



**CONVENTION ON
MIGRATORY
SPECIES**

CMS/PIC/MOS4/Doc.2.3

Date: 22 July 2021

Original: English

FOURTH MEETING OF THE SIGNATORIES TO
THE MEMORANDUM OF UNDERSTANDING FOR
THE CONSERVATION OF CETACEANS AND THEIR
HABITATS IN THE PACIFIC ISLANDS REGION

5-6 August 2021, *Online*

REGIONAL MARINE SPECIES ACTION PLANS IMPLEMENTATION REVIEW 2021

Regional Marine Species Action Plans Implementation Review 2021



JULY 22

SPREP

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Acronyms

- BIORAP Rapid Biological Assessments
- CBD Convention on Biological Diversity
- CITES Convention on the International Trade of Endangered Species of Wildlife Flora and Fauna
- CMS Convention on the Conservation of Migratory Species of Wildlife
- DOC New Zealand Department of Conservation
- DOE Tonga Department of Environment
- EEZ Exclusive Economic Zone
- GEF Global Environment Facility
- IMMA Important Marine Mammal Area
- IWC International Whaling Commission
- LMMA Locally Managed Marine Area
- MECA Masani Environmental Care Association
- MECDMM Ministry of Environment, Climate Change, Disaster Management and Meteorology
- MMA Marine Management Area
- MPA Marine Protected Area
- MSP Marine Spatial Planning
- NGO Non-Governmental Organisation
- NZST New Zealand Standard Time
- PICTs Pacific Island Countries and Territories
- PIR Pacific Island Region
- PROTÉGÉ Pacific Territories Regional Project for Sustainable Ecosystem Management
- RMSAP Regional Marine Species Action Plan
- RMSP Regional Marine Species Programme
- SPREP Secretariat of the Pacific Regional Environment Programme
- SUMA Special or Unique Marine Area
- TBOC Tonga Blue Ocean Conservation
- TREDIS Turtle Research and Monitoring Database System
- WCPFC Western and Central Pacific Fisheries Commission
- WPRFMC Western Pacific Regional Fishery Management Council

Overview

The Marine Species Programme outlines a regional strategy for the cooperative conservation and management of dugongs, marine turtles, and whales and dolphins (cetaceans). The purpose of the programme and Action Plans is to enable Pacific Islanders to take a primary role in achieving a vision of “a healthy Pacific Ocean with sustainable populations of whales, dolphins, marine turtles, dugongs and other species, and meets the aspirations of Pacific Island peoples and protects their natural and cultural heritage”. The conservation and management of threatened and migratory species, particularly dugongs, whales, dolphins, and marine turtles has long been a key feature of SPREP’s work on biodiversity conservation. Since 2003, SPREP and its partners underlined, developed, reviewed and implemented three consolidated regional Marine Species Action Plans – an initiative designed, endorsed and implemented by the SPREP member countries and territories. The Marine Species Programme for 2013-2017 followed on from the 2008-2012 programme and was developed after a review in 2012 in Fiji by 16 members and partners.

Pacific Island peoples are stewards of their marine environment and depend on these resources for their way of life. The Marine Species Programme supports them by:

- Increasing knowledge, awareness and understanding of these species and their habitats, and their ecological and cultural values.
- Building capacity and securing human and financial resources to enable implementation of the Action Plans.
- Promoting appropriate customary management practices and traditional stewardship.
- Enhancing cooperation and coordinated action at national, regional, and international levels, and
- Fostering opportunities for multi-species approaches.

And provision of advice on:

- Identifying and mitigating threats.
- Improving the condition of marine species and their habitats through improved management.
- Ensuring that marine species populations recover and continue to fulfil their ecological roles.
- Fostering the sustainable use of marine species, including non-consumptive uses (e.g. tourism).

Review of the 2013-2017 programme began in 2017 with limited response, so a more concerted effort was designed to ensure that the next set of plans were fit for purpose and achievable. A secondment from the New Zealand Department of Conservation has allowed us to re-visit the plans and dedicate time to consult with countries on their progress and challenges with implementing the plans.

Purpose and Objectives

The purpose of this work was to consult with PICTs to:

- Determine progress on implementation of the current Action Plans,
- Identify issues and challenges with implementing the plans,
- Obtain feedback about the plans in general.

The overall objective is to develop a series of Marine Species Action Plans for the 2021-2026 period that are fit-for-purpose, digestible, and achievable for PICTs. The information and feedback obtained from these consultations will be used to inform further changes to the draft Action Plans for the 2022-2026 period.

Method

A circular was sent to SPREP focal points on 1 April 2020 indicating that SPREP would like to hold video calls with PICTs technical staff to review progress on implementation of the current plans including identification of issues and challenges in order to assist with finalising drafts of the new plans.

Implementation review tables were created for each Action Plan (dugongs, turtles, and whales and dolphins) to capture the outputs from PICTs over the last seven or so years. Columns were provided to capture activities, comments on progress, gaps, and roadblocks, and future planned work or recommendations. To simplify reporting, we designed the tables to capture activities undertaken against each objective, rather than per action. There are up to six objectives for each theme (with 8-9 themes per plan), but mostly there was just one objective per theme. The specific actions relevant to SPREP members were included in the table as a prompt to consider what activities may have taken place to address the objectives.

We recognise that over the last 5 years many PICTs have reported on their marine species conservation activities at various workshops, specifically the 'Whales in a Changing Ocean Conference' in 2017 and the 'Pacific Islands Regional Dugong and Seagrass Conservation Workshop' in 2018. So, prior to consulting with members we used the reports from the conference and workshop to pre-fill some of the activities to reduce reporting repetition. In some cases, the Blue Days Conference Proceedings 2015 were also used as well as the final report from the 'Community-based turtle monitoring and ecotourism in the Pacific Region' project 2017.

Video meetings were organised with PICT representatives via Microsoft Teams where the relevant Action Plans were discussed. These consultations were recorded, with permission, for reference and notes written about the consultation. Afterwards, the representatives were instructed to consult with any other relevant colleagues and complete the implementation tables to the best of their ability, returning these to the Migratory Marine Species Conservation Officer.

Additional questions were asked of the PICTs to help set the scene of marine species conservation in the Pacific and get feedback on level of use of the plans:

- Has your country/territory used the Marine Species Programme and Action Plans to inform conservation of your turtle, cetacean, and/or dugong species?
- Have you developed national Action Plans for turtles and cetaceans?
- Have you reported on any of these activities in your state of environment report?
- Are you a Party to CITES, CMS, and/or CBD?
- How useful was the Regional Marine Species Programme/Action Plans for conservation and management of the marine species present in your country/territory?
- What improvements could be made to the next version of the Action Plans to address the needs of your country/territory?
- Do you have any other lessons learned from implementing the 2013-2017 Marine Species Programme?

Out of scope

This consultation and review process was focused on PICT members' implementation of the Action Plans. We have not reviewed the implementation of actions with SPREP and partner countries as the identified lead, nor did we go into the actions at the start of the Regional Marine Species Programme focused on 'commitment, funding and human resources' and 'implementation and coordination'. Finally, this is not a thorough desktop review of everything that each country has completed towards the Action Plans for these three taxa. This was a self-reporting exercise of the Regional Marine Species Programme which is supported and coordinated by SPREP. There is likely to be many more relevant activities that aren't captured here.

Disclaimer

Information provided in this review is of a qualitative nature. This was primarily a self-reporting exercise, and information taken from the 'Whales in a Changing Ocean Conference' and the 'Pacific Islands Regional Dugong and Seagrass Conservation Workshop' was also self-reported. Due to this, information provided may not be entirely accurate or fully representative. It is also worth noting that some information was provided by non-government agencies and may not represent the views of officials.

Results summary

We received initial responses to the circular from all countries except Kiribati, Samoa, Federated States of Micronesia, Nauru, and Tokelau. Various follow up communications were sent to SPREP focal points and identified contacts but unfortunately engagement remained low. Attempts to collect information and feedback continued until March 2021. We were able to successfully undertake video call consultations with Solomon Islands, Palau, Tonga, American Samoa, Niue, and Tuvalu where some additional information was obtained to add to the tables, but final completed tables were only received from New Caledonia (for whales and dolphins only), Tonga (whales and dolphins), and the Cook Islands (for turtles only).

Due to the low engagement of PICTs, there is limited information we can provide here about implementation of the plans and their usefulness, as well as feedback we can take forward in reviewing the plans. However, what information we were able to obtain via consultations, previous conference/workshop reports, or email communications is summarised here. Information and feedback that applies more generally to consider overall when reviewing the plans have been summarised first, then we provide summaries per country. The summaries from the couple of countries that provided more substantial activity information have been broken down by theme. A simple pictorial summary of PICTs subscriptions to multi-lateral agreements regarding wildlife protection is provided as well as links to other relevant documents that are available online such as CBD reporting, CMS reporting, and State of Environment assessments.

Some activity highlights across the Region include:

- The Year of the Whale was celebrated in 2017 which was marked by the [Whales in a Changing Ocean](#) conference hosted by Tonga in April 2017. The conference was attended by 13 SPREP member states (excluding partner countries) and a variety of NGOs, institutes and private sector. The key outcomes of the conference included:
 - Commitment to adopt and sign the Pacific Islands Year of the Whale Declaration 2016/2017.
 - Agreement to a voluntary commitment, for the UN Oceans conference, informed by the Whales in a Changing Ocean.

- Government of the Kingdom of Tonga’s announcement of a whale sanctuary in their waters.
- Commitment for technical and scientific input to SPREP’s Whale and Dolphin Action Plan 2018-2023¹.
- The Solomon Islands hosted a [Regional Dugong and Seagrass Conservation Workshop](#) in March 2018 which was attended by four of the six SPREP Member range states (New Caledonia, Palau, Solomon Islands, and Vanuatu). The objectives of the workshop were to exchange experiences with dugong conservation across the dugong range states in the Pacific and to provide feedback on SPREP’s Regional Dugong Action Plan 2018-2021.
- A joint project implemented by the New Zealand Department of Conservation (DOC) and SPREP which ran from 2012-2017 encouraged the conservation of marine turtles through community-based monitoring and eco-cultural tourism development in Pacific Island countries. Over 26 education, training and participatory business planning workshops were provided. Ecotourism feasibility studies and business plans were developed for two sites in Fiji and sites in the Solomon Islands. Kiribati and Tonga were also looked at.
- Cook Islands Marae Moana multiple-use marine park, covering the entire EEZ (1.9 square kilometres), established in July 2017. The primary purpose is to protect and conserve the ecological, biodiversity and heritage values of the Cook Islands marine environment. The area will be zoned based on the wants and economic, cultural, social and environmental needs of Cook Islands people.
- Palau has approved the creation of a marine sanctuary which will be the six largest fully protected sanctuary in the world covering 80% of the EEZ.
- The Important Marine Mammal Area (IMMA) regional workshop for the South Pacific was successfully convened in Samoa in March 2017. The expert group agreed upon 29 candidate IMMAs for consideration. [18 of the IMMAs were accepted for full status by the Review Panel. The workshop also recognised that there are substantial data gaps for marine mammals across the region.](#)
- Niue established whale watching regulations in 2016, supported with the first enforcement training workshop for Niue and the region.
- A management strategy for dugong and seagrass was included in the Solomon Islands 2018 Fisheries Regulations. The gazetting of these regulations made the hunting of dugongs, as well as nesting turtles and leatherback turtles, illegal. Additionally, you cannot sell, buy or export any turtle or destroy turtle nests or eggs.

¹ Note that this is now the 2022-2026 Action Plan.

Summary of PICT marine species conservation actions

Table 1. Table 1: a summary of PICTs national strategies for marine species, what relevant international agreements, MOUs and declarations they are signatories to, and any significant sanctuaries within their EEZ.

