MARINE PLAN PARTNERSHIP FOR THE NORTH PACIFIC COAST **CENTRAL COAST ANNUAL REPORT** 

2017-18



Cite as: Marine Plan Partnership for the North Pacific Coast – Central Coast Annual Report 2018. Copyright © 2018

Cover Photo Credit: Janie Wray, CetaceaLab Seaweed Motif: Simon Davies - Jones, Davies & Davies Layout and Design: Gary Leung – www.garyleungonline.com









MARINE PLAN PARTNERSHIP FOR THE NORTH PACIFIC COAST

# CENTRAL COAST ANNUAL REPORT

2017-18





### **TABLE OF CONTENTS**

Message from the Implementation Team	4
Acknowledgments	5
Implementation Progress Overview	5
Implementation Progress Details	6
Looking Ahead	16
Graphics and Figures	17





#### **MESSAGE FROM THE IMPLEMENTATION TEAM**

The Central Coast Marine Plan outlined a vision, objectives and strategies for the stewardship and management of the Central Coast's coastal and marine areas, and provided guidance and recommendations for First Nations and provincial agencies in their evaluation of coastal and marine-based activities and uses.

The Province of B.C. and the Heiltsuk, Kitasoo/Xai'Xais, Nuxalk and Wuikinuxv Nations ("the Central Coast partners") are working to implement the recommendations in the Central Coast Marine Plan, with input from communities, stakeholders, local governments, and the broader public.

The Central Coast Implementation Technical Team is pleased to present the 2017-18 annual report. This report reflects implementation progress made between April 1, 2017 and March 31, 2018. We hope you will enjoy reading about the progress that was made and we look forward to continuing to work towards full implementation of the Central Coast Marine Plan.

Sincerely,

Aaron Heidt and Gord McGee (Co-Leads, Central Coast Indigenous Resource Alliance)

Sally Cargill (Co-Lead, Province of B.C.)





### ACKNOWLEDGMENTS

The Central Coast Implementation Technical Team would like to acknowledge and thank all the representatives of the Heiltsuk, Kitasoo/Xai'Xais, Nuxalk, and Wuikinuxv Nations, the Province of B.C., the sector representatives who make up the Central Coast Marine Plan Implementation Advisory Committee and many other contributing organizations and individuals for the time and energy that they have put into implementing the Central Coast Marine Plan. The plan itself represents the culmination of several years of dedicated work by many of these same representatives. We thank all those representatives that have continued to remain involved through implementation, as well as those that have recently become involved.

We also wish to acknowledge the ongoing financial support for MaPP implementation from funders to the Great Bear Sea Fund at Tides Canada Foundation.

#### **IMPLEMENTATION PROGRESS OVERVIEW**

Implementation priorities for the Central Coast Marine Plan were identified during the planning phase and were further scoped through implementation work planning and budgeting. Priority implementation activities in 2017-18 built on the foundational governance work of earlier years to implement priority strategies related to stewardship and sustainable economic development.

In 2017-18, Coastal Guardian Watchmen continued collecting data on ecosystem-based management (EBM) indicators; welcoming and educating visitors in the territory; and promoting compliance through education and presence. Guardians improved their proficiency in monitoring, data collection, and survey methodology. They noticed an increase in recognition from marine users, a decrease in illegal activities, and growing stakeholder interest and support for the monitoring work they do.

We continued to build partnerships for stewardship and monitoring with parties such as the Hakai Institute, Coastal Oceans Research Institute, Fisheries and Oceans Canada, and the Conservation Lands Management Program. These partnerships continue to improve our capacity to monitor the Central Coast environment.

We worked with a number of experts in the shellfish aquaculture industry, including academics, private consultants, and staff in the federal and provincial governments, to get a better understanding of how to move this industry forward in the Central Coast. We set up a two-year shellfish aquaculture research project that will provide the right mix of research, innovation and



practical guidance required to help establish the shellfish aquaculture industry in the Central Coast.

The Plan has been informing tenuring decisions for three years. An initial review of tenure authorizations shows a high level of consistency between tenuring decisions and recommendations in the Central Coast Marine Plan. This information will continue to be tracked for 2017-18 to help inform plan implementation. The Marine Plan Partnership (MaPP) partners expect to report out on this and other plan performance measures over time.

