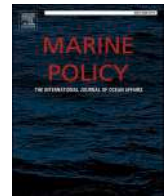


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Marine Plan Partnership for the North Pacific Coast: Engagement and communication with stakeholders and the public

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ABSTRACT

Marine spatial planning (MSP) is a governance approach to managing the multitude of pressures currently being exerted on marine ecosystems. A key component to this approach is acknowledgement that stakeholder engagement is essential for success. During the planning phase of the Marine Plan Partnership (MaPP) initiative, the Partners (the B.C. provincial and 18 First Nations governments) employed, what was termed, an advisory approach to engagement. This advisory approach committed the Partners to engage meaningfully with stakeholders and the public, consider their feedback, work towards balanced solutions, and incorporate what was found to be agreeable. However, it did not require a consensus among participants in order for advice to be accepted or acted upon. Planning occurred over a three-year period in four sub-regions encompassing 102,000 square kilometers of coastal and marine waters on the North Pacific Coast of Canada. Engagement spanned more than 10 sectors of special interest and 22 coastal communities throughout the planning area and included interested members of the general public. Upon plan completion, there was broad stakeholder support for the final sub-regional plans and the Regional Action Framework. The purpose of this paper is to describe from the MaPP governance partners' perspective, the components of the MaPP advisory-based stakeholder engagement policy and key lessons learned about the factors contributing to the success of its approach. The paper draws upon analysis of MaPP Partner discussions and reflections during and after the planning process, and includes the results of an internal evaluation of stakeholder engagement by independent consultants who surveyed the MaPP team, stakeholders, and the public.

1. Introduction

Marine spatial planning (MSP) is an approach to allocating and managing the multitude of pressures currently exerted on marine ecosystems to achieve ecological, economic, and social goals [1]. Incorporating meaningful stakeholder and public engagement in MSP is critical for the success of plan development and an essential component of ecosystem-based management [2,3]. Stakeholder engagement can occur on a spectrum of intensity from communication approaches that require low levels of engagement or incorporation of input from stakeholders (such as input on a final plan product), to high levels of stakeholder influence that include a consensus-based approach requiring negotiation amongst participants to reach agreement on plan components or with

the process leading entity(ies) [3–6].

The mid-spectrum of engagement generally commits the leading entity(ies) to consider advice and integrate what is found agreeable [4]. This is termed an “advisory approach” for the purposes of this paper. The advisory approach is generally considered to be more expeditious than higher levels of engagement such as collaborative, consensus-based planning, where it can take extended periods of time to reach full consensus. However, advisory processes may be more vulnerable to a lack of “buy-in” by members of the advisory body than higher engagement levels [5,7,8].

The Marine Plan Partnership for the North Pacific Coast (MaPP) initiative was formed in 2011 through a formal Letter of Intent between 18 First Nations and the Province of British Columbia (the MaPP

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Partners) [9]. In this formal partnership commitment, First Nations and Provincial government became equal governing partners [9]. The purpose of the MaPP initiative was to develop and implement four sub-regional marine plans and a Regional Action Framework to inform policy regarding spatial and nonspatial decisions for achieving healthy ecosystems within the MaPP region of 102,000 square kilometers of coastal and marine waters, on the North Pacific Coast of Canada [9]. The larger MaPP region was divided into four sub-regions (Haida Gwaii, North Coast, Central Coast, and North Vancouver Island (Fig. 1)) with each sub-region developing its own marine plan and a Regional Action Framework (RAF) to aggregate common objectives and actions at the Regional scale [9]. Diggon et al. [9] further explains the overview of the MaPP planning process including the governance structure and the socio-political context during plan development.

The MaPP stakeholder engagement strategy was carefully planned and structured on the basis of a new approach to planning processes that reflected a move away from stakeholder interest-based consensus negotiation in which First Nations were considered stakeholders. The MaPP engagement strategy reflected governance partner agreements to ensure plans were completed in a timely manner (under three years), had clearly defined product outcomes, and provided regularly scheduled opportunities for stakeholder review and discussion of draft plan products together with governance partners in a meaningful way. The United

Nations Educational, Scientific and Cultural Organization (UNESCO) defines stakeholders as any individual, group, or organization that are affected, involved or interested by the implementation of MSP [1]. The MaPP Partners chose to use a stakeholder advisory committee structure for development of each sub-regional plan and the Regional Action Framework. MaPP engagement included stakeholders and local government representatives, after which came targeted engagement with the broader public. MaPP Partners secured the necessary resources and coordination needed to achieve a high level of stakeholder input, trust, and buy-in, including funding for stakeholder participation in advisory committee meetings, and committee Terms of Reference that clearly laid out roles, responsibilities, code of conduct and process, and timeframe.

We provide the background to the political and policy context that existed prior to and during the development of the Partners' approach to engagement. We then describe the engagement approach and process divided into three parts including: the stakeholder engagement approach, the technical support for the engagement process, and the public engagement approach. Following this we identify key lessons learned about engagement from the governance partners' perspective. This draws from a structured internal review carried out by independent consultants who surveyed governance partners, MaPP technical staff, and stakeholders. From the results of the evaluation, key lessons emerged for the governance partners that include sufficient funding for