Country	National plans of action ²	IMMAs (candidate) ³	CITES ⁴	CBD ⁴	CMS ⁴	Signatory to MOUs ²	Year of the whale declaration	Sanctuaries/reserves
American Samoa	Sh ⁵	1 - Samoan Archipelago IMMA	T	T	T			National Marine Sanctuary of American Samoa
Cook Islands	Sh	1 - Cook Islands Southern Group IMMA	x	✓	✓	Cet/Sh	Y	Marae Moana Marine Park
Fiji	Tu	1 - Vatu-i-Ra IMMA	✓	✓	✓	Cet	Y	
French Polynesia	Cet	4: - Austral Archipelago IMMA - Cook Islands Southern Group IMMA - Marquesas Archipelago IMMA - Society Archipelago IMMA	x	x	x	Cet		EEZ sanctuaries for cetaceans and sharks
Guam	Sh ⁵		T	T	T			Micronesia Regional Shark Sanctuary
Kiribati		(1) Gilbert Islands cIMMA	x	✓	x			Micronesia Regional Shark Sanctuary Phoenix Islands Protected Area

² Cet = Cetaceans, Tu = Turtles, Du = Dugongs, Sh = Sharks

³ <https://www.marinemammalhabitat.org/immas/immas-searchable-database/>

⁴ Signatory to convention? T = a territory that can't join independently but are members through their metropolitan country

⁵ Via US NPOA Sharks

Marshall Islands, Republic of the			x	✓	x			Micronesia Regional Shark Sanctuary
Micronesia, Federated States of			x	✓	x	Cet		Micronesia Regional Shark Sanctuary
Nauru			T	T	T	Sh		
New Caledonia	Du, Tu	4: - Chesterfield-Bellona Coral Reef Complex and Seamounts IMMA - New Caledonia Southern Seamounts and Banks IMMA - New Caledonian Lagoons and Shelf Waters IMMA - Waters of New Caledonia and Loyalty Islands IMMA	T	T	T	Du/Cet	Y	Natural Park of the Coral Sea
Niue	Cet		x	✓	x	Cet		National whale sanctuary
Northern Mariana Islands	Sh ⁵		x	x	x			Micronesia Regional Shark Sanctuary
Palau		1 – Southern Shelf Waters and Reef Edge of Palau IMMA	✓	✓	✓	Du/Sh	Y	National Marine Sanctuary Micronesia Regional Shark Sanctuary
Papua New Guinea	Sh	3: - Bismarck Sea IMMA - Kikori Delta IMMA - Main Solomon Islands IMMA	✓	✓	x	Du/Cet/Tu	Y	

Samoa		1 – Samoan Archipelago IMMA	✓	✓	✓	Cet/Sh	Y	National whale and dolphin sanctuary National shark sanctuary
Solomon Islands	Tu/Du	1 – Main Solomon Islands IMMA	✓	✓	✗	Du/Cet		Arnavon Community Marine Park
Tokelau			T	T	T		Y	
Tonga	Sh	1 - Tongan Archipelago IMMA	✓	✓	✗	Cet/Sh	Y	National whale sanctuary
Tuvalu		(1) Tuvalu cIMMA	✗	✓	✗	Cet/Sh	Y	Funafuti Conservation Area
Vanuatu	Tu/Sh	(1) Vanuatu Archipelago cIMMA	✓	✓	✗	Du/Cet/Sh		Marine mammal sanctuary
Wallis and Futuna		(1) Wallis and Futuna cIMMA	T	T	T	Cet		

Recommendations/feedback received on Action Plans

- Very thorough and ambitious.
- Personalisation for countries as priorities often differ, might lead to better uptake of the RMSP by PICTs.
- Many actions are redundant between programmes. Maybe a section that combines actions relevant to all species.
- The plans were used more so when the Marine Species Programme Regional Network was active – regular meetings, communications via a list-serve. Since the passing of Lui Bell in 2012, the Marine Species Programme has been relatively inactive and with no budget to support member countries in facilitating many of the activities. Even the list-serve that normally kept the regional network connected with useful updates and disseminating new publications, info on upcoming conferences etc. was inactive.
- The plans should be updated to address all the socio-economic and cultural legislative and environmental changes including the species current status (Red List) that have emerged since last plans were developed.
- Combine some of the activities to reduce and simplify the plans, most PICTs don't have the human or financial capacity within their environment agency to implement all these plans.
- Support from SPREP in sourcing funds or technical capacity for implementation of the plans is very useful, as well as regular workshops and meetings, training and active list-serve to promote networking within the region to discuss cross-cutting issues, constraints, progress, disseminate new publications etc assists to maintain momentum in implementing the plans.
- One of the ongoing issues is that people working in the environmental field (especially overseas consultants) don't always include the cultural sector in meetings, or consultations. They do not recognize the importance of taking a "biocultural" approach to managing resources in Oceania.
- The Marine Species programme is a very useful outline of objectives (wish list) on what should/needs to be done.

Country/territory results

American Samoa

Consultation

- A video call was held with government representatives from the Department of Marine Wildlife Resources in American Samoa in August 2020. Attendees said they would need to coordinate with federal partners (NOAA, NIMS, Science Council Committee etc) and they were also missing their turtle scientist. Information provided during this consultation is summarized here. Final tables and further information were not provided.
- American Samoa representatives feel isolated when it comes to international conventions but have attended a couple of CBD workshops in last few years (Bioregions of the South West Pacific in Fiji).

Implementation

- Representatives of American Samoa were not familiar with the Marine Species Action Plans and therefore have not used them to inform their conservation of whales, dolphins, and turtles. American Samoa gets their funding from American federal agencies and their conservation work is directed via these agencies.

General

- Officials work with scientists to do education and awareness, but it is spread between Enforcement division, Wildlife division, and Education division. They would get resources from SPREP, during year of the sea turtle for example, and disseminate to the public, and go into schools.
- There is a [National Marine Sanctuary of American Samoa](#) (a NOAA federal programme) where only subsistence fishing is allowed, the Rose Atoll protected area where no fishing is allowed, and local no fishing zones.
- The sanctuary is difficult to enforce with challenging and dynamic management.
- Protected areas often have committee-based management so challenges working with village councils, the dynamics of village council can be critical as to how regulations are being enforced.
- Being a US territory, there is a unique situation between customary governance and federal governance. There is local jurisdiction 0-3 miles offshore, beyond it is federal jurisdiction.
- All threatened species are under protection from NOAA through the Endangered Species Act (federal law) providing regulations on approach distances at sea etc.
- There is a lot of protected area on the north side of main island, as well as big chunks of outer Manua islands. Ofu and Ta'u beaches are part of the national parks (technically protected).
- To combat plastic pollution there are catchment nets at midstream and stream mouths around main island, but unlikely to be any data collected and they need a lot of maintenance. There is a bill with the American Samoa Environmental Protection Agency (ASEPA) to ban polystyrene foam. There is little/no recycling and little effort put into single use plastic alternatives. There was a plastic bag ban implemented a couple of years ago. They do Island Wide Coastal Clean-ups (IWCC).
- There are discussions about possible future sea-bed mining and what regulations would be required.
- There is a comprehensive 10-year Wildlife Strategy which was recently reviewed and includes fisheries.

Turtle

- When the turtle biologist does necropsies, they also do education, invite students, hand out pamphlets. If turtles get entangled, use newspaper or social media to provide education.
- Rose Atoll is a big nesting site for green turtles, which is protected, but sea level rise is a threat.
- Main threat at nesting sites will be invasive species (rats and cats) and have thought about doing cat control for native bird protection, but not much evidence that invasive species are impacting the turtles. On the main island dogs are likely to be having an impact.
- They have a biologist focused on turtles who collected nesting data on Ofu in December-Jan: 30 nests, GPS tags, in conjunction with NOAA. Go out to some atolls and put tags on. Have been collecting consistently for 10 years.

- Swains Island is definitely a nesting site due to presence of turtle tracks but there is no data and it is only visited every few years. Rats likely to be getting hatchlings and an eradication is planned.
- Not aware of any intentional take.
- Turtle “stranding response” – collect and do necropsies, mostly green and hawksbills.
- Unsure if TREDIS is in use, the turtle scientist went to training for it in the past.
- Used to have cultural practices, but regulations are really strong and being enforced (both local and federal law), so everybody is aware that you are not supposed to take, harass turtles etc. Cultural significance of turtles now going towards protecting them and everybody is working together on that. They Considered a sacred animal. Officials are not aware of any harvesting anymore or use in cultural ceremonies.

Whale and Dolphin

- Have done stranding response training in past (6 or 7 years ago). Capability there for necropsies, work with Hawaii (Kristie West) over skype to collect correct tissues etc. Send them the data collected.
- Whale entanglements are not frequent enough to do training.
- Science Committee Council discussing false killer whales and longline interactions.
- There are observers on fishing boats and bycatch is reported to NOAA.
- No direct take occurring.
- No seabed mining or seismic surveying.
- Marine Mammal Research Programme focused on humpback whales, 150 identified (genetics and fluke shots). Trying to start satellite tagging programme (not sure where they go from American Samoa). Working with Centre for Coastal Studies (Massachusetts). Every year over a month collect genetic samples from humpbacks.
- No whale tourism market. Looked into options, but whale season coincides with rough seas, not enough tourists to make it a profitable business. Looked into land-based whale watching.

Feedback

- There is a missing link in communications from SPREP and American Samoa which could be improved as they would like to see improved collaboration.
- Would like to see some education and training at the RMSAP workshops.
- Are interested in what kind of support and assistance can be obtained from SPREP.

Cook Islands

A [State of Environment](#) report was published for Cook Islands in 2018.

The Cook Islands submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- Attempts to consult with government officials from the Cook Islands were not successful, however a completed turtle table was received from the Manager of the Island Futures Division of the National Environment Service. At the time of writing, they were waiting on a

response from the Ministry of Marine Resources to provide information on whales and dolphins.

Implementation

General

- In 2017 the Cook Islands has declared its entire EEZ as a Marae Moana – Marine Park via the Marae Moana Act, 2017. All waters within 50 nautical miles of Cook Islands are protected from commercial fishing, this equates to 16.25% of EEZ. It is anticipated that through this commitment, the Cook Islands will reduce the interactions between the commercial fishing sector and artisanal fishing. This decision aligns with an existing commitment from the Cook Islands to also exclude any possible future sea-bed mineral activities from within 50 nm of islands.
- Legislation in place for license to import biodegradable bags only to combat plastic pollution.
- The National Environment Service is currently developing a National Environment Policy that will protect and manage wildlife in the Cook Islands.
- A summary of the Cook Islands National Environment Policy has been translated into Cook Island Maori, and once the Environment Policy document is finalized this will also be translated.
- Although the Cooks are not a signatory to CITES, they operate similar processes, prohibiting the export of Appendix 1 species, although trade in sperm whale teeth (tabua) with Fiji is under consideration for cultural purposes
- Challenges include building capacity (and then retaining it) and breaking down the traditional barriers between government agencies on oceans and marine wildlife issues.

Turtle

- Turtle awareness programmes have been conducted in some schools in the other islands as well as youth and community outreach. Only a few people are interested in turtles and this differs from island to island. Looking to source funding to assist with this programme from GEF.
- On the island of Penrhyn the students are taught the life cycle of the turtle using a book written about the turtles of Penrhyn.
- At Rarotonga 'Te Ara o te Onu' (Cook Islands Turtle Conservation Society) has started working with schools, public events, publicity, tourism organisations etc.
- Community programmes were conducted on some of the outer islands for the removal of washed up plastics on islets and around turtle nesting sites.
- Some islands keep records of turtle harvest, in particular the island of Penrhyn where they encourage no harvesting of females.
- NES is in the process of appointing environment officers on all the outer islands which will assist in protecting and managing turtles with the assistance of marine officers.
- Some islands have by-laws in place that protect and manage the harvesting of turtles.
- Turtle monitoring has been conducted on some of the outer islands. On Penrhyn occasional surveys of potential beaches has been carried out and sightings of turtles by locals are reported. Hatching success is high, nests are excavated occasionally to check (95-100% hatch ok). Nest numbers are steadily increasing.
- Biggest problem is climate change killing trees behind nesting beaches meaning they get full sun all day. Over 6000 trees have been planted since 2018 to create shadow and localised cooling (GEF award 2018).

