



SLIPPING THROUGH THE NET
REPORTED BUT IGNORED
INFRINGEMENTS IN THE MSC TUNA FISHERIES
OF THE WESTERN AND CENTRAL PACIFIC

MAY 2022

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EXECUTIVE SUMMARY

This report is based on a review of Observer data sets from the Fijian National Observers Programme (FJOB), the Solomon Islands National Observers programme (SBOB) and the PNA Observer Agency (POA)¹, and subsequent in-country investigations conducted by Shark Guardian researchers in collaboration with CNS Global Consulting (CNS).

A review of the data sets reveals that management of the Solomon Islands Exclusive Economic Zone (EEZ) by the Solomon Islands Ministry of Fisheries and Marine Resources (MFMR), and of areas observed by the Parties to the Nauru Agreement (PNA) Observer Agency (POA) operating under the Federated States of Micronesia Arrangement for Regional Fisheries Access (FSMA), has been compromised in a number of key areas including:

- Assessments of the impacts of fisheries on non-target species.
- The monitoring of illegal, unreported and unregulated (IUU) fishing.
- Violations of the Marine Stewardship Council's (MSC's) standards by MSC-certified vessels, often during sets classified as MSC-eligible. Including involvement in shark finning, which according to a 2011 MSC Board of Trustees resolution should make sets ineligible for certification to the MSC standard for sustainable fisheries.^[1]
- Other violations of the Western and Central Pacific Fisheries Commission's (WCPFC's) Conservation and Management Measures (CMMs) were observed on the same vessels.

Similar observations were indicated by the Fijian findings. However, the data sets from the FJOB were limited in size.

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. It is worth noting that this review only looked at a few available data sets, drawing from reports of a small number of Observers on a small number of trips. In reality, the scale of actual violations is likely to be far higher, considering the high number of violations this small sample has brought to light.

The review found that MSC-certified purse seiners operating under the Solomon Islands bilateral fishing licences and the FSMA licence continue to violate the MSC certification guiding principles² but have not had their MSC certification revoked or suspended. Fishing sets during MSC trips on MSC-certified vessels were classified as MSC-eligible despite documented practices during these sets that were in violation of MSC standards.

1. Operating under the Federated States of Micronesia Arrangement for Regional Fisheries Access (FSMA).

2. The MSC Fisheries Standard is measured against three principles: 1. Fish stock sustainability, 2. Environmental impact and 3. Effectiveness of fisheries management. See: https://www.msc.org/docs/default-source/default-document-library/for-business/program-documents/fisheries-program-documents/msc-fisheries-standard-v2-01.pdf?sfvrsn=8ecb3272_19#page=182&zoom=100,92,674



A whale shark (RHN) trapped inside the net sack. Deliberately setting a net around a school of tuna associated with a live whale or whale shark is a violation of CMM 2019-04.

The critical incidents identified include (but are not limited to):

- Deliberately setting a net around a school of tuna associated with a live whale or whale shark.
- Shark finning.
- Inappropriate treatment of Species of Special Interest (SSI), including cetaceans and whale sharks caught inside nets and landed on deck dead or dying due to negligence.
- A helicopter illegally dumped at sea.
- Violations of Observer rights.
- Fishing on Fish Aggregating Devices (FADs) during FAD closure period.
- High grading (discarding the on-board catch to make room for better quality, larger size or for more marketable species).
- Discrepancies in daily catch and effort reporting by the vessel.

With less than 5% Observer coverage on long liners, and the impact of the COVID-19 pandemic on Observer programmes (suspended for purse seiners from April 2020–March 2022 and long liners partially suspended in 2020–2021),^{[2],[3]} we estimate the amount of actual violations to be considerably higher than those revealed in this report.

Without Observers, fishing vessels operate with no checks and balances, and no accountability. The illegal dumping of a helicopter revealed in section 1.3 highlights the ongoing need for high Observer levels.

These findings should be of concern to the MSC, as they undermine the credibility of its blue tick guarantee to customers that fish caught under its umbrella is genuinely sustainable. The MSC must urgently assert its influence and responsibility to improve reporting practices, and the enforcement of existing regulations, including CMMs and the MSC's own standards. CABs should reform themselves and take Observers' reports seriously and act on them.

The WCPFC and the Observer programmes, along with national governments and the MSC, must ensure that valuable advances in the sustainable management of tuna fisheries are not compromised through negligence, non-compliance, corruption, and, as exposed in this report, by turning a blind eye to the significant and meticulous reporting efforts undertaken by its fisheries Observers. According to the MSC Guidance to the Fisheries Standard, data collected from Observer programmes is classified as having a “higher verifiability and lower bias”,^[4, p. 72] relative to other sources such as logbooks and full dockside monitoring (see Appendix 3).

Auditing practices and Observer data flow need to be improved to ensure that Observers' reports are not ignored. Without accurate reporting and reliable reporting procedures, buyers, stakeholders and consumers have no guarantee that MSC-certified fish from tuna fisheries in Fiji, the PNA and Solomon Islands is genuinely sustainable.

BACKGROUND

The Western and Central Pacific Ocean (WCPO) tuna fisheries are the largest in the world. Under the jurisdiction of the WCPFC, fisheries range from small-scale artisanal operations in the coastal waters of Pacific nations to large-scale industrial fishing operations in EEZs and international waters.

Tuna fishing in the WCPO comprises both Pacific nation-flagged vessels and Distant Water Fishing Fleets (DWFFs), using purse seine, longline, and pole and line gear. DWFFs access the geographical areas and respective EEZs covered in this report under several different arrangements, including:

- Bilateral fishing access arrangements between national governments and the governments of bilateral partners.
- Vessels operating under the PNA.
- Vessels operating under a cross-party, multi-zone access pool.
- Vessels from other Pacific Island nations fishing under the FSMA ^[5].
- Vessels operating under the multilateral treaty between the Pacific Islands Forum Fisheries Agency (FFA) member countries and the United States of America (US Treaty).

CNS aims to generate evidence usable in the global fight to eliminate illegal fishing and human rights abuse in tuna fisheries, promote industry reform through the reform of fisheries certification schemes (such as the MSC) as well as RFMOs and Observer programmes, and advocate for increased transparency. CNS wishes to advance sustainability and corporate responsibility across the board, by highlighting the impact of highly subsidised DWFFs on coastal states and their artisanal fishing activities, while endorsing and enhancing the United Nations' Sustainable Development Goal (SDG) 14, 'Conserve and sustainably use the oceans, seas and marine resources for sustainable development'.

