



SCIENTIFIC COMMITTEE

TWENTY-SECOND REGULAR SESSION

11-19 August 2026

Apia, Samoa (Hybrid)

REPORT OF THE PACIFIC MARINE SPECIMEN BANK STEERING COMMITTEE

WCPFC-SC22-2026-RP-P35b02

7 August 2026

PMSB Steering Committee

1. PRELIMINARIES

The 8th meeting of the Pacific Marine Specimen Bank (PMSB) Steering Committee was held via video conference through Microsoft Teams at 11:00 am - 12 pm, Noumea time, on 24th July 2026, in preparation for the 22nd Regular Session of the WCPFC Scientific Committee (SC22).

A list of meeting participants is provided in Annex 1 of this report.

Prior to the PMSB Steering Committee meeting, a progress report to SC22 on PMSB activities (SC22-RP-35b-01) was made available to meeting participants on the SC22 website at <https://meetings.wcpfc.int/node/32262>. A presentation summarising the progress report was given at the meeting, and participants were given the opportunity to ask questions, clarifications and provide comments. Below we outline the key information presented to participants.

Background

The WCPFC Pacific Marine Specimen Bank (hereafter, PMSB) is a repository of biological samples from marine specimens collected from across the WCPO, and its ongoing operation is now funded by WCPFC through Project 35b, and other donors (SPC, New Zealand, Australia, France, GEF, GCF and the European Union). National and international research institutes can access samples from the PMSB to advance our understanding of the dynamics of tuna and related species in the WCPFC region (including analyses to estimate spatially- and temporally-explicit age, growth and reproductive parameters, and to investigate stock structure, for consideration within future stock assessments). In a broader ecosystem context, the collections are also used for trophic analyses, including diet studies, measurement of stable isotopes, mercury and other biochemical elements for exploring trophic structure and movement, in addition to taxonomic studies. The dedicated website of the PMSB is accessible at: <https://www.spc.int/ofp/PacificSpecimenBank>.

The objective of Project 35b is to maintain the PMSB, with particular emphasis on WCPO bigeye, yellowfin, albacore and skipjack tunas and swordfish, and, to facilitate transmission of samples to specified researchers with due cognizance of the WCPFC PMSB Access Protocols. SPC as the Scientific Services Provider (SSP) is tasked with maintaining and developing the PMSB, and through the biological sampling programme, expanding the collection of samples held.

In 2018, it was agreed to run the process of PMSB reporting in a similar manner to the Pacific Tuna Tagging Programme PTPP (Project 42) at SC15, with a brief report of the PMSB Steering Committee presented to the SC Plenary (i.e. this report). This serves to expedite the work of the Scientific Committee whilst giving adequate time to discuss details of the PMSB activities during the Steering Committee meeting.

1.1: Review and adoption of agenda

The provisional agenda for the PMSB Steering Committee meeting was presented, highlighting the addition of section “4.3 Nagoya protocol” compared to the draft agenda posted on the WCPFC website. This new agenda was adopted and is provided in Annex 2.

2. PMSB SAMPLING ACTIVITIES

2.1: PMSB activities – Between 1 January 2025 and 31 December 2025, 79,821 new biological samples, taken from 57,081 fish, were added to PMSB holdings. The PMSB now houses 367,722 biological samples taken from 238,722 individual animal specimens.

2.2: Observer-based sampling – In 2025, 1320 samples were collected by observers, and increasing trends in number of samples, number of trips and sampling rate are noted since 2023, when significant efforts were made by SPC and the Fisheries Authorities in countries to revitalize the biological sampling programme by Fisheries observers. It is important to note that sampling by observers at sea allows access to species that are subsequently discarded and that are not therefore disembarked and cannot be sampled at port. Observers also have access to freshly caught specimens and can hence access samples that cannot be collected from fish preserved on ice or frozen such as blood.

2.3: Port sampling – The number of fish sampled increased substantially over recent years, reaching 54,606 fish in 2025. The major increase in sampling number compared to the ~6,000 fish sampled in 2022-2023 is related to the need of large sampling size for the Close-Kin- Mark-Recapture project. These achievements were possible thanks to our partnerships with NIWA, MRAG Asia Pacific Pty, Soltuna Cannery in the Solomon Islands, DR Fishing Ltd in Papua New Guinea, SOCSKARGEN Federation of Fisheries and Allied Industry Inc. / Bureau of Fisheries and Aquatic Resources (SFFAI/BFAR) in the Philippines, Westport Seafood in the USA and Territory Seafood in Canada.