#### **IMPLEMENTATION PROGRESS DETAILS**



This section highlights key achievements related to implementation of the Central Coast Marine Plan in 2017-18, organized by associated MaPP strategic outcomes.

Each strategic outcome section also includes a table that lists all the related priority strategies that the Central Coast partners worked on in 2017-18. For each strategy, a scorecard is provided that shows the implementation status of the strategy and key upcoming actions in 2018-19. Full implementation of many of the strategies will take several years.

Implementation status is defined as:

**Complete/functioning** – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.

**On track** – All discrete activities intended to be undertaken for this strategy in 2017-18 are completed. All continuous activities intended to be undertaken for this strategy in 2017-18 are fully operational.

**In development/some activities initiated** – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.

Not started – No activities for this strategy were initiated in 2017-18.



**Outcome 1: Collaboration and Governance** – Strengthening the model of collaborative oceans governance.

In 2017-18, the Central Coast partners maintained and strengthened the structures required to implement the Central Coast marine plan. Key achievements included:

- Recruiting new representatives for coastal forestry and shellfish aquaculture to the Central Coast Marine Plan Implementation Advisory Committee (MPIAC) and re-engagement of local government with representatives from the Central Coast Regional District.
- Creating and filling a new seat for a youth representative on the MPIAC.
- Circulating the 2016-2017 annual report to MPIAC members during the summer and circulating an interim 2017-18 progress report in December 2017.
- Holding the annual in-person MPIAC meeting in March 2018. Stakeholders on the committee reviewed the draft 2018-19 workplan and discussed implementation topics, including the management planning approach for Protection Management Zones (PMZ) and Special Management Zones; the EBM indicator monitoring program; and climate change and cumulative effects work.
- Participating in all Marine Protected Area (MPA) Technical Team meetings and on several sub-committees established to advance specific aspects of MPA network planning.
- Reaching technical agreement on the Terms of Reference for the MPA Technical Team and the Letter of Intent that outlines the approach to Federal-Provincial-First Nations collaboration on MPA network planning. These documents are undergoing executive-level review.



### *Table 1. Implementation status of strategies identified in the 2017-18 workplan related to Collaboration and Governance.*

Central Coast Marine Plan Strategy	Implementation Status <sup>1</sup> as of April 1, 2018	Key upcoming actions in 2018-19
<b>Governance 2.3</b> : Seek required resources identified for the implementation of the Central Coast Marine Plan, including those required for governance structures.	Complete/ functioning	Continued support for Nation-level community engagement.
<b>Governance 2.4:</b> Establish a stakeholder advisory process that supports the successful implementation of the Central Coast Marine Plan.	Complete/ functioning	Continued support for stakeholder engagement through the Marine Plan Implementation Advisory Committee.
<b>Governance 3.1</b> Encourage the development of protocols and agreements between First Nations and local governments.	In development/ some activities initiated	Work with the Central Coast Regional District on a protocol agreement for areas of mutual interest such as climate change impacts and emergency response.
<b>Governance 3.2</b> Review and increase the effectiveness of existing protocols and agreements between First Nations and local governments.	In development/ some activities initiated	Bring forward relevant information on common elements of protocol agreements to discussions with the Central Coast Regional District.
Monitoring & Enforcement 2.2: Improve understanding and communication between relevant compliance and enforcement agencies.	In development/ some activities initiated	Engagement between individual B.C. agencies and First Nations on logistics of increasing First Nation participation in compliance and enforcement activities.
<b>Tenured Activities 1.1</b> : Review existing provincial tenure policies to ensure they are current, effective and up-to-date and consistent in describing proponents' responsibilities to engage with First Nations, while recognizing that the responsibility to consult remains with the Province.	On track	Finalize technical report on review of guidelines.

