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Marine Stewardship Council fisheries assessments

PNA Western and Central Pacific skipjack and yellowfin, unassociated / non FAD set, tuna purse seine fishery



Surveillance Report

Conformity Assessment Body (CAB)	Acoura Marine t/a LRQA
Assessment team	Rob Blyth Skyrme and Kevin McLoughlin
Fishery client	Parties to the Nauru Agreement (PNA)
Assessment type	Third Surveillance
Date	19/10/2022

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1 Assessment Data Sheet

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	Principle 1	Kevin McLoughlin
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2 Executive summary

The PNA Western and Central Pacific skipjack and yellowfin, unassociated / non FAD set, tuna purse seine fishery (hereafter 'the PNA Tuna Fishery') was first certified in December 2011, and was recertified against the Marine Stewardship Council (MSC) Certification Requirements version 2.0 (CRv.2.0) on 22nd March 2018. This report constitutes the third annual surveillance of the fishery since reassessment, and is undertaken against the CRv.2.0 (MSC 2014) using the MSC Fisheries Certification Process version 2.2 (FCPv.2.2, MSC 2020).

Effort in the fishery has remained below the total allowable effort (TAE) level set to constrain effort and catch within PNA waters. The total combined catch of skipjack tuna and yellowfin tuna exceeded 830,000 t in 2019, and 650,000 t in 2020.

Six Conditions of certification were set against the fishery in 2018, and all six Conditions remain on target.

Three non-binding recommendations were set against the fishery in 2018, but two new non-binding recommendations were raised this year, as follows, as a result of the Audit Team's review of a report by Shark Guardian that was provided to LRQA in late May 2022:

- 1) It is apparent that reporting by some vessels is not fully comprehensive, and we therefore make a new non-binding recommendation against the certified PNA fishery, that efforts are made to ensure catch reporting for SSIs is undertaken rigorously by all vessels in support of scientific and management initiatives.
- 2) Observers undertake a very important role within WCPFC fisheries. In support of this, and noting comments provided in interview regarding the availability of information on cases to them, a system should be established to ensure observers can follow the progression of relevant cases through to their conclusion to the extent that confidentiality requirements allow.

Overall, the PNA Tuna Fishery continues to meet the MSC Standard. The Audit team recommends the continued MSC certification of the PNA Tuna Fishery.

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3 Report details

3.1 Surveillance information

Table 1. Surveillance information

1	Fishery name																													
	PNA Western and Central Pacific skipjack and yellowfin tuna purse seine fishery																													
2	Unit(s) of Assessment (UoA)																													
	UoA 1 <table><tr><td>Species:</td><td>Skipjack tuna (<i>Katsuwonus pelamis</i>)</td></tr><tr><td>Geographical area:</td><td>Western and Central Pacific in the EEZs (i.e., not including archipelagic waters) of Papua New Guinea, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, Palau, Solomon Islands, Tuvalu and Tokelau</td></tr><tr><td>Method of capture:</td><td>Purse seine targeting freeschool (unassociated / non FAD set) skipjack tuna (noting the WCPFC definition of a FAD¹)</td></tr><tr><td>Stock:</td><td>Western and Central Pacific skipjack tuna</td></tr><tr><td>Management System:</td><td>PNA Implementing arrangements National Management Plans and national licensing conditions WCPFC CMMs</td></tr><tr><td>Client Group:</td><td>Vessels operating under the Vessel Day Scheme (VDS) as managed and monitored by the PNA Office on behalf of the PNA (Papua New Guinea, Kiribati, Federated States of Micronesia, Solomon Islands, Marshall Islands, Nauru, Palau and Tuvalu) and Tokelau.</td></tr><tr><td>Other Eligible Fishers:</td><td>None</td></tr></table> UoA 2 <table><tr><td>Species:</td><td>Yellowfin tuna (<i>Thunnus albacares</i>)</td></tr><tr><td>Geographical area:</td><td>Western and Central Pacific in the EEZs (i.e., not including archipelagic waters) of Papua New Guinea, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, Palau, Solomon Islands, Tuvalu and Tokelau</td></tr><tr><td>Method of capture:</td><td>Purse seine targeting freeschool (unassociated / non FAD set) yellowfin tuna (noting the WCPFC definition of a FAD¹)</td></tr><tr><td>Stock:</td><td>Western and Central Pacific yellowfin tuna</td></tr><tr><td>Management System:</td><td>PNA Implementing arrangements National Management Plans and national licensing conditions WCPFC CMMs</td></tr><tr><td>Client Group:</td><td>Vessels operating under the Vessel Day Scheme (VDS) as managed and monitored by the PNA Office on behalf of the PNA (Papua New Guinea, Kiribati, Federated States of Micronesia, Solomon Islands, Marshall Islands, Nauru, Palau and Tuvalu) and Tokelau.</td></tr><tr><td>Other Eligible Fishers:</td><td>None</td></tr></table>		Species:	Skipjack tuna (<i>Katsuwonus pelamis</i>)	Geographical area:	Western and Central Pacific in the EEZs (i.e., not including archipelagic waters) of Papua New Guinea, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, Palau, Solomon Islands, Tuvalu and Tokelau	Method of capture:	Purse seine targeting freeschool (unassociated / non FAD set) skipjack tuna (noting the WCPFC definition of a FAD ¹)	Stock:	Western and Central Pacific skipjack tuna	Management System:	PNA Implementing arrangements National Management Plans and national licensing conditions WCPFC CMMs	Client Group:	Vessels operating under the Vessel Day Scheme (VDS) as managed and monitored by the PNA Office on behalf of the PNA (Papua New Guinea, Kiribati, Federated States of Micronesia, Solomon Islands, Marshall Islands, Nauru, Palau and Tuvalu) and Tokelau.	Other Eligible Fishers:	None	Species:	Yellowfin tuna (<i>Thunnus albacares</i>)	Geographical area:	Western and Central Pacific in the EEZs (i.e., not including archipelagic waters) of Papua New Guinea, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, Palau, Solomon Islands, Tuvalu and Tokelau	Method of capture:	Purse seine targeting freeschool (unassociated / non FAD set) yellowfin tuna (noting the WCPFC definition of a FAD ¹)	Stock:	Western and Central Pacific yellowfin tuna	Management System:	PNA Implementing arrangements National Management Plans and national licensing conditions WCPFC CMMs	Client Group:	Vessels operating under the Vessel Day Scheme (VDS) as managed and monitored by the PNA Office on behalf of the PNA (Papua New Guinea, Kiribati, Federated States of Micronesia, Solomon Islands, Marshall Islands, Nauru, Palau and Tuvalu) and Tokelau.	Other Eligible Fishers:	None
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Other Eligible Fishers:	None																													
3	Date certified	Date of expiry																												

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	22/03/2018	21/09/2023
4	Surveillance level and type	
	Surveillance level 6, off-site surveillance audit (FCP v2.2 7.28.1-7.28.6). In accordance with clause 1.3.a of Derogation 3: Covid-19 Fishery and Chain of Custody Remote Auditing, the audit will proceed offsite. The decision to undertake an off-site audit is based on travel throughout the PNA region remaining very difficult or impossible due to Covid-19 restrictions,	
5	Surveillance number	
	3rd Surveillance	✓
6	Proposed team leader	
Team Leader Experience	<p>Rob Blyth-Skyrme – Team Leader, P2 & P3 assessor</p> <p>Dr. Rob Blyth-Skyrme is a consultant with a strong interest and involvement in the development and assessment of all areas of fisheries management and policy. Rob completed a Masters in aquaculture in 1998, and a PhD that looked at the sociological and environmental performance of an inshore fishery in 2004. He now has more than 20 years postgraduate experience, having worked as a marine fish farmer, a scientist on a groundfish stock assessment project, a Deputy Chief Fishery Officer (inshore fisheries management and enforcement), a Government advisor on fisheries and nature conservation and, since 2009, as an independent fisheries consultant. He has now been involved in more than 100 MSC audits and assessments of fisheries for species including tuna, shellfish, groundfish, salmon and freshwater percids, employing gears including purse seines, demersal seines, trawls, dredges, gillnets, longlines, traps and pole and line. Rob is also an active member of the MSC's Peer Review College, and is a trainer with the MSC's Capacity Building Programme.</p> <p>Rob has passed all the MSC training requirements for Team Member and Lead Assessor, and has no Conflict of Interest in relation to this fishery. A full CV is available upon request.</p>	
7	Proposed team members	
	<p>Kevin McLoughlin – P1 assessor</p> <p>Kevin McLoughlin is a specialist fisheries consultant based in Australia with more than 30 years' experience across a wide range of domestic and international fisheries science issues. Kevin's experience in working on MSC assessments spans over 10 years.</p> <p>As a fisheries scientist with the Australian Department of Agriculture and Fisheries, Kevin represented the Australian Government on many committees and groups such as fishery assessment groups, providing advice on a diverse range of fisheries and species (including tuna, shark, various finfish, scallop and prawn). Work in assessment groups involved assessment of target species, development of bycatch action plans and ecological risk assessments. Mr McLoughlin was responsible for the production of annual status reports for Australian government-managed fisheries for a number of years. Mr. McLoughlin was also Australia's delegate on scientific issues at the Indian Ocean Tuna Commission and was Chair of the IOTC Working Party on Bycatch for several years.</p> <p>Mr McLoughlin has worked predominantly on Principle 1 aspects of MSC assessments but has also undertaken Principle 2 and 3 work, as well as peer review, surveillance audits and pre-assessments for several fisheries. Kevin was a team member for the full assessment of the Fiji tuna longline fishery (P1 & P2); the New Zealand Albacore Fishery (P1 & P2); the New Zealand Skipjack Fishery (P1 & P2); the Parties to the Nauru Agreement Western and Central Pacific Skipjack and Yellowfin purse seine fishery (P1 & P2); the Tri Marine Western and Central Pacific Skipjack and Yellowfin Tuna Fishery (P2 & P3). He was also a member for the full assessment of Australia's blue grenadier fishery (P1);. Australia's</p>	

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	Northern Prawn Fishery (P1); Western Australia's Exmouth Gulf and Shark Bay prawn trawl fisheries (P1); and South Australia's Spencer Gulf prawn trawl fishery (P1). Kevin has undertaken MSC training requirements and has no Conflict of Interest in relation to this fishery. A full CV is available upon request.
Local Context	English is largely spoken in the region. Both Rob and Kevin have undertaken multiple assessments in the region.
Traceability	Rob has completed the MSC traceability module in the last 5 years.
RBF	Both assessors have completed the RBF training.
8	Audit/review time and location
	Meetings took place for the offsite surveillance from 12 th - July, and was then extended by Variation Request in a remote/offsite format.
9	Assessment and review activities
	All relevant data, progress on the Client Action Plan and progress on the 6 open conditions and 2 recommendations. The audit also considered a report by the Shark Guardian Charity.

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3.2 Background

3.2.1 Changes in management system

There have been no significant changes to the management system for the fishery since the 2nd surveillance audit. Western Central Pacific Fisheries Commission (WCPFC) Conservation and Management Measures (CMMs) introduced since the 2nd audit are presented in Table 2, below. Significant changes in the CMMs relevant to the PNA Tuna fishery are discussed elsewhere in the report.

Table 2. WCPFC CMMs adopted/implemented since the 2nd surveillance audit of the fishery

CMM	Title	Impact on scoring
CMM 2021-01	Conservation and Management Measure for bigeye, yellowfin and skipjack tuna in the Western and Central Pacific Ocean	No material change from tropical tuna measure CMM 2020-01.
CMM 2021-02	Conservation and Management Measure for Pacific Bluefin Tuna	No material change.
CMM 2021-03	Conservation and Management Measure on the Compliance Monitoring Scheme	No material change.
CMM 2021-04	Conservation and Management Measure for Charter Notification Scheme	No material change.

3.2.2 Changes in relevant regulations

In March 2020, WCPFC agreed to suspend the requirements for observer coverage on purse seine vessels (now set out in paragraphs 32 and 33 of CMM 2021-01 and CMM 2018-05) until 31 May 2020 due to Covid-19. This suspension was subsequently extended, and was only lifted in June 2022, with a transitional period allowed until full coverage is again required from 1st January 2023¹. It was noted to the Audit Team that coverage of PNA vessels in 2020 was around 40% and in 2021 was estimated to have fallen to around 10% (SPC, pers. comm.). Panizza et al. (2021) indicated that 44% of purse seine trips had known observer placement in 2020. The PNA have increased the level of electronic monitoring and introduced measures such as proximity monitoring to support Chain of Custody measures. The period from 15 June – 31 December 2022 is a transitional period during which time CCMs should make best efforts to embark observers in line with defined guidelines (WCPFC-SS4; Annex A). No other changes were reported in regulations.

3.2.3 Changes to personnel involved in science, management or industry

A new Chief Executive Officer has been appointed to the PNA (Dr Sangaalofa Clark). Other than that, no changes were reported in staffing of the principal managers and advisors in the PNA, nor changes to staffing in the Oceanic Fisheries Programme of the Secretariat of the Pacific Community (SPC). The PNAO has employed a compliance officer to increase capacity.

3.2.4 Changes to scientific base of information, including stock assessments

Catch monitoring:

Catch estimates for all tuna and billfish species fished in the WCPFC statistical area are compiled annually by SPC based on reports provided by CCMs (WCPFC Commission Members, Cooperating Non-Members and Participating Territories). The most recent report provides catches for the period 1960-2020.

The provisional 2020 WCPFC Convention Area (WCPFC-CA) skipjack catch of 1,769,202 t was around 279,000 t lower than the 2019 record (2,041,738 t) (Figure 1). The purse-seine fishery catch for 2020 was 1,447,342 t, with the 2019

¹ <https://www.wcpfc.int/file/819723/download?token=97iNg1Ss>

catch (around 1,700,000 t) also well down on the 2019 record level. The total provisional 2020 pole-and-line catch (121,530 t) was considerably lower than the 2019 catch (195,402 t) and was amongst the lowest since 1963.

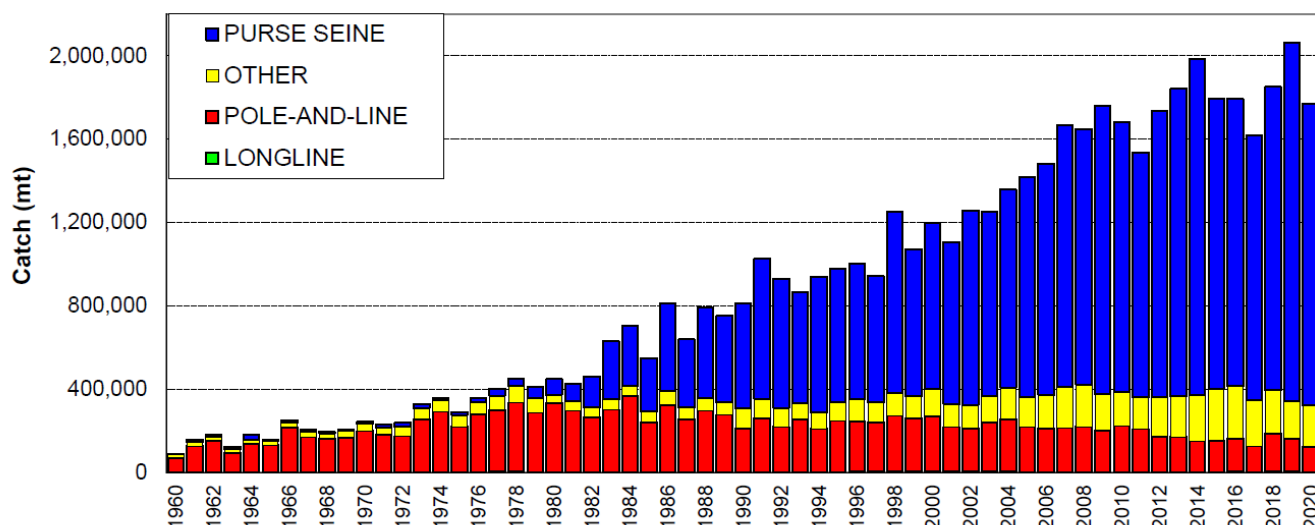


Figure 1. Skipjack tuna WCPFC-CA catch (t) by gear, 1960-2020 source (Williams and Ruaia, 2021)

The 2020 WCPFC-CA yellowfin tuna catch (643,251 t) was the third highest on record, at around 65,000 t less than the previous record in 2017 (Figure 2), with a purse seine catch of 391,250 t. The longline catch for 2020 (72,357 t) was the lowest since 1999, 30,000 t less than the 2019 catch in this fishery; a decrease in effort in the broad area where yellowfin are mainly targeted (due to COVID-19) contributed to this decline. Pole-and-line fisheries took only 11,600 t of yellowfin in 2020, compared with 37,563 t during 2019, the highest on record. Catches in the 'other' category are largely composed of yellowfin taken by various assorted gears (e.g. troll, ring net, bag net, gillnet, large-fish handline, small-fish hook-and-line and seine net) in the domestic fisheries of the Philippines and eastern Indonesia (Williams and Ruaia, 2021).

The UoA catch of skipjack tuna was 687,069 t in 2019 and was 510,348 t in 2020. The UoA catch of yellowfin tuna 145,260 t in 2019 and was 140,575 t in 2020.

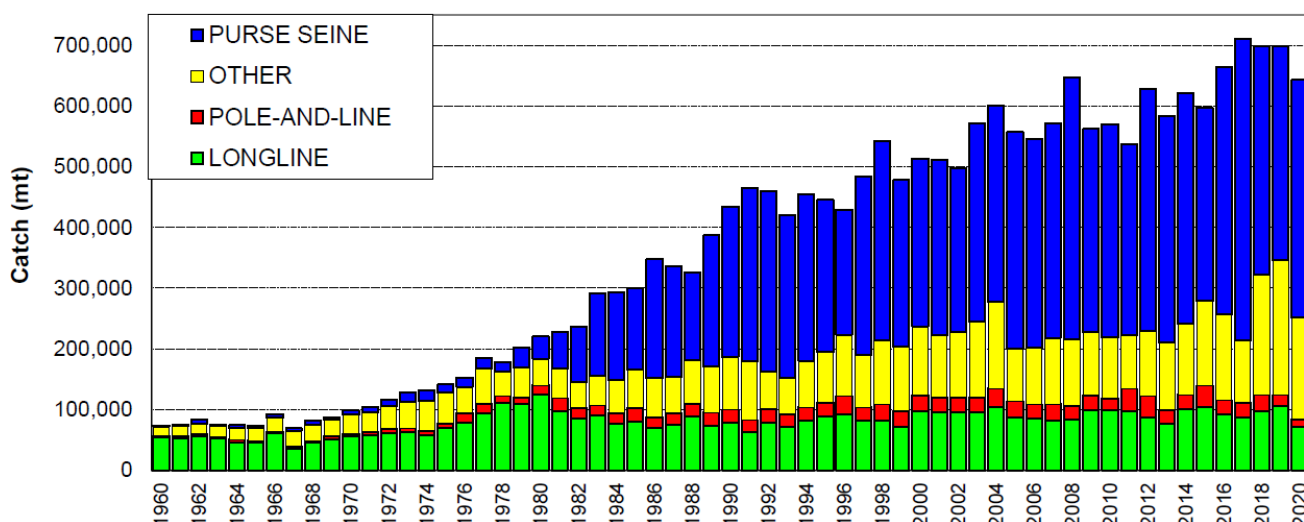


Figure 2. Yellowfin tuna WCPFC-CA catch (t) by gear, 1960-2020 (source Williams and Ruaia, 2021)

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As described in the PCR for the fishery (Blyth-Skyrme *et al.*, 2018), the PNA Total Allowable Effort (TAE) is distributed among its members as a Party Allowable Effort (PAE). A summary of the total allocated and used fishing days for 2017-2021 (Table 3) shows that, although purse seine fishing effort has been increasing in recent years, it has remained less than the PAE days available. Table 4 shows the number of vessels on the PNA purse seine VDS register since 2017. Overall, there has been little change in the size of the fleets operating in PNA waters, which have ranged between 243 and 254 vessels annually over this period. Table 5 shows the estimated purse seine fishing catch in PNA waters for 2019 and 2020, based on logsheets (it is noted that there has been progressive introduction of e-logs, recently, with most vessels now submitting catch data electronically).

Table 3. Purse seine effort (logsheets days) in PNA EEZ and the allocated TAE (including Tokelau) for 2017-2021. Data provided by PNAO, July 2022.

	2017	2018	2019	2020	2021
Effort days (EEZ)	37,899	36,035	38,291	39,412	40,552
TAE days (EEZ)	45,590	45,005	45,034	45,035	45,035
% TAE used	83%	80%	85%	88%	90%

Table 4. No. of vessels operating in PNA EEZs for the period 2011 to 2020. Data provided by PNAO, July 2022.

Fleet	2017	2018	2019	2020	2021	2022
Pacific Islands	110	88	93	91	103	102
Foreign	144	161	157	153	151	141
Total	254	249	250	244	254	243

Table 5. Purse seine catch (mt) in PNA EEZ waters for 2019 and 2020 (including Tokelau). Data provided by PNAO, July 2022.

	Skipjack		Yellowfin		Bigeye	
	2019	2020	2019	2020	2019	2020
PNA EEZ Free School	687,069	510,348	145,260	140,575	7,165	4,523
PNA EEZ Associated	527,790	525,236	114,705	176,849	29,118	47,778
PNA EEZ total	1,214,859	1,035,584	259,965	317,424	36,283	52,301

3.2.5 Skipjack tuna

Information on a 2019 updated stock assessment for skipjack tuna in the WCPO (Vincent *et al.*, 2019) was provided in the 2nd surveillance audit report for the fishery (Blyth Skyrme and McLoughlin, 2021). This updated assessment did not result in a change to the scoring of skipjack. The next stock assessment update for skipjack is scheduled to be presented at the 2022 Scientific Committee meeting.

3.2.6 Yellowfin tuna

Information on a 2020 updated stock assessment for yellowfin tuna in the WCPO (Vincent *et al.*, 2020; WCPFC-SC 2020) was provided in the 2nd surveillance audit report for the fishery (Blyth Skyrme and McLoughlin, 2021). This updated assessment did not result in a material change to the Principle 1 scoring for yellowfin tuna, however, harmonisation discussions in January 2021 revised the score for PI 1.1.1 to 100 rather than 90.

3.2.7 Harvest Strategy development:

The WCPO harvest strategy for skipjack tuna has several components, with WCPFC, PNA and national and archipelagic management actions, supported by a robust stock assessment and extensive monitoring frameworks. The current harvest strategy relies on annual decision-making processes founded on the core principles of the WCPFC as laid out in its Convention and in a growing body of CMMs (see <https://www.wcpfc.int/conservation-and-management-measures>). Monitoring frameworks include the collection of operational catch and effort data, the provision of a range of scientific,

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monitoring and compliance information by observers, VMS data, and port sampling data. The monitoring provides the key databases for the skipjack tuna stock assessments.

Skipjack, yellowfin and bigeye tuna stocks are currently managed through CMM 2021-01 which replaced CMM 2020-01 and its predecessors. CMM 2021-01 came into effect on 16 February 2021 and shall remain in effect until 15 February 2024 unless earlier replaced or amended by the Commission. CMM 2021-01 dictates a suite of purse seine management measures including temporal (3-month) and spatial closure periods/areas, limits on the number of FADs actively fishing, catch retention measures for bigeye, yellowfin and skipjack tuna, and monitoring and control requirements. CMM 2021-01 also sets longline bigeye catch limits by flag (including charter vessels) for the distant water nations.

CMM 2021-01 was adopted following work carried out in 2021 which included two “Development of New WCPFC Tropical Tuna Measure” workshops (Workshop 1, 26–30 April; and Workshop 2, 6– 10 September). The workshops provided an opportunity to clarify CCMs’ views on many elements of the tropical tuna measure, and resulted in a number of requests being made of the Scientific Services Provider (SSP) for further analyses; results of these analyses are summarised in (SPC-OFP 2021). CCMs provided a number of submissions on the new measure to the Commission meeting.

An important addition to CMM 2021-01 was the introduction of additional FAD measures. CCMs agreed on the importance of reducing the risk of entanglement of sharks, sea turtles and other species in FADs, and incorporated requirements that from January 1 2024, CCMs shall ensure that the design and construction of any FAD to be deployed in, or that drifts into, the WCPFC Convention Area shall comply with the following specifications:

- the use of mesh net shall be prohibited for any part of a FAD;
- if the raft is covered, only non-entangling material and designs shall be used;
- the subsurface structure shall only be made using non-entangling materials.

CMM 2021-01 also indicates that CCMs shall encourage vessels flying their flag to use, or transition towards using, non-plastic and biodegradable materials in the construction of FADs. In addition, the SC shall continue to review research results on the use of biodegradable material on FADs, and shall provide specific recommendations to the Commission in 2022 including on a definition of biodegradable FADs, as well as a timeline for the stepwise introduction of biodegradable FADs.

As indicated in previous surveillance reports, there have been a number of delays in the timeline of the workplan to meet CMM 2014-06 harvest strategy requirements. There have also been changes due to MSC Covid-19 derogations. The timeline is discussed in Section 4.3 on the progress against conditions.

WCPFC18, held in December 2021, further discussed and updated the CMM 2014-06 workplan (WCPFC 2021; Attachment I). The updated workplan indicates further delays to the timeline for adoption of CMM 2014-06 requirements for bigeye and yellowfin tuna. Management procedures for yellowfin and bigeye are now scheduled for adoption in 2024. There was no change to the timeline for skipjack.

Activities listed in the latest workplan for skipjack tuna are shown below (WCPFC 2021; Attachment I).

2022 Develop management procedures and Management strategy evaluation

- SC agree the operating models for MSE;
- SC provide advice on performance of candidate management procedures;
- SC provides advice on relevant elements of the monitoring strategy;
- TCC consider the implications of candidate management procedures.
- **Commission review and adopt a management procedure.**

2023 Implement management procedure

Activities listed in the latest workplan for yellowfin tuna are as follows:

2022 Agree Target Reference Point

- **Commission agree a TRP for yellowfin**

[Continue development of multi-species framework]

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- **Develop management procedures and Management strategy evaluation**
- SC provide advice on potential management procedures.

2023 **Develop management procedures and Management strategy evaluation**

- SC agree the operating models for MSE;
- SC provide advice on performance of potential management procedures;
- SC provides advice on relevant elements of the monitoring strategy;
- TCC consider the implications of candidate management procedures;
- Commission consider advice on progress towards management procedures.
- **Develop and implement relevant elements of the monitoring strategy**

2024 **Develop management procedures and Management strategy evaluation**

- SC provide advice on performance of candidate management procedures;
- SC provides advice on relevant elements of the monitoring strategy;
- TCC consider the implications of candidate management procedures;
- Commission consider and refine a candidate set of management procedures.
- **Commission adopt a management procedure**

WCPFC18 also recognized that it is important to understand the implications of single species management procedures within a multi-species fishery context upon application of any of the management procedures. SC15 agreed to initially consider developing a multi-species modelling framework that can be used for mixed fishery management strategy evaluation for the four tuna stocks. A multi-species approach has implications for candidate TRP levels. Work on the multi-species approach is ongoing, with progress reported at SC17 (Scott et al., 2021a).

The Commission supports the need for capacity building to allow CCMs to understand and participate fully in the harvest strategy development process and ultimately to have confidence that an adopted harvest strategy is an agreeable balance of their objectives. To this end, the WCPFC18 agreed to hold a Science-Management Dialogue back-to-back with SC18 in 2022, providing general capacity building to support confident and full participation of all CCMs in decision making on harvest strategies. Capacity building efforts to date have focused on running country-specific harvest strategy workshops, several of which were been run during 2021. Efforts to increase the number of workshops in 2021 have been hindered by the continuing impacts of Covid-19. To further support and augment the online workshops, an 'Introduction to Harvest Strategies' Module course has been developed and is hosted on the SPC learning management system (<https://spc.learnbook.com.au/login/index.php>; Scott et al., 2021b). Harvest strategy capacity building seminars were run online in June 2022 (<https://meetings.wcpfc.int/meetings/hscb-01>) and July 2022 (<https://meetings.wcpfc.int/meetings/hscb-02>).

PNA continue to play a very important role in the WCPO tuna fisheries and provides continued support for the WCPO harvest strategy implementation process. PNA has, along with other Forum Fisheries Agency (FFA) Members, led an effort to see greater priority given to harvest strategy development within the WCPFC processes. PNA has also played a major role in the revision of Tropical Tuna CMMs to enhance the effectiveness of measures for WCPO tuna management.

3.2.8 Any developments or changes within the fishery which impact traceability or the ability to segregate between fish from the UoC (certified fish) and fish from outside the UoC (non-certified fish)

As noted in Section 3.2.2, in March 2020, WCPFC agreed to suspend the requirements for observer coverage on purse seine vessels due to Covid-19. This suspension was extended until June 15 2022, with a transitional period from 15 June to 31 December 2022, during which time CCMs should make best efforts to embark observers in line with defined guidelines (WCPFC-SS4; Annex A). It was confirmed to the Audit Team that coverage of PNA vessels in 2020 was around 40-50% and in 2021 had fallen to around 10% (SPC, pers. comm.). The PNA have increased the level of electronic monitoring and introduced measures such as proximity monitoring to support Chain of Custody measures.

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The approach to traceability taken overall by the PNA fishery is considered to be robust, and so the lower observer coverage due to Covid-19 is not considered to impact traceability or the ability to segregate between fish from the UoC and fish from outside the UoC.

3.2.9 Shark Guardian report

A key focus for the Audit Team this year was the May 2022 Shark Guardian report entitled '*Slipping through the net. Reported but ignored, Infringements in the MSC tuna fisheries of the Western and Central Pacific*' (Available [here](#)). This report presents an analysis of a sample of observer information from three fisheries in the Western Pacific - the MSC-certified PNA fishery that is subject to this audit, but also an MSC-certified purse-seine fishery in the Solomon Islands (SBOB data, Tables 2-14 and 28) and a Fiji longline fishery (FJOB data, Tables 22-27). The information is presented within the Shark Guardian report as evidence of systematic or serious non-compliance with WCPFC CMMs within the different fisheries, including of observer intimidation or bribery, as well as of failing to meet MSC requirements.

In this regard, the report makes allegations against CABs, stating the following in the Executive Summary:

"Overall, the role of Conformity Assessment Bodies (CABs) must be questioned as a result of this research. Based on the findings of this report, the CAB – supposedly an independent auditor auditing against the MSC standard – did not perform to standard and failed to identify numerous issues raised by Observers."

The report was provided to LRQA in May 2022, initially requiring that LRQA consider whether the information contained within the report for the PNA fishery warranted the announcement of an expedited audit of the fishery (Section 7.29, MSC 2020).

Expedited audits are required in the following circumstances (MSC 2020):

"7.29 Expedited audits.

7.29.1 The CAB shall complete an expedited audit if the CAB becomes aware of changes to the circumstances of the fishery and/or of new information that may cause: ■

- a. A PI score falling below 60.*
- b. A Principle score falling below an aggregate 80 score due to the changes to the score for 1 or more PIs.*
- c. A change in scope (as per 7.4, 7.5.2 or 7.5.3)."*

Associated guidance is also provided (MSC 2020):

"G7.29.1 New information ▲

Examples of 'significant new information' are:

- Major changes in management.*
- New information describing a major impact of the fishery.*

However, as the FCP, states there must be good reason to think that these are actual material differences, and not a likely temporary change in indicated status that might arise, for instance, from the introduction of a new, not yet validated, stock assessment model."

The Assessment Team and LRQA Head Office staff reviewed the Shark Guardian report initially in late May 2022 following 7.29.2 (MSC 2020), but it was determined that, for the information presented in the report that was specific to the PNA fishery, none of the conditions that required an expedited audit under 7.29.1 were met. It was therefore concluded that it was appropriate to review the findings of the Shark Guardian report at the delayed third annual audit of the PNA Fishery that was planned for July 2022. This review was undertaken, and the findings presented below as part of the audit.

