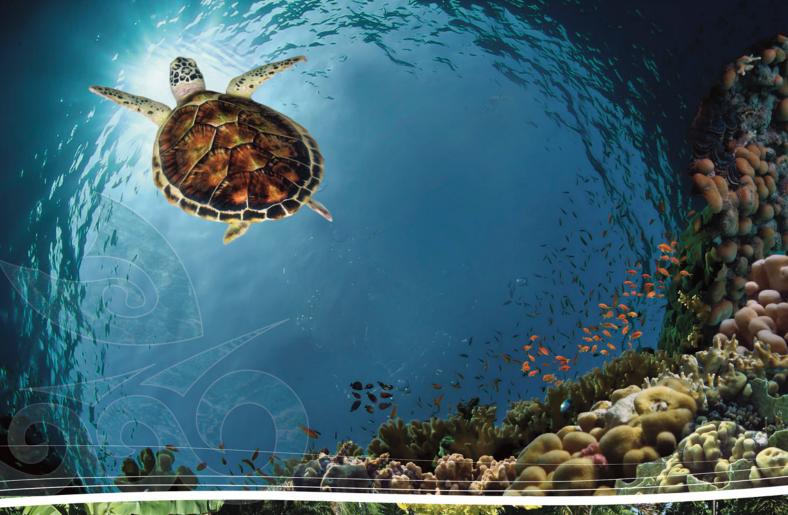
# PACIFIC TURTLE FORUM REPORT

29–30 April 2025, Nadi, Fiji















# **SPREP Library Cataloguing-in-publication data**

Pacific turtle forum report, 29-30 April 2025, Nadi, Fiji. Apia, Samoa: SPREP, 2025.

27 p. 29 cm.

ISBN: 978-982-04-1472-3 (ecopy)

- 1. Marine animals Sea turtles Oceania.
- 2. Sea turtles Ecology Oceania.
- 3. Sea turtles Law and legislation Oceania. I. Pacific Regional Environment Programme (SPREP). II. Title.

597.920961

Reproduction for educational or other non-commercial purposes is authorised without prior written permission from the copyright holders and provided that SPREP and the source document are properly acknowledged. Reproduction of this publication for resale or other commercial purposes is prohibited without prior written consent of the copyright owners of the original and adapted editions.

Disclaimer: This publication was produced with the financial support of the European Union and the Government of Sweden. Its contents are the sole responsibility of SPREP and do not necessarily reflect the views of the European Union or the Government of Sweden. This document has been compiled in good faith, exercising all due care and attention. SPREP does not accept responsibility for inaccurate or incomplete information.



PO Box 240, Apia, Samoa T: +685 21929 E: sprep@sprep.org W: www.sprep.org

Our vision: A resilient Pacific environment sustaining our livelihoods and natural heritage in harmony with our cultures.

© Secretariat of the Pacific Regional Environment Programme (SPREP) 2025

CONTENTS	0
1. EXECUTIVE SUMMARY	1 0
2. BACKGROUND	2
FORUM OBJECTIVES	3
AGENDA	3
3. DAY 1 PROCEEDINGS	25
PRESENTATIONS	5 0 0
COUNTRY PRESENTATIONS	7
4. DAY 2 PROCEEDINGS	12
OPENING REFLECTIONS AND OVERVIEW	12
BREAKOUT SESSIONS: NATIONAL ACTION PLANNING	12
BREAKOUT SESSIONS: REGIONAL ACTION PLANNING	18
PLENARY DISCUSSION AND COORDINATION	17
FINANCING AND FUTURE SUPPORT	17
CLOSING SESSION	17
5. KEY OUTCOMES AND RECOMMENDATIONS	18

# 1. EXECUTIVE SUMMARY

The Pacific Turtle Forum, held in Nadi, Fiji on 29–30 April 2025, brought together 35 participants from 12 Pacific Island countries, SPREP, and partners to address the urgent conservation challenges facing marine turtles across the region. Convened under the EU-funded BIEM Initiative and the Pacific BioScapes Programme, the Forum was a platform for sharing new scientific findings, aligning national priorities, and developing regional cooperation strategies.

Marine turtles are integral to Pacific ecosystems and cultures but face severe threats from overharvest, bycatch, habitat loss, and climate change. Recent extinction risk modelling indicates that hawksbill, leatherback, loggerhead, and olive ridley populations could collapse within decades without intervention. The Forum aimed to socialise findings from turtle use surveys, bycatch assessments, connectivity studies (e.g., ShellBank), and extinction risk models; and to identify priority actions at both national and regional levels.

Day 1 featured presentations on community turtle use (revealing high harvest levels exceeding 34,000 annually in PNG, 10,000 in Fiji, and 6,000 in Tonga), bycatch in industrial and artisanal fisheries, connectivity insights from genetics and tagging, and regional extinction risk modelling. Country presentations highlighted significant gaps in legislation, data, funding, and enforcement, alongside community-led successes and priorities.

Day 2 focused on national and regional action planning. Countries identified needs for National Plans of Action for Turtles, identified legislative reforms, monitoring systems, community engagement, and capacity building as urgent needs. Regional breakout sessions emphasised transboundary cooperation, data sharing, and cultural leadership in turtle governance.

Key outcomes included; (1) Recognition that turtle populations are declining rapidly across the region, with some facing imminent collapse, (2) Consensus on updating and implementing National Plans of Action, supported by stronger legislation, enforcement, and community engagement, (3) Agreement on the need for regional coordination to address migratory species, including data sharing through TREDS and ShellBank, standardised monitoring, and bilateral/multilateral agreements, and (4) Emphasis on cultural leadership, women's and youth networks, and traditional practices as integral to sustainable turtle management.