In this data review, Shark Guardian in collaboration with CNS aimed to identify vessels, in particular MSC-certified purse seine and longline vessels, involved in IUU, fishing in unauthorised areas and illegal transshipment, shark finning, human rights and labour abuses or infringements on MSC rules.

Between June and December 2021, researchers reviewed a total of 64 Observer data sets from the SBOB (2018–2021), the FSMA/POA (2019–2020) and the FJOB (2017–2020), including: General (GEN) 1-6 forms (Observer forms used for reporting sighted vessels, SSI interactions and sightings, noted infringements, FAD encounters and pollution reports), Observer Trip Journals with elaborated details, PS 1-5 Forms (SPC/FFA Observer forms used for purse seiners), Supplementary Information (SUP) 1-4 Forms (SPC/FFA Observer preparation forms), Purse Seiner (PS) Trip Reports (the final report of the fishing trip with summarised information), Long Liner (LL) 4 Forms (SPC/FFA Observer forms for long liners), relevant legislation, and additional references. The available Observer data was analysed and catalogued in a database spanning over 600 entries, which were organised by the type of observations reported by Observers.

All documented cases of violations were validated using national, regional and international regulations, including MSC standards where relevant. Table 1 provides an overview of the relevant Pacific Islands Regional Fisheries Observer (PIRFO) Codes used in Observer reports and the analyses of these reports.

In the data review, researchers defined critical incidents as incidents that, according to relevant regulations, required immediate attention as soon as they had been reported by the Observer. Once the Observer was safely in port, compliance officers would have been required to apprehend the vessel in question, preferably while the vessel was still in port.

In researching this paper, researchers met with several limitations, most notably scarce longline data. Given that Observer coverage of longline vessels already struggles to meet the 5% WCPFC target, COVID-19 restrictions and the suspension of the Observer programme coverage means longline data is at an all-time low.

Researchers had very limited access to government offices and relevant offices of interest to ask for additional information during the study. Senior officers would not provide evidential information either because of a lack of trust in the research, or because they demanded unacceptable bribes for the provision of information.

Table 1. List of Pacific Islands Regional Fisheries Observer (PIRFO) Codes and FAO Species Codes used.

Bycatch and Target catch Fate Codes		Sharks & Rays FAO species Codes	
DCF	Discarded Cut Free or Far ³	AML	Grey Reef Shark
DFR	Discarded Fins Retained (Sharks only)	BLR	Blacktip Reef Shark
DUS	Discarded Unwanted Species	BSH	Blue Shark
DDL	Discarded Difficult to Land	FAL	Silky Shark
DGD	Discarded Gear Damaged	LMA	Longfin Mako Shark
DTS	Discarded Too Small	OCS	Oceanic Whitetip Shark
DPD	Discarded Protected Species Dead	RHN	Whale Shark
DPA	Discarded Protected Species Alive	RMB	Manta Ray
DPU	Discarded Protected Species Condition Unknown	RMV	Devil Ray
DOR	Discarded Other Reasons	SMA	Shortfin Mako Shark
ROR	Retained Other Reasons	Other Bycatch species FAO codes	
RFR	Retained Fins Retained (Sharks only)	BAO	Longfin Batfish
RCC	Retained for Crew Consumption	BLM	Black Marlin
Cetacean FAO species Codes		BLT	Bullet Tuna
BRW	Bryde's Whale	BUM	Blue Marlin
FAW	False Killer Whale	CNT	Oceanic Triggerfish
MIW	Minke Whale	CNT	Oceanic Trigger fish
RTD	Rough Toothed Dolphins	DOL	Mahi-mahi (dolphinfish)
SHW	Short Finned Pilot Whale	FRI	Frigate Tuna
SIW	Sei Whale	GBA	Great Barracuda
		GLT	Golden Trevally
		KAW	Kawa-Kawa (Mackerel Tuna)
		KYC	Blue Sea Chub
		MSD	Mackerel Scud
		PLS	Pelagic Stingrays
		RRU	Rainbow Runner
		LOB	Tripletail
		WAH	Wahoo

4. Although it says in relevant PIRFO guidance 'Discarded. Cut free!' (See: <https://www.pirfo.org/index.php/resources/downloads/category/32-longline?download=106:18-obs-ll-4>), according to LL 4 form instruction, DCF is discarded cut free or far. 'Or Far' means that the fish did not come alongside the vessel before the line was cut, i.e. the line was cut when the fish was at some distance away from the vessel.

FINDINGS

I. MSC-CERTIFIED VESSELS

The Tri Marine Group's purse seine fishing recertification for the Solomon Islands (MSC Tuna Fishery Certification) was granted in June 2021. Tri Marine received permission to include Drifting Fish Aggregating Devices (dFADs) and log sets within the certificate. Skipjack and yellowfin became MSC-eligible for these set types: anchored FADs, drifting FADs and floating logs, in addition to sets on free-schools for all purse seine fishing trips from 16 June 2021 onwards. This was a contentious decision, as it meant vessels operating under the Tri Marine Solomon Islands MSC certificate were no longer required to adhere to on-board MSC Chain of Custody (CoC) procedures, particularly the separation of MSC and non-MSC catches, since all set types and wells would classify as MSC-eligible. Under this worrying change, Observers were no longer necessary for MSC CoC monitoring of purse seine fishing trips and unloading of catches.⁵

The authors believe that granting certification to fish on dFADs violates the MSC Fisheries Standard, according to which: "Fisheries are scored against the three principles: Principle 1 Sustainability of the stock: fisheries must operate in a way that allows fishing to continue indefinitely, without overexploiting the resource; Principle 2 Ecosystem impacts: Fishing operations need to be managed to maintain the structure, productivity, function and diversity of the ecosystem upon which the fishery depends, including other species and habitats; Principle 3 Effective management: All fisheries need to meet all local, national and international laws and have an effective management system in place."^[6]

The use of FADs, whether anchored, natural or drifting, has been shown to result in the capture of millions of undersized and juvenile tunas. Furthermore, Endangered, Threatened and Protected (ETP) species such as sharks, rays and turtles are also caught when drifting FADs are deployed. Certifying dFAD fishing under the MSC label contradicts the first principle of the MSC Fisheries Standard for the sustainability of the tuna stock, as well as other bycatch species. Shark landings associated with dFAD fishing are common,^[7] with over 90% of the shark bycatch composed of silky sharks.^[8] Mitigation efforts to reduce the impact of dFADs on silky shark populations as recommended by the International Seafood Sustainability Foundation (ISSF), including using non-entangling FADs, release from the net and release from the deck,^[8] are mostly not observed due to a lack of enforcement and monitoring capabilities.^[9] The result is that many of the shark species that land on deck are already dead or left on deck to die before being discarded overboard.