Table 29 of the Shark Guardian report provides a summary of the 'violations' that are levelled against the PNA fishery based on the observer data examined by the authors. The text associated with Table 29 states:

"A total of 19 PNA Observer trips were reviewed from the years 2018, 2019 and 2020. According to the PNA trip data analysed, a total of 196 cases of violations were identified:

- 55 cases of critical incidents in violation of CMM 2019-04, CMM 2011-03, CMM 2007-01, CMM 2009-02.*
- 125 cases of discrepancies in bycatch and target catch reporting by vessels in violation of CMM 2013-05.*

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- 87 cases of sharks and rays interactions and landings cases in relation to CMM 2013-05, CMM 2019-04 and CMM 2019-05.
- 1 critical incident of shark finning violating CMM 2019-04."

The data presented by the Shark Guardian report related to the certified PNA fishery, specifically, are provided in Section 1.2 (Tables 15-21), as follows:

Table	Year	Vessels	Focus	'Violations'
15	2019	1	Interactions with 'species of special interest' (SSI)	3
16	2020	3	Interactions with 'species of special interest' (SSI)	15
17	2018	1	Discrepancies in Bycatch and Target Species Discard Reporting	2
18	2019	1	Discrepancies in Bycatch and Target Species Discard Reporting	9
19	2020	3	Discrepancies in Bycatch and Target Species Discard Reporting	20
20	2019	1	Bribery and intimidation	1
21	2020	1	Bribery and intimidation	1
Total				51

Given that the number of 'violations' identified in Shark Guardian Tables 15-21 (51) and separately in Table 29 (268) are not equal, it appears that the total derived by the Shark Guardian report in Table 29 do not comprise only the certified PNA fishery as is subject to this MSC annual audit, but instead also includes activity that occurred elsewhere, presumably within the two other fisheries identified in the report. These additional cases presented appear to have taken place within national (i.e., within 12 nm of the coast) or archipelagic (i.e., within archipelagic baselines) waters that have never been included within the certified PNA fishery (i.e., as reflected in Tables 2-14 and the maps presented as Shark Guardian Figures 1 - 4), or on vessels operating outside PNA waters and/or as long line vessels that are not part of the PNA certificate (i.e., as reflected in Shark Guardian Tables 22-28).

Considering the CMMs which are identified as relevant with respect to the 'violations', the PNA fishery Audit Team has considered the issues raised in Shark Guardian Tables 15-21 in the following sections.

3.2.9.1 CMM 2007-01 (Conservation and Management Measure for the regional observer programme):

Shark Guardian states (P.45):

"CMM 2007-01, 12 which stipulates that Observers are not to be intimidated from carrying out their duty freely on board a fishing vessel. Requesting an event not to be recorded by an Observer is considered as interfering with the Observer's work and compromising the safety and wellbeing of the Observer"

CMM 2007-01 is no longer in force, however, as it was replaced by CMM 2018-05 (Conservation and Management Measure for the Regional Observer Programme). Amongst other Clauses, this stipulates:

- Clause 15.g) *The Commission ROP shall be operated to ensure that observers shall not be unduly obstructed in the discharge of their duties. To this extent, CCMs of the Commission shall ensure that vessel operators comply with the Guidelines in Annex B — Guidelines for the Rights and Responsibilities of Vessel Operators, Captains and Crew.*
- Annex A, Part 1 (The rights of observers shall include) i) *Freedom to carry out their duties without being assaulted, obstructed, resisted, delayed, intimidated or interfered with in the performance of their duties.*
- Annex B, Part 2 (The responsibilities of vessel operators and captains shall include) m) *Ensuring the ROP observer is not assaulted, obstructed, resisted, delayed, intimidated, interfered with, influenced, bribed or is attempted to be bribed in the performance of their duties, ensuring the ROP observer is not coerced or convinced to breach his/her responsibilities, and facilitating the observer's adherence to the applicable code of conduct.*
- Annex B, Part 4 (The responsibilities of the vessel crew shall include) a) *Not assaulting, obstructing, resisting, intimidating, influencing, or interfering with the ROP observer or impeding or delaying observer duties, not*

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coercing or convincing the ROP observer to breach his/her responsibilities, and facilitating the observer's adherence to the applicable code of conduct.

Independent observers undertake a vital role within fisheries, globally, including the certified PNA fishery. The data provided through observer programmes support science and management initiatives, and can support the enforcement of management measures, although observers in the PNA fishery do not have an enforcement role – their role is purely to observe and report on activity on the vessels, with any compliance or enforcement response occurring only after the vessel returns to port.

The PNA fishery is quite unusual in global fishery terms, with WCPFC purse seine vessels being subject to 100% observer coverage. A suspension of the 100% observer coverage requirement was applied by the WCPFC during the Covid-19 pandemic, but the PNA fishery has maintained some level of observer coverage throughout. The WCPFC lifted the suspension from 15th June 2022, with a transitional period until 31st December 2022, during which time CCMs are required to make “best efforts to embark observers”. The suspension is lifted fully from the 1st of January 2023².

The requirement for 100% coverage within WCPFC purse seine fisheries is consistent with best practice, globally, and is a key strength of the certified PNA fishery in comparison to many other MSC-certified fisheries. However, if other factors are equal, the higher the level of observer coverage within a fishery, the higher the chance of detecting illegal or undesirable activity within that fishery. This means that, for example, whilst the chance of detecting any shark finning activity that occurred within the PNA fishery is high, the chance of detecting any shark finning activity on long line vessels, where observer coverage is typically 5% or less, is very low in comparison.

With 100% observer coverage and a large number of vessels, again assuming other factors are equal, the potential for a case of intimidation, bribery or other obstruction to duty for observers within the PNA fishery is also higher than it would be in other RFMO fisheries with lower levels of coverage or a smaller number of vessels. Nevertheless, any intimidation and/or bribery of observers is a key issue that everyone involved in fisheries management and science is concerned with, and CMM 2018-05 (replacing CMM 2007-01) reflects the importance of safeguarding observers, including within the PNA fishery.

In this regard, the Audit Team investigated the case of intimidation (Shark Guardian Table 20) and the case of bribery (Shark Guardian Table 21) during this Year 3 audit. Importantly, the team was informed that the case of intimidation was subject to an ongoing investigation, and the case of bribery had resulted in a prosecution, with the operator of the vessel involved being fined. It is noted that the approach taken by the observer with respect to the attempted bribery case, as reported in Shark Guardian Table 21, follows recommended practice in helping to ensure observer safety when working offshore.

During the Audit Team's investigation of the Shark Guardian's allegations, we interviewed senior staff from the SPC and WCPFC with an overview of the observer programmes within the WCPFC. The Audit Team also interviewed seven observers from the Tuvalu Fisheries and Marshall Island's observer programmes. It was confirmed to the Audit Team that whilst the observer's role can be very challenging, observers are able to undertake their role of 'observe and record' successfully aboard PNA vessels. Having interviewed the observers, the Audit Team believes that their success can be attributed to training and the professional and adaptable approach that is taken by the observers operating within the system. The issuance to each observer of 'Inreach' personal satellite communicators³ that allow messages to be sent and received from any location, also supports observers in their role, both for transmission of data and to enhance observer safety.

The Audit Team also asked interviewees about the observer debriefing process, where each observer is required to work through their report with a senior staff member soon after arriving back in port. The team was informed that debriefing was undertaken faithfully, and that it gives observers the opportunity to raise concerns and confirm understanding of their data. The GEN 3 forms⁴, which summarise a vessel's compliance with WCPFC CMMs and are required to be completed by the observer on every trip, were reported to be the first thing to be checked during debriefing, given the potential need to act quickly with a vessel in the event that non-compliance did occur.

Overall, the Audit Team believes that these results, including the investigations of the cases identified by Shark Guardian, reflect that there is a process in place to address non-compliance, including with respect to the role of the observers aboard the vessels, and it is being followed. This is consistent with the MSC Standard. It is the case that non-

² <https://www.wcpfc.int/doc/circ-2022-40/outcomes-ss4-covid-19-intersessional-decisions>

³ <https://discover.garmin.com/en-GB/inreach/personal/>

⁴ https://oceanfish.spc.int/en/publications/doc_download/1571-16-obs-gen-3-final

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compliance may occur and risks with respect to observers in undertaking their role do exist, but the Audit Team heard consistently from the observers interviewed that they are able to 'observe and report' activity as is required of them.

Nevertheless, the seven observers the Audit Team spoke to almost all highlighted and expressed frustration that they were not usually aware of what happened as a result of their reports of non-compliance being submitted. In essence, information flow back to observers regarding their reports appears to be poor, and limits their confidence in the effectiveness of the system overall.

The Year 3 Audit Team therefore makes a new non-binding recommendation against the certified PNA fishery, that a system should be established to ensure that, to the extent that confidentiality requirements allow, observers can follow the progression of relevant cases through to their conclusion. In essence, information is key, and it seems likely this would help to give observers greater confidence in the management system's effectiveness and in their role within it.

3.2.9.2 CMM 2009-02 (Conservation and Management Measure on the application high seas FAD closures and catch retention).

Shark Guardian states (P.24) that "According to CMM 2009-02, ^[21] fishing vessels are not allowed to discard tuna catches even if the tuna species are considered undersized or unmarketable"

Shark Guardian also stated (P.24) that "Our research suggests that regional and national fisheries governing bodies are not taking cases of discrepancies in bycatch and target catch discard reporting seriously and have not been found to issue penalties on vessels for misreporting of bycatch and target catch. Often only weak warnings are issued to vessel operators. Misreporting is an unfortunate, albeit common practice. Urgent attention and effort is needed to change this trend, as incorrect and wrong reporting will lead to a false interpretation and assessment of the fish stock in the WCPO."

Amongst other Clauses, CMM 2009-02 stipulates:

- Clause 8. *Where the operator of a vessel determines that fish should not be retained on board for reasons related to the size, marketability, or species composition, the fish shall only be released before the net is fully pursed and one half of the net has been retrieved.*
- Clause 9. *Where the operator of a vessel determines that fish should not be retained on board because they are "unfit for human consumption", the following definitions shall be applied:*
 - a. *"unfit for human consumption" includes, but is not limited to fish that:*
 - i. *is meshed or crushed in the purse seine net; or*
 - ii. *is damaged due to shark or whale depredation; or*
 - iii. *has died and spoiled in the net where a gear failure has prevented both the normal retrieval of the net and catch and efforts to release the fish alive; and*
 - b. *"unfit for human consumption" does not include fish that:*
 - i. *is considered undesirable in terms of size, marketability, or species composition; or*
 - ii. *is spoiled or contaminated as the result of an act or omission of the crew of the fishing vessel.*
- Clause 10. *Where the operator of a vessel determines that fish should not be retained on board because it was caught during the final set of a trip when there is insufficient well space to accommodate all fish caught in that set, the fish may only be discarded if:*
 - a. *the vessel master and crew attempt to release the fish alive as soon as possible;*
 - b. *no further fishing is undertaken after the discard until the fish on board the vessel has been landed or transhipped.*

The Audit Team notes, critically, that CMM 2009-02 applies only to vessels operating on the 'high seas' of the WCPFC, which does not include the PNA EEZ where the MSC-certified PNA fishery takes place. Therefore, CMM 2009-02 is not relevant for the PNA fishery. However, for vessels operating on the High Seas, the Clauses noted above evidence that the Shark Guardian statement regarding the prohibition on discarding of tuna catches is incorrect in detail; under the circumstances presented in Articles 8, 9a and 10, operators of vessels on the high seas are permitted to discard tuna.

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For the PNA fishery, the relevant catch retention and reporting requirements are provided in CMM 2021-01 (and predecessors). Clauses 29 and 30 of the CMM are relevant for catch retention, and Clause 48 is relevant for catch reporting, as below:

- Clause 29. *To create an incentive to reduce the non-intentional capture of juvenile fish, to discourage waste and to encourage an efficient utilization of fishery resources, CCMs shall require their purse seine vessels fishing in EEZs and on the high seas within the area bounded by 20oN and 20oS to retain on board and then land or transship at port all bigeye, skipjack, and yellowfin tuna. (Paragraphs 8 to 12 of CMM 2009-02 set out the Commission's rules for catch retention in the high seas.) The only exceptions to this paragraph shall be:*
 - (a) *when, in the final set of a trip, there is insufficient well space to accommodate all fish caught in that set, noting that excess fish taken in the last set may be transferred to and retained on board another purse seine vessel provided this is not prohibited under applicable national law; or*
 - (b) *when the fish are unfit for human consumption for reasons other than size; or*
 - (c) *when serious malfunction of equipment occurs.*
- Clause 30. *Nothing in paragraphs 14-16 and 29 shall affect the sovereign rights of coastal States to determine how these management measures will be applied in their waters, or to apply additional or more stringent measures.*
- Clause 48. *Operational level catch and effort data in accordance with the Standards for the Provision of Operational Level Catch and Effort Data attached to the Rules for Scientific Data to be Provided to the Commission relating to all fishing in EEZs and high seas south of 20N subject to this CMM except for artisanal small-scale vessels shall be provided to the Commission not only for the purpose of stocks management but also for the purpose of cooperation to SIDS under Article 30 of the Convention.*

The requirements for reporting under Attachment K, Annex 1, Clause 1.5 of 'WCPFC 13 Summary Report Attachment G: Scientific data to be provided to the Commission'.⁵

- 1.5 *Information on operations by purse seiners and related gear types*
 - *Weight of fish caught per set, for the following species: albacore, bigeye, skipjack, yellowfin, blue shark, silky shark, oceanic whitetip shark, mako sharks, thresher sharks, porbeagle shark (south of 20°S, until biological data shows this or another geographic limit to be appropriate), hammerhead sharks (winghead, scalloped, great, and smooth), whale shark, and other species as determined by the Commission.*

Under CMM 2021-01, therefore, there are reasons why tuna may be discarded; these may include, for example, where fish are crushed or gear damaged during the fishing process. Further, there is no requirement under CMM 2021-01 specifying the level of accuracy or detail required in catch reporting. Nevertheless, the 'violations' identified by Shark Guardian (as reported in Shark Guardian Table 17, 18 and 19) reflect generally very small quantities of tuna (table, below).

Shark Guardian Table	Year	Vessels	Tuna species 'Violations'	Set # on trip	Specific Information
					DGD = Discarded gear damaged RCC = Retained for crew consumption
17	2018	1	2 (at least 4 sets were undertaken on the trip)	1	12kg SKJ (DGD)
				4	30 kg YFT (RCC)
18	2019	1	9 (at least 37 sets were	3	20 kg YFT (DGD)
				13	30 kg SKJ / 20 kg YFT (DGD)
				16	30 kg SKJ / 80 kg YFT (DGD)

⁵ <https://www.wcpfc.int/doc/data-01/scientific-data-be-provided-commission>

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			undertaken on the trip)	18	40 kg SKJ / 20 kg YFT (DGD), 20 kg YFT (RCC)
				22	30 kg SKJ (DGD)
				24	40 kg SKJ (DGD)
				29	40 kg SKJ (DGD), 30 kg SKJ (RCC)
				35	20 kg SKJ (DGD), 20 kg SKJ (RCC)
				37	10 kg SKJ / 40 kg YFT (DGD)
19	2020	3	5 (at least 16 sets were undertaken on the trip)	3	500 kg SKJ (DGD)
				6	500 kg SKJ (DGD)
				10	80 kg SKJ (DGD)
				12	20 kg SKJ (DGD)
				16	1000 kg SKJ (DGD)
			0 (at least 14 sets were undertaken on the trip)	n/a	----- No 'violations' of tuna reporting recorded -----
			3 (at least 23 sets were undertaken on the trip)	7	300 kg SKJ (DGD)
				9	Vessel reported 5,000 kg catch of SKJ the observer did not witness
				23	Observer recorded 1,591 kg of YFT that the vessel recorded as SKJ

The Audit Team discussed the reporting requirements and the quantities of catch identified in the Shark Guardian report with SPC staff. The context for these figures is that the tuna catch per set within the PNA fishery may exceed 100 tonnes, and routinely average over 30 tonnes. However, because the tuna cannot be weighed when brought aboard the vessels, it is only an estimate of catch weight that is reported by both the vessel crew and the observer. These estimates are based on catch composition, brail capacity and number, and well volume. Vessels may also report catches in whole tonnes, although the small values reported in the table above are likely to be well within the estimation error that will exist within even the best estimates of catch as reported. Nevertheless, it was noted that quantities as identified here do not adversely affect the value of the data or the rigour of the science conducted upon them. Further, it was noted that observer estimates of catch are provided separately and are independent of the data reported by the vessel, and provide the comparative and detailed data that may be required for scientific analyses.

Overall, the Audit team cannot say that catches of tuna are never deliberately misreported by vessels within the certified PNA fishery. However, there is no Total Allowable Catch (TAC) or quota system applied within the PNA fishery which might incentivise under- or over-reporting, and by their nature the catch estimates as provided by vessels and observers are subject to estimation error. CMM 2009-02 is not relevant for the certified PNA fishery, and catch may be discarded, including for reasons of gear damage. Further, the Audit Team was reassured in our discussions with SPC that the quantities of tuna identified in Shark Guardian Tables 17-19 were not significant with respect to science or management.

3.2.9.3 CMM 2011-03 (Conservation and Management Measure for the protection of cetaceans from purse seine fishing operations).

Shark Guardian states (P.18) that "According to CMM 2011-03 (Conservation and Management Measure For Protection Of Cetaceans From Purse Seine Fishing Operations) [17] ... cetaceans, such as ... Bryde's whales (BRW), short finned pilot whale (SWH) and sei whale (SIW) are to be immediately released as soon as possible after the species is brought alongside the vessel, in a manner that results in as little harm to the ... cetacean as possible.

If SSIs are neglected, left to die on deck ..., deliberately left in the net, or if deliberate sets on cetaceans are observed, these incidents should be classified as violations.

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Shark Guardian also states (P.56) that: “Observers reported incidents of SSIs deliberately encircled with tuna schools and neglected and left to suffer or die inside the net or on deck (in contravention to CMM 2011-03...), before being discarded overboard as unwanted or unmarketable species.”

Amongst other Clauses, CMM 2011-03 stipulates:

- Clause 1. CCMs shall prohibit their flagged vessels from setting a purse seine net on a school of tuna associated with a cetacean in the high seas and exclusive economic zones of the Convention Area, if the animal is sighted prior to commencement of the set.
- Clause 2. CCMs shall require that, in the event that a cetacean is unintentionally encircled in the purse seine net, the master of the vessel shall:
 - (a) ensure that all reasonable steps are taken to ensure its safe release. This shall include stopping the net roll and not recommencing fishing operation until the animal has been released and is no longer at risk of recapture; and
 - (b) report the incident to the relevant authority of the flag State, including details of the species (if known) and number of individuals, location and date of such encirclement, steps taken to ensure safe release, and an assessment of the life status of the animal on release (including, if possible, whether the animal was released alive but subsequently died).
- Clause 3. In taking steps to ensure the safe release of the cetacean as required under paragraph 2(a), CCMs shall require the master of the vessel to follow any guidelines adopted by the Commission for the purpose of this measure.
- Clause 4. In applying steps under paragraphs 2(a) and 3, the safety of the crew shall remain paramount.

The data presented in the Shark Guardian report for the PNA fishery relevant to CMM 2011-03 (for the protection of cetaceans) are limited to the following ‘violations’.

Shark Guardian Table	Year	Vessels	Description
15	2019	1	Vessel deliberately set on a tuna school that was associated with a Bryde’s whale (BRW). The entrapped whale escaped by jumping over the net and was able to get away alive yet injured.
			16 Short finned pilot whale (SHW) interacted with secondary gear, feeding outside the net on discard. SHW were not harmed in any way.

The Audit Team interviewed seven observers during the audit of the PNA fishery. All seven had worked as observers since at least 2016, with multiple trips undertaken each year prior to the suspension of activities in 2020. Several confirmed that they had observed and reported on what they considered to be deliberate setting on tuna schools associated with cetaceans. In this regard, deliberate setting is non-compliant with CMM 2011-03, but it is the observer’s role to observe and report, and determining non-compliance is not necessarily straightforward. Specifically, it may be difficult for the observer to determine whether setting on a whale is ‘deliberate’ because the positioning of the animal and timing are critical (i.e., Clause 1 – ‘associated with’ and ‘sighted prior to the commencement of the set’). It is important, also, that the Audit Team was informed by the observers interviewed that typically they did not discuss their opinions or determinations of set type with the vessel captain or fishing master, such that it is apparent that there is potential for there to be differences of opinion with regards to if / when a cetacean was sighted or whether it is associated with the tuna school. Regardless of these potential differences of opinion, the observers were consistent in indicating that they report the situations as they see them. For example, if a free school set is commenced and a whale is then spotted in association, the set should remain designated as a free school set, but a note may be added to the observer’s journal or record highlighting that a whale was observed subsequently.

In the case of the Bryde’s whale, listed in Shark Guardian Table 15, during the Audit Team’s discussion with SPC staff the team was informed that the observer’s workbook for that specific case does not list ‘deliberate setting’, with the comment that the Bryde’s whale managed to escape on its own after pursuing was complete, with ‘Condition A2’ – injured or distressed. It was noted that this does not necessarily reflect illegal practice, and the Audit Team is not in a position

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to determine definitively one way or the other. However, it is understood that no prosecution was sought from this case, which suggests that the evidence of non-compliance was not overwhelming.

With respect to the comment that short-finned pilot whales were observed feeding outside the net on discard, but that 'SHW were not harmed in any way', the Audit Team notes that vessels cannot prevent animals from approaching, and we believe it is clear that this does not represent a violation in any way.

Overall, there may be occasions when purse seine vessels set deliberately on cetaceans, but determining this requires consideration of the evidence in detail by trained debriefers and investigators. It is highlighted that cetaceans may be caught in sets accidentally even with care being taken to minimise the risk of this possibility. It is also highlighted that if a whale is caught, even accidentally, any catch from that set is not MSC-eligible under the terms of the PNA MSC Chain of Custody MoU (PNA 2021), which helps to further minimise risks and incentives where vessels are seeking to benefit from the PNA's MSC certification by targeting free school catches.

3.2.9.4 CMM 2013-05 (Conservation and Management Measure on daily catch and effort reporting).

Shark Guardian states (P.24) that "*Discrepancies in the reporting of retained and discarded bycatch and target species are considered a violation of CMM 2013-05.*"

Shark Guardian also stated (P.11) that "*According to WCPFC CMM 2013-05,[7] vessels are required to produce complete and accurate daily catch and effort information. The data recorded for each day's fishing operations must also include accurate target species and bycatch information for stock assessment and other scientific evaluation purposes. Vessels are required to report information about both retained and discarded target species and bycatch accurately.*"

Amongst other Clauses, CMM 2013-05 stipulates (underlining as originally presented in the CMM text):

- Clause 1. Each CCM shall ensure that the master of each vessel flying its flag in the Convention Area shall complete an accurate written or electronic log of every day that it spends at sea on the high seas of the Convention Area as follows:
- 2. Information recorded for each day with fishing operations shall, at a minimum, include the following:
 - a. *The information specified in sections 1.3 to 1.6 of ANNEX 1 of the Scientific Data to be Provided to the Commission;*

The Audit Team notes, critically, that CMM 2013-05 again applies only to vessels operating on the 'high seas' of the WCPFC, which does not include the PNA EEZ where the MSC-certified PNA fishery takes place. Therefore, CMM 2013-05 is not relevant for the PNA fishery.

As noted previously, for the PNA fishery, the relevant catch retention and reporting requirements are provided in CMM 2021-01 (and predecessors). Clause 48 is relevant for catch reporting, as below:

- Clause 48. Operational level catch and effort data in accordance with the Standards for the Provision of Operational Level Catch and Effort Data attached to the Rules for Scientific Data to be Provided to the Commission relating to all fishing in EEZs and high seas south of 20N subject to this CMM except for artisanal small-scale vessels shall be provided to the Commission not only for the purpose of stocks management but also for the purpose of cooperation to SIDS under Article 30 of the Convention.

The requirements for reporting under Attachment K, Annex 1, Clause 1.5 of 'WCPFC 13 Summary Report Attachment G: Scientific data to be provided to the Commission'.⁶

- 1.5 Information on operations by purse seiners and related gear types
 - *Weight of fish caught per set, for the following species: albacore, bigeye, skipjack, yellowfin, blue shark, silky shark, oceanic whitetip shark, mako sharks, thresher sharks, porbeagle shark (south of 20°S, until biological data shows this or another geographic limit to be appropriate), hammerhead sharks (winghead, scalloped, great, and smooth), whale shark, and other species as determined by the Commission.*

⁶ <https://www.wcpfc.int/doc/data-01/scientific-data-be-provided-commission>

Shark Guardian Table	Year	Vessels	Non-tuna species 'Violations'	Set # on trip	Specific Information
					DGD = Discarded gear damaged RCC = Retained for crew consumption DPU = Discarded protected species condition unknown DPD = Discarded protected species dead DPA = Discarded protected species alive RWW = Retained whole weight DUS = Discarded unwanted species
17	2018	1	0 (at least 4 sets were undertaken on the trip)	n/a	No 'violations' of non-tuna species identified
18	2019	1	0 (at least 37 sets were undertaken on the trip)	n/a	No 'violations' of non-tuna species identified
19	2020	3	8 (at least 16 sets were undertaken on the trip)	4	3 silky shark @ 26 kg (DPU), 5 silky shark @ no weight (DPD)
				5	1 silky shark @ 40 kg (DPU)
				8	3 silky shark @ 36 kg (DPA)
				9	2 silky shark @ 35 kg (DPU), 1 blue marlin @ 45 kg (RWW)
				13	1 blue marlin @ 50 kg (RWW)
				14	1 silky shark @ 20 kg (DPU)
				15	1 Oceanic whitetip shark @ 20 kg (DPU)
				16	8 silky shark @ 86 kg (DPU)
			5 (at least 14 sets were undertaken on the trip)	2	1 blue marlin @ 70 kg (DUS)
				7	2 silky shark @ 100 kg (DPD)
				8	5 silky shark @ 200 kg (DPD), 1 devil ray @ 400 kg (DUS)
				9	1 silky shark @ 30 kg (DPD)
				14	Rainbow runner @ 30 kg / Mackerel scad @ 10 kg (DUS), Rainbow runner @ 20 kg / Mackerel scad @ 10 kg (RWW)
			3 (at least 23 sets were undertaken on the trip)	n/a	----- No 'violations' of non-tuna species identified on the third vessel

The Audit Team discussed the data on non-reporting of non-tuna species. Here, SPC was able to go into the original catch reports and confirmed that the vessels identified were not systematically failing to report catches of shark or other non-target species – their data routinely included reports of catches of non-tuna species. In essence, these failings appear to be estimation, counting or reporting errors, as may occur due to undertaking busy fishing operations and where the intent with the shark species is to return them to the water as soon as possible. The DPA (discarded protected species alive) and DPU (discarded protected species condition unknown) codings that were applied to more than half of the sharks identified here implies that the animals were returned quickly once detected by the crew (a DPD coding may imply otherwise, although any animal that is not detected until late in the brailing process is very unlikely to be survive the capture and discarding process due to the stress of the fishing operation).

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It is noted that rainbow runner and mackerel scad are not listed as species that are required to be reported by vessels under Attachment K, Annex 1, Clause 1.5 of 'WCPFC 13 Summary Report Attachment G: Scientific data to be provided to the Commission'.⁷

Overall, the Year 3 Audit Team is satisfied that the evidence presented does not reflect that there is systematic, deliberate misreporting across the fishery. Nevertheless, it is apparent that reporting by some vessels is not fully comprehensive, and we therefore make a new non-binding recommendation against the certified PNA fishery, that efforts are made to ensure catch reporting for SSIs is undertaken rigorously by all vessels in support of scientific and management initiatives.

3.2.9.5 CMM 2019-04 (Conservation and Management Measure for Sharks).

Shark Guardian states (P.14) that "CMM 2019-04,[10] states that WCPFC members (CCMs)⁸ shall take measures necessary to prevent their fishing vessels from retaining on board (including for crew consumption), transshipping and landing of shark fins. Any harvesting of shark fins is in contravention of this CMM."

Amongst other Clauses, CMM 2019-04 stipulates:

- Clause 7. CCMs shall take measures necessary to require that all sharks retained on board their vessels are fully utilized. CCMs shall ensure that the practice of finning is prohibited.
- Clause 12. CCMs shall take measures necessary to prevent their fishing vessels from retaining on board (including for crew consumption), transshipping, and landing any fins harvested in contravention of this CMM.
- Clause 17. The Commission shall adopt and enhance bycatch mitigation measures and develop new or amend, if necessary, existing Shark Safe Release Guidelines¹ to maximize the survival of sharks that are caught and are not to be retained. Where sharks are unwanted bycatch they should be released alive using techniques that result in minimal harm, taking into account the safety of the crew. CCMs should encourage their fishing vessels to use any Commission adopted guidelines for the safe release and handling of sharks.
- Clause 19. Development of new WCPFC guidelines or amendment to existing guidelines for safe release of sharks should take into account the health and safety of the crew.
- Clause 20. Oceanic whitetip shark and silky shark
 - (1) CCMs shall prohibit vessels flying their flag and vessels under charter arrangements to the CCM from retaining on board, transshipping, storing on a fishing vessel or landing any oceanic whitetip shark, or silky shark, in whole or in part, in the fisheries covered by the Convention.
 - (2) CCMs shall require all vessels flying their flag and vessels under charter arrangements to the CCM to release any oceanic whitetip shark or silky shark that is caught as soon as possible after the shark is brought alongside the vessel, and to do so in a manner that results in as little harm to the shark as possible, following any applicable safe release guidelines for these species.
- Clause 21. Whale shark
 - (1) CCMs shall prohibit their flagged vessels from setting a purse seine on a school of tuna associated with a whale shark if the animal is sighted prior to the commencement of the set.
 - (5) CCMs shall require that, in the event that a whale shark is incidentally encircled in the purse seine net, the master of the vessel shall:
 - (a) ensure that all reasonable steps are taken to ensure its safe release.; and
 - (b) report the incident to the relevant authority of the flag State, including the number of individuals, details of how and why the encirclement happened, where it occurred, steps taken to ensure safe release, and an assessment of the life status of the whale shark on release.
 - (6) In taking steps to ensure the safe release of the whale shark as required under subparagraph (5)(a) above, CCMs shall encourage the master of the vessel to follow the WCPFC Guidelines for the Safe Release of Encircled Whale Sharks (WCPFC Key Document SC-10)².
 - (7) In applying steps under sub-paragraphs (1), (5)(a) and (6), the safety of the crew shall remain paramount.
- Clause 29. This CMM shall become effective on November 1st 2020 and shall replace CMM 2010-07, 2011-04, 2012-04, 2013-08, and 2014-05 at that time.

⁷ <https://www.wcpfc.int/doc/data-01/scientific-data-be-provided-commission>

The Shark Guardian raised various cases of interactions by vessels in the PNA fishery with sharks as evidence of 'violations'. These are listed in Tables 15 and 16 as 'SSI interactions', where silky shark and oceanic whitetip shark are included within the list of species considered to be 'species of scientific interest', as below:

Shark Guardian Table	Year	Vessels	Set # on trip	Description
				DPU = Discarded protected species condition unknown DPD = Discarded protected species dead DPA = Discarded protected species alive
15	2019	1 (at least 37 sets on trip)	18	1 silky shark @0.02mT landed dead during brailing and was discarded (DPD).
			24	1 silky shark @0.02mT landed dead in a brail and was discarded (DPD).
			29	1 silky shark @0.04mT landed dead in a brail and was discarded (DPD).
			35	1 silky shark @0.03mT landed alive in a brail and was discarded while still alive (DPA). Another 7 silky sharks @0.2mT landed dead in brails and discarded (DPD).
			37	2 silky sharks @0.06mT landed alive and were discarded still alive (DPA). 41 silky sharks @1mT landed dead in brails, they were discarded (DPD).
16	2020	3 (at least 16 sets on trip)	4	3 silky sharks @0.026mT discarded (DPU) and 5 silky sharks landed on deck during hauling, discarded dead (DPD).
			5	1 silky shark @0.04mT (DPU).
			8	3 silky sharks @0.036mT (DPA).
			9	2 silky sharks @0.035mT (DPU).
			14	1 silky shark @0.02mT (DPU).
			15	1 oceanic whitetip shark @0.02mT (DPU).
			16	8 silky sharks @0.086mT (DPU)
		(at least 14 sets on trip)	7	2 silky sharks @0.1mT that landed alive and healthy (A1) during set; both were discarded dead (DPD).
			8	5 silky sharks @0.2mT that landed alive and healthy (A1) during set, all discarded dead (DPD).
			9	1 silky shark @0.03mT that landed alive and well (A1) during the set, it was later discarded dead (DPD).
			14	6 silky sharks @0.42mT that all landed alive and well (A1) during the set, all discarded dead (DPD).
		(at least 23 sets on trip)	7	10 silky sharks @0.445mT that all landed alive and injured (A2) during the set, all discarded dead (DPD).
			6	1 oceanic whitetip shark landed on deck. Shark was dead when first sighted before brailing began. Brailed and discarded dead (DPD).
			17	2 silky sharks (FAL) landed on deck. They were first sighted during brailing process, and both discarded dead (DPD).
			23	1 silky shark landed on deck. It was first sighted during brailing process and then discarded dead (DPD).