<sup>&</sup>lt;sup>1</sup> Implementation status is defined as:

<sup>Complete/functioning – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.
On track – All discrete activities intended to be undertaken for this strategy in 2017-18 are completed. All continuous activities intended to be undertaken for this strategy in 2017-18 are fully operational.
In development/some activities initiated – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.
Not started – No activities for this strategy were initiated in 2017-18.</sup> 



Central Coast Marine Plan Strategy	Implementation Status <sup>1</sup> as of April 1, 2018	Key upcoming actions in 2018-19
<b>Tenured Activities 1.2</b> : Develop provincial guidelines which support the development of protocols between First Nations and tenure proponents.	In development/ some activities initiated	Create guidance documents for tourism operators and recreational fishing service providers that assist in the development of protocol agreements between operators and the Central Coast Nations.
<b>Traditional, Cultural and Heritage Resources 3.3:</b> Ensure protocols developed between tourism proponents and First Nations include guidelines for human activities around cultural sites and areas, including the use of First Nations monitors and guides, where appropriate.	In development/ some activities initiated	Create guidance documents for tourism operators and recreational fishing service providers that assist in the development of protocol agreements between operators and the Central Coast Nations.
<b>Traditional, Cultural and Heritage Resources 3.5:</b> Ensure research protocols developed between First Nations and researchers identify local sensitivities and guide human activities around sensitive cultural and archaeological sites.	Complete/ functioning	Test the policy and research protocol template developed in 2017-18.

**Outcome 2: Marine Zoning** – Achieving a healthy marine environment, robust economy and strong communities through zoning.

In 2017-18, the Central Coast partners further refined management zones in the Central Coast sub-region. Key achievements included:

- Reaching agreement on zone type for two of the five areas that require more detailed planning: a small bay in Burke Channel, and Fog Creek/Green River area.
- Completing a detailed inventory of existing marine and associated land-based log handling tenures in South Bentinck. This inventory will support discussions between the partners and industry on zoning in South Bentinck.
- Identifying priority PMZs and beginning to populate management plan templates for these zones.
- Developing a SeaSketch enhancement that will help populate a PMZ atlas and PMZ management plans.
- Contributing to key technical reports that will support development of the MPA Network for the Northern Shelf Bioregion.



## Table 2. Implementation status of strategies identified in the 2017-18 workplan related to Marine Zoning.

Central Coast Marine Plan Strategy	Implementation Status <sup>2</sup> as of April 1, 2018	Key upcoming actions in 2018-19
<b>Governance 2.2</b> : Actively engage in a governance structure that includes relevant Crown agencies and First Nations, for the development and implementation of a Marine Protected Area Network for the Northern Shelf Bioregion.	On track	Continue to engage in the Marine Protected Area Network governance structure, including participating in Marine Protected Area Technical Team and Network Committee meetings, and co-chairing the Central Coast Ocean Advisory Committee.
Marine Protection 1.1: Work with relevant Crown agencies and First Nations to collaboratively discuss, identify and advance possible areas for inclusion in an MPA Network for the Northern Shelf Bioregion	On track	Support development of key technical reports and begin scenario planning.
Marine Protection 1.3: Develop management tools and protection measures for collaboratively managing Protection Management Zones.	On track	Develop a strategic approach for populating Protection Management Zone management plans.
Tenured Activities 3.3 Conduct detailed planning in the 5 areas requiring more detailed planning: - Burke Channel (Burke/Fisher) - Northern end of South Bentinck (Dean/Bentinck) - Southern end of South Bentinck (Asseek) - Kimsquit Bay - Fog Creek/ Green River	In development/ some activities initiated	Finalize zone amendment for the areas in Burke Channel and Fog Creek/ Green River. Continue zoning discussions for the remaining three areas requiring more detailed planning.
<b>Traditional, Cultural and Heritage Resources 1.1</b> : Incorporate the protection of sensitive cultural and archaeological sites into the management of Protection Management Zones.	In development/ some activities initiated	Continue to develop management plans for Protection Management Zones.

Complete/functioning – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.
 On track – All discrete activities intended to be undertaken for this strategy in 2017-18 are completed. All continuous activities intended to be undertaken for this strategy in 2017-18 are fully operational.
 In development / some activities initiated – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.
 Not started – No activities for this strategy were initiated in 2017-18.



<sup>&</sup>lt;sup>2</sup> Implementation status is defined as:

Central Coast Marine Plan Strategy	Implementation Status <sup>2</sup> as of April 1, 2018	Key upcoming actions in 2018-19
Marine Fisheries Economy 1.1: Work with relevant Crown agencies and First Nations to assess the need, and where appropriate, develop a siting policy for marine-based sport fishing lodges that incorporates traditional and local knowledge and values and considers cumulative effects.	In development/ some activities initiated	Continue to develop management plans for Protection Management Zones and include an assessment of marine-based sport fishing lodges in the area and whether a siting policy would address concerns related to cumulative effects.