- Green turtle DNA samples collected and sent to the USA for testing.
- Penrhyn: year-round juvenile development & foraging; mating habitat. Rarotonga: hawksbill/green foraging and being monitored by Te Ara Group. Rakahanga has foraging adult females. Palmerston: less clear now as no one is monitoring. In progress at Tongareva since 2010.
- NES reports records of turtles to TREDIS however this is sporadic.
- Turtle tours recently started on Rarotonga but border closures have affected this.
- Turtles are not commercially harvested in the Cook Islands and NES do not issue CITES permits for any turtle parts or derivatives unless for research purposes.
- Dr Michael White is Member of IUCN Marine Turtle Specialist Group; and Deep Ocean Stewardship Initiative's Marine Pollution Working Group.

Whale and Dolphin

- The Cook Islands attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific islands Year of the Whale Declaration. The information below is transcribed from information presented at the conference.
- In 2001 the Cook Islands declared its entire EEZ as a Sanctuary for Whales, committing to: the promotion of non-lethal scientific research, collaboration for information exchange, education and awareness initiatives, and best practice management for the interactions with whales in our waters.
- The Cook Islands Ministry of Marine Resources is on a pathway to develop the necessary legislative framework to formalize the declaration and regulate human interactions with whales. Legislation will maintain the spirit and intentions of our 2001 Declaration and look to managing interactions from unlawful take, fisheries and strandings, to name a few. After discussing within an intergovernmental Whale Working Group, the Policy Paper and regulations underwent a series of public consultations in Rarotonga and Aitutaki during 2015-2016. The current status is unknown.
- The Cook Islands has recorded 26 species of cetacean in its waters which has increased from 21 in 2007 due to research and efforts by government and the Cook Islands Whale Research Centre.
- Most well-known species is the humpback which arrives in winter, from June to October, using the Cook Islands as a corridor to true breeding grounds, probably Tonga, but calving has occurred in Cook Islands waters which makes these individuals special to Cook Island peoples.
- A unique characteristic of the Cook Islands humpback population is that there doesn't seem to be any site fidelity. In 17 years of research, we have only seen 2 whales return to the Cook Islands, all other whales recorded have been new visitors. This is extremely unusual since humpbacks tend to return to the same area during their lifetime.

Fiji

A [State of Environment](#) report was published for Fiji in 2013.

Fiji submitted [their sixth national report](#) to the CBD in 2020.

Fiji submitted a [CMS National Report](#) in 2017.

Consultation

- Attempts to consult with government officials from Fiji were not successful. Information provided below is taken from the Whales in a Changing Ocean final conference report 2017, the Blue Days Conference proceedings 2015, and the Community-based Turtle Monitoring and Ecotourism in the Pacific Region project report 2017.

Implementation

General

- Fiji has a [National Biodiversity Strategy and Action Plan for 2020-2025](#) and a National Ocean Policy 2020-2030
- The Fiji Locally Managed Marine Areas (FLMMA) network has provided management tools for community-based adaptive management of marine resources, and has provided valuable spin-offs for ecotourism, such as at Silana Village and Moon Reef (spinner dolphins).
- Challenges include funding constraints that prevent the expansion of the current programme; and the limited opportunities for prosecution in the event of violations of community-agreed restrictions.

Turtle

- Dau-ni-Vonu (with support from WWF) supports the implementation of Fiji's Sea Turtle Recovery Plan. They have established a monitoring network for nesting turtles, and the monitors (30 so far) trained to protect turtles also operate as fish wardens. Educational materials have been developed and distributed to schools.
- Fiji was one of the PICTs chosen for a five-year project to encourage the conservation of marine turtles through community-based monitoring and eco-cultural tourism development in Pacific Island countries.
- An ecotourism feasibility study and business plan were developed for two island sites in Fiji – Moturiki and Yanuca Islands with support from the Department of Conservation in New Zealand- as an outcome of over 26 education, training, and participatory business planning workshops.

Whale and Dolphin

- In addition to general biodiversity reporting via the CBD, Fiji attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific Islands Year of the Whale Declaration.
- The Fijian government declared its waters a Whale Sanctuary in 2003.
- Fiji participated in a meeting of experts in Samoa to identify IMMAs in the region. The meeting provided an opportunity for Fiji to propose a significantly important area as a

marine mammal area, namely the Vatu-i-ra Seascape, and listing another 4 key areas of interest within Fijian waters.

- Whales have a respected cultural value for the Fijian people, who highly regard the sperm whale tooth or tabua as a symbol of genuine commitments or to reciprocate heartfelt gestures.
- Tabua is strictly regulated under our Endangered and Protected Species Act 2002 which implements CITES at national level.
- Past historical data shows that whales were once in abundance in Fiji waters, which contrasts with present day numbers after massive whaling took place in the 1900's. In the 1950s, Fiji was identified as a critical breeding and calving ground for the endangered Oceania humpback population.
- 18 species of cetaceans have also been confirmed in Fiji waters including some that are threatened species identified in the IUCN Red List.
- Issue identified at the Science Research Working Group presentation to the plenary at the Whales in a Changing Climate conference: genetic identification of Fiji humpback whale/diversity, distribution and abundance of the presence of different cetacean species present in Fiji waters (biopsy sampling with comparison to Oceania databases). Where does Fiji fit into the South Pacific humpback whale story? (Repeat shore-based surveys, resources for island specific studies of small cetaceans, improve fluke and genetic catalogue, photo Id/genetic analysis/tagging in Chesterfield reef).
- Fiji's whale watching industry is at budding stages. We have one dolphin watch operator who practices responsible tourism following the regional whale and dolphin watching guideline. Opportunistic humpback whale watching is also being carried out by dive boats.
- Fiji co-chaired the UN Oceans Conference in New York with the Government of Sweden in June 2017.
- Fiji recognises the important roles people and communities play, and the technical contributions of NGOs in supporting national development in the areas of oceans and cetacean management in Fiji waters. Fiji recognises the importance of collaboration within the Pacific in its continued efforts to strengthen and generate more awareness and build stronger networks with expert groups and sharing lessons from budding whale watching industries.

French Polynesia

Consultation

- Attempts to consult with government officials from French Polynesia were not successful. Information provided below is taken from the Whales in a Changing Ocean final conference report 2017 and the Blue Days Conference proceedings 2015.

Implementation

General

- The entire EEZ is protected as a sanctuary for cetaceans since 2002.
- French Polynesia follows the SPREP Marine Species Programme and encourages communities to embrace the protection of marine species.

Turtle

- Fewer activities for turtles than whales and dolphins.

- Two care clinics but no opportunities to observe nesting turtles (remoteness and accessibility), but many are monitored by volunteers.

Whale and Dolphin

- Information material is developed such as flyers, posters, kakemono (hanging banner or scroll) and there is a communication budget for protected marine species.
- Raising awareness is done through speeches in schools by the Environment Division or Professors, flyers, posters, press articles, postings on buses, post in the cinema or on radio and tv during the whale season. There is also an agreement with an association for the protection of marine mammals every year to lead an awareness campaign on the waters during the period of whale watching.
- There are 20 whale-watch operators who are required to report their activities in detail.
- The Code of the Environment regulates the approach of cetaceans for private, cinemagraphic, scientific or commercial activities. Any activity involving the observation of marine mammals must have an authorisation delivered by the Director of the Environment. Regulations for commercial tourism is similar to the regulations for all sea users.
- French Polynesia established its own Action Plan where the Environment Department (Direction de l'Environnement) makes actions every year for the protection of marine mammals including information, raising awareness, education and communication; capacity building and research; reduction of the threats; and regulations and tourism.

Guam

Consultation

- Attempts to consult with government officials from Guam were not successful. Some comments were reported in the Blue Days Conference proceedings 2015.

Implementation

General

- The military build-up on Guam may have some effect on marine life.

Whale and dolphin

- 12% of visitors take a tour to see spinner dolphins and dolphin watching is offered by 18 companies, but only one-third of these attended a recent training for operators. There may be harassment occurring during at least some of these tours.

Kiribati

A [National Biodiversity Strategy and Action Plan](#) for Kiribati was published in 2015.

The Kiribati submitted their [fifth national report](#) to the CBD in 2014.

Consultation

- Attempts to consult with government officials from Kiribati were not successful. Information below was taken from the Community-based Turtle Monitoring and Ecotourism in the Pacific Region project report, 2017.

Implementation

Turtle

- Kiribati was one of the PICTs chosen for a five-year project to encourage the conservation of marine turtles through community-based monitoring and eco-cultural tourism development in Pacific Island countries.
- Consultations with local communities about the proposed project sites resulted in three villages indicating they were keen to participate in the project.
- The Kiribati programme had a strong focus on awareness raising and education. Signs were erected at nesting sites, and the in-country project team actively worked with schools and young people in the community.
- A turtle specialist delivered a workshop in turtle awareness and conservation management including classroom sessions and practical fieldwork such as egg relocation and turtle tagging and release. A refresher training in turtle monitoring was provided for two participants during a three-day study tour to a community-based turtle monitoring and voluntourism project in Vanuatu in 2015.
- The single major threat to marine turtles in Kiribati is the unsustainable harvesting of turtles and their eggs for consumption. It is believed that turtle eggs and meat constitute important items of the traditional diet, with very little turtle meat being sold. In early 2016, there was a significant achievement for sustainable turtle management in Kiribati when one community banned its members from capturing and consuming turtles and their eggs.
- Coastal erosion, as a result of climate change and storm events, is also having an impact on nesting beaches. ECD is working with SPREP to address the erosion problem through a planting programme referred to as soft engineering.
- There are some reports of high levels of bycatch of turtles in gill nets and subsequent selling of the meat locally.
- Very little is known about turtle populations in Kiribati, including nesting populations.
- Turtle monitors were appointed for the North Tarawa project sites during the turtle monitoring training in November 2014. These monitors established a turtle committee. Fourteen monitors have been conducting beach surveys during the nesting season, flipper tagging turtles and supplying data on turtle nesting, foraging, tagging and harvesting.
- Initially North Tarawa and Kiritimati had potential for ecotourism development. However, there is currently minimal infrastructure to support tourism at North Tarawa and Kiritimati. As well, the costs of developing ecotourism at either of the Kiribati sites were looking to be significantly more than the budget allowed for, so the project was focused to sites at Fiji and Solomon Islands.
- The Kiribati Marine Turtles Profile report (2010) recommended “further training on planning and conducting turtle nesting monitoring programmes to enhance local capacity is necessary. Due to limited resources (finance and human) it would be necessary to involve communities in the monitoring where possible. This would mean training for community representatives. Other areas for capacity building include turtle species identification, nest identification, record keeping, compilation and analysis of data. With the increasing impacts of climate change on turtle nesting areas, capacity building in relocation of turtle eggs of suitable sites is of high importance.

Marshall Islands, Republic of the

A [State of Environment](#) report was published for the Republic of the Marshall Islands in 2016.

The Republic of the Marshall Islands submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- Attempts to consult with government officials from the Republic of the Marshall Islands were not successful.

Micronesia, Federated States of

A [State of Environment](#) report was published for the Federated States of Micronesia in 2018.

The Federated States of Micronesia submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- Attempts to consult with government officials from the Federated States of Micronesia were not successful.

Nauru

Nauru submitted [their sixth national report](#) to the CBD in 2019.

Consultation

- Attempts to consult with government officials from Nauru were not successful.

Implementation

Whale and Dolphin

- Australia funded attendance of Nauru representatives at the Whales in a Changing Ocean conference.

New Caledonia

New Caledonia submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- There was communication with government representatives about the review of these plans and although a video consultation did not occur, completed tables were received. Two of these tables were received in French and translated using a basic translating tool. Additional information about implementation of the whale and dolphin action plan was received from a representative from IRD (Research Institute Development)/Opération Cétacés.