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With regard to discarding shark species, the Audit Team notes that PNA vessels, in common with other WCPFC purse seine vessels, are not permitted to retain silky shark or oceanic whitetip sharks, or any part thereof. As such, discarding of these species is absolutely what is required (i.e., as reflected in the DPU, DPD or DPA fate codes in the table above), with live release if possible, albeit that the Audit Team notes the vital elements of Clause 17 and 19 that the safety of the crew is paramount in this regard. Regrettably, even with the best intentions, silky sharks and other species often do not survive fishing, particularly because they may not be seen in the net until late in the process (as evidenced by some of the comments in the table above). Even if animals are caught in good condition but are subsequently released dead, however, the Audit Team is not in a position to judge if discarding was undertaken adequately in the manner directed under the CMM. In some cases, for example, sharks may be difficult or dangerous to handle such that the release is delayed, or there may have been other, competing safety concerns that occurred as a live shark was brought on deck that meant the crew were unable to attend to it quickly – simply, it is not possible to say, and we believe this is reflected in the writing of safe release ‘guidelines’ rather than ‘requirements’.

Regarding shark finning, this continues to be a key focus for the MSC, and for assessment and Audit Teams in assessing a fishery’s compliance against the Standard. We note that a recommendation on shark finning was raised against the PNA fishery when it was recertified in 2018, and reporting against this recommendation has been undertaken rigorously at each annual audit of the PNA fishery (see Section 4.4.1).

We also note that the MSC’s latest interpretation on shark finning⁸ states:

“Through the introduction of the MSC Fisheries Certification Process (FCP) v2.2 and the retractions of the interpretation “Shark finning requirements”¹ on September 25 2020, the MSC has confirmed that shark finning is not to be undertaken within MSC certified fisheries. ...

If there is objective verifiable evidence that indicates shark finning is taking or has taken place on board a vessel that operates in a UoA/UoC within the last two years, then this vessel should be excluded from the UoA(s)/UoC(s) that it operates by the fishery client(s) and should not operate in the UoA(s)/UoC(s) or be eligible to access any fishery certificate for two years from the date of exclusion.”

In this regard, the Audit Team notes that the Shark Guardian’s single allegation of shark finning against a vessel engaged in the certified PNA fishery was that “A 25 kg bag of shark fin was confiscated from the vessel in port Noro.” Footnote 26 in the report then stated that the allegation was “...based on unverified online discussions backed up by personal communications.” The Audit Team requested additional information from Mr. Hofford as an author of the Shark Guardian report, but no further information was provided. We note there was no observer report to confirm the allegation, and the Secretariat to the Pacific Community (SPC) confirmed that there is no information contained within any official record. In the absence of objective, verifiable evidence, the Audit Team can take no further action in this case.

Overall, the Audit Team notes stakeholder concerns regarding shark catches and the potential for finning. Discarding sharks is required, however, and the observer data presented above confirm that discarding occurred – these are not violations. There is also no objective, verifiable evidence of finning having occurred in the PNA fishery in the last two years, as is the requirement of the MSC Standard as confirmed through interpretation.

3.2.9.6 CMM 2019-05 (Conservation and Management Measure on Mobulid rays caught in association with fisheries in the WCPFC Convention Area).

Shark Guardian makes no particular comment with respect to CMM 2019-05, other than to say (P. 58) that there were “87 cases of sharks and rays interactions and landings cases in relation to CMM 2013-05, CMM 2019-04 and CMM 2019-05.”

Amongst other Clauses, CMM 2019-05 stipulates:

- Clause 3. CCMs shall prohibit their vessels from targeted fishing or intentional setting on mobulid rays in the Convention Area.
- Clause 4. CCMs shall prohibit their vessels from retaining on board, transshipping, or landing any part or whole carcass of mobulid rays caught in the Convention Area.
- Clause 5. CCMs shall require their fishing vessels to promptly release alive and unharmed, to the extent practicable, mobulid rays as soon as possible, and to do so in a manner that will result in the least possible

⁸ <https://mscportal.force.com/interpret/s/article/Update-29-6-2021-Clarification-of-shark-finning-conviction-scope-requirements-approach-to-take-when-there-s-evidence-of-shark-finning-in-UoA-UoC-FCPv2-2-7-4-2-10-FisheriesStandardv2-01-Pls-1-2-1-e-2-1-2-d-2-2-2-d-SA2-4-3-SA2-4-7-SA3-5-2-SA3-8-2>

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harm to the individuals captured. CCMs should encourage their fishing vessels to implement the handling practices detailed in Annex 1, while taking into consideration the safety of the crew.

- Clause 8. *CCMs shall ensure that fishers are aware of proper mitigation, identification, handling and releasing techniques and should encourage them to keep on board all necessary equipment for the safe release of mobulid rays. For this purpose, CCMs are encouraged to use the handling practices included as Annex 1.*
- Clause 9. *CCMs are encouraged to investigate at-vessel and post-release mortality in mobulids including, but not exclusively, the application of satellite tagging programs to investigate the effectiveness of this measure and more effective methods of live release.*
- Clause 10. *Observers shall be allowed to collect biological samples of mobulid rays caught in the WCPFC Convention Area that are dead at haul-back.*
- Clause 11. *This measure will take effect on 1 January 2021.*

Here LRQA notes, critically, that the Shark Guardian report's analysis of PNA data was based on observer data covering 19 trips from the years 2018, 2019 and 2020. Clause 11 of CMM 2019-05 stipulates that the CMM comes into force on 1st January 2021. The CMM is therefore not relevant for the period of time covered by the data examined by Shark Guardian.

Nevertheless, the PNA certification has focused on Mobulids since the fishery was recertified in 2018. Specifically, Conditions 5 and 6 were set against the fishery, such that *"the client shall demonstrate that there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of Manta and devil rays as ETP species."* The assessment team has reported against these conditions in each annual audit report of the fishery since it was recertified (see Section 4.3.2).

3.2.9.7 Overall conclusions from the Shark Guardian report

The Shark Guardian report presents observer data as evidence that MSC fisheries in the WCPFC are routinely and systematically in violation of WCPFC CMMs, and of the MSC Standard, and that CABs have been negligent in undertaking their role in assessing these fisheries. The PNA Audit Team cannot and does not comment on the Shark Guardian report with respect to other fisheries identified in the report – our focus is the certified PNA fishery. In this regard, we have reviewed the evidence in detail, including through discussing the report with the client, SPC and WCPFC staff, observers from two different programmes and in a call with one of the authors of the report. We believe the evidence as presented in our analysis is that Shark Guardian misunderstands or misrepresents the data and/or the measures that are relevant to the PNA fishery, that the PNA fishery is not routinely and systematically in violation of WCPFC CMMs or the MSC Standard, and that LRQA has not been negligent.

Nevertheless, the PNA Audit Team acknowledges the importance of the role undertaken by independent observers in WCPFC fisheries, and we recognise that there are significant and/or serious risks that observers may face in undertaking their role. In this regard, through the interviews we undertook, we were left in no doubt that PNA observers are committed to 'observe and report' what they see within the fishery, and it was confirmed that debriefing was thoroughly and routinely undertaken. However, we believe that a new non-binding recommendation, that a system should be established to ensure observers can, to the extent that confidentiality requirements allow, follow the progression of relevant cases through to their conclusion, is appropriate and will, if acted upon, provide observers with greater confidence in the management system's effectiveness and in their role within it.

We also believe that a new non-binding recommendation that efforts are made to ensure catch reporting for SSIs is undertaken rigorously by all vessels in support of scientific and management initiatives should help to focus attention on minor reporting issues that may reflect less than best practice. We highlight that under normal circumstances in the absence of Covid-19 limitations, observers are present on 100% of PNA fishery vessels, and their role includes the collection of very detailed catch data, including of species that are not required to be reported by operators when vessels are fishing inside EEZs.

3.3 Version details

The following versions of the MSC Fisheries Program documents were used for this year 3 audit (Table 6).

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Table 6. Fisheries program documents versions

Document	Version number
MSC Fisheries Certification Process	Version 2.2
MSC Fisheries Standard	Version 2.0*
MSC General Certification Requirements	Version 2.4
MSC Surveillance Reporting Template	Version 2.1

* default assessment tree

4 Results

4.1 Surveillance results overview

4.1.1 Summary of conditions

The following table summarises the progress of the six conditions set against the fishery.

Table 7. Summary of conditions

Condition number	Condition	PI	Status	PI original score	PI revised score
1	UoA 1: Skipjack tuna Sla) By the fourth surveillance audit, the client will need to demonstrate that the harvest strategy for skipjack tuna is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.	1.2.1	On target	70	n/a
2	UoA 1: Skipjack tuna Sla) By the fourth surveillance audit, the client will need to demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Slb) By the fourth surveillance audit, the client will need to provide evidence that the HCRs are likely to be robust to the main uncertainties. Slc) By the fourth surveillance audit, the client will need to demonstrate that available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	1.2.2	On target	60	n/a
3	UoA 2: Yellowfin tuna	1.2.1	On target	70	n/a

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	Sl(a) By the fourth surveillance audit, the client will need to demonstrate that the harvest strategy for yellowfin tuna is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.				
4	<p>UoA 2: Yellowfin tuna</p> <p>Sl(a) By the fourth surveillance audit, the client will need to demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY.</p> <p>Sl(b) By the fourth surveillance audit, the client will need to provide evidence that the HCRs are likely to be robust to the main uncertainties.</p> <p>Sl(c) By the fourth surveillance audit, the client will need to demonstrate that available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.</p>	1.2.2	On target	60	n/a
5	<p>UoA 1: Skipjack tuna (NB. This is the same as Condition 6 for UoA 2.)</p> <p>Sl(a) By the fourth surveillance audit, the client will need to demonstrate that there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of Manta rays and devil rays.</p>	2.3.2	On target	75	n/a
6	<p>UoA 2: Yellowfin tuna (NB. This is the same as for Condition 5 for UoA 1.)</p> <p>Sl(a) By the fourth surveillance audit, the client will need to demonstrate that there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of Manta rays and devil rays.</p>	2.3.2	On target	75	n/a

4.1.2 Total Allowable Catch (TAC) and catch data

The following table confirms the catch data for the fishery in 2020.

Table 8. Catch data – UoC 1 – skipjack

WCPFC skipjack tuna catch	Year	2020	Amount	1,769,202 t
PNA skipjack tuna purse seine catch	Year	2020	Amount	1,035,584 t
PNA UoC skipjack tuna catch	Year	2020	Amount	510,348 t
PNA UoC skipjack tuna catch	Year	2019	Amount	687,069 t
PNA UoC share of total PNA skipjack purse seine catch	Year	2020	Amount	49%
PNA UoC share of WCPFC skipjack catch	Year	2020	Amount	39%

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Table 9. Catch data – UoC 2 – yellowfin

WCPFC yellowfin tuna catch	Year	2020	Amount	643,251 t
PNA yellowfin tuna purse seine catch	Year	2020	Amount	317,424 t
PNA UoC yellowfin tuna catch	Year	2020	Amount	140,575 t
PNA UoC yellowfin tuna catch	Year	2019	Amount	145,260 t
PNA UoC share of total PNA yellowfin purse seine catch	Year	2020	Amount	44%
PNA UoC share of WCPFC yellowfin catch	Year	2019	Amount	23%

4.2 Re-scoring Performance Indicators

No changes were made to scoring at this Year 3 audit report.

4.3 Conditions

4.3.1 Closed Conditions

No conditions were closed at this Year 3 audit report.

4.3.2 Progress against conditions

Condition 1 (Skipjack tuna – UoC 1)

Performance Indicator	1.2.1 (Sla)
Score	70
Justification	<p>Current management measures are expected to ensure that fishing mortality and spawning biomass remain at levels that will achieve the stock management objective, meeting SG60 requirements. The basis for SG80 not being met is predominantly that some Hong Kong meeting participants considered that there is no clear linkage between potential catch and allocated effort, that the processes for determining VDS TAE and PAE are not transparent and that it is unclear how the TAE is determined, based on stock status advice. Overall, it was agreed at the harmonisation that for the WCPFC tuna fisheries, including those under the PNA's VDS, that there is insufficient evidence that the harvest strategy is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving management objectives</p> <p>There has been progress in satisfying the requirements for this PI in recent years. CMM 2014-06 has been adopted, defining the approach for a harvest strategy with harvest controls and reference points to be adopted. A work plan for implementation was accepted at the 2015 WCPFC Commission meeting (see Appendix 8). Limit and target reference points have been adopted for skipjack. The assessors feel there is a strong case for this scoring issue being met.</p> <p>The MSC harmonisation meeting (Hong Kong, 21-22 April 2016) and subsequent discussions between the assessors and other CABs did not reach consensus on the scoring of this issue and the findings</p>

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	of the Hong Kong meeting stand, i.e. 1.2.1a meeting SG60 requirements only, and PI 1.2.1 having an overall score of 70.
Condition	By the fourth surveillance audit, demonstrate that the harvest strategy for skipjack tuna is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.
Milestones	<p><u>Years 1, 2 and 3: (Resulting score 70)</u></p> <p>The client will need to provide evidence that it is actively working to ensure that the harvest strategy for WCPO skipjack tuna is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving the management objectives reflected in the target and limit reference points. This evidence will include a summary of the actions taken by the client and other relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan.</p> <p><u>Year 4: (Resulting score ≥80)</u></p> <p>The client will need to provide evidence that the harvest strategy is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving management objectives reflected in PI 1.1.1 SG80.</p>
Client Action Plan	<p>NB: The PNA is not in agreement with the outcomes of the Hong Kong Harmonisation Meeting in respect to PI 1.2.1, and has submitted its evidence for reconsideration (See Appendix 5, this report). That said we understand the binding requirements to set out an Action Plan for this condition.</p> <p><u>By Year 1-2018 PNA will:</u></p> <ul style="list-style-type: none"> Review the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1 Support the implementation of a harvest strategy process for the WCPO, including the adoption of a harvest strategy for WCPO skipjack tuna. Support the implementation of a WCPFC Harvest Strategy Workplan that includes a process for development of a harvest strategy for WCPO skipjack tuna. Promote for consideration by the WCPFC, the effectiveness of measures for WCPO skipjack tuna management within the Tropical Tuna CMM. <p><u>By Year 2-2019 PNA will:</u></p> <ul style="list-style-type: none"> Develop a strategy to address any shortfalls in the Year 1 Review of the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1 for implementation for application until a HCR for WCPO skipjack tuna is implemented. Work towards the adoption of a formal harvest strategy for WCPO skipjack tuna. Implement actions to raise awareness of the need for any additional WCPFC skipjack tuna management measures among PNA Members. Support the undertaking of a new assessment for WCPO skipjack tuna by 2020. <p><u>By Year 3-2020, PNA will:</u></p> <ul style="list-style-type: none"> Prepare an assessment of how the harvest strategy for WCPO skipjack tuna responds to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1

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	<p>Provide evidence of support for the adoption of a formal harvest strategy for WCPO skipjack tuna.</p> <p>Raise awareness of the need for any additional WCPFC skipjack tuna management measures among PNA Members.</p> <p>Promote the adoption by PNA and/or the WCPFC of any additional management measures needed for WCPO skipjack tuna.</p> <p><u>By Year 4-2021, PNA will provide evidence to show that:</u></p> <p>The harvest strategy for WCPO skipjack tuna is responsive to the state of the stock and the elements of the harvest strategy working together towards achieving management objectives reflected in the target and limit reference points.</p> <p><u>2nd audit note (2021):</u></p> <p><u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u></p>
Consultation on condition	As P1 requirements are stock-wide, meeting this condition will require work to be done through the WCPFC.
Progress on Condition (Year 1)	<p>A submission by PNA on progress in addressing this condition is at Section 7.2 (Report 1). In summary, PNA indicate that they have:</p> <ul style="list-style-type: none"> a) Reviewed the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1; b) Simplified and clarified the manner in which the VDS TAE is determined; c) Continued to support the implementation of a harvest strategy process for the WCPO. d) Played a major role in the revision of Tropical Tuna CMM to enhance the effectiveness of measures for WCPO skipjack tuna management. <p>As noted in the re-certification report (Box 1, Harmonisation Section, Blyth-Skyrme et al. 2018), the score of 60 for PI 1.2.1 Sla was determined at a harmonisation meeting in Hong Kong in early 2016; participants at the meeting considered that there was no clear linkage between potential catch and allocated effort, that the processes for determining VDS TAE and PAE were not transparent, and that it was unclear how the TAE was determined, based on stock status advice. Neither the Team Leader (i.e. Rob Blyth-Skyrme) nor the P1 expert (i.e. Kevin McLoughlin) for the PNA Tuna Fishery reassessment were present for the Hong Kong meeting, but in keeping with MSC requirements for harmonisation, and because P1 is scored for the whole stock (such that measures to score 80 need to be applied and effective for the whole stock), PI 1.2.1 Sla for skipjack tuna and yellowfin tuna was scored consistent with other WCPO tuna fisheries as having met SG60 requirements but not SG80.</p> <p>PNA disagreed with this outcome, in particular for PI 1.2.1a for skipjack tuna (see CAP, above), and has made submissions to explain this position to Assessment Teams undertaking some of the subsequent MSC assessments of skipjack in the WCPO. In April 2017, PNA filed an objection to a Final Report for Talley's New Zealand Skipjack Tuna Purse Seine fishery, objecting to the scoring of PI 1.2.1 at 70 rather than at 80. The objection proceedings did not result in a change to Talley's or harmonized scores. More recently, PNA submitted a stakeholder comment for consideration in the MSC assessment of the Western Pacific Sustainable Tuna Alliance (WPSTA) skipjack and yellowfin free school purse seine fishery, articulating their position regarding the scoring of 1.2.1a for skipjack (see Appendix 3 of the WPSTA Public Certification Report (WPSTA 2018). The WPSTA assessment team (and other teams assessing the skipjack harvest strategy), have concluded that deficiencies in the harvest strategy identified previously remain (resulting in the PI 1.2.1 score of 70), particularly while there was no harvest control rule. A core concern identified in the WPSTA PCR under PI 1.2.1 relative</p>

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to PNA is that there is a lack of a clear link between the Party Allowable Effort (PAE) or Total Allowable Effort (TAE) and scientific advice on stock status.

In addition to the Talley's objection and the submission to the WPSTA, PNA have provided further comment on this issue at Section 7.2.4.

The Audit Team for the PNA Tuna Fishery reviewed information again this year, including information collected and collated since the fishery was recertified, and agree that there is merit in the position put by PNA for PI 1.2.1, especially in relation to the link between the PAE and scientific advice on stock status. The origin of the stated concern that a clear link between the PAE and scientific advice on stock status is lacking appears to be the first MSC assessment of the PNA unassociated fishery (Banks et al. 2011) which comments on this lack of a clear link as being a weakness of the VDS. This identified weakness was a factor in a condition on the original assessment for PI 3.2.2 on decision-making processes. The condition indicated that in meeting its requirements, PNA may consider *"The link between the VDS TAEs and WCPFC requirements and the scientific advice should be clearly established by the PNA. Records of meetings should demonstrate discussion on VDS TAEs, that scientific advice is incorporated into the decision-making process, and that PNA actions are being agreed upon and implemented"*. It is noted that this condition was closed at the 2nd surveillance audit for the fishery in December 2013.

PNA argue that there have been changes since the original assessment of the fishery which clarify the link between the TAE and the scientific advice on stock status. In its submission to the WPSTA MSC assessment, PNA provide a number of statements which they believe support their position. As indicated above, those arguments have not been accepted as a reason to change the harmonised scoring for PI 1.2.1, hence are not repeated in detail here, though there is little commentary by CABs on the statements made by PNA. Section 7.2.4 provides additional comment from PNA on recent developments on the issue. Under V2.1 where no agreement is reached, the lowest score is applied meaning no change to scores. PNA outline the steps involved in the preparation of CMM 2017-01 and CMM 2018-01 which are described by the Commission as measures to provide for a robust transitional management regime that ensures the sustainability of bigeye, skipjack, and yellowfin tuna stocks in accordance with the agreed work plan for the adoption of harvest strategies under CMM 2014-06. These steps demonstrate the scientific input to the development of the CMMs and PNA's role in their development. In Section 7.2.4, PNA acknowledge that there were some complexities in the determination of the TAE but suggest that these have now been simplified to make the process of determining the TAE more transparent, for example, effort limits have been reformulated as numbers of days rather than the previously used 2010 effort levels.

Effort creep

An additional concern raised in relation to 1.2.1a for skipjack stated in the WPSTA PCR is "how the VDS will deal with evidence of effort creep from increasing size of fishing vessels and increases in the number of sets per fishing day and tonnage caught per fishing day". Effort creep for purse seine fisheries is acknowledged in the skipjack stock assessments as an issue to be dealt with. At SC12, candidate indicators of effort creep in the WCPO purse seine fishery were reviewed at the request of the PNA (Pilling et al. 2016). Muller et al. (2018) and VDSTSC (2019) provide an updated examination of the candidate effort creep indicators. Three potential proxies for effort creep are examined:

- Trends in tuna catch levels, catch rates, and alternative fishing effort values;
- Estimates of trends in vessel size and other characteristics;
- Trends in estimated catchability from WCPFC stock assessment models.

The details of the findings for these proxies are found in the cited references. VDSTSC (2019) indicates that there are recent positive trends in the majority of effort creep indicators and that further work is planned to evaluate effort creep.

As summarised in VDSTSC (2019): *"Although key indicators show increasing trends, uncertainty remains given the difficulty in tying changes in indicators back to 'effective effort'*. While work is ongoing to identify and evaluate effort creep, an alternative approach is to develop management approaches,

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including harvest control rules, that can 'automatically' adjust for effort creep or that can function well despite the difficulties in quantifying it.

Within the context of the PNA VDS, the Parties must consider whether any observed effort creep is 'detrimental to the fishery' and whether any management action is necessary. Possibly the biggest risk to the VDS and the fishery from an effort creep perspective is that effort creep is masking a declining stock. In situations where stock status indicators such as CPUE are hyperstable, changes in the biomass tend to be detected long after the biomass has declined to a point at which significant management action is required to rebuild it. In this context, disentangling the changes in underlying biomass from stability in CPUE and changes in effective effort is essential. Work to resolve this should be given a high priority, as should identifying harvest control rules that mitigate the effect of effort creep or define management actions that are insensitive to its effects.

Within the VDS, a vessel day varies according to the size of the vessel. One vessel day counts as 0.5 VDS days for vessels of overall length <50m; a vessel >80m overall length must buy 1.5 VDS days per day fishing. PNA considers that this acts as a built-in disincentive to effort creep. Annex 1 of VDSTSC (2019) provides figures comparing patterns of CPUE by vessel length from logbooks for two periods, 2013 to 2017 and 2015 to 2017. These figures reveal the decline in the number of vessels >80m. The figures do not suggest that CPUE has changed greatly with the entry of more vessels <80m. Nevertheless, dealing with effort creep is an ongoing issue and an important component of harvest control rule development.

Bigeye tuna

Stock assessment of bigeye tuna in 2017 indicates that it is not overfished and overfishing is not occurring. However, prior to these assessments, indications were that the species was close to its limit reference point. A perceived lack of action to reduce fishing mortality on bigeye tuna at the time of this scientific advice on its status is also cited by some CABs as reason for SI 1.2.1a not being met for skipjack despite its healthy status, on the basis that it reduces the level of confidence that the harvest strategy would be responsive to the state of the stock or that the elements will work together when required to do so to achieve the management objectives.

PNA (Section 7.2.4) suggest that although it took time for actions to be agreed, effective actions were progressively introduced to reduce effort and catch when the scientific advice was that the stock was overfished through FAD closures adopted in CMMs. Section 7.2.4 shows a figure from an SPC presentation to the 24th annual meeting of the Parties to the Palau Arrangement (March 2019) indicating the reductions in bigeye catch due to the FAD closures, suggesting an overall reduction of 22% for the period 2009-2017.

It should be noted that the latest time period for the most recent bigeye assessment (2017 and the 2018 update) is 2015, hence there is no direct information about the impact of the CMMs after that time period (other than projections).

The measures introduced in the tropical tuna CMMs do suggest that the harvest strategy was responding to the scientific advice on the state of the bigeye stock.

Lack of a harvest control rule and PI 1.2.1

Some CABs have suggested that SI 1.2.1a cannot meet SG80 requirements without an agreed harvest control rule having been adopted. For example, the WPSTA PCR (p11) states that "*In Principle 1, two of the PIs (1.2.1 and 1.2.2 for both skipjack and yellowfin) received scores under SG80, resulting in four conditions. Both conditions are rooted in a lack of a clear harvest control rule linked to the status of the skipjack and yellowfin stocks.*"

Whilst it is clearly preferable that a formal HCR is adopted, the Audit Team does not believe that a condition is necessarily required for both PI 1.2.1 and PI 1.2.2 without this having happened, and that PI 1.2.1 can meet SG80 requirements prior to the adoption of an agreed HCR.

Effectiveness of current harvest strategy

As shown in Section 7.2.4, the 4 major tuna species in the WCPO continue to be not overfished and not subject to overfishing. This could be taken as being indicative of an effective harvest strategy, but

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at a minimum it indicates that the harvest strategy as it stands has not resulted in poor outcomes for stock status. There is considerable work being undertaken for the further development of the WCPO harvest strategy to satisfy the requirements of the CMM 2014-06 workplan. For example, a Special WCPFC Intersessional Meeting to Progress the Draft Bridging Measure for Tropical Tunas (for CMM 2017-01, CMM 2018-01), was held in August 2017. As a result, SPC was tasked with evaluating the likely consequences of a range of different management options reflecting the approaches to be adopted in the CMMs for skipjack, yellowfin and bigeye, based on the latest assessments for each stock (SPC 2017). A series of options were evaluated based on the probability of future (2045) biomass and fishing mortality in relation to reference points. Uncertainty was captured using deterministic projections from each of the stock assessment models within the 'uncertainty grid' used by the Scientific Committee to provide advice (bigeye: 72 models, yellowfin: 48 models, skipjack: 54 models). Future catchability of each fleet within the model was assumed to be constant at the level estimated in the final year of the stock assessment (i.e. no future effort creep is assumed). For skipjack, 2013-15 purse seine effort conditions (longline fishing levels have little influence on skipjack stock status) are predicted to maintain the spawning biomass depletion around the target reference point ($0.5SB_{F=0}$). Median F/F_{MSY} falls slightly compared to that estimated within the assessment, while there is no risk of the stock falling below the LRP, or of fishing mortality increasing above F_{MSY} levels.

Although further development of the harvest strategy is required and the projections discussed above do not capture the full range of uncertainty, indications are that the harvest strategy for skipjack tuna is effective.

The required elements of the harvest strategy are set out in CMM 2014-06 (operational objectives; target and limit reference points; acceptable levels of risk of not breaching limit reference points; monitoring strategy; harvest control rules; evaluation of harvest control rules against management objectives). Elements other than the harvest control rules are in place under the current harvest strategy. The SG80 requirement is that the harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives. Information above suggests that WCPFC decision-making is informed by the evaluation of different options and that the harvest strategy has been responsive. The approach taken in the development of CMM 2017-01 and CMM 2018-01 show that PNA and WCPFC work together and the PNA VDS is incorporated into the measures adopted.

Outcome

A coordinated approach was agreed by the different CABs involved in tuna certifications regarding meeting conditions on tuna fisheries. This was submitted as a Variation Request in December 2018 and subsequently accepted by the MSC in February 2019 (<https://cert.msc.org/FileLoader/FileLinkDownload.aspx/GetFile?encryptedKey=p3uFTqdX1oHTX5nuicz1vOEncR9PBqQh0eNLCsnYIJHaGrGit1IU0FIfaxlkZP/D>). More details are provided in Section 7.3). Notwithstanding this Variation Request, the above information suggests that consideration could be given to re-scoring PI 1.2.1 Sla as meeting the SG80 requirements. However, after LR contacted other CABs involved in MSC tuna fishery certifications and provided the rationale above, and it was reported to the Audit Team by LR that there is not universal agreement that the WCPO skipjack tuna harvest strategy meets SG80. As such, under MSC process v.2.1, the score cannot be changed and it remains at SG60 (PB1.3.3, MSC 2018).

In any case, PNA continue to play a very important role in the WCPO skipjack tuna fishery and provide continued support for the WCPO harvest strategy implementation process. PNA has, along with other FFA Members, led an effort to see greater priority given to harvest strategy development within the WCPFC processes.

The CMM 2014-06 harvest strategy workplan has been amended several times since it was first adopted. WCPFC adopted further updates in 2017 (WCPFC14, 2018, Attachment L) and again in 2018 (WCPFC15, 2019; Attachment I), however there were no changes to the workplan for skipjack tuna. The harvest strategies and control rules for skipjack are still scheduled for completion within the condition timeline/certificate cycle and this aspect of the condition remains on-target. WCPFC15

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	agreed that the annual meeting in 2019 would be a 6-day meeting with additional time devoted for the Commission to discuss harvest strategies.																			
Progress on Condition (Year 2) – Client update & Audit Team comments	<u>Client submission</u>																			
	PNA has:																			
	a. Previously reported that it had reviewed the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1. Results of that review were set out in the PNA submissions to the PNA objection on certification of the Talley's New Zealand Skipjack Tuna Purse Seine Fishery. In that documentation, the PNA noted that several elements of new information, including the revised, more positive, status of the bigeye stock, the process of preparation of CMM 2017-01 and CMM 2018-01, and some changes in the form of purse seine management arrangements in CMM 2017-01 and CMM 2018-01, pointed to the responsiveness and effectiveness of the WCPO harvest strategy for skipjack. The PNA had also provided additional advice to the CAB on the relevance of this new information in a separate document.																			
	b. Further reviewed the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1. In this direction, PNA notes that updated information on Stock Status by Ocean set out in the Attachment continues to indicate that the WCPO is the only oceanic region in which the major tropical stocks of bigeye, skipjack and yellowfin tuna are well-managed and sustainably fished. The relatively superior status of these WCPO tropical tuna stock management outcomes provides further evidence that WCPO skipjack harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving the relevant stock management objectives. The quality of these WCPO outcomes is highlighted by two elements of this analysis: <div><div>i. The long record of successful management of WCPO skipjack management compares favourably with the management outcomes for Atlantic yellowfin and Eastern Pacific bigeye yellowfin which are summarised below, and which are considered by the MSC to have harvest strategies that are responsive to the state of the stock and elements that work together towards achieving the relevant stock management objectives. Can there be any doubt that WCPO skipjack meets this standard.</div><table><tr><th colspan="4">1.2.1 results</th></tr><tr><th>Region</th><th>Stock</th><th>Score</th><th>Stock Status</th></tr><tr><td>Atlantic Ocean</td><td>Yellowfin</td><td>95</td><td>Overfished</td></tr><tr><td>Eastern Pacific</td><td>Bigeye</td><td>≥80</td><td>Overfished/overfishing</td></tr><tr><td>Eastern Pacific</td><td>Yellowfin</td><td>95</td><td>Overfished/overfishing for several years until 2020</td></tr></table></div>	1.2.1 results				Region	Stock	Score	Stock Status	Atlantic Ocean	Yellowfin	95	Overfished	Eastern Pacific	Bigeye	≥80	Overfished/overfishing	Eastern Pacific	Yellowfin	95
1.2.1 results																				
Region	Stock	Score	Stock Status																	
Atlantic Ocean	Yellowfin	95	Overfished																	
Eastern Pacific	Bigeye	≥80	Overfished/overfishing																	
Eastern Pacific	Yellowfin	95	Overfished/overfishing for several years until 2020																	
	<div><div>ii. More systematically, it should be clear by now that the harvest strategies in place for WCPO tropical tuna fisheries are working; while the harvest strategies being applied for the management of tropical tuna stocks in other regions are failing. All the WCPO fisheries for tropical tuna stocks are being fished sustainably. All the bigeye stocks in other regions are not being fished sustainably. In addition, there is substantial uncertainty in the assessments of the stock status of some of the skipjack stocks in other regions, along with Indian Ocean yellowfin; and the status of some of the skipjack stocks in other ocean regions is uncertain.</div><div>iii. This outcome is not an accident; it's not coincidence; it's not because there is any less commercial pressure to increase harvests in the WCPO. It's because of the effectiveness</div></div>																			

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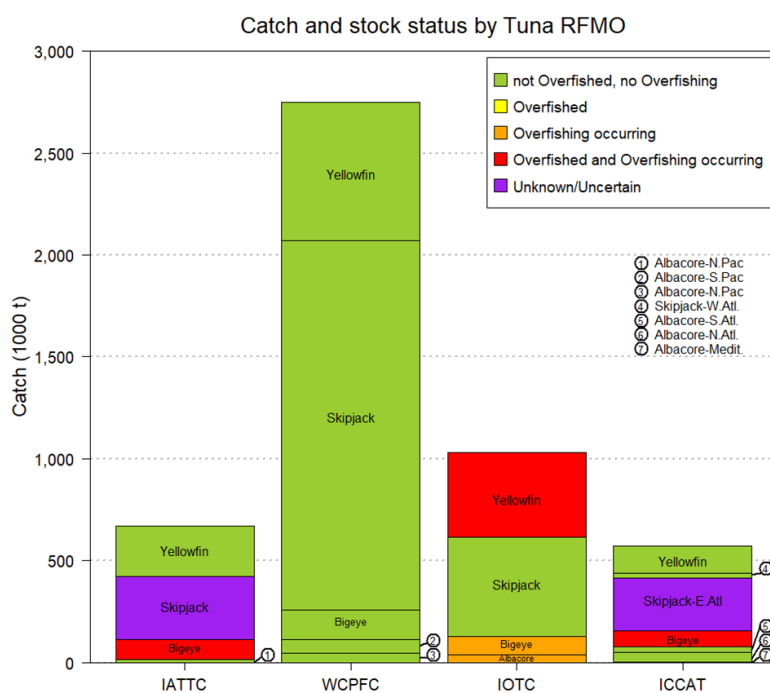
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of the WCPO harvest strategies. In the PNA view, these developments highlight that the current scoring of PI 1.2.1 is not a reflection of the quality of the harvest strategy for WCPO skipjack. Rather it is a reflection of weaknesses in the MSC assessment process, particularly the lack of transparency in the harmonisation process, as PNA has previously noted.