With these problems in mind, industry Observers and stakeholders were taken by surprise when the Solomon Islands National Fisheries Development Limited (NFD) and the Tri Marine International (Pte) Limited acquired MSC certification for purse seine fisheries of all set types in June 2021. One of the three main principles for the assessment of MSC certification is 'fish stock sustainability'. To acquire MSC certification for unsustainable fishing practices, such as fishing on drifting FADs, contravenes that very principle. With Solomon Island's Ministry of Fisheries and Marine Resources (MFMR) seeming to turn a blind eye to the matter, it may be concluded that short-term financial benefits are of higher value than the sustainability of the fish stocks.

MSC-certified vessels operating under PNA and FSMA licences are guilty of violating several WCPFC CMMs. The 19 PNA Observer trip data sets that were reviewed and analysed by the researchers brought to light 51 cases of MSC-certified vessels committing critical infringements requiring, but not receiving, immediate attention.

In addition to reported evidence of vessels deliberately setting nets around live whales and whale sharks, the authors found cases of vessels' crew interfering with the Observers' work, shark finning on

5. Based on communication with a source that wishes to remain anonymous.

some vessels, and fish being discarded and wasted because they were undersized and unmarketable (high grading the catch). Each of these issues are elaborated upon in the following sections.

MSC-certified vessels were also found to have breached fisheries agreements around the handling of SSI. The data review identified cases where SSIs were neglected and left inside the net sack,⁶ while vessels continued brailing their catch on board. In some cases, SSIs were left on deck to die, while in other cases, SSIs were treated unethically by letting them go through the net power block, or butchering them when they were entangled in the net.

Furthermore, discrepancies in the reporting of the bycatch and target catch by MSC-certified vessels were worryingly common. Cases were identified where vessels did not bother to report in their logbooks bycatch or target tuna species that had been discarded or retained for crew consumption. 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.

Of greatest concern were the MSC-certified vessels and MSC-certified sets which, despite numerous observed and documented violations, were still classified as MSC-eligible. The findings as presented in the following are disaggregated by source (SBOB, POA/FSMA and FJOB).

6. Net sack, sometimes called the net bag, is a section at the skiff end of the net that consists of more durable netting, able to sustain the stress weight of the catch after the main body of the net has been rolled on board the vessel (similar to the cod end of the trawl net). It is usually made with stronger netting material or double netting features compared to the main body of the net because it is the area that is responsible for holding the entire weight of the catch, sometimes up to 400 metric tons.

I.1 VIOLATIONS ON MSC VESSELS DURING MSC TRIPS AND SETS CLASSIFIED AS MSC-ELIGIBLE – SOLOMON ISLANDS OBSERVER DATA

The following is an overview of violations found reviewing the SBOB Observer programme data.

SHARK FINNING



Shark carcasses, namely silky sharks (FAL), with their fins removed. Photo taken inside the well deck (or storage hatch deck). Violation of CMM 2019-04.

Shark finning was observed on a worrying number of MSC-certified vessels. Twenty-four incidents of shark finning were identified, all of which took place on (currently) MSC-certified vessels, out of which 19 happened during MSC trips and sets classified as MSC-eligible (Table 2). A controversial case took place in late 2020 when around 25 kilograms of shark fins were confiscated from the Southern Seas 301 vessel in Port Noro, and no enforcement action was taken (see Findings: Section 2 for more details).⁷