**Outcome 3: Stewardship, Monitoring and Enforcement** – Enhancing stewardship of ecological and cultural values, and archaeological sites and areas through comprehensive monitoring and enforcement.

As in previous years, stewardship, monitoring and enforcement were a significant focus in 2017-18. Key achievements included:

- Each Nation continuing to collect EBM indicator data and monitor marine tenures through their Science and Coastal Guardian Watchmen programs. The science and monitoring programs include: marine tenures, cultural sites, vessel traffic, wildlife, spills, contaminants, debris, invasive species such as green crabs and tunicates, dungeness crabs, groundfish, recreational and commercial crab traps, and estuary health.
- Using monitoring within PMZs, conducted by the Coastal Guardian Watchmen through the Central Coast EBM indicator program, to provide rationale and support for two additional commercial crab fishery closure areas, and establishing a joint technical working group with Fisheries and Oceans Canada for crab management in the Central Coast.
- Working towards creating a stronger foundational understanding of the pathways of effects of the Central Coast and Regional EBM indicator suites, which will help identify what specific gaps in stressors, drivers and components related to our key EBM values need to be filled to allow for informed management.
- Working to develop a communications strategy to raise awareness and understanding among local communities and tourists about First Nations title and rights, cultural areas and sites, and cultural beliefs and values with respect to marine resources.
- Providing MaPP funding and coordination to assist in removing 108 barrels of fuel and other hazardous substances and 105 empty barrels from the old Namu cannery site.
- Continuing collaboration with the Conservation Land Management Program to assess estuarine health at three important sites in the Central Coast Plan Area: Koeye, Asseek and



North Bentinck. Continuing measures of sea level, sea-surface temperature, timing of fresh water run-off, dissolved oxygen and acidification, salt-water marsh erosion/accretion as well as species and habitat changes. This monitoring will result in greater understanding of climate change impacts on estuaries and will be used in a coast-wide model to help determine how and where to allocate resources to support estuary health and adaptation. Nuxalk and Heiltsuk Coastal Guardian Watchmen were also trained on using datalogger equipment, and vegetation monitoring and breeding bird surveys.

• Contributing to regional work items associated with marine response planning.

### *Table 3. Implementation status of strategies in the 2017-18 workplan related to Stewardship, Monitoring and Enforcement.*

Central Coast Marine Plan Strategy	Implementation Status <sup>3</sup> as of April 1, 2018	Key upcoming actions in 2018-19
<b>Monitoring &amp; Enforcement 2.3:</b> Coordinate training for marine monitoring programs with other relevant enforcement agencies to establish a collaborative approach to compliance monitoring and reporting out to relevant enforcement agencies.	In development/ some activities initiated	Continue to look for joint training activities.
Monitoring & Enforcement 2.4: Establish Memorandums of Understanding between First Nations and relevant Crown agencies to clarify monitoring and enforcement authority roles and responsibilities.	Not started	Bring together representatives of monitoring and enforcement programs across provincial and First Nations governments in the Central Coast to identify opportunities for collaboration
Monitoring & Enforcement 2.5: Establish a communications strategy that ensures the effective flow of information and timely action on monitoring and enforcement issues.	Not started	No activities planned for 2017-18.
Monitoring & Enforcement 2.6: Develop a monitoring and assessment needs report for current and future	In development/ some activities	Hire a contractor to assess resources required to effectively promote, monitor and facilitate compliance with marine environmental and

<sup>&</sup>lt;sup>3</sup> Implementation status is defined as:

Complete/functioning – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.
 On track – All discrete activities intended to be undertaken for this strategy in 2016-17 are completed. All continuous activities intended to be undertaken for this strategy in 2016-17 are fully operational.
 In development / some activities initiated – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.
 Not started – No activities for this strategy were initiated in 2016-17.



