002; Cullen, 2006
North Coast	McGee, 2006

Morice	Morton, 2009
Sea to Sky	Kennedy, 2012
Haida Gwaii	Astooroff, 2008
LRMP Currently Underway	
Atlin-Taku	n/a
Dease Liard	n/a
Nass South	n/a
Regions with no LRMP	
Sunshine Coast	n/a
Chilliwack	n/a
Merrit	n/a
Marine Planning	
Pacific North Coast Integrated Management Area Process	Vandermoor, 2017
Marine Planning Partnership for the North Pacific Coast	n/a

Reproduced from Morton (2009) with additions informed by Government of BC (2011), PNCIMA Initiative (2017b), and MaPP (2017a).

Chapter 4. Case Study: The Pacific North Coast Integrated Management Area Process

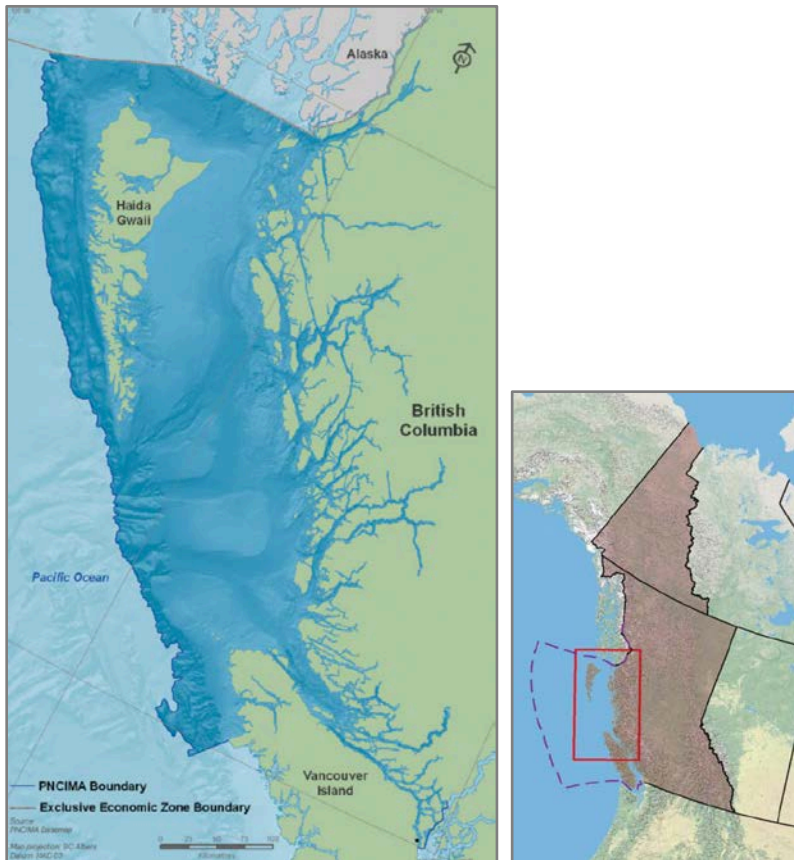
4.1. Study Area

The Pacific North Coast Integrated Management Area (PNCIMA) in British Columbia (BC) is one of five Large Ocean Management Areas (LOMAs) identified by the Government of Canada in Canada's *Oceans Action Plan (2005)* for the development of marine plans or "integrated management plans" under the *Oceans Act, 1997*. The PNCIMA boundary was selected based primarily on ecological considerations, aligning with the Northern Shelf Ecoregion of the Pacific Ocean. North to south, it extends from the Canada - US border of Alaska to Brooks Peninsula on northwest Vancouver Island and Quadra Island. East to west, it extends from the outer limit of the foot of the continental slope in the west to coastal watersheds in the east, including nearshore and offshore areas. The PNCIMA encompasses an area of 102,000 sq. km, which is approximately two-thirds of the BC coast (Figure 4.1) (PNCIMA Initiative, 2010c; PNCIMA Initiative, 2010d).

The PNCIMA region is characterized by steep, rugged coastal mountains and numerous islands, fjords, and valleys. Its diverse coastal and ocean habitats support a plethora of species seasonally or year-round, including hundreds of fish species, many of which support Aboriginal, commercial and recreational fisheries, and dozens of marine mammal species, including four populations of killer whales. Sites within the PNCIMA are also regionally and internationally important for various seabird life stages, including several important colonies on the Scott Islands, Queen Charlotte Islands, and northern mainland. Of all of the species that inhabit the PNCIMA, 33 are assessed as endangered, threatened, or of special concern by the federal Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and 19 are protected under the *Species at Risk Act, 2002* (Hall, 2008; Irvine & Crawford, 2011; Lucas, Verrin & Brown, 2007). The region also supports rare glass sponge reefs. In recognition of its unique, ecological value, more than 45,000 square kilometres of this area have been identified by the DFO as Ecologically and Biologically Significant Areas (EBSAs) (Hall, 2008).

In addition to its ecological value, the PNCIMA is also important economically, socially, and culturally. For centuries, the region and its abundant resources have supported coastal economies and ways of life. In 2011, the total human population was estimated at 118,416, excluding First Nation communities. Today, the region is home to 32 First Nation communities, 14 incorporated communities, and 18 unincorporated coastal communities. Various activities occur in the PNCIMA, including aquaculture; commercial, recreational, and Aboriginal fisheries; defense and public safety; ocean disposal; marine tourism and recreation; and transportation. The region also includes ports vital for international trade, with its three main ports being Kitimat, Prince Rupert, and Stewart (PNCIMA Initiative, 2017b; Robinson Consulting and Associates Ltd., 2012). Over the next 15 years, container volumes are expected to increase (Robinson Consulting and Associates Ltd., 2012). Potential offshore oil and gas development, oil tanker traffic, and fish farming in the region continue to be polarizing issues among stakeholders (Gunton, Rutherford & Dickinson, 2010).

Figure 4.1 (a) The Pacific North Coast Integrated Management Area and (b) its location



Reproduced from the PNCIMA Initiative, 2017b.

4.2. Governance

Two key agreements laid the groundwork for collaborative governance in the PNCIMA. In 2002, Fisheries and Oceans Canada (DFO), Indigenous and Northern Affairs Canada (then Indian and Northern Affairs Canada) and the Coastal First Nations (then Turning Point Initiative) signed an Interim Measures Agreement to work towards a government-to-government relationship for marine use planning in BC. In 2004, the Memorandum of Understanding (MOU) respecting the implementation of Canada's Oceans Strategy on the Pacific Coast of Canada was signed by the DFO on behalf of the Government of Canada and the Ministry of Agriculture on behalf of the Government of BC (DFO et al., 2008; PNCIMA Initiative, 2017b).

Building on these two agreements, the DFO, Coastal First Nations, and North Coast Skeena First Nation Stewardship Society (NCSFNSS) signed the PNCIMA Collaborative Governance MOU in December 2008. The Province of BC signed onto the MOU two years later, effectively changing it from a bilateral to a trilateral agreement (DFO et al., 2010) (PNCIMA Initiative, 2017b). In January 2011, the Nanwakolas Council also signed onto the MOU (DFO et al. 2011). This trilateral agreement established a new governance framework through which these parties could work together to support marine planning for the PNCIMA. While encouraging collaboration between the three levels of government, the governance framework also recognized existing authorities and jurisdictions. Additionally, the MOU provided direction on the marine planning process and its outcomes (DFO et al., 2008; PNCIMA Initiative, 2017b).

Under the 2008 Collaborative Governance MOU, First Nation, federal, and provincial governments (the “governance partners”) formed the PNCIMA Steering Committee. The Steering Committee’s mandate was to provide “strategic direction and executive oversight to the PNCIMA initiative (PNCIMA Initiative, 2017b, p. 23). In 2013, the Steering Committee’s membership included seven representatives from the federal government and one representative from each of the provincial government, NCSFNSS, Coastal First Nations, and Council of the Haida Nation (Table 4.1)⁵. A representative from the Nisga'a Lisims Government acted as an observer. The chair of the Steering Committee rotated between the federal and First Nations governments each year. The

⁵ Some representatives on the Steering Committee have changed over the course of the planning process.

Regional Committee on Oceans Management (RCOM) informed and coordinated federal and provincial agencies' participation in the Steering Committee. It was originally envisaged in the 2008 Collaborative Governance MOU that federal representatives would participate at the Regional Director or Director level (DFO et al., 2008), but this was not the case for every participating department and agency. The Steering Committee was to meet on a biannual basis, or as required (PNCIMA Initiative, 2017b).

According to the draft Terms of Reference for the Steering Committee (PNCIMA Initiative, 2009a), the committee was supposed to:

- develop an overall vision for PNCIMA;
- provide strategic direction and executive oversight to the bilateral process including the activities of the Secretariat;
- approve mutually acceptable approaches to integrated management and marine use planning in PNCIMA including the design of processes and timelines;
- review and ratify all terms of reference, budgets and work plans; and
- resolve disputes as necessary.

An important objective of the collaborative governance framework for the PNCIMA was to provide “enhanced opportunities for First Nations to engage meaningfully in decision-making processes at a variety of scales” (DFO et al., 2008, p. 6). First Nations that are signatories to the 2008 Collaborative Governance MOU coordinated their participation through the First Nations Governance Committee (PNCIMA Initiative, 2017b, p.23). The First Nations Governance Committee was comprised of First Nations leaders from Haida Gwaii, the North Coast and the Central Coast, with technical support at the PNCIMA Planning Office from several organizations, including the Haida Fisheries Program, NCSFNSS, CFN, and the Central Coast Indigenous Resource Alliance (CCIRA). Aggregate groupings of First Nations were considered an effective way to integrate marine use planning initiatives across First Nations territories in the PNCIMA. However, this arrangement did not alter any relationship or obligation of the federal and provincial governments to engaging and consulting with individual First Nations or those First Nations that are not signatories of the 2008 Collaborative Governance MOU (DFO et al, 2008; PNCIMA Initiative, 2017b).

Member	Sector
Bonnie Antcliffe (co-chair)	Fisheries and Oceans Canada
Garry Wouters (co-chair)	Coast First Nations - Great Bear Initiative
Allan Lidstone	BC Ministry of Forests, Lands and Natural Resource Operations
Andrew Mayer	Prince Rupert Port Authority
Barry Smith	Environment Canada
Bruce Reid	Fisheries and Oceans Canada
Candace Newman	Natural Resources Canada
Harry Nyce Sr. (observer)	Nisga'a Lisims Government
Hilary Thorpe	Parks Canada
Masoud Jahani	Transport Canada
Robert Grodecki*	North Coast-Skeena First Nations Stewardship Society
Spencer Siwalace*	Central Coast Indigenous Resource Alliance
Trevor Russ	Council of the Haida Nation, Haida Oceans Technical Team

*These positions were vacant when the draft PNCIMA plan was released in 2013.
Reproduced from PNCIMA Initiative (2017).

4.3. Participation

A draft PNCIMA Initiative Engagement Strategy was circulated for public review in March and April 2010, with nine community meetings held to invite feedback on the options for public and stakeholder participation in the PNCIMA planning process. The final *PNCIMA Initiative Engagement Strategy* was released in 2010. This strategy laid out a number of opportunities for stakeholders and the general public to participate in the development and implementation of the PNCIMA plan, including community meetings, sub-regional advisory forums, and the PNCIMA website/ online submissions (PNCIMA Initiative, 2010b). Following the restructuring of the PNCIMA process in September 2011 (Section 4.5.), the opportunities for engagement were reduced. Most significantly, stakeholder engagement shifted from a consensus-seeking approach to a more consultative approach (described in Section 4.5.3) (PNCIMA initiative, 2017b; Living Oceans Society, 2011).

4.3.1. Stakeholders

The Integrated Oceans Advisory Committee (IOAC) was a multi-sector advisory body established to provide strategic-level, consensus advice and recommendations on the development and implementation of the PNCIMA plan in a manner consistent with the goals of the PNCIMA initiative (Section 4.4 - Goals). The IOAC was the primary mechanism for stakeholder engagement in the PNCIMA planning process from June

2010 to April 2013. Twelve IOAC meetings were held during this time (at various locations in the PNCIMA region until September 2011 and outside PNCIMA in the City of Richmond thereafter). To generate advice on specific issues, IOAC members could form working groups. The IOAC shared advice with Steering Committee members, who then reported that advice to their individual organizations and returned feedback to the IOAC (PNCIMA Initiative, 2010b; PNCIMA Initiative, 2017b). The relationship between the Steering Committee, IOAC, and Planning Office is shown in Figure 4.2.

Figure 4.2. PNCIMA Governance and Advisory Structure

Reproduced from PNCIMA Initiative (2017b).

The composition and size of the IOAC was intended to achieve both inclusivity and efficiency (PNCIMA Initiative, 2010a). The IOAC was comprised of representatives from regional districts, industry sectors (renewable resources, non-renewable resources, shipping, recreation, tourism, aquaculture, commercial and recreational fisheries), and the conservation sector (Table 4.2.) (PNCIMA Initiative, 2017b). These members were asked to commit to an initial two-year planning cycle, plus an additional six months for plan review. Each IOAC member could also appoint one alternate for their sector who could attend IOAC meetings and observe discussions or step in as a member if the regular member was unable to attend. Finally, First Nation organizations and federal and provincial governments participated as “ex-officio members” to provide feedback on IOAC discussions, but were not party to consensus (PNCIMA Initiative, 2010a).

According to the draft IOAC Terms of Reference, the IOAC was to provide advice and recommendations on:

- identifying and prioritizing key issues and identifying opportunities to pursue common interests (scope);
- how best to engage sectors on elements of the plan and access science and technical expertise to inform plan development (planning process); and

- proposing strategies for reconciling different interests or objectives that emerge throughout the planning process (problem solving) (list reproduced from PNCIMA Initiative, 2010a).

Examples of specific elements of the process that the IOAC was to provide advice and recommendations on include:

- work plans;
- identifying and prioritizing key issues and identifying opportunities to pursue common interests (scope);
- communication and engagement activities to sectors and public;
- prioritization of key issues and establishing working groups;
- information and science requirements;
- identification of process support needs, including funding for engagement and scientific advice;
- review of a resourcing and partnering plan;
- incorporation of results, input, or recommendations from Working Groups, workshops, Sub-regional Advisory Forums, and other means of engagement into an integrated management plan;
- implementation of the integrated management plan(s); and
- evaluation of the planning process (list reproduced from PNCIMA Initiative, 2010a).

Table 4.1.PNCIMA Integrated Oceans Advisory Committee (IOAC) (2010 - 2013)		
Member	Alternative	Sector
Stephen Brown Chamber of Shipping	Ross Cameron BC Ferries	Marine transportation
Kaity Stein International Ship Owners Alliance	Phillip Nelson Council of Marine Carriers	
Matt Burns Naikun Wind Energy Group	Jessica Mclroy Oceans Renewable Energy Group	Renewable energy
	Bill Johnson Focus Environmental Inc.	
Kim Johnson Shell	Christa Seaman Shell	Non-renewable energy
	Ken MacDonald Enbridge	
Richard Opala Marine Harvest	David Minato BC Salmon Farmers Association	Aquaculture
	Roberta Stevenson BC Salmon Farmers Association	
Kim Wright Living Oceans Society	Bill Wareham David Suzuki Foundation	Environmental nongovernmental organizations
Urs Thomas Sport Fishing Advisory Board	Jeremy Maynard Sport Fishing Advisory Board	Recreational fisheries
	Rupert Gale Sport Fishing Advisory Board	
Des Nobels Skeena Queen Charlotte Regional District	Brad Setso Skeena Queen Charlotte Regional District	Local government: Skeena Queen Charlotte (2010–2012)
Bob Corless Kitimat-Stikine Regional District	Andrew Webber Kitimat-Stikine Regional District	Local government: Kitimat–Stikine
Al Huddleston Mt. Waddington Regional District	Doug Aberly Mt. Waddington Regional District	Local government: Mt. Waddington
Jim Abram Strathcona Regional District	John MacDonald Strathcona Regional District	Local government: Strathcona
Brian Lande Central Coast Regional District		Local government: Central Coast
	Patrick Marshall Coastal Community Network	Local communities
Nick Heath Outdoor Recreation Council of BC, Sea Kayak Association of BC	Alan Thomson Recreational Canoeing Association of British Columbia	Recreation
Evan Loveless Wilderness Tourism Association		Tourism
Jim Mclsaac Commercial Fisheries Caucus	Christina Burridge BC Seafood Alliance	Commercial fisheries

Lorena Hamer BC Seafood Alliance, and Herring Research and Conservation Society	Arnie Nagy United Fishermen and Allied Workers' Union	
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Reproduced from PNCIMA Initiative (2017b).

4.3.2. The Public

In addition to the IOAC and other existing advisory processes, engagement opportunities or “mechanisms” identified in the *PNCIMA Engagement Strategy (2010)* through which the public could participate in the planning process included community meetings, sub-regional advisory forums, and the PNCIMA website/ online submissions.

Engagement Tool	Purpose	Dates	Number
PNCIMA Forum	To officially launch the PNCIMA planning process.	March 2009	1
Workshops	To provide in-depth analysis and discussion of specific topics (e.g., marine spatial planning, Marxam software, VECs, VSECs).	January 2010 - February 2012	5
Stakeholder Engagement Community Meetings	To solicit feedback from communities on options for public and stakeholder participation in the PNCIMA planning process, circulated the draft PNCIMA Engagement Strategy.	March 2010	9
Sub-regional Advisory Forums	To introduce the ecosystem-based management (EBM) approach that was in development and receive feedback from communities on four broad categories of issues that are central to the planning process, including integrated economic strategies, marine transportation and vessel safety, fisheries, and marine protection.	March 2011	6
Community Meetings	To solicit feedback on the draft PNCIMA plan.	June 2013	4

Information from PNCIMA Initiative (2017b).

Workshops were convened on an as-needed basis with process participants and others to provide in-depth analysis and discussion of specific topics (two workshops were held in Vancouver, one in Prince Rupert, and two in Richmond). Sub-regional advisory forums were intended to offer broader and recurring opportunities for communities in the PNCIMA to share their perspectives, interests, and knowledge related to the process directly with the Planning Office and Steering Committee. They were open to all interested parties and held in each of four regions of PNCIMA: Haida Gwaii, the north coast, the central coast, and northern Vancouver Island (PNCIMA

Initiative, 2017a). There were approximately 200 attendees at these forums, including those who participated through webcast. Each meeting was videotaped and the resulting videos were posted on the PNCIMA website. Workshops and sub-regional advisory forums were discontinued after the process was streamlined in September 2011.

4.4. Process Structure

Purpose

The purpose of the PNCIMA Initiative is only defined in one PNCIMA Initiative publication. According to the “PNCIMA Initiative Overview” (2010c), the purpose is “to ensure a healthy, safe, and prosperous ocean area by engaging all interested parties in the collaborative development and implementation of an integrated management plan for PNCIMA” (p. 2). In addition to the purpose, the process outputs were also identified. The main output of the planning process was a draft integrated management plan. More specifically, the plan was intended to include (reproduced from PNCIMA Initiative, 2010d):

- a vision and shared values for the area;
- a description of the PNCIMA’s main characteristics, summarized from key reports;
- a description of the key issues and opportunities in PNCIMA, summarized from participants and key reports;
- an ecosystem-based management framework for the marine environment including goals, objectives and indicators for respecting the cultural, social, economic, and ecological health of the area;
- oceans management recommendations, including: (1) spatial management plan(s) and (2) management strategies and recommended practices (e.g., best practices for wastewater discharge);
- an implementation strategy, including an accountability matrix connecting various agencies’ roles and responsibilities with relevant components of the integrated management plan; and,
- enduring arrangements for on-going management (list reproduced from PNCIMA Initiative, 2010d).

Technical and Administrative Support

The PNCIMA Planning Office was established to coordinate the PNCIMA process. This role involved providing technical and administrative support to the Steering Committee, the IOAC, and public engagement activities (Section 4.3). The Planning

Office was staffed by representatives appointed by the member organizations of the Steering Committee (PNCIMA Initiative, 2017b).

