

MARINE PLAN PARTNERSHIP FOR  
THE NORTH PACIFIC COAST

**CENTRAL COAST  
ANNUAL  
REPORT**

2019-2020



Cite as: Marine Plan Partnership for the North Pacific Coast – Central Coast Annual Report 2020.  
Copyright © 2020

Cover Photo Credit: Janie Wray, CetaceaLab

Seaweed Motif: Simon Davies - Jones, Davies & Davies



MARINE PLAN PARTNERSHIP FOR  
THE NORTH PACIFIC COAST

**CENTRAL COAST**  
**ANNUAL REPORT**

2019-2020



## TABLE OF CONTENTS

Message from the Implementation Team .....	4
Acknowledgments .....	5
Implementation Progress Overview .....	5
Implementation Progress Details.....	6
Outcome 1: Collaboration and Governance .....	7
Outcome 2: Marine Zoning.....	9
Outcome 3: Stewardship, Monitoring and Enforcement.....	11
Outcome 4: Sustainable Economic Development and Healthy Communities .....	17
Outcome 5: Climate Change and Adaptive Management.....	18
Figures .....	20
Looking ahead .....	20





Photo Credit: Michael Vegh

## MESSAGE FROM THE IMPLEMENTATION TEAM

The Central Coast Marine Plan outlines a vision, objectives and strategies for the stewardship and management of the Central Coast’s coastal and marine areas and provides guidance and recommendations for First Nations and provincial agencies in their evaluation of coastal and marine-based activities and uses.<sup>1</sup>

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 2019-2020 annual report. This report reflects implementation progress made between April 1, 2019 and March 31, 2020. 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.).

---

<sup>1</sup> The Central Coast Marine Plan is available online at <http://mappocean.org/central-coast/central-coast-marine-plan/>

## 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 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 (2011-2015) and further scoped through implementation work planning and budgeting. Stewardship, monitoring and enforcement activities have been a focus of the MaPP partnership throughout the first five-year implementation phase (2016-2020), and as in previous years it was a priority for the Central Coast partners in 2019-2020 to support the Nations' Coastal Guardian Watchmen programs. In addition to ongoing capacity building for stewardship, monitoring and enforcement activities, a significant development this year was the move to analyzing and reporting on the considerable outputs of the Guardian Watchmen's monitoring work. Of 27 ecological and socio-economic indicators (selected in the planning phase to support an ecosystem-based management approach), draft reports have been developed for the first 14 of these. The information in these reports has begun to fill critical knowledge gaps on the Central Coast and was derived in large part from primary research conducted by the Nations' Guardian Watchmen. This information is now being used by the Central Coast partners to inform discussions with stakeholders and co-governance partners about ongoing management planning.

Building partnerships and facilitating collaboration also continued to be an important role for MaPP. Much of the work that goes into the Central Coast EBM monitoring program, for example, has been accomplished in partnership with organizations such as the Hakai Institute, the West Coast Conservation Land Management Program, and the B.C. Kelp Mapping Analytical Working Group. Effective compliance and enforcement in the sub-region has been enabled, as in previous years, through joint workshops and training between provincial and Guardian Watchmen operational staff, and this year for the first time through joint patrols on the water. While there have been challenges over the years, communication and the relationships between these organizations have been steadily improving. The Central Coast Nations have also entered into a

pilot collaborative crab management process with DFO. This and a joint review of Rockfish Conservation Areas (RCAs), which has led to the drafting of new RCA boundaries in the sub-region, are examples of how MaPP-supported EBM monitoring work is contributing to processes outside MaPP. Within MaPP, meanwhile, a regional Policy and Planning Working Group was established to develop and implement policies for the management of wild marine aquatic plants. This is an emerging management and policy issue that was not addressed during the original marine planning process.

Another highlight of Marine Plan implementation in 2019-2020 was the engagement of the Central Coast partners in Marine Protected Area (MPA) Network Planning for the Northern Shelf Bioregion (NSB). This year the partners engaged stakeholders and received feedback on the technical draft of an MPA Network Scenario. The Scenario, which was developed and shared through SeaSketch, a marine planning tool, incorporates EBM monitoring data and other work undertaken by the Nations and closely reflects the Protected Management Zones (PMZs) identified in the Central Coast Marine Plan. In the coming year the signatories to the 2018 Reconciliation Framework Agreement for Bioregional Oceans Management and Protection, which include the Heiltsuk, Kitasoo/Xai'xais, Nuxalk and Wuikinuxv First Nations, will continue to work with the federal and provincial governments to establish new co-governance arrangements for MPAs in the NSB.