Central Coast Marine Plan Strategy	Implementation Status <sup>3</sup> as of April 1, 2018	Key upcoming actions in 2018-19
requirements, including resources, across all agencies.	initiated	traditional laws now and into the future.
<b>Monitoring &amp; Enforcement 2.8:</b> Build capacity for appropriate levels of monitoring and enforcement with particular attention to monitoring and enforcement within MPAs.	On track	Continue implementation of EBM indicator monitoring program.
Monitoring & Enforcement 3.5: Prioritize marine species and habitats that require targeted monitoring, including invasive species.	On track	Continue implementation of EBM indicator monitoring program and support regional EBM indicator monitoring efforts where appropriate.
Monitoring & Enforcement 3.6: Measure long-term changes in ecological integrity and human wellbeing using the Central Coast sub-regional EBM indicators identified during implementation of the central coast marine plan.	On track	Continue implementation of EBM indicator monitoring program and support regional EBM indicator monitoring efforts where appropriate.
<b>Climate Change Adaptation &amp; Mitigation 2.1</b> : Determine which climate change indicators can be monitored through partnerships with local organizations and individuals, such as the Coastal Guardian Watchmen and citizen science groups.	On track	Develop capacity to monitor a set of regional climate change indicators, subject to approval of external funding.
<b>Climate Change Adaptation &amp; Mitigation 3.1:</b> Identify marine habitats and species with critical ecosystem functions and roles.	On track	Continue the multi-year collaboration with the Conservation Land Management Program and implementation of the integrated EBM work plan, including the pathways of effects study.
<b>Pollution 1.1</b> : Work with relevant Crown agencies and First Nations to contribute to the ongoing review, assessment and, where applicable, amendment and implementation of marine pollution policies and laws, focusing on international best management practices.	In development/ some activities initiated	Work to understand the existing regulatory framework for key pollution concerns and identify potential means of addressing concerns.
<b>Pollution 2.1</b> : Identify sites for marine habitat restoration, including but not limited to: log sorts, heli-drop sites, booming areas, derelict vessels, abandoned sites, derelict fishing gear.	In development/ some activities initiated	Continue recording tenure sites with abandoned gear or other concerns. Pursue restoration of priority areas as funding opportunities arise.
<b>Pollution 2.2</b> : Develop, implement and prioritize restoration plans, as appropriate.	On track	Develop workplan and budget for Namu restoration.
<b>Pollution 3.1:</b> Work with First Nations and relevant Crown agencies to review and implement	On track	Work with the federal government to facilitate community outreach meetings to identify areas



Central Coast Marine Plan Strategy	Implementation Status <sup>3</sup> as of April 1, 2018	Key upcoming actions in 2018-19
international best management practices for marine accidents and spill clean up.		of concern which is an initial step in the creation of Geographic Response Plans.
<b>Pollution 3.2</b> : Develop information-sharing protocols that ensure the efficient flow of information and data among all levels of government.	In development/ some activities initiated	Support the regional marine spill response process and associated activities.
<b>Pollution 3.5:</b> Ensure that sufficient response capability is in place before marine activities are approved.	In development/ some activities initiated	Support the regional marine spill response process and associated activities.
<b>Pollution 4.1</b> : Research and compile effective components of successfully implemented marine response plans in other geographic regions.	In development/ some activities initiated	Support the regional marine spill response process.
<b>Pollution 4.2:</b> Work with relevant Crown agencies and First Nations to gather and analyze all relevant information and data to populate marine response plans.	In development/ some activities initiated	Support the regional marine spill response process and associated activities.
<b>Tenured Activities Forestry 11.3:</b> Monitor floating camps, barges and land-based facilities for potential marine ecological impacts.	Complete/ functioning	Continue to incorporate monitoring of forestry floating camps, barges and land-based facilities into regular Coastal Guardian Watchmen patrols.
<b>Traditional and Cultural Resources 2.1:</b> Develop outreach and education programs that inform local communities and tourists about First Nations title and rights, cultural areas and sites, cultural beliefs and values with respect to Marine Resources.	On track	Complete the communications strategy and develop outreach/education materials.
<b>Traditional, Cultural and Heritage Resources 3.2:</b> Develop guidelines that teach potential visitors about basic etiquette while visiting cultural and archaeological sites.	On track	Complete the communications strategy and develop outreach/education materials.
Marine Fisheries Economy 4.2: Identify gaps in enhancement and restoration activities based on ecological, social and economic need.	On track	Pursue enhancement and restoration activities as funding opportunities arise.