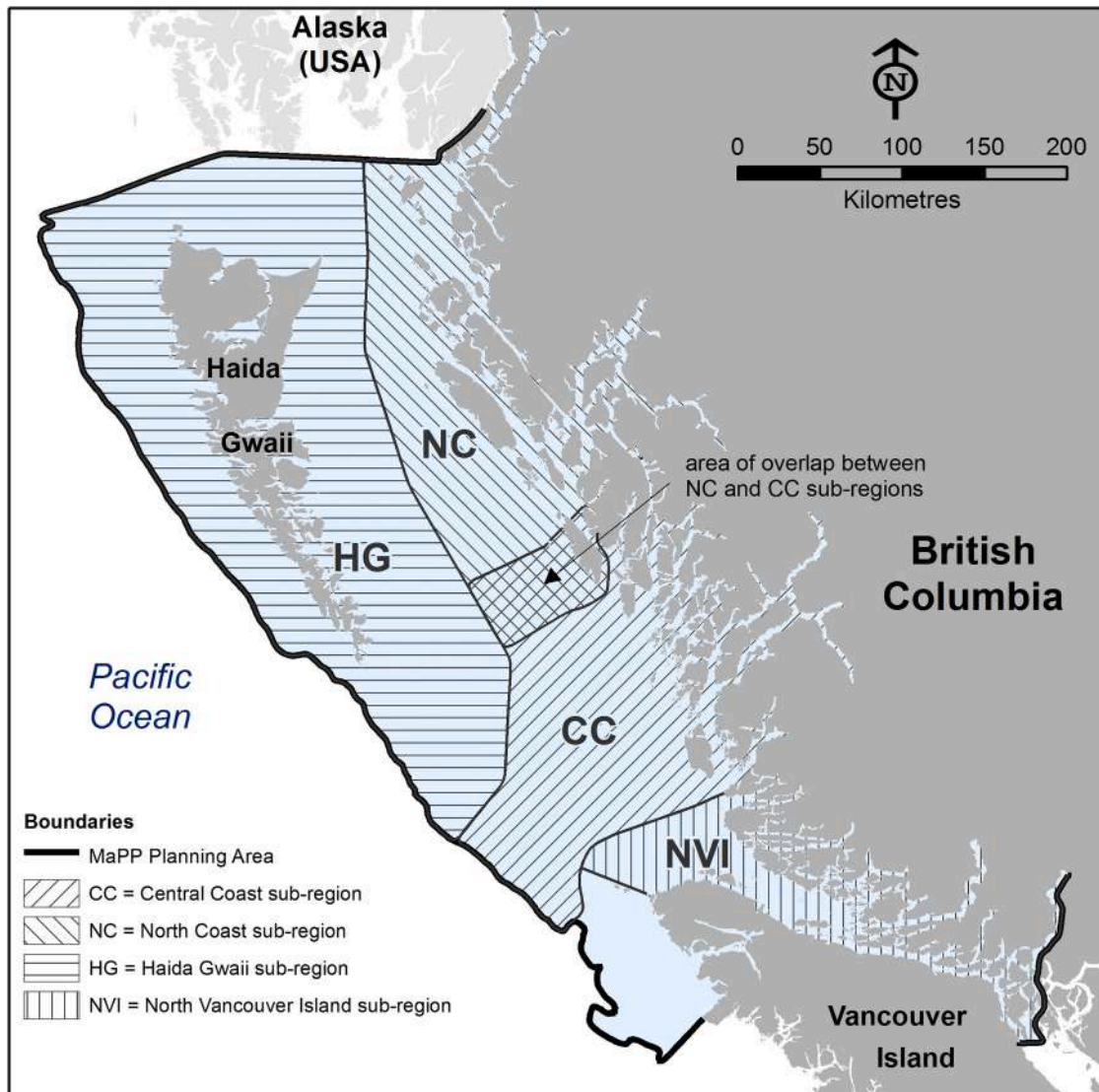


Fig. 1. The Marine Plan Partnership for the North Pacific Coast study area indicating the four sub-regions.

high engagement, inclusive stakeholder representation, collaborative and accountable leadership, use of a template Terms of Reference, independent process support, creation of opportunities to build relationships, and early commitment to engage stakeholders in implementation.

1.1. MaPP engagement context

In the early 1990s, the B.C. provincial government began using land use planning as a tool to resolve resource conflicts in British Columbia. Initially, provincial land use planning policy focused on supporting consensus-based, stakeholder interest-based planning processes, with technical and expertise support from Provincial ministries [10]. First Nations had stakeholder status in these processes and for that reason often chose to abstain, until their status as their own governments was recognized.

In 2005, the B.C. provincial government developed a new approach, based on a detailed assessment of the results of the consensus, interest-based model and in recognition of its obligation to consult and address First Nation interests. Under this new approach, the provincial government and First Nations agreed to work together in government-to-government relationships, as active partners in the development of land use planning processes, with stakeholders shifting to an advisory role. The co-led approach was put into practice in the final negotiation and implementation stages of the Great Bear Rainforest (GBR) land use planning agreements [11]. The GBR agreements include the upland areas covering much of the MaPP marine planning region and many of the participating MaPP First Nations were a part of the GBR process [9]. Based on the success of the GBR approach, and new government planning policy [12], the MaPP Partners supported the continued use of a co-led planning process, using an advisory approach for stakeholder engagement [13].

The Pacific North Coast Integrated Management Area (PNCIMA) initiative, a planning process co-led by the Canadian federal, First Nations' and, B.C. provincial governments, also played a role in reinforcing the advisory role of stakeholders and the public in the MaPP initiative. PNCIMA pre-planning from 2006 to 2010 included the creation of stakeholder advisory groups [9]. Principles for stakeholder engagement in PNCIMA were drawn from Canada's Oceans Act [14] and Oceans Strategy [15] and modified based on stakeholder feedback from a forum that included over 380 participants as well as five preparatory meetings in the communities of Skidegate, Masset, Prince Rupert, Kitimat, and Port Hardy.

PNCIMA was altered in scope in 2011 when the Canadian federal government withdrew from a funding agreement with First Nations' and the B.C. provincial governments [16]. With funding secured through a public-private partnership, the B.C. provincial and First Nations' governments chose to continue with planning and created the MaPP initiative [9].

1.2. MaPP engagement principles

MaPP stakeholder engagement was based on five principles: openness, transparency, inclusiveness, responsiveness, and informed input. These principles were listed in a Letter of Intent (LOI) to Collaborate on Coastal and Marine Planning in the Pacific North Coast [17], signed in November 2011 by MaPP Partner First Nations' and the B.C. provincial governments. To build on the extensive stakeholder engagement already undertaken through PNCIMA [9,18], the principles for MaPP engagement were drawn from those generated during the creation of PNCIMA stakeholder committee for the PNCIMA process. The MaPP Partners chose not to pursue the PNCIMA principle of promoting stakeholder consensus on advice to the planning Partners, but did encourage collective dialogue and work towards consensus on advice where possible. Initially, some stakeholders were concerned that the MaPP process did not require consensus between stakeholders and MaPP Partners on plan products but nevertheless participated in it. By developing an

engagement approach through the five MaPP principles the advisory approach was able to make steady progress in plan development using stakeholder input on proposed plan content. As well, the MaPP LOI recognized the stated authorities of First Nations and the provincial governments. While the principles used in PNCIMA were defined, in MaPP they were not, something that is recognized as a limitation. Loose parallels can be drawn between each of the PNCIMA principles and corresponding MaPP principles but further interpretation of the intent of each principle is beyond the scope of this paper.

The LOI also outlined the governance structure and intended outcomes for MaPP and suggested engagement tools (advisory committees, open houses, bilateral sessions, and a MaPP website) to support the MaPP advisory-based engagement approach. These tools provided for full transparency of decision making, as well as the inclusion and opportunity for stakeholders and community members to inform plan development with an openness to all feedback received and responsiveness to detail how feedback was considered. Advisory committee meetings along with public open houses and the MaPP website allowed for openness and transparency about the planning process with stakeholders as well as the public. The careful selection of stakeholder representatives from many different marine sectors ensured informed input from both experienced and knowledgeable individuals from their respective sectors. Stakeholder advice captured in advice logs was maintained during stakeholder engagement as a tool used to track and respond to input received and detail how the advice would be considered in the development of the plans. This tool was specifically designed to avoid the pitfall in consensus-based stakeholder meetings of emphasizing accuracy of previous meeting minutes, instead of focusing meeting efforts on discussing new draft plan products tabled by the MaPP partners. The MaPP engagement principles helped to shape and guide the engagement of stakeholders and the general public during MaPP plan development.

2. Engagement approach and process

Based on the engagement principles described above, the MaPP Partners designed a rigorous and structured approach to engage with stakeholders, local government, and the public. This section describes key engagement components and their use and outcomes in the planning process.

2.1. Approach to stakeholder engagement

Four sub-regional advisory committees and a Regional Marine Advisory Committee were created. Each of the four sub-regional committees had a planning team led by one provincial government and one First Nations co-lead (called the sub-regional technical team co-leads) (Fig. 2). The regional committee planning team was led by two provincial government and two First Nations co-leads (called the Marine Coordination Team). Each planning team also included a dedicated contractor who supported stakeholder engagement and other planning tasks.