According to the draft IOAC Terms of Reference, it was the responsibility of the Planning Office to:

- administrate and organize meetings, workgroups, science advice, and communications;
- draft documents (work plans, terms of reference for working groups, minutes, reports, etc.);
- provide technical guidance to the IOAC, working groups, science groups, etc.;
- serve as a communications link between the IOAC and the governance framework;
- establish linkages between the PNCIMA initiative and existing initiatives, advisory processes and/or other bodies; and
- draft planning products and the integrated management plan(s) based on information and input from the IOAC, public engagement, existing advisory and planning processes, working groups, science advice, and government legislation and policy (list reproduced from PNCIMA Initiative, 2010a).

Facilitation

An independent, neutral facilitator who was neither a member, alternate, nor ex-officio participant on the IOAC was selected to facilitate IOAC meetings. The role of the facilitator was to:

- support cooperative problem solving;
- manage the process consistent with the terms of reference, code of conduct, and agreed upon agenda; promote dialogue and a cooperative atmosphere, and enable all perspectives to be heard within the constraints of the time available;
- support bringing issues to closure by ensuring that there is clarity on the topics being discussed, a summation of the collective advice of the committee, and acknowledgement of any outstanding issues or concerns;
- identify areas where there are conflicts and support processes through which those conflicts can be addressed; and
- prior to the conclusion of every meeting, engage the members in the identification of agenda items and scheduling for the next meeting of the IOAC (list reproduced from PNCIMA Initiative, 2010a).

Ground Rules

The draft IOAC and Steering Committee Terms of Reference provide ground rules to guide participation in the PNCIMA process. The draft IOAC Terms of Reference

define the roles and responsibilities of its members, as well as alternates, ex-officio members, the Planning Office, and the facilitator. It lays out meeting procedures pertaining to setting the agenda, scheduling meetings, taking minutes, funding, relations with the media, generating information, and process evaluation. Formal Rules of Conduct were also provided (PNCIMA Initiative, 2010a). IOAC meetings were guided by the principles of consensus-seeking and joint problem-solving (PNCIMA Initiative, 2010a), whereas the Steering Committee was only required to “operate on a collaborative basis applying interest based negotiation to arrive at agreement” (PNCIMA Initiative, 2009a, p.2).

Record Keeping

According to the draft IOAC Terms of Reference, the facilitator was responsible for working with a notetaker to develop summary notes from each IOAC meeting. The Planning Office was then responsible for circulating the meeting materials within five business days of the meeting so that participants had the opportunity to review and comment on the notes before they were posted to the PNCIMA website. The notes were to focus on identifying discussion items, advice given, any agreements reached, action items, and next steps (PNCIMA Initiative, 2010a).

Relations with the Media

The draft IOAC Terms of Reference also outline how participants should interact with the media. IOAC meetings were accessible to the public and media to attend as observers, with scheduled opportunities for their comments or questions; however, the IOAC retained the right to close meetings or parts of meetings to the public and the media. In order to attend meetings, the public and media observers were required to register in advance or register their participation when they arrived. IOAC meeting agendas and summary notes were posted to the PNCIMA website (PNCIMA Initiative, 2010a).

Information Generation

Information was to be provided to the IOAC by the Planning Office. Additionally, IOAC members were invited to bring information to the committee where agreed to by its members and consistent with the agenda. Under the draft IOAC Terms of Reference, participants agreed to share information necessary to make informed decisions in

matters related to the process; however, proprietary or confidential information was permitted to be withheld. Requests for information that would incur a cost were to be addressed by the IOAC and coordinated through the Planning Office, subject to budgetary and time constraints (PNCIMA Initiative, 2010a)

Key documents characterizing the PNCIMA region served as the knowledge base upon which recommendations and decisions on integrated oceans management could be based during the PNCIMA process. Prior to initiating the process, existing information was assembled and presented in the 2007 PNCIMA Ecosystem Overview (2007). The purpose of this report was to provide an overview of the current state of knowledge of ecosystems in PNCIMA. Later in the process, the 2010 Socio-Economic and Cultural Overview and Assessment was completed (updated in 2012), followed by the identification of valued ecosystem components (VECs) and valued socio-economic and cultural components in 2012. An ecological risk assessment framework was also developed that same year (PNCIMA Initiative, 2017b).

Resources

Until the PNCIMA process was restructured in September 2011, it was supported by a private-public funding model. Preliminary work for the PNCIMA Initiative was funded primarily out of the DFO budget. At the first IOAC meeting in June 2010, the Steering Committee proposed external funding as a way to fill gaps in nominal DFO funding. The Steering Committee explained to the IOAC that without external funding, an integrated oceans management plan would still be delivered, but it would likely take longer and be less comprehensive (PNCIMA Initiative, 2010d). At that time, interim funding had already been committed by US-based Gordon and Betty Moore Foundation (GBMF) to offset some of the costs in Phase 1 of the PNCIMA Initiative Budget (June - January 2010), including Planning Office temporary personnel, IOAC meetings (e.g., administration and travel), and consultant and contractor fees for the preparation of planning products (e.g. PNCIMA issue identification and analysis, the EBM framework) (PNCIMA Initiative, n.d.).

In January 2011, an \$8.1 million grant from the GBMF, administered through Tides Canada Foundation, was approved by governance partners. In Phase 2 of the PNCIMA Initiative Budget (January - June 2011), GBMF provided additional funding for new planning office personnel, consultation and contractor fees, and IOAC meetings (three per phase), as well as a considerable amount of funding for workshops,

convening working groups (i.e., travel), convening and tasking a Marine Technical Advisory Team (MTAT) (i.e., travel and honoraria), and hosting Sub-Regional Advisory Forums (5 per phase) (PNCIMA Initiative, n.d.). The BC government was a late-comer to the process and their participation was subject to approval of the GBMF grant. BC government participants were paid directly by Tides Canada Foundation as term employees (PNCIMA Initiative, 2010f).

Governance partners and the GBMF shared the costs associated with IOAC meetings (PNCIMA Initiative, n.d.). Eligible administrative costs for IOAC meetings included document distribution, conference calling, meetings rooms, minute taking, and facilitation. IOAC members and alternates were reimbursed for travel costs only when requested, as funding levels allowed. Specifically, eligible travel costs included transportation directly associated with travel to and from the meeting, accommodation costs directly associated with attendance at the meeting, and a per diem provision to cover meals and incidental costs not otherwise provided or covered by the meeting hosts (PNCIMA Initiative, 2010a). With respect to Steering Committee meetings, DFO funding was provided to cover administration costs, while other agencies or departments and First Nations were expected to fund their attendance and participation in Steering Committee meetings in-kind (PNCIMA Initiative, 2009a).

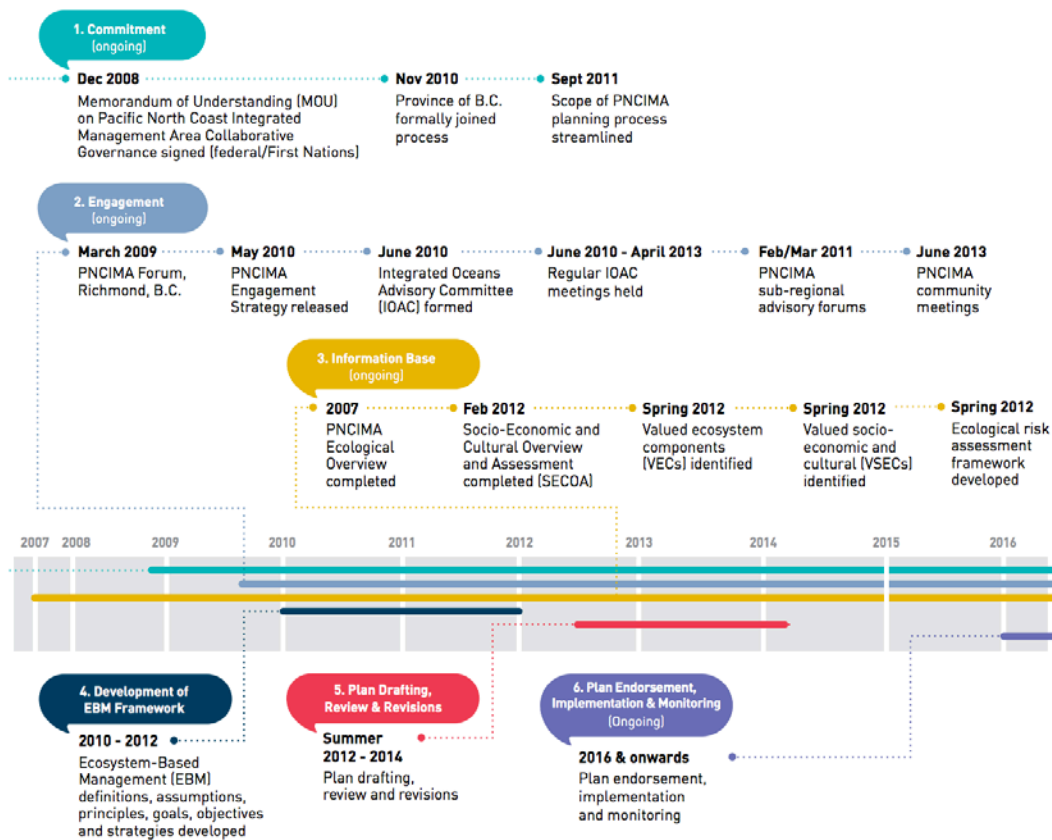
Evaluation

According to the draft IOAC Terms of Reference, opportunities would be provided for IOAC members to share their perspectives on which aspects of the stakeholder engagement process were working well and which could be improved. These evaluations were intended to be used by the Steering Committee to adapt and improve the planning process to ensure its fairness and effectiveness (PNCIMA Initiative, 2010a).

4.5. Process Evolution

The PNCIMA plan was intended to be completed by December 2012 (West Coast Environmental Law, 2011). However, the process took much longer. It was comprised of several stages and evolved considerably over the course of a decade (Figure 4.3) (PNCIMA Initiative, 2017b).

Figure 4.3. PNCIMA Timeline



Reproduced from PNCIMA Initiative (2017b).

4.5.1. Original Process

Laying the groundwork for the PNCIMA process involved assembling background information on the region, developing a governance arrangement (Section 4.2.), and designing the collaborative planning process. The PNCIMA process was officially launched with a two-day, multi-stakeholder forum held in Richmond on March 26th and 27th 2009 and attended by over 300 people. Community meetings were held in March and April 2010 to solicit feedback from communities on options for public and stakeholder participation in the PNCIMA planning process (PNCIMA Initiative 2017b). The IOAC formed in June 2010. Thereafter, the Steering Committee and IOAC worked together to develop an ecosystem based management (EBM) framework for the region based on consensus agreement (PNCIMA Initiative 2017b). In response to an interest in broader community involvement expressed by the public at community meetings, sub-regional advisory forums were held in March 2011 to collect additional community feedback (PNCIMA Initiative 2017b).

At the first IOAC meeting in June 2010, ex-officio members representing the Steering Committee proposed external funding from the GBMF as a way to fill gaps in nominal DFO funding. Concern was expressed by some members of the IOAC that the GBMF's affiliation with environmental initiatives would compromise the integrity of the process, that accepting funding from a US foundation was a sovereignty issue, and that inadequate funding from the federal government speaks to a lack of commitment to the project. The Steering Committee assured the IOAC that activities funded by the GBMF would be consistent with purpose, goals and objectives of the PNCIMA Initiative (PNCIMA Initiative, 2010e).

During the second IOAC meeting in September 2010, discussion on the external funding arrangement continued over two days. During this time, IOAC members expressed concerns similar to those raised at the previous meeting. Ex-officio members advised that governance partners had considered the implications and were willing to move forward with the arrangement with appropriate checks and balances in place to ensure transparency and accountability. The IOAC expressed a reluctant willingness to move forward, agreeing to write a letter to the Minister of Fisheries and Oceans (copying the Prime Minister's Office) communicating the need for adequate government funding to support the PNCIMA Initiative and a second letter to the Steering Committee stating the IOAC's concerns with the external funding arrangement. Some members indicated they would need to go back to their sectors to ensure that this approach is consistent with their sector's views on external funding (PNCIMA Initiative, 2010f).

At the third IOAC meeting in November 2010, the Steering Committee affirmed their commitment to the external funding arrangement and assured the IOAC that it would not hinder the discretion of their decision-making. Nevertheless, there were still "varying levels of comfort around the table regarding the external funding" (PNCIMA Initiative, 2010g, p. 3). In an attempt to address these concerns, the representatives from the GBMF and Tides Canada Foundation were invited to present to the IOAC at the fourth IOAC meeting in February 2011 (PNCIMA Initiative, 2011). In January 2011, external funding from the California-based Gordon and Betty Moore Foundation (GBMF) was approved for an amount of up to \$8,337,858, which was to be administered through a Project Support MOU with the Tides Canada Foundation. This private-public funding model was agreed to by the Steering Committee and reviewed by government lawyers (Living Oceans Society, 2011; PNCIMA Initiative, n.d.; PNCIMA Initiative, 2010e).

According to a letter from then Minister of Fisheries and Oceans, Gail Shea, to the IOAC in February 2010, “external funds are intended to support effective stakeholder engagement and facilitate access to tools and expertise in the planning process.” (Living Oceans Society, 2011).

4.5.2. Process Restructuring

In September 2011, a year and half into the process, DFO announced the federal government’s decision to restructure the PNCIMA planning process. The restructuring resulted in a reduction in plan scope, including changes to the planning process, structure, and outputs that had been established under the 2008 Collaborative Governance MOU and subsequent PNCIMA publications. Steering Committee members were informed of these revisions in writing on September 2nd, 2011 and phone calls were made to IOAC members by the acting DFO Regional Director General, Bonnie Antcliffe, four days later (Living Oceans Society, 2011). The DFO indicated that the decision was made “to ensure that the process is completed on schedule by December 2012 and that it results in an integrated management plan that is sustainable and effective” (DFO, n.d., para. 1). Given the new streamlined process, the federal government subsequently dropped the external funding from the GBMF (PNCIMA Initiative, 2011c).

A number of changes to the PNCIMA process resulted from the decision to restructure it. Most significantly, engagement with the IOAC changed from a consensus-seeking approach to a consultative approach (as described in Section. 4.5.3.). Additionally, a number of process components by the GBMF were discontinued under the streamlined process. These components include:

- Workshops
- Working groups
- The Marine Technical Analysis Team (MTAT)
- Sub-Regional Advisory Forums
- Funds for enhanced stakeholder engagement
- Technical and administrative support
- A spatial plan or a network of MPAs
- Funding for integration of planning at multiple scales (Living Oceans Society, 2011).

A group of PNCIMA participants released a press release on September 9, 2011 contending that these changes to the PNCIMA process were the result of a unilateral decision made by the Prime Minister's Office (PMO) influenced by the lobbying efforts of the marine transportation sector and Enbridge Inc (e.g., Living Oceans Society, 2011; West Coast Environmental Law, 2011). Further, these groups indicated that the decision was made against the advice of the Deputy Minister of Fisheries and Oceans Canada and the Privy Council Office. In particular, they suggest that the Stephen Harper government purposefully undermined the PNCIMA process because it was believed that the plan would “rally opposition” to the proposed Enbridge Northern Gateway project and impede the resulting tanker traffic. Bill Wareham from the David Suzuki Foundation indicated that “it looks like the forum for discussion about the future of our oceans has moved from coastal communities to the Prime Minister’s Office” (Living Oceans Society, 2011).

The proposed Enbridge Northern Gateway Pipeline Project was a controversial project to construct twin pipelines running from Alberta to Kitimat, BC. The westbound pipeline would transport an average of 83,400 cubic metres (525,000 barrels) of oil products (mostly diluted bitumen) per day to the new marine terminal in Kitimat where it would then be transported by oil tankers through the marine waters of the PNCIMA to international markets (NEB, 2013). A number of stakeholders, including environmental groups, First Nation organizations, BC communities and individuals, expressed concerns with the regulatory review process and were opposed to the project, (NEB, 2013). In June 2014, upon the conclusion of the National Energy Board (NEB) review, the project was approved by the federal government subject to 209 conditions (Payton & Mas, 2014). In June 2016, the Federal Court of Appeal overturned the approval after determining Ottawa failed to consult adequately with First Nations affected by the pipeline (Proctor, 2016).

Another factor that may have motivated the federal government's decision to restructure the PNCIMA process was a series of articles in the *Financial Post* by Vancouver-based writer and researcher Vivian Krause documenting trends in financial support provided by large US charitable foundations to Canadian environmental initiatives (Corcoran, 2012). Suggesting a lack of transparency in this financial support, Krause's research gained a significant following among conservative bloggers and MPs, becoming a topic of discussion during caucus meetings in 2011 and spurring greater

scrutiny of Canadian environmental organizations. Several months before the termination of the private-public finding agreement for the PNCIMA initiative, the Canada Revenue Agency began an audit looking into whether Tides Canada Foundation was violating restrictions on political activities (O'Neil, 2012).

In response to the restructuring of the PNCIMA process in September 2011, participating First Nations initially withdrew from the planning process. One month later, in November 2011, Coastal First Nations, NCSFNSS, and the Nanwakolas Council initiated a separate process for the same marine region called the Marine Planning Partnership for the North Pacific Coast (MaPP) (Section 4.7.) (MaPP, 2017) with the aim of achieving the original objectives of the PNCIMA process. After 10 months of negotiations on the content of the streamlined PNCIMA process with DFO, Coastal First Nations and NCSFNSS re-engaged in the PNCIMA initiative, while the Nanwakolas Council permanently withdrew (PNCIMA Initiative, 2017b). Negotiations between DFO, Coastal First Nations, and NCSFNSS continue on specific components of the PNCIMA plan that were dropped in September 2011, including MPA network implementation, co-management, and opportunities for First Nations to engage in commercial fisheries. To date, these negotiations have resulted in a Letter of Intent signed in June 2012 to collaborate on MPA network implementation for the Northern Shelf Bioregion, which shares the same footprint as the PNCIMA initiative.

4.5.3. Streamlined Process

Following the restructuring of the PNCIMA process, consensus agreement was not sought from members of the IOAC. As a result, while the final PNCIMA plan was endorsed by the federal, provincial, and participating First Nation governments (members of the Steering Committee), not all elements of the plan reflect consensus among stakeholders. In this way, the stakeholder engagement approach shifted from consensus-seeking to consultative. This shift in the stakeholder engagement approach halfway through the PNCIMA process is described in the PNCIMA plan as follows:

Throughout the planning process, advice and recommendations from the IOAC were shared with the PNCIMA Steering Committee⁶. Outcomes of the Steering Committee review were shared with the IOAC, which provided an opportunity to resolve differences by consensus, thereby allowing for broad support across participating sectors and interests. Following changes to the planning process in September 2011, as referenced in Section 1.4, engagement with the IOAC changed from a consensus-seeking approach to a more consultative approach. Consequently, the IOAC reached consensus on some but not all elements of the plan. The role of the IOAC is advisory in nature only. Therefore, the plan will not limit or prejudice the positions of the IOAC members in the future (PNCIMA Initiative, 2017b, p.25).

Six IOAC meetings were held between September 2011 and April 2013 (PNCIMA Initiative, 2017a). In 2012, a draft plan developed by governance partners was circulated to local First Nations and members of the IOAC (Government of Canada, 2017b). The draft PNCIMA plan was published on the PNCIMA website in May 2013. A series of community meetings were held in June 2013 to gain public feedback on the draft plan (PNCIMA Initiative, 2017b). After the release of the draft plan, there was limited communications on the status of the PNCIMA plan to stakeholders or the general public (the PNCIMA initiative website was not updated between June 2013 and February 2017). Three years later, in the summer and fall of 2016, the plan was reviewed by governance partners (personal communication, July 5th, 2016). On February 15, 2017, the endorsement of the final PNCIMA plan by representatives of Steering Committee member organizations (DFO, the Province of BC, Coastal First Nations, and NCSFNSS) was announced in Vancouver (Government of Canada, 2017a).