The Forum reaffirmed the collective commitment of Pacific Island countries to safeguard sea turtles, combining scientific evidence, traditional knowledge, and regional solidarity. By scaling up coordinated action, addressing knowledge gaps, and embedding turtle conservation into broader climate and biodiversity frameworks, participants charted a pathway to secure the future of turtles—symbols of both Pacific heritage and global biodiversity.

# 2. BACKGROUND

Sea turtles have played a significant role in the customs and traditions of Pacific island communities for thousands of years – and continue to do so to this day – featuring in many myths, legends, songs and traditions. Marine turtles are integral in the functioning of marine habitats. They are highly migratory, capable of traveling thousands of miles, and readily cross jurisdictional boundaries. Few survive to adulthood, with estimates ranging from one in 1,000 to one in 10,000. Their natural lifespan is estimated to be 50 - 100 years, spending most of their life at sea, except when ashore to lay their eggs<sup>1,2,3</sup>. They are recognised globally as at risk of extinction and species of conservation concern and face numerous threats in the Pacific including from by-catch, climate change, local consumption and trade.

However, sea turtles have been subjected to increasing pressure as customary practices have eroded and their popularity in commercial markets remains relatively unregulated. They continue to be caught as targeted or by-catch in commercial and artisanal fisheries and climate change threatens important nesting and feeding areas, along with sea turtle reproductive biology. While some information exists with respect to the by-catch of sea turtles in the Pacific from industrial fisheries such as the tuna purse seine and to a lesser extent longline sectors, less is known about levels of use of sea turtles by coastal communities and impacts of small-scale fisheries across the Pacific. Similarly, little is known of the impacts of climate change on sea turtles and their important habitats across much of the Pacific, and of the connectivity, status and trends of sea turtle populations at the local to regional levels.

A coordinated regional approach is needed to conserve marine turtles, including collaborating with SPREP members and ensuring a healthy exchange of information at national, regional, and global levels. Major constraints to implementing management actions in the region include lack of knowing which targeted effort will have the most impact, limited financial and human resources.

From 2019 to 2025 the Bycatch and Integrated Ecosystem Management (BIEM) Initiative helped to implement the Turtle Action Plan of the Pacific Islands Regional Marine Species Programme 2022-2026. This included seeking a better understanding of coastal communities' motivations for marine turtle use and trade; patterns of direct and indirect take of different turtle species; and to record environmental parameters at specified index beaches to inform the assessment of regional extinction risk and policy aimed at reducing the exploitation of marine turtles. Many of these activities have been conducted in collaboration with the World Wide Fund for Nature (WWF). SPREP and WWF-Pacific are committed to working in partnership to implement complementary projects, as detailed in the SPREP - WWF-Pacific MoU (11.10.2019).

SPREP, WWF-Coral Triangle Program, WWF-Australia and WWF-Pacific and local NGO partners have investigated the sociocultural use of marine turtles and monitored key index turtle nesting beaches for impacts of climate change in Tonga, PNG, Vanuatu and Fiji. This work builds on the turtle use survey undertaken by The Nature Conservancy in Solomon Islands in 2019, and WWF's ShellBank, Turtle Use Project and Blue Corridors for Turtles programs, to identify marine turtle connectivity and those populations impacted by overexploitation, bycatch and trade in the western Pacific. The results also informed the BIEM Initiative extinction risk assessment for marine turtles in the Pacific led by Dr N. Pilcher from the Marine Research Foundation (MRF)<sup>4</sup>. The published data will support the achievement of identified government priorities and strengthen the knowledge of the involved communities. The results of the community turtle use surveys and the regional turtle risk extinction risk model indicate that turtles are likely declining more quickly in the region than expected and several populations may go extinct in the region within decades.

3

Avens L and Snover ML (2013) Age and age estimation in sea turtles. In The Biology of Sea Turtles. Volume III, Wyneken J, Lohmann KJ and Musick JA, Eds. CRC Press, Boca Raton. pp 97-133

<sup>2</sup> Limpus CJ (2009) A Biological Review of Australian Marine Turtles. Brisbane, Queensland. Queensland Government Environmental Protection Agency. pp 324

Miller JD (1997) Reproduction in sea turtles. In The Biology of Sea Turtles. Volume I, Lutz PL and Musick JA, Eds. CRC Press, Boca Raton, FL. pp 51-83

Pilcher N.J. 2025. Extinction risk analyses for sea turtles in the Pacific Region. Secretariat of the Pacific Regional Environment Programme, Apia, Samoa

SPREP's Pacific Bioscapes Programme (2022-2026) is also seeking to improve data collection relating to population trends by improving key monitoring techniques including nesting beach data collection; supporting countries to implement priority actions to address threats to turtles; and responsible turtle tourism in Vanuatu and across the region and unsustainable harvest in PNG through community outreach.

Both projects are funded by the European Union with additional support from the Government of Sweden for the BIEM Initiative under the Pacific European Marine Partnership (PEUMP) programme.

The BIEM Initiative, in collaboration with the Pacific BioScapes Programme held a Regional Turtle Forum for SPREP Members to share the results of work done to date. In April 2025, this regional workshop provided an opportunity to socialise and discuss the findings of the regional turtle extinction risk assessment, turtle use surveys, connectivity and ShellBank progress. Participants collectively discussed the implications of this work and worked together to identify actions at regional and national levels needed to address the key threats identified and what will be required to implement sub regional activities.

All Pacific BioScapes target countries, which includes the five BIEM target countries were invited to participate. The Forum welcomed SPREP Member participants from:

Cook Islands Papua New Guinea

Fiji Samoa

Kiribati Solomon Islands

Marshall Islands Tonga

<u>Micronesia (Federated States of)</u> Vanua

Vanuatu

**Palau** 

Participants from Ministries of Environment and Ministries of Fisheries were invited for the forum. The Forum had 35 participants, including 18 participants from SPREP Member countries. One representative from SPREP Metropolitan Member (Australia) joined virtually. The remaining participants were from SPREP and partners (see Annex 1).