- c. Simplified and clarified the manner in which the VDS TAE is determined.
- d. Supported the undertaking of stock assessments in 2019 and 2020.
- e. Supported the WCPFC Scientific Committee advice to the Commission on the Status of the Stock and Management Advice and Implications for skipjack in 2019 and 2020.
- f. Participated in 4 FFA workshops in preparation for WCPFC consideration of the provision in para 28 of CMM 2018-01 that *“By 2020 the Commission shall agree on hard effort or catch limits in the high seas of the Convention Area and a framework for the allocation of those limits in the high seas amongst all Members and Participating Territories that adequately take into account Articles 8, 10 (3) and 30 of the Convention.”*
- g. Supported work towards the adoption of a harvest strategy for WCPO skipjack tuna as elaborated more fully in the report on Condition 2.
- h. Proposed with other FFA Members at WCPFC16 and WCPFC17 a reformulation of the skipjack TRP to overcome difficulties arising with the implementation of the interim Skipjack TRP as a result of changes in the skipjack assessment model reflecting improved scientific information about skipjack biology.
- i. Continued to support the implementation of a harvest strategy process for the WCPO, as detailed more fully in reporting on Condition 2.



Source: SPC Status of Stocks and Fisheries Presentation to WCPFC17

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	<p><u>Evidence Provided:</u></p> <p>Programmes of 4 FFA Workshops on Allocations of High Seas Limits</p> <p>WCPFC Scientific Committee 2019 Report, paras 206, 209, 390, 403, 406, 412, 417, 453 and 459 for records of PNA participation and paras 210 to 222 for SC conclusions pf skipjack stock status. https://www.wcpfc.int/meetings/sc15.</p> <p>WCPFC Scientific Committee 2020 Report, paras 220, 222, 243, 247 and 248. https://www.wcpfc.int/node/48070.</p> <p>WCPFC16-2019-DP01, FFA Members' Key Priorities for WCPFC16 https://www.wcpfc.int/node/44323.</p> <p>WCPFC17-2020-DP01, FFA Key Priorities for WCPFC17 https://www.wcpfc.int/node/48872</p> <p>WCPFC16 Report, paras 139, 146, 148, 167, 175, 187, 192, 193, 214, 218, 220, 244, 245, 253 and 280. https://www.wcpfc.int/node/45272.</p> <p><u>Assessor comments</u></p> <p>There have been several revisions to the CMM 2014-06 workplan since it was first agreed. In 2017 the Commission adopted an updated harvest strategy workplan (WCPFC15, 2018; Attachment L; https://www.wcpfc.int/meetings/wcpfc14) extending out to 2021 to allow for the ongoing work towards adoption of harvest strategies for the four key stocks (skipjack, yellowfin, bigeye and south pacific albacore). This workplan was further amended at WCPFC15 in December 2018 (WCPFC15, 2018; Attachment I; https://www.wcpfc.int/meetings/15th-regular-session-wcpfc). A range of harvest strategy related research was presented and discussed by WCPFC16. WCPFC16 agreed to further workplan changes which delay the implementation of elements of the harvest strategy for skipjack (WCPFC16 2019, Attachment H). A harvest control rule was scheduled to be adopted in 2020 for skipjack and a formal harvest strategy was to be in place in 2021. The updated plan recognises the need for additional time to a) build capacity and a sound understanding of harvest strategy functioning and consequences b) update the skipjack MSE framework in accordance with the 2019 assessment, and c) continue to develop the harvest strategy (WCPFC16, 2019, Attachment H).</p>
<p>Progress on Condition (Year 3) – Client update & Audit Team comments</p>	<p>Progress against this condition at the WCPFC level is discussed in detail in Section 3.2.7. In summary, at recent SC and WCPFC meetings many WCPFC members noted the need for further capacity building to better understand how harvest strategies function and their implications. In response to these concerns the pace of development of the technical aspects of the evaluation framework slowed in 2021 to allow greater focus on capacity building initiatives and to allow more time to review recent developments (Scott et al., 2021b). WCPFC18 agreed to hold a Science-Management Dialogue back-to-back with SC18 in 2022, providing general capacity building to support confident and full participation of all CCMs in decision making on harvest strategies. Capacity building efforts to date have focused on running country specific harvest strategy workshops, several of which were been run during 2021. Efforts to increase the number of workshops in 2021 were hindered by the continuing impacts of Covid-19. To further support and augment the online workshops, an 'Introduction to Harvest Strategies' Module course has been developed and is hosted on the SPC learning management system (https://spc.learnbook.com.au/login/index.php; Scott et al., 2021b). Harvest strategy capacity building seminars were run online in June 2022 (https://meetings.wcpfc.int/meetings/hscb-01) and July 2022 (https://meetings.wcpfc.int/meetings/hscb-02).</p> <p>Under the latest CMM 2014-06 workplan management procedures for skipjack continue to be scheduled for adoption in 2022.</p> <p>A detailed client report on progress against the condition is provided at Section 5.2 of this report. The client report provides a summary of the current harvest strategy and its effectiveness. The client report suggests that SG80 requirements for PI 1.2.1 are currently met and that the MSC harmonisation is flawed.</p> <p>As indicated in Section 3.2.7, the tropical tuna CMM was intensively reviewed by the WCPFC in 2020 and 2021, including two "Development of New WCPFC Tropical Tuna Measure" workshops (Workshop</p>

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	1, 26–30 April, https://meetings.wcpfc.int/meetings/ttmw1 ; and Workshop 2, 6– 10 September, https://meetings.wcpfc.int/meetings/ttmw2) and the Commission meeting in which PNA participated and made submissions. PNA also participated in two PNA workshops in February and April 2021, and five FFA Workshops in February, March, April, March August and September on the Tropical Tuna CMM revision.
Progress status	<p>Progress on the condition continues to be dependent on WCPFC outcomes. PNA has demonstrated ongoing support for the development of WCPFC harvest strategies. The team concludes that progress is in accordance with the milestones that are aligned with the MegVAR and the subsequent MSC Covid-19 derogations.</p> <p>The condition is on target.</p>
Additional information	In February 2019, MSC accepted a variation request submitted by all fisheries CABs to align harvest strategy condition timelines for Regional Fisheries Management Organisation (RFMO) managed highly migratory stocks in the MSC programme, including tuna and swordfish. The variation request proposed a 'hard deadline' approach to Principle 1 condition timelines. As a result of the variation request, the accepted deadline for closing harvest strategy conditions for WCPO skipjack, yellowfin and bigeye was 2021. Following a meeting in September 2020, the CABs agreed to implement the MSC's Covid-19 derogation ⁹ extension to timelines for existing fishery certificates by adding six months to the previous 'hard deadline' outcomes, with a new deadline of June 2022. Condition timelines on management and information PIs were extended for a further year following an additional MSC derogation ¹⁰ in March 2021. The result is that the CAB agreed deadline is June 2023.

Condition 2 (Skipjack tuna – UoC 1)

Performance Indicator	1.2.2 (SIa, SIb, SIc).
Score	60
Justification	<p><u>Scoring issue (a):</u></p> <p>WCPFC CMM 2014-06 established a process for the adoption of harvest control rules, however, well-defined harvest control rules are not currently in place and SG80 is not met.</p> <p>Following the MSC Notice, "Scoring of 'available' Harvest Control Rules (HCRs) in CRv1.3 fisheries" of 24th November 2014, PI 1.2.2 SI(a) has been scored using CRv2.0 provisions for SG60 (as above) scoring for a number of fisheries, including several tuna fisheries. MSC have also provided further comment on HCRs with their notice of 16 December, 2015 "Interpretation on Harvest Control Rules (HCR)".</p> <p>MSC CRv2.0 lays out two conditions for acceptance of HCR being available sufficient to justify scoring at the SG60 level (MSC 2014).</p> <p>1) CR v2.0 SA2.5.2a provides for HCR being recognised as available, "...if stock biomass has not previously been reduced below B_{MSY} or has been maintained at that level for a recent period of time".</p> <p>The skipjack assessment provides probabilistic estimates of parameters of interest, and uncertainty has been extensively explored using a crosswise grid of sensitivity tests. Previous skipjack</p>

⁹ <https://www.msc.org/docs/default-source/default-document-library/stakeholders/covid-19-pandemic-derogation-march-2020.pdf>.

¹⁰ <https://www.msc.org/docs/default-source/default-document-library/for-business/program-documents/chain-of-custody-supporting-documents/msc-derogation-6-covid-19-fishery-conditions-extension.pdf>.

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assessments indicate that SB has not been reduced below SB_{MSY} . The 2014 assessment estimates of spawning biomass (2011) are also above the level that will support the MSY. WCPFC-SC (2014a) also indicated that “Future status under status quo projections (assuming 2012 conditions) was robust to assumptions on future recruitment. Under either assumption, spawning biomass remained relatively constant and it is exceptionally unlikely (0%) for the stock to become overfished ($SB_{2032} < 0.2SB_{F=0}$) or for the spawning biomass to fall below SB_{MSY} , and it is exceptionally unlikely (0%) for the stock to become subject to overfishing ($F > F_{MSY}$)”.

An updated 2016 assessment provides conclusions that are largely consistent with previous assessments (McKechnie *et al.*, 2016). The reference case model of the 2016 stock assessment estimated the 2015 level of spawning potential to be at approximately 58% of the unfished level for the reference case model, well above the LRP of $20\%SB_{F=0}$ agreed by WCPFC (WCPFC 2016b). $SB_{latest}/SB_{F=0}$ was relatively close to the adopted interim target reference point ($0.5SB_{F=0}$) for all models explored in the assessment (structural uncertainty grid: median = 0.51, 95% quantiles = 0.39 and 0.67) (WCPFC 2016b).

The CRv2.0 SA2.5.2a condition is therefore met and HCRs are considered to be ‘available’.

2) CRv2.0 SA2.5.3b provides for HCR being recognised as available if, “...there is an agreement or framework in place that requires the management body to adopt HCRs before the stock declines below B_{MSY} CMM 2014-06 sets out the principles and elements for harvest strategies to be developed and implemented, including requirements for target and limit reference points and decision rules or (“harvest control rules”), with a clear intention that harvest control rules, tested using simulation approaches, will be part of the implemented harvest strategies. The CMM also included a requirement to adopt a workplan with an indicative timeframe no later than 2015 Commission meeting, with application to skipjack tuna, bigeye tuna, yellowfin tuna, Pacific bluefin tuna, and South and North Pacific albacore tuna. In fact, work towards establishing reference points and harvest control rules is already well underway through the Management Objectives Workshop process (a TRP and LRP have been adopted for skipjack tuna).

Following discussions at WCPFC12 a workplan was agreed (WCPFC 2015, Attachment Y). The Commission tasked the SC with support from the Scientific Service Provider to undertake the activities specified in the agreed workplan (included in this report at Appendix 8).

As indicated above, the current stock assessment and projections of future stock size indicate that the stock will remain above SSB_{MSY} over the period agreed in the CMM 2014-06 workplan. The CRv2.0 SA2.5.3b requirement is therefore met.

Scoring issue (b):

HCRs are still under development and SG80 is therefore not met.

Scoring issue (c):

The rationale for this SI needs to address two CRv2.0 (MSC 2014) requirements.

1) CR v2.0 SA2.5.6 requires that as part of the evaluation of the effectiveness of HCRs, “...teams shall include consideration of the current levels of exploitation in the UoA, such as measured by the fishing mortality rate or harvest rate, where available”. MSC CRv2.0 SA2.5.6 guidance (GSA2.5.2-7) states that “Evidence that current F is equal to or less than F_{MSY} should usually be taken as evidence that the HCR is effective”.

Evidence to support this is provided by the 2014 and 2016 assessments indicating that overfishing is not occurring ($F_{current}/F_{MSY} < 1$ across the grid of model runs) (WCPFC 2014a, WCPFC 2016b).

2) In relation to SIa, above, CRv2.0 SA2.5.5b, requires that where HCRs are recognised as ‘available’ “A description of the formal agreement or legal framework that the management body has defined, and the indicators and trigger levels that will require the development of HCRs” shall be provided. As noted at SIa, CMM 2014-06 sets out elements of harvest strategies to be developed and implemented. The WCPFC agreed to adopt a work plan at the 2015 Commission meeting, with potential revision in 2017, with application to skipjack tuna, bigeye tuna, yellowfin tuna, Pacific bluefin tuna, and South and North Pacific albacore tunas. Work to establish reference points and harvest control rules has been in

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	<p>progress over recent years through the Management Objectives Workshop (MOW) process. WCPFC has adopted an explicit LRP and TRP for skipjack. Following discussions at WCPFC12 a workplan was agreed (WCPFC 2015a, Attachment Y). No additional trigger is required for the Development of HCRs is required.</p> <p>The requirements detailed above are met and a score of 60 is awarded. SG80 refers to the tools 'in use' in the fishery. Given SIa finds HCRs are 'available', the tools are not considered to be in use and SG80 is not met.</p>
Condition	<p>SI a) By the fourth surveillance audit, demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY.</p> <p>SI b) By the fourth surveillance audit, provide evidence that the HCRs are likely to be robust to the main uncertainties.</p> <p>SI c) By the fourth surveillance audit, demonstrate that available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.</p>
Milestones	<p><u>Years 1, 2 and 3: (Resulting score 60)</u></p> <p>The client will need to provide evidence that it is actively working to ensure that well defined harvest control rules taking into account the main uncertainties are in place for skipjack tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached. This evidence will include a summary of the actions taken by the client and other relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan (Appendix 10).</p> <p><u>Year 4: (Resulting score ≥80)</u></p> <p>The client will need to provide evidence that well-defined harvest control rules taking into account the main uncertainties are in place for skipjack tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.</p> <p><u>2nd audit note (2021):</u></p> <p><u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u></p>
Client Action Plan	<p><u>By Year 1-2018 PNA will:</u></p> <ul style="list-style-type: none"> Work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC; Participate in work to refine the initial list of performance indicators for the Tropical Purse Seine Fisheries for the purpose of the evaluation of HCRs agreed at WCPFC13 Support WCPFC preparatory MSE work for the tropical purse seine fishery Promote support by PNA Member governments for the adoption and application of a HCR for skipjack; and Collaborate with other stakeholders to support work towards adoption of a HCR for skipjack by the WCPFC in accordance with the WCPFC workplan for the adoption of harvest strategies. <p><u>By Year 2-2019, PNA will:</u></p> <ul style="list-style-type: none"> Work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC Support MSE work for the Tropical Purse seine Fishery Promote support by PNA Members for the adoption and application of a HCR for skipjack; and

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	<p>Collaborate with other stakeholders to support work towards adoption by the WCPFC of a HCR for skipjack in accordance with the WCPFC workplan for the adoption of harvest strategies.</p> <p><u>By Year 3-2020, PNA will:</u></p> <p>Work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC</p> <p>Support MSE work for the Tropical Purse seine Fishery</p> <p>Promote support by PNA Members for the adoption and application of a HCR for skipjack; and</p> <p>Collaborate with other stakeholders to support the adoption by the WCPFC of a HCR for skipjack in accordance with the WCPFC workplan for the adoption of harvest strategies.</p> <p><u>By Year 4-2021, PNA will provide evidence that:</u></p> <p>Well-defined harvest control rules, under PNA or WCPFC, taking into account the main uncertainties, are in place for skipjack tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as the point of recruitment impairment is approached, and are expected to keep the stock fluctuating around a target level consistent with (or above) MSY; and</p> <p>The tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.</p>
Consultation on condition	As P1 requirements are stock-wide, meeting this condition will require work to be done through the WCPFC.
Progress on Condition (Year 1)	<p>As indicated at Section 7.2, PNA has:</p> <p>Continued to work closely with SPC on the development of HCRs for skipjack – see for example SC12-MI-WP-06;</p> <p>Participated fully in refining performance indicators for tropical purse seine fisheries, including participating in the Small Working Group on Management Objectives at WCPFC13 for the purpose of the evaluation of harvest control rules set out in Attachment M to the WCPFC16 report. PNA continues to participate in developing the performance indicators which will be further discussed at a PNA HCR Workshop to be held June 3-5, 2019;</p> <p>Supported preparatory MSE work by SPC both in PNA meeting discussions on MSE and at the WCPFC Scientific Committee;</p> <p>Supported and promoted discussion on HCRs and Harvest Strategies, which are a standing item on the agendas of the annual meetings of the VDS Technical and Scientific committee and the PNA;</p> <p>Supported continuing work on adoption of a HCR for skipjack tuna with other stakeholders at the WCPFC.</p> <p>These actions include actions taken both as PNA and as part of the wider FFA group. The client submission (Section 7.2, Reports 1 and 2) contains references to documents that provide evidence of the role undertaken by PNA and its members.</p> <p>A harvest control rule for skipjack is due to be adopted in 2020.</p>
Progress on Condition (Year 2) –	<p><u>Client submission</u></p> <p>PNA has:</p>

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<p>Client update & Audit Team comments</p>	<p>a) Worked with SPC on the development of a Harvest Strategy for Skipjack at the 9th Annual Meeting of the Palau Arrangement VDS Technical and Scientific Committee, including on analysis of candidate HCRs;</p> <p>b) Considered the further development of a Harvest Control Rule and Harvest Strategy for skipjack at the 38th Annual Meeting of PNA Members;</p> <p>c) Convened a 3-day PNA Harvest Strategy Workshop with SPC to advance work on a skipjack Harvest Strategy, including a HCR for skipjack;</p> <p>d) Collaborated with other WCPFC participants to adopt an updated Workplan for the Adoption of Harvest Strategies;</p> <p>e) Supported preparatory MSE work by SPC both in PNA meeting discussions on MSE and at the WCPFC Scientific committee and Commission sessions.</p> <p>These actions include actions taken both as PNA and as part of the wider FFA group.</p> <p>Evidence Provided:</p> <ul style="list-style-type: none"> • Agenda for the 8th and 9th Meetings of the Palau Arrangement VDS Technical and Scientific Committee, 12-13 March 2019, Koror, Palau. • Presentation by SPC on Recent Progress in the Development of Harvest Strategies for WCPO tuna stocks to the 8th Meeting of the Palau Arrangement VDS Technical and Scientific Committee, 12-13 March 2019, Koror, Palau. • VDS-T&SC9/Working Paper 2a: Progress update on the WCPO skipjack management strategy evaluation framework. • Agenda for the 38th Annual PNA Meeting, 18 – 22 March 2019, Koror, Palau. • Summary Record, PNA Harvest Strategy Workshop, Palau, 3 – 5th June 2019. • WCPFC Scientific Committee 2019 Report, paras 206, 209, 390, 403, 406, 412, 417, 453 and 459 for records of PNA participation and paras 210 to 222 for SC conclusions of skipjack stock status. https://www.wcpfc.int/meetings/sc15. • WCPFC Scientific Committee 2020 Report, paras 220, 222, 243, 247 and 248. https://www.wcpfc.int/node/48070. • WCPFC16-2019-DP01, FFA Members' Key Priorities for WCPFC16 https://www.wcpfc.int/node/44323. • WCPFC16 Report, paras 139, 146, 148, 167, 175, 187, 192, 193, 214, 218, 220, 244, 253 and 280. https://www.wcpfc.int/node/45272. • Updated Indicative Workplan for the Adoption of Harvest Strategies under CMM 2014-06 WCPFC16 Report, (Attachment H). <p><u>Assessor comments</u></p> <p>As for Condition 1.</p>
<p>Progress on Condition (Year 3) – Client update & Audit Team comments</p>	<p>As for Condition 1. The client provided at Section 5.2 identifies the following activities undertaken by PNA and as part of the wider FFA group in relation to the condition:</p> <p>a) Continued to work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC, including holding a 2-day PNA Harvest Strategy Workshop in June 2022 focused on skipjack HCR design.</p> <p>b) Supported continuing work on WCPFC Harvest Strategies, including MSE work for the Tropical Purse seine Fishery.</p>

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	<p>c) Supported the further development of the WCPFC Harvest Strategy for skipjack at the 2021 session of the WCPFC. See para 98 of WCPFC18(2021):</p> <p><i>98. PNG, on behalf of the PNA and Tokelau, supported the FFA statement by Tonga. They observed that agreement on a revised skipjack TRP has been held up for 3 years largely because some CCMs tried to take advantage of what should have been a simple technical adjustment to the interim skipjack TRP, and that this was the main reason that MSC certifications of WCPO tuna fisheries faced suspension. The PNA and Tokelau stated they hoped the Commission could give priority to Harvest Strategy work in 2022, including reaching agreement on a skipjack TRP.</i></p> <p>d) Collaborated with other WCPFC participants to adopt an updated Workplan for the Adoption of Harvest Strategies.</p>
Progress status	On target.
Additional information	See comments on Condition 1 above in relation to the 'hard deadline'.

Condition 3 (Yellowfin tuna – UoC 2)

Performance Indicator	1.2.1 (Sla)
Score	70
Justification	<p>There has been progress in satisfying the requirements for this PI in recent years. CMM 2014-06 has been adopted, defining the approach for a harvest strategy with harvest controls and reference points to be adopted. A work plan for implementation was accepted at the 2015 WCPFC Commission meeting (see Appendix 8). A limit reference point has been adopted for yellowfin. To date, the measures in place have achieved stock management objectives reflected in PI 1.1.1 SG80 and assessment projections indicate they will continue to do so, meeting SG60 requirements. However, there has been a lack of progress in the development of management measures for some components of the overall fishery for yellowfin. The elements of the harvest strategy are not considered to be working together towards achieving stock management objectives reflected in PI 1.1.1 SG80, hence SG80 requirements for this scoring issue are not met.</p> <p>The score for this PI is in agreement with the outcomes agreed at the MSC harmonisation meeting (Hong Kong 21-22 April 2016).</p>
Condition	By the fourth surveillance audit, demonstrate that the harvest strategy for yellowfin tuna is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.
Milestones	<p><u>Years 1, 2 and 3: (Resulting score 70)</u></p> <p>The client will need to provide evidence that it is actively working to ensure that the harvest strategy for WCPO yellowfin tuna is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving the management objectives reflected in the target and limit reference points. This evidence will include a summary of the actions taken by the client and other</p>

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	<p>relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan (see Appendix 10).</p> <p><u>Year 4: (Resulting score ≥80)</u></p> <p>The client will need to provide evidence that the harvest strategy is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving management objectives reflected in PI 1.1.1 SG80.</p> <p><u>2nd audit note (2021):</u></p> <p><u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u></p>
Client Action Plan	<p><u>By Year 1-2018, PNA will:</u></p> <ul style="list-style-type: none"> Support the implementation of a harvest strategy process for the WCPO, including the adoption of a harvest strategy for WCPO yellowfin tuna. Support the adoption of a WCPFC Harvest Strategy Workplan that includes a process for development of a harvest strategy for WCPO yellowfin tuna. Promote for consideration by the WCPFC, the effectiveness of measures for WCPO yellowfin tuna management. <p><u>By Year 2-2019, PNA will:</u></p> <ul style="list-style-type: none"> Support the implementation of a harvest strategy process for the WCPFC, including the adoption of a harvest strategy for WCPO yellowfin tuna. Work towards the adoption of a formal harvest strategy for WCPO yellowfin tuna. Implement actions to raise awareness of the need for any additional WCPFC yellowfin management measures among PNA Members. Undertake activities either directly by PNA or through FFA to ensure appropriate focus is given to more effective measures for WCPO yellowfin tuna management at the 14th Session of the WCPFC (December 2017). <p><u>By Year 3-2020, PNA will:</u></p> <ul style="list-style-type: none"> Provide evidence to illustrate working towards the adoption of a formal harvest strategy for WCPO yellowfin tuna. Raise awareness of the need for any additional WCPFC yellowfin management measures among PNA Members. Prepare, with the support of SPC, an assessment of how the elements of the harvest strategy for WCPO yellowfin tuna work together to achieve the management objectives for this fishery. Promote the adoption by PNA and/or the WCPFC of any additional management measures needed for WCPO yellowfin tuna. <p><u>By Year 4-2021, PNA will provide evidence to show that:</u></p> <ul style="list-style-type: none"> The harvest strategy for WCPO yellowfin tuna is responsive to the state of the stock and the elements of the harvest strategy working together towards achieving management objectives reflected in the target and limit reference points.
Consultation on condition	<p>As P1 requirements are stock-wide, meeting this condition will require work to be done through the WCPFC.</p>

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<p>Progress on Condition (Year 1)</p>	<p>Progress for this Condition is essentially as described for Conditions 1 and 2, above. The working papers prepared for WCPFC15 provide evidence of research and discussions that are taking place at WCPFC in relation to harvest strategy implementation. The client submission (Section 7.2, Report 1) contains references to documents that provide evidence of the role undertaken by PNA and its members.</p> <p>The CMM 2014-06 harvest strategy workplan has been amended several times since it was first adopted. WCPFC adopted further updates in 2017 (WCPFC14, 2018, Attachment L) and again in 2018 (WCPFC15, 2019; Attachment I).</p> <p>Changes to the workplan at WCPFC14 relevant to yellowfin were:</p> <p>The step that the “SC provide advice on a range of performance indicators to evaluate performance of harvest control rules” in 2017 was amended to state that this advice would only be for the Tropical Longline Fishery.</p> <p>The scheduled 2018 agreement to a TRP in 2018 for yellowfin was amended to propose only that there be: “SC and Commission discussion of management objectives for fisheries and/or stocks, and subsequent development of candidate TRPs for BET and YFT.”</p> <p>The agreement on a TRP has been deferred to 2019.</p> <p>An extension of activities to 2021. In 2020 and 2021 the workplan is expecting that the Commission “consider advice on progress towards harvest control rules”, with a harvest control rule to be adopted in 2021.</p> <p>At WCPFC15 in December 2018, activities to develop harvest control rules and management strategy evaluation for yellowfin were moved from 2018 to 2019.</p> <p>An important step in the workplan is that at the 2019 Commission meeting there is an agreed target reference point for yellowfin.</p> <p>The harvest strategies and control rules for yellowfin are still scheduled for completion within the condition timeline/certificate cycle and this aspect of the condition remains on-target. However, further delays in the workplan will lead to problems in the condition being closed before the end of the certification period. WCPFC15 agreed that the annual meeting in 2019 would be a 6-day meeting with additional time devoted for the Commission to discuss harvest strategies.</p>
<p>Progress on Condition (Year 2) – Client update & Audit Team comments</p>	<p>As for Condition 1, above.</p>
<p>Progress on Condition (Year 3) – Client update & Audit Team comments</p>	<p>Progress against this condition at the WCPFC level is discussed in detail in Section 3.2.7 and at Condition 1, above.</p> <p>Under the latest CMM 2014-06 workplan management procedures for yellowfin are now scheduled for adoption in 2024. The team notes that this updated timetable does not align with the adopted June 2023 deadline for closing WCPO tuna harvest strategy conditions.</p> <p>Information provided at SC and WCPFC meeting indicates that progress against this condition has clearly been ongoing in relation to the development of the harvest strategy for yellowfin, including research to develop a multi-species fisheries management framework.</p> <p>A detailed client report on progress against the condition is provided at Section 5.2 of this report. The client report provides a summary of the current harvest strategy and its effectiveness. The client report</p>

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	<p>suggests that SG80 requirements for PI 1.2.1 are currently met and that the MSC harmonisation is flawed.</p> <p>As indicated in Section 3.2.7, the tropical tuna CMM was intensively reviewed by the WCPFC in 2020 and 2021, including two “Development of New WCPFC Tropical Tuna Measure” workshops (Workshop 1, 26–30 April, https://meetings.wcpfc.int/meetings/ttmw1; and Workshop 2, 6– 10 September, https://meetings.wcpfc.int/meetings/ttmw2) and the Commission meeting in which PNA participated and made submissions. PNA also participated in two PNA workshops in February and April 2021, and five FFA Workshops in February, March, April, March August and September on the Tropical Tuna CMM revision.</p>
Progress status	<p>Progress on the condition continues to be dependent on WCPFC outcomes. Although the latest CMM 2014-06 workplan has been extended by an additional two years, with management procedures for yellowfin now scheduled for adoption in 2024, progress against this condition has clearly been ongoing in relation to the development of required harvest strategy elements. PNA has demonstrated ongoing support for the development of WCPFC harvest strategies. The team concludes that progress is in accordance with the milestones that are aligned with the MegVAR and the subsequent MSC Covid-19 derogations.</p> <p>The condition is on target.</p>
Additional information	See comments on Condition 1 above in relation to the ‘hard deadline’

Condition 4 (Yellowfin tuna – UoC 2)

Performance Indicator	1.2.2 (SIa, SIb, SIc)
Score	60
Justification	<p><u>Scoring issue (a):</u></p> <p>WCPFC CMM 2014-06 established a process for the adoption of harvest control rules, however, well-defined harvest control rules are not currently in place and SG80 is not met.</p> <p>Following the MSC Notice, “Scoring of ‘available’ Harvest Control Rules (HCRs) in CRv1.3 fisheries” of 24th November 2014, PI 1.2.2 SI(a) has been scored using CRv2.0 provisions for SG60 (as above) scoring for a number of fisheries, including several tuna fisheries. MSC have also provided further comment on HCRs with their notice of 16 December, 2015 “Interpretation on Harvest Control Rules (HCR)”.</p> <p>MSC CRv2.0 lays out two conditions for acceptance of HCR being available sufficient to justify scoring at the SG60 level (MSC 2014).</p> <p>1) CRv2.0 SA2.5.2a provides for HCR being recognised as available, “...if stock biomass has not previously been reduced below B_{MSY} or has been maintained at that level for a recent period of time”.</p> <p>The yellowfin tuna stock assessment provides probabilistic estimates of parameters of interest, and uncertainty has been extensively explored using a crosswise grid of sensitivity tests. Previous yellowfin tuna assessments indicate that SB has not been reduced below SB_{MSY}. The 2014 assessment estimates of spawning biomass (2011) are also above the level that will support the MSY ($SB_{latest}/SB_{MSY} = 1.24$ for the base case and from 1.05 to 1.51 across key models of the grid used in the assessment) (WCPFC 2014a). WCPFC (2014a) also indicated that “Future status under status quo projections (assuming 2012 conditions) depends on assumptions on future recruitment. When</p>

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spawner recruitment relationship conditions are assumed, spawning biomass is predicted to increase and the stock is exceptionally unlikely (0%) to become overfished ($SB_{2032} < 0.2SB_{F=0}$) or to fall below SB_{MSY} , or to become subject to overfishing ($F > F_{MSY}$). If recent (2002–2011) actual recruitments are assumed, spawning biomass will remain relatively constant, and the stock is exceptionally unlikely (0%) to become overfished or to become subject to overfishing, and it was very unlikely (2%) that the spawning biomass would fall below SB_{MSY}) (WCPFC 2014a). The CRv2.0 SA2.5.2a condition is therefore met and HCRs are considered to be 'available'.