## IMPLEMENTATION PROGRESS DETAILS

This section highlights the key achievements in the implementation of the Central Coast Marine Plan in 2019-2020, organized under five strategic outcome areas.

Each outcome section includes a table that lists the related priority strategies that the Central Coast partners worked on in 2019-2020. For each strategy, a scorecard is provided that shows the implementation status of the strategy and key upcoming actions in 2020-21. 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 2019-2020 are completed. All continuous activities intended to be undertaken for this strategy in 2019-2020 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 2019-2020.

---

## **Outcome 1: Collaboration and Governance**

*Strengthening the model of collaborative oceans governance.*

The Central Coast partners are committed to implementing the Central Coast Marine Plan in a manner that is collaborative, coordinated, efficient and responsive to their shared interests, and in 2019-2020 they maintained and strengthened the relationships and governance structures required to do so. Key achievements included:

- Finalizing the technical draft of the MPA Network Scenario and engaging with MPA network partners, collaborators and stakeholders. Extensive feedback was received from all stakeholder groups and Fisheries and Oceans Canada (DFO).
- Engaging members of the Marine Plan Implementation Advisory Committee (MPIAC) via annual in-person meeting, bilateral meetings and ongoing correspondence to finalize the EBM indicator reports and discuss sub-regional issues and ongoing opportunities for collaboration.
- Initiating negotiations with the federal government to establish a co-governance agreement for MPA Network implementation in the Northern Shelf Bioregion.
- Establishing a regional Policy and Planning Working Group to develop and implement regional marine plant harvest management recommendations.
- Members of all Central Coast Nations and the Province of B.C. are on the working group and were instrumental in its creation.
- Using a collaborative governance structure to prioritize and undertake restoration activities at Namu; this structure is being viewed by the Central Coast partners as a pilot for other complex remediation projects.
- Working to identify key elements of MaPP implementation on the Central Coast and their relative level of priority for MaPP implementation in the next 5 years.
- Developing a plan amendment process to guide discussions amongst the Central Coast partners on plan review and amendment in 2020-21.

*Table 1. Implementation status of strategies identified in the 2019-2020 work plan related to Collaboration and Governance.*



Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<p><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.</p>	<p>Complete/ functioning</p>	<p>Technical analysis of feedback and working at a government-to-government level (FN-Fed-Prov) and with stakeholders to develop a final network scenario. Collaborative drafting of a co-governance agreement for network implementation.</p>
<p><b>Governance 2.3:</b> Seek required resources identified for the implementation of the Central Coast Marine Plan, including those required for governance structures.</p>	<p>Complete/ functioning</p>	<p>Ongoing support for governance structures; a reduced MaPP budget in 2020-21 will be offset by a greater contribution from CCIRA. Community engagement in 2020-21 is expected to be intensive, with amendment of the CC Marine Plan and on work just completed at the technical level in 2019-2020.</p> <p>Determine if any amendments to the Central Coast Marine Plan are required. Determine the governance structure and focus of Central Coast Marine Plan implementation for 2020-21 and beyond.</p>
<p><b>Governance 2.4:</b> Establish a stakeholder advisory process that supports the successful implementation of the Central Coast Marine Plan.</p>	<p>Complete/ functioning</p>	<p>Receiving and integrating stakeholder feedback on the suite of EBM indicator reports.</p>
<p><b>Tenured Activities 1.2:</b> Develop provincial guidelines which support the development of protocols between First Nations and tenure proponents.</p>	<p>On track</p>	<p>Finalizing and planning the circulation of a draft guidance document for developing protocol agreements between commercial operators and Central Coast Nations.</p>

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<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.	On track	Same as above.
<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	Use developed research applications and agreements as required.