The delay in plan endorsement was likely due to a number of factors, including extended negotiations among governance partners on issues both within and outside the scope of the streamlined process. For example, a press release from the Council of the Haida Nations (CHN) on February 15, 2017 states that “political circumstances related to the Haida Gwaii Pacific ‘iinang/iinang herring fishery delayed Haida support for the signing of the PNCIMA Plan” (para.2). According to this source, “the political situation has changed significantly over the past three years” (para.4). Recent developments that

⁶ For example, “the IOAC carefully considered how to best reach the PNCIMA goals, and worked to develop EBM objectives which were subsequently reviewed by all collaborative governance parties” (PNCIMA Initiative, 2017b, p. 37).

led to CHN endorsing the PNCIMA plan include: the election of a new federal government in October 2015, the completion and ongoing implementation of the Haida Gwaii Marine Plan (2015), and the Haida Nation's participation in the MPA network planning process for the Northern Shelf Bioregion (Council of the Haida Nation, 2017).

4.6. The Plan

The primary output of the PNCIMA planning process is the integrated oceans management plan. The PNCIMA plan is a high-level, strategic and non-legally-binding plan intended to inform other planning and decision making processes. The PNCIMA plan also affirms the Government of Canada's commitment to co-management of the ocean with Indigenous peoples, the provinces and territories, and stakeholders (Government of Canada, 2017a; Government of Canada, 2017b).

A key component of the PNCIMA plan is its ecosystem-based management (EBM) framework. The EBM framework was developed to guide resource managers and resource users alike in order to achieve a more integrated approach to oceans management in the region. According to the PNCIMA plan, "a true measure of the plan's success will be how well the EBM framework and its associated tools are integrated into the regular course of business for federal, provincial and First Nation governments, along with stakeholders" (PNCIMA Initiative, 2017, p. 45). The EBM framework is comprised of a definition of EBM, assumptions, principles, goals, objectives, and strategies, as presented in Figure 4.4.

The PNCIMA plan outlines the following EBM goals:

1. integrity of the marine ecosystems in PNCIMA, primarily with respect to their structure, function and resilience;
2. human well-being supported through societal, economic, spiritual and cultural connections to marine ecosystems in PNCIMA;
3. collaborative, effective, transparent and integrated governance, management and public engagement; and
4. improved understanding of complex marine ecosystems and changing marine environments. (List reproduced from PNCIMA Initiative, 2017b, p. v).

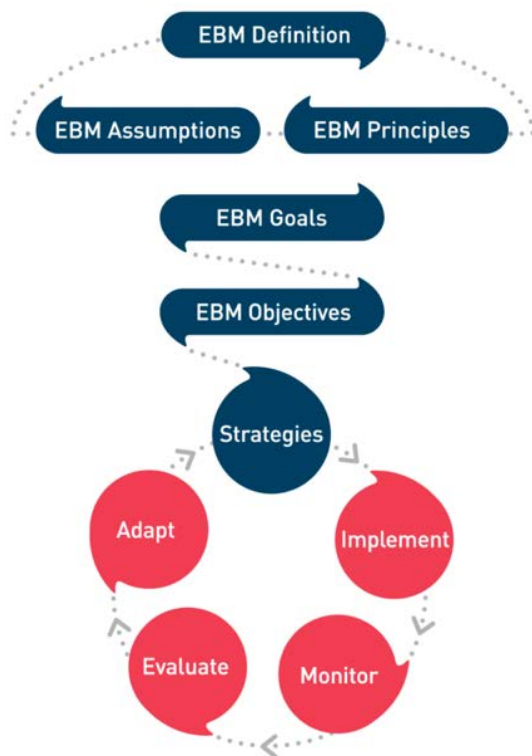
The PNCIMA plan also outlines more detailed objectives for each goal, as well as management strategies and associated timelines for advancing PNCIMA objectives

(strategies are classified as “short term”, “long term”, or “ongoing”). In total, there are 22 objectives and 72 strategies provided in the plan. According to the PNCIMA plan:

Strategies relate to the authorities and priorities of various departments, agencies and organizations. They are not meant to be implemented in isolation or by a single department, agency, organization or individual. Rather, they are meant to integrate EBM into the regular course of business for all governments, First Nations and stakeholders involved in PNCIMA. Therefore, responsibility for implementing particular strategies is shared among all parties to the PNCIMA initiative.

The plan notes also that “specific actions are not identified in the EBM framework. They will be identified on a case-by-case basis through work planning as particular strategies are implemented” (PNCIMA Initiative, 2017b, p. 37).

Figure 4.4. Components of the PNCIMA Ecosystem-Based Management (EBM) Framework



Reproduced from PNCIMA Initiative (2017).

The PNCIMA plan also provides an information base and a number of management and decision support tools to support the application of EBM at a variety of scales in the PNCIMA region. The information base for the PNCIMA is comprised of the Ecosystem Overview: Pacific North Coast Integrated Management Area (2007) report, Marine Use Analysis of the Pacific North Coast Integrated Management Area (2007) report, 16 Ecologically and Biologically Significant Areas that have been identified, and an atlas of the PNCIMA containing 63 maps of human activities and important ecological, hydrological and oceanographic features. With respect to decision-support tools, the DFO has developed a process for the identification of valued ecosystem components (VECs), as well as a finalized list of VECs for the PNCIMA and a preliminary list of valued socio-economic components (VSECs). Finally, a pilot ecological risk assessment framework for the identification of single and cumulative risk to VECs also continues to be developed and refined. The lack of an equivalent management tool for VSECs in the PNCIMA is identified in the plan as a significant gap (PNCIMA Initiative, 2017).

The PNCIMA plan emphasizes that it is the shared responsibility of all signatories to the planning process and will be undertaken within existing programs and resources, where possible. The plan identifies five priorities for implementation:

- governance arrangements for implementation
- marine protected area network planning
- monitoring and adaptive management
- integrated economic opportunities
- tools to support plan implementation. (List reproduced from PNCIMA Initiative, 2017, p. 46).

4.7. Other Related Processes and Programs

In addition to the PNCIMA, there are a number of different marine-based planning activities occurring in the PNCIMA region. The PNCIMA plan is intended to serve as an umbrella initiative, providing the EBM framework to guide and coordinate marine planning and management at smaller, more operational scales (PNCIMA Initiative, 2017b). As the PNCIMA plan (2017b, p. 48) states:

Currently, each planning process in the Northern Shelf Bioregion (e.g., MaPP, PNCIMA, Gwaii Haanas) has its own associated advisory body.

Many of these advisory bodies are associated with MPAs, involve similar stakeholders and address similar issues. Terms of engagement are not consistent, however, and despite ongoing work to address duplication of effort between processes, improvements are always possible.

4.7.1. The Marine Planning Partnership

The MaPP is a co-led initiative by seventeen First Nations and the Government of BC to plan for government-to-government management of what is known as the Great Bear Sea. The MaPP region shared the same footprint as the PNCIMA Initiative, encompassing 102,000 square kilometres of B.C.'s North Pacific Coast (MaPP, 2017a). Following the restructuring of the PNCIMA process, the MaPP process was launched in November 2011 through a Letter of Intent between the Coast First Nations, NCSFNSS, and the Nanwakolas Council. The federal government did not participate in the MaPP process. As a result, the MaPP plans do not address uses and activities considered by the Province of BC to be under federal government jurisdiction. According to the MaPP Initiative, with respect to implementation of the MaPP plans, "issues requiring federal government involvement would be subject to consultations with the federal government" (MaPP Initiative, para. 9). Like the original PNCIMA process, the MaPP process was supported through a private-public funding agreement with the GBMF, administered through Tides Canada Foundation under a Project Support MOU (MaPP, 2017b).

In April 2015, the MaPP Initiative released final sub-regional marine plans for four sub-regions of the Great Bear Sea: for the North Coast, the Central Coast, North Vancouver Island and Haida Gwaii. A Regional Action Framework was also released in May 2016. These marine plans provide overarching policy and detailed management direction for marine activities, including ocean zoning maps identifying general, special, and protection management zones (MaPP, 2017a). According to the PNCIMA plan (2017b), MaPP "draws from, and builds on, the PNCIMA plan" (p.29). The most significant example of this is the EBM framework established through the PNCIMA process and used to inform the sub-regional MaPP plans (PNCIMA Initiative, 2017b). Objectives and strategies for each sub-regional marine plan and the Regional Action Framework will be implemented on a priority basis, as set out in their respective implementation agreements, which were announced in August 2016. MaPP will again be using a public-private funding model for the plan implementation phase (MaPP, 2017a).

4.7.2. First Nations Marine Use Planning

First Nations on the North Pacific Coast have been managing the natural resources in their territories for thousands of years. Between 2006 and 2010, most First Nations in the PNCIMA developed community marine use plans. Community marine use plans identify each Nation's vision and values for the marine areas and resources within their traditional territories, combining ancient wisdom and scientific knowledge. Plans vary between Nations, but typically describe each Nation's jurisdiction; goals, objectives, and strategies for resource management and economic development; special protection for specific areas; and capacity needs. Some plans also include collaborative government relationships, spatial management, and various partnerships with stakeholders. Community marine use plans are intended to guide decision-making within the community, as well as to inform collaboration and engagement with the Government of BC and Government of Canada through PNCIMA, MaPP, and other related initiatives (Coastal First Nations, 2008; Nanwakolas Council, 2011; NCSFFSS, 2014).

4.7.3. Marine Protected Area Network Planning

The Government of Canada has committed to protect 5% of Canada's marine and coastal areas by 2017 and 10% by 2020 (Government of Canada, 2017). In 2014, the Canada-British Columbia Marine Protected Network Strategy was developed outlining a vision, goals and specific design principles for the development of a network of marine protected areas (MPAs) in BC to contribute to Canada's conservation targets (Canada of Canada, 2014). The Strategy is consistent with and guided by the National Framework for Canada's Network of Marine Protected Areas (Government of Canada, 2011). Two MPAs have already been designated in the PNCIMA region. The Hecate Strait/Queen Charlotte Sound Glass Sponge Reefs MPA was designated by the DFO in 2017 under the *Oceans Act*, 1997. Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site was designated by Parks Canada 2010 and a process is underway to designate the proposed Scott Islands Marine National Wildlife Area led by Environment and Climate Change Canada (PNCIMA Initiative, 2017b).

The development of a MPA network for the Northern Shelf Bioregion was intended to be an outcome of the PNCIMA Initiative, but is now being pursued through separate collaborative processes between First Nations, federal and provincial

governments. The PNCIMA plan outlines next steps for MPA network development in the Northern Shelf Bioregion. These steps include:

- developing an enduring collaborative governance structure for MPA network planning and management that adopts or expands existing governance structures, as appropriate;
- identifying ecological, social, cultural and economic objectives and zoning designations for a Northern Shelf Bioregion MPA network;
- compiling and sharing best available scientific data and traditional and local knowledge, where appropriate;
- reviewing how existing conservation and protection tools in the Northern Shelf Bioregion contribute to the MPA network objectives, and identifying sites and recommended tools for area-based protection;
- proposing a timeline and identifying resource requirements for the development of this MPA network that integrate with existing planning and governance processes, where possible;
- coordinating regional and sub-regional stakeholder engagement for MPA network planning, and identifying common principles for engagement; and
- incorporating inputs from other processes and scales of planning (e.g., MaPP) to support development of an MPA network for the Northern Shelf Bioregion (list reproduced from PNCIMA Initiative, 2017b, p. 48).

4.7.4. The Oceans Protection Program

On November 7, 2016, the Prime Minister launched a \$1.5 billion national Oceans Protection Plan. The plan aims to improve marine safety and responsible shipping, protect Canada's marine environment, provide new economic opportunities for Canadians and build partnerships with Indigenous and coastal communities. It includes some spatial measures, including the identification of ship refuge areas. The PNCIMA Plan will support activities undertaken as part of the OPP. Related to the OPP, on November 29, 2016, the Government of Canada announced it would introduce legislation to formalize a moratorium prohibiting tankers carrying crude oil and persistent oil products from entering and leaving ports and marine installations in the Great Bear Rainforest/Great Bear Sea area (Government of Canada, 2017b).

Chapter 5. PNCIMA Evaluation and Results

This chapter describes the best practice criteria used for the evaluation of the PNCIMA case study and the design, administration, and analysis of the participant survey. It then summarizes the results of the participant survey in three parts. Part one provides a summary the findings for the overall performance of the PNCIMA process, including its performance relative to the MaPP Initiative. The second part summarizes the findings for each evaluation criterion based on responses to likert-style questions. The third part summarizes additional results provided through open-ended questions on lessons learned from the PNCIMA process and anticipated barriers to PNCIMA plan implementation.

5.1. Evaluation Framework

The evaluation framework applied to the PNCIMA case study is primarily an adaptation of the evaluation framework proposed in Frame (2002) to evaluate the effectiveness of the collaborative planning process used to prepare Land and Resource Management Plans (LRMPs) in British Columbia (BC). The framework in Frame (2002) is an integration of five earlier frameworks: Cormick et al. (1996); Duffy et al. (1998); Moote, McClaran, and Chickering (1997); Innes and Booher (1999); and Wondolleck and Yaffee (2000). Frame (2002) applied this framework to seventeen LRMPs completed before 2002. It has since been adapted and applied to the Central Coast LRMP in Cullen, (2006), the North Coast LRMP (McGee, 2006), Haida Gwaii LRMP (Astofooroff, 2008), Morice LRMP (Morton, 2009), and Sea-to-Sky LRMP (Kennedy, 2012).

Several best practice criteria were added to the evaluation framework proposed in Frame (2002) to reflect unique considerations for effective marine planning. For example, integration at multiple levels is of particular importance in marine planning due to the highly mobile nature of marine resources and complex interactions between marine ecosystems and human uses (Dickinson et al., 2010). Accordingly, 'integration' is one of several guiding principles for effective marine planning identified in Dickinson, Rutherford and Gunton (2010) based on a review of international experience in marine planning. Integration is also a primary objective of Canada's ocean legislation and policy

(Rutherford et al., 2010). It is therefore a valuable exercise to evaluate the extent to which the PNCIMA process achieved full integration. To reflect other recommendations in marine planning and policy literature, ‘strong leadership’, ‘effective legal framework’, ‘adequate funding’, and ‘collaborative governance’ were also added to the evaluation framework for the PNCIMA case study.

In total there are 26 evaluation criteria used. These criteria are grouped into 15 process criteria (Table 5.1) and 11 outcome criteria (Table 5.2)

Table 5.1.Process Criteria	
Criteria	Description
1. Shared Purpose	Participants are committed to their roles and responsibilities and to the overall planning process.
2. Strong Leadership*	Senior levels of government demonstrate strong commitment to ensuring the success of the planning process.
3. Effective Legal Framework*	A legislative and policy framework exists at the national level to guide planning and provide strategic direction.
4. Inclusive Participation	All interested and affected parties are involved throughout the planning process in a capacity that is appropriate given the nature of their interest or entitlement.
5. Self-Design	Participants work together to design the process to suit the individual needs of that process and its participants.
6. Clear Ground Rules	A comprehensive procedural framework is established as the process is initiated, including clear roles and responsibilities and/or terms of reference and/ or operating procedures.
7. Balanced Opportunity	All participants have sufficient opportunity and resources to participate effectively in the process with no single interest/ value/ perspective dominating.
8. Principled Negotiation	The planning process operates according to the conditions of principled negotiation, including mutual respect, trust, and understanding.
9. Accountable Representatives	All participants are accountable to their constituents, the broader public, and the process itself.
10. Adaptable Design	Flexibility is designed into the planning process to allow for adaptation to new circumstances and creative problem solving.
11. Adequate Information	The information used throughout the process was adequate for effective decision-making.
12. Reasonable Time Limits	Realistic milestones and deadlines are established and managed throughout the planning process.
13. Effective Process Management	The process is coordinated and managed effectively and in a neutral manner.
14. Independent Facilitation	An independent trained facilitator is used throughout the process.
15. Adequate Funding*	Funding mechanisms are adequate for the planning process.

* Indicates criteria added to the framework proposed in Frame (2002).

Table 5.2. Outcome Criteria	
Criteria	Description
16. Reached Agreement	The process developed a plan(s) accepted by participants.
17. Reduced Conflict	The process reduced conflict among stakeholder groups.
18. Integration Achieved*	The plan successfully incorporates diverse values/ interests/ perspectives.
19. Developed Creative Solutions	The process resulted in creative and innovative ideas and actions.
20. Built Human Capital	Participants gained knowledge, understanding, and skills by participating in the process.
21. Built Social Capital	The process resulted in new personal and working relationships among participants that have the potential to support collaborative activities outside of the process.
22. Improved the Information Base	The process built an improved information base that will support improved oceans management.
23. Established a Collaborative Governance Agreement*	The process resulted in a lasting collaborative governance structure(s) that will improve oceans management.
24. Met the Public Interest	The outcomes are regarded as just and serve the common good or public interest, not just those of participants in the process.
25. Perceived as Success	The process and outcome are perceived as successful by all participants.
26. Demonstrates Commitment to Implementation, Monitoring, and Reporting	The process and marine plan include clear commitments to implementation, monitoring, and reporting.

* Indicates criteria added to the framework proposed in Frame (2002).

5.2. Participant Survey

5.2.1. Survey Design

The survey is organized into five parts. In Parts 1 and 2, participants were asked to respond to a series of statements regarding their experiences in the PNCIMA process based on a five point likert scale. Options available to participants were ‘strongly agree’, ‘somewhat agree’, ‘somewhat disagree’, ‘strongly disagree’, and ‘unsure/don’t know’. There were 39 statements used to test for the 15 process criteria and 27 statements used to test for the 11 outcome criteria. For some best practice criteria, participants were given the option to provide additional information through a corresponding open-ended question. In Part 3, participants were asked to rate the PNCIMA process and plan on a scale of 1 to 10, with 1 being very poor and 10 being excellent. They were then asked a

series of open-ended questions regarding the overall performance of the PNCIMA Initiative as well as to compare the effectiveness of the PNCIMA planning process to the MaPP process by stating whether the MaPP process was better or worse than the PNCIMA process. Finally, in Part 4, participants were asked to identify lessons learned from the PNCIMA process and what they perceive to be the greatest barriers for implementation of the resulting plan. They were also given the option to provide additional comments and to indicate if they approved follow-up by the research team for the purpose of reviewing the survey results.

5.2.2. Survey Administration

When the draft PNCIMA plan was released in 2013, there were 45 PNCIMA participants named in the plan document. Of those 45 participants, 10 were Steering Committee members, 16 were Integrated Oceans Advisory Committee (IOAC) members, and 19 were IOAC alternate members. The Steering Committee members represented 12 organizations (Table 5.4), while IOAC members and alternates represented 15 marine sectors (Table 5.3).

Sector	Seats	
	Member	Alternate
Marine transportation	2	2
Renewable energy	1	2
Non-renewable energy	1	2
Aquaculture	1	2
Environmental non-governmental organizations	1	1
Recreational fisheries	1	2
Local government – Skeena Queen Charlotte (2010 -2012)	1	1
Local government – Kitimat–Stikine	1	1
Local government – Mt. Waddington	1	1
Local government – Strathcona	1	1
Local government – Central Coast	1	0
Local communities	0*	1
Recreation	1	1
Tourism	1	0
Commercial fisheries	2	2
Total	16	19

Adapted from PNCIMA Initiative (2013). *There was no member representing local communities on the IOAC, so the alternate was included in the participant survey as a member.

Level	Organization	Seats
Government of Canada	Fisheries and Oceans Canada	1 (co-chair)
	Transport Canada	1
	Prince Rupert Port Authority	1
	Natural Resources Canada	1
	Environment Canada	1
	Parks Canada	1
First Nations Organizations	Council of the Haida Nation	1
	Central Coast Indigenous Resource Alliance	1 (vacant in 2013)
	Coastal First Nations–Great Bear Initiative	1 (co-chair)
	North Coast Skeena First Nations Stewardship Society	1 (vacant in 2013)
	Nisga'a Lisims Government	1 (observer)
Government of BC	Ministry of Forests, Lands and Natural Resource Operations	1
Total		10

Adapted from PNCIMA Initiative (2013).

The participant survey was first emailed to 27 participants, including the 10 members of the Steering Committee, 16 members of the IOAC, and 1 alternate on the

IOAC representing local communities⁷. An initial email was sent using FluidSurvey containing a link to the survey and instructions to either complete the survey or forward the email to another representative of their organization who could complete the survey if they could not. This initial email was followed by two reminder emails and a phone call, if required. If a response could not be obtained from an IOAC member within a month of the survey being sent, the survey was then forwarded to the alternate on the IOAC for their sector⁸. Three IOAC members could not be located, one IOAC member did not respond, and one member was not available to participate. Consequently, the survey was forwarded to five alternates. In total, 23 surveys were completed, resulting in a response rate of 85%. The response breakdown by sector (IOAC) and organization (Steering Committee) is detailed in Table 5.5.