#### **Forum Objectives**

The overall objectives of the Forum were:

- Oscialise the results of the regional turtle extinction risk assessment, turtle use surveys and other related work undertaken through BIEM and Pacific BioScapes.
- ldentify priority regional and national actions and activities needed to increase protection and management of marine turtles to address key threats for delivery within and between each country.

#### **Agenda**

The full agenda is available in Annex 2. The agenda for the two day forum included technical sessions on:

- Sharing of turtle research/review findings
  - Regional Turtle Use Results for PNG, Tonga, Fiji and Solomon Islands
  - Turtle bycatch offshore and coastal fisheries. Are things getting better?
  - Regional Connectivity, Blue Corridors and ShellBank.
  - Turtle Extinction Risk Results

- Dreak out session 1
  - What are the implications of these results within your country?
  - What are the implications of these results regionally?
  - What are the key issues and gaps?
- Country presentations on turtle conservation and management that identify key issues and gaps
- Pacific Island Regional Marine Species Programme Turtle Action Plan 2022-2026
- Break out session 2 (National level action planning)
  - Mow do we respond to these results at a national level?
  - What specific actions are needed within your country to address the key issues identified (building on the Pacific Islands Regional Marine Species Programme Turtle Action Plan and any National Plans of Action)
  - Mow do you implement these key activities including who needs to be involved, who would lead and over what timeframe?
- Break out session 3 (Regional level action planning)
  - How do we manage turtles at a regional level, given the connections on the maps? What are the key issues?
  - What actions are needed at a regional level to address the issues identified and how do we best implement them?
- Sharing results and plenary talanoa



Photo: Delegates at the Pacific Turtle Forum

#### 3. DAY 1 PROCEEDINGS: 29 APRIL 2025

#### 3.1 Presentation Session: Sharing Research and Review Findings

The session began with an overview from Anissa Lawrence (TierraMar) the forum facilitator, who helped to set the scene and explained how the research findings provide insight into turtle migration, community use, and species extinction risks.

#### **Turtle Use Survey Results – Duncan Williams (WWF Pacific)**

Surveys conducted in Papua New Guinea, Fiji, and Tonga provide critical information about community use of turtles across the region. Among other findings, the studies have revealed high levels of turtle harvesting, with estimated annual takes exceeding 34,000 in Papua New Guinea; 10,000 in Fiji; and over 6,000 in Tonga. The level of take is an emerging issue for the region for species that are critically endangered (such as Hawksbill turtles and Leatherback turtles). Turtle use is driven by cultural, nutritional, and trade factors. Many communities reported that turtles caught today are smaller and less abundant than in the past.

Working with communities and traditional leaders going forward within and between countries, given the migratory corridors of turtles, is key.

#### **Turtle Bycatch – Karen Baird (SPREP)**

Bycatch remains a key issue in industrial longline and purse seine fisheries in the Western Central Pacific Ocean. Although some data exists, trends are unclear, and improvements to mitigation requirements in the regional fisheries body (WCPFC) and at national level are essential to bring down bycatch rates. Improvements to bycatch data collection are also needed.

#### **Connectivity and ShellBank – Dr. Christine Madden (WWF)**

Turtles migrate across jurisdictions. ShellBank is helping track these movements via genetic samples and satellite tagging. However, genetic data in the Pacific is limited, and more collaboration is needed. Tools like photo ID and genetics were proposed as more accessible and cost-effective alternatives to traditional tagging. Genetic sampling also provides results on connectivity much more quickly than tagging which requires resightings to provide data. It could also be useful in fisheries bycatch investigations to provide information on which populations are more at risk.

**Question 1:** Are any fisheries collecting DNA samples based on bycatch?

**Response 1:** Some studies have been done in the past and current research is ongoing in eastern Pacific. There is nothing in the western Pacific currently.

**Question 2:** We are doing flipper tagging. Does it hurt the turtles and is there a better way because we do not see many returns of tagged turtles.

**Response 2:** It comes down to what questions you are trying to answer. There are many alternatives but it depends on the questions you are asking. Photo ID is one method. Genetics is another method. Satellite tagging gets fast results. Flipper tagging can take 20-30 years to get a result. Also, satellite tags may be expensive compared to individual flipper tags. But when you look at the overall results, much more money is spent on flipper tags with fewer results.

**Question 3:** What are the costs of getting baseline genetic data from nesting beaches where no DNA samples have been collected.

**Response 3:** You can define your genetic stock with 20-30 samples. At USD 50 per sample plus a USD 50 kit, you can define your genetic stock for about USD 1800. The ShellBank team can assist with getting permits and liaising with a laboratory to process samples.

#### Extinction Risk Assessment - Dr. Nick Pilcher (Marine Research Foundation)

Modelling shows leatherback, hawksbill, loggerhead and olive ridley turtles are at risk of extinction in the region, with population collapse expected within 30 - 70 years without intervention. Green turtles are doing better regionally thanks to large and stable populations in Australia, however in the rest of the region green turtles are also endangered and any increase in consumption will also cause these populations to collapse.

The following key actions were recommended at national and regional levels to improve the conservation outlook for sea turtles in the Pacific region:

- Addressing mortality of eggs and hatchings on nesting beaches
- Addressing incidental capture of all age classes in commercial and artisanal fisheries
- Addressing the loss of nesting females on nesting beaches
- Addressing local consumption of sea turtles and their products
- Improved data collection fisheries and communities.