CRv2.0 SA2.5.3b provides for HCR being recognised as available if, "...there is an agreement or framework in place that requires the management body to adopt HCRs before the stock declines below B_{MSY} ".

WCPFC CMM 2014-06 sets out the principles and elements for harvest strategies to be developed and implemented, including requirements for target and limit reference points and decision rules or ("harvest control rules"), with a clear intention that harvest control rules, tested using simulation approaches, will be part of the implemented harvest strategies. The CMM also included a requirement to adopt a workplan with an indicative timeframe no later than 2015 Commission meeting, with application to skipjack tuna, bigeye tuna, yellowfin tuna, Pacific bluefin tuna, and South and North Pacific albacore tunas.

Work towards establishing reference points and harvest control rules is well underway through the Management Objectives Workshop process (a LRP has been adopted for yellowfin tuna and candidate TRPs are under consideration). Following discussions at WCPFC12 a workplan was agreed (WCPFC 2015, Attachment Y). The Commission tasked the SC with support from the SPC to undertake the activities specified in the agreed workplan (included in this report at Appendix 8).

As indicated above, the current stock assessment and projections of future stock size indicate that the stock will remain above SSB_{MSY} over the period agreed in the CMM 2014-06 workplan. The CRv2.0 SA2.5.3b requirement is therefore met. In summary, as conditions at both CR v2.0 SA2.5.2a and CR v2.0 SA2.5.3b are met, a score of SG60 is awarded.

Scoring issue (b):

HCRs are still under development and SG80 is therefore not met.

Scoring issue (c):

The rationale for this SI needs to address two CRv2.0 (MSC 2014) requirements.

1) Evidence to support this is provided by the 2014 assessment indicating that overfishing is not occurring ($F_{current}/F_{MSY} < 1$ across the grid of model runs) (WCPFC 2014a).

2) In relation to SIa, above, CRv2.0 SA2.5.5b, requires that where HCRs are recognised as 'available' "A description of the formal agreement or legal framework that the management body has defined, and the indicators and trigger levels that will require the development of HCRs" shall be provided.

As noted at SIa, CMM 2014-06 sets out elements of harvest strategies to be developed and implemented. The WCPFC agreed to adopt a work plan at the 2015 Commission meeting, with potential revision in 2017, with application to skipjack, bigeye, yellowfin, Pacific bluefin, and South and North Pacific albacore tunas. Work to establish reference points and harvest control rules has been in progress over recent years through the Management Objectives Workshop (MOW) process. WCPFC has adopted an explicit LRP for yellowfin and candidate TRPs are being considered. Following discussions at WCPFC12 a workplan was agreed (WCPFC 2015a, Attachment Y). No additional trigger is required for the development of HCRs is required.

The requirements detailed above are met and a score of 60 is awarded. SG80 refers to the tools 'in use' in the fishery. Given SIa finds HCRs are 'available', the tools are not considered to be in use and SG80 is not met.

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Condition	<p>SI a) By the fourth surveillance audit, the client shall demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY.</p> <p>SI b) By the fourth surveillance audit, the client shall provide evidence that the HCRs are likely to be robust to the main uncertainties.</p> <p>SI c) By the fourth surveillance audit, the client shall demonstrate that available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.</p>
Milestones	<p><u>Years 1, 2 and 3: (Resulting score = 60)</u></p> <p>The client will need to provide evidence that it is actively working to ensure that well defined HCRs taking into account the main uncertainties are in place for yellowfin tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as LRPs are approached. This evidence will include a summary of the actions taken by the client and other relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan (Appendix 10).</p> <p><u>Year 4: (Resulting score ≥80)</u></p> <p>The client will need to provide evidence that well-defined HCRs taking into account the main uncertainties are in place for yellowfin tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as LRPs are approached.</p> <p><u>2nd audit note (2021):</u></p> <p><u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u></p>
Client Action Plan	<p><u>By Year 1-2018 PNA will:</u></p> <p>Support and participate in WCPFC work on performance indicators to evaluate performance of harvest control rules for yellowfin tuna WCPFC in accordance with the WCPFC workplan for the adoption of harvest strategies.</p> <p>Promote support by PNA Member governments for the adoption and application of a HCR for yellowfin tuna.</p> <p>Collaborate with other stakeholders to support work towards adoption of a HCR for yellowfin tuna by the WCPFC in accordance with the WCPFC workplan for the adoption of harvest strategies; and.</p> <p>Act to raise awareness of the need for any additional WCPFC yellowfin management measures among PNA Members.</p> <p><u>By Year 2-2019 PNA will:</u></p> <p>Support and participate in WCPFC work on a TRP for yellowfin tuna and support the adoption of a TRP for yellowfin tuna in accordance with the WCPFC workplan for the adoption of harvest strategies.</p> <p>Support MSE work for yellowfin tuna.</p> <p>Collaborate with other stakeholders to support work towards adoption by the WCPFC of a HCR for skipjack in accordance with the WCPFC workplan for the adoption of harvest strategies; and</p> <p>Support any additional WCPFC management measures needed for WCPFC yellowfin tuna.</p> <p><u>Year 3-2020, PNA will:</u></p> <p>Support MSE work for yellowfin tuna.</p> <p>Support and participate in WCPFC work on a HCR for yellowfin tuna in accordance with the WCPFC workplan for the adoption of harvest strategies.</p>

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	<p>Collaborate with other stakeholders to support the adoption by the WCPFC of a HCR for yellowfin tuna in accordance with the WCPFC workplan for the adoption of harvest strategies.</p> <p><u>Year 4-2021, PNA will provide evidence that:</u></p> <p>Well-defined harvest control rules, taking into account the main uncertainties, are in place for yellowfin tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as the point of recruitment impairment is approached, and are expected to keep the stock fluctuating around a target level consistent with (or above) MSY; and The tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.</p>
Consultation on condition	As P1 requirements are stock-wide, meeting this condition will require work to be done through the WCPFC.
Progress on Condition (Year 1)	<p>Progress for this Condition is as described for the Conditions above. The client submission (Section 7.2, Reports 1 and 2) contains references to documents that provide evidence of the role undertaken by PNA and its members.</p> <p>Although there were changes to the harvest strategy workplan at WCPFC14, a harvest control rule for yellowfin is still due to be adopted in 2021. Further delays in the harvest strategy workplan will lead to problems in the condition being closed before the end of the certification period.</p>
Progress on Condition (Year 2) – Client update & Audit Team comments	As for condition 1, above.
Progress on Condition (Year 3) – Client update & Audit Team comments	As for condition 1, above.
Progress status	On target.
Additional information	See comments on Condition 1 above in relation to the 'hard deadline'.

Condition 5 (Skipjack tuna – UoC 1)

Performance Indicator	2.3.2 (Sib)
Score	75

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Justification	<p>Observer data indicate that the number interactions between the PNAFTF and <i>Manta</i> and devil rays has averaged 634 animals annually over the period 2011-2015 (PNAO, pers. comm.). It is not clear to what extent <i>Manta</i> and devil rays are retained in the PNAFTF, but retention generally seems unlikely. Croll <i>et al.</i> (2015) noted that while extrapolated from limited observer data, the relatively high mobulid bycatch rate and intensity of effort suggest the WCPO purse seine fisheries have a large mobulid bycatch compared with others.</p> <p>At the 12th WCPFC Scientific Committee (SC) meeting (SC12), the designation of <i>Manta</i> and <i>Mobula</i> species as 'key shark species' was proposed, which would result in improved data collection and reporting of the <i>Manta</i> and <i>Mobula</i> bycatch. This proposal was supported by FFA members, but achieved only limited support in the SC overall. Amongst a range of recommendations, SC12 recommended that purse seine observer training programmes add emphasis to the identification of <i>Mobula</i> species as part of their curricula (WCPFC 2016b). SC12 also recommended that the WCPFC considers adopting guidelines for safe release of <i>Manta</i> and <i>Mobula</i> rays caught incidentally in WCPFC fisheries, and a good practice guide has been produced and distributed to inform fishermen of the best techniques for releasing sharks and rays, including <i>Manta</i> and <i>Mobula</i> species (Poisson <i>et al.</i> 2012). However, there is nothing in place for ray species consistent with the requirements to release silky shark, oceanic whitetip shark, or whale shark.</p> <p>Overall, there are considered to be measures in place that are expected to ensure the UoA does not hinder the recovery of devil rays and manta rays, but it is not clear that together they comprise a strategy to manage and minimise impacts. The fishery meets SG60 but not SG80 and a Condition is introduced.</p>
Condition	<p>Slb) By the third annual surveillance audit, the client shall demonstrate that there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of <i>Manta</i> and devil rays as ETP species.</p>
Milestones	<p><u>Year 1: (Resulting score = 75)</u></p> <p>At the first annual surveillance audit, the client will need to present a plan (including timeline) showing how a strategy to ensure the PNAFTF does not hinder the recovery of <i>Manta</i> and devil rays will be implemented.</p> <p>The client will need to provide evidence that available information on <i>Manta</i> and devil rays is being considered in developing the strategy, including species identification and recording where appropriate.</p> <p>An update on the catch and likely mortality rate of <i>Manta</i> and devil rays taken in the PNAFTF will be needed.</p> <p><u>Year 2: (Resulting score = 75)</u></p> <p>Evidence of progress towards the development and implementation of a strategy to ensure the PNAFTF does not hinder the recovery of <i>Manta</i> and devil rays shall be provided.</p> <p>An update on the catch and likely mortality rate of <i>Manta</i> and devil rays taken in the PNAFTF will be needed.</p> <p><u>Year 3: (Resulting score ≥80)</u></p> <p>Evidence that a strategy is in place that is expected to ensure the PNAFTF does not hinder the recovery of <i>Manta</i> and devil rays has been implemented shall be provided.</p> <p>An update on the catch and likely mortality rate of <i>Manta</i> and devil rays taken in the PNAFTF will be needed.</p> <p><u>2nd audit note (2021):</u></p>

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	<u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u>
Client Action Plan	<p><u>By Year 1-2018 PNA will:</u></p> <p>Promote the collection of data on manta and devil rays as part of the PIRFO observer programme, including action taken and state of the species; and will make a request to SPC to undertake a literature review on the mortality to manta and devil rays when returned to sea.</p> <p><u>By Year 2-2019 PNA will:</u></p> <p>Provide evidence that a dialogue has commenced with national governments and NGOs to assess the direct impact of purse seine free school fisheries on manta rays; and PNA will determine a strategy to ensure the PNAFTF does not hinder the recovery of Manta and devil rays will be implemented.</p> <p><u>Year 3-2020, PNA will:</u></p> <p>Implement a strategy for inclusion as an industry code of conduct and /or a PNA Implementation Arrangement or WCPFC Commission Management measures, as deemed necessary.</p> <p><u>Year 4-2021, PNA will provide evidence that:</u></p> <p>The PNA and/or WCPFC strategy evaluated to ensure that the strategy is meeting its objectives.</p>
Consultation on condition	The Assessment Team accepts that this condition can be met through action taken by the PNA alone, or by the PNA within the wider WCPFC process.
Progress on Condition (Year 1)	<p>Condition 5 (UoC 1) is the same as Condition 6 (UoC 2).</p> <p>The Client provided an update to the Audit Team at the Year 1 site visit (included in surveillance audit report Year 1, Report 4). This shows that catches of <i>Mantas</i> and mobulids continue to be documented by observers in the PNA Tuna Fishery, showing that the catch of <i>Manta</i> species was 897 in 2016 and 517 in 2017. This is consistent with the numbers recorded in previous years (634 animals per year for 2011-2015). It was noted to the Audit Team that this reflects a very low rate of interaction, but we highlight that it is total mortality rather than rate of interaction that is important.</p> <p>Also, through the WCPFC Shark Research Plan, there is a process ongoing to improve the information available on catches through observer training, and through the development of a <i>Manta</i> and mobulid identification guide (WCPFC-SC14-2018/EB-WP-04: https://www.wcpfc.int/file/216146/download?token=Oza616l9).</p> <p>There has also been progress in the development of safe release guidelines for <i>Manta</i> and mobulid rays in the WCPO. As noted in the recertification report for the PNA Tuna Fishery (Blyth-Skyrme <i>et al.</i>, 2018), a good practice guide had been produced and distributed previously to inform fishermen of the best techniques for releasing species including Manta and devil rays from purse seine fisheries (i.e. Poisson <i>et al.</i>, 2012). These were combined with guidelines for longline fisheries and released at the SC14 meeting of the WCPFC Scientific Committee (https://www.wcpfc.int/file/216439/download?token=dCOslw0r). It is understood that these guidelines are voluntary and therefore not subject to compliance monitoring.</p> <p>The International Seafood Sustainability Foundation (ISSF) has undertaken at least two 'skipper workshops' in the PNA region in 2017 and 2018, where ideas including around safe handling of Mantas and mobulids is discussed.</p> <p>The Audit Team notes that the client highlighted discussion at the WCPFC on <i>Manta</i> and mobulid ray management that had occurred previously, where at least one CCM was resistant to proposals</p>

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	<p>to require safe release through a CMM in the absence of assessment information (WCPFC 13: https://www.wcpfc.int/system/files/WCPFC13%20Summary%20Report%20final_issued%202%20M arch%202017%20complete.pdf). We highlight that Dr. Shelley Clarke of the SPC was reported at WCPFC 13 to have commented “<i>In her opinion there are sufficient data to support a detailed assessment of mobula and manta rays.</i>” We also highlight that Condition 5 (and the identical Condition 6) is on Principle 2, and therefore that the condition can be met through action taken by the PNA alone, or by the PNA within the wider WCPFC process. We therefore encourage the PNA to ensure the SG80 requirement is met, fully accepting that a CMM requiring safe release is not necessarily essential in order to meet the Condition.</p>
Progress on Condition (Year 2)	<p>Although there are no details on progress, as reported last year it is confirmed that there is ongoing work for a shark and ray identification guide (WCPFC-SC 2019a).</p> <p>More significantly, CMM 2019-05 (on Mobulid Rays caught in association with fisheries in the WCPFC Convention Area) came into effect on 1 January 2021. The PNA have provided support for the development and implementation of this CMM (as documented in WCPFC-TCC 2019 and WCPFC16 2019), which prohibits setting on and retaining any Mobulids (including Manta species), and details best-practice measures for handling and returning these species to the water. Under the CMM, CCMs will be required to report on the implementation of the measures in part 2 of their annual reports to the WCPFC.</p> <p>In discussions with the SPC at the site visit in January 2021, it was confirmed that it was too early to determine if CMM 2019-05 had had any effect on catch and / or release rates for Mobulid species, but it was confirmed that it should be feasible to review the effectiveness in upcoming years using catch and fate data collected by observers.</p> <p>In light of the implementation of CMM 2019-05, which essentially comprises the key components of a strategy for Mantas and devil rays, it is appropriate to modify the milestones for this Condition. The revised milestones also account for the Covid-19 derogations issued by the MSC to extend timelines for certificates and conditions. The new milestones and information on the Covid-19 derogations is presented in the Additional information [year 2] box, below.</p>
Additional information (Year 2)	<p>In March 2020, the MSC issued a Covid-19 derogation that extended the timelines for existing fishery certificates and conditions by six months. The MSC recently issued a further Covid-19 derogation, with the effective date of 28 March 2021, to extend condition timelines for management and information PIs for an additional year (i.e., including PI 2.3.2), and for relevant conditions there are no milestones effective for this current year. The overall effect of the two derogations is to delay milestones and the requirement for this condition to be met by 18 months. Also, it is noted that the year of each surveillance audit as written originally in the Client Action Plan for the PCR for the fishery and reproduced above was incorrect (e.g., Year 1 took place in 2019, not 2018); this was the result of the Objection against the recertification determination for the fishery, which delayed the publication of the PCR from 2017 into 2018 (BlythSkyrme et al. 2018). In light of the implementation of CMM 2019-05, the wording and timelines for this condition are adjusted as follows:</p> <p><u>Year 3: (Resulting score = 75)</u></p> <p>Evidence of progress towards the development and implementation of a strategy to ensure the PNAFTF does not hinder the recovery of Manta and devil rays shall be provided. An update on the catch and likely mortality rate of Manta and devil rays taken in the PNAFTF will be needed.</p> <p><u>Year 4: (Resulting score =80)</u></p> <p>Evidence that a strategy is in place that is expected to ensure the PNAFTF does not hinder the recovery of Manta and devil rays has been implemented shall be provided. The effectiveness of the strategy (including measures under CMM 2019-05) should be determined through appropriate analysis.</p> <p>The revised Client Action Plan (CAP) is presented in Section 3.6</p>

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Progress on
Condition (Year
3) –
Client update &
Audit Team
comments

For the Year 3 audit, the PNAO provided updated observer data for 2019 and 2020, showing catch and fate for the Mobulids taken withing the fishery, as below (Table 1 = numbers, Table 2 = %). It is noted that the 2020 data are not comprehensive for the fishery overall, given the limitations on observer coverage caused by Covid-19.

Table 1: Fate codes for Mobulids caught in the PNA fishery - number by species.

Fate code	A0	A1	A2	A3	D	U	(blank)	Grand Total
2019								
Giant manta	182	15	24	5	181	189	734	1,330
Mantas, Devil rays, NEI.		1					40	41
Mobula	71	15	29	3	121	151	409	799
Munk's devil ray							1	1
Pelagic stingray		1					38	39
Stingrays, butterfly rays, NEI.							6	6
Total	253	32	53	8	302	340	1,228	2,216
2020								
Giant manta	41	1	3	1	128	76	189	439
Mantas, Devil rays, NEI.							10	10
Mobula	11	3			44	17	136	211
Munk's devil ray							2	2
Pelagic stingray							4	4
Stingrays, butterfly rays, NEI.							3	3
Total	52	4	3	1	172	93	344	669

Table 2: Fate codes for Mobulids caught in the PNA fishery - percentage by species.

Fate code	A0	A1	A2	A3	D	U	(blank)	Grand Total
2019								
Giant manta	13.7	1.1	1.8	0.4	13.6	14.2	55.2	100.0
Mantas, Devil rays, NEI.		2.4					97.6	100.0
Mobula	8.9	1.9	3.6	0.4	15.1	18.9	51.2	100.0
Munk's devil ray							100.0	100.0
Pelagic stingray		2.6					97.4	100.0
Stingrays, butterfly rays, NEI.							100.0	100.0
Total	11.4	1.4	2.4	0.4	13.6	15.3	55.4	100.0
2020								
Giant manta	9.3	0.2	0.7	0.2	29.2	17.3	43.1	100.0
Mantas, Devil rays, NEI.							100.0	100.0
Mobula	5.2	1.4			20.9	8.1	64.5	100.0

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Munk's devil ray							100.0	100.0
Pelagic stingray							100.0	100.0
Stingrays, butterfly rays, NEI.							100.0	100.0
Total	7.8	0.6	0.4	0.1	25.7	13.9	51.4	100.0

Overall, the data for 2020 are not comprehensive due to the impact of Covid-19 on observer coverage within the region, but they show a very similar pattern as for 2019. However, as noted previously, CMM 2019-05 (on Mobulid Rays caught in association with fisheries in the WCPFC Convention Area) came into effect on 1 January 2021. While the observer data available to the Audit Team extend only to 2020, they do not cover the period in which implementation of the CMM is required.

The Audit Team was also provided with an update from the PNA, highlighting that requirements of WCPFC CMMs are linked to the latest version of the PNA's MSC Chain of custody MoU (PNA 2021). It was also highlighted that observer reporting requirements have been amended to include more detailed species identification (e.g., Giant Manta, Giant Devil Ray, Munk's Devil Ray etc.) and additional reporting on any interactions with SSIs. This additional information includes the condition of all SSIs both at capture and upon release, as below. The 2021 SPC Purse Seine Observer Guide (SPC 2021) outlines instructions for Observers completing these additional reporting fields. It is considered that these additional data will enable PNA to evaluate the effectiveness of the strategy in ensuring the UoA does not hinder the recovery of Manta and devil rays.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV – Interaction, beside vessel	ICV – Collision with vessel
ION – Interaction, outside net	ICP – Collision with propeller
ICF – Interaction, crew feeding	ICT – Collision with tori line
IWF – Interaction – with FADs but not set on	FRB – Feeding on bait during set
IDW – Interaction – dead in water	IFO – Feeding on discarded offal
OTH – Interactions – other, please specify	IRE – Resting on vessel, floats or FADs (birds)

Condition codes

A0 – alive; A1 – alive and healthy; A2 – alive, injured; A3 – alive but dying; D – Dead U – unknown.

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	<p>Fate codes</p> <p>RWW – Retained – whole weight RHG – Retained – headed and gutted (billfish only) RGG – Retained – gilled and gutted (kept for sale) RPT – Retained – partial (e.g. fillet, loin) RCC – Retained – crew consumption (on board) ROR – Retained – other reason (specify) RFR – Retained trunk – fins retained (shark only) DFR – Discarded trunk – fins retained (shark only) DTS – Discarded – too small (tuna only) DGD – Discarded – gear damage (tuna only) DVF – Discarded – vessel fully loaded DUS – Discarded – unwanted species DSD – Discarded – shark damage DWD Discarded – whale damage DPQ Discarded – poor quality DOR – Discarded – other reasons (specify) ESC – Escaped (use these fate codes for any SSIs landed on deck) DPA – Discarded Protected Species – Alive DPD – Discarded Protected Species – Dead DPU – Discarded Protected Species – Unknown</p>
Status of condition	<p>Implementation of the measures for mobulids under CMM 2019-05 has been required since January 1st 2021, with efforts made by the PNA to advance this through the CMM's inclusion within the PNA MSC CoC MoU. The Year 3 milestone is met.</p> <p>The condition is on target.</p>
Additional information (Year 3)	None

Condition 6 (Yellowfin tuna – UoC 2)

Performance Indicator	2.3.2 (SIb)
Score	75
Justification	<p>Observer data indicate that the number interactions between the PNAFTF and <i>Manta</i> and devil rays has averaged 634 animals annually over the period 2011-2015 (PNAO, pers. comm.). It is not clear to what extent <i>Manta</i> and devil rays are retained in the PNAFTF, but retention generally seems unlikely. Croll <i>et al.</i> (2015) noted that while extrapolated from limited observer data, the relatively high mobulid bycatch rate and intensity of effort suggest the WCPO purse seine fisheries have a large mobulid bycatch compared with others.</p>

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	<p>At the 12th WCPFC Scientific Committee (SC) meeting (SC12), the designation of Manta and Mobula species as 'key shark species' was proposed, which would result in improved data collection and reporting of the <i>Manta</i> and <i>Mobula</i> bycatch. This proposal was supported by FFA members, but achieved only limited support in the SC overall. Amongst a range of recommendations, SC12 recommended that purse seine observer training programmes add emphasis to the identification of <i>Mobula</i> species as part of their curricula (WCPFC 2016b). SC12 also recommended that the WCPFC considers adopting guidelines for safe release of <i>Manta</i> and <i>Mobula</i> rays caught incidentally in WCPFC fisheries, and a good practice guide has been produced and distributed to inform fishermen of the best techniques for releasing sharks and rays, including <i>Manta</i> and <i>Mobula</i> species (Poisson <i>et al.</i>, 2012). However, there is nothing in place for ray species consistent with the requirements to release silky shark, oceanic whitetip shark, or whale shark.</p> <p>Overall, there are considered to be measures in place that are expected to ensure the UoA does not hinder the recovery of devil rays and manta rays, but it is not clear that together they comprise a strategy to manage and minimise impacts. The fishery meets SG60 but not SG80 and a Condition is introduced.</p>
Condition	<p>Slb) By the third annual surveillance audit, the client shall demonstrate that there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of Manta and devil rays as ETP species.</p>
Milestones	<p><u>Year 1: (Resulting score = 75)</u></p> <p>At the first annual surveillance audit, the client will need to present a plan (including timeline) showing how a strategy to ensure the PNAFTF does not hinder the recovery of Manta and devil rays will be implemented.</p> <p>The client will need to provide evidence that available information on Manta and devil rays is being considered in developing the strategy, including species identification and recording where appropriate.</p> <p>An update on the catch and likely mortality rate of Manta and devil rays taken in the PNAFTF will be needed.</p> <p><u>Year 2: (Resulting score = 75)</u></p> <p>Evidence of progress towards the development and implementation of a strategy to ensure the PNAFTF does not hinder the recovery of Manta and devil rays shall be provided.</p> <p>An update on the catch and likely mortality rate of Manta and devil rays taken in the PNAFTF will be needed.</p> <p><u>Year 3: (Resulting score ≥80)</u></p> <p>Evidence that a strategy is in place that is expected to ensure the PNAFTF does not hinder the recovery of Manta and devil rays has been implemented shall be provided.</p> <p>An update on the catch and likely mortality rate of Manta and devil rays taken in the PNAFTF will be needed.</p> <p><u>2nd audit note (2021):</u></p> <p><u>See Additional Information below re changes to the timetable for closing conditions as a result of Covid-19 related MSC derogations.</u></p>
Client Action Plan	<p><u>By Year 1-2018 PNA will:</u></p> <p>Promote the collection of data on manta and devil rays as part of the PIRFO observer programme, including action taken and state of the species; and will make a request to SPC</p>

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	<p>to undertake a literature review on the mortality to manta and devil rays when returned to sea.</p> <p><u>By Year 2-2019 PNA will:</u></p> <p>Provide evidence that a dialogue has commenced with national governments and NGOs to assess the direct impact of purse seine free school fisheries on manta rays; and PNA will determine a strategy to ensure the PNAFTF does not hinder the recovery of Manta and devil rays will be implemented.</p> <p><u>Year 3-2020, PNA will:</u></p> <p>Implement a strategy for inclusion as an industry code of conduct and /or a PNA Implementation Arrangement or WCPFC Commission Management measures, as deemed necessary.</p> <p><u>Year 4-2021, PNA will provide evidence that:</u></p> <p>The PNA and/or WCPFC strategy evaluated to ensure that the strategy is meeting its objectives.</p>
Consultation on condition	The Assessment Team accepts that this condition can be met through action taken by the PNA alone, or by the PNA within the wider WCPFC process.
Progress on Condition (Year 1)	<p>Condition 6 (UoC 2) is the same as Condition 5 (UoC 1).</p> <p>The Client provided an update to the Audit Team at the Year 1 site visit (included in Section surveillance audit report Year 1, Report 4). This shows that catches of <i>Mantas</i> and mobulids continue to be documented by observers in the PNA Tuna Fishery, showing that the catch of <i>Manta</i> species was 897 in 2016 and 517 in 2017. This is consistent with the numbers recorded in previous years (634 animals per year for 2011-2015). It was noted to the Audit Team that this reflects a very low rate of interaction, but we highlight that it is total mortality rather than rate of interaction that is important.</p> <p>Also, through the WCPFC Shark Research Plan, there is a process ongoing to improve the information available on catches through observer training, and through the development of a <i>Manta</i> and mobulid identification guide (WCPFC-SC14-2018/EB-WP-04: https://www.wcpfc.int/file/216146/download?token=Oza616l9).</p> <p>There has also been progress in the development of safe release guidelines for <i>Manta</i> and mobulid rays in the WCPO. As noted in the recertification report for the PNA Tuna Fishery (Blyth-Skyrme <i>et al.</i>, 2018), a good practice guide had been produced and distributed previously to inform fishermen of the best techniques for releasing species including Manta and devil rays from purse seine fisheries (i.e. Poisson <i>et al.</i>, 2012). These were combined with guidelines for longline fisheries and released at the SC14 meeting of the WCPFC Scientific Committee (https://www.wcpfc.int/file/216439/download?token=dCOslw0r). It is understood that these guidelines are voluntary and therefore not subject to compliance monitoring.</p> <p>The International Seafood Sustainability Foundation (ISSF) has undertaken at least two 'skipper workshops' in the PNA region in 2017 and 2018, where ideas including around safe handling of Mantas and mobulids is discussed.</p> <p>The Audit Team notes that the client highlighted discussion at the WCPFC on <i>Manta</i> and mobulid ray management that had occurred previously, where at least one CCM was resistant to proposals to require safe release through a CMM in the absence of assessment information (WCPFC 13: https://www.wcpfc.int/system/files/WCPFC13%20Summary%20Report%20final_issued%202%20March%202017%20complete.pdf). We highlight that Dr. Shelley Clarke of the SPC was reported at WCPFC 13 to have commented "<i>In her opinion there are sufficient data to support a detailed assessment of mobula and manta rays.</i>" We also highlight that Condition 5 (and the identical Condition 6) is on Principle 2, and therefore that the condition can be met through action taken by</p>

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	the PNA alone, or by the PNA within the wider WCPFC process. We therefore encourage the PNA to ensure the SG80 requirement is met, fully accepting that a CMM requiring safe release is not necessarily essential in order to meet the Condition.
Progress on Condition (Year 2)	As detailed in Condition 5.
Progress on Condition (Year 3) – Client update & Audit Team comments	As detailed in Condition 5.
Progress status	As detailed in Condition 5.
Additional information	As detailed in Condition 5.

4.4 Recommendations

Two new non-binding Recommendations were raised at this Year 2 surveillance audit. These will be reported against at subsequent audits.

The following tables detail the progress made against the three Recommendations set on the fishery at recertification in 2018. It is noted that these are 'non-binding', such that there is no specific requirement to make progress against a Recommendation, but clients are encouraged to pursue Recommendations within the spirit of the MSC Standard.