**Outcome 2: Marine Zoning**

*Achieving a healthy marine environment, robust economy and strong communities through zoning.*

Addressing marine zoning priorities – including management planning for Protected Management Zones (PMZs) and conducting additional planning for areas that were not completed during the original planning phase – has been delayed while Nations concentrate on building capacity to engage in parallel terrestrial planning processes. These processes, which relate to marine forestry operations, will have implications for marine use planning and are therefore being prioritized first. Key achievements in 2019-2020 included:

- Development and review with stakeholders of the general approach to PMZ management planning, and of a draft plan for a PMZ in Goose Bay; although it was ultimately decided that further work on PMZ management plans will not be undertaken in the near term, piloting this approach produced valuable lessons and will inform amendments to the Marine Plan that provide further direction concerning activities within PMZs.
- Identification by the Nations of priority cultural and archaeological sites, which are now being actively monitored throughout the year by Guardian Watchmen. This work has been incorporated into a draft MPA Network plan for the NSB that, if established through legislation, will provide legal protection to these sites.

*Table 2. Implementation status of strategies identified in the 2019-2020 work plan related to Marine*



Zoning.

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<p><b>Tenured Activities 3.3:</b> Conduct detailed planning in:</p> <ul style="list-style-type: none"> <li>• Burke Channel (Burke/Fisher)</li> <li>• Northern end of South Bentinck (Dean/Bentinck)</li> <li>• Southern end of South Bentinck (Asseek)</li> <li>• Kimsquit Bay</li> <li>• Fog Creek/ Green River</li> </ul>	<p>In development/ some activities initiated</p>	<p>Further work towards this strategy will be on hold until terrestrial planning associated with the Great Bear Rainforest Agreement has been completed.</p>
<p><b>Traditional, Cultural and Heritage Resources 1.1:</b> Incorporate the protection of sensitive cultural and archaeological sites into the management of PMZs.</p>	<p>On track</p>	<p>Monitor priority cultural sites through the Guardian Watchmen program. Post Guardian Watchmen in high-priority areas during the busiest part of the tourism season. Engage stakeholders to amend statements in Marine Plan related to conditionally acceptable activities in PMZs.</p>
<p><b>Marine Protection 1.1:</b> Work with relevant Crown agencies and First Nations to collaboratively discuss, identify and advance possible areas for inclusion in MPA Network for the Northern Shelf Bioregion</p>	<p>On track</p>	<p>Ongoing engagement in the Marine Protected Area Technical Team (MPATT) to identify opportunities for PMZs to inform MPA Network design. Analysis of feedback on draft, and development of a final MPA network scenario.</p>
<p><b>Marine Protection 1.3:</b> Develop management tools and protection measures for collaboratively managing Protection Management Zones (PMZs).</p>	<p>In development/ some activities initiated</p>	<p>Build on lessons from piloting PMZ management plans to amend Marine Plan and produce resources for Nations' stewardship staff regarding additional guidance to direct and assess conditionally allowable activities in PMZs.</p>

### **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 MaPP provided funding for two Coastal Guardian Watchmen in each Nation to support ongoing implementation of this outcome area - a key priority for the Central Coast partners since Plan implementation began. Key achievements in 2019-2020 included:

- Collection by Guardian Watchmen of data on Dungeness crabs, invasive species (green crab and invasive tunicates), groundfish (rockfish and halibut), estuary health, kelp, eelgrass, marine spills and pollution, vessel traffic, and sea surface temperature, salinity and pH. This and data from other sources was analyzed and synthesized into 14 draft reports that are now being shared with First Nations communities and stakeholders. This work is informing ecosystem-based management decisions, and once finalized the reports will help to communicate the findings of the Central Coast Monitoring Program to decision makers, stakeholders, funders and the general public.
- Contributing to the Regional Kelp Monitoring Program (implemented in 2018) by ground truthing aerial surveys and geospatial imagery of kelp extent at one candidate site per Nation. The Central Coast partners also drove the establishment of a Regional Policy and Planning working group that is working to review, develop and implement regional marine aquatic plant management recommendations.
- Guardian Watchmen undertook field training for the development of Geographic Response Strategies, which outline how marine incidents will be responded to at specific sites. The Nations completed Area of Concern mapping, conducted field surveys and developed more than 50 draft response strategies. This work will continue over the coming years in cooperation with federal and provincial governments.
- Operational staff from the province and Nations met for a second year at a pre-season communication workshop to develop relationships and improve communication related to monitoring and compliance work. Staff also participated in joint training and, for the first time, joint patrols for compliance monitoring were conducted by Guardian Watchmen and Natural Resource Officers in all of the Nations' territories.
- Completion of an assessment to identify the funding and equipment that MaPP Guardian Watchmen require to monitor PMZs according to best management practices. The results of this assessment will inform the development of a long-term funding strategy for the MaPP Guardian Watchmen program.
- Restoration work at Namu continued with the collection and secure storage of materials posing a threat to the marine environment and construction of a heli-pad to facilitate further clean-up work.