Priority actions summarised for each species were:

	Regional	National	Management required
<b>Green turtle</b> (Chelonia mydas)	Least concern	Australia: Least concern Other countries and territories Endangered	Manage turtle consumption/ use, harvest and bycatch
Hawksbill turtle (Eretmochelys imbricata)	Critically Endangered	All countries and territories: Critically Endangered	Reduce egg consumption Reduce bycatch Reduce turtle consumption/ use
Leatherback turtle (Dermochelys coriacea)	Critically Endangered	All countries and territories: Critically Endangered	Reduce egg consumption Reduce bycatch
<b>Loggerhead turtle</b> (Caretta caretta)	Critically Endangered	All countries and territories: Critically Endangered	Reduce egg consumption Reduce bycatch
Olive Ridley turtle (Lepidochelys olivaceall)	Critically Endangered	Australia: Critically Endangered	Reduce egg consumption

# **3.2 Group Work and Discussions**

For the first breakout session participants were split into several groups based on where countries share turtle migratory corridors. Groups were asked to answer 3 questions:

- What are the implications of these results within your country?
- What are the implications of these results regionally?
- What are the key issues and gaps?

Key findings from discussions included:

#### **Key Regional Themes Across All Groups**

- (i) Widespread data gaps, particularly in genetic data, bycatch levels and harvest levels.
- Lack of funding and human capacity are major barriers to effective turtle conservation.
- Limited national coordination and communication between government levels and traditional leaders.
- Need for regional collaboration on turtle conservation due to their migratory nature and the regional approach to management of fisheries bycatch.

#### **Group 1 (Australia, Papua New Guinea, Solomon Islands, Vanuatu)**

- Understanding connectivity is important
- Expanding efforts across the region is needed
- Empowering communities to document stories and share data is important
- Balance of livelihoods and conservation
- Mow status of turtles in each country to support regulation
- Papua New Guinea aims to replicate turtle use surveys in more provinces
- © Communication of traditional rules and scaling traditional harvest rules

#### **Group 2 (Kiribati, Marshall Islands, Papua New Guinea, Solomon Islands)**

- Emphasis on understanding turtle connectivity across and within countries
- Need for awareness about sustainable harvest and ecological links
- Proposed regional and national actions across turtle migration corridors:
  - Share experiences across all levels.
  - Establish bilateral agreements and joint committees
  - Use of regional networks (e.g. Coral Triangle Initiative and Micronesia Challenge)
  - Nationally: improve data collection, involve communities, strengthen regulations, improve compliance and enforcement

#### **Group 3 (Marshall Islands, Micronesia, Palau)**

- Micronesia: large data and capacity gaps, need improved intergovernmental communication, engage with traditional leaders
- Palau: irregular monitoring efforts, use of trail cameras to monitor poaching, putting observers on long line fishing vessels, Helen Reef and other areas are remote and hard to access
- Mighlighted Micronesian Islands Forum commitment to 50% marine resource conservation

#### **Group 4 (Cook Islands, Fiji, Samoa, Tonga)**

- Surprised at harvest numbers in Fiji and Tonga
- Moted lack of data, especially genetic data
- © Cook Islands: launching coastal fisheries monitoring app (Ikasavea) that could collect turtle data, potential resident turtle population, concerns over turtle emaciation perhaps linked to loss of foraging habitat, need for tagging funds, challenge of remote islands
- Samoa: lacks turtle protection legislation and funding
- ightly ahead Fiji and Tonga: similar levels of progress, but Fiji slightly ahead
- Common challenges: basic data needs unmet, limited capacity and funding across all countries

#### **Plenary Reflections**

- Consistent themes of limited funding, capacity, and data across all presentations.
- Suggested a collaborative regional proposal for donor support, drawing parallels from successful approaches in the dugong and seagrass sectors targeting GEF or other multinational funding mechanisms.
- Pacific BioScapes Programme will support turtle monitoring and training over the next several years.

#### **3.4 COUNTRY PRESENTATIONS**

Each country shared a short presentation on its current turtle conservation work, challenges, and future priorities. They were asked to present specifically on:

- How are turtles managed in your country?
- What are the key issues and challenges?
- What are the national current priorities for managing turtles?

#### **Papua New Guinea**

Coastal communities use traditional rules, seasonal restrictions, and cultural beliefs to manage turtles. NGOs collaborate on nesting site monitoring and community conservation. Enforcement faces resource limitations. **Key issues**: Overharvesting, bycatch, habitat loss, limited data, climate impacts, poaching. **Priorities:** Finalise NPOA, enhance education, strengthen monitoring and community conservation.



#### **Solomon Islands**

Four species present, managed through legislation and collaborative initiatives. Recently completed NPOA. **Key issues**: Poaching, lack of a national database, coordination gaps, funding shortages. **Priorities:** Improve enforcement, build national turtle data systems, strengthen stakeholder collaboration.



#### Vanuatu

Combines national legislation with traditional rules (e.g., limited ceremonial harvests). Community monitoring is widespread but suffers from weak coordination and low funding. **Key issues:** Illegal harvests, poor data quality, turtle tourism, no central database. **Priorities:** Improve coordination, observer coverage, and enforcement; support community outreach.

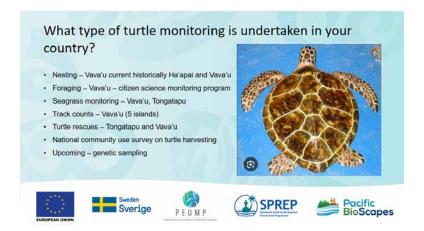


#### Fiji

Protected under the Fisheries Act and CITES. Five species present. Active NGO involvement in foraging and nesting studies. **Key issues:** Incomplete coverage of community monitoring, funding gaps, geographic constraints. **Priorities:** Finalise NPOA, expand monitoring programs, strengthen coordination via the Sea Turtle Steering Committee.