Implementation

General

- New Caledonia created a Natural Park of the Coral Sea, 2014 covering its entire EEZ of approximately 1.3 million square kilometres.
- It was noted that threats to marine species are numerous and it is difficult to eliminate them completely, especially climate change, however improvements are still visible.
- Most activities around the TREDIS programme seemed to have stopped due to lack of funding.

Turtle

Theme 1: Information, awareness/education and communication

- A marine turtle awareness programme for public events and schools has been set up by the Aquarium des Lagons, which is now supported by a network of volunteers. Schools are regularly invited to participate in the activity within the establishment.
- The North and South Provinces encourage schools to include sea turtle awareness in school programmes.
- The Centre for Integrative Ecology (CIE) created and distributed an educational booklet on sea turtles.
- Awareness panels were installed in important areas like nesting or foraging sites (e.g. Bwără, Southern province).
- An identification, monitoring and good practices guide has been drawn up and distributed which is intended for the public, agencies and partners (2017).
- Results of a [PhD](#) on turtles in New Caledonia were presented to the executive, the customary authorities and the general public in 2015.
- A presentation relating to the conservation status of green turtles was given to officials and customary authorities in the Northern province.
- Science results are shared with the public during events.
- Awareness raising of the public and users on threats and good practices (Association pour la Sauvegarde de la Biodiversité d'Ouvéa (ASBO), Bwără).
- Promotion of the actions of management committees in the protection of sea turtles through the local press (Conservatoire d'espaces (CEN)) in 2014.

- There is regular information in the media relating to sea turtles, especially before and during breeding season, about threats and appropriate behaviour.
- Lagoon ambassadors have been trained on sea turtle issues by the Southern Province (beginning 2016). A marine turtle awareness event is held every year since 2019 in different locations of the Southern Province. This event is open to schools and public and brings together relevant local people to deliver information and activities related to sea turtles.
- In 2012 a turtle sponsorship system was set up for juvenile turtle release. This programme led to the creation of a turtle pond in the Aquarium des Lagons.

Theme 2: Capacity Building

- Meetings were held between provinces and jurists, relating to environmental offenses and the implementation of financial penalties proportional to the offense.
- Exchange of experience between management committees, about techniques for monitoring nesting sites.
- Partnerships exist between associations, NGOs, researchers, local communities, Provinces, government agencies, etc. These collaborations are centred around field surveys and legal responses to infringements.
- Members of the management committees of the North Province were trained in monitoring and tagging techniques by scientists.

Theme 3: Threat reduction/hazard mitigation

- Actions are being taken to identify, prioritise and reduce the various threats affecting turtles e.g.:
 - Turtle harvesting is prohibited (except customary ceremonies).
 - Regulations have been put in place to limit disturbance (environmental codes).
 - Actions are being taken to drive dogs away from beaches.
 - A rat control project has been launched on a major nesting site in Isles Province, with collaboration between local association (ASBO), SPC, local and NZ experts.
- The use of plastic bags and disposable dishes has been banned in New Caledonia since August 2019 however it takes time to sell existing stocks and find alternatives. In 2022 they plan to ban plastic food trays.
- Studies on the uses and consumption of sea turtles have been carried out but this was back in 2009. They recognise a need to carry out a new survey focusing on the evolution of the uses and consumption of the sea turtle in New Caledonia.
- Most of the important nesting beaches are known and protected by regulations and monitored by the Brigade of Nature Guards or associations. Some have restricted access.
- A plant nursery was created in Bourail, and revegetation of the back beach of La Roche Percée and the Baje des tortues was carried out. Thousands of endemic trees have already been replanted.
- Commercial fishermen have undergone a training programme on the release of sea turtles, this was started in 2001 and is still running.
- There is an observer programme onboard offshore fishing vessels, this also started in 2001 and is ongoing. Annual reports are produced for this programme and made available.
- A programme for the implementation of suitable deep-sea fishing equipment (circle hooks) started in 2001 and is ongoing.

Theme 4: Legislation, policy and management/recovery plans

- The capture of turtles is prohibited at all times; exemptions are possible for the green turtle only. Customary area councils are included in the process of granting exemptions.
- Environmental codes specify a turtle size limit of 100cm Curved Carapace Length (CCL) for customary captures in the Northern province, and a size limit of 80cm CCL in Southern province.
- In 2016 a consultation and exchange process was implemented with a perspective to share sustainable management of marine turtles in the South province.
- A first document for the development of an action plan for the conservation of marine turtles in New Caledonia was published in 2018 and an action plan coordinator was recruited in 2020.
- Management plans for marine sanctuaries (UNESCO sites) have been established and include marine turtle conservation issues.

Theme 5: Traditional knowledge and customary practices

- Studies on the consumption of turtles and dugongs have been carried out.
- Socio-anthropological studies on the place and symbolism of emblematic species including marine turtles in New Caledonia (ESPAM programme).

Theme 6: Research and monitoring

- An inventory of knowledge on marine turtles in New Caledonia and in the region has been carried out (*C. caretta* only in 2012 then a synthesis of all knowledge in 2016).
- Training in 2016 by the National Museum of Natural History (MNHN) on identification, management and monitoring of nests and nesting sites, stranding, tagging, monitoring techniques.
- A map showing turtle nesting beaches has been produced. This could be updated with new data and there is georeferencing to be carried out in the North province.
- Different sea turtle nesting sites are monitored throughout the territory each year, with different operators and protocols. It has been suggested that protocols should be re-evaluated and standardised where possible.
- There is an inventory of the Grand lagon Sud nesting sites with the implementation of long-term monitoring (2017-2020, WWF).
- The North province has implemented a survey app to facilitate data collection in the field.
- Index nesting beaches are identified and long-term turtle nesting monitoring is undertaken: Chesterfield (since 2011) ; Entrecasteaux (since 2007); Beautemps-Beaupré (since 2013); La Roche Percée (since 2006); Grand Lagon Sud islets (since 2016). Monitoring of the most frequented sites within UNESCO zones is done by the management committees in Northern province (since 2013). Some nesting sites are made up of several small islands and islets without any index nesting beach, which makes monitoring difficult.
- Use of data loggers for nest sand temperatures occurs in different surveys (WWF studies in Bourail & Grand Lagon Sud, and collaboration with Queensland University in remote islands in the EEZ).
- A study of the effects of temperature on nests and new-born loggerheads with the set-up of shaded nurseries.
- Hatchling success monitoring in La Roche Percee.
- Monitoring of temporal changes of beach morphology by the coastal observatory, coordinated by the government. Also coastal evolution monitoring by ASBO in Isles province.

- Samples were taken during the T Read PhD which made it possible to identify the different genetic stocks of the New Caledonian sea turtle population. Genetic samples are also regularly taken from turtle strandings (*C. mydas*, *C. caretta*, and *E. imbricata*) and ceremonial catches (*C. mydas*). Samples are stored chilled, awaiting analyses.
- A stranded turtle observation sheet was developed in 2017 by the Northern province, intended for management associations and committees and the general public.
- A collaboration between WWF offices in Fiji, PNG, Solomon Islands, Tonga and French Polynesia has been established for a future project for the acquisition of genetic knowledge on hawksbill populations and the regional connectivity (breeding, foraging and nesting areas).
- A PhD was carried out from 2012 to 2015 to study the population structure of green turtles, their migration and habitat in the Grand Lagon Sud.
- The Zonéco Programme provided mapping of the shallow lagoon seagrass beds.
- Aerial surveys were carried out to monitor the dugong population where sea turtles were also recorded when seen, though not down to species level.
- There have been collaborations for tag monitoring and satellite tracking: La Roche Percée (2006 to 2020); Entrecasteaux (2015); Chesterfield (2017); Beautemps-Beaupré (2021). A satellite tracking program (SAT-NC) has been set up by WWF, ended in 2021 with 80 tags.

Theme 7: Sustainable development

- In 2016 a new eco-tourism activity began (turtle watching) on a nesting site at a nature reserve. Regulated activity and collaboration between a scientific association for turtle protection.
- Commercial harvesting and trade of marine turtles have been prohibited since 1985.
- Marine turtle harvesting, outside traditional ceremonies, has been prohibited since 2006 in lagoon waters. Capture prohibited since 2008 in the EEZ.
- Holding turtles in captivity is prohibited throughout the territory, but there is a special permit for the aquarium for rehabilitation, research and educational purposes. There is also a permit for rehabilitation in a stranding centre in the Northern province.
- It is planned in the northern province to train fishermen to better report turtle data and samples from ceremonial captures.

Theme 8: National, regional and international collaboration and partnership

- In 2015, regional cooperation with the Cook Islands was set up to share experience on nesting sites monitoring.

Dugong

Theme 1: Information, awareness/education and communication

- Booklet about dugongs created in 2010 by CIE, still distributed today.
- The book “Dhyum the dugong” was translated into French.
- Created a stand presenting the Dugong Action Plan (PAD) for the general public and various information and media over the years (posters, brochures, booklet on best practises) as well as activities (board games, quizzes etc).
- An educational programme for schools was created in 2014-2015, as well as a presentation for schoolchildren in 2016 and an activity sheet for schools in 2017.
- Communication and support for awareness campaign for users of the sea “today I pay attention”.

- There is a project to create an educational kit which is in progress.
- In 2018-2019 held meetings with locals to raise awareness about poaching and trying to stop it.
- Each year there are numerous collaborations with the media (written and audiovisual press), including: the production of a documentary on dugongs in NC, notably broadcast on France O (2014, 2016), the production of TV spots (2013, 2017) and a short documentary "[Brut](#)" (2020).
- Writing of a report on "the assessment of the place of dugong in New Caledonian society" (Dupont 2015), which presents the knowledge, representations and social practices related to dugong, as well as the perceptions of regulations and measures of protection of the dugong.
- Work initiated with the Agency for the Development of Kanak Culture (ADCK) on the transmission of information and the collection of traditional knowledge (to be relaunched).
- With regard to regional and international dynamics, the work carried out in New Caledonia contributes, as far as possible, to the implementation of the SPREP five-year action plan. The dugong action plan was also highlighted by the French delegation during the first official meeting of the signatory parties to the Memorandum of Understanding on the conservation of the dugong (CMS) in September 2012 in Abu Dhabi.
- Presentation of the actions of the PAD at the "Regional Dugong and Seagrass Workshop" in the Solomon Islands in 2018.
- An internship focused on "dugong, culture and society" confirmed a high cultural value to indigenous people (celebrating weddings and funerals, also an important source of food).
- Restitution of the various studies carried out on the dugong within the framework of the PAD to the members of the management committees in particular (2014-2015).

Theme 2: Capacity building

- Contribution of the NC to the regional study led by SPREP and CMS in 2010-2011 (final report published in 2016).
- Completion of a thesis on the ecology of dugongs at different spatio-temporal scales in New Caledonia through studies and field campaigns carried out between 2011 and 2014 as part of the dugong action plan; thesis co-supervised by the Australian University of James Cook (Cleguer C., 2015).

Theme 3: Threat reduction

- Stranded/beach cast dugongs are assessed where possible: out of 49 animals surveyed, 43% were of unknown cause, and 31% were attributed to attempts at poaching. Other events were attributed to shark, biological event, accident bycatch, natural event, collision.
- The threats to dugongs in New Caledonia are not well assessed and inspections by field rangers, cops, and customs are limited. There is confirmed accidental captures in fishing nets as well as collisions with vessels. Poaching is thought to be a significant source of mortality.
- Penalties against hunting, catch, mutilation, meat consumption, sale, and purchase. In South Province, approach within 50m is prohibited.
- Have conducted surveys on the pressures exerted by nautical activities among lagoon users as part of the 1st PAD 2011-2015.
- Willingness, within the framework of the new 2016-2021 action plan, to concretely reduce the threats weighing on the dugongs, in particular poaching. During 2017: (i) production of a TV and radio spot to bring to the attention of the public the importance of the threat of

poaching on the maintenance of the species and (ii) organization of a 2-day workshop dedicated to this theme.