The planning teams gathered feedback from stakeholders on the circulated draft Terms of Reference in the first two meetings and revised them based on provided feedback. The planning teams also coordinated committee meetings, presented relevant draft plan material to the advisory committees, and captured and responded to advice. This approach allowed the sub-regional teams to tailor the engagement approach to incorporate sub-regionally specific issues and context. Furthermore, the process was designed to be product-responsive making it more time-efficient. The focus of the meetings was for stakeholders to review and provide feedback on the materials initially developed by the Technical Teams and Partners.

The North Coast, Central Coast, and North Vancouver Island sub-regions and the MaPP region took similar approaches by creating unique Marine Plan Advisory Committees (MPAC). The Haida Gwaii

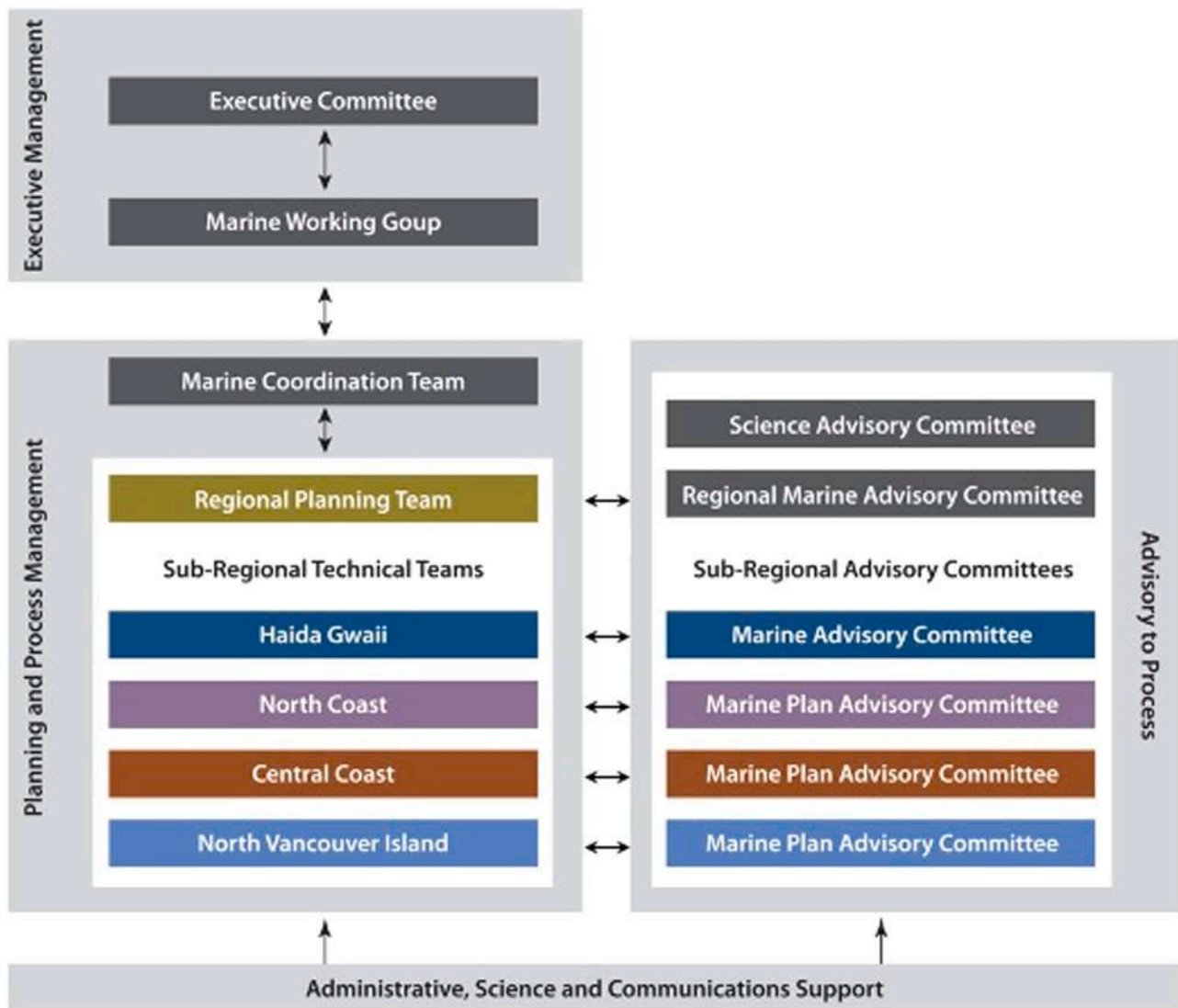


Fig. 2. Governance framework developed by the Marine Plan Partnership for sub-regional and regional planning.

sub-regional team took a slightly different approach, establishing a Marine Advisory Committee (MAC) that was interest-based, rather than sector-based. MAC members were not representatives of specific sector groups; rather, they were selected based on their collective knowledge and experience.

2.1.1. Selection of advisory committee members

Each of the four sub-regional technical teams and the regional coordination team sent invitations to marine stakeholder groups, relevant interest groups, and local governments, along with nomination forms to be completed by each organization for their selected nominee and a draft Terms of Reference. The nomination forms included questions for the applicants which were then evaluated by sub-regional co-leads and from which advisory committee members and alternates were selected for each of the sectors for which applications were received. Prospective and alternate members (where applicable) were selected based on several criteria including: their suitability to represent their sector/interest, technical expertise, and ability to be collaborative with others in planning discussions. The MaPP sub-regions (excluding Haida Gwaii) and the MaPP region sought an advisory committee member and an alternate member who could attend meetings if the main representative was unavailable. The Haida Gwaii sub-regional advisory committee did not include alternate members.

In keeping with the principle of inclusivity, members were drawn from a wide range of backgrounds. Some represented formal or informal aggregations or associations of organizations with similar interests, while other members provided specialized expertise (Table 1). A full list of stakeholders and the sector they represented can be found in the four sub-regional MaPP plans and the RAF [19–23].

The sub-regional planning teams attempted to engage with individuals that lived or worked within the respective sub-regions but in some cases, representatives were nominated who lived or worked in larger centres outside of the sub-region. The representatives from outside of the sub-region were often part of larger organizations which, in some cases, proved to be a benefit to the process. They provided additional expertise for the review of draft plan components and linkages to broader regional perspectives of their organizations, many of whom were involved in all MaPP tables.

Stakeholder representation by sub-region and the region and sector/interest are listed in the table below (Table 1). Though sub-regional planning teams worked throughout the process to recruit representatives from each relevant sector to their sub-region, not all seats were filled depending on the availability of representatives from each sector.

2.1.2. Terms of reference

Terms of Reference (TOR) were developed for each of the advisory

Table 1
Sectors/interests represented by stakeholders in the MaPP advisory processes.