- Development of pilot PMZ management plans with direction and tools to assist in mitigating and/or preventing potential future impacts from log handling to marine based values.

*Table 3. Implementation status of strategies in the 2019-2020 work plan related to Stewardship, Monitoring and Enforcement.*

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<b>Monitoring &amp; Enforcement 2.1:</b> Establish a collaborative regional monitoring network among appropriate compliance agencies, including First Nations, that seeks to increase respect for the authority of First Nations' compliance and monitoring staff.	On track	Working with Coastal First Nation representatives and Stewardship Directors to ensure context about executive level discussions on compliance and enforcement are properly conveyed to operational level.
<b>Monitoring &amp; Enforcement 2.2:</b> Improve understanding and communication between relevant compliance and enforcement agencies.	On track	Development by Nations / Stewardship Directors of project plans to guide when and where joint patrols should be conducted. Conference calls to maintain / advance coordination and collaboration.
<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.	On track	Joint training is unlikely in 2020-21 but a conference call may be scheduled to facilitate information sharing and program coordination.
<b>Monitoring &amp; Enforcement 2.4:</b> Establish Memorandums of Understanding between First Nations and relevant Crown agencies to clarify monitoring and enforcement authority roles and responsibilities.	In development / some activities initiated	Continuing to lay the groundwork for this strategy through implementation of Monitoring & Enforcement strategies 2.1-2-3.
<b>Monitoring &amp; Enforcement 2.5:</b> Establish a communications strategy that ensures the effective flow of information and timely	In development / some activities initiated	Developing shared objectives for joint patrols.



Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
action on monitoring and enforcement issues.		
<b>Monitoring &amp; Enforcement 2.6:</b> Develop a monitoring and assessment needs report for current and future requirements, including resources, across all agencies.	Complete / functioning	Use Central Coast Monitoring Needs Assessment (produced in 2018) to finalize a funding strategy for Guardian Watchmen programs.
<b>Monitoring and Enforcement 2.7:</b> Seek long-term funding for appropriate levels of monitoring and enforcement, with particular attention to monitoring and enforcement within Protection Management Zones.	On track	Use Central Coast Monitoring Needs Assessment (produced in 2018) to scope a contract for support to develop an interim funding strategy for the MaPP Guardian Watchmen.
<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	Ongoing support for capacity building in First Nations communities through skills training and investments in equipment and fuel. Training will occur remotely, with opportunities for peer to peer training and on-site training explored as covid restrictions ease.
<b>Monitoring and Enforcement 3.1:</b> Develop an agreement that enables on the ground agencies or staff to work collaboratively with existing monitoring and assessment programs in order to collect data that inform the adaptation of management policies and programs.	On track	Support development and implementation of regional marine plant harvest management recommendations, including related to monitoring through the Regional Kelp Monitoring Project.
<b>Monitoring &amp; Enforcement 3.3:</b> Provide First Nations and relevant local residents with training on collecting data related to EBM indicators in order to improve monitoring participation.	On track	See Monitoring & Enforcement 2.8, above.

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<b>Monitoring &amp; Enforcement 3.5:</b> Prioritize marine species and habitats that require targeted monitoring, including invasive species.	Complete / functioning	See next.
<b>Monitoring &amp; Enforcement 3.6:</b> 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.	Complete / functioning	Continue implementation of EBM indicator monitoring program, including through ongoing improvement in monitoring consistency and quality. Finalize report summarizing EBM indicator data analysis and continue to build capacity for reporting on monitoring and informing management. Discussions are needed to decide how additional indicators, including for human well-being, can be added in future workplans.
<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 agencies to reduce the number of inactive or under-utilized tenures.	In development	Guardian Watchmen continue to monitor active tenures to inform future discussion on inactive or underutilized tenures.
<b>Tenured Activities 11.1:</b> Work with relevant agencies to continue engaging industry in improving/developing Best Management Practices that also incorporate First Nations values, concerns and interests for logging-related activities that affect marine areas.	On track	Continue to work with stakeholder reps to review log-handling BMPs on Central Coast and describe potential mitigative/preventative measures.
<b>Tenured Activities 11.2:</b> Work with relevant agencies to ensure compliance with Best Management Practices for logging-related activities	On track	Developing project plans to guide when and where joint patrols should be conducted. Collaboratively-developed joint patrol plans will confirm the shared objectives for