7. Personal communications.

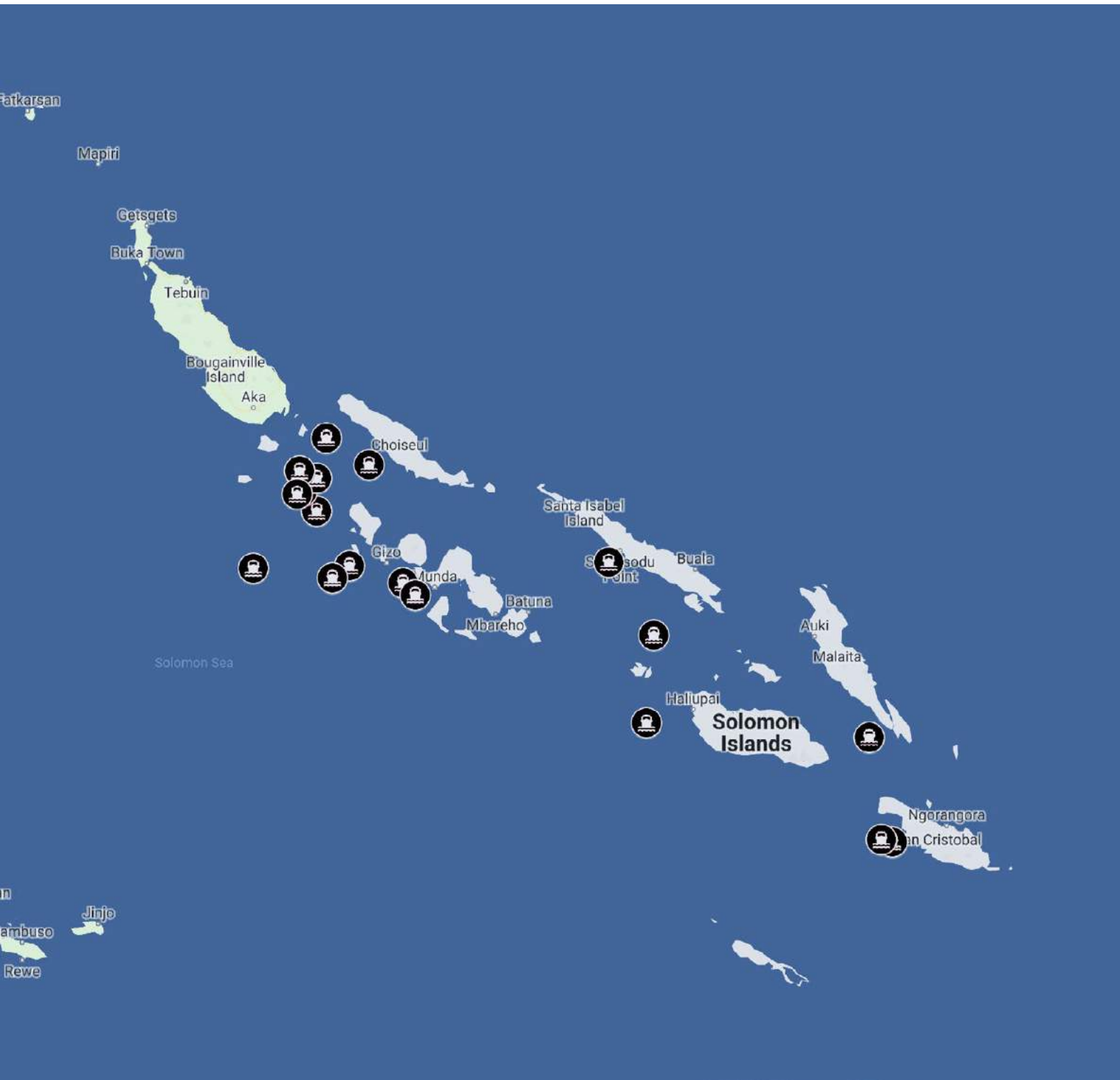


Three large silky sharks (FAL) with their dorsal and pectoral fins removed. Violation of CMM 2019-04.



Catches that are to be discarded. Including damaged tuna and bycatch species. Silky shark (FAL) carcasses with dorsal, pectoral and caudal fins removed. Violation of CMM 2019-04.

Figure 1. Shark Finning on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – Solomon Islands Observer Data.



Note: GPS coordinates were only available for some of the observed violations among the data sets.

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), transhipping and landing of shark fins. Any harvesting of shark fins is in contravention of this CMM.

8. CCM = Commission Members, Cooperating Non-Members, and Participating Territories of the WCPFC.

Table 2. Shark-Finching Incidents on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2019.

Year: 2019 No of reported violations: 12					
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FU Kuan 808 ^[11]	Taiwan	MSC-C-53088 (27 January 2021) ^[12]	M13910	Observer recorded 2 cases of shark finning of silky sharks (FAL) by vessel crew (DFR).	#26 @12:49 hrs.
FV Solomon Opal ^[13]	Solomon Islands	MSC-F-30002; ^[14] C-SCS-0888 (26 July 2019). ⁹	SIMSC 1948	Observer recorded 5 silky sharks (FAL) @0.18mT landed on board during the set. All sharks were discarded dead with their fins retained on board for local sale (DFR).	#5 @05:49 hrs.
				Observer recorded 3 silky sharks (FAL) @0.15mT landed on board during the set. All 3 sharks were discarded dead with their fins retained on board for local sale (DRF).	#9 @05:38 hrs.
				Observer recorded 8 silky sharks (FAL) @0.4mT landed during brailing of the set. All sharks were discarded dead with their fins retained on board for local sale (DFR).	#10 @06:04 hrs.
				Observer recorded 6 silky sharks (FAL) @0.25mT landed during the set. All sharks were discarded dead with their fins retained on board for local sale (DFR).	#11 @05:44 hrs.
				Observer recorded 8 silky sharks (FAL) @0.3mT landed during the set. All sharks were discarded dead with their fins retained on board for local sale (DFR).	#12 @05:56 hrs.
				Observer recorded 12 silky sharks (FAL) @0.25mT landed during the set. All sharks were discarded dead with their fins retained on board for local sale (DFR).	#15 @05:53 hrs.
			SIMSC 19123	Observer recorded 12 large silky sharks (FAL) @0.35mT, landed during the set, and were discarded dead with their fins retained on board for local sale (DFR).	#5 @18:38 hrs.
			SIMSC 19123	Observer recorded 16 silky sharks (FAL) @0.5mT and 8 blacktip reef shark (BLR) @0.4mT landed and had their fins removed for local sale (DFR).	#12 @07:47 hrs.

9. Retrieved from: SCS Global Services, "PNA Western and Central Pacific Skipjack and Yellowfin, Unassociated / Non FAD Set, Tuna Purse Seine Fishery," pnatuna.com, 2019. https://www.pnatuna.com/sites/default/files/PNA_Addendum_26July2019.pdf. File no longer available on the website, as of 27 December 2021, however it remains on file with CNS.

				Observer recorded 1 silky shark (FAL) @0.04mT landed during the set and was discarded dead with its fins retained on board for local sale (DFR).	#16 @14:26hrs.
				Observer recorded 6 silky sharks (FAL) @0.2mT landed during the set and were discarded dead with their fins retained on board for local sale (DFR).	#17 @10:56 hrs.
				Observer recorded 10 silky sharks (FAL) @0.2mT landed during the set and were discarded dead with their fins retained on board for local sale (DFR).	#18 @17:08 hrs.

Table 3. Shark-Finishing Incidents on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2020.

Year: 2020				No of reported violations: 7	
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Opal	Solomon Islands	MSC-F-30002; MSC-C-53088 (2019) ^[15]	SIMSC 19132	Observer recorded 3 dead silky sharks (FAL) landed by the brail out of which 1 large silky shark (FAL) @50 kg was finned and discarded by crew member (DFR) and the other silky sharks (FAL) were discarded whole, dead (DPD).	#3 @09:10 hrs.
				Observer recorded 5 silky sharks (FAL) @90 kg were finned and discarded (DFR) while 2 other smaller silky sharks (FAL) were discarded whole (DPD).	#5 @06:40 hrs.
				Observer recorded that during brailing, 1 silky shark (FAL) @ 20 kg was landed, finned and the carcass discarded by crew member (DFR).	#6 @13:30 hrs.
				Observer recorded 2 silky sharks (FAL) @40 kg were finned and discarded (DFR).	#8 @07:04 hrs.
				Observer recorded 8 silky sharks (FAL) @160 kg was discarded without fins (DFR). All 8 silky sharks (FAL) were dead when they landed during net hauling.	#11 @10:57 hrs.
				Observer recorded 7 silky sharks (FAL) @140 kg were discarded and fins removed for sale (DFR).	#12 @10:57 hrs.
FV Solomon Pearl ^[16]	Solomon Islands		SIMSC 2080	Observer recorded that 3 silky sharks (FAL) reportedly had their fins removed by local fishermen, who were on board during the set.	#11 @04:52 hrs.



SPECIES OF SPECIAL INTEREST INTERACTIONS AND LANDINGS

Not all SSI interactions or landings are considered violations, as protected shark species and cetaceans often get caught by accident during fishing sets. If an SSI is landed on board or interacts with gear, and is released appropriately, the incident is not considered an infringement.