2.4: Tagging cruises – Tagging cruises continue to be an important source of biological samples for PMSB holdings, contributing 49,854 samples from 14,715 fish to date. The 2025 Central Pacific cruise (CP17) added 2,442 new biological samples to the PMSB (collected on 301 fish). It should be noted that sampling conducted during tagging cruises makes an important contribution to the PMSB by providing samples for targeted research projects, including reproductive biology, epigenetic calibration, and mercury and selenium studies. Tagging cruises also provide a unique opportunity to use specialised equipment and implement complex sampling protocols that require a high level of training and technical expertise.

Steering Committee discussion on Agenda item 2

A discrepancy between the number of fish sampled by observers in 2024 shown on the figure and described in the text was pointed out. The SSP will correct the report and published a revised version on the WCPFC website.

Clarification has been requested on the important increase in number of fish sampled by port samplers in recent years, and how this greater sampling effort was implemented (e.g. more staff, higher efficiency?). The SSP explained the increased number of samples was due to the implementation of close-kin-mark recapture (CKMR) and other genomic activity which requires an increase sampling effort to be effective. Current CKMR activity is focusses on albacore tuna primarily and the simple sampling procedure with the use of a biopsy sampler allows the collection of many samples very quickly. The simplicity of the process allowed to train a greater number of staff including persons already involved in sampling processes.

In relation to the increased effort for genetic sampling, it was asked if this achievement was meet within the PMSB allocated budget. The SSP clarified that the WCPFC funds allocated to the PMSB (Project 35b: ~USD100,000) and other related projects (Project 100C, 100D), supporting the sampling effort only represents a small proportion of the required funds for the functioning of the PMSB. SPC has secured co-financing from other donors for an approximate amount of USD1,000,000. The SSP was asked to better inform the SC on the financial contribution of the WCPFC and other donors for a clearer acknowledgement of the contributors. The SSP indicated that the donors are listed in the report however the amounts provided are not specified and it is the object of one of the items of the

2026-2027 workplan recommended for approval at SC. It is requested that the financial situation be highlighted during a 10-minute presentation by the SSP at the SC.

3. PMSB PROCESSES FOR ACQUISITION AND MANAGEMENT

3.1: Training – In 2025, 144 people were trained and or mentored in biological sample collection, debriefing procedures for biological sampling.

PIRFO biological sampling training material for observers is available on Moodle, and each country has a platform that they administer.

A manual for collecting biological samples by the crew onboard New Caledonian longline vessels was developed and training certificate are now delivered to the crew.

3.2: Storage – The PMSB's -20°C storage capacity comprises approximately 103 m³ in Nouméa, 2 m³ in Hobart, and numerous chest freezers located at key ports across the region. In addition, the PMSB maintains approximately 1 m³ of ultra-low-temperature (-80°C) storage.

For specimens preserved in ethanol, as well as otoliths and microscope slides, the PMSB has two compactus storage systems.

A comprehensive list of the PMSB's equipment used for sample processing and analysis is provided in the SC22 report.

3.3: Electronic reporting (ER) and database – In 2025, 99% of the fish sampled by port-samplers were entered using OnShore and 70% of the fish sampled by observers at sea on longliners, were entered using Ollo. The new ER application *fibi* was used during CP17 tagging cruise. This application allows data recording for complex sampling protocols.

Steering Committee discussion on Agenda item 3

No comments or questions received on this section.

4. PMSB PROCESSES FOR USAGE

4.1: PMSB access and projects– In 2025, 10 new projects accessing samples from the PMSB for WCPFC-related work, led by SPC and/or other national and international organisations, were initiated. Altogether, in addition to the new 2025 projects, 82 projects utilising PMSB samples are either 'completed' or 'pending' (i.e. work in progress).

Progress on the YFT reproductive biology (P120) and ALB CKMR (P100d) projects is available in the SC22 report or by consulting the corresponding Information Papers submitted to SC22.

4.2: Outputs - Eight papers, linked either directly or indirectly to the PMSB, were submitted to SC21 in 2025 as Information Papers or Research Papers.

In addition, a total of nine other books, peer-reviewed journal articles, conference papers or popular articles associated with PMSB work were published in 2025.