Theme 4: Management and protection

- Study carried out as part of the aforementioned thesis of the distribution of the population of dugongs within the network of marine protected areas (MPAs) set up by the North and South provinces, as well as in heritage areas UNESCO World; underlines a spatial gap between areas with a high density of dugongs and MPAs in which the regulatory requirements are the most stringent ([Cleguer et al 2015](#)).
- New Caledonia provided a national report to the Secretariat of the Memorandum of Understanding on the Conservation and Management of Dugongs and Their Habitats Throughout Their Range in 2017. They also attended the [Workshop on the Conservation of Dugong and Seagrass](#) in March 2018 in the Solomon Islands where they presented a [summary of dugong status, trends and threats in New-Caledonia and summary of recent research](#).
- Dugong are managed via the New-Caledonia Dugong Action Plan which is coordinated by the New-Caledonian Conservatory of Natural Areas. The Action Plan is a framework for collaboration between agencies to improve knowledge, raise awareness and to protect dugongs and their seagrass habitat.
- Four IMMA's were identified in New Caledonia.

Theme 5: Traditional knowledge, customary marine tenure and traditional resource management

- Realization of a socio-anthropological field internship: Assessment of the place of dugong in New Caledonian society (understanding of the conservation dynamics implemented in NC and understanding of the perception of local populations with regard to animals, conservation strategies and institutional actors).
- Confirmed high cultural value to indigenous people (celebrating weddings and funerals, also important source of food).
- Work initiated with ADCK on the transmission of information and the collection of traditional knowledge (to be relaunched).

Theme 6: Research and monitoring

- Establishment of an alert number to report any dead or distressed dugong; information relayed to the general public via a dedicated poster campaign.
- Satellite and GPS tags have been deployed on dugongs in the southern and northern provinces to identify important habitat, see Cleguer, Garrigue and Marsh 2020
- Encourage citizens to report dead or injured dugongs via a mobile app.
- Seagrass is the most representative coastal habitat in New Caledonia and is reasonably well mapped. Only New Cal is reasonably confident that it has reliable estimate of the size of its seagrass meadows.
- Numerous studies on (i) the temporal variability of the relative abundance of the dugongs and (ii) the spatial ecology of the Dugongs in the lagoons of NC carried out as part of the knowledge improvement component of the PAD 2011-2015 (including the thesis mentioned above), with aerial overflight campaigns and dugong equipment with satellite beacons.
- Various studies also conducted in this context on the isolation and genetic diversity of populations of dugongs in NC. Low genetic diversity Oremus et al 2011, 2015
- SIREN program focuses on the spatial behaviour of dugongs

- Ongoing GRASS program focusing on genetic and trophic analysis of the dugong population of NC

Theme 8: National, regional and international collaboration

- Implementation of CITES initially ensured by state services, based on the provisions of the VC, then now via the GNC, with regulations in place since 2016.
- New Caledonia offered assistance to range states for planning and implementing aerial surveys and other types of technical collaboration including genetic analysis of tissue samples in Vanuatu and Solomon Islands.
- Participated in PIR dugong and seagrass conservation workshop and other regional conferences and meetings
- Contribution of the NC to conferences organized elsewhere at the national level (eg: in 2018, during the AFB Overseas Seminar or during a conference devoted to the overseas biodiversity of the Pacific).

Whale and Dolphin

Theme 1: Information, awareness/education and communication

- Published a New Caledonia marine mammal identification guide (Garrigue and Poupon 2013).
- In the southern province, publication each year of the "lagoon guide" and its specific page on whale watching; also publication of leaflets on the rules of observation.
- Organization of the whale festival every year since 2011 on Ouen Island.
- Year 2016 declared the year of the whale in the Pacific.
- Signature by the NC in April 2017 of the declaration on the protection of the whales of the Pacific islands which in particular (i) underlines the essential role of whales, (ii) recognizes that an urgent intervention aimed at preventing and considerably reducing pollution marine is essential and (iii) urges governments to collaborate with other islands and territories in the Pacific.

Theme 2: Capacity building

- Establishment of annual pre-season training since 2008 for whale watching operators.
- In 2012, official inauguration of the development of the Cap N'Dua nature reserve, which allows whale watching thanks to the construction of an observatory equipped with spotting scopes.

Theme 3: Threat reduction

- Participation of NC in the observation program on board longliners, within the framework of the work of WCPFC.
- Information transmitted to the General Secretariat of SPC for use in the assessment of the state of the pelagic ecosystem and in the estimation of fish stocks at regional level, on behalf of WCPFC.
- Awareness of crews on animal treatment and release methods (dedicated guides).
- Possible interactions with marine species are limited with the use of horizontal drifting longlines, nylon leaders and circular hooks.

- Some rare accidental catches observed (none from 2012 to 2016; 2 whales and 1 dolphin in 2017, 1 whale in 2018, 1 whale and 1 dolphin in 2019).
- Launch in 2017 of the Tchitù project (study and conservation of bottlenose dolphins in the Indo-Pacific using the southern lagoon of NC), with funding from the customary environmental advisory committee, study returned in 2021, showing that 11% of the dolphins photographed presented anthropogenic marks, mostly caused by boaters - [Bonneville et al 2021](#).
- New regulations implemented in 2019 integrating the cetacean approach charter into the environmental code and prohibiting the approach of females accompanied by calves.

Theme 4: Ecosystems and habitat protection

- Four IMMA's were identified in New Caledonia.
- The [WHERE programme](#) (Humpback Whale Habitat Exploration) improves spatial management in the natural park of the coral sea.
- Creation of the National Park of the Coral Sea (PNMC) in 2014, covering the entire EEZ of approximately 1.3 million km²
- Establishment of the [WHERE program](#) in 2016 to obtain robust scientific knowledge on cetaceans frequenting the remote waters of the Coral Sea Natural Park, on which managers can rely to create a network of MPAs protecting in particular mammals marine - resulted in 2018 in the classification of certain coral reefs and lagoons as natural and integral reserves.

Theme 5: Legislation, policy and management/recovery plans

- Editing of the management plan for the Coral Sea Natural Park, of which several objectives go in the direction of the protection of whales.
- Implementation of management plans for protected areas and/or areas inscribed on the UNESCO World Heritage List, with one or more actions dedicated to the enhancement and protection of emblematic and protected species.

Theme 6: Cultural significance and value

- In 2019, organization of workshops for three customary areas of NC in the same dynamic: promoting the Kanak cultural and linguistic heritage on themes that link man to the ocean.
- IRD ESPAM report 2016-2018 (Emblematic species, acceptance and sustainability of marine protected areas).
- Natural park of the coral sea managing committee includes customary authorities to promote traditional knowledge.

Theme 7: Research and monitoring

- WHERE project, launched in 2016, already mentioned above. Same type of collection with authorization from the Government of the NC
- [REMMOA campaign](#) (census of marine mammals and other pelagic megafauna by aerial observation conducted in 2014, showing in particular highlighting the great diversity of cetaceans observed in Caledonian waters).
- Commissioning of the MObl application (Marine Mammal Observer of Oceania by Internet) carried by WWF NC, allowing everyone to locate and reference their observations of marine mammals in the region.
- Whale photo ID and biopsy sampling occurs regularly.

- Scientific papers have been published for humpback whale on growth rate (Orgeret *et al*, 2014) and on birth rate and birth interval (Chero *et al*, 2020).
- A few new species have been identified in the waters of New Caledonia: tropical bottlenose whale (*Indopacetus pacificusi*), striped dolphin (*Stenella coeruleoalba*), and Fraser's dolphin (*Lagenodelphis hosei*).
- Paper published looking at understanding the environmental drivers of humpback whales in the context of climate change (Derville *et al*, 2019)
- Sea surveys have been conducted in the high seas especially around shallow seamounts and banks.
- Satellite tags have been deployed on humpback whales in Province South and in the Natural Park of the Coral Sea which identified critical habitats – a [story map](#) is available for the 2017 season and results have been published from the data from 2016-2018 (Derville *et al*, 2020).
- Reporting of observations through email and app, strandings reported via website www.rescue.ird.nc.
- Provided valuable information on the use by humpback whales of the loyalty ridge, the Norfolk ridge and the Lord Howe guyots chain, on preferred habitats and observed densities as well as on social behaviour.
- Confirmed the connectivity by genetic and photographic analysis between the populations frequenting the south of the Loyalty ridge, the south lagoon as well as the seamounts of the Norfolk ridge.
- Determined the spatial distribution and the characteristics of populations of bottlenose dolphins, tropical pilot whales, sperm whales, dwarf sperm whales and pygmy sperm whales.

Theme 8: Whale and dolphin based tourism

- Implementation of annual pre-season training since 2008 for whale watching operators.
- Annual presentation of lessons learned from the results of the previous year during the meeting with nautical operators (training and signing of the charter).
- Province South has developed surveillance and enforcement capacity to implement national protection measures during whale watching activities, as well as a leaflet for education on rules. They also collect data on tourists and animal numbers.
- Whale watching rules included in the province's environmental code since 2019; regulatory changes in 2019: ban on approaching and observing a calf or a group with calf.

Theme 9: National, regional and international collaboration and cooperation

- New Caledonia attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific Islands Year of the Whale Declaration. Some of the information provided here was taken from the conference report.
- Training for stranding response undertaken for rangers in the 3 provinces beginning 2020.

Feedback

- New Caledonia was one of the only countries to respond to the initial survey monkey in 2017 to comment on the 2013-2017 Action Plans. A representative of WWF France responded, identifying the RMSAPS as 'somewhat useful' and "very thorough and ambitious". They recommended personalising the programmes to specific countries and identified the redundancy in actions across the plans.

- New Caledonia also recommends that the Marine Species Programme and other such documents are made available in French as well as English.

Niue

A [State of Environment](#) report was published for Niue in 2019.

Niue submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- A video conference was held with a representative from the Department of Environment in September 2020. Information provided during this consultation is summarized here along with information taken from the Whales in a Changing Ocean Conference in 2017. Final tables and further information was not provided.
- Representatives indicated they were aware of the Action Plans and use them in their conservation work. They also suggested that Niue were considering joining CITES and CMS.

Implementation

- The main challenges faced by the representatives spoken to is that they are under-resourced and don't have enough capacity.

Turtle

Theme 1: Information, awareness/education and communication

- Representatives were not familiar with the Turtle Research and Monitoring Database System (TREDS).
- No other information about turtle conservation was provided.

Whale and Dolphin

- Niue attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific Islands Year of the Whale Declaration. They presented on 'What whales mean to the people and economy of Niue'.
- In 2006 Oma Tafua launched its first whale awareness campaign.
- In 2003 Niue declared its waters a National Whale Sanctuary.
- Oma Tafua manages the progress towards the management objective and research mandate under Niue's Plan of Management for the whale sanctuary and the SPREP WDAP, as well as CMS obligations.
- Funding is expected for Oma Tafua to conduct humpback whale research in Niue which can then be compared across the Pacific region, filling data gaps and contributing to greater regional conservation efforts.
- Niue established whale watching regulations in 2016, supported with the first enforcement training workshop for Niue and the region, bringing together all relevant stakeholders.
- There is a national Action Plan for whales and dolphins.

Northern Mariana Islands

Consultation

- Attempts to consult with government officials from Northern Mariana Islands were not successful. Some comments were reported in the Blue Days Conference proceedings 2015.

Implementation

Turtles

- A turtle monitoring programme involves flipper tagging.

Whales and dolphins

- Tourism comprises 95% of GDP and there are 120 permitted marine sports operators. There may be harassment of spinner dolphins by some of these commercial operators.

Palau

A [State of Environment](#) report was published for Palau in 2019.

Palau submitted their [sixth national report](#) to the CBD in 2019.

Palau submitted a [CMS National Report](#) in 2017.

A [National Biodiversity Strategy and Action Plan](#) for Palau was published in 2018.