Figure 2. Species of Special Interest Interactions and Landings on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – Solomon Islands Observer Data..



Note: GPS coordinates were only available for some of the observed violations among the data sets.

According to CMM 2011-03 (Conservation and Management Measure For Protection Of Cetaceans From Purse Seine Fishing Operations) ^[17] and CMM 2019-04 (Conservation and Management Measure for Sharks), ^[10] protected shark species or cetaceans, such as silky sharks (FAL), oceanic whitetip sharks (OCS) and whale sharks (RHN) or 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 shark or cetacean as possible.

If SSIs are neglected, left to die on deck (which often happens with silky sharks (FAL)), deliberately left in the net, or if deliberate sets on cetaceans are observed, these incidents should be classified as violations.

Table 4. SSI Interactions on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2018.

Year: 2018			No of reported violations: 3		
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Ruby ^[18]	Solomon Islands	MSC-F-30002	No Record	5 silky sharks (FAL) @0.2mT, landed during the set were neglected and were eventually discarded dead (DPD).	#2 @05:48 hrs.
				6 silky sharks (FAL) @0.07mT were neglected when landed onboard, they were eventually discarded dead (DPD).	#4 @05:40 hrs.
				2 silky sharks (FAL) @0.04mT landed during the set were neglected and were eventually discarded dead (DPD).	#8 @05:38 hrs.



Devil Rays (RMV) neglected on deck during brailing sacking up process or brailing process. Violation of CMM 2019-05.

Table 5. SSI Interactions on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2019.

Year: 2019			No of reported violations: 8		
Vessel name	Flag	MSC certification code (or certificate number present and at time of incident)	MSC trip no	Description	Set no.
FV Solomon Jade ^[19]	Solomon Islands	MSC-F-30002; C-SCS-0888 (26 July 2019).	TMI SIMSC 11910	Observer recorded 2 silky sharks (FAL) @0.1mT, which landed alive during hauling and brailing and were discarded dead (DPD).	# 3 @09:14 hrs.
				Observer recorded 5 silky sharks (FAL) @0.2mT landed during brailing in very distressed condition. Crew quickly pulled them out of the net and discarded them dead (DPD).	# 8 @16:14 hrs.
				Observer recorded 1 silky shark (FAL) @0.04mT landed on deck dead during brailing and was discarded (DPD), 1 silky shark (FAL) @0.06mT landed on deck alive during brailing discarded alive (DPA).	#12 @05:59 hrs.
				Observer recorded 7 silky sharks (FAL) @0.25mT landed on deck during set and crew quickly pulled out during brailing and discarded overboard, dead (DPD).	#13 @05:22 hrs.
FU Kuan 808	Taiwan	MSC-C-53088 (27 January 2021) ^[12]	M13910	Observer recorded 15 silky sharks (FAL) @2.20mT landed dead on deck during set and were discarded dead (DPD).	#26 @12:49 hrs.
				Observer recorded 7 silky sharks (FAL) @1.00mT landed dead on deck during set and were discarded dead (DPD). 2 manta rays (RMB) @0.01mT landed on deck and were discarded as unwanted species (DUS).	#28
FV Solomon Opal	Solomon Islands	MSC-F-30002; C-SCS-0888 (26 July 2019).	TMI SIMSC 19123	Observer recorded 2 silky sharks (FAL) @0.04mT landed on the vessel and were discarded dead by crew (DPD).	#1 @05:20 hrs.
				Observer recorded 3 manta rays (RMB) @0.3mT land on board, all were discarded dead (DPD).	#5 @18:38 hrs.



Solomon Jade © Steven Watkins

Table 6. SSI Interactions on MSC Vessels During MSC Trips and Sets Classified as MS-Eligible – SBOB Data, 2020.

Year: 2020				No. of reported violations: 26	
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Opal	Solomon Islands	MSC-F-30002; MSC-C-53088 (2019) ^[15]	SIMSC 19132	Observer recorded 4 small silky sharks (FAL) (around 100cm) alive until they reached the power block and then died instantly and discarded (DPD).	#1 @06:47 hrs.
				Observer recorded 2 small silky sharks (FAL) landed dead during net hauling and discarded overboard immediately by crew.	#2
				3 silky sharks (FAL) @0.02mT landed on deck dead and were discarded dead (DPD).	#3 @09:10 hrs.
				Observer recorded 4 small silky sharks (FAL) (1 metre) landed during net hauling, let through power block so died instantly and then discard whole. 3 more silky sharks (FAL) landed during brailing, already dead and then discarded whole (DPD).	#4 @06:24 hrs.
				2 small silky sharks (FAL) @ 0.018mT landed on deck dead during brailing and were discarded (DPD).	#5 @05:34 hrs.

				Observer recorded, during the net hauling, 2 silky sharks (FAL) landed on deck and left to die by crew (DPD).	#6 @13:30 hrs.
				Observer recorded 3 small silky sharks (FAL) landed during net hauling. All silky sharks (FAL) were dead when caught and were discarded whole (DPD).	#7 @06:50 hrs.
			TMI SIMSC-2005	Observer recorded 5 silky sharks (FAL) landed alive during net hauling and were killed when the net went through the power block. Crew discarded them whole once they landed on deck (DPD). Another 5 silky sharks (FAL) landed dead during brailing and were discarded (DPD).	#4 @06:40 hrs.
				Observer recorded 6 silky sharks (FAL) @0.09mT, landed alive during net hauling, were killed when the net went through the power block and were discarded (DPD). Another 7 silky sharks (FAL) landed dead on deck during brailing and were discarded whole by crew (DPD).	#6 @07:00 hrs.
				Observer recorded 5 silky sharks (FAL) @0.08mT, landed alive during net hauling, killed when the net went through the power block. Crew discarded them whole once they landed on deck (DPD). 1 silky shark (FAL) landed dead on deck during brailing and was discarded (DPD).	#7 @06:18 hrs.
				Observer recorded 2 silky sharks (FAL) @0.03mT, landed alive during net hauling, but were killed when the net went through the power block and discarded after landing on deck (DPD). Another 2 silky sharks (FAL) @0.03mT landed dead on deck during brailing and were discarded (DPD).	#8 @05:38 hrs.
			TMI SIMSC 12013	Observer recorded 4 silky sharks (FAL) @0.02mT, landed dead and were discarded (DPD),	#5 @06:08 hrs.
			TMI SIMSC 12018	Observer recorded 1 silky shark (FAL) @0.05mT landed on deck dead and was discarded (DPD).	#3 @18:01 hrs.
				Observer recorded 2 silky sharks (FAL) @0.01mT, landed on deck dead and were discarded (DPD).	#10 @05:41 hrs.
FV Solomon Jade	Solomon Islands		SIMSC 2075	Observer recorded 5 silky sharks (FAL)@0.1mT landed, all were discarded dead (DPD).	#6 @05:09 hrs.
				Observer recorded 10 silky sharks (FAL) @0.04mT landed, all were discarded dead (DPD).	#8 @05:10 hrs.
				Observer recorded 15 silky sharks (FAL) @0.1mT landed, all were discarded dead (DPD).	#10 @05:20 hrs.