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
		patrols and ensure all parties are included in the planning.
<b>Tenured Activities 11.3:</b> Monitor floating camps, barges and land-based facilities for potential marine ecological impacts.	Complete / functioning	Ongoing monitoring by Guardian Watchmen of forestry floating camps, barges and land-based facilities.
<b>Tenured Activities 11.4:</b> Work with relevant agencies to provide training opportunities to increase First Nations involvement in monitoring and enforcement of industry compliance with logging Best Management Practices	In development	See Tenured Activities 11. 2 (above). Joint training is unlikely in 2020-21 but a conference call may be scheduled to facilitate information sharing and program coordination between Guardian Watchmen and Natural Resource Officers.
<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	Develop outreach materials with guidance from Communications Strategy (produced in 2018-19).
<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	Same as above.
<b>Pollution 1.3:</b> Promote the establishment of waste disposal infrastructure, including vessel haul-out facilities and pump outs, throughout the Plan Area.	On track	Engage with partners and community / stakeholders to discuss findings of 2020 vessel pump-out needs analysis and next steps, including seeking funding for implementation.
<b>Pollution 2.1:</b> Identify sites for marine habitat restoration, including but not limited to: log sorts, heli-drop sites,	On track	Undertake priority restoration projects at Namu as directed by the collaborative governance structure. Pursue opportunities to restore

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
booming areas, derelict vessels, abandoned sites, derelict fishing gear.		other priority areas identified by Guardian Watchmen.
<b>Pollution 2.2:</b> Develop, implement and prioritize restoration plans, as appropriate.	On track	Same as above.
<b>Pollution 3.1:</b> Work with First Nations and relevant Crown agencies to review and implement international best management practices for marine accidents and spill clean-up.	On track	Continue to collaborate with Transport Canada and Canadian Coast Guard to develop plans and processes, and address equipment needs to prevent marine incidences and enable effective response.
<b>Pollution 3.2:</b> Develop information-sharing protocols that ensure the efficient flow of information and data among all levels of government.	On track	Same as above.
<b>Pollution 3.5:</b> Ensure that sufficient response capability is in place before marine activities are approved.	On track	Same as above.
<b>Pollution 4.1:</b> Research and compile effective components of successfully implemented marine response plans in other geographic regions.	On track	Same as above.
<b>Pollution 4.2:</b> Work with relevant Crown agencies and FN to gather and analyze all relevant information and data to populate marine response plans.	On track	Same as above.
<b>Climate Change Adaptation and Mitigation 1.1:</b> Review regional climate change indicators and select those that are relevant to the Central Coast Plan Area.	On track	Continue monitoring regional and sub-regional EBM indicators related to climate change, including eelgrass, kelp, sea surface temperature, estuaries and dissolved oxygen.

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<b>Marine Fisheries Economy 4.2:</b> Identify gaps in enhancement and restoration activities based on ecological, social and economic need.	In development	Continue recording tenure sites with abandoned gear or other concerns. Pursue restoration of priority areas 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.*

This strategic outcome will increase stability and certainty for industries and communities by providing clear direction for existing and emerging sectors, reducing potential conflicts, and managing sustainability of the marine economy. Key achievements in 2019-2020 included:

- Building on the work and key lessons from 2018-19 to refine the objectives of a Geoduck aquaculture pilot and working with North Island College to design a project proposal and apply for funding through the Natural Sciences and Engineering Council (NSERC). If funding is secured this program will be initiated in Summer/ Fall 2020.
- Continuing support to Nations to hire a coordinator for their SEAS (Supporting Emerging Aboriginal Stewards) programs. These programs provide opportunities for youth to interact with community elders and mentors, and to engage in contemporary and traditional use activities and stewardship of the marine environment. Some Nations ran summer cultural camps or hired youth interns to participate in their stewardship department activities, including Guardian Watchmen duties. During the school year the Nations integrated traditional harvest and marine management experiential learning opportunities into their school curriculums. MaPP funding has also helped Nations leverage funds from other organizations for programming costs.
- Creating guidelines for commercial operators working in the territories of the Central Coast Nations (e.g., tourism operators, recreational fishing service providers). This work included clarifying components of protocols between the Central Coast Nations and commercial operators, providing contact info for each Nation, and providing guidance on territorial boundaries to assist operators in identifying which Nations to speak with.