Consultation

- A video conference was held with a representative from the Bureau of Marine Resources in October 2020. Information provided during this consultation is summarized here along with information taken from the Whales in a Changing Ocean Conference in 2017, the Workshop on the Conservation of Dugong and Seagrass in 2018. Final tables and further information were not provided.
- Palau officials work with the state government in terms of regulations or policy. There are a lot of players and it requires consultation with other stakeholders to report on this.

Implementation

- Most of the work under the Action Plans is being done at a national level.

General

- Doing a review and update of the existing marine national legislation, including protection of species and the Marine Protection Act 1994. A [review of natural resource and environment related legislation](#) was published in 2018.
- National marine sanctuary implemented in 2020, closing 80% of EEZ to commercial fishing as well as activities like drilling for oil. World's six-largest fully protected area. Fishing is restricted to domestic and artisanal.
- So far only one of 16 states in Palau has improved monitoring and enforcement.

- Conservation is hampered by limited capacity and limited data.
- Tourism has grown rapidly in recent years and is managed through the Responsible Tourism Framework.

Dugong

- Palau provided a national report to the Secretariat of the Memorandum of Understanding on the Conservation and Management of Dugongs and Their Habitats Throughout Their Range in 2017. They also attended the [Workshop on the Conservation of Dugong and Seagrass](#) in March 2018 in the Solomon Islands where they presented on their recent work on dugong and seagrass.
- Palau dugong awareness campaign in 2012/2013.
- Kids activity booklets distributed for free to all 5th and 6th graders. Virtual reality headsets and new current education materials will be published and used to teach students about Palau's most endangered marine mammal.
- The most significant threat is poaching – 2013-2015 several dugong hunters were arrested and charged/fined for illegal poaching. Dugong used to be hunted in Palau for special cultural events. This is now prohibited. Dugong-shaped foods are used instead.
- Seagrass meadows are only protected in MPAs.
- Dugong Protection Act signed in 2013, there are significant penalties for deliberate take or injury.
- A team of five international experts assembled by the IUCN Marine Mammal Protected Areas Task Force visited Palau in October/November 2017. The goal of the visit was to support the implementation of conservation and management considerations for an Important Marine Mammal Area (IMMA) for dugongs.
- The Coral Reef Research Foundation published 'Behavioural observations and habitat use of dugongs in the rock islands southern lagoon, Palau' in 2020. This research was done using drones and underwater cameras.
- Other research is done using aerial survey. Best information is from Koro State, a dugong 'hotspot' in Palau. Thought to be 50-100 animals and are thought to be the most genetically isolated population in the world.
- Seagrass appears to be declining in Koro and Ngchesar.

Whale and Dolphin

- Palau attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific Islands Year of the Whale Declaration.
- Whales and dolphins aren't really represented in legislation yet but are working on it.
- Marine mammal conservation occurring, but lacking regulation and details.
- Interaction between Palauan community members and whales has never been frequent as fishers traditionally stay in the lagoon. Palau doesn't have a history of whaling for traditional or subsistence purposes or permitting whaling in their waters.
- Whales and dolphins, while not present in Palau's legends, are considered friends in the ocean who are occasionally encountered by local fishermen.
- In 2010 the Palau Marine Mammal Sanctuary was established, which protects marine mammals throughout Palau's waters. Our senior matriarchs in 2011 adopted a resolution calling on our traditional and constitutional leaders to support the goals, objectives, and implementation of the Palau Marine Mammal Sanctuary.
- The Palau cetacean research project began with Whaleology in 2012 and 2013. This project confirmed the presence of at least 12 species of whales and dolphins in Palau's waters, with

the possibility that there could be as many as 30 species because of Palau's location (its proximity to Asia) and the diverse bathymetry of the Palau archipelago, including the Palau trench. To date (2017), this project is the ONLY TARGETED CETACEAN RESEARCH ever conducted in Palau's waters.

- In 2011 Whaleology came to Palau to help us gain more insight to the economic potential of cetaceans in Palau by conducting a whale watching feasibility study.
- Australia funded attendance of Palau representative at the Whales in a Changing Ocean Conference in 2017.

Feedback

- No feedback on the Action Plans was provided.

Papua New Guinea

Papua New Guinea submitted their [sixth national report](#) to the CBD in 2019.

Consultation

- Attempts to consult with government officials from Papua New Guinea were not successful however they did indicate that they are currently working on a National Plan of Action for Sharks and Rays through the BIEM project but are yet to develop plans for other migratory marine species. They consider that the Action Plans will be used to assist in this development.

Implementation

Dugong

- Papua New Guinea provided a national report to the Secretariat of the Memorandum of Understanding on the Conservation and Management of Dugongs and Their Habitats Throughout Their Range in 2017. Information provided in the report is shared below. Papua New Guinea was unable to attend the 2018 workshop on the Conservation of Dugong and Seagrass held in the Solomon Islands.
- In the Moro Momoro Gamo Management Plan it has sections that clearly require take of dugong to only by use of traditional gear and by non-powered canoes. Restriction also relates to take of one or more must be shared by the whole community.
- A full national scale survey was conducted for only selected province that had occurrence of dugong and seagrass habitat. These areas have been mapped and further workshops were conducted with the respective province. Mainly efforts to the south of Papua New Guinea which has a very high catch and use of the dugong. For other centres dugong is not considered as food source. The baseline data has been collected and used to provide guide and advise for local communities to better protect the dugong population.
- PNG has used the high priority biodiversity areas. This mainly refers to major occurrence sites and foraging sites. This has been done together with University of Queensland, Australia using the Protected Areas of Works Assessment.
- PNG is a signatory to the Coral Triangle Initiative, and we have been working very closely with our 5 country partners developing a management plan under the Threatened Species Goal mainly to address illegal harvest and protect migratory pathways for migratory species.

- PNG has made significant progress by signing of the MoU together with the Shark MoU. PNG has emphasized the protection of the dugong habitat which has been the major focus and mainly with province further north and in the Bismarck Solomon seas while further south towards the PNG Australia border has had its challenges.

Whale and Dolphin

- Papua New Guinea attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific islands Year of the Whale Declaration.

Samoa

A [State of Environment](#) report was published for Samoa in 2013.

Samoa submitted their [sixth national report](#) to the CBD in 2018.

Samoa submitted a [CMS National Report](#) in 2019.

[Samoa Ocean Strategy 2020-2030](#)

A [National Biodiversity Strategy and Action Plan](#) for Samoa was published in 2015.

Consultation

- Samoa did not respond to requests to participate in this review process.

Implementation

Whale and Dolphin

- Samoa attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific islands Year of the Whale Declaration.
- Samoa declared the EEZ as a national marine sanctuary for dolphins and whales in 2002.

Solomon Islands

A [State of Environment](#) report was published for the Solomon Islands in 2019.

The Solomon Islands submitted their [sixth national report](#) to the CBD in 2019.

Consultation

- A video conference was held with representatives from the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) in August 2020. Information provided during this consultation is summarized here along with information taken from the Whales in a Changing Ocean Conference in 2017, the Community-Based Turtle Monitoring and Ecotourism in the Pacific Region project report 2017, and the Workshop on the

Conservation of Dugong and Seagrass in 2018. Final tables and further feedback were not provided.

Implementation

General

- Strong police enforcement on blast fishing.
- Weak compliance and enforcement on management on target species or endangered species, e.g. leatherback turtles (conflict between law vs customary practices).
- No seabed mining at this point but some talks at the political level.
- Plastic pollution is a big issue. Some provinces are pushing hard for reducing single-use plastics, some talk at the national level with the Ministry. Would like to get a national understanding of provincial initiatives.
- Fisheries regulations in place for turtle, dugong, shark finning, bycatch.
- All sites with some form of community management are considered to be LMMAs. There is limited efforts and poor systematic process to keep track of existing community management plans and no national or regional database for archiving community protocols. The LMMA network recognises 206 tabu and LMMA sites. In a recent update, MECDM recognised 416 tabu, LMMA and terrestrial sites.
- MECDM and Ministry of Fisheries and Marine Resources have existing laws establishing legal protection of MPA/MMAs, especially on marine/coastal areas (Protected Areas Act 2010 and Fisheries Management Act 2015).
- Under Solomon Islands Marine Spatial Planning (MSP) and Ocean work, SI have identified 65 Special, Unique Marine Areas (SUMAs) (12 offshore and 53 inshore).
- Under MSP process, the Solomon Islands are developing its Marine Spatial Plan linking to existing Solomon Islands National Ocean Policy.
- IUCN threat classification vs Solomon Islands threat classification – there is no clear national listing processes or systems in place for aligning to regional and IUCN red lists.

Dugong

Theme 1: Education and Awareness

- Education and awareness of the Dugong and Seagrass Conservation Project (DSCP) has been used to influence plans at both the national and community level.
- Art competitions, dugong sculptures at national art gallery, creative writing competition. No education about vessel behaviour but recognize its importance.
- Focus now is on raising awareness rather than highlighting negative impact of hunting but would like some help with communication material.

Theme 2: Capacity Building

- Not enough capacity for gathering data, especially because many sites are in custody of landowners and need to support them to do their own monitoring and reporting. Capacity needed for enforcement, training for college students.

Theme 3: Threat Reduction

- Standardised Dugong Catch/By-catch Questionnaire distributed, only 300 collected, not uploaded into data sheet. Little incentive for people to participate. Plan to put more resource into this and collecting ad hoc sightings.

- Three dugong killings in 2016, including a high-profile event that got social media attention, prompted government to state that this behaviour was 'not encouraged'. In 2018 the Fisheries Management Regulations were gazetted making dugongs, as well as many other marine species, off limits to fishers – this was a major achievement. Result of influence of the GEF DSCP. Management plan for dugong and seagrass was included in the 2018 Fisheries Regulations.
- Cannot completely ban the consumption of dugongs currently, trying to understand which communities are still practicing harvesting for traditional feasting activities.
- Staff that were consulted with were unable to comment on levels of bycatch or efforts to reduce this but said there are mandatory observers on fishing boats.
- There is no response plan (that can capture mortality record for reporting or advice) for stranded/deceased dugongs but would be good and a good opportunity for public engagement, would complement overall monitoring plan. Limited information available to the community on what to do if a dugong washes up. Most likely seen as an opportunity for food.

Theme 4: Management and Protection

- Tetepare Descendants Association do seagrass monitoring following Seagrass Watch protocols, 27 sites, 18 inside island's MPA.
- Other past sites involved in monitoring: LAU Lagoon in Malaita Province, Rarumana/vonavona lagoon-Roviana, and Chumbikopi sea grass sites- Marovo.
- Community based resource management, via Fisheries, harmonizing what communities are doing.
- Most marine protected areas managed locally, if areas identified as a national priority, have to get consent of local community. Currently only responding to communities' requests for protected areas. Established under the Protected Areas Act 2010.
- Fisheries officers in the provinces, have a role to ensure there is compliance to illegal harvesting but there is a lack of enforcement at national provincial and community levels. A need for proper enforcement at a national level, especially with the new regulations for dugongs.
- Dugong are protected under Inshore fisheries regulations
- There is a conservation strategy for dugong and seagrass habitats (2018)

Theme 5: Traditional Knowledge, Customary Marine Tenure and Traditional Resource Management

- Species of high cultural significance.
- Using traditional management to regain community appreciation for the dugong. For example, the Project was featured at the National Resource Management Symposium in 2017.
- Value adding is partnering with Culture and Tourism sector, promoting customary stories, dances, arts and crafts and songs.
- Want to encourage traditional knowledge and practices to be captured. Trying to seek support for integration of these values into conservation.

Theme 6: Research and Monitoring

- Mapped estimated total coverage of sea grass area over 10,000 ha for Solomon Islands (2004 TNC-SIG, REA). This needs to be updated – there is potential for remote sensing work or ground truthing (actual mapping).
- Only 66km² of seagrass has been mapped. Ten seagrass species have been identified – confident there are more. Largest meadow in Malaita province. A project finished in 2019 with WorldFish on mapping.
- No genetic studies of the linkages of New Caledonia population to Vanuatu and Solomon Islands.
- Urgent priority for Solomon Islands is to define the research questions that need to be answered as a priority.