				Observer recorded fifteen silky sharks (FAL) @0.150mT landed, all were discarded dead (DPD).	#11 @05:11 hrs.
				Observer recorded 2 silky sharks (FAL) @0.03mT landed, both were discarded dead (DPD).	#13 @05:11 hrs.
				Observer recorded 2 silky sharks (FAL) @0.05mT landed, both were discarded dead (DPD).	#14 @05:12 hrs.
FV Solomon Pearl	Solomon Islands		SIMSC-19129	Observer recorded 11 silky sharks (FAL) @0.1mT landed, all were discarded dead (DPD).	#1 @05:27 hrs.
				Observer recorded a total of 29 silky sharks (FAL) landed, out of which 14 silky sharks (FAL) @0.310mT were discarded dead (DPD) and 15 silky sharks (FAL) @0.34mT were discarded with unknown conditions (DPU).	#2 @17:33 hrs.
				Observer recorded 3 silky sharks (FAL) @0.04mT landed, all were discarded dead (DPD).	#4 @05:23 hrs.
				Observer recorded 5 silky sharks (FAL) @0.06mT landed, all were discarded dead (DPD).	#5 @05:37 hrs.
				Observer recorded 7 silky sharks (FAL) @0.02mT landed, all discarded dead (DPD).	#6 @05:41 hrs.
				Observer recorded 3 silky sharks (FAL) @0.04mT landed, all were discarded dead (DPD).	#7 @05:27 hrs.

DISCREPANCY IN BYCATCH AND TARGET CATCH DISCARD REPORTING

Discrepancies in the reporting of retained and discarded bycatch and target species are considered a violation of CMM 2013-05.^[20] 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.

Figure 3. Discrepancy In Bycatch and Target Catch Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – Solomon Islands Observer Data.



Note: GPS coordinates were only available for some of the observed violations among the data sets.

If a silky shark or any other SSI happens to be landed on deck or is interacted with during sets and is not recorded by the vessel, the vessel is in breach of both regulations for the landing of SSIs and the reporting of bycatch (CMM 2019-04 and CMM 2011-03). The research found some vessels to be over-reporting, i.e. reporting more bycatch than the on-board Observer. There are several possible reasons for the mismatch in these reports: a) the vessel's estimation method could be different to that of the Observer, b) the Observer may have underestimated, c) the vessel may deliberately record higher bycatch landings so data will indicate that the bycatch fish stock is still healthy. According to conversations with Observers, vessel companies would instruct the vessels' crew to over-record, giving the fishing industry indirect permission to continue fishing, on the basis of assessments indicating that fish stocks are still thriving, despite the vast industrial fishing operations taking place in the region.

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. By not paying attention to actual practices, and by relying exclusively on information relayed through intermediaries who often have conflicting interests, as in the case of the Solomon Opal in Section 1.2 of the findings, the MSC is unwittingly promoting an unscientific and false stock assessment.

Table 7. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2018.

Year: 2018			No. Of reported violations: 11		
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Ruby	Solomon Islands	MSC-F-30002	No Record	Vessel failed to record in log sheets: DOL @0.04mT, CNT @0.01mT and MSD @0.01mT, (DUS); SKJ @0.01mT and YFT @0.01mT, (DGD); YFT @0.01mT (RCC).	#1 @05:36 hrs.
				Vessel failed to record in log sheets: 5 silky sharks (FAL) @0.2mT (DPD); DOL @0.03mT (RCC); DOL @0.03mT (DUS); RRU @0.03mT (ROR); SKJ @0.04mT and YFT @0.06mT, (DGD); YFT @0.01mT (RCC).	#2 @05:48 hrs.
				Vessel failed to record in log sheets: 6 silky sharks (FAL) @0.07mT (DPD); RRU @0.01mT (ROR); SKJ @0.1mT and YFT @0.05mT, (DGD).	#4 @05:40 hrs.
				Vessel failed to record in log sheets: SKJ @0.05mT and YFT @0.04mT, (DGD); YFT @0.01mT (RCC)	#5 @05:40 hrs.
				Vessel failed to record in log sheets: DOL @0.05mT (DUS); YFT @0.04mT and SKJ @0.06mT, (DGD); SKJ @0.03mT and YFT @0.03mT, (RCC).	#6 @05:35 hrs.
				Vessel failed to record in log sheets: DOL @0.04mT (DUS); SKJ @0.05mT and @ YFT @0.05mT, (DGD); SKJ @0.01mT and YFT @0.03mT, (RCC).	#7 @05:37 hrs.
				Vessel failed to record in log sheets: 2 silky sharks (FAL) @0.04mT (DPD); DOL @0.07mT (DUS).	#8 @05:38 hrs.
				Vessel failed to record in log sheets: SKJ @0.02mT and YFT @0.02mT, (DGD); SKJ @0.01mT and YFT @0.02mT, (RCC).	#9 @05:34 hrs.
				Vessel failed to record in log sheets: SKJ @0.04mT and YFT @0.03mT, (DGD); SKJ @0.02mT and YFT @0.02mT, (RCC).	#10 @05:53 hrs.
				Vessel failed to record in log sheets: SKJ @0.05mT and YFT@0.05mT, (DGD); SKJ @0.03mT and YFT @0.05mT, (RCC).	#11 @05:36 hrs.
				Vessel failed to record in log sheets: DOL @0.06mT (DUS); SKJ @0.1mT and YFT @0.08mT, (DGD); SKJ @0.02mT and YFT @0.02mT, (RCC); SKJ @3mT and YFT @7mT, (DVF).	#12 @06:13 hrs.

Table 8. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2019.