4.3: Nagoya protocol - Due diligence approach applied by SPC was briefly presented. All Pacific Island Countries and Territories National Focal Points identified under the Nagoya Protocol, as well as relevant authorities in non-Party jurisdictions, were contacted and informed of the PMSB activities. The objective was not to seek project-by-project approval but rather to provide transparency regarding the PMSB operations and to allow countries and territories the opportunity to raise concerns, request additional information or specify any national requirements that should be considered. No country or territory expressed objections to the PMSB activities or requested modifications to current practices.

Steering Committee discussion on Agenda item 4

It was highlighted that the PMSB may consider taking account of the relevant developments under the BBNJ Agreement, particularly in relation to samples collected in areas beyond national jurisdiction. The Secretariat notes that the agreement entered into force on the 17th of January 2026.

5. WORK PLAN 2026-27

5.1 : General work plan

The PMSB work plan for the coming year was presented.

Actions planned for 2026-27 includes actions continuing from previous work:

- Continue to update and improve training materials for biological sampling.
- Continue the development and enhancement of electronic recording ER apps and associated trainings.
- Continue the development of a WCPO-wide sampler network for the collection of tuna genetics samples.
- Continue the development of our Quality Management System to meet international standards.

And the work plan also contains new activities:

- Noting the increasing and evolving role of the PMSB within the Commission's work, start the development of a PMSB business case to review challenges and opportunities, and to analyse costs, benefits and risks for presentation to the PMSB steering committee and SC23 in 2027.
- Investigate methods to modernise/digitalise the PMSB (e.g. usage of QR codes to identify samples)
- Investigate and implement options to increase storage capacity in Nouméa.
- Development of the PMSB website to better highlight the use of the PMSB samples and associated outputs.

Steering Committee discussion on Agenda item 5

No comments or questions received on this section.

6. ADMINISTRATIVE MATTERS

6.1: Budget – The annual cost of supporting the PMSB is USD 97,200 baselined in 2018, with a 2% annual inflation adjustment agreed by the Commission in 2018 for out-years, but no increase otherwise.

The Steering Committee was reminded that the approved budget for 2026 was USD 111,712, and the proposed budget for 2027 is USD 113,947, with indicative annual budgets for 2028 and 2029 of USD 116,224 and USD 118,549 respectively. This comprises 60% for PMSB coordination, information management and training for samplers, 23% for sampling fees and freight, and 17% for the additional storage facility in Brisbane.

Other donors contributing to the PMSB are SPC, New Zealand, Australia, France, GEF, GCF and the European Union.

The summary of the completion of activities (as per the WCPFC agreement with the SSP for Project 35b activities) and the summary of the milestones and budget for 2025 activities are provided as Annex 3 to this report.

6.2: Recommendations to SC22 – The PMSB Steering Committee endorsed the SC22 recommendations specified in [WCPFC-SC22-2026-RP-P35b01_Rev01](#):

- Continue to support initiatives to increase rates of biological sampling, especially by fisheries observers at sea, noting that this contribution is essential to the ongoing success of the WCPFC's work.
- Incorporate the identified budget into the WCPFC 2027 budget and the 2028-29 indicative budgets, as development of the WCPFC PMSB is intended to be ongoing and is considered essential.
- Endorse that the work plan in Section 5 of this report should be pursued by the Scientific Services Provider, in addition to standard duties associated with maintenance and operation of the WCPFC PMSB.

Steering Committee discussion on Agenda item 6

It was commented that in the report, Section 5, the PMSB proposes increasing storage capacity in Noumea, while section 6 also indicates 17% of the budget for additional storage facility in Brisbane. In consequence, a clarification is requested whether the proposed budget also covers the planned Noumea storage expansion or will it come from other funds. The SSP indicated that the budget for the proposed storage expansion would come from other sources of funds. The SSP also highlighted the increasing recognition of the PMSB in the region but also globally requiring that PMSB operation procedures comply with global standards of biobanks and collections. Meeting those standards require important investments in the functioning of the PMSB.

The expansion of the work of the PMSB since the beginning of the steering committee has been observed with activities providing useful applications for different types of research. The SSP is asked to deliver a 10-minute presentation at the SC to demonstrate the expansion of the work for the WCPFC and globally and to provide more information on the fundings and contribution from other donors to provide a complete picture of the project to the SC for a better recognition of this essential project. The SSP indicates that the 2026-2027 work plan

includes the development of a business case to detail the funding structure and challenges of the PMSB and only very approximate numbers can be provided at SC22

It is suggested that in 2027 the steering committee of the PMSB be organised along with the PTPP steering committee to increase the number of participants. The SSP agreed to the suggestion and will organise the two 2027 steering committees together.