**Outcome 4: Sustainable Economic Development and Healthy Communities** – Fostering a new ecosystem-based marine economy for improved community and human well-being.

The Central Coast partners explored options for establishing a successful shellfish aquaculture industry on the Central Coast. Programs that teach First Nations youth about traditional management and harvesting practices were supported. Key achievements included:

- Exploring and establishing a two-year shellfish aquaculture research project that will assess feasibility of geoduck aquaculture at four pilot sites in the Central Coast.
- Increasing the technical capacity of the Coastal Guardian Watchmen through mentorship and training with Central Coast Indigenous Resource Alliance (CCIRA) technical staff and other program partners. Current training and monitoring is providing the foundation for compliance monitoring in the future.
- Supporting each Central Coast Nation to hire a SEAS (Supporting Emerging Aboriginal Stewards) coordinator. Some Nations ran summer cultural camps, hired youth interns to participate in their stewardship department activities, and/or integrated learning about traditional harvest from elders and marine management experiential learning opportunities into their school curriculums.

### Table 4. Implementation status of strategies identified in the 2017-18 workplan related toSustainable Economic Development and Healthy Communities

Central Coast Marine Plan Strategy	Implementation Status <sup>4</sup> as of April 1, 2018	Key upcoming Actions in 2018-19
Monitoring & Enforcement 3.3: Provide First Nations and relevant local residents with training on collecting data related to EBM indicators in order to improve monitoring participation.	On track	Continue to support capacity building in First Nations communities through skills training and investments in equipment and fuel.
<b>Tenured Activities 2.1</b> : Assess provincial tenures in the Plan Area, and review their current level of activity. Where appropriate, work with relevant	In development/ some activities initiated	Develop inventory of log handling and storage tenures for the Central Coast Plan Area.

<sup>&</sup>lt;sup>4</sup> Implementation status is defined as:

Complete/functioning – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.
 On track – All discrete activities intended to be undertaken for this strategy in 2017-18 are completed. All continuous activities intended to be undertaken for this strategy in 2017-18 are fully operational.
 In development / some activities initiated – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.
 Not started – No activities for this strategy were initiated in 2017-18.



agencies to reduce the number of inactive or under- utilised tenures.		
<b>Tenured Activities 9.2</b> : Encourage First Nations and local ownership and operation of aquaculture tenures.	On track	Monitor geoduck aquaculture feasibility at four pilot sites in the Central Coast.
<b>Tenured Activities 9.3:</b> Prepare a review of infrastructure requirements for First Nations and local community processing of aquaculture products in cooperation with relevant government agencies, industry and stakeholders.	In development/ some activities initiated	Support regional marine infrastructure assessment.
<b>Traditional, Cultural and Heritage Resources 2.2:</b> Support programs and activities that encourage youth involvement in traditional use activities and stewardship of the marine environment.	Complete/ functioning	Continue to support the SEAS program. Explore opportunities to engage non-Aboriginal youth in activities related to understanding and managing the marine environment.

**Outcome 5: Climate Change and Adaptive Management** – Undertaking studies and plans to better address the effects of climate change in the MaPP region.

The Central Coast partners supported regional climate change and adaptation planning initiatives. There were no sub-regional strategies related to climate change in the 2017-18 workplan. Key achievements included:

- Identifying a suite of regional and sub-regional climate change indicators. A funding
  proposal to develop capacity to monitor the identified indicators was developed and
  submitted to the federal government. Monitoring will begin in 2018-19 subject to funding.
- Collaborating with the Conservation Land Management Program to measure sea level, seasurface temperature, timing of fresh water run-off, dissolved oxygen and acidification, as well as species and habitat changes at key estuaries in the Central Coast. This monitoring will result in greater understanding of climate change impacts on estuaries and will inform adaptive management for these areas.

### LOOKING AHEAD

In 2017-18, we implemented priority strategies related to stewardship, monitoring and enforcement, and sustainable economic development. In 2018-19, we will continue to strengthen and advance priority strategies under these same outcome areas. Key activities for 2018-19 are summarized below by strategic outcome.