⁷ There was no member representing local communities on the IOAC, so the alternate was included in the participant survey as a member.

⁸ According to the IOAC draft Terms of Reference, discussion at the IOAC table was usually limited to members; however, an alternate was permitted to take the seat of his or her sector member on occasion to address the IOAC or participate in discussion (PNCIMA Initiative, 2010a).

IOAC	
Marine transportation	2
Renewable energy	1
Non-renewable energy	0
Aquaculture	1
Environmental non-governmental organizations	1
Recreational fisheries	1
Local government - Skeena Queen Charlotte (2010 -2012)	1
Local government – Kitimat–Stikine	1
Local government – Mt. Waddington	0
Local government - Strathcona	1
Local government – Central Coast	1
Local communities	1
Recreation	1
Tourism	1
Commercial fisheries	2
Steering Committee	
Fisheries and Oceans Canada	0
Transport Canada	1
Prince Rupert Port Authority	1
Natural Resources Canada	1
Environment Canada	1
Parks Canada	1
Council of the Haida Nation	1
Central Coast Indigenous Resource Alliance	N/A
Coastal First Nations–Great Bear Initiative	1
North Coast Skeena First Nations Stewardship Society	N/A
Nisga'a Lisims Government	1
Ministry of Forests, Lands and Natural Resource Operations	1
Total	23

5.2.1. Analysis

For each likert-style question in Parts 1 and 2, the frequency of response types ‘strongly agree’, ‘somewhat agree’, ‘somewhat disagree’, and ‘strongly disagree’ for each statement was calculated as a percentage (frequency of response type divided by total number of responses). Where a question was phrased negatively, responses were inverted to ensure comparability of the result with positively worded questions. To simplify reporting of results, positive responses (‘strongly agree’ or ‘somewhat agree’) were combined into a ‘total agreement’ percentage for each statement. Additionally, a ‘success rating’ for each criterion was calculated by averaging the ‘total agreement’ percentages of all the statements related to that criterion. The success rating uses the following categories): less than 50% agreement received a ‘low’ success rating, 50-75%

received a 'medium' success rating, and 76-100% received a 'high' success rating. Criteria that that received a low success rating were classified as unmet, criteria that received a medium success rating were classified as moderately met, and those that received a high success rating were classified as strongly met (Table 5.6).

Responses to open-ended questions in Parts 1, 2, 3 and 4 were analyzed using nVivo software. A coding system was developed to identify reoccurring themes in the responses. Once coding was complete, the responses were grouped thematically to determine the frequency of response types. Feedback provided through open-ended questions was then used to contextualize, interpret, and analyze the results of the likert-style questions.

	Average Agreement for all Statement	Criterion Met?	Success Ratings?
Criterion 'x'	Less than 50%	Unmet	Low
	50% - 75%	Moderately Met	Medium
	76% - 100%	Strongly Met	High

Reproduced from Morton (2009).

5.2.2. Limitations

There are several limitations to the research findings. First, the last IOAC meeting was nearly four years before this survey was done, making it difficult for some respondents to recall certain details of the process (e.g., “retired, too long away from process”). Second, most IOAC members had not yet seen the final PNCIMA plan prior to completing the survey. Consequently, three participants indicated that they had insufficient information to describe process outcomes (e.g., “how can we say anything about this. Despite being a participant, I have not seen a draft of the plan since November 2012. And that was pretty meaningless”). Additionally, as with any survey, the results are based on participant perceptions of the process, which may be influenced by factors beyond the PNCIMA process, such as other interactions with the lead agency. Third, due to the significant changes made to structure of the PNCIMA process halfway through, several participants found it difficult to evaluate the strengths and weakness of the process overall. Fourth, given that the research findings are for a single case study, they may not be applicable in all contexts. Despite these limitations, the results of this

study will be useful to those responsible for the design and management of collaborative planning processes. A final limitation is the results do not reflect the views of all participants in the process; 4 of 27 members did not complete the survey. Sectors/ organizations whose views are not represented in the survey results include non-renewable energy, local government – Mt. Waddington, and DFO.

5.3. Survey Results

5.3.1. Response Rate

Of the 27 PNCIMA participants comprising the sample group, 23 responses were received in total, which form the basis of this analysis (response rate of 85%). Responses were received from 9 of 10 Steering Committee members (response rate of 90%) and 14 IOAC members or alternates (response rate of 82%). Of the 15 sectors represented in the PNCIMA process through the IOAC, 13 are included in the results, with non-renewable energy and one regional government (Mt. Waddington) being the only sectors not represented.

5.3.2. Process Criteria

The following sections report results for each process criterion, indicating participant perceptions of the strengths and weaknesses of the PNCIMA process.

Shared Purpose

The purpose of the process was clearly defined and relevant to all participants.

All Steering Committee members and 71% of IOAC members became involved in the process because they felt it was an effective way to achieve their organization's goals and because they felt the issues being dealt with through the process were significant and required timely resolution. All participants (100%) felt committed to their roles and responsibilities in the process and most Steering Committee (88%) members and IOAC members (79%) felt other parties were committed to fulfilling their roles and

responsibilities in the process. Overall, the ‘shared purpose’ criterion receives a high success rating (87%), the highest rating of all the criteria (Table 5.7.).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I became involved in the process because I/my organization felt it was an effective way to achieve our goals.	100%	71%	83%
The issues we were dealing with in the process were significant and required timely resolution.	100%	71%	83%
I was committed to fulfilling my roles and responsibilities in the process.	100%	100%	100%
Other parties were committed to fulfilling their roles and responsibilities in the process.	88%	79%	82%
Average Rate of Agreement for all Statements	97%	80%	87%

Strong Leadership

Senior levels of government demonstrated a strong commitment to ensuring the success of the planning process.

While the majority of Steering Committee members agreed there was a strong commitment to ensuring the success of the process demonstrated by the lead agency (DFO) (67%) and at the senior management level of all relevant government departments and agencies (56%), fewer IOAC members agreed with these statements. Only 36% of IOAC members agreed commitment was demonstrated by the lead agency and 29% agreed commitment was demonstrated at the senior management level of other relevant agencies. Overall, the ‘strong leadership’ criterion receives a low success rating (43%) (Table 5.8).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The lead agency (the Department of Fisheries and Oceans Canada) demonstrated strong commitment to ensuring the success of the process.	67%	36%	48%
There was a strong commitment at the senior management.	56%	29%	39%
Average Rate of Agreement for all Statements	61%	32%	43%

Effective Legal Framework

A legislative and policy framework exists at the national level to guide planning and provide strategic direction.

While most Steering Committee members (67%) felt the *Oceans Act* and related legislation and policy provided an adequate framework for the development of the PNCIMA plan, fewer IOAC members (57%) agreed. Further, there were three responses of 'unsure/don't know', suggesting the *Oceans Act* and related legislation and policy were referred to infrequently during the process. Overall, the 'effective legal framework' criterion is rated as moderately met (61%) (Table 5.9).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The <i>Oceans Act</i> and related legislation and policy provided an adequate framework for the development of the marine plan.	67%	57%	61%

Participants were also asked to identify any major gaps in the legal framework for the PNCIMA process. The following are major gaps identified by participants:

- The regulatory authority to implement the PNCIMA plan
- Clarity on jurisdictional issues
- Incentive for other federal agency participation
- Clear direction on the role of coastal communities and stakeholder groups in plan development and implementation
- Consideration of the international context for marine planning in Canada

Three participants felt that the legal framework did not adequately define how local communities should be engaged in the process. Of these three participants, two felt that the legal framework should have required engagement with local communities at the Steering Committee level and one felt that the legal framework should have been more prescriptive of federal government collaboration with both local communities and stakeholder groups. Another participant indicated that the legal framework does not provide a mechanism to compel other federal agencies and departments to be involved in plan development or implementation, limiting full integration. Other participants noted that the legal framework does not provide the regulatory authority required for plan implementation, clarity on jurisdictional overlap between the federal and provincial governments (DFO authority, in particular, was “ill-defined”), or an acknowledgement of the international context of integrated management in Canada’s EEZ.

Inclusive Participation

All interested and affected parties are involved throughout the planning process in a capacity that is appropriate given the nature of their interest or entitlement.

Most Steering Committee members (89%) and IOAC members (86%) felt that they were meaningfully involved throughout the process. The majority of Steering Committee members (67%) also felt that all appropriate values/ interests/perspectives were adequately represented throughout the process, whereas fewer IOAC members (57%) felt this was the case. While half of the Steering Committee members (50%) agreed that there was sufficient public awareness of the process, only 7% of IOAC members agreed (the lowest level of agreement with any survey statement). Overall, the ‘inclusive participation’ criterion is rated as moderately met (57%) (Table 5.10).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
All appropriate values/ interests/perspectives were adequately represented throughout the process.	67%	57%	60%
I/ the organization I represented was meaningfully involved throughout the process.	89%	86%	87%
There is sufficient public awareness of the process.	50%	7%	23%
Average Rate of Agreement for all Statements	69%	50%	57%

Participants were also asked to identify any groups not included in the process that should have been. Participants identified the following groups as not included:

- Local community groups
- Labour
- Coastal forestry/ forestry

In addition to identifying sectors they felt should have been included in the process, participants also provided feedback on process inclusiveness generally, with several key themes emerging. First, one participant noted that the IOAC was difficult to manage due to the large number of members, and adding any more members would have made it even more difficult to manage. Similarly, another participant added that the process was already “too stakeholder heavy”. Second, some participants felt that the level or nature of sectoral representation was inadequate. For example, two participants felt that local governments should have been represented on the Steering Committee as a level of government, rather than on the IOAC as a single interest group. Two other participants felt that the marine terminal sector was inadequately represented at both the Steering Committee and IOAC levels. Yet two more participants felt that the Government of BC was not fully involved in the process. Third, the relationship between the Steering Committee and IOAC tables affected perceptions of process inclusiveness. One participant, for example, felt that there was a lack of transparency at the Steering Committee level and that the process was being heavily influenced by the objectives of First Nation participants. Finally, one participant felt that the restructuring of the process in September 2011 affected the inclusiveness of the process overall. According to this participant:

[The termination of the funding agreement by the federal government] lead to FN [First Nation] governments and the BC provincial government

also entering a separate process. The process continued without FN government involvement and important issues were left off the table, including fisheries and shipping as an example.

Self-Design

Participants are engaged in process design on an ongoing basis to ensure it is effective and meets each participant's individual needs.

Interestingly, more IOAC members (69%) felt that they had been involved in the design of the process (e.g., ground rules, roles, procedures) than Steering Committee members (44%), even though the IOAC was an advisory body and the Steering Committee was a decision-making body. However, both the Steering Committee and IOAC had few members who felt they were able to influence the design of the process on an *ongoing* basis (33% and 38% respectively). Overall, the 'self-design' criterion receives a low success rating (48%) (Table 5.11).

Table 5.11. Level of Agreement for 'Self-Design' Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I was involved in the design of the process (e.g., ground rules, roles, procedures).	44%	69%	59%
On an ongoing basis, I was able to influence the design of the process.	33%	38%	36%
Average Rate of Agreement for all Statements	39%	54%	48%

Clear Ground Rules

A comprehensive procedural framework is established as the process is initiated, including clear terms of reference and/ or written operating procedures.

Most participants (96%) indicated that they clearly understood their roles and responsibilities in the process, but fewer (68%) felt the roles and responsibilities of other participants in the process were clearly defined. All Steering Committee members felt that the procedural ground rules (e.g., how parties work together) were clearly defined, whereas fewer (71%) IOAC members agreed. Far fewer participants agreed that all decisions were made through consensus, with 56% of Steering Committees members and only 36% of IOAC members agreeing. The overall success rating for the 'clear ground rules' criterion is medium (72%) (Table 5.12.).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I clearly understood my roles and responsibilities in the process.	89%	100%	96%
The roles and responsibilities of other participants in the process were clearly defined.	63%	71%	68%
The procedural ground rules (e.g., standards of conduct or how parties work together) were clearly defined.	100%	71%	83%
All decisions were made through consensus.	56%	36%	43%
Average Rate of Agreement for all Statements	77%	70%	72%

Balanced Opportunity

All participants had sufficient opportunity and resources to participate effectively in the process with no single interest/ value/ perspective dominating.

Most participants felt that they had or received sufficient training (74% aggregate) and funding (78% aggregate) to participate effectively in the process. Despite having sufficient training and funding, however, few participants (14%) felt that participants had equal influence over decision-making. More participants (43%), although still the minority, felt that their participation had an impact on the outcomes of the process. With these low ratings, respondents may be referring to the inherent power imbalances

between committees (as a decision-making body, the Steering Committee is expected to have greater influence over the process relative to the IOAC). Alternatively, they may also be referring to power imbalances *within* committees. Whichever the case, only 43% of participants felt that the process reduced power imbalances among participants. Overall, the 'balanced opportunity' criterion receives a medium success rating (52%) (Table 5.13).

Table 5.13. Level of Agreement for 'Balanced Opportunity' Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I had or received sufficient training to participate effectively.	78%	71%	74%
I had or received sufficient funding to participate effectively.	78%	79%	78%
The process reduced power imbalances among participants.	56%	36%	43%
Participants had equal influence over decision-making.	33%	14%	22%
My participation had an impact on the outcomes of the process.	67%	29%	43%
Average Rate of Agreement for all Statements	62%	46%	52%

Principled Negotiation

The planning process operated according to the conditions of principled negotiation, including mutual respect, trust, and understanding.

All participants (100%) indicated that there were significant differences in values, interests, and perspectives among participants⁹. Most Steering Committee and IOAC

⁹ This statement does not contribute to the total success rating for the 'principled negotiation' criterion. It is for contextual information only.

members (77% aggregate) indicated that participants demonstrated a clear understanding of these different values, interests, and perspectives, likely due to the open communication about them at each table (78% aggregate). However, just over half of participants felt that the process generated trust (52% aggregate) or fostered teamwork (55% aggregate). These low rating likely reflect the challenge of reconciling the divergent values, interests and perspectives held by participants. Overall, the 'principled negotiation' criterion receives a medium success rating (72%) (Table 5.14.).

Table 5.14. Level of Agreement for 'Principled Negotiation' Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
There was open communication about participant values/ interests/ perspectives.	67%	86%	78%
Participants demonstrated a clear understanding of the different values/ interests/ perspectives of other participants.	88%	71%	77%
The process generated trust among participants.	56%	50%	52%
The process fostered teamwork.	50%	57%	55%
There were significant differences in values/ interests/ perspectives among participants.	100%	100%	100%
Average Rate of Agreement for all Statements	65%	66%	66%

Accountable Representatives

All participants were accountable to their constituents, the broader public, and the process itself.

Most participants felt that the organization they represented in the process provided them with clear direction throughout the process (77% aggregate), although

more of the IOAC members felt this way (86%) than did the Steering Committee members (63%). Most participants also felt that the process helped to ensure they were accountable to their constituency or membership (73% aggregate); however, this statement was agreed with by more Steering Committee members (87%) than IOAC members (64%). There were four responses of ‘unsure/don’t know’ to the statement “the representatives in the process were accountable to their constituencies/ members”, indicating the statement was either unclear or that participants were not aware of the relationship between other participants and their constituencies or memberships. Only half of participants felt that the public engagement process gave the general public adequate opportunity to provide feedback on the plan throughout its development, with fewer IOAC members (43%) agreeing than Steering Committee members (63%). Overall, the ‘accountable representatives’ criterion receives a medium success rating (68%) (Table 5.15).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The organization I represented provided me with clear direction throughout the process.	63%	86%	77%
The representatives in the process were accountable to their constituencies/ members.	56%	79%	73%
The process helped to ensure I was accountable to the constituency/membership I was representing.	87%	64%	73%
The public engagement process gave the general public adequate opportunity to provide feedback on the plan throughout its development.	63%	43%	50%
Average Rate of Agreement for all Statements	67%	68%	68%

Adaptable Design

Flexibility was designed into the planning process to allow for adaptation to new circumstances and creative problem solving.

Most Steering Committee members (75%) felt that the process was flexible enough to adapt to new information or circumstances, whereas only 50% of IOAC members agreed, indicating the adaptability of the process may have been different at the two tables. Overall, the ‘adaptable design’ criterion receives a medium success rating (59%) (Table 5.16).

Table 5.16. Level of Agreement for ‘Adaptable Design’ Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process was flexible enough to adapt to new information or circumstances.	75%	50%	59%

Adequate Information

The information used throughout the process was adequate for effective decision-making.

Most Steering Committee members (88%) felt that the process had adequate information for decision-making, including both traditional/ local knowledge and scientific/ technical data, whereas only 50% of IOAC members agreed, suggesting the information available or attitudes towards it’s adequacy may have been different at the two tables. Overall, the ‘adequate information’ criterion receives a medium success rating (64%) (Table 5.17).

Table 5.17. Level of Agreement for ‘Adequate Information’ Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process had adequate information for decision-making, including both traditional/ local knowledge and scientific/ technical data.	88%	50%	64%

For this criterion participants were also asked, if they thought that information was not adequate for decision-making, to identify any gaps. Participants identified the following gaps in information:

- Resource use in the region
- Traditional and local knowledge
- Provincial knowledge
- The economic contribution of marine transportation

One participant identified “provincial information” as missing from the process. Two participants noted the value of traditional and local knowledge, with one participant suggesting it should inform future planning processes and another emphasizing the importance of the knowledge held by anglers on the BC coast for whom recreational fishing is part of a way of life. One participant suggested that the PNCIMA process could have benefited from additional information on resource use in the region. Three participants felt, more specifically, that there was insufficient information on the economic contribution of the marine transportation sector to the BC and Canadian economies.

Participants provided feedback not only on specific gaps, but also on the information generation process for the PNCIMA process overall. For example, one participant suggested that the impacts of integrated oceans management on local and regional governments were not adequately assessed due to the spatial scale of analysis. Two participants described ways in which some sectors had more or less influence over decision-making than others at different stages in the process. For example, one participant noted that the First Nation perspective was absent in decision-making after the PNCIMA process was restructured in September 2011 when First Nation representatives temporarily withdrew from the process. One participant noted a lack of consensus on the information used in the process, especially in instances where some participants distrusted the information source. That participant also felt that there was insufficient information used to support references at the table to declining ocean health in the PNCIMA region. Finally, one participant indicated that their lack of expertise in the areas of marine use and ecosystems meant that they had to rely on other participants for the information they needed and were unable to determine the reliability of the information made available to them.

Reasonable Time Limits

Realistic milestones and deadlines were established and managed throughout the planning process.

Most Steering Committee members (88%) felt that there was sufficient time allotted to complete the process, whereas only 50% of IOAC members agreed. Similarly, 75% of Steering Committee Members and 64% of IOAC members felt the process had a detailed work plan(s), including a schedule with clear deadlines for deliverables. While most participants agreed that the process had deadlines (68% aggregate), far fewer participants (27% aggregate) agreed that these deadlines were adhered to throughout the process. Overall, the ‘reasonable time limits’ criterion receives a medium success rating (53%) (Table 5.18).

Table 5.18. Level of Agreement for ‘Reasonable Time Limits’ Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
There was sufficient time allotted to complete the process.	88%	50%	64%
The process had a detailed work plan(s) including a schedule with clear deadlines for deliverables.	75%	64%	68%
Deadlines were adhered to throughout the process.	25%	29%	27%
Average Rate of Agreement for all Statements	63%	48%	53%

Effective Process Management

The process was coordinated and managed effectively and in a neutral manner.

Most Steering Committee and IOAC members (73% aggregate) were satisfied with the content and structure of the meetings they attended. Most participants (77%

aggregate) also felt that there was adequate technical and administrative support throughout the process. Overall, the 'process management' criterion receives a medium success rating, on the higher end of the rating scale (75%) (Table 5.19).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I was satisfied with the content and structure of the meetings I attended.	75%	71%	73%
There was adequate technical and administrative support throughout the process.	88%	71%	77%
Average Rate of Agreement for all Statements	81%	71%	75%

Independent Facilitation

An independent, trained facilitator was used throughout the process.