#### **Tonga**

Monitoring conducted mainly in Vava'u and Tongatapu, often linked with other surveys. Citizen science model in use. **Key issues:** Inconsistent monitoring, awareness gaps, limited staff capacity. **Priorities:** Strengthen monitoring, initiate tagging, improve enforcement of existing laws.



#### **Australia**

Strong Federal and regional framework, including Indigenous ranger co-management programs. **Key issues:** Climate change impacts, feral animal predation, limited Traditional Custodian engagement in some areas, data coordination. **Priorities:** Address light pollution, bycatch reduction, and include First Nations in management planning.



#### **Federated States of Micronesia**

Turtle management via legislation and conservation zones. Some community-level radio outreach. **Key issues:** Geographic dispersion, data and enforcement limitations, cultural overrides of law. **Priorities:** Conduct a systematic turtle study, expand conservation zones, improve enforcement.

#### **Palau**

Strong legal framework including Hawksbill moratorium and seasonal bans. **Key issues:** Limited staff and equipment, database gaps, poaching. **Priorities:** Evaluate effectiveness of laws, strengthen enforcement, formalise monitoring.



#### Samoa

Protected under national laws and sanctuary regulations. Monitoring includes drone patrols and tagging. **Key issues:** Egg poaching, beach degradation, funding constraints. **Priorities:** Declare protected nesting sites, enforce village bylaws, expand annual surveys.



#### **Cook Islands**

Turtle management varies by island; only 4 have dedicated legislation. **Key issues:** Weak legal framework, unmanaged tourism, pollution. **Priorities:** Pass national legislation, regulate tour operators, establish habitat management plans.



#### **Marshall Islands**

Hawksbill and green turtles protected by size and egg harvest bans. Observer program active. **Key issues:** Capacity and enforcement gaps, outdated laws. **Priorities:** Legislation review, increase monitoring capacity, integrate turtle issues in school curricula.



#### **Kiribati**

Managed jointly by fisheries and environment departments. Sale and trade banned but local use continues. **Key issues:** No turtle-specific conservation law, geographic challenges. **Priorities:** Strengthen data collection and inter-agency coordination, enforce local bylaws.









Photos: Country presentations (Day 1)

#### 4. DAY 2 PROCEEDINGS: 30 APRIL 2025

#### **4.1 Opening Reflections and Overview**

Day two opened with a prayer, and reflections on Day 1 from participants. Representatives from Cook Islands, Tonga, Palau, and Vanuatu commented on how surprised they were by the scale of turtle harvest and conservation efforts in other countries. This reinforced the need for better data sharing, stronger legislation, and more coordinated action across the Pacific.

#### Pacific Island Regional Marine Species Programme 2022-2026 and the Turtle Action Plan

Karen Baird (SPREP) presented the 2022–2026 Turtle Action Plan, which covers nine strategic themes. The plan is a regional strategy which was endorsed by the SPREP Members in September 2023. The presentation focused on key objectives for threat reduction, strengthening management responses to bycatch, and addressing unsustainable harvest and trade. The regional framework is intended to provide guidance on key priorities at a national and regional level but should be further refined in a national plan for turtles identifying species national priorities.

#### **4.2 Breakout Sessions: National Action Planning**

In national breakout sessions, each country group developed draft actions for their national plans, addressing the extinction risks and conservation gaps identified. **Key questions considered:** 

- Mow do we respond to these results at a national level?
- What specific actions are needed within your country to address the key issues identified (building on the Pacific Islands Regional Marine Species Programme Turtle Action Plan and any National Plans of Action you might have)?
- Mow do you implement these key activities including who needs to be involved, who would lead and over what timeframe?

#### **IDENTIFIED NATIONAL PRIORITIES**

Some countries identified leaders of activities and timelines other focused on the priorities.



**Action:** Addressing laws and monitoring small scale turtle fishery (targeted, bycatch, numbers of take) **Who:** Council of Chiefs, State Legislature, Governors' Office, Women's Community

**Action:** Collect connectivity data (tagging, genetics, photo ID)

Who: Governors Office, Bureau of Fisheries

**Action:** Engage with Mechesil Belau (Council of Chiefs) to pilot genetics on Toluk to use as awareness in support of a turtle management plan

Who: Mechesil Belau, Council of Chiefs

All actions 2025 - 2028



#### **Papua New Guinea**

**Action:** Legislative review (Fauna Protection Act to include all turtle species) and finalise NPOA Turtles

Who: CEPA, NFA, CCDA, NMSA Timeframe: 2025 – 2028

**Action:** Bycatch reduction (inclusion of TEDs on fishing vessels – included into the fisheries management act) and Observer monitoring sheet on board

**Who:** CEPA, NFA, Provincial fisheries, SPC

Timeframe: Immediate action

**Action:** Develop a ShellBank workplan for PNG and implementation **Who:** CEPA, NFA, CCDA, PF, PAs, SPC, NMSA, communities, NGOs, CBOs

**Timeframe:** 2025 – 2026

**Action:** Expand the turtle use surveys to all maritime provinces **Who:** CEPA, NFA, CCDA, PAs, NMSA, SPC, communities, NGOs, CBOs

Timeframe: 2026



# **Federated States of Micronesia**

**Action:** Bring together stakeholders and create turtle management plan. Use existing legislation to create a turtle specific regulation that is uniform across the nation

**Who:** State fisheries sector, Community representatives, Women groups, Youth groups, State environment sector, Local government, College representatives.

**Action:** As part of turtle management plan include actions on collecting and analyzing data (with pilot genetics on 1 site) and monitoring turtle feeding grounds

**Who:** State fisheries sector, Community representatives, Women groups, Youth groups, State environment sector, Local government, College representatives.