Area of interest or sector	MaPP Area				
	HG	NC	CC	NVI	Region
Coastal forestry	-	✓	✓	✓	✓
Commercial fisheries	✓	✓	✓	✓	✓
Commercial tourism/marine tourism	✓	✓	✓	✓	✓
Finfish aquaculture	-	-	✓	✓	✓
Fish processing	✓	-	-	-	-
Local government	-	✓	✓	✓	✓
Marine conservation	✓	✓	✓	✓	✓
Marine infrastructure	✓	-	-	-	✓
Marine science/academia	-	✓	✓	-	-
Marine Transportation	✓	-	-	-	-
Non-renewable energy ²	-	-	-	-	✓
Public recreation	-	✓	✓	✓	✓
Public recreational fishing (recreational angling)	✓	✓	-	✓	✓
Recreational fishing services (commercial rec fishing)	✓	✓	✓	✓	-
Renewable energy	-	✓	✓	✓	-
Shellfish aquaculture	-	✓	✓	✓	✓

HG = Haida Gwaii sub-region, NC = North Coast sub-region, CC = Central Coast sub-region, NVI = North Vancouver Island sub-region, Region = the MaPP region. ✓ indicate areas of interest or sectors which were represented at each MaPP advisory process, - indicates that the sector/interest was not represented at on a given advisory committee.

committees [24–28]. A draft TOR developed through extensive stakeholder engagement during the PNCIMA process was brought into the MaPP process. Each stakeholder advisory committee (for the region and each sub-region) had the flexibility to make minor adjustments as needed to suit the geographical context. Minor amendments were made to the TOR based on feedback from advisory committee members.

The TORs outlined the general role of members which was to provide advice and feedback on sub-regional or regional planning products developed by the MaPP Partners. It also included a code of conduct and meeting schedule which outlined anticipated timelines and draft product delivery to make clear the level and extent of time commitment required of stakeholders. The TOR also detailed expenses that were funded, specifically, costs associated with travel for the member or alternate to attend meetings. It also included a stakeholder support fund for: sector capacity to review and provide feedback on work products, communication within the sector, and for alternates to travel to meetings. All advisory committee members agreed to comply with the TOR as part of the membership confirmation process.

2.1.3. Funding for engagement

Costs were covered for expenses associated with conducting advisory committee meetings and public open houses, including venue rental, catering, materials, facilitation, coordination, overhead and travel by MaPP representatives, as well as travel, accommodation and meal expenses for advisory committee members. In total, approximately 21 per cent of the overall planning budget was spent to support stakeholder and local government participation in the process, engagement of sector/interest group constituents on plan development, and public engagement through open houses. Included within this was a stakeholder support fund to which stakeholders with demonstrated financial need could apply in order to fund engagement of their constituents throughout the two years of planning. In total, fifteen stakeholders/organizations used the fund. Management of engagement funds (and overall MaPP funding during planning) is described in a Memorandum of Understanding [29] and demonstrates the Marine Working Group (Fig. 2) had control over the allocation of the funds.

2.1.4. Engagement timeline

In December 2011, the Partners across all four sub-regions agreed on the stakeholder engagement process and adopted the TORs for guiding

the work. At this time, stakeholders were identified and invited to participate in advisory committee meetings and to communicate with planning teams through bilateral meetings as needed. The schedule for advisory committee meetings was laid out in the MaPP TORs and corresponded with plan development stages. This kept the technical teams accountable to timelines and provided clarity for stakeholders and local government to prepare for participation in meetings (Fig. 3). Effort was made to align the sub-regional and regional process timelines, where possible.

The first set of official MaPP stakeholder meetings were held in the summer of 2012 and stakeholder engagement concluded approximately two and a half years later (Fig. 3). During that time period, the five MaPP advisory committees met for two to three days per meeting every two to three months. In total, there were 50 face-to-face advisory committee meetings held throughout the planning area and in Vancouver (Table 2). As well, supplementary teleconference meetings with stakeholders were held in some sub-regions. This level of engagement required a high degree of internal fiscal and human resource management for both the government technical teams and coordination of stakeholder participation. It is of note that Haida Gwaii held two stakeholder meetings in 2011, prior to the signing of the MaPP LOI in November 2011. Because these were held before the MaPP initiative was formalised, they are not included in the totals provided below.

2.1.5. Meeting Content

Planning products, which included the plans as well as supporting material such as various frameworks, were developed by the planning teams and presented to advisory committees for feedback and advice. As the plans developed, further iterative and collaborative problem solving took place between the co-leads and stakeholders on many issues. The drafting of objectives and strategies during plan development is one example where input was sought from advisory committees and these collaborative discussions resulted in improved and informed components of the plans.

Though the four sub-regional and regional meetings were held independently of one another, efforts to coordinate stakeholder review across the advisory committees were made. For more detailed meeting schedules, refer to the MaPP sub-regional marine plans [19–22] and the RAF [23].

The following is a summary of the type of content covered in the sub-regional stakeholder committee meetings though the topic order and content varied somewhat among sub-regions:

- Desired future state by stakeholder/interest representative and collective marine plan vision
- Terms of Reference
- Issues, trends, and opportunities in the marine environment
- Plan components and introduction to issues, objectives, and strategies for key topics
- Introduction to the draft MaPP Zoning Framework
- MaPP spatial planning tools and input datasets used to support marine spatial planning
- Draft 1 of Marine Plan and associated planning products
- Draft zoning and associated planning products
- Draft 2 of Marine Plan and spatial zoning and associated planning products
- Changes to the draft plans after public engagement
- MaPP endorsement process
- Next steps for marine plan implementation

The regional advisory committee meetings included the following topics:

- Marine zoning
- Regional Cumulative Effects Assessment Framework
- Regional compliance, monitoring, and enforcement