Year: 2019				No. Of reported violations: 23	
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FU Kuan 808	Taiwan	MSC-C-53088 (27 January 2021 ^[12])	M13910	Vessel did not record in log sheets: MLS @0.03mT (RPT); SKJ @0.1mT and YFT @0.05mT, (DGD).	#26 @12:49 hrs.
				Vessel did not record in log sheets: 7 silky sharks (FAL) @1mT (DPD); 2 manta rays (RMB) @0.01mT (DUS); SKJ @0.08mT and YFT @0.02mT, (DGD).	#28
FV Solomon Jade	Solomon Islands	MSC-F-30002; C-SCS-0888 (26 July 2019).	TMI SI MSC 11910	Vessel failed to record in vessel log sheets: 10 RRU @0.02mT, 8 DOL @0.015mT (ROR- local sale); YFT @0.01mT (RCC).	#1 @05:15 hrs.
				Vessel failed to record in log sheets: 1 devil ray (RMV) @0.04mT (DUS); RRU @0.015mT (ROR); SKJ @0.03mT and YFT @0.02mT, (DGD).	#2 @05:22 hrs.
				Vessel failed to record in log sheets: 2 silky sharks (FAL) @0.1mT (DPD)	#3 @09:14 hrs.
				Vessel failed to record in log sheets: RRU @0.01mT (ROR).	#4 @05:32 hrs.
				Vessel failed to record in log sheets: 1 SFA @0.01mT (RHG); RRU @0.1mT (ROR); 4 BAO @0.01mT (RCC); SKJ @1mT and YFT @0.1mT, (DGD).	#5 @05:44 hrs.
				Vessel failed to record in log sheets: 3 GBA @0.01mT (RCC); YFT @0.02mT (RCC).	#6 @05:36 hrs.
				Vessel failed to record in log sheets: YFT @0.1mT (RCC).	#8 @16:14 hrs.
				Vessel failed to record in log sheets: 1 silky shark (FAL) @0.04mT (DPD); 1 silky shark (FAL) @0.06mT (DPA); 10 DOL @0.02mT (ROR); SKJ @0.06mT and YFT @0.04mT, (DGD).	#12 @05:59 hrs.
Vessel failed to record in log sheets: 13 LOB (triptail) @0.02mT (RCC); CNT @0.05mT (ROR); 7 GBA @0.02mT (RCC). RRU @0.2mT in Observer report, recorded @0.01mT in vessel log sheets, (ROR). SKJ @3mT underreported and YFT @0.05mT failed to be recorded in vessel log sheets, (DGD). Observer recorded 7 silky sharks (FAL) @0.25mT (DPD) whereas the vessel reported 5 silky sharks (FAL) @0.2mT.	#13 @05:22 hrs.				

FV Solomon Opal	Solomon Islands	TMI SIMSC 19123	Vessel failed to record in log sheets: MSD @0.1mT; RRU @0.7mT; CNT @0.03mT, (DUS); SKJ @0.08mT and YFT @0.1mT, (DOR). As per Observer these violations were the deliberate negligence of the crew under captain.	#1 @05:20 hrs.	
			Vessel failed to record in log sheets: MSD @0.1mT, RRU @0.1mT, CNT @0.05mT, KYC@0.03mT and DOL @0.02mT, (DUS); MSD @0.2mT (RCC); YFT @0.08mT (DOR). As per Observer these violations were the deliberate negligence of crew under captain	#2 @05:13 hrs.	
			Vessel failed to record in log sheets: MSD @0.05mT (DUS); SKJ @0.3mT and YFT @0.07mT, (DOR). As per Observer these violations were the deliberate negligence of crew under captain.	#3 @05:14 hrs.	
			Vessel recorded in log sheets: 5 silky sharks (FAL) @0.1mT landed whereas Observer recorded 12 silky sharks (FAL) @0.35mT. Vessel failed to record in log sheets: 3 manta rays (RMB) @0.3mT (DPD).	#5 @18:38 hrs.	
			Vessel failed to record in log sheets: SKJ @0.1mT and YFT @0.2mT, (DGD).	#16 @14:26 hrs.	
			Vessel failed to record in log sheets: SKJ @0.8mT and YFT @0.2mT, (DGD).	#18 @17:08 hrs.	
			SIMSC 1948	Vessel failed to record in log sheets: RRU @0.1mT, GBA @, 0.05mT, dolphinfish @0.1mT, (RWW); SKJ @0.5mT and YFT @0.3mT (DOR).	#4 @05:32 hrs.
			Vessel failed to record in log sheets: SKJ @0.1mT and YFT @0.2mT, (DGD).	#5 @05:49 hrs.	
			Vessel failed to record in log sheets: DOL @0.05mT (RWW); SKJ @0.1mT and YFT @0.1mT (DGD).	#8 @ 05:52 hrs.	
			Vessel failed to record in log sheets: CNT @0.1mT, RRU @0.2mT and DOL @0.2mT, (RWW).	#13 @05:40 hrs.	
Vessel failed to record in log sheets: RRU @0.2mT (RWW).	#14 @05:44 hrs.				
Vessel failed to record in log sheets: SKJ @0.05mT and YFT @0.05mT, (DGD).	#15 @05:53 hrs.				

Table 9. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2020.

Year: 2020			No. Of reported violations: 39		
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Opal	Solomon Islands	MSC-F-30002; MSC-C-53088 (2019)	SIMSC 19132	Vessel failed to record in the log sheets: 1 silky shark (FAL) @0.05mT (DFR); 3 silky sharks (FAL) @0.02mT (DPD); MSD @0.1mT. Difference in reporting between Observer and vessel log sheets: RRU @0.5mT by Observer and RRU @0.15mT by vessel.	#3 @09:10 hrs.
				Observer recorded 3 silky sharks (FAL) @0.06mT and the vessel logged 4 silky sharks (FAL) @0.9mT. Bycatch not reported by vessel: 2 silky sharks (FAL) @0.03mT (DFR); 2 silky sharks (FAL) @0.018mT (DPD); RRU @0.3mT (RWW); MSD @ 0.1mT (RWW) and CNT @0.03mT, (RCC).	#5 @05:34 hrs.
				Observer recorded 2 silky sharks (FAL) @0.04mT (DPD) and the vessel reported as 3 silky sharks (FAL) @0.1mT (DPD). Vessel did not record in log sheets: 1 silky shark (FAL) @0.02mT (DFR).	#6 @12:08 hrs.
				Observer recorded silky sharks (FAL) @0.04mT (DFR) and vessel log reported silky sharks (FAL) @0.1mT. Vessel failed to log RRU and MSD @0.1mT.	#8 @07:04 hrs.
				Observer recorded 4 silky sharks (FAL) @0.09mT (DPA) and vessel log reported 5 silky sharks (FAL) @0.15mT. Vessel does not record in log sheets: 8 silky sharks (FAL) @0.16mT (DFR).	#11 @09:24 hrs.
				TMI SIMSC 12013	Vessel failed to record in the log sheets: MSD @0.01mT (RCC); SKJ @0.5mT and YFT @0.2mT, (DTS).
			Vessel failed to record in the log sheets: MSD @0.02mT (RCC); MSD @0.05mT (DUS); MSD @0.01mT (ROR); GBA @0.01mT (RCC); SKJ @1mT and YFT @0.05mT, (DTS).	#2 @05:45 hrs.	
			Vessel failed to record in the log sheets: 2 GBA @0.01mT (RCC); SKJ @0.05mT and YFT @0.05mT, (DTS).	#3 @05:42 hrs.	
			Vessel failed to record in the log sheets: SKJ @0.5mT (DGD).	#4 @05:34 hrs.	
			Vessel failed to record in the log sheets: 4 silky sharks (FAL) @0.02mT (DPD); MSD @0.005mT (DUS); 2 WAH @0.005mT (RCC); RRU @0.02mT (ROR); SKJ @0.5mT and YFT @0.5mT, (DTS); YFT @0.02mT (RCC).	#5 @06:08 hrs.	