*Table 4. Implementation status of strategies identified in the 2019-2020 work plan related to Sustainable Economic Development and Healthy Communities*



Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<b>Tenured Activities 9.2:</b> Encourage First Nations and local ownership and operation of aquaculture tenures.	On track	If the funding application to Natural Sciences and Engineering Research Council of Canada (NSERC) is approved, initiate research project with North Island College to monitor and evaluate geoduck pilot sites.
<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.
<b>Marine Fisheries Economy 5.1:</b> Explore opportunities for First Nations and local community investment, partnership and participation in seafood processing and other value-added activities.	Complete / functioning	Coordinate with Central Coast Commercial Fisheries Association (CCCFA) on their work to assess license access, business planning, funding for processing and license acquisition and building capacity to participate in commercial fisheries.
<b>Marine Fisheries Economy 6.4:</b> Identify new and expandable export markets for Central Coast seafood products.	On track	Same as above.
<b>Marine Fisheries Economy 7.1:</b> Facilitate development and implementation of protocol agreements between First Nations and recreational fishery service providers, where appropriate.	On track	Finalizing and planning the circulation of a draft guidance document for developing protocol agreements between commercial operators and Central Coast Nations.

### Outcome 5: Climate Change and Adaptive Management

*Undertaking studies and plans to better address the effects of climate change in the MaPP region.*

This outcome will determine cultural, social, ecological, and economic vulnerability to different climate change effects, and inform adaptation plans. Although the 2019-2020 annual work plan included only two sub-regional strategies directly related to climate change, the Central Coast partners continued to support regional climate change and adaptation planning initiatives and many of our implementation activities contributed to this outcome area. Key achievements included:

- Continuing collaboration with the West Coast Conservation Land Management Program (WCCLMP) to monitor estuary health at Asseek, Koeve, and Bella Coola estuaries. This program, with funding recently confirmed from the British Columbia Salmon Restoration and Innovation Fund for the next five years, is a partnership between the Nature Trust of B.C., Ducks Unlimited Canada, Environment and Climate Change Canada, and the Province of B.C.’s Ministry of Forests, Lands, Natural Resource Operations & Rural Development. It is providing valuable information about the resilience of estuaries to climate change, which will be used in a coast-wide model to help determine how and where to allocate resources to support estuary health and adaptation.
- Monitoring regional and sub-regional EBM indicators to inform our understanding of climate change and its impacts, including eelgrass, kelp, sea surface temperature, and dissolved oxygen.
- Working closely with the Hakai Institute to increase cooperation between our respective monitoring efforts for kelp, seagrass and oceanographic indicators.

*Table 5. Implementation status of strategies identified in the 2019-2020 work plan related to Climate Change and Adaptive Management*