4.4.1 Recommendation 1 (Skipjack tuna – UoC 1 and Yellowfin tuna – UoC 2)

Performance Indicator	2.2.2 (SIId)
Recommendation	SPC provided observer data showing that shark finning does occur at a low level in the PNAFTF. For each MSC audit, a Recommendation is set that the PNA provide a PNAFTF-specific enforcement and compliance summary report of CMM 2010-07 (CMM for sharks), CMM 2011-03 (CMM for oceanic whitetip sharks) and CMM 2013-08 (CMM for silky sharks). This should detail any contraventions of these CMMs that have occurred in the PNAFTF in the preceding year, the enforcement action taken as a result in each case, and any statutory or non-statutory approaches taken to further reduce the likelihood of any contraventions occurring.
Progress on Recommendation (Year 1)	<p>The client provided a submission on shark finning to the Audit Team at the site visit (surveillance audit report Year 1). The submission includes a description of the process undertaken within the WCPFC and PNA to monitor and enforce relevant shark finning regulations, as well as a detailed break-down of shark finning cases observed in the certified fishery for 2016 and 2017.</p> <p>As reported at recertification (Blyth-Skyrme <i>et al.</i>, 2018), the PNA Tuna Fishery is 100% observed, which means that if finning occurs at even a very low rate then it will be detected. This gives much greater confidence that the MSC requirements around shark finning, as interpreted (https://mscportal.force.com/interpret/s/article/Shark-finning-requirements-1527262010507), are</p>

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	<p>being met in the PNA Tuna Fishery than if no finning was identified in a fishery with a low level of observer coverage.</p> <p>As noted in the reassessment of the PNA Tuna Fishery, a key part of the observed decline in shark finning appears to have been the adoption and enforcement of shark-finning regulations at the WCPFC level (e.g., CMM 2011-04 requires that oceanic whitetip sharks (<i>Carcharhinus longimanus</i>) are not retained in whole or in part; CMM 2013-08 requires that silky sharks (<i>Carcharhinus falciformis</i>) are not retained in whole or in part) and in the individual PNA countries (e.g., Kiribati Shark Sanctuary Regulations 2015 https://www.ffa.int/system/files/Shark_Sanctuary_Regulations_2015.pdf). Nevertheless, implementation and education around the rules can take time, and any regulation may be vulnerable to infringement by inexperienced individuals or new entrants to the fishery who are not versed fully in the fishery rules.</p> <p>The detailed data presented in surveillance audit report Year 1 show that the number of individual cases of shark finning recorded annually has declined over time, from 266 in 2013 to 14 in 2016 (representing six separate vessel trips) and just three in 2017 (representing one vessel trip). This represents a very high level of compliance as a proportion of the trips that are undertaken annually in the PNA Tuna Fishery.</p> <p>The PNAO also provided the Audit Team with an update on the approach taken to pursue appropriate sanctions in cases where finning was identified in the UoC. In summary, where a small number of sharks are finned, warnings may be issued rather than prosecutions being sought. However, more serious issues are taken up with the flag state, either directly or with follow-up by the PNAO. This represents appropriate sanction.</p> <p>In this regard, the PNA has recently established a Compliance Sub-Committee, which recommended the appointment of a PNA Compliance Officer to facilitate the exchange of information, and to follow up on actions taken by Parties. It was reported at the site visit that this appointment has not yet been made.</p> <p>In summary, further progress has been made in the last year, and the level of shark-finning in the PNA Tuna Fishery in the most recent years has been very low. The fishery continues to perform at SG80 level of performance for PI 2.2.2 SId.</p>
Progress on Recommendation (Year 2)	<p>Under the new version of the MSC Process requirements (v2.2 – MSC 2020), from September 25th 2020, fisheries in the MSC programme cannot include <u>entities</u> that have been prosecuted for a shark-finning violation in any fishery in the last two years – such entities will be considered out-of-scope for MSC certification. For this Year 2 audit, the Audit Team reviewed data with the client and SPC in detail and confirmed to the best of our ability that no entity in the PNA fishery has been prosecuted for a shark-finning offence in the last two years.</p> <p>We note that it is standard legal practice for any authority to assess the seriousness of an offence in deciding whether it is appropriate to prosecute, and that an ‘appropriate sanction’ for a very minor offence may be no sanction at all. In this regard, until September 25th 2020 the MSC had provided a finning interpretation¹¹ that stated “<i>No systematic occurrence of shark finning is acceptable for an MSC certified fishery</i>” and “<i>If only one or two cases have been reported, for example, and the vessel/s involved have been appropriately sanctioned, then the team may still conclude that it is likely or highly likely that shark finning is not taking place in any significant way.</i>”</p> <p>However, it was announced by the MSC in early 2020 that this finning interpretation was to be rescinded on September 25th 2020 (the implementation date of MSC Process v.2.2), at which point a zero-tolerance approach to any finning would be enacted. This revised approach potentially meant that if even one shark finning event was identified in a fishery, it would be impossible to meet SG60 for the shark finning SIs (i.e., PI 1.2.1 SId, PI 2.1.2 SId, PI 2.2.2 SId, that require “<i>It is likely that shark finning is not taking place</i>”). In essence, the zero-tolerance approach had the potential to penalise fisheries with high levels of observer coverage severely in comparison to those with no</p>

¹¹ <https://mscportal.force.com/interpret/s/article/Shark-finning-requirements-1527262010507>

or very low levels of coverage, which would be inappropriate given that high levels of observer coverage should in every case benefit a fishery in the MSC context (i.e., good information should support scoring, poor information should result in a more precautionary approach being taken to scoring, including in meeting the shark finning SIs – GSA2.4.5 – GSA2.4.7, MSC 2018).

A new finning interpretation¹² was released by the MSC in September 2020, where it was specified that any vessel engaged in shark finning (irrespective of the level of finning and irrespective of a prosecution) is not eligible to access a MSC certificate for a period of two years from the point it is excluded from a certificate, and that clients are expected to be proactive in excluding vessels where shark finning is found to have occurred. It was stated that, “for certified fisheries it means the entire UoC should not be suspended due to the involvement of one vessel or a minority of vessels in shark finning practices”. Further clarification was sought on this new interpretation in January 2021, where it was confirmed by e-mail (dated February 9th, 2021) that the MSC expected the new approach (i.e., excluding vessels from certificates in a proactive manner if shark finning had occurred in the previous two years) to be applied retrospectively, including for the period prior to the September 25th, 2020 even though the original shark finning interpretation was in place at that time.

Shark catch and fate data from the SPC TUBS observer database for the certified PNA fishery were reviewed in detail by the Audit Team at the site visit. It was determined that in the last two years, three vessels in the UoA had undertaken very low levels of shark finning, as follows:

Vessel	Set date	Regional observer programme trip?	Species	Code	Number of sharks
Taiyo Tofol	23 rd January 2019	Yes	Silky shark	Discarded fins removed	1
Fu Kuan 808	3 rd June 2019	Yes	Silky shark	Discarded fins removed	2
Queen Isabella 88	7 th January 2020	Yes	Silky shark	Discarded fins removed	2

It is noted that none of the three vessels was prosecuted, which is as expected given the very low level of offence in each case. Nevertheless, it was demonstrated to the CAB that the PNAO client had requested information from the relevant authorities in order to clarify and/or verify the situations, but no evidence was presented demonstrating that finning had not occurred. As a result, and following the clarification from the MSC that the new interpretation should be applied retrospectively, the PNAO has removed these vessels from the certificate and will prevent their access to the certificate for a two year period. It is the CABs determination that this action by the client is ‘proactive and timely’ given the new understanding of the new interpretation provided by the MSC.

The new interpretation also specifies that where vessels are excluded, a change of scope has occurred and that a CAB should complete an expedited audit as per 7.29. The expedited audit report will be made available as a separate document, but several points are noted at this stage:

- The last recorded finning offence in the certified PNA fishery was in January 2020 (>1 year ago).

¹² <https://mscportal.force.com/interpret/s/article/Clarification-of-shark-finning-conviction-scope-requirements-and-the-approach-to-take-when-there-is-evidence-of-shark-finning-in-the-UoA-UoC>.

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- Observer coverage levels in the certified PNA fishery were 100% until the Covid-19 pandemic prevented observers from moving freely within the region from April 2020.
- Despite Covid-19, observer coverage levels have not dropped below 20% at any time, and are likely to have been around 40% for the year (SPC, pers. comm.).
- In GSA2.4.5 – GSA2.4.7 (MSC 2018) the SG60 requirement for 'some external validation' is a nominal observer coverage of 5%, while the SG80 requirement for external validation is nominal observer coverage of 20% of effort.

In this regard, and in the absence of any recent reports of finning having occurred within the certified PNA fishery, it is considered appropriate to maintain the score for PI.2.2.2 SId at 80.

The potential for excluded vessels to impact upon traceability is assessed in Section 3.2.8 of this report. It is concluded that the PNAO employs numerous checks and balances within its CoC system to ensure that there is no mixing of certified and non-certified products.

Progress on Recommendation (Year 3)

Observer coverage within WCPFC purse seine fisheries is required to be 100%, but this requirement was suspended in a decision taken in April 2020. The latest decision by the WCPFC in June 2022¹³ lifted this suspension, with a transitional period now in place until 31st December 2022, during which time CCMs 'should make best efforts to embark observers' in line with the WCPFC guidelines on enabling the placement of observers as recovery from the Covid-19 pandemic continues. The 100% observer coverage requirements are nevertheless required from 1st January 2023.

For this Year 3 audit, the PNAO provided the Audit Team with a document detailing their approach to the PNA MSC CoC scheme during the Covid-19 pandemic (PNA 2022). This provides an overview of the approach taken to ensuring that products from the fishery comply with their CoC policy, which include maintaining compliance with MSC and WCPFC requirements.

The PNA 2022 document also details that, as noted in Year 2, the PNA has managed to maintain some observer coverage on its vessels overall, despite Covid-19 and the WCPFC suspension of the observer coverage requirements, with a coverage level in 2021 reported to be 18% (see following table). However, at-sea observer coverage forms only part of the overall monitoring strategy for the fishery, with high levels of observation of landings and containerisation typically achieved. Data from the client shows the following:

Category of monitoring	2020 [2021]
% at sea monitoring by observers of MSC certified trips	68% [18%]
% of direct discharge to PNA plants monitored	79% [100%]
% of containerization in PNA ports monitored.	88% [77%]
% of transshipment in PNA port monitored	65% [8%]
% of all certified MSC trips either monitored at sea or during discharge	86% [27%]
% of secondary containerization monitored in Asia	100% [100%]
% of discharges and out turn monitored in Asia **	84% [100%]
% of discharges where the factory provided additional out turn data	100% [100%]

** Due to COVID 19 pandemic wave, 3rd party monitoring in General Santos, Philippines was suspended in 2020 for an extended period.

In the last two years, there have been no shark finning incidents observed in the PNA fishery. The level of monitoring including observer coverage achieved in total is adequate for the fishery to continue meeting the MSC SG80 finning requirement. It is expected that, for 2023, the 100%

¹³ <https://www.wcpfc.int/doc/circ-2022-40/outcomes-ss4-covid-19-intersessional-decisions>

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observer coverage requirements will be reimplemented within the PNA fishery, as is required for WCPFC purse seine fisheries following the WCPFC decision of June 2022.

4.4.2 Recommendation 2 (Skipjack tuna – UoC 1 and Yellowfin tuna – UoC 2)

Performance Indicator	2.3.1 (SIc)
Recommendation	<p>Although the number of pollution incidences from the 1,400-1,500 purse seine vessels considered in Richardson <i>et al.</i> (2015) report indicate that pollution from the PNAFTF fleet is highly unlikely to create unacceptable impacts, a Recommendation is set, that the client work to implement the second and third initiatives identified in the report, which are as follows:</p> <p><i>A regional outreach and compliance assistance programme on marine pollution prevention for fishing vessel crews, business operators and managers; and</i></p> <p><i>Improvements in Pacific port waste reception facilities to enable them to receive fishing vessel wastes on shore.</i></p>
Progress on Recommendation (Year 1)	<p>PNAO informed the Audit Team that a request had been submitted to the SPC to update the Richardson <i>et al.</i>, (2015) information regarding pollution incidents. The client noted that data from the purse seiners are readily available because of the high level of observer coverage, whereas other fleets have lower levels of observer coverage and there is therefore much greater uncertainty about the level of pollution derived from those fleets.</p> <p>WCPFC (2018) Conservation and Management Measure (2017-04) on Marine Pollution (https://www.wcpfc.int/doc/cmm-2017-04/conservation-and-management-measure-marine-pollution) was implemented on 1st January 2019. Amongst various items that take the issue of pollution management forward, this includes that WCPFC Commission Members, Cooperating Non-Members and Participating Territories (CCMs) are:</p> <p><u>Encouraged</u> to ratify, accept, approve or accede to the annexes of MARPOL and the London Protocol at the earliest possible opportunity if they have not already done so,</p> <p><u>Shall prohibit</u> their fishing vessels operating within the WCPFC CA from discharging any plastics (including plastic packaging, items containing plastic and polystyrene) but not including fishing gear, and</p> <p><u>Encouraged to prohibit</u> their fishing vessels operating within the WCPFC CA from discharging oil or fuel products or oily residues into the sea; garbage, including fishing gear, food waste, domestic waste, incinerator ashes and cooking oil; and sewage, except as would be permitted under applicable international instruments.</p> <p><u>Requested to ensure</u> adequate port reception facilities are provided to receive waste from fishing vessels.</p> <p>A report by Bulman (2018) was also presented to the Audit Team at the site visit. This report was undertaken for the Forum Fishery agency (FFA) and presents a business model for reception of wastes from fishing vessels in the Pacific region.</p> <p>Waste is clearly a challenging issue to address, but it appears that good steps are being taken towards reducing and managing the problem. The fishery continues to perform at SG80 level of performance for PI 2.3.1 SIc, and the Audit Team will be interested in seeing further progress in coming years.</p>
Progress on Recommendation (Year 2)	<p>It was reported to the Audit Team that several ports do now have waste reception facilities. Further information will be sought for the next Audit report (Year 3).</p>

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Progress on Recommendation (Year 3)	No further information was available at this Year 3 audit.
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4.4.3 Recommendation 3 (Skipjack tuna – UoC 1 and Yellowfin tuna – UoC 2)

Performance Indicator	3.1.3 (Sla)
Recommendation	There are elements of the management system where it is not clear that the precautionary approach is applied in practice across all policy for all stocks. It is recommended that, specifically in the PNA, long-term objectives that reference the precautionary approach are explicitly adopted. These should acknowledge the link of objectives between the WCPFC, the PNA and the individual Parties.
Progress on Recommendation (Year 1)	PNAO has reviewed all member national legislation to identify gaps (with a view to addressing the weakness identified at re-certification) including reference to the Precautionary Approach. While all member states are members of WCPFC, members are obligated (at national level) to apply precautionary management actions. Only two countries do not have explicit reference in their legislation to the PA, Tokelau and Palau (this was identified at the recertification of the fishery as well). Also, the PNA instruments identified at recertification that do not refer explicitly to the PA (Nauru Agreement and Palau Arrangement) have not yet been revised, although the need for this is recognised by the PNA (noting that they do however follow the principles of the UNFSA under Article 6). The team were satisfied that the weaknesses in national legislation and the PNA instruments regarding the PA is recognised by the PNA and that efforts to strengthen the legislation in this regard was in process (recognising that changing instruments of this nature are time consuming and complex). The fishery continues to meet the SG80 requirement, here.
Progress on Recommendation (Year 2)	<p>A PNAO review of legislation undertaken for the reassessment of the PNAFTF in 2018 identified that only Palau and Tokelau did not have explicit reference in their legislation to the precautionary approach (Blyth-Skyrme et al. 2018). The PNA have been working recently to enshrine the precautionary approach within the management system at the sub-regional level, though, and have committed to this through the PNA Strategic Plan 2019-2025 (PNA 2019), as follows:</p> <p>PNA Strategic Plan 2019-2025 (PNA 2019)</p> <p><i>“Ecologically Sustainable Fisheries Management: PNA supports and promotes the need to ensure sustainable fish stocks and healthy ocean ecosystems and commits to implement a precautionary approach to the management of their fisheries as the fundamental starting point to pursuing economic returns.”</i></p> <p>In the last year, the precautionary approach has also been enshrined in the national management system for both Palau and Tokelau, as below:</p> <p>Palau National Marine Sanctuary Fishing Regulations (Government of Republic of Palau):</p> <p><i>“These Regulations are intended to promote sustainable development, food security, and the sustainable management of fishing activities in Palau’s waters by:</i></p> <p><i>vii. adopting measures to ensure the long-term sustainability of highly migratory fish stocks that are based on the best available science and designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, and taking into account fishing patterns and the interdependence of stocks; and</i></p>

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viii. applying a precautionary approach and an ecosystem based management approach in accordance with international standards and any Convention, access agreement or fisheries management agreement to which the Republic is a party.”

Tokelau Offshore Fisheries Management Plan (Government of Tokelau 2020):

“Persons exercising or performing functions or duties under this plan in relation to the sustainable utilisation of fisheries resources shall take account of the following environmental and precautionary principles:

Environmental Principles:

- Adverse impacts of fishing on the marine environment should be avoided, remedied or mitigated:
- Associated and dependent species should be maintained above a level that ensures their long-term sustainability:
- Biological diversity of the aquatic environment should be maintained:
- Habitat of particular significance should be protected.

Precautionary Principle:

- Decisions should be made on the best available information:
- Decision makers should consider any uncertainty in the information available:
- Decisions makers should be cautious when information is uncertain, unreliable, or inadequate:
- The absence of, or uncertainty in, any information should not be used as a reason for postponing or failing to take action to achieve the purpose of this plan.”

Overall, therefore, this Recommendation has been met fully and is closed.

4.4.4 New Recommendation 4 (Skipjack tuna – UoC 1 and Yellowfin tuna – UoC 2)

Performance Indicator	2.3.3 (Sla).
Recommendation	Observers undertake a critical role in providing data on non-target species catches, but it is apparent that additional reporting of interactions with species of special interest (SSI) by some vessels may not be fully comprehensive. We therefore make a new non-binding recommendation against the certified PNA fishery, that efforts are made to ensure catch reporting for SSIs is undertaken rigorously by all vessels in support of scientific and management initiatives.

4.4.5 New Recommendation 5 (Skipjack tuna – UoC 1 and Yellowfin tuna – UoC 2)

Performance Indicator	3.2.3 (Sla)
Recommendation	Observers undertake a very important role within WCPFC fisheries. In support of this, and noting comments provided in interview regarding the availability of information on cases to them, a system should be established to ensure observers can follow the progression of relevant cases through to their conclusion to the extent that confidentiality requirements allow.

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4.5 References

Note: references indicated in sections on progress against conditions prior to this Year 3 audit are available in the final audit reports for previous years (https://fisheries.msc.org/en/fisheries/pna-western-and-central-pacific-skipjack-yellowfin-and-bigeye-tuna-purse-seine-fishery-fad-and-non-fad-sets/@_assessments).

- Blyth-Skyrme, R., McLoughlin, K. and Japp, D. (2018). MSC Sustainable Fisheries Certification. PNA Western and Central Pacific skipjack and yellowfin, unassociated / non FAD set, tuna purse seine fishery. https://fisheries.msc.org/en/fisheries/pna-western-and-central-pacific-skipjack-yellowfin-and-bigeye-tuna-purse-seine-fishery-fad-and-non-fad-sets/@_assessments.
- Blyth-Skyrme, R. and McLoughlin, K. (2021). MSC Sustainable Fisheries Certification. PNA Western and Central Pacific skipjack and yellowfin, unassociated / non FAD set, tuna purse seine fishery. 2nd Surveillance Report. https://fisheries.msc.org/en/fisheries/pna-western-and-central-pacific-skipjack-yellowfin-and-bigeye-tuna-purse-seine-fishery-fad-and-non-fad-sets/@_assessments.
- Panizza, A., Williams, P., Falasi, C., Loganimoce, E. and Schneider, E. (2021). Status of observer data management. WCPFC 17th SC. WCPFC-SC17-2021/ST-IP-02. <https://meetings.wcpfc.int/node/12538>.
- PNA 2021. Memorandum of understanding, PNA MSC chain of custody group. 11 pp.
- PNA 2022. PNA MSC COC scheme – with regards to validating MSC freeschool certified catch, monitoring shark finning, other violation, and their mitigation under the COVID 19 Pandemic. 28 pp.
- Scott, F., Scott, R., Yao, N., Pilling, G., Hamer, P., Hampton, J., 2021a. Mixed-fishery harvest strategy developments. WCPFC-SC17-2021/MI-WP-05.
- Scott, R., Scott, F., Yao, N., Hamer, P., Pilling, G., Hampton, J., 2021b. Recent progress in the technical development of harvest strategies for WCPFC stocks and fisheries. WCPFC-SC17-2021/MI-WP-03.
- SPC 2021. Purse-seine Observer Guide 2021. SPC Oceanic Fisheries Programme, Noumea, 140 pp. https://www.spc.int/DigitalLibrary/Doc/FAME/Reports/Purse_seine_Observer_Guide_2021_Web.pdf
- SPC-OFP, 2021. Results of analyses requested by TTMW2 and TTMW1. 18th Regular Session of the Commission. Electronic Meeting1–7 December 2021. WCPFC18-2021-15. <https://meetings.wcpfc.int/node/14244>.
- Vincent M., Pilling G. and Hampton J. (2019). Stock assessment of skipjack tuna in the western and central Pacific Ocean. Report to the 15th Regular Session of the WCPFC Scientific Committee, Pohnpei, Federated States of Micronesia, 12-20 August 2019. WCPFC-SC15-2019/SA-WP-05. <https://www.wcpfc.int/node/42931>.
- Vincent, M., Ducharme-Barth, N., Hamer, P., Hampton, J., Williams, P. and Pilling, G. (2020). Stock assessment of yellowfin tuna in the western and central Pacific Ocean. Report to the 16th Regular Session of the WCPFC Scientific Committee, Electronic meeting, 12-19 August 2020. WCPFC-SC16-2020/SA-WP-04 (Rev. 3). <https://www.wcpfc.int/node/46611>.
- WCPFC18. (2021). Summary Report. Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Eighteenth Regular Session, Electronic meeting, 1–7 December 2021. Issued 13 April 2022. <https://meetings.wcpfc.int/meetings/sc18>.
- WCPFC-SS4. (2022). Outcomes Document. WCPFC Special Session of the Commission. Electronic Meeting, 9 June 2022. WCPFC-SS4-2022-Outcomes, 13 June 2022. <https://www.wcpfc.int/doc/circ-2022-40/outcomes-ss4-covid-19-intersessional-decisions>.
- Williams, P. and Ruaia, T. 2021. Overview of tuna fisheries in the Western and central Pacific Ocean, including economic conditions – 2020. Scientific Committee 17th Regular Session. Electronic Meeting, 11 – 19 August 2021. WCPFC-SC17-2021/GN IP-1. <https://meetings.wcpfc.int/meetings/sc17>.

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5 Appendices

5.1 Evaluation processes and techniques

5.1.1 Site visits

The site visit for the Year 3 audit was undertaken remotely, given the continuing difficulties of travelling to and within the region due to Covid-19. As such, all meetings were conducted remotely, as presented in Table 10. It is noted that following the main part of the audit, a series of meetings were held with observers in early October to support the Audit Team's understanding of issues around the observers' role and responsibilities, non-compliance, and the debriefing process. The audit reporting period was extended by variation request¹⁴ to accommodate these additional interviews.

Table 10. Stakeholder participation in site visit meetings

Date	Attendees	Topics discussed
13 th July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Tom Lopes-Viera (LRQA) • Sergio Cansado (ASI) • Maurice Brownjohn (PNAO) • Les Clark (PNAO) • Sangaa Clark (PNAO) • Melino Bain-Vete (PNAO) • Stephen Brouwer (PNAO) • Brian Kumasi (PNAO) 	<ul style="list-style-type: none"> • Audit procedures • Confirmation of site visit plan • Any changes in management systems and relevant regulations • Any changes to key staff • Any changes in the scientific base of information • Any changes to traceability • Any changes in the fishery • Progress against Conditions • Progress against Recommendations • Shark Guardian report
13 th July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Sergio Cansado (ASI) • Alex Hofford (CTTF) 	<ul style="list-style-type: none"> • Audit procedures • Shark Guardian report
14 th July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Sergio Cansado (ASI) • Peter Williams (SPC) 	<ul style="list-style-type: none"> • Audit procedures • SPC role in validating observer data • Data review and science needs • Shark Guardian report
15 th July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Sergio Cansado (ASI) • Tim Park (SPC) 	<ul style="list-style-type: none"> • Observer role and training • Observer protocol • Debriefing process • E-logs • Shark Guardian report
21 st July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Sergio Cansado (ASI) • Lara Manarangi-Trott (WCPFC) 	<ul style="list-style-type: none"> • WCPFC compliance monitoring processes • CCM reporting to WCPFC • Observer role and responsibilities • Shark Guardian report

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<https://cert.msc.org/FileLoader/FileLinkDownload.aspx/GetFile?encryptedKey=Cpjtk/BY2uEDX6cxeUQBLYZgNAVI2xkHdEmIgz3H G03fNgGKjugPpzSzKNZI4p6t>

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21 st July 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Sergio Cansado (ASI) • Maurice Brownjohn (PNAO) • Les Clark (PNAO) • Sangaa Clark (PNAO) • Melino Bain-Vete (PNAO) • Stephen Brouwer (PNAO) 	<ul style="list-style-type: none"> • Summary of findings
6 th Oct 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Tuvalu) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
6 th Oct 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Tuvalu) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
7 th Oct 2024	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Tuvalu) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
7 th Oct 2024	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Tuvalu) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
12 th Oct 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Marshall Islands) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
12 th Oct 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Marshall Islands) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process
12 th Oct 2022	<ul style="list-style-type: none"> • Rob Blyth-Skyrme (LRQA) • Kevin McLoughlin (LRQA) • Observer (Marshall Islands) 	<ul style="list-style-type: none"> • WCPFC and PNA observer responsibilities • Experience of non-compliance • Debriefing process

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5.1.2 Stakeholder participation

During the audit, the CAB received an e-mail from the Pew Charitable Trusts (below), and a stakeholder submission from the International Seafood Sustainability Foundation (ISSF) (following pages).

5.1.2.1 Stakeholder input – Pew Charitable Trusts

Hi Tom-

Thanks for reaching out. As part of the audit process, we would like to make you aware of the recent determination of the CAB undergoing the assessment for the Hawaii longline swordfish, bigeye and yellowfin tuna fishery. The CAB found that, for conditions related to HCRs for WCPO YFT and BET, “the deadline set out in the MEGVAR is therefore unlikely to be achieved” due to “WCPFC amending their work plan schedule for implementing HCRs, where management measures for YFT and BET tunas will not be adopted until 2024 see <https://www.wcpfc.int/system/files/Attachment%20I%20Indicative%20Harvest%20Strategy%20Workplan%20updated.pdf>.”

We believe this is directly relevant to the PNA fishery, as it has the same harmonized HCR condition deadlines, and should be considered when judging progress against the conditions during the surveillance audit.

Source:

<https://cert.msc.org/FileLoader/FileLinkDownload.aspx/GetFile?encryptedKey=V5hq9XOXtkPztIAXQZwDAP63KspnP D0ZQDntKWuXfOoRz5dyWgXtNdNuFypUEWK5>

Thanks,
Jamie

Jamie Gibbon

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5.1.2.2 Stakeholder input - ISSF

<p>General comments on the surveillance audit</p> <p>Stakeholders should note that input is most useful for assessment teams when attributed to an MSC Performance Indicator, condition or milestone, and when objective evidence and references are provided in support of any claims or claimed errors of fact.</p>	<p>Objective evidence or references should be provided in support of any claims or claimed errors of fact.</p>	<p>CABs should respond in this column.</p> <p>CAB responses should include details of where different changes have been made in the report (which section #, table etc).</p>	<p>The CAB shall assign a response code to each row completed by the stakeholder.</p> <p>(NB – Codes as defined by the MSC are limited to default choices)</p>
<p>ISSF already provided comprehensive input for the fishery operations with FADs covered in the last scope assessment report. The comments provided at this point are in relation to the previous certificate only covering the non-FAD operations fishery and should be considered as an addition to previous input.</p>		<p>Thank you – noted.</p>	<p>Accepted (condition on target)</p>
<p>HS advocacy actions</p> <p>ISSF provided recommendations for the Client Action Plan at the fishery FAD scope extension PCDR assessment to address the conditions towards the adoption by WCPFC of robust HS and HCR for tropical tuna stocks. Below we provide an updated version of these for the client consideration.</p> <p>The timeframes in the original WCPFC Harvest Strategy Work Plan have lapsed. The MSC established deadlines for harvest strategy (HS) and HCR (Principle 1) conditions, after which certifications will be suspended.</p> <p>ISSF asks the CAB to share with the client the following specific actions that, if included in the CAP, are expected to help meet the conditions in place:</p> <ol style="list-style-type: none"> 1) Publicly support the high-level appeals for RFMOs developed by global NGOs that are participants in the NGO Tuna Forum. <p>In 2022, companies will have the opportunity to engage in other direct RFMO advocacy tactics to demonstrate market support for specific tuna sustainability asks. NGO participants in the NGO Tuna Forum have begun reaching out to market partners with these opportunities.</p> <ol style="list-style-type: none"> 2) Advocate for accelerated progress on the adoption and implementation of Harvest Strategies and Harvest Control Rules through tRFMOs, such as through continued direct engagement with national delegations. Once the WCPO MSC Alignment Group is reactivated, ISSF encourages the client fishery to participate in the Group. 3) Urge the delegation of PNA and of all other parties associated with the client fishery at WCPFC to take a strong public position on advancing harvest strategies, including HCR and the establishment of Target Reference Points for tropical tunas, in accordance with the agreed Harvest Strategy Workplan, as part of 	<p>- https://ngotunaforum.org/ - https://iss-foundation.org/what-we-do/influence/po-sition-statements/</p>	<p>Thank you for the detailed comments. The Audit team has shared these with the PNAO client for their consideration.</p> <p>We expect the upcoming WCPFC meeting to be studied closely by all parties interested in the WCPO fisheries, including MSC client groups and MSC CABs and MSC stakeholders. We are, of course, aware of the June 2023 deadline, and will be monitoring the situation closely.</p> <p>We note that the WCPFC observer requirements for purse seine vessels are already at 100%, and the suspension of those requirements due to Covid-19 has recently been lifted, with full implementation required again from 1st January 2023.</p>	<p>Accepted (condition on target)</p>

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<p>the deliberations WCPFC will undertake, either virtually or in-person, this year, including by making proposals for the development of harvest strategies including harvest control rules, and to underscore that under Fisheries Standard Version 2.01 MSC has established hard deadlines for P1 conditions for certified tuna fisheries, which for Western Pacific Yellowfin, Skipjack and Bigeye is June 2023 and for North Pacific. If these deadlines are not met, the corresponding MSC certifications will be suspended.</p> <p>The WCPFC has a harvest strategies Work Plan (https://www.wcpfc.int/doc/placeholder-harvest-strategy-key-documents). Meeting the deadlines in the WCPFC Harvest Strategy Work Plan for skipjack, bigeye and yellowfin tuna stocks is necessary for MSC-certified fisheries to resolve existing conditions to maintain certification. At its December 2021 meeting, the WCPFC deferred decisions outlined in the Work Plan for skipjack, bigeye and yellowfin until 2024 (https://meetings.wcpfc.int/node/14489).</p> <p>Therefore, specifically, for 2022, the client is urged to advocate for the WCPFC to:</p> <ul style="list-style-type: none"> • Adopt Target Reference Points for bigeye and yellowfin. • Adopt a list of candidate management procedures for skipjack. <p>4) Have meetings, calls or other direct contact with all other relevant WCPFC delegations where the client fishery has business interests to advocate for the adoption of Harvest Strategies including HCR, management procedures and Target Reference Points. Urge WCPFC delegations where the client fishery has business interests to participate in the scientist/manager dialogue group in 2022.</p> <p>5) Publicly support ISSF Position Statements that contain detailed asks on Harvest Strategies and Harvest Control Rules to the virtual sessions of the WCPFC in 2022, as well as future in-person meetings, and document that support (e.g. by submitting a letter or some other communication citing the Position Statement).</p> <p>6) Support technical work of WCPFC as well as capacity workshops on Management Strategy Evaluation so as to increase the leverage of RFMO members for the discussion and adoption of robust Harvest Strategies and HCRs.</p> <p>7) Additionally, advocate and urge the WCPFC on the following points towards the adoption on Electronic Monitoring:</p> <p>1) Adopt a CMM for an Electronic Monitoring Program and the Minimum Standards developed by the EM/ER Working Group.</p> <p>2) Require 100% observer coverage (human and/or electronic) in industrial tuna fisheries, including all those engaged in at sea transshipment, by 2024.</p> <p>3) Reinstate the observer requirements for purse seine vessels and at-sea transshipment as soon as it is safe and logistically feasible</p>			
<p>Conditions 5 and 6 on rays and sharks' interactions.</p> <p>Updates provided by the fishery on their interactions with Manta rays indicate these continue to be significant while information presented at the 1st surveillance audit confirms that post release mortality is high and likely above 60%. Report from the 2nd audit presents a list of advances made by WCPFC and other organisations (including ISSF) on the adoption of handling and release guidelines for Manta rays and sharks. However, it is understood that these guidelines are voluntary and therefore not subject to compliance monitoring.</p>	<p>Ref: 'Onandia I, Grande M, Galaz JM, et al (2021) New assessment on accidentally</p>	<p>Thank you for the link to the reference.</p> <p>The PNA MSC Chain of custody MoU now references CMM 2019-05. We agree that evidence of implementation is important, though, and note that this is challenging in the context of the limited observer</p>	<p>Accepted (condition on target)</p>