Most IOAC members (79%) agreed that the presence of an independent facilitator/mediator improved process effectiveness, whereas fewer Steering Committee members (63%) agreed. Most participants (82%) felt that the independent facilitator/mediator acted in a neutral and unbiased manner. Overall, the 'independent facilitation' criterion receives a high success rating (77%) (Table 5.20).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The presence of an independent facilitator/mediator improved process effectiveness.	63%	79%	73%
The independent facilitator/mediator acted in a neutral and unbiased manner.	88%	79%	82%
Average Rate of Agreement for all Statements	75%	79%	77%

Adequate Funding

Funding mechanisms were adequate for the planning process.

Only one- half of the Steering Committee members (50%) and 42% of IOAC members felt that the process had adequate funding. Overall, the 'adequate funding' criterion receives a low success rating (45%) (Table 5.21).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process had adequate funding and resources.	50%	42%	45%

For this criterion participants were also asked, if funding and resources were not adequate throughout the process, to identify the major gaps. Participants indicated a lack of resources and funds to support the following:

- Key components of the work plan (e.g., working groups)
- Engagement
- Travel
- Provincial participation
- Participant per diem/ honoraria

Beyond specific gaps in funding and resources, participants also provided general feedback about the funding and resources available to the process. As reflected in the overall success rating for this criterion, several participants indicated that funding was a contentious issue in the PNCIMA process, with one participant suggesting that this was one of the factors that contributed to what they perceived to be a failed planning process. Several participants expressed negative attitudes towards the public-private funding model used in the first phase of the PNCIMA process, but for different reasons. Participants provided the following reasons for their lack of support for the private-public funding model:

- The government should have provided sufficient funding to a process they initiated
- Past projects funded by the private sponsor, the Gordon and Betty Moore Foundation (GBMF), and the agency responsible for administering the GBMF grant, Tides Canada, suggested that the involvement of these foundations would bias the PNCIMA process against resource development
- Accepting funding from a US foundation for a Canadian initiative is against the principles of sovereignty

Other participants focused on changes to the PNCIMA process and outcomes resulting from the termination of the public-private funding agreement in September 2011. One participant noted that key components of the work plan were dropped. As a result of changes to the process, other participants described how First Nations and the BC government pulled out of the PNCIMA process at that time to initiate the MaPP process relying on the GBMF funding. One participant expressed their disappointment with the loss of these participants from the PNCIMA process. Another participant indicated that they had declined to participate in the MaPP process due to its acceptance of the GBMF funding rejected by the PNCIMA process.

5.3.3. Outcome Criteria

The following section reports results for outcome criteria, indicating participant perceptions of the overall success of the PNCIMA process.

Reached Agreement

The process developed a plan(s) accepted by participants.

While most Steering Committee members (75%) agreed that the PNCIMA plan addressed the needs and concerns of the organization they represented, only 21% of IOAC members agreed. This is a significant difference in perceptions of the plan between the two committees, suggesting the process could have more effectively incorporated the recommendations of the IOAC into the plan. It is important to note, however, that Steering Committee members may be basing this feedback on a version of the PNCIMA plan not yet seen by IOAC members at the time of survey completion. Therefore, the ‘reached agreement’ criterion receives a low success rating (41%) (Table 5.22).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The resulting plan addressed the needs and concerns of the organization I represented.	75%	21%	41%

For this criterion, participants were also asked to describe any needs or concerns that the plan did not address. According to participants, needs, and concerns not adequately addressed by the PNCIMA draft plan include:

- The economic value of marine transportation
- Local and regional government concerns
- Integration of environmental, social and economic objectives
- Potential for renewable energy development
- Local spill response
- Fisheries (i.e., the relationship between Aboriginal, commercial, and recreational)
- Sufficient detail and spatial direction

Several participants identified specific needs or concerns not adequately addressed by the plan, with the needs or concerns of local government and marine transportation being the two sectors referenced the most by participants. For example, one participant indicated that local and regional government impacts were not identified

or assessed through the process. Another participant identified specific examples of local and regional government issues left unresolved, including local government jurisdiction, coastal community access to marine resources, project licensing prior to local government approval, and oil spill response at light stations. Four participants noted that the economic value of marine transportation was not adequately assessed through the process. One Steering Committee member suggested that in the future, an independent specialist should be engaged to provide expertise in this area.

Fisheries was another sector identified as not being adequately addressed by the plan. Specifically, one participant suggested that the relationship between Aboriginal, commercial, and recreational fisheries was not addressed. Another participant added that the process built expectations that allocation issues would be addressed, even though these issues were outside the scope of the process.

Other participants provided more general comments on the PNCIMA draft plan. For example, one participant commented that, overall, "the [PNCIMA] plan is a high level strategic plan and lacks spatial direction". Another participant suggested that the plan was not able to integrate environmental, social, and economic objectives, resulting in a one-sided outcome that benefited some sectors more than others. Another participant suggested that the quality of the agreement was reduced overall because "the subsequent work after DFO left the public private funding partnership was inadequate".

Finally, three IOAC members indicated that they were limited in their ability to comment on the plan because they had only seen the draft version. Comments of this nature were as follows:

- "I have not heard or seen anything of PNCIMA over the last year and thought it was still shelved. If it has been implemented I would have to review it before I could comment further".
- "This [the final PNCIMA plan] will come out in the next few months and years so let's see what our future is in Marine planning and their implementation!"
- "The resulting plan was never completed".

Reduced Conflict

The process reduced conflict among stakeholder groups.

A minority of Steering Committee members (43%) agreed that as a result of the process, conflict among stakeholders decreased. Fewer of IOAC members (21%) agreed that conflict decreased. Therefore, the 'reduced conflict' criterion receives a low success rating (29%) (Table 5.23).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
As a result of the process, conflict among stakeholders decreased.	43%	21%	29%

Participants were also asked to identify any remaining conflicts that should be addressed moving forward. Sources of conflict identified by participants include:

- Lobbying efforts by certain sectors
- Level of sectoral representation
- Irreconcilable conservation vs. resource development values
- Lack of a common 'problem' driving the process
- Restructuring of the process
- Delay in plan endorsement
- Access and allocation of the fisheries resource
- Lack of plan relevance to certain sectors

Some sources of conflict identified by participants were present at the beginning of the process, while others emerged after the restructuring of the process in September 2011. Two participants noted dissatisfaction with the process by which committee seats were allocated among sectors, indicating that the level of representation did not fully reflect the relative importance of each sector. One participant felt that there was a lack of a clear problem driving the process. One participant noted that access and allocation of the fisheries resource was a source of conflict, while another felt that irreconcilable differences in values among participants created challenges for the process from the beginning.

Other stakeholders described conflict arising from the restructuring of the PNCIMA process in September 2011. One source of conflict noted by several participants was the lobbying efforts of certain sectors, which were perceived as an

attempt to bypass the process using the “back door”. The government response to terminate the funding agreement and unilaterally restructure the process was another source of conflict among and within sectors. The change in the planning process and content resulted in increased resentment with the federal government, according to another participant.

Achieved Integration

The plan successfully incorporates diverse values/ interests/ perspectives.

The majority of participants agreed that the PNCIMA plan successfully incorporates diverse values, interests, or perspectives. Therefore, the ‘achieved integration’ criterion receives a medium success rating (64%) (Table 5.24).

Table 5.24. Level of Agreement for ‘Integration’ Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The plan successfully incorporates diverse values/ interests/ perspectives.	75%	57%	64%

Produced Creative Solutions

The process resulted in creative and innovative ideas and actions.

Results from the survey statements for ‘produced creative solutions’ indicate this criterion was moderately met by the process. 64% of participants agreed that the process produced creative ideas that will contribute to improving oceans management in the marine region and elsewhere. Overall, the ‘produced creative solutions’ criterion receives a medium success rating (53%) (Table 5.25).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process produced creative ideas that will contribute to improving oceans management in the marine region and elsewhere.	75%	57%	64%

Built Human Capital

Participants gained knowledge, understanding, and skills by participating in the process.

As a result of the process, 82% of Steering Committee and 79% of IOAC members agree that they now have a better understanding of the challenges and opportunities for oceans management and planning in the marine region. While most Steering Committee members (75%) agreed that they gained new or improved skills as a result of the process that will be useful in future ocean management and planning, fewer IOAC members agreed (57%). This lower level of agreement from the IOAC may indicate that its members either do not feel they gained new or improved skills from the PNCIMA process or that they do not believe they will be involved in ocean management and planning beyond the PNCIMA process. Overall, the 'built human capital' criterion receives a medium success rating (73%) (Table 5.26).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
As a result of the process, I now have a better understanding of the challenges and opportunities for oceans management and planning in the marine region.	88%	79%	82%
As a result of the process, I gained new or improved skills that will be useful in future ocean management and planning.	75%	57%	64%
Average Rate of Agreement for all Statements	81%	68%	73%

Built Social Capital

The process resulted in new personal and working relationships among participants that have the potential to support collaborative activities outside of the process.

Results from the survey statements for 'built social capital' indicate this criterion was met by the process. While most Steering Committee members (75%) agreed that relationships among participants improved over the course of the process, fewer IOAC members (57%) agreed. However, almost all IOAC members (93%) agreed that they now have a better understanding of the interests/values/perspectives of other participants as a result of the process, while slightly fewer Steering Committee members (88%) agreed. Given the significant differences in interests/ values/ perspectives among participants, IOAC members' perceived understanding of other party's interests is a valuable outcome.

Another point of interest with respect to the 'built social capital' criterion is that despite unresolved conflict, most Steering Committee and IOAC members agreed that they have better working relationships with other parties involved in oceans management as a result of the process (82% aggregate) and that the contacts they acquired through their participation in the process would be useful to them (77% aggregate). Three participants indicated 'unsure/don't know' as to whether collaborative

activities (e.g., new partnerships or organizations) emerged outside the process as a result of relationships built through the process, while the aggregate level of agreement for the two committees was 68%. Overall, the 'built social capital' criterion receives a high success rating (76%) (Table 5.27).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The relationships among participants improved over the course of the process.	75%	57%	64%
As a result of the process, I now have a better understanding of the interests/values/perspectives of other participants.	88%	93%	91%
As a result of the process, I have better working relationships with other parties involved in oceans management.	88%	79%	82%
Contacts I acquired through my participation in the process are useful to me and/or my organization.	88%	71%	77%
I am aware of collaborative activities (e.g., new partnerships or organizations) outside of the process that emerged as a result of relationships built through the process.	63%	71%	68%
Average Rate of Agreement for all Statements	80%	74%	76%

Improved Information Base

The process built an improved information base that will support improved oceans management.

All Steering Committee members (100%) agreed that the process built an improved information base for the marine region (e.g., maps, inventories), including a better understanding of ecosystem dynamics, whereas just over half of IOAC members (57%) agreed with this statement. Half of the Steering Committee members (50%) and 64% of the IOAC members felt that the information they acquired through their

participation in the process is useful to them or their organization. Overall, the ‘improved information base’ criterion receives a medium success rating (67%) (Table 5.28).

Table 5.28. Level of Agreement for ‘Improved Information Base’ Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process built an improved information base for the marine region (e.g., maps, inventories), including a better understanding of ecosystem dynamics.	100%	57%	73%
Information acquired through my participation in the process is useful to me and/or my organization.	50%	64%	59%
I have used information generated through the process for purposes outside of the process.	63%	71%	68%
Average Rate of Agreement for all Statements	71%	64%	67%

Established a Collaborative Governance Arrangement

The process resulted in a lasting collaborative governance arrangement that will improve oceans management in the planning region.

Half of Steering Committee members (50%) agreed that the process resulted in a lasting collaborative governance structure that will improve decision-making in the marine region and only 7% of IOAC members agreed (the lowest level of agreement with any survey statement). Therefore, the ‘established a collaborative governance arrangement’ criterion receives a low success rating (23%), which is the lowest rating of all the best practice criteria (Table 5.29).

Table 5.29. Level of Agreement for 'Established a Collaborative Governance Arrangement' Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process resulted in a lasting collaborative governance structure that will improve decision-making in the marine region.	50%	7%	23%

Met the Public Interest

The outcomes are regarded as just and serve the common good or public interest, not just those of participants in the process.

The majority of Steering Committee members (63%) believed that the outcome of the process served the common good or public interest, whereas fewer (36%) of IOAC members agreed. Overall, the 'met the public interest' criterion receives a low success rating (45%) (Table 5.30).

Table 5.30. Level of Agreement for 'Met the Public Interest' Survey Statements			
Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I believe the outcome of the process served the common good or public interest.	63%	36%	45%
Average Rate of Agreement for all Statements	63%	36%	45%

Perceived as Successful

The process and outcomes are perceived as successful by all participants.

Half of Steering Committee members (50%) and fewer IOAC members (36%) agreed that the process was a success, resulting in an aggregate level of agreement of 39%. Slightly fewer participants (35% aggregate) agreed that the process met their expectations. Despite this perceived lack of success and failure to meet participant expectations, slightly more participants (52% aggregate) agreed that the process was a positive experience overall, suggesting that benefits have arisen from the process regardless of its outcomes (e.g., the social capital built).

Interestingly, while only half of Steering Committee members (50%) agreed that the process was a success, a much larger percentage of Steering Committee members (75%) would get involved in a process similar to the PNCIMA process again. In contrast, the percentage of IOAC members that would get involved in a process similar to the PNCIMA process again (43%) was similar to the percentage that felt it was a success (36%). Significantly, 67% of the Steering Committee members and half of the IOAC members (50%) agreed that the plan will improve oceans management in the marine region if implemented. This low level of aggregate agreement may be related to the yet lower level of aggregate agreement (43%) with the statement: “the plan has no major weaknesses or omissions”. Overall, the ‘perceived as successful’ criterion receives a low success rating (Table 5.31).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
The process was a success.	50%	36%	39%
The process was a positive experience.	63%	50%	52%
Knowing what I know now, I would get involved in a process similar to this process again.	75%	43%	52%
The process and plan met my expectations.	44%	29%	35%
If implemented, the plan will improve oceans management in the marine region.	67%	50%	57%
The plan has no major weaknesses or omissions.	44%	14%	26%
Average Rate of Agreement for all Statements	57%	37%	43%

If participants felt the process was not a success, they were also asked to identify the contributing factors. These factors include:

- Low government commitment to implementation
- Lack of space for ongoing collaborative work (e.g., on MPA network planning)
- Unilateral restructuring of the process midway through
- Failure to dissuade lobbying
- Inadequate meeting minutes (i.e., not indicating where consensus was not achieved)
- Lack of transparency (i.e., limited feedback from the Steering Committee)
- Lack of trust
- Lack of collaboration
- Inadequate integration of economic objectives
- Inadequate assessment of the economic value of marine transportation
- Did not adequately assess the international context of activities in Canada's EEZ
- Narrow interests of participants
- Irreconcilable values
- Delay in plan finalization and endorsement
- Key gaps in plan content, including ocean protection, fisheries, and marine transportation
- Unclear Terms of Reference created unrealistic expectations
- Poor stakeholder engagement
- Low public awareness

Commitment to Implementation, Monitoring, and Reporting

The process and marine plan include clear commitments to implementation, monitoring, and reporting.

Just over half of participants (55% aggregate) agreed that they felt strongly committed to plan implementation. Fewer participants (36% aggregate) agreed that other participants are strongly committed to plan implementation. The perceived low commitment to plan implementation may reflect a lack of clear direction on plan implementation: only 35% of Steering Committee members and even fewer IOAC members (7%) agreed that the plan has clear and measurable objectives with associated strategies indicating who will do what by when, resulting in a low aggregate agreement of 14%. There was also low agreement (33%) that the process produced a clear and effective strategy for plan performance monitoring, evaluation, and reporting.

Overall, the ‘commitment to implementation, monitoring, and reporting’ criterion receives a low success rating (33%) (Table 5.32).

Survey Statements	Level of Agreement		
	Steering Committee	IOAC	Aggregate
I feel strongly committed to plan implementation.	63%	50%	55%
Other participants are strongly committed to plan implementation.	50%	29%	36%
The plan has clear and measurable objectives with associated strategies indicating who will do what by when.	25%	7%	14%
The process produced a clear and effective strategy for plan performance monitoring, evaluation, and reporting.	38%	21%	27%
Average Rate of Agreement for all Statements	44%	27%	33%

5.3.4. Overall Performance

Overall Rating

On a scale from 1 to 10 (1 being very poor and 10 being excellent), the average rating of the PNCIMA process was 5.5 and the average rating for the PNCIMA plan was 5.2 (Table 5.33).

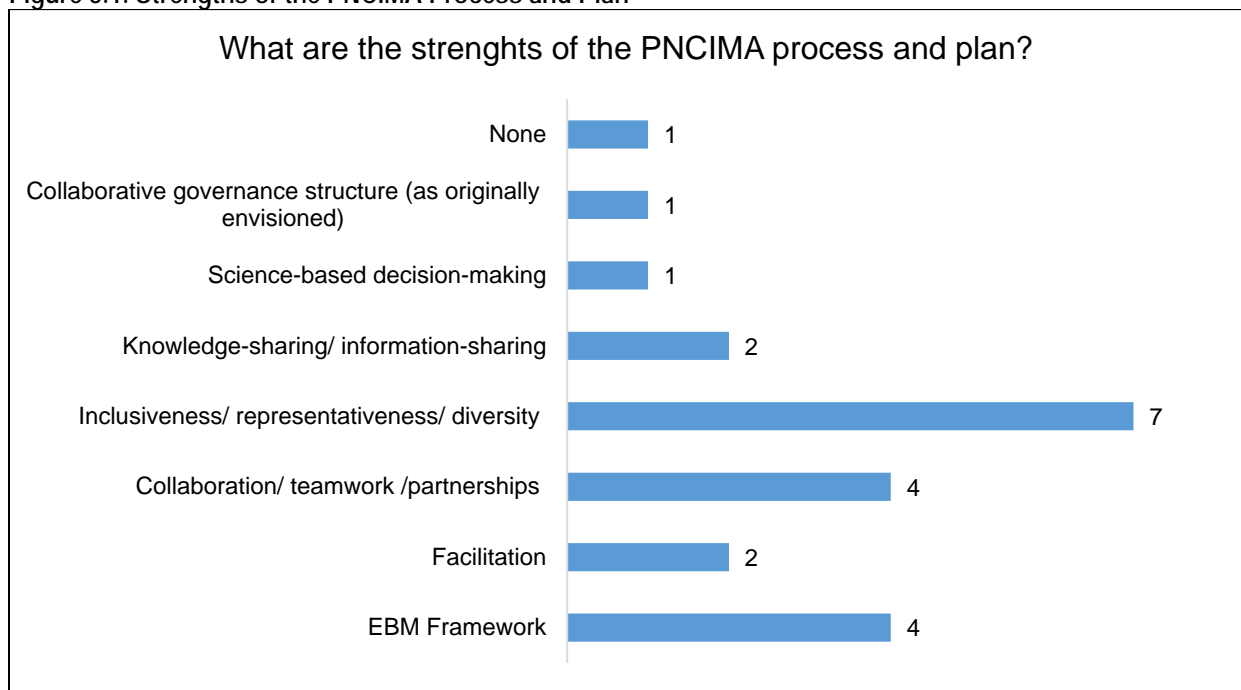
	PNCIMA Process	PNCIMA Plan
Mean	5.5	5.2
Median	5.5	6
Mode	7	6

Strengths

Strengths of the process identified by respondents are summarized in Figure 5.1. One Steering Committee member praised the process overall, describing it as “a bold and forward looking exercise to overcome individual interests and create a broad consensus”. In contrast, one IOAC member felt that the process had no strengths. Four participants referenced the EMB Framework as either an important outcome or the most important outcome of the process, indicating that it reflects consensus among participants, provides a clear definition of EMB, and represents a commitment to EBM in the marine region. One IOAC member provided a description of how the EMB Framework was developed during the first phase of the plan development process:

[The] EBM Framework was the greatest accomplishment. When there was adequate funding and the full and effective participation of all sectors, using a consensus based decision making framework, we developed an EBM framework that was world class. During that same initial period, there were working groups that worked on specific issues and brought them back to the larger group for discussion on key topics and conflicts in order to collectively problem solve and build relationships between sectors. It was a good period of time and the process was working.