Theme 7: Sustainable Practices/Interactions with Dugongs

- Community-based conservation in Western province. Eco-tourism programme includes dugong and seagrass conservation.
- Protocols on handling and interaction with visitors, tourists, or even researchers.
- No dugongs are held in captivity (aligning with Wildlife Protection and Management Act 1998 and WPMA reg (amendment 2017)/CITES requirements for breeding facility).

Theme 8: National, Regional, and International Collaboration

- Solomon Islands provided a national report to the Secretariat of the Memorandum of Understanding on the Conservation and Management of Dugongs and Their Habitats Throughout Their Range in 2017.
- They also attended the [Workshop on the Conservation of Dugong and Seagrass](#) in March 2018 in the Solomon Islands where they presented a summary of dugong status, trends and threats in the Solomon Islands and summary of recent research.
- The Project partners could have engaged better with the National Facilitating Committee and Project activities should have been more of a part of National Government programmes.
- Better platforms could have been established for data sharing with government agencies.

Turtle

Theme 1: Information, Awareness/Education and Communication

- There is a [documentary](#) about the Hawksbill turtle conservation programme at the Arnavon Islands.
- There is a need for increased communication and awareness strategy for turtles.
- Some exchange of knowledge between networks, turtle conservation sites for schools, practitioners, rangers etc.
- School essay completion, speech competition, and awareness on market vendors.

Theme 2: Capacity Building

- Targeting Solomon Islands Rangers Association (SIRA) through networks.
- Turtle tagging, nest-relocation techniques, monitoring, and reporting etc.
- Turtle training workshop in 2014, 25 participants from government, NGOs and villagers.
- In 2015 two turtle monitor representatives took part in a study tour to Vanuatu.
- In 2015 an education, awareness and refresher training was given to newly appointed community turtle monitors.

- Recent workshops in Isabel province for communities with leatherback nesting sites in 2020.

Theme 3: Threat Reduction

- Main threats to turtles are direct take by fishermen for ceremonies, functions, parties etc, bycatch in purse-seine and longline, beach erosion, predation from introduced predators, illegal trade.
- Awareness on shipping services, work with customary/traditional leaders.
- Protected under the Fisheries Act, the regulations protect the nests and eggs.
- On Arnavons they use fences to protect nests from predators. There is also pressure from climate change here where they have already noticed changes to beaches. Looking at ways to adapt, such as relocating nest sites.
- The Arnavon Community Marine Park was declared in 2017.
- The Solomon Islands developed a national Marine Turtle Action Plan 2008-2012 and its monitoring component has been implemented. The plan is waiting for review and amendment of other policies to align with the new Fisheries Management Act 2015 and the Protected Areas Act 2010.

Theme 5: Traditional Knowledge and Customary Practices

- Under customary marine tenure system, landowners can declare any areas (reef, mangroves or land) under their control protected or tambu. This is normally based on a short-term closed and open closure. Certain coastal tribes/individuals also have specific traditions that prohibit them from killing and eating marine turtles. These animals are revered and treated as sacred or seen as ancestors. Some churches restrict the use and consumption of turtles.

Theme 6: Research and Monitoring

- Green, hawksbill and leatherback turtles are the most common and have known nesting beaches in the country. As leatherback breeding sites have been lost in many other areas in the Asia-Pacific region in recent years, the Solomon Islands has assumed a greater significance for the continued survival of this species. Little is known about the population of foraging marine turtles in the Solomon Islands due to data deficiency and irregular records.
- Arnavons, besides Tetepare Descendant Association, Baniata, Zara Resource Management Area in Western Province, Waihau Conservation in Malaita Province, Lithoghahira, Haevo, Sasakolo nesting beach are known sites to keep regular records for both foraging and nesting turtles and the Arnavons is one of the few examples anywhere in the world of significant population recovery of hawksbill turtles, thanks in large part to a community-based monitoring programme supported by The Nature Conservancy.
- From satellite tagging studies in the past by NOAA, it was known that leatherback turtles migrate from California to Haevo beach in the Arnavon Islands to lay their eggs. By early 2015 the turtle rangers at Haevo had made two exciting discoveries as a result of their monitoring efforts. The Haevo turtle monitors reported in 2015 that since the turtle rangers started monitoring Haevo beach over 19 months ago, our results show that between October 2013 and March 2015 leatherback turtle have nested virtually all year round. The results indicated there are two distinct nesting seasons - from October to March and April to September, with peak nesting times in December-March and July-August.
- Turtle harvest report by The Nature Conservancy in 2019.
- Update turtle nesting beach and occurrence for Solomon Islands.

Theme 7: Sustainable Development

- The Solomon Islands were one of the PICTs chosen for a five-year project to encourage the conservation of marine turtles through community-based monitoring and eco-cultural tourism development in Pacific Island countries.
- An ecotourism study and business plan were developed at sites in the Solomon Islands as an outcome of over 26 education, training, and participatory business planning workshops.

Theme 8: National, Regional and International Collaboration and Partnership

- Enforcement of CITES under the Solomon Islands Wildlife Protection and Management Act.
- Existing partnerships covering species: CTI, SPREP, SPC, WCS, TNC, WWF and other NGOs/CBOs.

Whale and Dolphin

- Any laws protecting species gives recognition to cultural harvesting and there is cultural harvesting in Malaita Province for the purpose of meat and teeth. For instance, mean average catch total of 813 dolphins.
- Whale and Dolphin survey done for Central Guadalcanal, Isabel and Malaita in 2011-2013.
- Demographic and genetic assessments of dolphin taken in Solomon Islands (Oremus et.al, 2014).
- Lack of expertise of cetaceans and research.
- The government banned the capture and export of dolphins in 2012.
- There is no response plan in place for stranded/beachcast whales and dolphins.
- Attended the Whales in a Changing Ocean Conference in 2017.
- No management plan for whales and dolphins.

Tokelau

A [State of Environment](#) report was published for Tokelau in 1994.

Consultation

- Attempts to consult with government officials from Tokelau were not successful.

Implementation

Whale and Dolphin

- Tokelau attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific islands Year of the Whale Declaration.
- In April 2010, the late Faipule Foua Toloa, Ulu o Tokelau announced Tokelau's intention to declare a national whale sanctuary in Tokelau's EEZ of 290,000 square kilometres. In 2011 Faipule Toloa made the Tokelau Whale Sanctuary a commitment to the Pacific Island Forum Leaders' Pacific Oceanscape, an initiative also endorsed by Tokelau. The values behind the marine sanctuary include: to conserve migratory species; help threatened species to

recover; help maintain/improve marine biodiversity; protect marine ecosystems by identifying and managing threats; support and develop the nature tourism industry; and attract support for education and research.

Tonga

A [State of Environment](#) report was published for Tonga in 2018.

Tonga submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- A video conference was held with representatives from the Ministry of Fisheries and the Department of Environment as well as the Vava'u Environmental Protection Association (VEPA).

Implementation

General

- A [Rapid Biodiversity Assessment](#) (BIORAP) of the Vava'u Archipelago, Kingdom of Tonga was completed in 2014.
- The Department of Environment, Masani Environmental Care Association (MECA) and Tonga Blue Ocean Conservation (TBOC) are currently working to develop a platform where government, industries, businesses and communities can share information and data.
- MECA citizen science program on migratory species is currently conducting awareness programmes on marine emblematic species including whales, dolphins, turtles, sharks and other marine species including seabirds.

Turtle

- BIORAP 2014: Important areas for marine turtles were identified. It may be that illegal direct take represent the single greatest threat currently facing Vava'u's turtles due to low occurrence of other common threats.
- In Vava'u however, a successful rat eradication programme was carried out on the most populous nesting island (Maninita) in 2009. The Fisheries Management (Conservation) Regulations of 2008 define the permissible fishing activities associated with turtles. In summary, these regulations state that females of all species are protected year-round; leatherback turtles are protected year-round; male turtles of other species, with a minimum carapace length of 45cm, can be caught between 1 February and 31 July; all nests and eggs are protected; turtles cannot be caught with spear guns; and all landed turtles must be presented in their shells to the Ministry of Fisheries for certification. However, there is little enforcement of the regulations in the outer island groups of Tonga. There are significant and immediate concerns over the long-term effects of two illegal turtle fishing practices: egg poaching from turtle nests and the catching of large female green turtles for important cultural events.
- A review of natural resource and environment related legislation was published for Tonga in 2018.

Whale and Dolphin

Comments from the Department of Environment (DOE): Unfortunately, we have not effectively implemented the past Whale and Dolphin Action Plan (2013-2017) due to lack of staff and operational budget dedicated to whale conservation. Much of the work on whales is linked to regulating whale watching activities under the Ministry of Tourism and not specifically on whale conservation. However, Tonga has declared its waters as a whale sanctuary, and we have begun research on whales (still ongoing). I believe the findings of this research will contribute significantly to an improved Action Plan that we will endeavour to implement in the future.

Theme 1 – Information, awareness/education and communication

- Currently collecting whale data for Tongatapu including whale behaviour, water physical quality measurement, sampling whale skin, recording whale song negotiated by DOE, MECA (Mesani Environmental Care Association) and TBOC (Tonga Blue Ocean Conservation).
- TBOC is currently developing a work plan for school awareness on whales and dolphins including traditional knowledge, customs and stories.
- MECA currently runs a citizen science program for secondary schools involving high school students in collecting data and observing of whale behaviour on the field.
- MECA and TBOC engaging members from government, NGOs and schools on the weekly whale research trips.
- Have a facebook page and website where they post pictures of the tribal whales (humpbacks) to notify the people of Tonga that these animals are travelling through the Kingdom's waters and that it is important not to harass them (fishing boats, ferries etc).
- Challenges include limited funding and an absence of tools for collecting data such as hydrophone, sampling bottles, preservation agents, boat, cameras, GPS etc. Additionally, whales are a political topic in Vava'u.

Theme 2 – Capacity building

- A member of an NGO in Tonga was sent to Australia to do research on tribal whale in the Pacific, they returned to Tonga to continue the research, working with the government to pass on learnings.
- MECA citizen science program involving members from NGO's, Businesses, Tonga National Youth, Secondary Schools science students, and Primary school students.
- A Capacity building workshop and tour for Ministry of Tourism staff was organised for 2020 to NZ but was postponed due to COVID-19.

Theme 3 – Threat reduction

- At present the only threats to whales in Tonga is due to tourist activities from heavy whale watching during whale season which have affected their behaviour (whale research team has yet to finalise findings on behaviour). The COVID-19 pandemic has alleviated this to a great degree and the impacts of this has yet to be determined, pending completion of whale research by MECA, TBOC and DOE.
- Hunting and killing of whales has been banned since 1978.
- VEPA has conducted some disentanglement training with support from IWC.
- There is fisheries legislation about harm to marine mammals, including boat strike and bycatch. Long-lining and gill-netting are the main fishing gear types but purse-seining is being investigated. Not currently much bycatch.
- VEPA has a ghost fishing project to remove lost gear from reefs.

- Looking to identify alternatives to buoys and ropes for boundary demarcations in the ocean environment.
- There are ongoing programmes to reduce plastics and waste reaching the ocean (DoE, VEPA, Waste Authority).
- Challenges include: lack of resources to do disentanglement efficiently, need consistent training, projects often rely on “do-gooders”.

Theme 4 – Ecosystem and habitat protection

- In 2017 Tonga re-declared its waters as a whale sanctuary (initially in 1978)
- As part of the 2014 BIORAP, there was a secondary assessment on habitat suitability for mother/calf humpback whales, including some work to identify possible rest areas where tourism would have to avoid. Current research has identified areas of favourable habitat and migratory pathways.