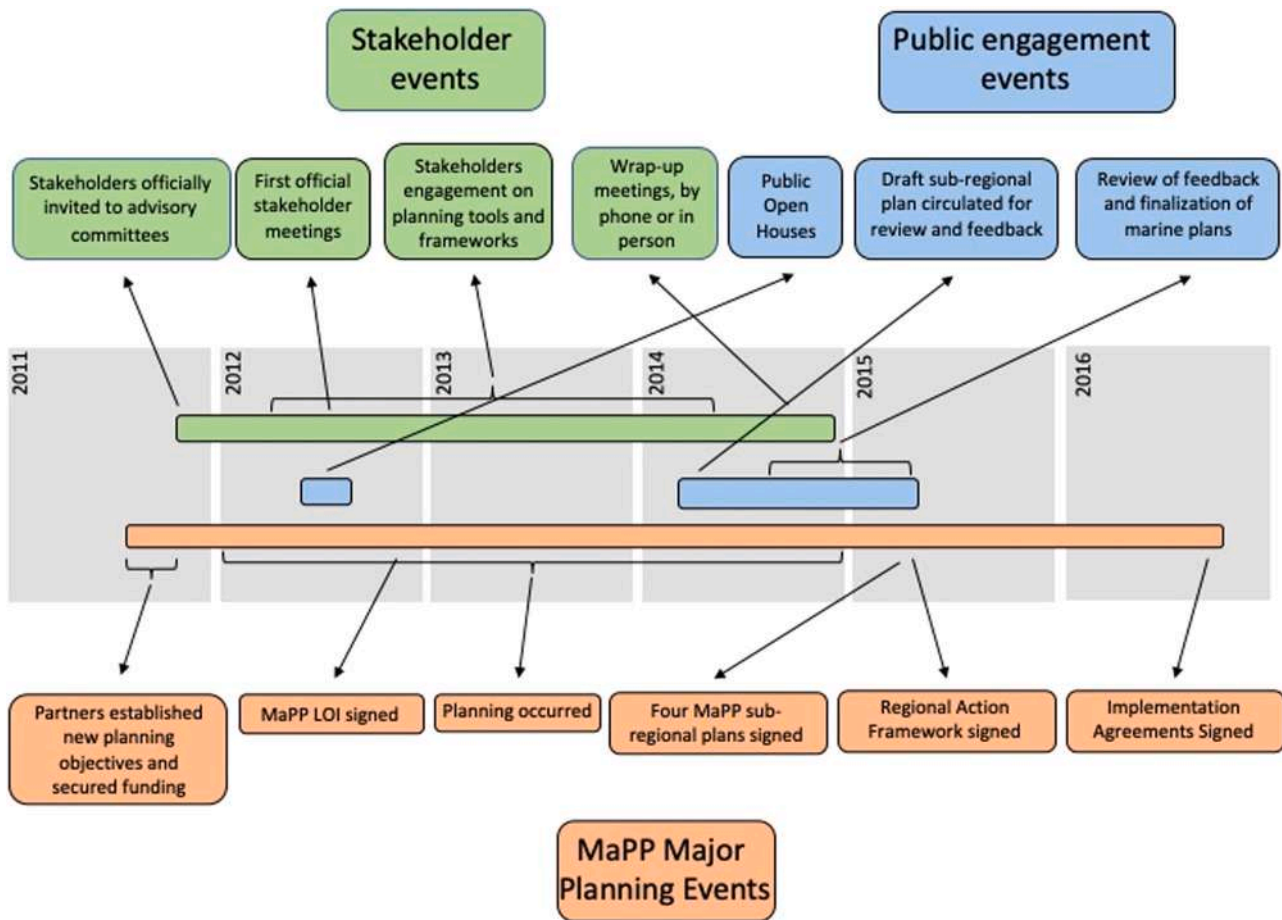


Fig. 3. MaPP key planning events and stakeholder and public engagement timeline.

Table 2

Number of face-to-face MaPP Plan Advisory Committee Meetings conducted in the various MaPP areas throughout the planning process.

MaPP area	Number of meetings
Haida Gwaii sub-region	10
North Coast sub-region	10
Central Coast sub-region	11
North Vancouver Island sub-region	10
MaPP region	9
Total number of meetings	50

Supplementary teleconference meeting and two Haida Gwaii meetings conducted before the signing of the LOI are not included in the totals.

- Marine response and pollution management
- Integrated economic strategies and marine policy
- Review outputs and provide status updates on components
- Ecosystem-Based Management indicators
- Review of multiple drafts and the final Regional Action Framework

2.1.6. Advice tracking and plan development

The MaPP Partners committed to gather and respond to advice provided by stakeholders at each stage of engagement. Advice from stakeholders came in the form of stakeholders’ questions, concerns, or suggestions related to any topic presented on or draft content generated during the planning process. An example of a spatial suggestion was a boundary change to incorporate an important ecological feature in a proposed zone, and an aspatial suggestion included ensuring appropriate activities within a zone.

The Haida Gwaii sub-region used the meeting summaries to track

advice and as a base for making changes and incorporating feedback. These meeting summaries were reviewed by stakeholders at the beginning of each subsequent meeting for feedback and approval. The North Coast, Central Coast, North Vancouver Island sub-regions, and the regional process, gathered and responded to advice through the use of advice logs. All advice received, including verbal feedback at meetings and written comments on distributed material, was recorded and tracked in advice logs. Approximately 3300 pieces of advice were tracked during the planning phase. The advice was recorded in the advice logs and then presented to stakeholders to clarify and confirm their advice was recorded accurately. The technical team co-leads then worked to provide a written response and explanation for the use of the advice.

Throughout the plan development process, stakeholders were encouraged to share draft plan products with constituents (as applicable) in their sectors/interest groups and broader communities, and to provide information and feedback to the process from those exchanges. While the MaPP Partners did not seek formal consensus from local government and stakeholders, planning teams and stakeholders worked together to find innovative and balanced solutions that would secure a high level of local government and stakeholder input into and satisfaction with the marine plans and their implementation.

2.2. Process support

A team of independent contractors who reported to the Marine Co-ordination Team and sub-regional technical teams supported the regional and sub-regional stakeholder engagement, respectively. The contractors provided a range of process support that included all aspects

from meeting planning and document drafting to advice tracking, and stakeholder coordination. Additional capacity was provided by expert consultants who were engaged to assist and deliver specific outputs, provide expert reviews and analyses, and provide facilitation and meeting support [9].

The MaPP Science Coordinator managed technical planning tool development and subsequent product review (e.g., compatibility matrix). A Science Advisory Committee was established to provide expert review and advice. Members were identified for their expertise and familiarity with British Columbia's marine environment.

Advisory committee meetings were co-chaired by the technical team co-leads and, depending on preference, some sub-regions engaged facilitators for some or all of their advisory committee meetings. Both approaches focused on conducting meetings that gave equal opportunities for members to voice their interests, concerns, advice, and feedback in meetings. Meetings were also designed and facilitated to ensure participants felt adequately engaged in meetings and ensured technical teams captured feedback and summarised the meetings accurately.

2.2.1. The marine plan portal

The MaPP marine plan portal, an internet-based mapping tool using the SeaSketch application, was utilized during plan development to build understanding and knowledge of the multiple interests and unique marine habitats and species that exist in the MaPP area. The marine plan portal allowed users to view more than 250 data layers including administrative boundaries, species, habitats, and marine uses and to review draft plan spatial products, including draft zones. The information available in the marine plan portal was used by the sub-regions to support discussions related to conflict avoidance and the development of zones [30].

Stakeholders were encouraged to use the marine plan portal to increase their understanding and facilitate more informed advice on draft planning outputs. The marine plan portal also provided stakeholders opportunities to engage with others through an online forum that was set up for each advisory committee sector/interest group. Stakeholders were able to share draft zoning scenarios and receive advice which they could then pass on to the technical team co-leads [30].

2.3. Public engagement approach

The primary focus for MaPP engagement was with local government and stakeholders through advisory committees; however, ongoing public engagement through the MaPP website and other communication tools, open houses, and a public review process offered opportunities for broader public engagement throughout the planning process.

2.3.1. Communications tools

Public communications were guided by an internal MaPP communications strategy designed to support public understanding of the planning process and the transition to implementation of the plans. The strategy focused on major milestones such as open houses explaining the planning process, the redesign of the website, the draft plan public review period, plan signing celebrations, and the release of final plans. The strategy also identified key goals, risks and mitigation measures, tools to achieve key communications objectives, and primary and secondary audiences.

All communications tools and materials were developed jointly by the Partners. The MaPP website communicated information about the planning process and its ongoing progress to the public. For example, the website presented information about advisory committee meetings and following each meeting, materials were posted on the MaPP website. As advisory committee meetings were open to the public; their dates were also advertised on the website to promote observer attendance. In total, the website received 540,167 hits, most of which were during the public review stage.

An email notification list-serve was available for sign up by the

public on the MaPP website and by June 2014 it included 1273 contacts. A story-based approach was used in e-newsletters and on the website to describe the topics addressed by the plans and profiled the people involved in planning. The stories were used for a variety of purposes such as for the website, advisory committee updates, final reporting, handouts at open houses, and hooks for media stories. Other tools included news releases, internal key messages to announce milestones, and the marine plan portal which allowed the public to view layers of data used in the planning process.

2.3.2. Open houses and public review process

Information open houses were held in the summer of 2012 in each sub-region to introduce the public to the MaPP initiative. At the introductory open houses, presentations were given and informative poster boards were displayed. MaPP contractors and Partner representatives were present to answer questions.