Figure 5.1. Strengths of the PNCIMA Process and Plan



Weaknesses

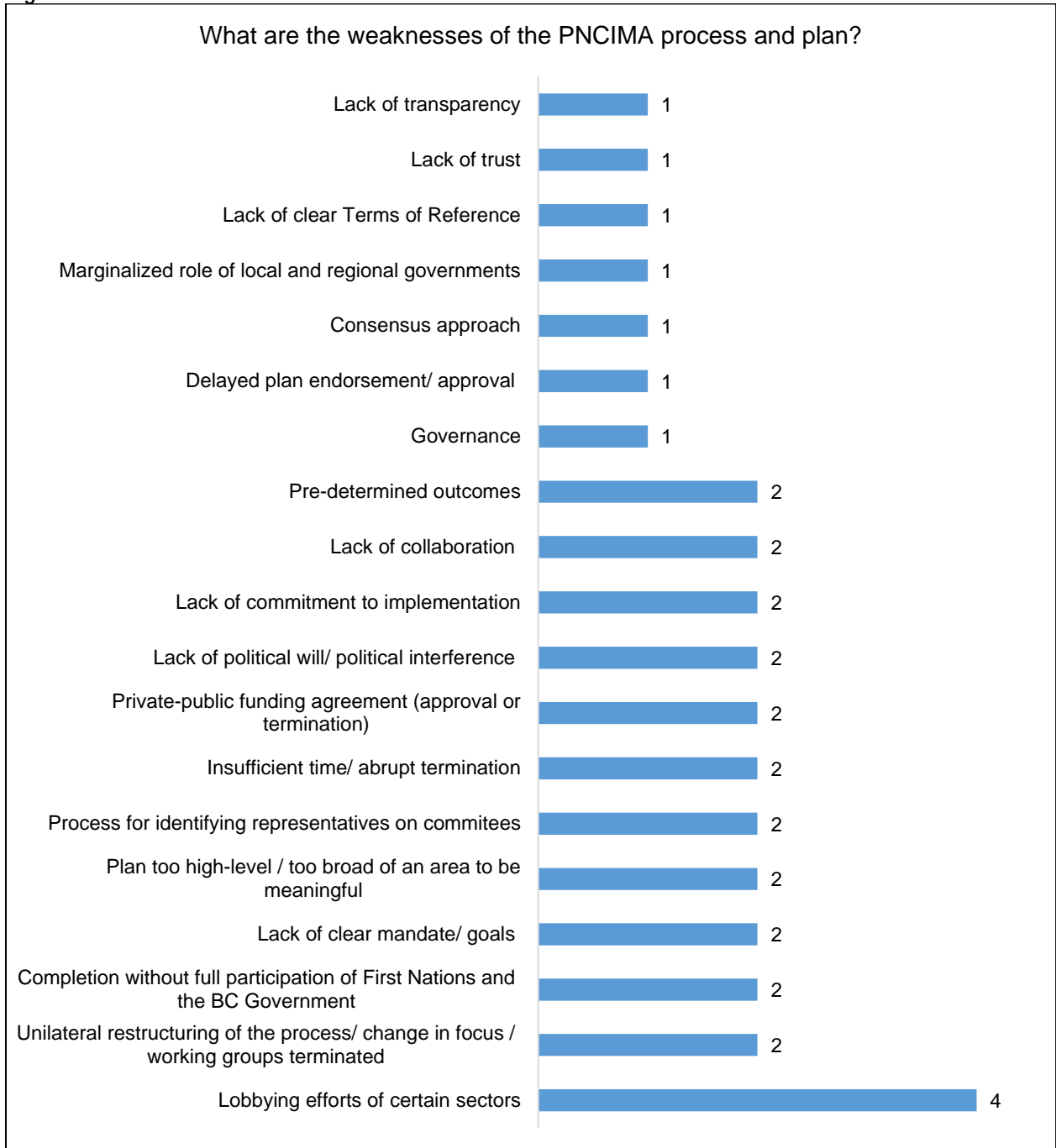
Deficiencies in the process identified by respondents are summarized in Figure 5.2. The majority of feedback received from participants for this question focused on the weaknesses of the PNCIMA process, rather than the resulting plan. One participant felt that the process was impaired from the beginning, given a lack of a clear mandate or goals to guide it. Two participants noted challenges arising from the lack of a clear process for appointing representatives to the Steering Committee and IOAC. For example, one participant felt that the involvement of local government at the IOAC level marginalized local and regional government fiduciary responsibilities. Similarly, one industry participant felt that their sector was only invited to provide legitimacy to a process that did not address their needs or concerns. Another participant felt that there was insufficient time allotted for the process.

Other weaknesses identified by participants are related to the restructuring of the process in September 2011. Several participants felt that the main weakness of the process was its failure to dissuade certain sectors from seeking changes to the process through lobbying. Similarly, one participant felt the process was successful until it was restructured and that the previous federal government's intervention in the process to restructure it was a reflection of its preferential treatment of industry and a lack of political support for the process overall. In contrast, one industry representative felt that the involvement of private funders had influenced the process outcomes from the start and that the restructuring of the process was done in an effort to restore balance to the process. Two participants expressed disappointment that, as a result of process restructuring, First Nations and the BC government left the table. A lack of commitment to implement the plan by the previous government was also noted by two participants as a weakness of the process. Finally, delays in the official endorsement of the plan enhanced differences among some stakeholders, according to one participant.

With respect to the PNCIMA draft plan, a couple of weaknesses were noted. One participant felt that the plan covers too broad of a geographic area and is so high-level "that it doesn't mean much". Another participant felt the plan includes unrealistic goals and insufficient detail to guide effective and collaborative management of the region. Despite these perceived weaknesses, one Steering Committee member noted that "my

comment is not that there are weaknesses, but that there are realistic limitations to achieve broad consensus with a large number of Stakeholders and FN [First Nations] with many intersecting interests”.

Figure 5.2. Weaknesses of the PNCIMA Process and Plan



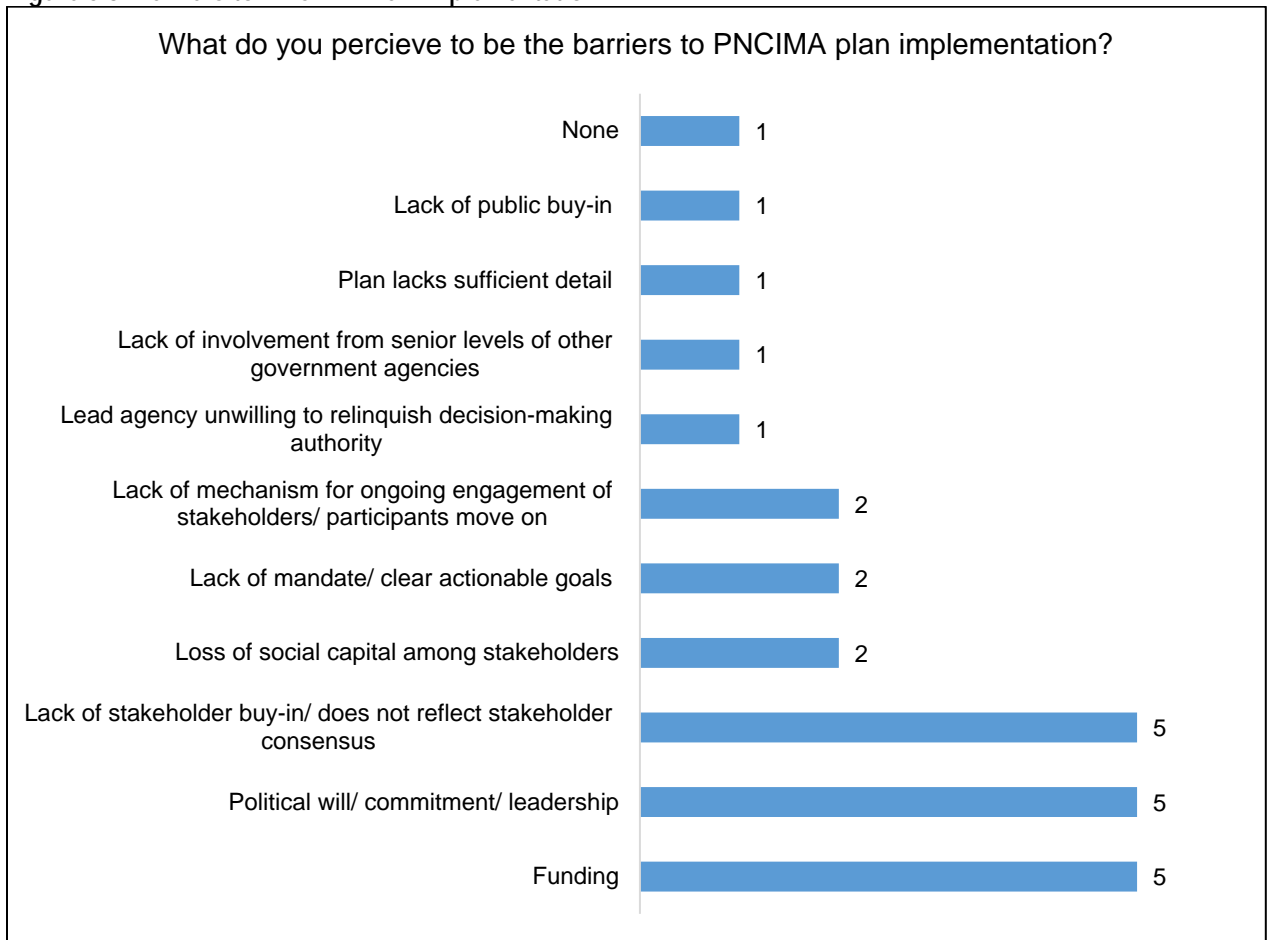
Barriers to Implementation

What do you perceive to be the greatest barriers for implementation of the PNCIMA plan?

Barriers to implementation identified by respondents are summarized in Figure 5.3. A lack of funding was cited by several participants as a barrier to successful implementation of the PNCIMA plan. Lack of support for implementation from senior levels of government, stakeholders, and the general public, was also identified as a barrier. With respect to a lack of political will at the senior government level, two contributing factors identified by participants are the lack of incentive to encourage the participation of other government agencies and an unwillingness of the lead agency to relinquish decision-making authority to enable collaboration. One participant noted that while the federal government appears committed to MPA network implementation, this is not yet being done in the context of the EBM framework developed through the PNCIMA process.

With respect to a lack of stakeholder buy-in, participants noted several contributing factors. The restructuring of the process enhanced differences among stakeholders and eroded the government-stakeholder relationship. Additionally, the resulting plan does not reflect consensus agreement among stakeholders. One participant noted lack of local and regional government support specifically as a barrier. Two participants noted that while ongoing engagement of and outreach to stakeholders is desirable, no mechanism currently exist to achieve this. As the original participants move on, it will be challenging to maintain a sense of commitment to implementation. In contrast, one participant perceived there to be no barriers to implementation, given that “[the plan] is high level and should be generally supportive of other planning and activities”.

Figure 5.3. Barriers to PNCIMA Plan Implementation



5.3.5. Comparison of Results with the Marine Planning Partnership Process

The MaPP process was initiated by First Nations and the Government of BC in November 2011 in response to the restructuring of the PNCIMA process. The majority of PNCIMA participants also participated in the MaPP process: 56% of Steering Committee members and 57% of IOAC members participated in both processes (Figure 5.4). Of the individuals who participated in both processes, 54% indicated that the MaPP process was better than the PNCIMA process, while 15% indicated that the MaPP process was worse. However, 31% of participants indicated that the two processes cannot be compared and 15% indicated that they were unsure of the relative performance of the two processes (Figure 5.5).

Figure 5.4. Participation in the MaPP and PNCIMA Processes

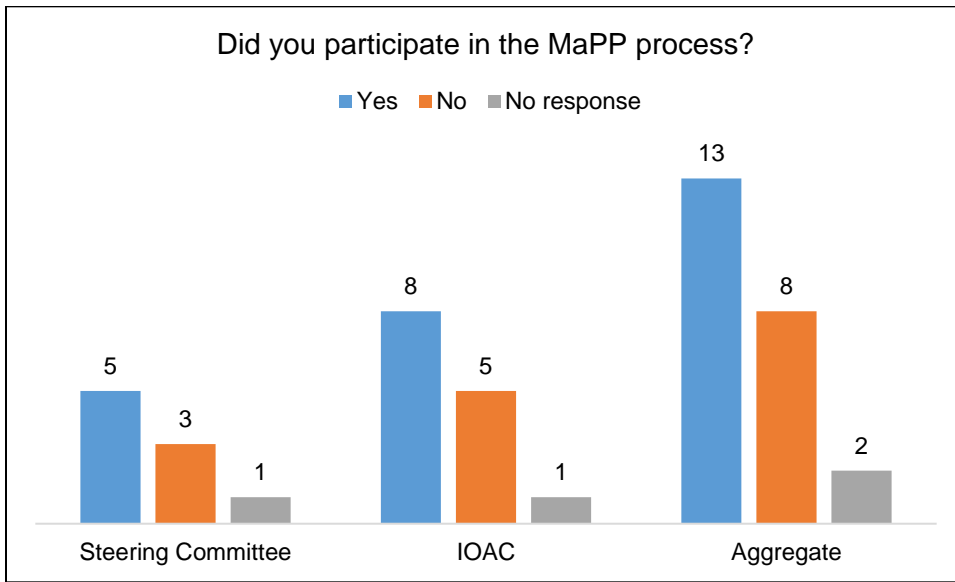
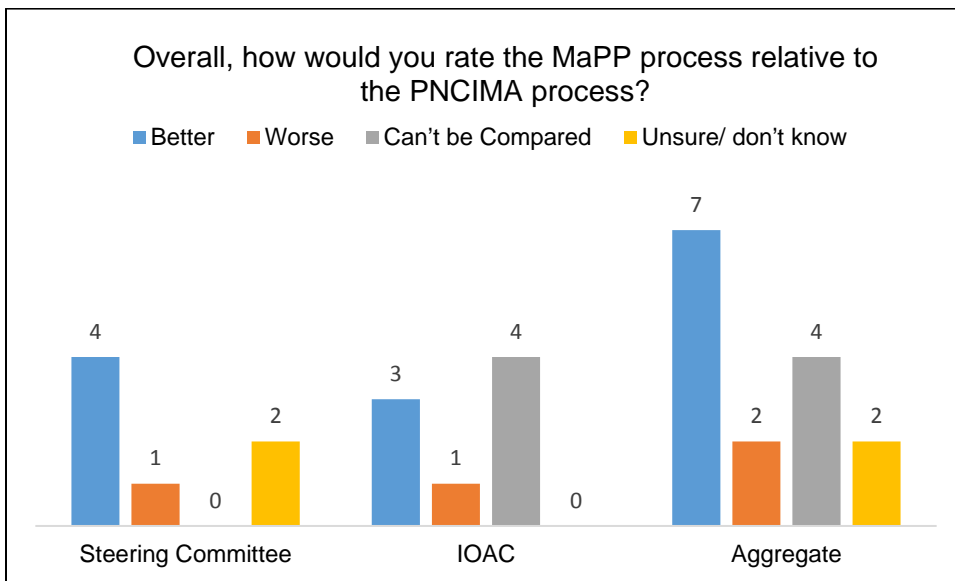


Figure 5.5. MaPP and PNCIMA Relative Performance



Respondents' views about the strengths and weaknesses of the MaPP process relative to the PNCIMA process are summarized in Figure 5.6 and 5.7. The key perceived strength of MaPP relative to PNCIMA is that it is more collaborative, especially with regard to First Nations while the key weakness is that the federal government is not a participant in the MaPP process.

Figure 5.6. Relative Strengths of the MaPP Process to the PNCIMA Process

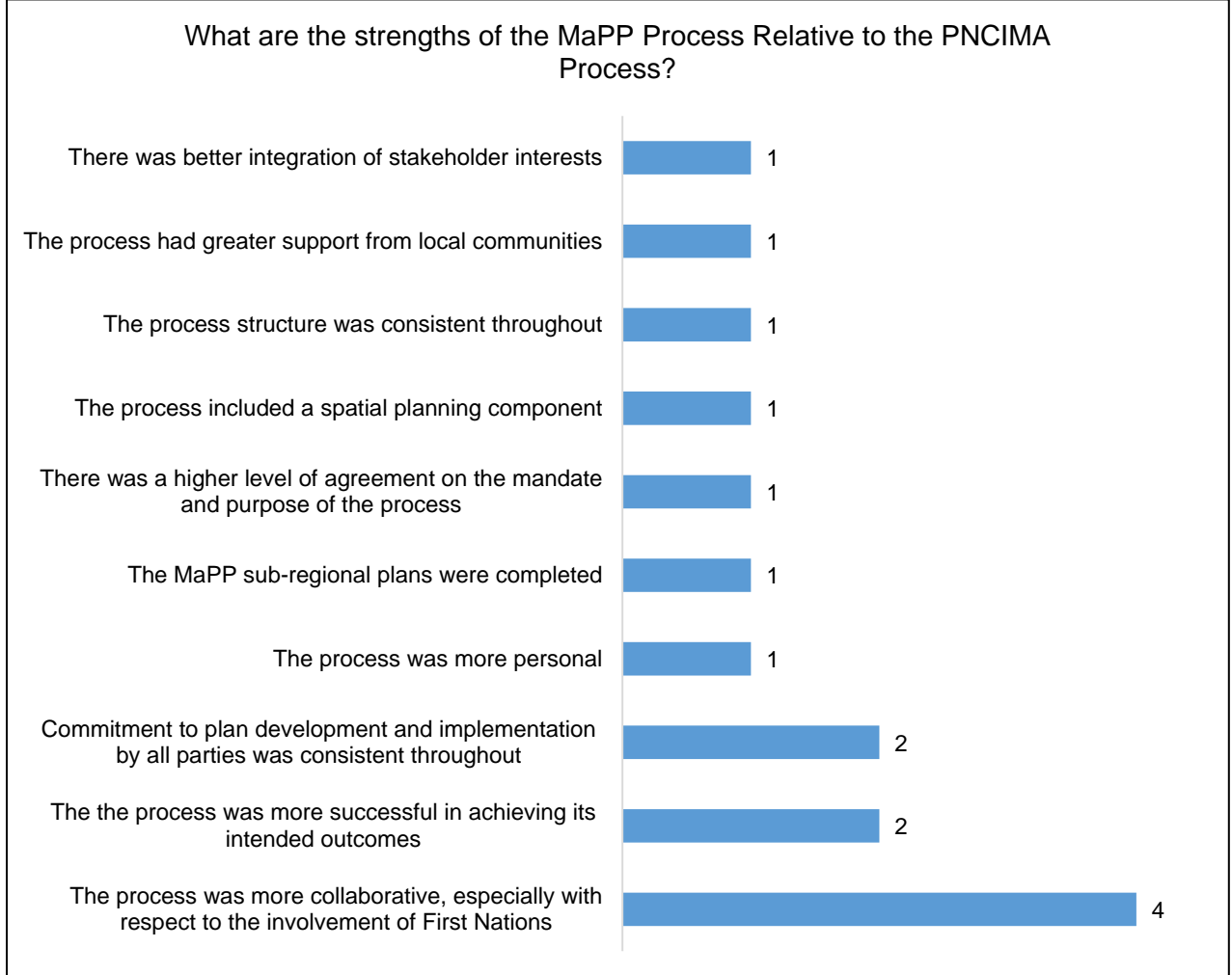
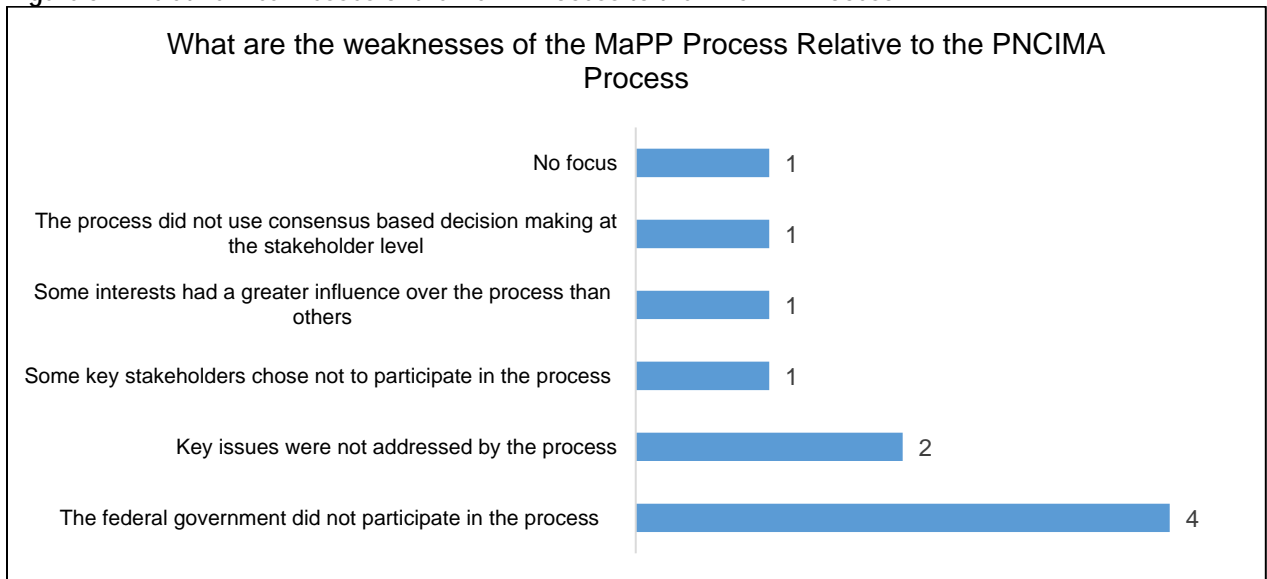


Figure 5.7. Relative Weaknesses of the MaPP Process to the PNCIMA Process



Given that the MaPP and PNCIMA Initiatives cover the same marine region and involve similar stakeholder groups, BC presents a unique opportunity to compare strengths and weaknesses of two large-scale marine planning processes. There are several key differences between the MaPP and PNCIMA processes. First, the federal government did not formally participate in the MaPP process, which prevented the province from endorsing outcomes it considered to be in the jurisdiction and mandate of the federal government (MaPP, 2017a). As a result of differences in jurisdictional authority, the PNCMA and MaPP plans deal with slightly different issues. Second, planning occurred at different scales, with the PNCIMA process producing a plan for the entire marine region and the MaPP process producing four sub-regional plans and a Regional Action Framework to coordinate those plans. To support sub-regional planning, the MaPP process involved a multi-tiered governance structure, including one regional and four sub-regional Marine Advisory Committees (MACs). Third, with respect to stakeholder engagement, the PNCIMA process began with a consensus approach and shifted to a consultative approach after it was restructured, whereas consensus-based decision-making at the stakeholder level was never included in the design of the MaPP process (MaPP, 2017b). Finally, the nature of the plans resulting from these two marine planning processes is also different. Unlike the MaPP sub-regional plans, the PNCIMA plan is not a true marine spatial plan. The PNCIMA plan is a high level, strategic plan that does not provide management direction at the operational/ local level or ocean

zoning like the MaPP sub-regional plans do. The MaPP Initiative is described greater detail in Section 4.7.