Both actions are considered "as soon as possible."



#### **Kiribati**

Action: Develop national legislation to address overharvesting of turtles and their eggs

Action: Create awareness programme targeting behavior change

Who: Governments, NGOs and communities

Timeframe: 2026



#### **Solomon Islands**

**Action:** Develop turtle management plan for overharvesting adults and eggs

**Action:** Conduct community awareness programmes

**Action:** Support alternative livelihood options

Who: Government, NGOs, CBOs

Timeframe: 2026 - 2028



#### **Marshall Islands**

**Action:** Address harvesting at nesting grounds through awareness programme through local resources committees

**Action:** Strengthen enforcement through national and local ownership

**Action:** Support alternative livelihood options **Who:** Government, local government, NGOs

Timeframe: 2026 - 2030



# **Cook Islands**

**Action 1:** Data collection at a national level. Baseline data is lacking, and data is needed for transparency. Tracking of turtles harvested can be incorporated into Ikasavea app.

Who: Management sub committee (Government stakeholders, NGOs, CSOs, traditional leaders, etc)

**Action 2:** NES is drafting a passage management plan. Increasing tourism activity overcrowds passages while engaging in turtle tourism.

**Action 3:** Conduct turtle surveys including training communities to participate and monitor changes from baseline data. Also include turtle tour operators to contribute to data collection

Timeframe: 2025 - 2030



#### Actions for Samoa include:

Strengthen legislation

Push for publication of research

Increase data sharing and avoid loss of data

Engage with traditional leaders, especially for enforcement

Collect turtle harvest data and genetic analysis

Timeframe: 2025 - 2028



The "Fiji Sea Turtle Committee" meets twice per year and is comprised of government, academia, and NGOs. It communicates through manuscripts and reports, to the Ministry of Fisheries (MOF). This is part of the process of reporting to Cabinet and to CMS and CITES on turtle issues. It is tasked to draft a National Sea Turtle Action Plan (2024 – 2030) with 6 themes to be reviewed annually. It supports fisheries officers on the ground and building MOF capacity for fisheries warden training for enforcement

Action 1: Education and awareness to improve understanding of turtle biology

**Action 2:** Identification of threats (including take, habitat destruction, predation, pollution)

**Action 3:** Long term monitoring at index beach to consolidate data at national level and contribute to TREDS

Who: Members of the Sea Turtle Committee led by government

**Timeframe:** Draft plan to accomplish activities by 2030



With objectives of increasing successful turtle nesting and reduction of bycatch of turtles, the actions are:

- Networking between government, NGOs, and communities for turtle collecting and reporting
- By-catch reduction through regulations and observer improvement strategies
- (TAILS / Ikasavea)
- Genetic data collection and sea grass monitoring
- Mesting beach climate change mitigation activities
- Conduct turtle use surveys in Vanuatu



The objective is to reduce cultural harvest and understand turtle distributions. The results of turtle use surveys in Tonga need to be accepted by the government and communities, including information on where the survey was conducted, when it was done, what information was gathered – through final reports. Need reference to observer information to long line fishing vessels in EEZ.

**Action:** Identify nesting sites

Action: Reduce turtle use through targeted awareness to churches through church leaders

Action: Change legislation to an open and closed season with closed season coinciding with church

conference season

**Action:** Continue enforcement and monitoring of nesting sites

Action: Harvest size limit to be in accordance with permits from Department of Fisheries for local sale

**Action:** Continue genetic sample analysis for connectivity

#### 4.3 Breakout Sessions: Regional Action Planning

In regional breakout sessions, each group was selected using turtle migration corridors, and developed draft actions for that migration corridor (sub-region) addressing the extinction risks and conservation gaps identified. Key questions considered:

- How do we manage turtles at a regional level, given the connections on the maps? What are the key issues?
- What actions are needed at a regional level to address the issues identified and how do we best implement them (building on the Regional Action Plan)?

Subregional priority actions included:

#### 1. Sub-regional Migration Corridors

- Protection of migratory corridors is needed
- Transnational agreements between countries connected by turtles (Vanuatu, New Caledonia, etc.)
- Melanesia Spearhead Group cooperation on marine areas
- Regional turtle exchange (knowledge preservation, practice sharing)
- Bilateral agreements (PNG, Solomon Islands, Fiji, etc.)
- © Cross-border sharing of information, experiences, and technical support
- Use of SPREP Turtle Platform (website) for networking & information sharing
- Regional plan led by environment ministries, NGOs, universities, and technical partners
- Regional newsletters and email updates
- Mational coordinators contributing to regional network
- Fundraising for community-led initiatives

#### 2. Traditional Leadership & Cultural Practices

- Traditional permitting (chiefs, leaders)
- Storytelling and oral traditions for turtle knowledge
- Recognition of traditional authority in turtle management
- Food, feasting, ceremonial use (birthdays, funerals, rites)
- Totems and cultural identity linked to turtles
- Traditional gifts, jewellery, ornaments
- Pride and trade in turtle-related practices
- Role of women's groups and communities in turtle governance

#### 3. Monitoring & Data Collection

- Bycatch: small-scale & industrial scale
- Immediate priority: guidelines for bycatch handling
- Waster ("cheat sheet")
  Waster ("cheat sheet")
- Recording, reporting, monitoring of turtle take
- Closed-season monitoring, permit requirements, marker tags
- © Electronic monitoring, license requirements
- Community outreach & education for monitoring
- Standardised data capture (TREDS input)
- Training in TREDS (regional database)
- Current status & threats data feeding into regional pool
- Genetic sampling for conservation science

#### 4. Tagging & Scientific Work

- TREDS (turtle research & database system)
- Standardised tagging protocols and training
- @ Genetic sampling initiatives across countries
- National turtle coordinators to handle tagging and reporting
- Linkage of tagging to regional data systems and research institutions