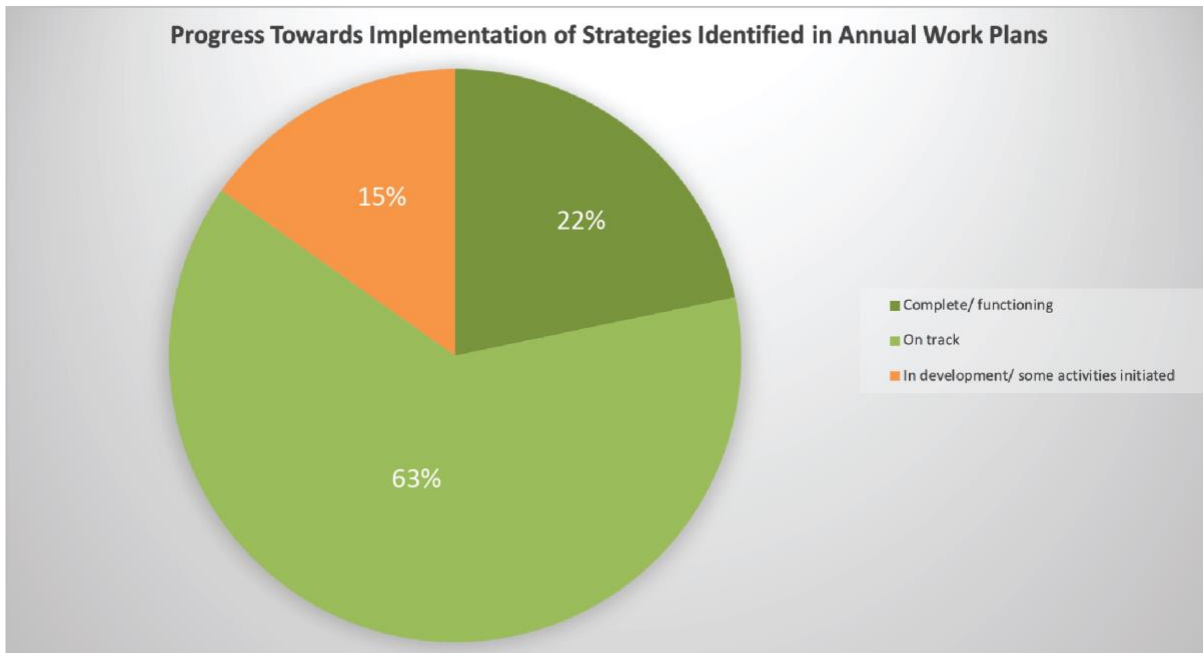
Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<p><b>Climate Change Adaptation and Mitigation 2.1:</b> Determine which climate change indicators can be monitored through partnerships with local organizations and individuals, such as the Coastal Guardian Watchmen and citizen science groups.</p>	<p>On track</p>	<p>Continue partnership with the West Coast Conservation Land Management Program (WCCLMP) to monitor estuarine health at Asseek, Koeve, and Bella Coola estuaries. Continue working with the Hakai Institute to monitor EBM indicators related to climate change.</p>

Central Coast Marine Plan Strategy	Implementation Status as of March 31, 2020	Key upcoming actions in 2020-21
<b>Climate Change Adaptation &amp; Mitigation</b> <b>3.1:</b> Identify marine habitats and species with critical ecosystem functions and roles.	On track	Continue to identify and consider habitats and species that require targeted monitoring through both the sub-regional and regional EBM indicator monitoring programs.

## FIGURES

The following figures illustrate the implementation status of the strategies identified in the 2019-2020 workplan.





## LOOKING AHEAD

The 2020-21 year began with a great deal of uncertainty due to the novel coronavirus pandemic. Remote coastal communities are particularly vulnerable to this threat and the priority for the Central Coast partners at this time is keeping the communities safe. While travel restrictions and other social distancing measures will have an impact on our work, the Partners are committed to continuing to build on the work of previous years to advance priority strategies under the five strategic outcome areas. The key activities planned for 2020-21 are summarized below.

**Collaboration and Governance:** We will continue to support the governance structures that have been established for MaPP implementation and work with government partners to develop new collaborative governance arrangements for an MPA network in the NSB. We will engage with stakeholders to keep them informed and receive their input on this and other activities, including Marine Plan amendment and EBM indicator reporting.

**Marine Zoning:** We will build on the development of pilot management plans for Protected Management Zones (PMZs) to provide additional guidance in the Marine Plan regarding conditionally allowable activities in PMZs and integrate this work into the final design of the NSB MPA Network.

**Stewardship, Monitoring and Enforcement:** Supporting the work of Coastal Guardian Watchmen to monitor the suite of EBM indicators will continue to be a priority. The data that is being collected through the monitoring program is already being used to inform ecosystem-based management, and in 2020-21 we will share the results of this work with a broader audience. We

will also discuss how the monitoring program can be expanded to include indicators of human well-being and, crucially, work to secure stable funding to maintain this important work.

**Sustainable Economic Development and Healthy Communities:** The Supporting Emerging Aboriginal Stewards (SEAS) program will remain a key funding priority for the Central Coast Partners in 2020-21. We will also continue to coordinate with the Central Coast Commercial Fisheries Association (CCCFA) – a collaborative initiative of the Heiltsuk, Kitasoo/Xai'xais, Nuxalk and Wuikinuxv Nations to advance the well-being of their communities – and assist the Nations in developing protocol agreements with commercial operators wishing to work in their territories.

**Climate Change and Adaptive Management:** Strategies related to climate change will primarily be addressed through the implementation of the Central Coast EBM monitoring program by supporting the Nations' Guardian Watchmen program and maintaining our valuable partnerships with the West Coast Conservation Land Management Program, Hakai Institute, and others.