In the spring of 2014, towards the completion of the planning process, open houses were held in each sub-region to get feedback on the planning outputs. These public open houses were held during a six-week public review period. The open houses were advertised through the MaPP website, e-newsletter, media and posters, and by MPAC members. In total 379 members of the public came out to attend 11 open houses held in the four sub-regions to review draft sub-regional marine plans. As the content of the Regional Action Framework was a reflection of the sub-regional plans, it was not considered necessary to engage the public through regional open houses.

An online response form was linked on the MaPP website to provide opportunities for stakeholders and the public to comment on the plans outside of the open houses. This response form was used to document feedback. In total 202 submissions were received through the online response form. There was a total of 1023 discrete pieces of advice received across all sub-regions during the public review period. For each sub-region and the region the proposed changes and advice received through the public review period were recorded in an advice log. Advice was reviewed by the MaPP Partners and, where appropriate, was incorporated into the sub-regional marine plans.

3. Lessons learned

Stakeholder and public engagement was a focal point during MaPP planning at the sub-regional and regional scales, taking up substantial time and resources. As a result, stakeholder input and advice helped to substantially shape all four sub-regional plans and the Regional Action Framework (RAF). Although there were many different views and opinions, the MaPP Partners feel that stakeholder concerns were heard, and feedback received during and after the process suggests there was a satisfactory balance amongst the many competing interests. The engagement process is considered a success by the Partners. At the end of the MaPP planning process in 2014, informal end-of-process surveys [9] and advice logs revealed there was a high level of support from local governments, stakeholders, and the public for the plan outcomes and broad support to finalize the process in 2015. Furthermore, a successful engagement approach is reflected by the fact the plans and the RAF are considered durable, as they remain unchallenged in their sixth year of implementation. Further, implementation has included consistent year-over-year stakeholder participation in the same five advisory committees used during the planning process. Finally, although the plans are not legally binding, annual surveys by the Province reveal that Provincial authorization officers consistently reference MaPP plan guidance in their reports to decision makers and the outcomes of their decisions are highly consistent with policy direction of the MaPP plans. In summary, the durability of the four plans and the RAF is strong since they are being used as intended and are considered by the Partners to be sufficiently supported by stakeholders as they have avoided legal challenges and other barriers experienced by processes with poor stakeholder buy-in [5,31].

The MaPP Partners discussed and reflected on the stakeholder engagement approach during and after the planning process. MaPP also engaged independent consultants for an internal evaluation once the process was completed, which surveyed the MaPP teams, stakeholders, and the public [9]. The evaluation contained multiple-choice, open-ended and short-answer questions, and interviews were held with representatives of the governance structure. From these reflections, the consultants derived several key factors that contributed to the success of the MaPP Partners' high-engagement, advisory approach that are highlighted below.

3.1. Sufficient funding

Adequate support for stakeholder and public engagement is recognized as an important component of a successful planning process in international best practices [6]. Approximately 21 per cent of the planning phase financial resources were used to secure inclusive and intensive stakeholder and public engagement. Engagement funding supported coordination and participation of stakeholders at advisory committee meetings which included travel, food, and accommodation for all members or alternates, and additional funding for advisory committee members to engage their sector/organization.

Fifteen advisory committee members demonstrated the need to use the engagement funding to gather and collate their sector/organizations' perspectives on each successive piece of technical work developed. The commitment by the MaPP Partners to remove financial barriers to secure high levels of participation by stakeholders in advisory committees contributed to an inclusive process with a great diversity of stakeholder input and more efficient stakeholder review and responses.

Engagement funding also supported ongoing public engagement. This funding enabled engagement with the public in a broad manner through open houses and tools such as the MaPP website and the marine plan portal.

3.2. Inclusive stakeholder representation

Effective engagement requires a commitment to developing methods that ensure evenly balanced representation for all stakeholder groups [32]. Fifty-two advisory committee members and additional alternates from sixteen sectors and interests participated in MaPP engagement. An average of ten sectors/interests were represented on each of the five stakeholder advisory committees. The Partners were able to draw on member input from a diversity of interest areas that represented the breadth of socio-economic and environmental interests held in each sub-region and in the MaPP region as a whole.

Some sectors invited to participate in MaPP chose not to formally participate and adopt the responsibilities of the TOR, for example, sectors that were not under provincial jurisdiction, such as shipping and transportation. Importantly, to ensure transparency and openness, the MaPP Partners provided all of these sectors with the opportunity to observe MaPP process meetings and to be informed via bilateral updates as the process progressed.

Sub-regional open houses, held both at the start and completion of the planning phase, enabled direct engagement between planning teams and the public. Members of the public were also able to attend stakeholder meetings as observers. The MaPP website and other communication tools provided up-to-date information on MaPP planning and delivered a wealth of information on planning structures, as well as meeting schedules, agendas, and summaries. Towards the end of the planning process, a public review period offered opportunities for broader public engagement and feedback on draft products. The Partners received some comments that including more public engagement would have been helpful; however, the focus was to ensure meaningful engagement with stakeholders and there were limits in the capacity to engage in the broader public.

A number of changes were made to the planning outputs based on the

public review period, including clarifying how the International Union for Conservation of Nature (IUCN) protected area management categories applied to the MaPP zoning framework.

3.3. Collaborative and accountable leadership

Good process management and accountable leadership are essential to help stakeholders navigate through a planning process [32]. When stakeholders have trust in a process, they are more likely to be engaged and willing to speak to their interests. If trust is lacking, participants may limit their engagement or be driven to find other avenues outside of the planning process to ensure their input is considered and met [33].

The MaPP Partners provided accountable leadership and management of the process including ensuring Terms of Reference were developed for advisory committees and adhered to, schedules for meetings were developed well in advance and advertised, the governance structure was adhered to, and the timelines were managed in order to complete the planning outputs. Furthermore, MaPP Partners led the drafting of the plan products and focused the meetings on stakeholder response, thereby, making the planning process and incorporation of stakeholder interest more efficient. There was minimal internal turnover of leadership capacity during the process, which aided consistency and institutional memory throughout the planning phase. One of the challenges of multi-year planning processes is change in leadership positions or process management, causing internal systems to struggle under low-capacity periods and subsequent new capacity; MaPP was largely able to avoid this issue.

Each MaPP sub-regional advisory committee planning team had two co-leads, one representing the First Nations Partner organization and one representing the B.C. provincial government. The co-leads were available as the main point of contact for stakeholders. They were responsible for managing stakeholder engagement and the development of the technical planning products. This resulted in accountability to the stakeholders and provided stakeholders with an accessible point of contact for questions or feedback on planning products.

The planning teams worked to ensure stakeholders were involved in the process from the beginning of planning and were provided evidence their advice was being fully considered. MaPP Partners felt these steps helped build trust during the process. For the advisory committees that used advice logs, all advice given and responses provided by the planning teams were available for review by all stakeholders throughout the process. In most sub-regions the frequency of meetings also allowed stakeholders to see how their advice had been meaningfully incorporated into the developing plans.

Over the two years of MaPP planning, stakeholders met collectively with the Partners fifty times. The result was a substantial amount of feedback that influenced each stage of MaPP planning. Stakeholder input and influence on successive drafts of plan topics could be seen transparently by the Partners and stakeholders as the plans developed.