**Collaboration and Governance**: We will keep stakeholders and local government apprised of implementation progress and seek advice on topics such as the integrated EBM indicator work plan, cumulative effects framework, draft management plans for PMZs, and sector-specific protocols and agreements. We will continue participating in MPA Technical Team meetings and work toward establishment of an MPA Network for the Northern Shelf Bioregion.

**Marine Zoning**: We will contribute to scenario planning for the MPA Network for the Northern Shelf Bioregion. We will populate management plan templates for priority PMZs, complete zone amendment for two of the five areas that require more detailed planning and continue to explore options for the other three areas that require more detailed planning.

**Stewardship, Monitoring and Enforcement**: We will continue to support the Coastal Guardian Watchmen to improve their proficiency in monitoring, data collection and survey methodology and will provide continued support for them to collect data on EBM indicators; welcome and educate visitors in the territory; support marine response; and promote compliance through education and presence.

We will complete the Communications Strategy and develop educational materials that inform key user groups about First Nations title and rights, cultural areas and sites, cultural beliefs and values with respect to marine resources.

We will continue to build partnerships for stewardship and monitoring with Hakai Institute, Coastal Oceans Research Institute, Fisheries and Oceans Canada, and the Vancouver Island Conservation Land Management Program. We will continue with remediation of Namu.

**Sustainable Economic Development and Healthy Communities**: We will monitor geoduck aquaculture feasibility at four pilot sites in order to help establish this emerging industry on the Central Coast. We will continue to support the SEAS program to mentor youth in traditional harvesting, marine management and tourism. We will contribute to the regional marine infrastructure assessment.

**Climate Change and Adaptive Management**: We will continue to support regional climate change and adaptation planning initiatives.

#### **GRAPHICS AND FIGURES**

The following graphics illustrate implementation status of the strategies identified in the 2017-18 workplan. Implementation status is defined as follows:

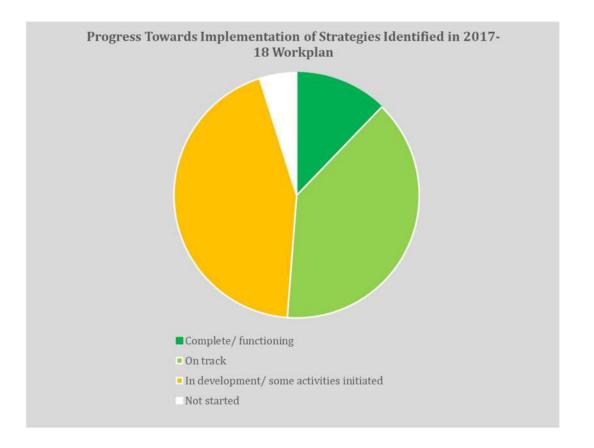
**Complete/functioning** – Of the discrete activities intended to be undertaken for this strategy, all are completed. Of the continuous activities intended to be undertaken for this strategy, all are fully operational and ongoing.



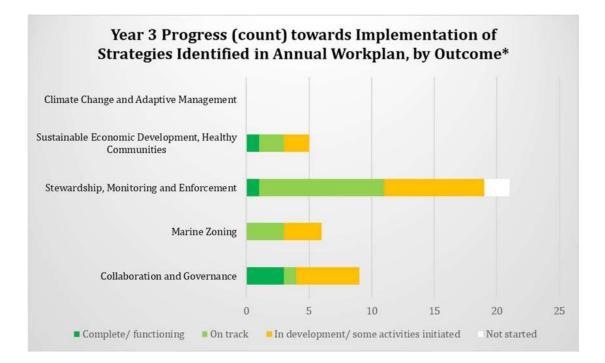
**On track** – All discrete activities intended to be undertaken for this strategy in 2017-18 are completed. All continuous activities intended to be undertaken for this strategy in 2017-18 are fully operational.

**In development / some activities initiated** – Of the activities intended to be undertaken for this strategy, some have been initiated or are in development, but not all are yet complete/ functioning.

**Not started** – No activities for this strategy were initiated in 2017-18.







\*The Central Coast partners supported regional climate change and adaptation planning initiatives. There were no sub-regional strategies related to climate change in the 2017-18 workplan.



### WHERE TO GO FOR MORE INFORMATION

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

Marine Plan Partnership for the North Pacific Coast | MaPP is a partnership between the Government of B.C. and First Nations.