#### 5. Bycatch Management

- Reducing turtle take (temporary take, traditional take, feeding)
- Immediate action: bycatch guidelines for the region
- Integration of bycatch into fisheries legislation
- © Cross-border technical support for bycatch mitigation

#### 6. Capacity Building & Education

- Training managers and community leaders
- Education in schools (awareness about turtle conservation)
- Media and communication campaigns
- © Community exchanges and ranger exchanges across the region
- Building local capacity for conservation and monitoring

#### 7. Governance & Policy

- Legislative frameworks to protect turtles
- Recognition of traditional leaders in governance
- Coordinated area-based management
- Role of national coordinators (country-based turtle officers)
- Advocacy for national and regional changes
- Government engagement through presentation of conservation priorities





**Photos: Breakout session presentations** 

#### **4.4 Plenary Discussion and Coordination**

During plenary discussion, participants reiterated the need for better regional coordination. Ideas included:

- © Creating a central Pacific database for turtle sightings, harvests, and genetic data. (But also note TREDS should be able to fulfil this role)
- Supporting storytelling, theatre, and culturally relevant outreach (e.g., Wan Smolbag)
- Facilitating joint monitoring, enforcement, and Traditional leader engagement
- Enhancing community education and promoting successful local models
- Participants proposed a regional knowledge hub and better use of existing platforms like the Micronesia Islands Forum and Melanesian Spearhead Group

#### 4.5 Financing and Future Support

Karen Baird also presented opportunities for funding support through the CITES Secretariat upon request, to meet current turtle resolutions. Currently the focus would be on addressing gaps in compliance and enforcement, such as training. Note there are five Pacific Parties to CITES. Parties should approach the CITES Secretariat through their CITES Management Authority.

Salome Tukuafu (SPREP) led a session on sustainable financing. She outlined multiple pathways to support marine turtle conservation through climate and biodiversity funds, such as:

- Global Environment Facility (GEF)
- @ Green Climate Fund (GCF)
- Adaptation Fund

# **Key points included:**

- Aligning turtle conservation with climate adaptation goals improves funding eligibility.
- Multi-country projects are now eligible for up to \$30 million in regional funding.
- SPREP can assist as an executing partner, while accredited agencies (e.g., UNDP, FAO) lead applications.

The EU reaffirmed support for regional coordination and long-term financing, encouraging Member States to align their national plans with regional goals.

#### **4.6 Closing Session**

The forum concluded with closing remarks and reflections. SPREP summarised options for next steps, including:

- Finalising formal National Plans of Action in relevant participating countries
- Developing national priorities and action plannings to address most critical activities to reduce turtle mortality
- Developing regional partnerships for implementation.
- Strengthening collaboration with Traditional leaders, women's groups, and youth networks.
- Continuing data sharing and capacity building across the Pacific.

Participants reaffirmed their shared commitment to marine turtle conservation and to working collaboratively to address this critical regional challenge.

#### 5. KEY OUTCOMES AND RECOMMENDATIONS

The Pacific Turtle Forum identified several clear and urgent priorities for action, both at national and regional levels. These outcomes reflect the collective knowledge, experience, and commitment of Pacific Island nations and stakeholders.

#### **Key Outcomes**







Photos: Discussions during the Plenary Session

#### RECOMMENDATIONS FROM THE FORUM

<b>(1)</b>	Finalise or update formal National Plans of Action (NPOAs in relevant countries)
02	Finalise priorities and actions to reduce turtle mortality
13	Establish a Regional Traditional Leaders Forum to guide culturally grounded conservation strategies
04	Pursue turtle conservation mandates at national levels from appropriate traditional and cultural leadership
05	Expand the use of ShellBank and TREDS to improve data collection, sharing, and analysis.
06	Conduct coordinated regional genetic sampling (e.g., 50 nesting and 100 foraging samples per country)
0	Standardise monitoring and bycatch recording using observer programs (with electronic options)
08	Increase investments in community-led turtle monitoring, with attention to quality assurance and data use
09	Leverage regional knowledge-sharing platforms and South-South exchanges to work together across countries that fall within key turtle migratory corridors
10	Integrate turtle conservation into national marine spatial planning and climate adaptation policies
11)	Pursue funding through climate-linked biodiversity initiatives such as GEF, GCF, and the Adaptation Fund
12	Develop regional communication and outreach strategies to raise public awareness and build support.

The forum concluded with a reaffirmed commitment from all participants to work collaboratively in conserving marine turtles and their habitats across the Pacific.

# EXTINCTION RISK ANALYSES FOR SEA TURTLES IN THE PACIFIC REGION

This report addresses risks to extinction for sea turtle populations in the Pacific, specifically for countries and island territories within the SPREP region (herein SPREP region). The extinction risk analysis has been made based on modelled scenarios given much of the region suffers from data uncertainty in terms of biological attributes of sea turtle populations.

For example, clutch frequency is unknown for most of the Pacific region, pivotal temperatures are unknown for many species and populations, andthere are almost no long-term trends in numbers of turtles. A modelled approach that takes into account natural variability, climate, condition of foraging grounds, etc. is a more useful approach to determining risks of extinction than current IUCN risk categorisation given these data gaps.



Sea turtles are facing a number of threats, including climate impacts, light pollution, and coastal development, but are primarily threatened by commercial and local community-based fisheries. As such, proportions of 'take' of sea turtles in both community-based, artisanal and commercial fisheries have been manipulated to simulate ongoing and potential threats to sea turtles in the region. The extinction risk model was developed by Prof. Marc Girondot at the University of Paris-Saclay called vTurtle. The model makes a number of assumptions and borrows biological attributes from neighbouring populations or stocks when these are not available for a specific species in this region.