Theme 5 – Legislation, policy and management/recovery plans

- Legislation relating to whale watching activities is mandated by Ministry of Fisheries.
- Whale watching activities are managed through regulations and permits through the Ministry of Tourism. These regulations have recently been reviewed and updated to improve management of whale watching activities.
- Legislation on whale and dolphin conservation is briefly addressed in Fisheries Management Act.
- A review of natural resource and environment related legislation was published for Tonga in 2018.

Theme 6 – Cultural significance and value

- Stranded/deceased whales on beaches are utilised as a resource for meat and bone by local communities – trying to communicate to communities that conservationists aren’t trying to stop them from harvesting deceased cetaceans but want to collect data and understand them better, and also ensure there aren’t health risks from consuming the flesh.
- No targeted harvesting occurring but communities are interested in being able to do this again.
- During the community consultations for the marine spatial planning work, a lot of community knowledge was collected on their perceptions on whale movements, status of whale populations, historically where they used to see them vs now, comments about how they perceive impacts of whale watching industry. Put forward possible rest areas where tourism would have to avoid.

Theme 7 – Research and monitoring

- There was a BIORAP in 2014 which added two new species to the known cetacean species of Tonga: the Cuvier’s beaked whale and the rough-toothed dolphin. The presence of a third, the Antarctic Minke whale, requires confirmation. The bottlenose dolphin species has been identified via genetics as *Tursiops truncatus*. Photos from stranded whales and live sightings were used.
- Have worked with HappyWhale for fluke ID catalogue to see what other regions the whales travel to.
- There needs to be an updated population study throughout the island groups to suitably address some of the issues with tourism and to update the previous population surveys.

- Ferries commuting from Tongatapu to outer islands have reported many sightings of whales but these are not currently documented.
- Current whale survey underway (DOE, MECA, TBOC) including GPS plotting, depth, reef type and flexibility.
- Strandings data collected by VEPA and sent to SPREP and Fisheries and Environment Departments. Not easy to do necropsies just capture length and species. A few DNA samples collected. Not many strandings occur. Until Tonga was under CITES it was very difficult to send DNA samples to be analysed so they weren't collected regularly.

Theme 8 – Whale and dolphin based tourism

- Tonga is listed as one of the best sites for responsible whale watching and recognised as a leading whale watching destination in the region. There are currently 36 whale watching operators in Tonga of which 22% are locally owned.
- The whale watching space can be quite political.
- TBOC and MECA are working together with foreign researchers and tourists for collecting scientific data and documenting tourist vs whale interaction behaviour.
- The first workshop for whale watching operators was held in Vava'u, supported by partners including SPREP.
- Mark Orams research 'Economic value of whale watching in Vava'u' key findings note the predominance of swim-with-whales activities; the compressed peak tourism season; increasing concern regarding the potential negative impacts on whales; tension regarding licenses and management; disagreement on commercial whale-watching activities on Sundays; and low numbers of local Tongan owners and low level of involvement from locals in the industry. Management regimes can be effective if carefully designed, developed in partnership with industry and effectively implemented (including policing).
- Whale watching and swimming regulations were passed in 2013, the Ministry of Tourism has reviewed whale watching regulations, taking on board researchers' advice on impacts to whales from existing activities, and these are ready to be promulgated.
- There is a need to renew the Whale Watch Association in Tonga and to update the regulations to clarify the role and process for enforcement of regulations on businesses operating in Tonga.
- Some research was conducted on 'Training gaps in the Tonga whale watch industry'. It has been identified that there needs to be greater support with training from government to address the skills shortage including development of relevant curriculum.
- Other challenges identified included limited training opportunities locally, language barriers and cash flow. The importance of increasing community participation, and promoting local ownership was viewed as important. Financial literacy was also identified as a need to support the industry.

Theme 9 – National, regional and international collaboration and cooperation

- Tonga hosted and attended the [Whales in a Changing Ocean Conference](#) in 2017 where they signed the Pacific islands Year of the Whale Declaration.

Tuvalu

A [State of Environment](#) report was published for Tuvalu in 1993.

Tuvalu submitted their [sixth national report](#) to the CBD in 2020.

Consultation

- Consultation with a Biodiversity Officer of the Department of Environment occurred in August 2020. This representative was not familiar with the Action Plans and could only provide information on turtle conservation as whales and dolphins are managed under a different Department. Despite follow up emails, we were unsuccessful in getting information from the fisheries colleagues, or completed tables from the Department of Environment.

Implementation

General

- There is one MPA that is legally recognised, in Funafuti which is a no take zone. Other outer islands have locally managed marine areas (LMMAs; no-take zones, but open on special occasions).
- Some conservation work is done via NGOs rather than the government.

Turtle

- Turtles are a traditional food source and can also be used for weddings and special events.
- The killing of turtles, particularly on the main capital (Funafuti) is banned and enforced via the local Kaupule.
- There was a review of marine turtle legislation in Tuvalu in 2010.
- The COVID-19 pandemic drove most of the islanders to outer islands which is where some of the nesting sites are and there is some evidence of harvesting, including of undersize turtles, via photos shared on facebook for example.
- The government supports communities with general training programmes that are not necessarily focused on turtles.
- Are familiar with TREDIS but need more information to use it.
- Not currently tagging but this could be possible if equipment and training is provided.
- Tuvalu has banned the importation of single-use plastics and are phasing out other plastics.
- Climate change and nutrient run-off are a problem. Sea level rise is threatening nesting sites for turtles.
- Management plans for LMMAs are in a draft form and they are hoping to talk with the relevant communities about integrating turtle conservation into those plans which would include adaptation strategies to climate change.

Whale and Dolphin

- Tuvalu is signatory to the Cetacean MOU and attended the [Whales in a Changing Ocean Conference](#) held in Tonga in 2017 where they signed the Pacific Islands Year of the Whale Declaration.
- Whales and dolphins are managed under the Fisheries Department.

Feedback

- The representative spoken with was not familiar with the plans so was unable to provide feedback.

Vanuatu

A [State of Environment](#) report was published for Vanuatu in 2004.

Vanuatu submitted their [sixth national report](#) to the CBD in 2019.

Consultation

Attempts to consult with government officials of Vanuatu were not successful, however a representative from the Vanuatu Cultural Centre/National Museum provided some feedback which is reported here.

Implementation

General

- They have used the Marine Species Programme to inform their conservation of turtles, dugongs and cetaceans.
- The indigenous people in Vanuatu have constitutional and traditional land and marine tenure rights, well established traditional governance systems, as well as traditional knowledge of the environment and resources that underpins well documented traditional resource management systems that have been used for centuries.
- Traditional knowledge and cultural values of turtles, dugongs and cetaceans have been documented from many different areas of Vanuatu.
- A tender was advertised by SPREP (through the Bycatch and Integrated Ecosystems Initiative BIEM) in February 2021 to conduct BIORAPS in four coastal areas and associated watersheds in Vanuatu.

Dugong

- Vanuatu provided a national report to the Secretariat of the Memorandum of Understanding on the Conservation and Management of Dugongs and Their Habitats Throughout Their Range in 2017. They also attended the [Workshop on the Conservation of Dugong and Seagrass](#) in March 2018 in the Solomon Islands where they presented on progress of the dugong and seagrass conservation project in Vanuatu. Information from that workshop is provided here.
- The entire EEZ was established as a marine mammal sanctuary in 2005 which prohibits the international trade in marine mammals, marine mammal parts, or marine mammal products.
- Important and nationally-significant baseline data has been collected on dugongs and seagrass across Vanuatu.
- Prioritisation of dugong hotspots has occurred based on scientific data and expert opinion, as well as spatial information on high-risk threats.
- Guideline documents have been developed for cross-sectoral use for the protection of dugongs.

- A national plan of action for dugongs and seagrass is being developed.
- Scientific survey work is progressing and upskilling of local ecologists will continue.
- Awareness documents have been developed and used in communities to increase awareness of dugongs and risks to the species.

Turtle

- A National Plan of Action for Sea Turtles was developed for 2016-2020 and a contract is in place (via SPREP, BIEM)) to review, update and finalise a new one (along with sharks and seabirds).
- Traditional knowledge and cultural values of turtles has been documented at the Vanuatu Cultural Centre in conjunction with the Vanua-tai Network.
- Important and nationally significant baseline data has been collected on turtle species across Vanuatu.
- Continuation of Vanuatu's most important, well-established and far-reaching network of community volunteers and environmental advocates.
- Satellite-tagged seven hawksbill turtles from a central rookery (Moso Island) over the last three years in partnership with the Hawaii Preparatory Academy and have migratory data for them.
- Improvement is required on the consistency and reliability of data collected, capacity building in management skills, and they are looking to assess their turtle tagging and tracking methods for international alignment.
- High reliance on grant-based funding, and non-government organisation (Vanuatu Environment and Science Society, VESS).

Whale and Dolphin

- The entire EEZ was established as a marine mammal sanctuary in 2005 which prohibits the international trade in marine mammals, marine mammal parts, or marine mammal products.
- Data from marine mammal strandings is being collected.

Feedback

- There are a number of very useful and important activities outlined in the plan that need to be addressed in order to better understand the status and conserve our marine species.
- The plans were used more so when the Marine Species Programme Regional Network was active – regular meetings, communications via a list-serve. Since the passing of Lui Bell in 2012, the Marine Species Programme has been relatively inactive and with no budget to support member countries in facilitating many of the activities. Even the list serve that normally kept the regional network connected with useful updates and disseminating new publications, info on upcoming conferences etc. was inactive.
- The plans should be updated to address all the socio-economic and cultural legislative and environmental changes including the species current status (Red List) that have emerged since last plans were developed.
- Combine some of the activities to reduce and simplify the plans, most PICTs don't have the human or financial capacity within their environment agency to implement all these plans.
- Support from SREP in sourcing funds or technical capacity for implementation of the plans is very useful, as well as regular workshops and meetings, training and active list-serve to promote networking within the region to discuss cross-cutting issues, constraints, progress, disseminate new publications etc assists to maintain momentum in implementing the plans.

- One of the ongoing issues is that people working in the environmental field (especially overseas consultants) don't always include the cultural sector in meetings, or consultations. They do not recognize the importance of taking a "biocultural" approach to managing resources in Oceania.
- The Marine Species programme is a very useful outline of objectives (wish list) on what should/needs to be done.

Wallis and Futuna

Consultation

- A representative from the Environment Department communicated briefly with me on the Regional Marine Species Programme but were unable to commit to a video consultation or review of the Action Plans. The brief information they were able to provide is summarised here.

Implementation

General

- The territory of Wallis and Futuna has not been involved in the Marine Species Programme and Action Plans.
- We recently validated a list of protected species in the territory, including the two species of turtle present and all cetaceans.
- We do not have a local Action Plan for turtles or cetaceans.
- Awareness and communication actions on turtles are currently taking place in connection with the PROTÉGÉ (SPREP project) project coordinated here by the fisheries department.
- Wallis and Futuna, as a French territory, are members of CITES, CMS via the MDE Cetaceans of the Pacific Islands, and the CBD.

Feedback

- The territory would be delighted to be more involved in the Marine Species Programme, to support our local strategies, in particular our Biodiversity Strategy.

Final Recommendations

Some brief recommendations for reviewing the Regional Marine Species Programme:

- The Programme should be translated into French to support the French territories.
- The plans could and should be simplified as they would be more likely to be taken up and used.
- The actions could be less specific and rather provide guidance on what some activities might be to work towards objectives.
- Establish a standardised, simple, online reporting mechanism.
- As much as possible, the Action Plans should be streamlined and aligned with other relevant agreements such as the CMS MOU on the Conservation and Management of Dugongs and Their Habitats.
- Reinstating of the list-serve would keep PICTs engaged and provide an avenue for collaboration and support.

- Reduce redundancy in the actions between Action Plans.
- Ensure consistency in the layout etc between the plans.

Next steps

The information and feedback provided here will be used to review the draft Action Plans from 2018. The revised drafts will be shared with SPREP Members and Partners for review and comment ahead of a series of workshops in late July 2021. Final drafts will be endorsed through an intersessional process after the SPREP meeting in September.