Participants described some relative strengths and weaknesses of the two marine planning processes. Several participants noted that as a result of the MaPP process's limited jurisdictional authority, discussion on federally-managed activities and uses, such as shipping and fisheries, was restricted and the opportunity to resolve conflict among sectors was reduced. On the other hand, several participants perceived First Nations to have had a greater influence on the MaPP process, which one participant considered "a true partnership". Finally, even though some participants felt that stakeholder interests were better accommodated through the MaPP process than the PNCIMA process, two felt that the MaPP process was not as transparent or open to stakeholders and did not have a clear means to address stakeholder concerns in the MaPP process

Given their differences in process and outcomes, it is difficult to assess the relative performance of the MaPP and PNCIMA processes. Indeed, 31% of participants that took part in both processes indicated in the participant survey that the two processes cannot be compared. For the purpose of implementation, these two marine planning processes should be viewed as complementary (MaPP, 2017a; PNCIMA Initiative, 2017c). As the PNCIMA plan states, "it aims to enhance and support existing decision-making processes by linking sector planning and management to an overarching EBM framework" (PNCIMA Initiative, 2017b, p. 6). In other words, the PNCIMA initiative is an umbrella initiative that provides an overarching EBM framework to guide other marine planning and management activities, such as the MaPP Initiative (PNCIMA Initiative, 2017b).

5.3.6. Comparison of Results with Land and Resource Management Planning

As described in Section 5.1., the methodology used in LRMP evaluations was also used in the PNCIMA case study. Useful insights can be drawn by comparing the performance of collaborative planning processes used for PNCIMA and LRMPs. A comparison of performance evaluation results (Table 5.35) shows that the PNCIMA process underperformed relative to the LRMP processes in several ways. First, most

LRMP processes were able to reach consensus or partial consensus agreement, whereas the PNCIMA process achieved endorsement from the Steering Committee but was not formally approved by all stakeholders because the process changed from a collaborative to consultative process. Second, across LRMP processes, all criteria received levels of agreement of 50% or higher (i.e., medium and/or high success ratings), whereas nine of 26 criteria received levels of agreement lower than 50% (i.e., a low success rating) for the PNCIMA process. Second, across LRMPs processes, seven criteria achieved 75% agreement or higher (i.e., a high success rating), whereas only three criteria achieved 75% agreement or higher for the PNCIMA process. Additionally, while there was a low degree of variation in the level of agreement to process and outcome criteria between the Sea-to-Sky LRMP, the four other two-tier LRMPs, and the LRMPs in Frame et al. (2004), there was high variation in the level of agreement between these LRMP processes and the PNCIMA process for some criteria.

Table 5.34. Performance of LRMP Processes Compared with the PNCIMA Process

Process Criterion	1-Tier LRMPs	2-Tier LRMPs	PNCIMA (Aggregate) (Steering Cttee) (IOAC)		
Shared Purpose and incentives	82%	86%	87%	97%	80%
Inclusive Representation Participation	67%	67%	57%	69%	50%
Voluntary Participation and Commitment	73%	73%	N/A		
Self-Design	69%	61%	48%	39%	54%
Clear Ground Rules	71%	71%	72%	77%	70%
Equal Balanced Opportunity and Resources	56%	61%	52%	62%	46%
Principled Negotiation and Respect	65%	65%	66%	65%	66%
Accountable Representatives	65%	66%	68%	67%	68%
Flexible, Adaptive, Creative Adaptable Design	73%	70%	59%	75%	50%
High Quality Adequate Information	63%	63%	64%	88%	50%
Reasonable Time Limits	58%	64%	53%	63%	48%
Effective Process Management	69%	71%	75%	81%	71%
Independent Facilitation	76%	76%	77%	75%	79%
Total Average	68%	68%	65%	72%	61%

Outcome Criterion	1-Tier LRMPs	2-Tier LRMPs	PNCIMA (Aggregate) (Steering Cttee) (IOAC)		
Reached* Agreement	62%	53%	41%	75%	21%
Reduced Conflict	55%	56%	29%	43%	21%
Superior to Other Methods	64%	71%	N/A		
Innovation and Produced Creative Solutions	73%	80%	64%	75%	57%
Knowledge, Understanding, and Skills Built Human Capital	90%	91%	73%	81%	68%
Relationship and Built Social Capital	83%	90%	76%	80%	74%
Improved the Information Base	77%	76%	67%	71%	64%
Second-Order Effects	66%	55%	N/A		
Met the Public Interest	69%	67%	45%	63%	36%
Understanding and support of CP	80%	88%	N/A		
First Nations Participation	N/A	82%	N/A		
Perceived as Successful	63%	60%	43%	57%	37%
Demonstrated Commitment to Implementation, Monitoring, and Reporting	60%	50%	33%	44%	27%
Average	71%	72%	52%	65%	45%

*Criteria used to evaluate LRMP processes differ from those used to evaluate the PNCIMA process. Differences are indicated in red in this table.

5.3.7. Improving the Process

Participants identified changes that could have been made to the PNCIMA process and plan to make them more effective. According to participants, the following improvements could have been made:

- Address the concerns of certain industry sectors through the process to discourage lobbying outside of the process
- Strengthen the commitment (including funding) to plan implementation at all levels of government
- Revising the collaborative governance approach to engage First Nations and local governments in decision-making at the government-to-government level
- Addressing the concerns of First Nations and the BC government through the process to discourage these parties from leaving and initiating a separate process
- Developing a more representative governance structure, especially at the Steering Committee level

- Fully integrating environmental, social, and economic values and objectives (e.g., rather than dealing with human use values and ecological values separately)
- Reducing power imbalances among sectors
- Clearly identifying the problem driving the process
- Providing more comprehensive meeting minutes
- Maintaining the original objectives, process, and timelines
- Planning for a more focused geographic area (i.e., at the sub-regional level)
- Increasing public engagement and awareness
- Revising the IOAC Terms of Reference to clearly delineate authorities and define process deliverables
- None

5.3.8. Lessons Learned

Participants made the following recommendations for future processes based on their experience with PNCIMA:

- Hold more frequent meetings
- Invest adequate resources and funding to support meaningful participation, including working groups on key issues
- Invest adequate funding for implementation, adaptation, and ongoing stakeholder engagement
- Maintain a stable governance system
- Understand and address power imbalances among participants
- Seek public involvement and buy-in
- Be prepared to invest heavily in developing relationships
- Ensure all the relevant parties are represented and compelled to participate
- Be patient with the pace of achievements
- Ensure there is a clear mandate
- Ensure all the relevant parties are represented
- Be inclusive of all sectoral interests and potential contributions
- Encourage adherence to commitments and joint decision-making
- Allow sufficient flexibility to adjust timelines to ensure there is buy-in from all levels, including revisiting certain decisions
- Clearly state ministerial authority for ultimate decision-making from the outset
- Seek local and regional government participation at the Steering Committee level
- Integrate the planning process into other related planning processes
- Develop a Terms of Reference that clearly delineates authority
- Clearly define process purpose, goals, and action items with sufficient detail
- Integrate environmental, social, and economic values
- Ensure greater stakeholder engagement

Chapter 6. Conclusions and Recommendations

6.1. Discussion

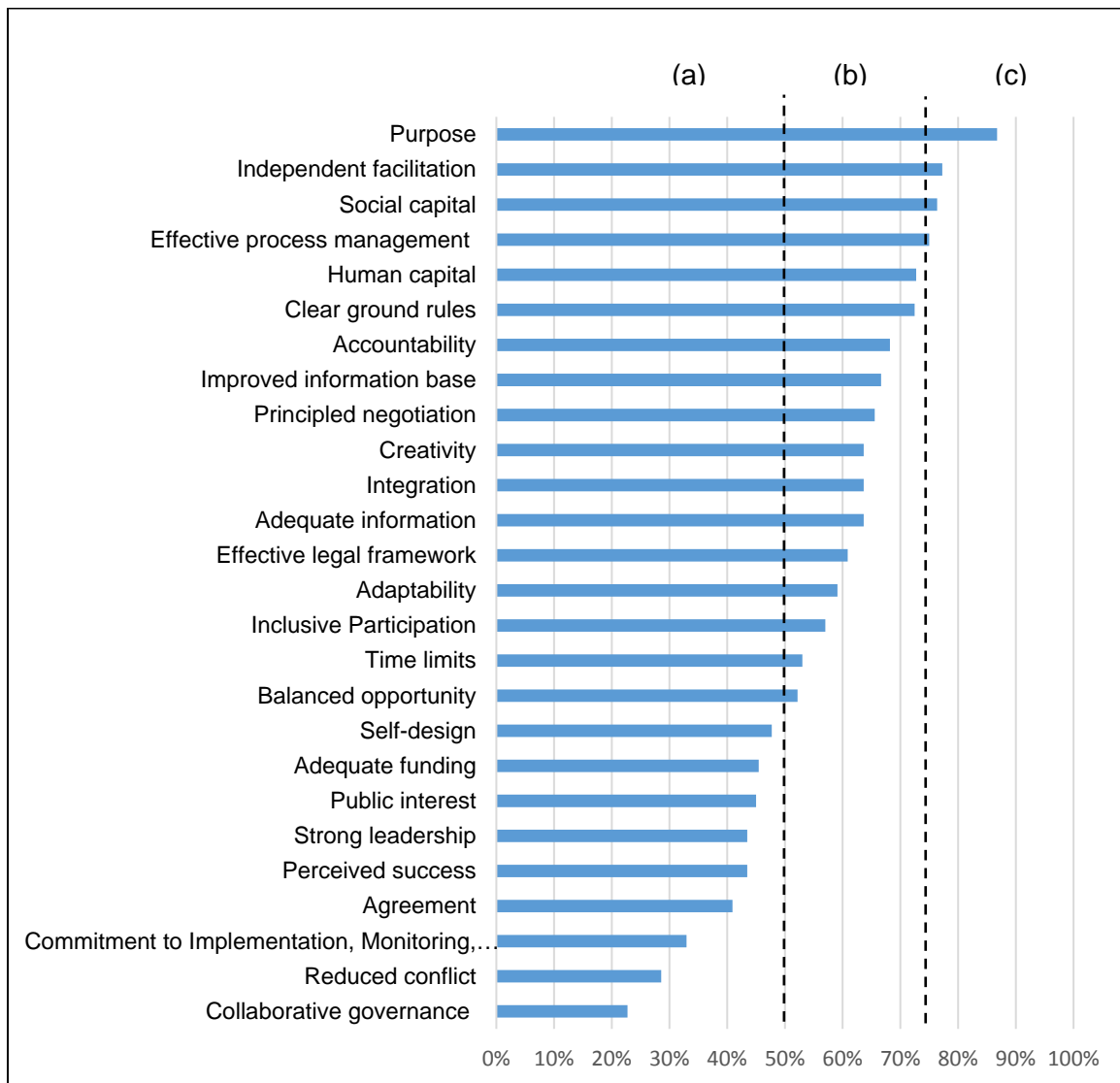
The PNCIMA process evolved considerably since it was initiated in 2009. Most notably, the process was unilaterally restructured by the federal government in September 2011, resulting in a reduction in plan scope halfway through the process. As a result, engagement with the IOAC shifted from a consensus-seeking approach to a more consultative approach and stakeholder consensus was not achieved for all elements of the plan (PNCIMA Initiative, 2017b). Additionally, participating First Nations withdrew from the PNCIMA process to co-lead a separate planning process for the same marine region with the provincial government. After the draft PNCIMA plan was publically released in May 2013, there was a nearly four-year delay in plan endorsement. During this time, negotiations with DFO led to two of the three First Nation organizations re-engaging in the PNCIMA process (CFN and NCSFNSS). On February 15, 2017, the plan was officially endorsed by the federal, provincial, and participating First Nations governments (Government of Canada, 2017b). The possible influence of the Northern Gateway Project on the former federal government's decision to restructure the PNCIMA process halfway through illustrates the impact that controversial issues can have on a multi-stakeholder, collaborative process.

The PNCIMA Initiative had strengths and weaknesses: three of the twenty-six best practices criteria for collaborative marine planning were strongly met, thirteen were moderately met, and nine were unmet (Figure 6.1). The PNCIMA Initiative was highly successful in terms of the sense of purpose shared by participants, independent facilitation utilized, and social capital built. It was least successful in terms of resolving conflicts, commitment to implementation, and failure to establish a collaborative governance arrangement for future oceans management in the region (Table 6.1). On a scale from 1 to 10 with 1 being very poor and 10 being excellent, the process received an average performance rating of 5.5, while the plan received 5.2.

With the exception of four criteria, the average level of agreement for each criterion was higher for the Steering Committee than the IOAC. The greatest difference in average agreement between committees was for the 'reached agreement' criterion.

While most Steering Committee members (75%) agreed that the PNCIMA plan addressed the needs and concerns of the organization they represented, only 21% of IOAC members agreed. In a collaborative planning process, all parties are required to make compromises. However, this high discrepancy in views on the PNCIMA plan between committees is likely at least a partial result of the unilateral restructuring of the process and the reduction in the involvement of IOAC members to merely an advisory role in plan development and approval.

Figure 6.1. Ranking of Criteria by Success Rating (Least to Most Met)



Criteria with less than 50% agreement were given a 'low' success rating and classified as 'unmet' (a), criteria with 50-75% agreement were given a 'medium' success rating and classified as 'met' (b), and criteria with 76-100% agreement were given a 'high' success rating and classified as 'strongly met' (c) (see Section 5.2.1).

6.1. Recommendations

As the first marine planning process to be initiated in BC and one of five pilot integrated oceans management processes across Canada, the PNCIMA process provides a unique learning opportunity for anyone responsible for the design and management of multi-stakeholder resource and environmental planning processes, both marine and terrestrial, in BC and in other jurisdictions around the world. Based on survey responses, the following recommendations are provided to help future processes better meet the best practice criteria used in this evaluation (Table 6.2).

1. Avoid unilateral changes to process design.
2. Adopt a funding model that is acceptable to all participants.
3. Demonstrate a strong commitment to plan implementation.
4. Ensure all relevant stakeholders are represented in the process at an appropriate level.
5. Invest heavily in building public awareness.
6. Create incentives for the participation of other federal agencies.
7. Develop a lasting collaborative governance arrangement for implementation that provides for ongoing stakeholder engagement.
8. Develop clear linkages with other related planning processes to plan and manage at nested spatial scales.

Recommendation #1: Avoid unilateral changes to process design.

The unilateral restructuring of the PNCIMA process halfway through (see Section 4.5.3.) by the federal government was widely referenced by participants as a key weakness of the process. It led to a reduction in plan scope, a shift from a consensus-seeking approach to a consultation approach towards stakeholder engagement, and the temporary withdrawal of First Nation participants and the provincial government. While this decision at the highest levels of the federal government was likely beyond the control of those responsible for process design and management in the region, and influenced by the broader policy context, the significant impact of that decision on participant perceptions of the process and its outcomes highlights the importance of consistency in any collaborative planning process. The potential benefits of collaborative

planning are less likely to be fully realized if decision-making responsibilities allocated to stakeholders at the beginning of the process are later withdrawn.

Participants are more likely to be satisfied with a planning process if they are engaged in the design of the process throughout its duration. Few PNCIMA participants (59%) agreed they were involved in the design of the process, and even fewer (36%) agreed they were able to influence the design of the process on an ongoing basis. The failure of the PNCIMA process to meet the “self-design” criterion suggests that it could have been improved by providing additional opportunities for participants to influence process design, including the design of its funding model (see Recommendation #2).

Recommendation #2: Adopt a funding model for plan development that is acceptable to all participants.

Survey results suggest that participants were divided in their views on the public-private funding model used in the PNCIMA process. While most participants (78%) agreed that they had or received sufficient funding to participate in the process effectively, just under half of participants (45%) agreed that the process had adequate funding overall. Participants provided a number of different reasons for concluding that funding was inadequate. Some participants felt that funding was adequate until the external funding agreement was terminated by the federal government, which left a number of key work plan items unfunded in the second half of the process. Other participants disapproved of the external funding used in the first half of the process, either because they felt the government should fully fund a process it initiates or because they were concerned that accepting funding from a US foundation was against the principles of sovereignty and that the involvement of the GBMF and Tides Canada Foundation would bias the process against resource development in the region. It was noted by one participant that, overall, “uncertainty surrounding potential funding from an environmental NGO created distrust among some commercial participants”.

The PNCIMA case study demonstrates the potential for funding to become a contentious issue in multi-stakeholder, collaborative planning processes (as described in Section 4.5.3.). One way to help ensure funding does not become a source of conflict is to adopt a funding model for plan development that is acceptable to all participants. Ehler (2009) recommends selecting an appropriate funding model for marine planning by

first identifying multiple funding options and then providing an opportunity for stakeholders to influence which options are selected (Ehler, 2009).

There are a number of different options for funding marine planning processes. Ideally, adequate government funds would be committed to marine plan development and implementation. Indeed, the majority of marine spatial plans reviewed by Collie et al. (2013) were funded by national or state governments. However, when government revenues are not sufficient, there are alternative ways to attract financial resources (Ehler & Douvère, 2009). In addition to grants from foundations like the Gordon and Betty Moore Foundation (GBMF), alternative funding can include grants and donations from international organizations, partnerships with non-governmental organizations, funds from the private sector, and user fees, among others (Ehler & Douvère, 2009). Ehler and Douvère (2009) provide a comprehensive list of financing mechanisms for marine plan development and implementation.