Mortality of turtles in the model is broken down into three categories: direct take by communities, bycatch in commercial fisheries, and take of nesting females. Other forms of mortality (for instance high early life stage mortality) can be embedded into these categories as necessary. It is envisioned that the model will be used as a predictive tool in the future to identify the most pressing threats and allow managers and policy-makers to address these as priorities.



Please download the report using the QR code or the link below:

https://library.sprep.org/sites/default/files/2025-09/ Turtle-Extinction-Risk-Report.pdf

# **6. ANNEXES**

# **Annex 1 - Participant List**

Participant	Country
Bryant Zebedy	Marshall Islands
Dave Aram	Solomon Islands
Dave Mathias	Micronesia
Elton Kaitokai	Papua New Guinea
George Taoaba	Kiribati
Hercules Emilio	Palau
Irae Tufuga	Samoa
Jayven Ham	Vanuatu
Joseva Raqitawa	Fiji
Marzena Ann Marinjembi	Papua New Guinea
Melvin Kilma	Marshall Islands
Michael Parrish	Cook Islands
Ongor Adelbai	Palau
Serah Devi	Solomon Islands
Siosina Katoa	Tonga
Terena Koteka-Wiki	Cook Islands
Tevita Ahoafi	Tonga
Jessica Armstrong	Australia
Manuela Fischer	Western Cape Turtle Threat Abatement Alliance (WCTTAA), Australia
Abby Bratt	Proteus
Christine Madden	WWF
Darryl MacKenzie	Proteus
Micheal Jensen	WWF
Nicolas J. Pilcher	Marine Research Foundation
Anish Maharaj	SPREP – SpatialWorks
Anissa Lawerance	SPREP – TierraMar
Belinda Norris	SPREP
Carlo lacovino	SPREP
Etienne Delattre	SPREP
Kalo Pakoa	SPREP – Bluecoast Enterprise
Karen Baird	SPREP
Kelera Macedru	SPREP
Kenneth Kassem	SPREP
Ledua Wati Tuiyalani	SPREP
Seema Deo	SPREP – Footprints in the Sand
Shritika Prakash	SPREP – Ika Bula Consultants
Sharon Tohaimae	SPREP

# Annex 2 - Forum Agenda

# Pacific Regional Marine Turtle Forum 29-30 April 2025 Nadi, Fiji

Time	Agenda item	Facilitator
9.00 – 9.15	1. Welcome and opening prayer	SPREP
9.15 – 9.30	2. Chief Guest speech Ministry of Environment	Fiji Government
9.30 – 10.00	3. Workshop overview and introductions	SPREP
10.00 – 10.30	4. Group photo and tea break	
10.30 – 12.30	6. Sharing of turtle research/review findings a) Regional Turtle Use Results for PNG, Tonga, Fiji and Solomon Islands Presentation – Duncan Williams (WWF) 25 mins, 10 mins questions b) Turtle bycatch – offshore and coastal fisheries. Are things getting better? Presentation – Karen Baird, SPREP (15 min, 10 min questions c) Regional Connectivity, blue corridors and ShellBank. Presentation – Dr Christine Madden, WWF Global Turtle Program Lead (25min, 10min questions) d) Turtle Extinction Risk Results Presentation – Dr Nick Pilcher, Marine Research Foundation (25min, 10min questions)	Multiple
12.30 – 1.30	Lunch	
1.30 – 2.30	Break out group facilitated discussion - What are the implications of these results within your country? - What are the implications of these results regionally? - What are the key issues and gaps?	Countries
2.30 -3.00	Feedback/plenary discussion	SPREP
3.00 – 3.15	Tea break	
3.15 – 5.00	Country presentations on turtle conservation and management (6 min each) identify key issues and gaps (using template provided) Papua New Guinea Solomon Islands Vanuatu Fiji Tonga Federated States of Micronesia Palau Samoa Cook Islands Marshall Islands Kiribati	SPREP
5.00	Close	
6.00 – 8.00	Evening cocktail and networking event	

# Day 2 - 30 April 2025

Time	Agenda item	Facilitator
9.00 – 9.30	Prayer Reflections on yesterday Pacific Island Regional Marine Species Programme Turtle Action Plan 2022-2026 - Presentation: Karen Baird (10 mins) Introduction to action planning (5 mins)	SPREP
9.30 – 11.00	Breakout group discussions  1. National level (building on discussions on Day 1)  - How do we respond to these results at a national level?  - What specific actions are needed within your country to address the key issues identified (building on the Pacific Islands Regional Marine - Species Programme Turtle Action Plan and any National Plans of Action you might have)?  - How do you implement these key activities including who needs to be involved, who would lead and over what timeframe?  Output: list of priority activities for immediate action ()	All
11.00 – 11.30	Morning tea	
11.30 – 1.00	Breakout group discussions continued  2. Regional breakout groups (countries connected by turtles)  - How do we manage turtles at a regional level, given the connections on the maps? What are the key issues?  - What actions are needed at a regional level to address the issues identified and how do we best implement them (building on the Regional Action Plan)?  Output: Priority activities that you will work on cross borders and with whom.	ALL
1.00 – 2.00	Lunch	
2.00 – 3.30	Sharing of breakout results from groups continued (5min each – 30min) Plenary discussion (1 hr) - What is missing? - How do we better coordinate across the region? - How do we better coordinate between countries where turtles are migrating between?	All
3.30 – 3.45	Afternoon tea	
3.45 – 4.45	Plenary discussion, including short presentations How do we sustainably finance the actions needed? (10 min - Presentation: Salome Tukuafu, SPREP) - EU discussion on future funding for the region (10 min, EU)	All
4.45 – 5.00	Next steps and closing remarks	SPREP