3.4. Using a template terms of reference

A template Terms of Reference (TOR) was produced regionally and each sub-regional team had the flexibility to make minor adjustments as needed to suit the respective sub-regional context. The use of a template TOR was a significant improvement on past planning processes in British Columbia where extensive time was spent securing consensus on a final TOR with participants. Instead, stakeholders were asked to sign the TOR in advance of participating in the committees, as opposed to making their requirements the basis for participation. There were some minor edits to the TORs once stakeholders began to meet, but significant time was saved while maintaining the integrity of the process.

3.5. Independent process support and additional capacity

A team of independent contractors was brought on during MaPP

planning to provide support as needed, including stakeholder and meeting support. This enabled technical team co-leads to focus on drafting the plan and stakeholder engagement, while the support contractors undertook tasks such as technical document drafting and tracking, stakeholder and meeting administrative and organisational tasks.

The independent contractors were able to provide unbiased support for the planning teams (i.e., not connected to the BC government or the First Nations partners). This enabled the development of documents and planning products that focused on shared interests, as directed by sub-regional co-leads. It also enabled the quick turnaround of documents needed to support stakeholder engagement and planning.

Depending on preference, some sub-regions used facilitation for all meetings, while other sub-regions chose not to use facilitation, or offered stakeholders the opportunity to engage facilitators for key meetings at specific planning stages. Those committees that used a facilitator found it helped to maintain a neutral environment and provided a better opportunity for co-leads to fully engage in discussions on advice. In some sub-regions, the trust built by the MaPP partners in co-leading the advisory tables resulted in the decision by stakeholders to decline the offer to bring in independent facilitation services for the final plan development meetings. Having a clear facilitative or leadership figure can help set and maintain clear ground rules, build trust, and enable dialogue for motivating stakeholders to collaborate [32].

A MaPP Science Coordinator led technical planning tool development and product review [9]. The Science Coordinator provided regional oversight as well as sub-regional support. A Science Advisory Committee was also established and consisted of an external pool of scientific and technical experts who could be called on to provide advice. In addition, the planning teams were able to include technical expertise at meetings as needed, including mapping and GIS support, as well as technical experts who were able to speak to specific topics such as provincial tenuring and management of various marine-related sectors. The comprehensive science and technical support provided to the planning teams enhanced the stakeholder engagement process, ensuring the science shared with the advisory committees was rigorous.

3.6. Create opportunities to build relationships

Relationship building between planning teams and stakeholders, and within the stakeholder group itself, was another important component to success and helped create the conditions for more collaborative, constructive, and positive working sessions. The advisory committee meetings enabled relationships to develop among stakeholders and the MaPP Partners. The Partners also created opportunities to build important social capital amongst participants through breaks, group dinners, and field trips which allowed members to share their knowledge and see the planning areas from new perspectives. These informal meetings helped to build trust and understanding amongst advisory committee members and the MaPP Partners.

3.7. Commit early to engaging stakeholders in implementation

The MaPP plans commit to the continued use of an advisory process during implementation. Incorporating implementation commitments into the plans assured stakeholders and local governments knew their roles would continue, thus encouraging greater buy-in to the planning outcomes. Where possible, the sub-regional technical teams worked to keep membership consistent for implementation advisory committees to maintain shared memory and build on the social capital that had been established during planning.

4. Conclusion

The MaPP initiative utilized a high engagement advisory approach to stakeholder engagement. The planning history in British Columbia was a

significant factor in both the decision to use an advisory approach and the structure of the approach used. For example, key stakeholders already had extensive experience with land use or marine use planning processes, internal processes to determine representatives had been determined, principles for engagement had been developed, and relationships amongst representatives had been built.

The advisory approach used in the MaPP initiative may be a useful model for other planning processes being co-led by multiple governments, especially those with tight timelines for completion. A key factor in the success of the chosen stakeholder engagement approach was the establishment of advisory committees that represented sub-regional and regional interests. These committees met intensively, for two to three days at a time, and frequently, on average every two months, for a total of 50 times in approximately two years. Advisory committee members received funding to participate in meetings and were able to access funds to engage their sectors if required. MaPP Partner co-leads, who led each of the advisory committees, were committed to tracking, responding, and integrating the large amount of stakeholder advice between successive meetings in a responsive and transparent fashion.

Several components of the MaPP engagement strategy that could be transferred to other engagement processes regardless of governance structure include the advisory approach (as opposed to achieving consensus), providing sufficient funding for meaningful stakeholder engagement, intensive and responsive engagement, and having adaptable draft TORs. Based on the independent consultant's evaluation of the engagement process, high participation of stakeholders in implementation, and the durability of the plans to date, the governance partners conclude that the engagement strategy resulted in strong stakeholder trust and support for the process and outcomes. Most stakeholders chose to continue to engage with MaPP and transitioned into membership in the implementation advisory committees. The high level of continuity in stakeholder participation in implementation of the MaPP plans is a further sign of the strength of stakeholder and public engagement undertaken by the MaPP Partners.

CRedit authorship contribution statement

Gord McGee – Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **Josie Byington** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **John Bones** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **Sally Cargill** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **Megan Dickinson** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **Kelly Wozniak** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing. **Kylee A Pawluk** - Conceptualization, Investigation, Writing - original draft, Writing - review & editing.

Conflict of interest

All authors declare no competing interests.