Not all funding options will be appropriate in any given context. For example, some commentators suggest that during the PNCIMA process the spotlight on trends in financial contributions from US foundations to Canadian environmental organizations likely contributed to the contentious nature of the \$8.3 million in external funding from the GBMF (e.g., O'Neil, 2012). Similarly, the use of external funding to support California's Marine Life Protection Act was highly controversial, prompting legal action by marine user groups. In contrast, the Massachusetts Ocean Management Plan was successfully developed with a grant from the GBMF similar in size to the one used to support the PNCIMA process (Ehler & Douvère, 2009).

Given that there is no "one size fits all" with respect to funding, providing an opportunity for stakeholders to influence how a collaborative planning process is funded can improve the political feasibility and acceptability of the funding model, thereby supporting the success of the process overall. Despite "varying levels of comfort around the table regarding the external funding" (PNCIMA Initiative, 2010e), the PNCIMA Steering Committee proceeding with the external funding agreement for \$8.3 million from the Gordon and Betty Moore Foundation (GBMF). Concerns regarding the external funding were raised at subsequent IOAC meetings and attempts to ameliorate concerns, including inviting representatives of GBMF and Tides Canada Foundation to speak at one IOAC meeting, proved unsuccessful. Consequently, select sectors were compelled

to seek ways to address their concerns outside of the PNCIMA process, leading to the external funding being dropped in September 2011 (PNCIMA Initiative, 2011c). In summary, the process could have been improved through greater efforts to address stakeholder concerns about funding, including considering viable alternatives.

Recommendation #3: Demonstrate a strong commitment to plan implementation.

PNCIMA participants perceived there to be a lack of commitment by the federal government to plan implementation, which affected their perceptions of the process overall. The 'commitment to implementation, monitoring, and reporting' criterion received the third lowest success rating of all best practice criteria. While just over half of PNCIMA participants (55%) felt strongly committed to plan implementation, fewer participants (36%) felt that other participants were strongly committed. One participant emphasized that there was no commitment by the previous federal government to implement the PNCIMA plan, which this participant considered a key weakness of the process. Another participant indicated, "it is going to sit on the shelf!" Two participants indicated that the process could have been improved by strengthening the commitment to implementation. Additionally, participants noted a number of different barriers to PNCIMA plan implementation, with the barrier most frequently cited being a lack of political will, commitment, or leadership.

A strong commitment to implementation is essential to the success of any collaborative planning process (Cormick et al., 1996; Joseph et al., 2008). When governments clearly and consistently communicate their support for implementation during the plan development phase, it gives stakeholders a sense of process legitimacy and motivates them to contribute to plan development. Stakeholders want to be assured that the time and effort put towards plan development will not be wasted (Cormick et al., 1996). In their evaluation of Kamloops LRMP implementation, Day, Gunton, and Albert (2003) found that a strong commitment by government agencies to implementation was also a very important factor affecting plan implementation success.

One way governments can demonstrate commitment to implementation during the planning process is by dedicating adequate resources to implementation, ideally through a formal agreement. Based on their experience in the PNCIMA process, one participant noted as a lesson learned that "there must be funding included to

implement the plans and keep all the partners and stakeholders meeting and discussing the adaptive management of the plan on an ongoing basis”. Funding should not only be adequate for implementation, but also from a source that is acceptable to all participants (see Recommendation #2).

A second way governments can demonstrate commitment to implementation during the planning process is by ensuring the plan resulting from a collaborative planning process includes an effective implementation strategy. The PNCIMA plan includes five short-term priorities to address EBM goals, each of which are supported by a list of “next steps”. The plan adds that implementation will be achieved through the collaborative development of work plans (PNCIMA Initiative, 2017). However, few participants felt that the PNCIMA plan includes clear and measurable objectives with associated strategies (14%) or clear and effective strategy for monitoring, evaluation, and reporting (27%).

Rather than waiting to specify the details of implementation until after plan completion through work plans, engaging stakeholders in the development of an effective implementation strategy during the process may raise their confidence that the plan will not “sit on the shelf”. Joseph et al., (2008) identify 19 best practice criteria that contribute to implementation success (grouped under three categories: stakeholder, plan, and implementation system characteristics). Process managers can use these criteria as a checklist to engage stakeholders in assessing the effectiveness of plan implementation strategies.

Recommendation #4: Ensure all relevant stakeholders are represented in the process at an appropriate level.

The ‘inclusive participation’ criterion was only moderately met (57%) by the PNCIMA process. This suggests that more could have been done to meaningfully engage participants. Ehler and Douvere (2009) recommend that to involve participants effectively and efficiently, process managers must consider who, when, and how they are involved. While a number of participants praised the diversity of sectors represented in the PNCIMA process, others indicated that the level at which they were represented (i.e., at the IOAC/ stakeholder level versus the Steering Committee/ governance level) was not commensurate with their interest or entitlement. In a two-tiered process, inclusive participation is not only a question of whether all the relevant sectors and

organizations are represented at the table, but whether they are represented at the right table. In the PNCIMA case study, local government is an example of a sector that, while represented in the process, was not engaged at a level suitable for a successful result.

In response to input received during early community meetings, four local government seats were added to the IOAC to increase local knowledge and input into the process (PNCIMA Initiative, 2010e). After being granted seats on the IOAC, local government representatives consistently asked for a place at the Steering Committee level, but were denied (PNCIMA Initiative, 2011b). One participant felt that local government should have been treated as a level of government, rather than a special interest group. According to this participant, the relegation of local government representatives to the IOAC “marginalized the role and fiduciary responsibilities of local and regional governments”. A second participant felt that, moving forward, oceans governance must change to ensure that local governments are fully engaged in collaborative decision making. A third participant felt that there was a lack of attention to and understanding of local government issues and concerns during the process.

While local government was not represented at the governance level (or second tier) of LRMP processes, overlapping jurisdictions in the marine environment may necessitate a greater role for local government in two-tiered collaborative planning processes. In most places, multiple levels of government share jurisdiction over the marine environment (Cicin-Sain et al., 1998). In BC, local governments (municipalities and regional districts) can plan, regulate, and use backshore, foreshore, and nearshore areas within their boundaries. Local governments contribute to the management of the marine areas through bylaws, zoning, and by other means (Green Shores, 2009).

To achieve integrated management in this multi-jurisdictional context, local governments within the planning region should have representation at the governance level. However, too many participants can complicate and slow down the process (the PCNIMA region includes 14 incorporated communities, 17 unincorporated communities, and 5 regional districts). One way to balance these considerations is for local governments to nominate one local government official or the representative of an umbrella organization to represent their interests at the governance level. For example, the PNCIMA process coordinated local government participation through regional districts. Pomeroy and Douvere (2008) also propose coordinating representation using

eco-functional networks (communities with identified shared interests in coastal and ocean resources).

Recommendation #5: Invest in public engagement to build public awareness.

As referenced earlier, the ‘inclusive participation’ criterion was only moderately met (57%) by the PNCIMA process. This rating is largely the result of only 7% of IOAC members agreeing that there was sufficient public awareness of the process, which is the lowest level of participant agreement with any survey statement. The PNCIMA process involved a number of opportunities for public involvement, including nine stakeholder community meetings in spring 2010 to invite feedback on the PNCIMA engagement strategy, six sub-regional advisory forums in spring 2011 designed to obtain local knowledge/ perspective, and four community open houses in spring 2013 to invite feedback on the draft PNCIMA plan (PNCIMA Initiative, 2010). Despite these efforts, the survey results suggest greater investments in public engagement are required to build sufficient public awareness of marine planning processes.

The findings of this study are consistent with those of Haider and Lozada (2015) based on a survey of a random sample of the BC population. Survey results showed that although three-quarters (76%) of all respondents had heard about one or more large-scale planning processes that have occurred in BC in the last two decades, only 15% had heard of MaPP or PNCIMA specifically. Given that marine planning is still in its infancy, future processes should invest heavily in public engagement in order to improve public awareness.

Recommendation #6: Build incentives for the participation of other federal agencies into the process.

As one of several key principles for successful marine planning systems identified in Dickinson, Rutherford and Gunton (2010), ‘strong leadership’ was added to the best practice criteria for the PNCIMA case study evaluation. According to these authors, leadership for marine planning should reside at the most senior levels of government. Further, an integrated approach to oceans management requires strong leadership from multiple federal agencies in order to harmonize sectoral policies and programs (Cicin-Sain et al., 1998). While the *Oceans Act*, 1997, extends a leadership role to the Minister of Fisheries and Oceans for the development of integrated oceans

management plans, it does not provide guidance on how to compel and coordinate the involvement of other federal agencies (Rutherford, Dickinson & Gunton, 2010).

Based on participant feedback, the 'strong leadership' criterion was one of nine criteria unmet by the PNCIMA process. In particular, only 39% of participants surveyed felt there was a strong commitment at the senior management level of all relevant government agencies to ensuring the success of the process. This is consistent with a previous evaluation of the national integrated oceans management program, which reported a perception among key informants of low ownership of integrated oceans management by other government departments (DFO, 2012). The lack of a mechanism to compel other federal agencies to participate was noted by one participant as a gap in the legislative and policy framework for the PNCIMA process. In considering changes to the *Oceans Act*, 1997, mechanisms to encourage the participation of other federal agencies (e.g., Transport Canada, Environment and Climate Change Canada, Parks Canada etc.) should be adopted in order to achieve integrated oceans management. In addition to legislative mandates for joint administration, Cicin-Sain et al. (1998) suggests the provision of additional financial assistance and staff as a way to encourage participation.

Recommendation #7: Develop a lasting collaborative governance arrangement for implementation that provides for ongoing stakeholder engagement.

A priority for PNCIMA implementation should be establishing a collaborative governance arrangement. The 'collaborative governance' criterion received the lowest rating of all criteria. It was particularly low for stakeholders, with only 7% of IOAC members agreeing that the PNCIMA process resulted in a lasting collaborative governance structure that will improve decision-making on integrated oceans management in the region. As one IOAC member notes:

Moving forward there are no way for the conservation sector and fishing sector to work out ways to design MPAs to enhance conservation and minimize impacts on revenues to independent fishermen. There is no way to look at shipping routes with relation to other activities in the marine, and there is no way of measuring cumulative effects of activities, because not all of these are being looked at anymore [through the PNCIMA process]. There is no process to do this work.

The PNCIMA plan identifies three strategies for achieving the EBM goal of “collaborative, effective, and integrated governance, management, and public engagement” that should be prioritized for PNCIMA plan implementation:

- Foster ongoing integrated management and coordination within and among First Nations, federal, provincial and local governments
- Establish mechanisms and/or build on existing mechanisms, advisory committees and opportunities to effectively coordinate stakeholder advisory processes for ocean management issues in PNCIMA.
- Establish mechanisms and/or build on existing mechanisms, advisory committees and opportunities to support stakeholder engagement in ocean management advisory processes in PNCIMA. (list reproduced from PNCIMA Initiative, 2017b, p. 42)

In addition to improving decision-making in the region, providing a forum for ongoing stakeholder engagement in oceans management may be an important part of restoring what one IOAC member described as “DFO's loss of social capital with stakeholders”.

Recommendation #8: Develop clear linkages with other related planning processes in order to plan and manage at multiple, nested spatial scales.

Several participants identified the PNCIMA plan’s high level, strategic nature as a main weakness. However, large-scale marine plans with only conceptual objectives are not necessarily less valuable if they are linked to plans that provide the necessary operational detail at a smaller spatial scale for improved oceans management. Given the large areas for which plans are being developed and complex nature of marine ecosystems, experience suggests that it is best to take a nested approach to marine spatial planning in which “each level provides context for the level below will provide the most effective and least complicated arrangement” (Gilliland & Laffoley, 2008, p. 789). This approach allows for the identification of clear targets and implementation measures to achieve those targets, as well as allowing for different issues to be addressed at the most appropriate spatial scale.

The PNCIMA process is intended to serve as an umbrella initiative to other marine planning and management activities in the region, including the Oceans Protection Program, MPA network planning, and sub-regional MaPP plans (see Section 4.7. for a description of other related processes and programs). A priority for PNCIMA implementation, as identified in the PNCIMA plan, must be coordination across these

initiatives, incorporating inputs at lower spatial scales, while ensuring all planning and management activities are consistent with the PNCIMA EBM framework.

6.2. Conclusion

The Trudeau Liberal government appears to have breathed life into the PNCIMA Initiative, which for a number of years was presumed by many to be dead in the water. As with the implementation of Canada's integrated oceans management program more broadly, the PNCIMA process encountered a number of challenges and only time will tell if it is able to deliver its potential benefits. Regardless, as one of five piloted integrated oceans management planning processes across Canada and the first large-scale, multi-stakeholder marine planning process to be initiated in BC, it presents an unprecedented learning opportunity. Lessons learned from the PNCIMA process can inform future collaborative planning processes for both the marine and terrestrial environments in Canada and in other jurisdictions around the world.

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Appendix A.

Pacific North Coast Integrated Management Area (PNCIMA) Process Participant Survey

Introduction

Part 1 and Part 2 of this survey aim to understand the overall quality of planning process for the Pacific North Coast Integrated Management Area (PNCIMA). We recognize that the process was revised part way through, but encourage you to keep the process as a whole in mind when responding.

Part 1: Planning Process Statements

In this section you will be asked to what extent you agree or disagree with a series of statements about the marine planning process for the Pacific North Coast Integrated Management Area (PNCIMA) to date.

Purpose

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1. I became involved in the process because I/the organization I represented felt it was an effective way to achieve our goals.					
2. The issues we were dealing with in the process were significant and required timely resolution.					
3. I was committed to fulfilling my roles and responsibilities in the process.					
4. Other parties were committed to fulfilling their roles and responsibilities in the process.					

Leadership

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
5. The lead agency (the Department of Fisheries and Oceans Canada) demonstrated strong commitment to ensuring the success of the process.					
6. There was a strong commitment at the senior management level of all relevant government agencies/ departments to ensuring the success of the process.					

Legal Framework

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
7. The Oceans Act and related legislation and policy provided an adequate framework for the development of the marine plan.					

If this legislation and policy did not provide an adequate framework, please identify the major gaps.

Inclusiveness

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
8. All appropriate values/ interests/perspectives were adequately represented throughout the process.					
9. I/ the organization I represented was meaningfully involved throughout the process.					
56. There is sufficient public awareness of the process.					

Please indicate any groups not included in the process that should have been.

Design

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
10. I was involved in the design of the process (i.e., ground rules, roles, procedures).					
11. On an ongoing basis, I was able to influence the design of the process.					

Ground Rules

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
12. I clearly understood my roles and responsibilities in the process.					
13. The roles and responsibilities of other participants in the process were clearly defined.					
14. The procedural ground rules (e.g., standards of conduct or how parties work together) were clearly defined.					
15. All decisions were made through consensus.					

Opportunity

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
16. I had or received sufficient training to participate effectively.					
17. I had or received sufficient funding to participate effectively.					

18. The process reduced power imbalances among participants.					
19. Participants had equal influence over decision-making.					
20. My participation had an impact on the outcomes of the process.					

Negotiation

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
21. There was open communication about participant values/ interests/ perspectives.					
22. Participants demonstrated a clear understanding of the different values/ interests/ perspectives of other participants.					
23. The process generated trust among participants.					
24. The process fostered teamwork.					
25. There were significant differences in values/ interests/ perspectives among participants.					

Accountability and Transparency

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
26. The organization I represented provided me with clear direction throughout the process.					
27. The representatives in the process were accountable to their constituencies/ members.					
28. The process helped to ensure I was accountable to					

the constituency/membership I was representing.					
29. The public engagement process gave the general public adequate opportunity to provide feedback on the plan throughout its development.					

Adaptability

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
30. The process was flexible enough to adapt to new information or circumstances.					

Information

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
31. The process had adequate information for decision-making, including both traditional/ local knowledge and scientific/ technical data.					

If information was not adequate for decision-making, please identify the major gaps.

Time Limits

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
32. There was sufficient time allotted to complete the process.					
33. The process had a detailed work plan(s) including a schedule with clear deadlines for deliverables.					
34. Deadlines were adhered to throughout the process.					

Process Management

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
35. I was satisfied with the content and structure of the meetings I attended.					
36. There was adequate technical and administrative support throughout the process.					

Facilitation

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
37. The presence of an independent facilitator/mediator improved process effectiveness.					
38. The independent facilitator/mediator acted in a neutral and unbiased manner.					

Funding

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
39. The process had adequate funding and resources.					

If funding and resources were not adequate throughout the process, please identify the major gaps.

Part 2: Planning Outcomes

In this section you will be asked to what extent you agree or disagree with a series of statements about the outcomes of the marine planning process for the Pacific North Coast Integrated Management Area (PNCIMA) to date.

Agreement

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

40. The resulting plan addressed the needs and concerns of the organization I represented.					
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Please describe any needs or concerns that the plan did not address.

Conflict

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
41. As a result of the process, conflict among stakeholders decreased.					

Please identify any remaining conflicts that should be addressed moving forward.

Integration

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
42. The plan successfully incorporates diverse values/ interests/ perspectives.					

Creativity

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
43. The process produced creative ideas that will contribute to improving oceans management in the marine region and elsewhere.					

Human Capital

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
44. As a result of the process, I now have a better understanding of the challenges and					

opportunities for oceans management and planning in the marine region.					
45. As a result of the process, I gained new or improved skills that will be useful in future ocean management and planning.					

Social Capital

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
46. The relationships among participants improved over the course of the process.					
47. As a result of the process, I now have a better understanding of the interests/values/perspectives of other participants.					
48. As a result of the process, I have better working relationships with other parties involved in oceans management.					
49. Contacts I acquired through my participation in the process are useful to me and/or my organization.					
50. I am aware of collaborative activities (e.g., new partnerships or organizations) outside of the process that emerged as a result of relationships built through the process.					

Information

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
51. The process built an improved information base for the marine region (e.g., maps, inventories), including a better understanding of ecosystem dynamics.					

52. Information acquired through my participation in the process is useful to me and/or my organization.					
53. I have used information generated through the process for purposes outside of the process.					

Collaborative Governance Structure

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
54. The process resulted in a lasting collaborative governance structure that will improve decision-making in the marine region.					

Public Interest

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
55. I believe the outcome of the process served the common good or public interest.					

Success

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
57. The process was a success.					
58. The process was a positive experience.					
59. Knowing what I know now, I would get involved in a process similar to this process again.					
60. The process and plan met my expectations.					
61. If implemented, the plan will improve oceans management in the					

marine region.					
62. The plan has no major weaknesses or omissions.					

If you feel the process was not a success, please explain why.

Commitment to Implementation, Monitoring, and Reporting

	Unsure/ Don't Know	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
63. I feel strongly committed to plan implementation.					
64. Other participants are strongly committed to plan implementation.					
65. The plan has clear and measurable objectives with associated strategies indicating who will do what by when.					
66. The process produced a clear and effective strategy for plan performance monitoring, evaluation, and reporting.					

Part 3: Overall Performance

Process Rating

	1	2	3	4	5	6	7	8	9	10
67. On a scale from 1 to 10 with 1 being very poor and 10 being excellent, how would rate the PNCIMA planning process?										

Plan Rating

	1	2	3	4	5	6	7	8	9	10
68. On a scale from 1 to 10 with 1 being very poor and 10 being excellent, how would rate the proposed marine plan resulting from the PNCIMA planning process?										

69. What were the main strengths of the process and plan?

70. What were the main weaknesses of the process and plan?

71. The process and plan could have been more effective by making the following changes:

Process Comparison

72. Did you also participate in the Marine Planning Partnership (MaPP) process?

Yes	
No	

	Can't be compared	Unsure/ don't know	Better	Worse
73. Overall, how would you rate the MaPP process relative to the PNCIMA process?				

74. If the MaPP process was better or worse than the PNCIMA process, please explain why.

Part 4: Moving Forward

75. What lessons learned from the PNCIMA process could be applied to other marine planning processes?

76. What do you perceive to be the greatest barriers for implementation of the PNCIMA plan?

Additional Comments

77. Would you like to make any additional comments?

Follow-up

78. I approve re-contact by the research team to allow me to review and/or comment on the research report prior to it being finalized.

Yes	
No	