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<p>Each iteration of assessment reports should include an in-detail description of the specific UoC actions already in place to address the environmental impacts and that the Client Action Plan reflects any additional actions that might be implemented in the future.</p> <p>No details are provided on to what extent there is assurance non-target species are being handled and released with the purpose of maximizing their survival. We urge the fishery to place extra effort in reducing post-release mortality rates of all non-retained species, which are ultimately the keys elements to determine that the strategy is working and that the fishery does not hinder their rebuilding or recovery of these species. The success of the partial strategy in improving survival rates of accidentally caught non target and ETP species is dependent on well designed and implemented handling and release techniques. Recent research on silky shark handling, release techniques and post release mortality has been carried out by an MSC certified tuna fishery in the Indian Ocean and similar work could be undertaken by the UoC. Ref: Onandia I, Grande M, Galaz JM, et al (2021) New assessment on accidentally captured silky shark post-release survival in the Indian Ocean tuna purse seine fishery. In: IOTC - 17th Working Party on Ecosystems and Bycatch. IOTC-2021-WPEB17(DP)-13_Rev1, Online</p>	<p>captured silky shark post-release survival in the Indian Ocean tuna purse seine fishery. In: IOTC - 17th Working Party on Ecosystems and Bycatch. IOTC-2021-WPEB17(DP)-13_Rev1, Online</p>	<p>coverage levels that have been achievable during the Covid 19 pandemic. Currently we consider the Condition to be on target.</p>	
<p>Recommendation on Shark finning</p> <p>UoA observer coverage continues to be reduced as a result to Covid19 restrictions, and might be below the MSC minimum requirements to confirm that shark finning is not occurring as well as to collect adequate information on interactions with non-target species. The next iteration of assessment reports must include a detailed account of current UoC observer coverage.</p> <p>ISSF urges the client fishery to adopt the following recommendations included in ISSF Technical Report 2022-02 and translate them into their action plan:</p> <ul style="list-style-type: none"> • Adopt a binding, public shark-finning policy requiring MSC participant fleets to land sharks with their fins naturally attached. This will be required by ISSF Conservation Measure 3.1(c) on Sharks by 31 December 2022. 		<p>Thank you for the comment. We note that a FNA policy is implemented in the WCPFC (under CMM 2019-04, albeit that alternative arrangements may be made under the CMM. Nevertheless, we note that the silky shark and oceanic whitetip shark are not permitted to be retained in the PNA fishery, and the evidence we have seen indicates that the fishery is compliant with this requirement (e.g., see the Shark Guardian discussion in this report). We note that a requirement to discard negates the need for a FNA policy for these species. Nevertheless, we accept that other shark species may be caught in the fishery, but highlight that the total catch of other sharks is very small, with blacktip shark (<i>C. limbatus</i>) being the next most common, averaging 16 t per year in total. Finally, we believe that the ISSF Conservation Measures have been effective in driving change within RFMO fisheries, and we support these efforts.</p>	<p>Accepted (condition closed)</p>

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5.1.2.3 Stakeholder input - CTTF

PI Comments

Performance Indicator	Summary sentence	Detail of stakeholder input	Objective evidence or references should be provided in support of any claims or claimed errors of fact.	The CAB shall respond in this column. CAB responses should include details of where different changes have been made in the report (which section #, table etc).	The CAB shall assign a response code to each row completed by the stakeholder.
2.3.2 - ETP species management	Unacceptable levels of sharkinning, shockingly poor bycatch handling; and bycatch misreporting in the fishery for a number of years. Vessel expulsion has not been shown to make any meaningful improvement.	The report "Slipping Through the Net" had exposed gross violation of the MSC's zero-tolerance of shark finning. We are certain that the CAB has identified all of the PNA registered vessels, along with their reported acts of infringements such as shark finning, misreporting of bycatch, and unacceptable handling of bycatch (particularly sharks) leading to them dying due to negligence. However, CTTF has highlighted some of the total shark finning events for some of the more prolific vessels - vessels that we note were previously removed from the certificate and then re-added after further consultation with the MSC, YET continued to fin sharks AFTER being added back onto the list, suggesting no real impact was made by the expulsion. We urge the CAB to consider how these vessels (and management in charge) can be considered to comply with the MSC's zero-tolerance stance.	Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian. FU Kuan 808- 2 silky sharks finned in 2021 Solomon Opal - 42 sharks finned on a single 2019 trip; 53 sharks finned on a separated trip in 2019; 24 sharks finned on another 2019 trip; Solomon Pearl 3 sharks finned for period of the report; Solomon Ruby - S13 Silky sharks landed alive, neglected onboard and discarded dead; Solomon Jade - 7 Silky sharks neglected and discarded dead	We note that we have addressed only the data presented in the report that are relevant to the MSC-certified PNA fishery. In regard of finning, the Shark Guardian report identifies one unsubstantiated report of a 'bag of fins' being removed from a vessel (the associated footnote states that the allegation was "...based on unverified online discussions backed up by personal communications.". Our investigation, including requesting information from a co-author of the report, was unable to identify any further information. As such, and in light of the requirements that dictate the need for 'objective, verifiable evidence', no further action can be taken.	Not accepted (information for PI score has not changed)
2.3.2 - ETP species management	The Slipping Through the Net report provides	The evidence from this report identified several cases of ETP and SSI being neglected after being landed resulting in the direct and indirect death of individuals, as such the measures to minimise	Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through	We note again that we have addressed only the data presented in the report that are relevant to the	Not accepted (information

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	<p>evidence that the measures/strategy is not being implemented successfully as there are numerous instances of deaths and injuries likely to lead to death of ETP/ SSI identified throughout.</p> <p>UoA-related mortality are clearly not in place/being acted upon on these MSC-certified vessels. Furthermore, these incidences are in contravention of CMMs 2011-03 and 2019-04, as such the measures do not achieve national and international requirements for the protection of ETP species</p>	<p>the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian.</p> <p>MSC-certified PNA fishery. Here, we highlight that the 'violations' as identified for the fishery are not necessarily violations in any way – in particular because the requirements to discard under the various CMMs are all subject to the need to take the safety of the crew into account (e.g., CMM 2019-04, Clauses 17 and 21 part 7). In this regard, we cannot (and observers cannot) indisputably determine if there were other concerns present which means sharks were not able to be attended to safely and quickly. We note in many cases, including some listed in the report, the sharks are first seen only late in the fishing process when they have already suffered mortality. Nevertheless, in all cases the sharks are listed as discarded - this is the requirement and is not a violation.</p>	<p>for PI score has not changed)</p>
3.1.1 - Legal and/or customary framework	<p>The report identified the following CMMs as being infringed upon, consequently evidencing the failure to meet minimum scoring requirements: • CMM 2007-01 • CMM2007-02 • CMM 2009-02 • CMM 2011-03 • CMM 2013-06 • CMM 2019-04</p>	<p>Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian.</p>	<p>We note that we have addressed only the data presented in the report that are relevant to the MSC-certified PNA fishery. The requirements under 3.1.1 relate to the existence (or otherwise) of a legal and/or customary framework. In this regard, there is clearly a legal framework in place.</p> <p>Not accepted (information for PI score has not changed)</p>
3.2.2 - Decision-making processes	<p>There are several incidences for each violation (shark finning, poor SSI handling, discrepancy in reporting, bribery, and intimidation, and unloading at an undesignated port), as such there are repeated violations of regulations and laws put in place for the sustainability of the fishery</p>	<p>Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian.</p>	<p>We note that we have addressed only the data presented in the report that are relevant to the MSC-certified PNA fishery. We've addressed these points extensively in undertaking our audit of the PNA fishery this year. We concluded that the data do not show repeated violations of relevant regulations and laws. Much more</p> <p>Not accepted (information for PI score has not changed)</p>

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			detail is included within the section of the audit report that considers these issues, specifically, and we encourage your reading of that section.	
3.2.2 - Decision-making processes	Failure to address issues such as the ones outlined in this report show that while they may theoretically exist, the decisionmaking processes to respond to serious issues are not being employed and, in some instances, are being actively suppressed (see sections on bribery and intimidation).	Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian.	We note again that we have addressed only the data presented in the report that are relevant to the MSC-certified PNA fishery. The two cases of bribery and/or intimidation that are presented were investigated during the audit. We were informed that the case of bribery had been prosecuted successfully and the vessel had been fined, whilst the other case of intimidation was currently being investigated. We consider this does not show a failure of the system - instead it demonstrates that the system is working.	Not accepted (information for PI score has not changed)
3.2.3 - Compliance and enforcement	<p>This PI is perhaps one of the most concerning PIs based on the "Slipping through the net" report. When taken as a whole, the report evidences systemic issues within the PNA fishery, as well as a blatant disregard of the work being done by observers. With regard to monitoring, control, and surveillance mechanisms we urge the CAB to investigate further why there are such significant discrepancies in reporting of both the primary and ETP species. Whilst this was reported on a relatively small number of vessels given the size of the PNA's vessel register it raises the concern that this may actually be happening throughout the fishery. We would also like to pick up on a certain word that we have used: "relatively" – whilst we acknowledge that the PNA has a very large number of vessels registered, thus faces certain challenges that come with such a large group, we do not think this should allow for any leniency for misreporting or shark finning given that the MSC Fisheries is just that: A Standard that should be applied fairly across all fisheries.</p> <p>Evidence regarding guidepost b (sanctions) also had a disturbing impact. When observers attempted to report instances of shark finning on the FV Solomon Opal they were made to retract their</p>	Schwenzfeier, J., Hardisty, S., Hofford, A. 2022. Slipping through the net - Reported but ignored. Infringements in the MSC tuna fisheries of the Western and Central Pacific. Shark Guardian.	We again note that we have addressed only the data presented in the report that are relevant to the MSC-certified PNA fishery. The evidence presented in the report for the PNA fishery does not show systematic non-compliance, repeated, serious infringements, or a disregard for the work undertaken by observers. The CMMs identified in some cases are not relevant for the PNA fishery (considering it takes place entirely within EEZs) or were not in force at the time (CMM 2019-05 was only implemented in January 2021, while the observer data only extended to 2020). Other 'violations' identified were not violations at all. As noted in our response, above, the two serious cases regarding observer bribery	Not accepted (information for PI score has not changed)

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statements which would have meant the second exclusion of the vessel from the MSC certificate. “The source, who wishes to remain anonymous, confirmed that the Observer Coordinator, under the directives of the Ministry of Fisheries and Marine Resources (MFMR) Director, and the General Manager of the National Fisheries Development Limited (NFD), persuaded the Observers to write up a statement letter retracting all observations of shark finning that they had reported while carrying out their Observer duties on board Solomon Opal in 2019. The letters, which the two fisheries Observers were coerced to write and sign, state that all shark finning incidents reported were ‘assumed’ rather than eye witnessed. In the letters, a key reason given for the reporting of shark-finning incidents on board the Solomon Opal was that the Observers had disagreements with certain crew members during their time on board the vessel and consequently wanted the NFD managements to penalise the crew members, (as a sort of revenge). According to the source, Observers were told to include a paragraph apologising to the crew and vessel company for any inconvenience that their reports might have caused to the company’s operation. It becomes apparent when reading the letters in question that both letters follow a similar script, raising significant doubts as to the letters’ veracity. According to the source, the Observers were ‘blacklisted’ and prevented from boarding any NFD operated fishing vessels as a consequence of reporting the Solomon Opal shark finning. The Observers were instructed by the Observer Coordinator to sign the letter to safeguard the NFD’s reputation and put under pressure by the Observer Coordinator, and through him by the NFD director, to sign the letter. As a result of this intimidating process, the Observers would not report on any observed infringements in the future, according to the source.” (Schwenzfeier et al. 2022, pg 52).

This evidence suggests a larger problem throughout the observer system and causes CTTF to wonder how many observers are operating under intimidating circumstances and how this may affect their reporting abilities. CTTF wish to make it explicitly clear that our concern does not lie in the capabilities of the observers, but rather the system in which they operate. We strongly urge the CAB to consider how the relevant authorities are conducting their follow-up

and/or intimidation have been addressed through proper process. When we interviewed observers in the PNA programme, we heard that the role is challenging, but that they are adaptive and innovative in doing their job, which is to observe and report – observers do not have an active enforcement role. Again, we consider this does not show a failure of the system - instead it demonstrates that the system is working.

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investigations: is the focus on the leak of the observer reports or the content of them?

General Comments

<p>General comments on the surveillance audit</p> <p>Stakeholders should note that input is most useful for assessment teams when attributed to an MSC Performance Indicator, condition or milestone, and when objective evidence and references are provided in support of any claims or claimed errors of fact.</p>	<p>Objective evidence or references should be provided in support of any claims or claimed errors of fact.</p>	<p>CABs should respond in this column.</p> <p>CAB responses should include details of where different changes have been made in the report (which section #, table etc).</p>	<p>The CAB shall assign a response code to each row completed by the stakeholder.</p> <p>(NB – Codes as defined by the MSC are limited to default choices)</p>
<p>We appreciate the CAB conducting the expedited surveillance audit triggered by the report by Schwenzfeier et al. 2022. CTTF believes this report exposes systematic disregard for observer efforts throughout the PNS fishery, contravention of several CMMs, and a shocking number of ETP infringements including poor handling of bycatch, shark finning, and misreporting. As a result we strongly urge the CAB to remove the certificate from the PNA fishery as they should fail several key PIs.</p>		<p>Thank you for bringing the Shark Guardian report to our attention. We note that we have addressed only the data that are relevant to the MSC-certified PNA fishery. Two new Recommendations have been raised as a result of our investigation, the first that efforts are made to ensure catch reporting for SSIs is undertaken rigorously by all vessels in support of scientific and management initiatives, and the second that a system should be established to ensure observers can follow the progression of relevant cases through to their conclusion to the extent that confidentiality requirements allow. The Shark Guardian report is discussed in detail within the audit report.</p>	<p>Not accepted (information for PI score has not changed)</p>

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5.2 Client report

PNA Client Report for Year 3 Surveillance Audit – Conditions 1 & 3 PNA Western and Central Pacific skipjack, yellowfin and bigeye tuna purse seine fishery (FAD and non-FAD sets)

Principle 1: Condition 1 – Skipjack

UoA 1 – PI 1.2.1 *Sia By the fourth surveillance audit, the client will need to demonstrate that the harvest strategy for skipjack tuna is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.*

Milestone: Years 1, 2 and 3: (Resulting score 70)

• *The client will need to provide evidence that it is actively working to ensure that the harvest strategy for WCPO skipjack tuna is responsive to the state of the stock and that the elements of the harvest strategy work together towards achieving the management objectives reflected in the target and limit reference points. This evidence will include a summary of the actions taken by the client and other relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan (see Appendix 10).*

CAP: By Year 2-2019 PNA will:

1. *Develop a strategy to address any shortfalls in the Year 1 Review of the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1 for implementation for application until a HCR for WCPO skipjack tuna is implemented*
2. *Work towards the adoption of a formal harvest strategy for WCPO skipjack tuna.*
3. *Implement actions to raise awareness of the need for any additional WCPFC skipjack tuna management measures among PNA Members.*
4. *Support the undertaking of a new assessment for WCPO skipjack tuna by 2020*

CAP: By Year 3-2020, PNA will:

1. Prepare an assessment of how the harvest strategy for WCPO skipjack tuna responds to the state of the stock and the extent to which the elements of the harvest strategy work together towards achieving the management objectives reflected in PI 1.1.1
2. Provide evidence of support for the adoption of a formal harvest strategy for WCPO skipjack tuna.
3. Raise awareness of the need for any additional WCPFC skipjack tuna management measures among PNA Members.
4. Promote the adoption by PNA and/or the WCPFC of any additional management measures needed for WCPO skipjack tuna

CAP: By Year 4-2021, PNA will provide evidence to show that:

The harvest strategy for WCPO skipjack tuna is responsive to the state of the stock and the elements of the harvest strategy working together towards achieving management objectives reflected in the target and limit reference points.

Milestone 1:

Summary

PNA has previously reported extensively on reviews of the responsiveness of the harvest strategy for WCPO skipjack tuna to the state of the stock. Those reviews have shown conclusively that the harvest strategy for WCPO skipjack is responsive to the state of the stock and the elements of the harvest strategy working together towards achieving management objectives reflected in the target and limit reference points. This note provides an update of some of the elements of the previous analyses, with some additional detail on effort creep following on from the focus on effort creep in the 2nd Surveillance Report.

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Failure of the MSC Harmonisation Process

The basis for scoring the fishery at 80 for PI1.2.1 Sla is well understood by the CAB who noted in the 2nd Surveillance Report that *“Notwithstanding this Variation Request, the above information suggests that consideration could be given to re-scoring PI 1.2.1 Sla as meeting the SG80 requirements.”*

The fact that the fishery is not scored at 80 for PI 1.2.1 Sla is also explained in the 2nd Surveillance Report *“However, after LR contacted other CABs involved in MSC tuna fishery certifications and provided the rationale above, and it was reported to the Audit Team by LR that there is not universal agreement that the WCPO skipjack tuna harvest strategy meets SG80. As such, under MSC process v.2.1, the score cannot be changed and it remains at SG60 (PB1.3.3, MSC 2018)”*.

The PNA skipjack fishery is not scored at 80 for PI 1.2.1 Sla as a result of deep flaws in the MSC harmonisation process identified by the Independent Adjudicator in the PNA Objection to the Talley's certification on exactly this issue as “troubling”, rather than any shortfalls in the management of the fishery. Evidence in that direction includes the outcomes of fully transparent detailed considerations of the conditions in the fishery including:

- a) The detailed considerations of the facts by the CAB for this fishery which has consistently pointed to a score of 80;
- b) The Talley's Objection, where the decision of the Independent Adjudicator indicated that all Parties to the Objection agreed on a score of 80, as follows:
“Unusually for the objection process, all parties appear to agree on the fundamental points at issue, which relate solely to the harvest strategy for the skipjack stock and Performance Indicator (“PI”) 1.2.1. The parties also agree that the objection should be upheld.”
And
“In this way, Acoura, Talley's and in turn PNA were locked into a situation in which they all agreed on the appropriate score for PI 1.2.1 but had no mechanism for further debate or attempts at agreement with the other P1 assessors from the harmonised fisheries.”
- c) The most recent (March 2022) version of the ISSF Technical Report - An Evaluation of the Sustainability of Global Tuna Stocks Relative to Marine Stewardship Council Criteria, which finds on the scoring of PI 1.2.1 S1a for WCPO skipjack that:
‘Overall, the current strategy therefore has been responsive to skipjack stock status and components are working together sufficiently to meet management objectives, so SG80 is met.

Quality of the WCPO Skipjack Harvest Strategy

The PCR describes the development of the current harvest strategy for skipjack over time. Fishing for skipjack in the EEZs and high seas is controlled by rules in the Tropical Tuna CMM, currently CMM 2021-01, supplemented by:

- rules adopted for archipelagic waters by the archipelagic states
- rules adopted for their EEZs and adjacent high seas by coastal states, most prominently the PNA Vessel Day Scheme
- rules adopted by flag states, most prominently the capacity limits adopted by several CCMs.

The key tools in the Tropical Tuna CMM for controlling skipjack are the EEZ and high seas effort limits in paras. 24 and 25 of CMM 2021-01. With these tools, the management system has very effectively controlled effort and capacity as shown in the 2 figures below from SC17-2021/GN-IP-1 Overview of Tuna Fisheries in the Western and Central Pacific Ocean, Including Economic Conditions – 2020

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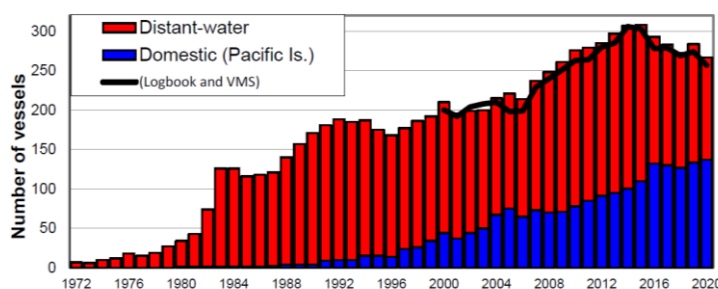


Figure 3.1.1 Number of purse seine vessels operating in the WCP-CA tropical fishery
(excludes Indonesia, Philippine and Vietnam domestic purse seine/ringnet fleets)

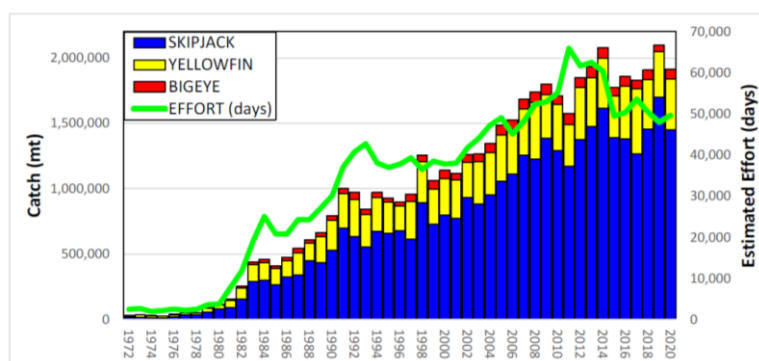


Figure 3.1.2 Purse seine catch (mt) of bigeye, skipjack and yellowfin and fishing effort (days fishing and searching) in the WCP-CA
(EFFORT: excludes Indonesia, Philippine and Vietnam domestic purse seine/ringnet fleets)

There is in addition, as shown in the PCR, a high quality information base and monitoring of stock status, and a record of the management system and fleet responding to stock status.

The effectiveness of the harvest strategy for skipjack is assessed:

- a) annually: in an annual review of the effectiveness of the Tropical Tuna CMM which includes a projection of the status of the skipjack stock expected to result from the continued application of the Tropical Tuna CMM as show below (from WCPFC-TTMW1-2021-01_rev3: Evaluation of CMM 2018-01 for Tropical Tuna):

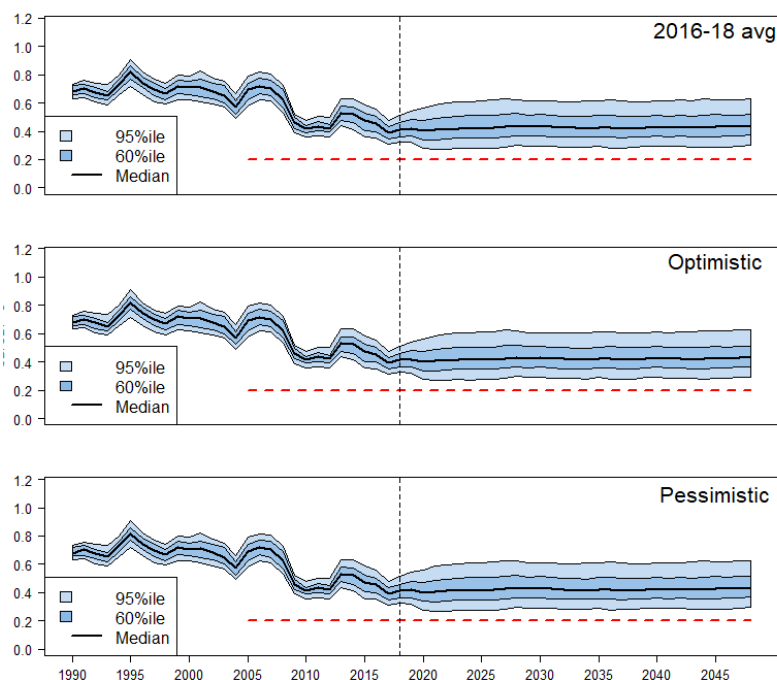
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- b) 3-yearly, when the Tropical Tuna CMM is reviewed, with these reviews including testing of projected alternative PS effort levels against management objectives as illustrated in the table below (see WCPFC-TTMW2-2021-01_rev4: Results of Analyses Requested By TTMW1). The latest 3-yearly review agreed to maintain key elements of the CMM relating to skipjack management.

Table 6. Combinations of specified EEZ and high seas FAD closure periods, purse seine effort and longline catch scenarios, and resulting depletion levels for bigeye (recent recruitment assumption), yellowfin and skipjack tuna.

Scenario combinations					Resulting Scalars					BET outcomes			YFT outcomes			SKI outcomes	
EEZ PS effort	EEZ FAD closure	HS FAD closure	LL catch	Other catch	PS effort & HS PS effort v 2016-18 avg	FAD closure scalar	Overall PS scalar	LL catch scalar	Other catch scalar	BET depletion	Result v 2012-15 avg	LRP risk	YFT depletion	Result v 2012-15 avg	LRP risk	SKI depletion	LRP risk
2016-18 levels	3mth	6mth	2016-18 levels	2016-18 levels	1	1.1	1.1	1	1	0.47	1.27	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	4mth	5mth	2016-18 levels	2016-18 levels	1	1	1	1	1	0.48	1.30	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	4mth	6mth	2016-18 levels	2016-18 levels	1	0.99	0.99	1	1	0.48	1.30	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	3mth	5mth	2016-18 levels	2016-18 levels	1	1.11	1.11	1	1	0.47	1.27	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	2mth	4mth	2016-18 levels	2016-18 levels	1	1.24	1.24	1	1	0.44	1.19	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	2mth	3mth	2016-18 levels	2016-18 levels	1	1.25	1.25	1	1	0.44	1.19	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	2mth	2mth	2016-18 levels	2016-18 levels	1	1.26	1.26	1	1	0.44	1.19	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	1mth	1mth	2016-18 levels	2016-18 levels	1	1.38	1.38	1	1	0.42	1.14	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	5mth	5mth	2016-18 levels	2016-18 levels	1	0.88	0.88	1	1	0.5	1.35	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	4mth	4mth	2016-18 levels	2016-18 levels	1	1.01	1.01	1	1	0.48	1.30	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	3mth	3mth	2016-18 levels	2016-18 levels	1	1.13	1.13	1	1	0.46	1.24	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	3mth	2mth	2016-18 levels	2016-18 levels	1	1.14	1.14	1	1	0.46	1.24	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	4mth	3mth	2016-18 levels	2016-18 levels	1	1.01	1.01	1	1	0.48	1.30	0%	0.59	1.07	0%	0.44	0%
2016-18 levels	5mth	3mth	2016-18 levels	2016-18 levels	1	0.9	0.90	1	1	0.5	1.35	0%	0.59	1.07	0%	0.44	0%
2019 levels	3mth	6mth	2019 levels	2016-18 levels	0.93	1.1	1.02	1.1	1	0.47	1.27	0%	0.59	1.07	0%	0.46	0%
2019 levels	4mth	5mth	2019 levels	2016-18 levels	0.93	1	0.93	1.1	1	0.48	1.34	0%	0.59	1.07	0%	0.46	0%
2019 levels	4mth	6mth	2019 levels	2016-18 levels	0.93	0.99	0.92	1.1	1	0.49	1.34	0%	0.59	1.07	0%	0.46	0%
2019 levels	3mth	5mth	2019 levels	2016-18 levels	0.93	1.11	1.03	1.1	1	0.46	1.27	0%	0.59	1.07	0%	0.46	0%
2019 levels	2mth	4mth	2019 levels	2016-18 levels	0.93	1.24	1.15	1.1	1	0.44	1.19	0%	0.59	1.07	0%	0.46	0%
2019 levels	2mth	3mth	2019 levels	2016-18 levels	0.93	1.52	1.41	1.1	1	0.41	1.10	0%	0.59	1.07	0%	0.46	0%
2019 levels	2mth	2mth	2019 levels	2016-18 levels	0.93	1.25	1.16	1.1	1	0.44	1.19	0%	0.59	1.07	0%	0.46	0%
2019 levels	1mth	1mth	2019 levels	2016-18 levels	0.93	1.26	1.17	1.1	1	0.44	1.19	0%	0.59	1.07	0%	0.46	0%
2019 levels	5mth	5mth	2019 levels	2016-18 levels	0.93	0.88	0.82	1.1	1	0.5	1.35	0%	0.59	1.07	0%	0.46	0%
2019 levels	4mth	4mth	2019 levels	2016-18 levels	0.93	1.01	0.94	1.1	1	0.48	1.30	0%	0.59	1.07	0%	0.46	0%
2019 levels	3mth	3mth	2019 levels	2016-18 levels	0.93	1.13	1.05	1.1	1	0.46	1.24	0%	0.59	1.07	0%	0.46	0%
2019 levels	3mth	2mth	2019 levels	2016-18 levels	0.93	1.14	1.06	1.1	1	0.46	1.24	0%	0.59	1.07	0%	0.46	0%
2019 levels	4mth	3mth	2019 levels	2016-18 levels	0.93	1.02	0.95	1.1	1	0.48	1.30	0%	0.59	1.07	0%	0.46	0%
2019 levels	5mth	3mth	2019 levels	2016-18 levels	0.93	0.9	0.84	1.1	1	0.49	1.34	0%	0.59	1.07	0%	0.46	0%

The result of the effective harvest strategy for WCPO skipjack is that the WCPO skipjack stock is the healthiest skipjack stock globally and arguably, probably along with the EPO yellowfin stock, one of the best-managed tropical tuna fisheries stocks globally.

The health of the WCPO skipjack stock and the quality of the WCPO management of fisheries for skipjack are part of a broader pattern of healthy WCPO tropical tuna stocks and well-managed WCPO tropical tuna fisheries illustrated by the comparative figure of tropical tuna stock status globally set out below, which continues to show clearly superior management outcomes from the harvest strategies for WCPO tropical tuna fisheries compared to other ocean regions.

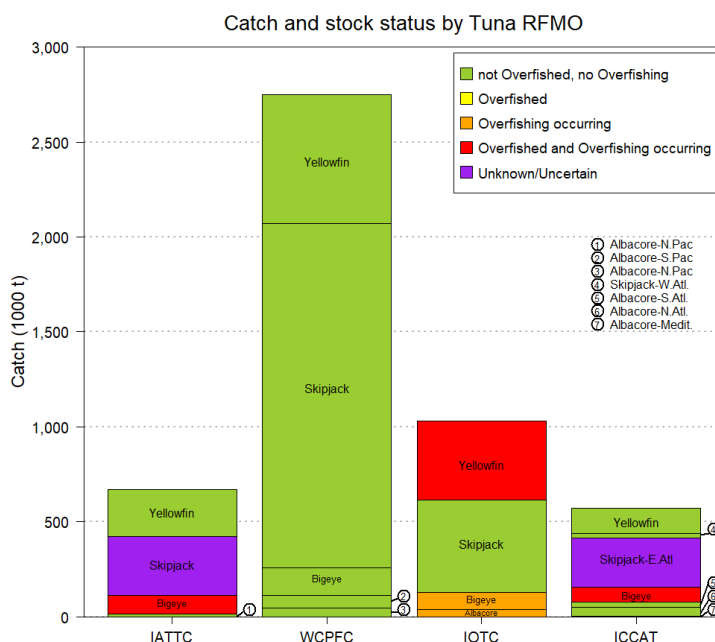
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Bar plot showing the catch by stock by RFMO as well as the stock status from the agreed stock assessment within each RFMO.

Note On Effort Creep

In the 2nd Surveillance Report, relating to 1.2.1a, particular attention was paid to effort creep, taking as the starting point a comment in the WPSTA Fishery PCR noting as a concern “*how the VDS will deal with evidence of effort creep from increasing size of fishing vessels and increases in the number of sets per fishing day and tonnage caught per fishing day*”.

Effort creep is an important issue in establishing an effort-based management regime for several reasons including:

- Effort creep can undermine the effectiveness of effort limits that are designed to constrain fishing mortality, requiring reduction in total effort allowed to compensate;
- Effort creep can mask stock decline;
- But at the same time, technology gains that are a large part of the effort creep discussion are a major contributor to the growth in economic rents in a fishery, noting that not all investment in technology gains in rent-enhancing.

For the reasons above, effort creep is taken seriously in the design, management and operation of the VDS. The VDS text says at para 2.4:

“...it will be a function of the annual meeting to:

i) Consider any matter referred to it for decision by the VDSC.

ii) Receive a briefing from the Administrator on catch and effort levels and any observed or potential increase in average effective fishing effort for each fishing day since the introduction of the Management Scheme (effort creep):

a. In respect of any observed effort creep the Parties shall take the necessary management action to ensure such effort creep is not detrimental to the fishery.

b. Options for management action by the Parties shall include controls on vessel length, vessel capacity, well size, the use of fish aggregating devices or any other necessary measure.