7. ADOPTION OF REPORT

The draft report of the PMSB steering committee was posted on the WCPFC-SC22 website and sent to meeting participants on 31st July 2026. Comments were invited from registered participants up until 12:00 Pohnpei time (UTC+11) on 6th August 2026, and integrated in the present report, following which the final endorsed version was posted on the WCPFC-SC22 website (i.e. this report). Please direct any comments and suggestions to Valerie Allain (valeriea@spc.int) at SPC.

Annex 1 – Attendee list of the 2026 PMSB Steering Committee

Name	Affiliation	Email
Francois Rounsard	SPC	francoisr@spc.int
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**WCPFC PACIFIC MARINE SPECIMEN BANK
STEERING COMMITTEE**

ELECTRONIC MEETING

24th July 2026, from 11:00-12:00 hours Pohnpei time (UTC+11 hours)

AGENDA

WCPFC-SC22-2026-10

1. PRELIMINARIES

- 1.1. Review and adoption of agenda

2. PMSB SAMPLING ACTIVITIES

- 2.1. Acquisition of samples
- 2.2. Observer-based sampling
- 2.3. Port sampling
- 2.4. Tagging cruises

3. PMSB PROCESSES FOR ACQUISITION AND MANAGEMENT

- 3.1. Training
- 3.2. Storage
- 3.3. Electronic reporting and database

4. PMSB PROCESSES FOR USAGE

- 4.1. Access and projects
- 4.2. Output
- 4.3. Nagoya Protocol

5. WORK PLAN 2026-2027

6. ADMINISTRATIVE MATTERS

- 6.1. Budget
- 6.2. Recommendations for SC22

7. ADOPTION OF REPORT

Annex 3 – Summarised PMSB activities and achievements for 2025 and indicative milestones and budget for 2026.

2025 SCOPE OF WORK	ACHIEVEMENT	REFERENCE
Maintain and develop: - the public SPC webpage; - a web-accessed database holding non-public data; - a relational database that catalogues the samples to include fishery/sampling metadata; and - the Brisbane (CSIRO) storage site.	See www.spc.int/ofp/PacificSpecimenBank See Section 2.4 in WCPFC-SC22-2026-RP-P35b01_Rev01 about the development of the PMSB database (BioDaSys) and ER data recording applications: https://meetings.wcpfc.int/node/32262	WCPFC-SC22-2026-RP-P35b01_Rev01
Tissue sample utilisation and a record of outcomes/outputs will also be detailed in the relational database	See www.spc.int/ofp/PacificSpecimenBank and section 3 in WCPFC-SC22-2026-RP-P35b01_Rev01: https://meetings.wcpfc.int/node/32262	WCPFC-SC22-2026-RP-P35b01_Rev01
Subject to approval by the WCPFC Executive Director: - metadata will be made available to institutions or organizations responsible for providing scientific advice in fisheries through the web-accessible component of the database, and subsequently, and - SPC-OFP will facilitate the transmission of requested samples to specified researchers/organisations, and the return of unused and/or processed samples to the relevant storage facility.	See section 3.2 and Table 3 in WCPFC-SC22-2026-RP-P35b01_Rev01: https://meetings.wcpfc.int/node/32262	WCPFC-SC22-2026-RP-P35b01_Rev01
As agreed at SC21RP-P35b-03, the Scientific Services Provider will: - support initiatives to increase rates of observer biological sampling; - complete the Work Plan 2025-2026 in WCPFC-SC21-2023/RP-P35b-02.	Sampling at port and at sea by observers increased compared to previous reporting year. Port sampling and sampling on observer trips reached a record year; See section 2.1 in WCPFC-SC22-2026-RP-P35b01_Rev01: https://meetings.wcpfc.int/node/32262 Workplan completed.	WCPFC-SC22-2026-RP-P35b01_Rev01
OUTPUTS AND SCHEDULE		
2025 progress report to the WCPFC Secretariat.	https://meetings.wcpfc.int/node/32262	WCPFC-SC22-2026-RP-P35b01_Rev01
Conduct of the annual WCPFC PMSB Steering Committee meeting on 2025 activities.	https://meetings.wcpfc.int/node/32595	WCPFC-SC22-2026-RP-P35b02
Steering Committee meeting report, including WCPFC PMSB work plan for the following year.	https://meetings.wcpfc.int/node/32595	WCPFC-SC22-2026-RP-P35b02
Submission of an annual project final report to the WCPFC Secretariat by 31 December 2026.	Due December 2026	