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References

- [1] C. Ehler, F. Douvère, Marine spatial planning: a step-by-step approach toward ecosystem-based management, UNESCO, Intergovernmental Oceanographic Commission and Man and the Biosphere Programme, Paris, (2009). (<https://www.researchgate.net/publication/268036864>) (Accessed May 31, 2019).
- [2] R. Sardà, T. O'Higgins, R. Cormier, A. Diedrich, J. Tintoré, A proposed ecosystem-based management system for marine waters: linking the theory of environmental policy to the practice of environmental management, *E&S* 19 (2014) art51, <https://doi.org/10.5751/ES-07055-190451>.
- [3] R. Pomeroy, F. Douvère, The engagement of stakeholders in the marine spatial planning process, *Mar. Policy* 32 (2008) 816–822, <https://doi.org/10.1016/j.marpol.2008.03.017>.
- [4] Biodiversity and stakeholders: concertation itineraries, in: M. Bouamrane (Ed.), *Biosphere Reserves, Technical Notes 1*, UNESCO, Paris, 2006 (Accessed April 3, 2019), (https://unesdoc.unesco.org/ark:/48223/pf0000146566_eng).
- [5] E. Fox, E. Poncelet, D. Connor, J. Vasques, J. Ugoretz, S. McCreary, D. Monie, M. Harty, M. Gleason, Adapting stakeholder processes to region-specific challenges in marine protected area network planning, *Ocean Coast. Manag* 74 (2013) 24–33, <https://doi.org/10.1016/j.ocecoaman.2012.07.008>.
- [6] E. Fox, M. Miller-Henson, J. Ugoretz, M. Weber, M. Gleason, J. Kirlin, M. Caldwell, S. Mastrup, Enabling conditions to support marine protected area network planning: California's Marine Life Protection Act Initiative as a case study, *Ocean Coast. Manag.* 74 (2013) 14–23, <https://doi.org/10.1016/j.ocecoaman.2012.07.005>.
- [7] R. Pomeroy, K. Baldwin, P. McConney, Marine spatial planning in Asia and the Caribbean: application and implications for fisheries and marine resource management, *Desenvolv. Meio Ambient.* 32 (2014) 151–164, <https://doi.org/10.5380/dma.v32i0.35627>.
- [8] P.M. Gilliland, D. Laffoley, Key elements and steps in the process of developing ecosystem-based marine spatial planning, *Mar. Policy* 32 (2008) 787–796, <https://doi.org/10.1016/j.marpol.2008.03.022>.
- [9] S. Diggon, J. Bones, C. Short, J.L. Smith, M. Dickinson, K. Wozniak, K. Topelko, K. A. Pawluk, The Marine Plan Partnership for the North Pacific Coast - MaPP: a collaborative and co-led marine planning process in British Columbia, *Mar. Policy*. (In Press).
- [10] G. McGee, A. Cullen, T. Gunton, A new model for sustainable development: a case study of the Great Bear Rainforest regional plan, *Environ. Dev. Sustain* 12 (2010) 745–762, <https://doi.org/10.1007/s10668-009-9222-3>.
- [11] K. Price, A. Roburn, A. MacKinnon, Ecosystem-based management in the Great Bear Rainforest, *For. Ecol. Manag* 258 (2009) 495–503, <https://doi.org/10.1016/j.foreco.2008.10.010>.
- [12] BC provincial government, land use objectives regulation: policy and procedures, (2008).
- [13] J. Bones, personal communication, (2017).
- [14] Minister of Justice, *Oceans Act S.C.* (1996), c. 31, n.d. (<https://laws-lois.justice.gc.ca/PDF/O-2.4.pdf>) (Accessed May 30, 2019).
- [15] Fisheries and Oceans Canada, *Canada's Oceans Strategy*, (2002). (<https://waves-va.gues.dfo-mpo.gc.ca/Library/264675.pdf>) (accessed May 29, 2019).
- [16] A. Gage, Why Harper's shot at PNCIMA also hit Enbridge in the foot | West Coast Environmental Law, Why Harpers Shot PNCIMA Also Hit Enbridge Foot, (2011). (<https://www.wcel.org/blog/why-harpers-shot-pncima-also-hit-enbridge-foot>) (Accessed April 26, 2019).
- [17] Coastal First Nations-Great Bear Initiative, North Coast-Skeena First Nations Stewardship Society, Nanwakolas Council, Province of British Columbia, Letter of Intent to collaborate on coastal and marine planning in the Pacific North Coast., (2011). (http://mapocean.org/wp-content/uploads/2013/10/LOI_Completed_No_v.28_2011-signatures-removed.pdf) (Accessed May 28, 2019).
- [18] Pacific North Coast Integrated Management Area (PNCIMA) Initiative, Pacific North Coast Integrated Management Area Plan, (2017). (<http://www.pncima.org/media/documents/2016-plan/2316-dfo-pncima-report-v17-optimized.pdf>) (Accessed May 30, 2019).
- [19] Marine Planning Partnership Initiative, Central Coast Marine Plan, (2015). (http://mapocean.org/wp-content/uploads/2015/08/MarinePlan_CentralCoast_10082_015.pdf) (Accessed May 30, 2019).
- [20] Marine Planning Partnership Initiative, Haida Gwaii Marine Plan, (2015). (<http://mapocean.org/wp-content/uploads/2015/09/HGMP-WEB-2015-07-08.pdf>) (Accessed May 31, 2019).
- [21] Marine Planning Partnership Initiative, North Coast Marine Plan, (2015). (http://mapocean.org/wp-content/uploads/2016/07/MarinePlan_NorthCoast_WebVer_20151207_corrected.pdf) (Accessed May 30, 2019).
- [22] Marine Planning Partnership Initiative, North Vancouver Island Marine Plan, (2015). (http://mapocean.org/wp-content/uploads/2015/11/MarinePlan_NorthVancouverIsland_28072015_corrected.pdf) (Accessed May 31, 2019).
- [23] Marine Plan Partnership Initiative, Regional Action Framework, (2016). (http://mapocean.org/wp-content/uploads/2016/05/raf_mapp_v2.22_web.pdf) (Accessed May 31, 2019).
- [24] Marine Planning Partnership Initiative, Haida Marine Advisory Committee Terms of Reference, (2012). (http://mapocean.org/wp-content/uploads/2013/09/MAC_HG_TOR_May2012_Final_web.pdf) (Accessed May 31, 2019).
- [25] Marine Planning Partnership Initiative, North Coast Marine Plan Advisory Committee Terms of Reference, (2012). (http://mapocean.org/wp-content/uploads/2013/09/MaPP_NC_MPAC_TOR_addendum_20131209_web.pdf) (Accessed May 31, 2019).
- [26] Marine Planning Partnership Initiative, Central Coast Marine Plan Advisory Committee Terms of Reference, (2012). (http://mapocean.org/wp-content/uploads/2017/03/MaPP_CC_MPAC-TOR_2Addenda_web.pdf) (Accessed May 31, 2019).
- [27] Marine Planning Partnership Initiative, North Vancouver Island Marine Plan Advisory Committee Terms of Reference, (2013). (http://mapocean.org/wp-content/uploads/2013/10/MaPP_NVI_MPAC_TOR_addendum_20131209_web.pdf) (Accessed May 31, 2019).
- [28] Marine Planning Partnership Initiative, Regional Marine Advisory Committee Terms of Reference, (2013). (http://mapocean.org/wp-content/uploads/2013/10/MaPPRegMACTOR_web_20131016.pdf) (Accessed May 31, 2019).
- [29] Marine Planning Partnership for the North Pacific Coast Support Project Memorandum of Understanding, (n.d.). (http://mapocean.org/wp-content/uploads/2013/10/MaPP_MOU_nosigs.pdf) (Accessed October 8, 2020).
- [30] J.L. Smith, A. Heidt, C. McDougall, C. Short, J. Tamblin, A. Paul, Planning tools and results to develop and implement special and protection management zones for the North Pacific Coast, *Mar. Policy* 17 (2020).
- [31] M. Gleason, E. Fox, S. Ashcraft, J. Vasques, E. Whiteman, P. Serpa, E. Saarman, M. Caldwell, A. Frimodig, M. Miller-Henson, J. Kirlin, B. Ota, E. Pope, M. Weber, K. Wiseman, Designing a network of marine protected areas in California: achievements, costs, lessons learned, and challenges ahead, *Ocean Coast. Manag.* 74 (2013) 90–101, <https://doi.org/10.1016/j.ocecoaman.2012.08.013>.
- [32] C. Ansell, A. Gash, Collaborative governance in theory and practice, *J. Public Adm. Res. Theory* 18 (2008) 543–571, <https://doi.org/10.1093/jopart/mum032>.
- [33] B. Manwaring, S. Orenstein, Principles for Stakeholder Involvement in Coastal and Marine Spatial Planning, U.S. Institute for Environmental Conflict Resolution of the Morris K. Udall and Stewart L. Udall Foundation, Tucson, AZ, (2011). (https://projects.ecr.gov/cmspstakeholderengagement/pdf/PrinciplesforStakeholderInvolvementinCoastalandMarineSpatialPlanning_0.pdf) (Accessed May 31, 2019).