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In response to this requirement in the VDS text, a series of annual studies have been undertaken with the results summarised below:

- VDSTSC (2019): *“Although key indicators show increasing trends, uncertainty remains given the difficulty in tying changes in indicators back to ‘effective effort’.*
- WCPFC-SC15-2019/MI-IP-05: *Evaluation of Effort Creep Indicators in the WCPO Purse Seine Fishery: p16: We note that the majority of the candidate effort creep catch-based indicators (e.g., CPUE indices) have shown decreases over the recent period within the WCPO*
- VDSTSC (2020): p2: *Most of the direct effort indicators (e.g., sets per day) have shown increasing trends over the longer-term, but with variable trends over the recent time period.*
- WCPFC-SC16-2020/MI-IP-15: *Examining Indicators of Technological and Effort Creep in the WCPO Purse Seine Fishery. Most of the direct effort indicators (e.g. sets per day) have shown increasing trends over the longer-term, but with variable trends over the recent time period.*
- VDSTSC (2021): p3: *Most of the catch and effort indicators have shown increasing trends in recent years as well as over the longer-term.*
- WCPFC-SC17-2021/MI-IP-06 *Effort Creep within the WCPO Purse Seine Fishery: p4:*
- *Overall, trends in the effort creep proxies within the PNA EEZs have generally been positive, with average long-term trends in per day and per set catch and effort indicators increasing by 0-3%, per year, while the catchability proxy suggests a more substantial annual increase of 6%.*
- VDSTSC (2022): p3: *...no evidence for nominal effort creep within the VDS limits and time frame.*
- *P4:over the period of the VDS implementation there is a lack of trends in the purse seine fishery metrics (sets/day, catch/set, catch/day) used as indicators for effort creep,*

The apparently contradictory conclusions in these papers are probably explained by the fact that catch rates bounce around with oceanographic conditions, rising with sustained El Nino conditions and pulling the trendline upwards, then declining with La Nina conditions and pulling the trendline down. The most recent work identified and removed a source of upward bias in the data for catch rates and concluded that there is a “lack of trends” in the various effort creep metrics, as indicated in the figure and table below.



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Indicator	2017/2018 vs 2019/2020		Per annum linear regression trend, 2007(or 2008)-2020 ³	
	PNA	Non-PNA	PNA	Non-PNA
Sets/year	-5%	+29%	+3%	+2%
Sets/day	-2%	+4%	0%	+1%
Total tuna CPUE (mt/day)	+8%	+12%	0%	+1%
Total tuna CPUE (mt/set)	+10%	+10%	0%	-1%
Total tuna CPUE (mt/set) - ASS sets	+15%	+11%	0%	0%
Total tuna CPUE (mt/set) - UNA sets	+11%	+14%	0%	0%
Total tuna catch	+4%	+39%	+2%	+1%
Total skipjack catch	+9%	+49%	+3%	+2%
Vessel length (m)	-2%		0%	
Vessel gross registered tonnage (GRT)	-3%		0%	
Vessel horsepower (HP)	0%		+1%	
Well capacity (mt)	+2%		+1%	

This might be seen as a surprising result given experience with effort management introductions elsewhere. It appears to result substantially from management actions, some of which were intended or expected to contribute to controlling effort creep, and others which incidentally reduce incentives for effort creep. These include:

- The VDS length adjustment factors (LAFs)** were designed to counter any incentive from introduction of the VDS to increased vessel size. The LAFs were deliberately set in a way that effectively penalised vessels >80m (required to purchase 1.5 VDS days for each fishing day), and encouraged retention of vessels <50m. That measure has resulted not only in deterring the construction of newer, larger vessels but has contributed to removing almost all larger vessels from the fishery – in 2021 there is only 1 vessel over 80m operating full-time in PNA waters; and also in retaining the smaller vessels.
- The effect of the LAFs** has been compounded by the effect of the FAD closure, because the larger vessels are generally more FAD dependent.
- Reductions in vessel mobility:** before VDS, purse seine vessels could fish where the operators liked. Operators bought licences to fish in each EEZ for prices from \$20k per year to \$70-80k for the most valuable zones allowing them to operate broadly where they liked, when they liked, for around \$300-400,000 p.a.. Now they pay on average more than \$2m per vessel annually, more for foreign vessels, and many still don't get to fish where they want. This limitation in choice of fishing ground was expected to reduce CPUE and catchability.
- Requirements on domestic fleets:** in the same way, before VDS, a very high proportion of seiners could also operate how and where they liked, moving to most productive grounds and unloading in the most economic locations. Now nearly half the fleet are operating as local vessels, mostly under the FSM Arrangement, and are subject to an array of requirements, particularly in respect of unloading in home party/flag state ports that constrain their operational freedom to roam to optimise their catches.
- Reduced investment:** before VDS, the fleet was more profitable, and in some cases, much more profitable. Before VDS, operators paid 4-6% of catch value for access; now they pay 20-25%. That's like a \$450m annual tax and it lowers operators' inclination to invest in newer and more powerful vessels, gear etc., noting that much technological development is embodied in new vessels. To understand how the VDS depresses investment, consider what the fishery would look like if there was a \$450m annual subsidy instead of a \$450m tax – there would likely be very much more investment in a more powerful fleet.
- The FAD closure;** brought in with the VDS as an "associated measure" because the VDS didn't respond to the bigeye stock status which was the primary conservation issue at the time, and which:

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- reduces overall CPUE per day simply because of the shift from FAD to free school sets, but also:
 - reduces free school CPUE because vessels are having to make free school sets in conditions where they wouldn't normally set on free schools, and FAD-dependent vessels in particular are having to fish free schools in a way that they may not be set up for; and
 - as noted above, actually deters some FAD-dependent vessels from fishing in the WCPO at all or for much of the year, with the high seas 5 month FAD closure.
- vii. **The Western high seas closure and the WCPFC high seas effort limits** which limit range and choice of fishing areas, also associated with the introduction of the VDS

It seems that the effects noted above have counteracted the better known effects from effort management to incentivise effort creep noted below:

- i. **the winnowing out of inefficient vessels** with 70-80 having left since 2010 and 40-50 presumably more efficient vessels having entered
- ii. **the incentive effect** for every vessel to increase its catch value per day
- iii. **more selective effort** with vessels choosing not to fish or to transfer to the EPO sometimes when fishing is poor rather than use expensive days.

At a broader level of management, the possible effects of effort creep are being taken into account in the work on a skipjack harvest strategy - see for example, the Chair's Report of the 1st 2021 Workshop on the Tropical Tuna CMM on how effort creep is being taken into account in the development of harvest strategies *"For a given level of fishing effort, with effort creep a greater impact on the stock can be expected. In the context of a harvest strategy, if effort creep is suspected, the fishing level would be adjusted accordingly"*.

Lack of a harvest control rule and PI 1.2.1

Some CABs have suggested that SI 1.2.1a cannot meet SG80 requirements without an agreed harvest control rule having been adopted. For example, the WPSTA PCR (p11) states that *"In Principle 1, two of the PIs (1.2.1 and 1.2.2 for both skipjack and yellowfin) received scores under SG80, resulting in four conditions. Both conditions are rooted in a lack of a clear harvest control rule linked to the status of the skipjack and yellowfin stocks."*

It was always clear that this interpretation was incorrect for 3 reasons:

- a) MSC clearly intends by the design of the Fishery Standard that the scoring of PIs should be independent unless otherwise stated.
- b) There is no reference to a HCR in the guidance relating to 1.2.1. The key elements of a Harvest Strategy for the purpose of 1.2.1 are set out in GSA2.4 as including:
 - *"The control rules and tools in place, including the ability of the management system to control effort, taking into account issues such as overcapacity and its causes;*
 - *The information base and monitoring stock status.*
 - *The responsiveness of the management system and fleet to stock status"*.

This text refers to *"control rules"*, not *"harvest control rules"* – if MSC had meant this text to refer to harvest control rules, they would have said so, or subsequently clarified the text in that direction, as they have now done as noted below; and

- c) The discussion in GSA2.4 about assessing informal approaches against PI 1.2.1, which can be taken as referring to fisheries where *"well-defined HCRs"* may not be expected.

This was noted by the CAB in the 2nd Surveillance Report - *Whilst it is clearly preferable that a formal HCR is adopted, the Audit Team does not believe that a condition is necessarily required for both PI 1.2.1 and PI 1.2.2 without this having happened, and that PI 1.2.1 can meet SG80 requirements prior to the adoption of an agreed HCR.*

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This issue is now clarified by the revised guidance in GSA2.4 that “A responsive harvest strategy does not need a ‘well-defined’ harvest control rule for it to be responsive”. While this Guidance is not in force yet, it clearly indicates the intention of the current Guidance.

More recently, this issue has been further clarified by the Decision of the Independent Arbitrator on the CTTF Objection which broadly supports the argument above saying:

40. After having considered this issue carefully, the correct interpretation of PI 1.2.1 at the score of 60 – The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1. SG80 – **does not require there to be harvest control rules in place**. It would be surprising if PI 1.2.1 required harvest control rules to be in place in circumstances where PI 1.2.2 goes to considerable effort in describing how PI 1.2.2 can be met when harvest control rules are not in place but are only available and by available the Standard requires there is an agreement in place that HCRs will be in place before the stock reaches BMSY. Reading the standard as a whole, it would make little sense for PI 1.2.1 to require harvest control rules to be in place, when PI 1.2.2 is the performance indicator which specifically deals with harvest control rules and provides for the lesser standard of the rules being available if not in place.

41. There is some confusion in the MSC Standard, Guidance and Vocabulary. In as much as the Guidance relied on by CTTF in respect of “control rules and tools in place”, that should not necessarily be interpreted as a reference to harvest control rules. Indeed when the Guidance introduces harvest control rules a little further down in respect of PI 1.2.2 on page 171 it states “harvest control rules (HCRs)”. I consider the MSC would have used this term earlier at PI 1.2.1 if the rules referred to were harvest control rules. Or if I am wrong about that (and I accept there is some doubt) the Guidance has used the term “in place” to include the definition of available, as discussed above.

Overall Conclusion

The fishery should be scored at 80 for PI1.2.1 Sla, and should have been scored at that level previously.

Principle 1: Condition 3 - Yellowfin

Milestone 1:

The comments above apply broadly to yellowfin with the important exception that fishing for yellowfin is managed indirectly by measures applied within the harvest strategies for skipjack and bigeye.

Assessment results and reviews of the Tropical CMM indicate that taken together, those measures are equally effective at managing fishing for yellowfin.

Conditions 1 & 3 - Skipjack and Yellowfin

Milestones 3 & 4

3. Raise awareness of the need for any additional WCPFC skipjack/yellowfin tuna management measures among PNA Members.

4. Promote the adoption by PNA and/or the WCPFC of any additional management measures needed for WCPO skipjack/yellowfin tuna

The Tropical Tuna CMM was reviewed intensively by the WCPFC in 2020 and 2021, including in 2 Tropical Tuna Workshops and the Commission session, in which PNA participated.

- [Development of New WCPFC Tropical Tuna Measure Workshop 1 | WCPFC Meetings](#)
- [Development of New WCPFC Tropical Tuna Measure Workshop 2 | WCPFC Meetings](#)

PNA also participated in 2 PNA workshops in February and April 2021, and 5 FFA Workshops in February, March, April, March August and September on the Tropical Tuna CMM revision.

SPC analyses to TTMW1 indicated that the CMM was projected to result in the skipjack and yellowfin stock status being satisfactory, in that:

- For skipjack**, it was consistent with the spawning biomass depletion ratio in 2012 that was the basis for the previous Skipjack TRP (50%), and there was zero risk of the LRP being breached.
- For yellowfin**: the spawning biomass depletion ratio was projected to remain above the 2012-15 objective level

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See
WCPFC17-2020-11: Updates to WCPO Skipjack Tuna Projected Stock Status To Inform Consideration Of An Updated Target Reference Point
Under baseline (2012) fishing levels the stock is predicted, on average, to fall slightly compared to 'recent' (2015-2018) levels (44% SBF=0), to 42% SBF=0. This is very slightly below 2012 depletion levels, but is an equivalent % SBF=0 value at 2 decimal places.

Tables and figures

Table 1. Summary of median depletion levels for the reference case model (2014) and across the uncertainty grids of the 2016 and 2019 WCPO skipjack stock assessments in specific years, weighted as specified by Scientific Committee.

Year	SB _{year} /SB _{F=0} , year-1 to year-10		
	2014 assessment	2016 assessment	2019 assessment
2012	51%	48%	42%
2015	-	51%	47%
2018	-	-	42%

And WCPFC-TTMW1-2021-01_rev3, Table 7

Table 7 Median and relative values of reference points and risk¹ of breaching reference points levels (adopted limit reference point (LRP) of 20% SB_{F=0}; F_{MSY}) in 2048 from the 2019 skipjack and 2020 yellowfin stock assessments, under the three future harvest scenarios (2016-2018 average fishing levels, optimistic, and pessimistic) and long-term recruitment patterns.

Stock	Fishing level	Scalars relative to 2016-2018		Median SB ₂₀₄₈ /SB _{F=0}	Median ratio SB ₂₀₄₈ /SB _{F=0} v SB ₂₀₁₂₋₁₈ /SB _{F=0}	Median F ₂₀₄₄₋₂₀₄₇ /F _{MSY}	Median ratio F ₂₀₄₄₋₂₀₄₇ /F _{MSY} v F ₂₀₁₄₋₁₇ /F _{MSY}	Risk ¹	
		Purse seine	Longline					SB ₂₀₄₈ < LRP	F > F _{MSY}
Skipjack tuna	2016-2018 avg	1	1	0.43	0.89	0.68	1.56	0%	16%
	Optimistic	1.11	1	0.43	0.88	0.70	1.57	0%	18%
	Pessimistic	1.13	1.51 ²	0.43	0.88	0.70	1.57	0%	18%
Yellowfin tuna	2016-2018 avg	1	1	0.59	1.09	0.29	0.82	0%	0%
	Optimistic	1.11	1	0.59	1.08	0.30	0.83	0%	0%
	Pessimistic	1.13	1.51 ²	0.57	1.04	0.32	0.89	0%	0%

¹ Risk within the stock assessment is calculated as the (weighted – if weights applied) number of models falling below the LRP (X / 72 and 54 models for yellowfin and skipjack, respectively). Risk under a projection scenario is the number of projections across the grid that fall below the LRP (X / 7,200 and 5,400 (72 and 54 models x 100 projections) for yellowfin and skipjack respectively) in the terminal projection year (2048).

² Note – inclusion of Canadian limits, as requested at WCPFC17, raises this scalar to 1.54

On that basis, and similar results for projected bigeye tuna status, the PNA joined other FFA Members in proposing (see [FFA submission to the 1st WCPFC workshop on the Tropical Tuna Measure | WCPFC Meetings](#)):

FFA members advocate a precautionary approach to changes to the current measures in the CMM, noting that:

- *the current CMM is working well and provides a carefully balanced approach to the sustainable management of the WCPO tropical tuna stocks;*

This precautionary approach was supported in a PNA submission ([PNA Submission to the 1st WCPFC workshop on the Tropical Tuna Measure | WCPFC Meetings](#))

Beyond that, joined other FFA Members in proposing hard limits for high seas purse seine effort, currently managed by historical effort limits for the historically large CMM fleets with a SIDS exemption, representing the major weakness in the WCPFC harvest strategy for skipjack and yellowfin.

High Seas Purse Seine Limits FFA members expect the Commission to agree to an overall purse seine effort limit to apply on the high seas of the Convention Area. FFA Members will be seeking an allocation of the high seas limit that reflects key provisions contained in Article 10 and Article 30 of the Convention, as well as Article 25 of the UN Fish Stocks Agreement.

The precautionary approach put forward by PNA and other FFA members was broadly accepted by other WCPFC Members as noted in the WCPFC 18 Summary Report: (see

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126. In the course of their discussions CCMs agreed to retain those elements of the current measure for which there was a lack of consensus regarding proposed revisions. This decision was made following significant deliberation, and was supported by CCMs in view of:

- ongoing efforts to develop harvest strategies for the main tuna stocks;*
- the acknowledged success of CMM 2020-01 and its predecessors in meeting the Commission's objectives with regard to maintaining their objectives for these stocks; and*
- the complexity of the negotiations regarding the central package of elements in the CMM, particularly given the challenges of the virtual meeting format.*

The Commission did agree however to work on hard limits for purse seine fishing in the high seas, as recorded in the WCPFC18 Summary Report:

137. CCMs agreed on the need to establish hard effort or catch limits in the high seas of the WCPFC-CA and agreed to commence a process to develop that framework in 2022, to enable reaching agreement in 2023.

Evidence Provided

VDST-SC11 WP1: Effort Creep within the WCPO Purse Seine Fishery

IA decision 20180228: Final Decision of The Independent Adjudicator in the Matter of PNA Western and Central Pacific Skipjack and Yellowfin Unassociated/Non-FAD Set Tuna Purse Seine Fishery 28 February 2018. (See Attachment 9 of the PCR)

ISSF 2022-03: An Evaluation of the Sustainability of Global Tuna Stocks Relative to Marine Stewardship Council Criteria: <https://www.issf-foundation.org/issf-downloads/download-info/issf-2022-03-an-evaluation-of-the-sustainability-of-global-tuna-stocks-relative-to-marine-stewardship-council-criteria/>

WCPFC: Conservation and Management Measure 2021-01 Conservation and Management Measure For Bigeye, Yellowfin And Skipjack Tuna In The Western And Central Pacific Ocean: SC17-2021/GN-IP-1 <https://www.wcpfc.int/file/758469/download?token=bLXiZjjh>

SC17-2021/GN-IP-1: Overview of Tuna Fisheries in the Western and Central Pacific Ocean, Including Economic Conditions –2020 [Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2020 | WCPFC Meetings](#)

WCPFC-TTMW1-2021-01_rev3: Evaluation of CMM 2018-01 for Tropical Tuna): [WCPFC-TTMW1-2021-01_rev3 CMM2018-01 evaluation REV3.pdf](#)

WCPFC-TTMW2-2021-01_rev4: Results of Analyses Requested By TTMW1: [Results of analyses requested by TTMW1 - revision 4 | WCPFC Meetings](#)

WCPFC-TTMW1-2021-Chair's Report: Chair's Report of TTMW1: [Chair's Report of TTMW2 | WCPFC Meetings](#)

IA decision 20180228: Final Decision of The Independent Adjudicator in the Matter of PNA Western and Central Pacific Skipjack and Yellowfin Unassociated/Non-FAD Set Tuna Purse Seine Fishery 28 February 2018. (See Attachment 9 of the PCR)

IA Decision 20220712: An Independent Adjudication In Respect Of PNA Western And Central Pacific Skipjack And Yellowfin Unassociated Non-Fad Set Tuna Purse Seine Fishery Scope Extension: Bigeye Tuna And Catches In All Set Types (FAD And Non-FAD Sets): [PNA WCPO IA Decision 12July22 \(1\).pdf](#)

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PNA Client Report for Year 3 Surveillance Audit – Conditions 2 & 4
PNA Western and Central Pacific skipjack, yellowfin and bigeye tuna purse seine fishery
(FAD and non-FAD sets)

Principle 1: Condition 2

Milestone:

Years 1, 2 and 3: The client will need to provide evidence that it is actively working to ensure that well defined harvest control rules taking into account the main uncertainties are in place for skipjack tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached. This evidence will include a summary of the actions taken by the client and other relevant parties to achieve this outcome in alignment with the WCPFC 2015 agreed work plan (Appendix 10).

CAP: By Year 2-2019 PNA will:

1. Work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC
2. Support MSE work for the Tropical Purse seine Fishery
3. Promote support by PNA Members for the adoption and application of a HCR for skipjack; and
4. Collaborate with other stakeholders to support work towards adoption by the WCPFC of a HCR for skipjack in accordance with the WCPFC workplan for the adoption of harvest strategies.

CAP: By Year 3-2020, PNA will:

1. Work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC
2. Support MSE work for the Tropical Purse seine Fishery
3. Promote support by PNA Members for the adoption and application of a HCR for skipjack; and
4. Collaborate with other stakeholders to support the adoption by the WCPFC of a HCR for skipjack in accordance with the WCPFC workplan for the adoption of harvest strategies.

CAP: By Year 4-2021, PNA will provide evidence that:

1. Well-defined harvest control rules, under PNA or WCPFC, taking into account the main uncertainties, are in place for skipjack tuna that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as the point of recruitment impairment is approached, and are expected to keep the stock fluctuating around a target level consistent with (or above) MSY; and
2. The tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.

Summary

PNA has:

- a) Continued to work with SPC on analysis of candidate HCRs for skipjack for PNA and the WCPFC, including holding a 2-day PNA Harvest Strategy Workshop in June 2022 focused on skipjack HCR design. (9 PNA Workshop papers to be provided)
- b) Supported continuing work on WCPFC Harvest Strategies, including MSE work for the Tropical Purse seine Fishery (see SC17 report)
- c) Supported the further development of the WCPFC Harvest Strategy for skipjack at the 2021 session of the WCPFC. See para 98

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98. PNG, on behalf of the PNA and Tokelau, supported the FFA statement by Tonga. They observed that agreement on a revised skipjack TRP has been held up for 3 years largely because some CCMs tried to take advantage of what should have been a simple technical adjustment to the interim skipjack TRP, and that this was the main reason that MSC certifications of WCPO tuna fisheries faced suspension. The PNA and Tokelau stated they hoped the Commission could give priority to Harvest Strategy work in 2022, including reaching agreement on a skipjack TRP.

- d) Collaborated with other WCPFC participants to adopt an updated Workplan for the Adoption of Harvest Strategies.

These actions include actions taken both as PNA and as part of the wider FFA group.

Principle 1: Condition 4 - Yellowfin

The comments above apply broadly to yellowfin with the important exception that fishing for yellowfin is managed indirectly by measures applied within the harvest strategies for skipjack and bigeye. Assessment results and reviews of the Tropical CMM indicate that taken together, those measures are equally effective at managing fishing for yellowfin.

Evidence Provided

Workshop Programme: PNA Harvest Strategy Virtual Workshop. 6-7 June 2022

WCPFC Scientific Committee 2021 Report, paras 254,255, 272,274, 282, 288, 298, 301, 326 for records of PNA participation . [17th Regular Session of the Scientific Committee | WCPFC Meetings](#)

WCPFC18 Summary Report: [WCPFC18 Summary Report - Issued 13 April 2022 | WCPFC Meetings](#) see para 98

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5.3 Revised Surveillance Programme

Table 11 - Surveillance level justification

Year	Surveillance activity	Number of auditors	Rationale
3	Offsite audit	2 offsite auditors	The conditions and principles they relate to require two auditors onsite to discuss with the client and relevant stakeholders.

Table 12 – Timing of surveillance audit

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
3	22 nd March 2022	12 th – 15 th of July 2022	A VR was applied on FCP v2.2 7.28.8 allowing for the year 3 Surveillance Audit for the PNA fishery to occur up to 9 months after the anniversary date. The additional timeframe and current propose surveillance audit date accommodates for outcomes of the PNA scope extension currently undergoing a stakeholder objection, for which the surveillance assessment team will be working on, as well as outputs of the PNA ministerial conference.

Table 13 – Fishery surveillance program

Surveillance level	Year 1	Year 2	Year 3	Year 4
e.g. Level 5	e.g. On-site surveillance audit	e.g. On-site surveillance audit	e.g. On-site surveillance audit	e.g. On-site surveillance audit & re-certification site visit
Level 6	Onsite	Onsite	Offsite (see rationale in Table 12)	On-site surveillance audit & re-certification site visit

5.4 Harmonised fishery assessments

The following tables provide details on the overlapping WCPO yellowfin tuna and skipjack tuna fisheries and scoring.

Table 14. Overlapping fisheries – WCPO yellowfin

Fishery name	Certification status and date	Performance Indicators to harmonise
AGAC WCPO purse seine tropical tuna fishery	Certified Dec 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Fiji albacore and yellowfin longline fishery	Re-certified Feb 2017. Bigeye certified Nov 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Australian Eastern Tuna and Billfish Fishery (albacore, yellowfin, bigeye tuna and swordfish)	Re-certified Aug 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
SZLC, CSFC & FZLC Cook Islands EEZ south Pacific albacore & yellowfin longline	Re-scored at 4 th surveillance Feb 2020; as per CAB VR	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4

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SZLC CSFC & FZLC FSM EEZ Longline Yellowfin and Bigeye Tuna	Certified Mar 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Solomon Islands longline albacore and yellowfin fishery	Certified Nov 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Solomon Islands skipjack and yellowfin tuna purse seine and pole and line	Re-certified Jun 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
American Samoa EEZ albacore and yellowfin longline fishery	Certified Nov 2017 (Re-certification ACDR Sep 2022)	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
French Polynesia albacore and yellowfin longline fishery	Certified Jun 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
MIFV RMI EEZ Longline Yellowfin and Bigeye tuna	Certified Oct 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PT Citraraja Ampat Sorong pole and line skipjack and yellowfin tuna	Certified Nov 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Tri Marine Western and Central Pacific Skipjack and Yellowfin tuna	Re-scored at 3rd surveillance Aug 2019; as per CAB VR	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PNA Western and Central Pacific skipjack and yellowfin, unassociated / non-FAD tuna purse seine	Re-certified Mar 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Tropical Pacific yellowfin and skipjack free school purse seine fishery	Certified Oct 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
WPSTA Western and Central Pacific skipjack and yellowfin free school purse seine	Certified Jun 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Kiribati albacore, bigeye and yellowfin tuna longline fishery	Certified Jan 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Pan Pacific yellowfin, bigeye and albacore longline fishery	Certified Jun 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PNG Fishing Industry Association's purse seine skipjack and yellowfin tuna fishery	Certified May 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Indonesia pole and line and handline, skipjack and yellowfin tuna of Western and Central Pacific archipelagic waters	Certified Jan 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
North Buru and Maluku Fair Trade Fishing Associations, Indonesian handline yellowfin tuna	Certified May 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Owasebussan Co. Ltd. North Pacific Longline tuna fishery for Albacore, Yellowfin Tuna & Bigeye Tuna	Certified Feb 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Micronesia Skipjack, Yellowfin and Bigeye Tuna Purse Seine Fishery	Certified Mar 2022	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Kiribati albacore, bigeye and yellowfin tuna longline fishery	Certified Jan 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Philippine Small-Scale Yellowfin Tuna (<i>Thunnus albacares</i>) Handline Fishery	Certified Oct 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4

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Table 15. WCPO Yellowfin harmonisation

Performance Indicators (PIs)	1.1.1	1.2.1	1.2.2	1.2.3	1.2.4
AGAC WCPO purse seine tropical tuna fishery)	100	70	60	80	95
Fiji albacore, yellowfin and bigeye longline (bigeye in assessment)	90	70	60	90	95
Australian Eastern Tuna and Billfish Fishery (albacore, yellowfin tuna and swordfish)	90	70	60	80	95
SZLC, CSFC & FZLC Cook Islands EEZ south Pacific albacore & yellowfin longline	90	70	60	80	95
SZLC CSFC & FZLC FSM EEZ Longline Yellowfin and Bigeye Tuna	90	70	60	80	95
Solomon Islands longline albacore and yellowfin fishery	90	70	60	90	95
Solomon Islands skipjack and yellowfin tuna purse seine and pole and line	90	70	60	90	95
American Samoa EEZ albacore and yellowfin longline fishery	90	70	60	80	95
French Polynesia albacore and yellowfin longline fishery	90	70	60	80	95
MIFV RMI EEZ Longline Yellowfin and Bigeye tuna	90	70	60	80	95
PT Citraraja Ampat Sorong pole and line skipjack and yellowfin tuna	90	70	60	90	95
Tri Marine Western and Central Pacific Skipjack and Yellowfin tuna	90	70	60	80	95
PNA Western and Central Pacific skipjack and yellowfin, unassociated / non-FAD tuna purse seine	90	70	60	90	95
Tropical Pacific yellowfin and skipjack free-school purse seine fishery	90	70	60	80	95
WPSTA Western and Central Pacific skipjack and yellowfin free school purse seine	90	70	60	80	95
Kiribati albacore, bigeye and yellowfin tuna longline fishery	90	70	60	80	95
Pan Pacific yellowfin, bigeye and albacore longline fishery	90	70	60	80	95
PNG Fishing Industry Association's purse seine skipjack and yellowfin tuna fishery	90	70	60	80	95
Indonesia pole and line and handline, skipjack and yellowfin tuna of Western and Central Pacific archipelagic waters	90	70	60	80	95
North Buru and Maluku Fair Trade Fishing Associations, Indonesian handline yellowfin tuna	90	70	60	80	95
Owasebussan Co. Ltd. North Pacific Longline tuna fishery for Albacore, Yellowfin Tuna & Bigeye Tuna	90	70	60	80	95
Micronesia Skipjack, Yellowfin and Bigeye Tuna Purse Seine Fishery	100	70	60	80	95

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Kiribati albacore, bigeye and yellowfin tuna longline fishery	90	70	60	80	95
Philippine Small-Scale Yellowfin Tuna (<i>Thunnus albacares</i>) Handline Fishery	100	70	60	80	95

Table 16. Overlapping fisheries – WCPO skipjack

Fishery name	Certification status and date	Performance Indicators to harmonise
AGAC WCPO purse seine tropical tuna fishery	Certified Dec 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Solomon Islands skipjack and yellowfin tuna purse seine and pole and line	Re-scored at 3rd surveillance Sep 2019; as per CAB VR	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PT Citraraja Ampat Sorong pole and line skipjack and yellowfin tuna	Certified Nov 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Tri Marine Western and Central Pacific Skipjack and Yellowfin tuna	Re-scored at 3rd surveillance Aug 2019; as per CAB VR	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Talleys New Zealand skipjack	Certified Aug 2017	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PNA Western and Central Pacific skipjack and yellowfin, unassociated / non-FAD tuna purse seine	Re-certified Mar 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Tropical Pacific yellowfin and skipjack free school purse seine fishery	Certified Oct 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
WPSTA Western and Central Pacific skipjack and yellowfin free school purse seine	Certified Jun 2018	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Japanese Pole and Line skipjack and albacore tuna fishery	Certified May 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Ishihara skipjack and albacore	Certified Mar 2019	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
PNG Fishing Industry Association's purse seine skipjack and yellowfin tuna fishery	Certified May 2020	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Indonesia pole and line and handline, skipjack and yellowfin tuna of Western and Central Pacific archipelagic waters	Certified Jan 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Kochi and Miyazaki Offshore pole and line albacore and skipjack fishery	Certified Jun 2021	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4
Micronesia Skipjack, Yellowfin and Bigeye Tuna Purse Seine	Certified Mar 2022	1.1.1 - 1.2.1 - 1.2.2 - 1.2.3 - 1.2.4

Table 17. WCPO Skipjack harmonisation

Performance Indicators (PIs)	1.1.1	1.2.1	1.2.2	1.2.3	1.2.4
AGAC WCPO purse seine tropical tuna fishery	100	70	60	90	95

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Solomon Islands skipjack and yellowfin tuna purse seine and pole and line	100	70	60	90	95
PT Citraraja Ampat Sorong pole and line skipjack and yellowfin tuna	100	70	60	95	95
Tri Marine Western and Central Pacific Skipjack and Yellowfin tuna	100	70	60	90	95
Talleys New Zealand skipjack	100	70	60	90	95
PNA Western and Central Pacific skipjack and yellowfin, unassociated / non-FAD tuna purse seine	100	70	60	90	95
Tropical Pacific yellowfin and skipjack free-school purse seine fishery	100	70	60	90	95
WPSTA Western and Central Pacific skipjack and yellowfin free school purse seine	100	70	60	90	95
Japanese pole and line albacore and skipjack fishery	100	70	60	90	95
Ishihara skipjack and albacore	100	70	60	90	95
PNG Fishing Industry Association's purse seine skipjack and yellowfin tuna fishery	100	70	60	90	95
Indonesia pole and line and handline, skipjack and yellowfin tuna of Western and Central Pacific archipelagic waters	100	70	60	90	95
Kochi and Miyazaki Offshore Pole and Line Albacore and Skipjack fishery	100	70	60	90	95
Micronesia Skipjack, Yellowfin and Bigeye Tuna Purse Seine	100	70	60	90	95

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2.0	17 December 2018	Release alongside Fisheries Certification Process v2.1
2.01	28 March 2019	Minor document change for usability
2.1	25 March 2020	Minor document change for usability

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