				Vessel failed to record in the log sheets: RRU @0.01mT (ROR); WAH @0.005mT and CNT @0.002mT, (RCC); SKJ @1mT and YFT 1mT, (DTS); SKJ @0.01mT and YFT @0.005mT, (DGD); YFT @0.02mT, (RCC).	#6 @05:44 hrs.
				Vessel failed to record in the log sheets: RRU @0.05mT, MSD @0.05mT and CNT @0.05mT, (ROR); 5 WAH @0.01mT and 5 GBA @0.01mT, (RCC); SKJ @1mT and YFT @0.5mT, (DTS); SKJ @0.05mT and YFT @0.1mT, (RCC).	#7 @05:43 hrs.
				Vessel failed to record in the log sheets: RRU @0.02mT, CNT @0.02mT and 2 WAH @0.015mT, (RCC); RRU @0.02mT (ROR).	#8 @05:41 hrs.
				Vessel failed to record in the log sheets: RRU @0.025mT, GBA @0.02mT and 5 KYC @0.002mT, (RCC); CNT @0.005mT (DUS); SKJ @0.02mT and YFT @0.02mT, (DTS).	#9 @05:38 hrs.
				Vessel failed to record in the log sheets: RRU @0.05mT (RCC); SKJ @1mT and YFT @0.05mT, (DTS).	#10 @05:33 hrs.
				Vessel failed to record in the log sheets: RRU @0.05mT (RCC); SKJ @2mT and YFT @0.05mT, (DTS).	#11 @05:41 hrs.
			TMI SIMSC 12018	Vessel failed to record in the log sheets: KAW @1mT (ROR); YFT @0.05mT (RCC).	#1 @08:35 hrs.
				Vessel failed to record in the log sheets: 1 silky shark (FAL) @0.05mT (DPD); SKJ @0.05mT and YFT @0.5mT, (DGD).	#3 @18:01 hrs.
				Vessel failed to record in the log sheets: SKJ @0.05mT and YFT @0.02mT, (DTS).	#6 @08:06 hrs.
				Vessel failed to record in the log sheets: 2 silky sharks (FAL) @0.01mT (DPD); MSD @0.05mT and RRU @0.05mT, (ROR); SKJ @1mT and YFT@1mT, (DTS).	#10 @05:41 hrs.
FV Solomon Jade	Solomon Islands		SIMSC 2075	Vessel failed to record in log sheets: SKJ @0.03mT and YFT @0.02mT, (DGD).	#1 @05:10 hrs.
				Vessel failed to record in log sheets: SKJ @0.09mT and YFT @0.1mT, (DGD); YFT @0.03mT (RCC).	#3 @05:11 hrs.
				Vessel failed to record in log sheets: SKJ @0.02mT and YFT @0.03mT, (DGD); KAW @0.05mT (RCC).	#4 @05:08 hrs.
				Vessel failed to record in log sheets: SKJ @0.5mT (DGD).	#5 @16:46 hrs.
				Vessel failed to record in log sheets: SKJ @0.2mT and YFT @0.1mT, (DGD); YFT @0.1mT (RCC). Vessel recorded in the log sheets that 3 silky sharks (FAL) @0.04mT landed during the set whereas the Observer recorded 5 silky sharks (FAL) @0.1mT landed (DPD).	#6 @05:09 hrs.

				Vessel failed to record in log sheets: 2 GB @0.01mT; 1 WAH @0.02mT and YFT @0.04mT, (RCC); SKJ @0.02mT and YFT @0.06mT, (DGD).	#7 @05:20 hrs.
				Vessel failed to record in log sheets: RRU @0.05mT; GBA @0.02mT and YFT @0.03mT, (RCC); CNT @0.02mT (DUS); SKJ @0.1mT and YFT @0.1mT, (DGD). Vessel recorded 10 silky sharks (FAL) @0.150mT landed whereas the Observer recorded 10 silky sharks (FAL) @0.04mT (DPD).	#8 @05:10 hrs.
				Vessel failed to record in log sheets: RRU @0.01mT and YFT @0.04mT, (RCC); CNT @0.03mT (DUS); SKJ @0.03mT and YFT @0.150mT, (DGD). Vessel recorded 12 silky sharks (FAL) @0.075mT landed that set whereas the Observer recorded 15 silky sharks (FAL) @0.1mT (DPD).	#10 @05:20 hrs.
				Vessel failed to record in log sheets: SKJ @0.08mT and YFT @0.1mT, (DGD). Vessel recorded 13 silky sharks (FAL) @0.205mT landed that set whereas Observer recorded 15 silky sharks (FAL) @0.150mT landed, all were discarded dead (DPD).	#11 @05:11 hrs.
				Vessel failed to record in log sheets: RRU @0.02mT (RCC); CNT @0.01mT (DUS); SKJ @0.2mT and YFT @0.4mT, (DGD).	#12 @08:05 hrs.
				Vessel failed to record in log sheets: SKJ @0.007mT and YFT @0.02mT, (DGD). Vessel recorded 4 silky sharks (FAL) @0.06mT landed in that set whereas Observer recorded 2 silky sharks (FAL) @0.03mT, both were discarded dead (DPD).	#13 @05:11 hrs.
				Vessel failed to record in log sheets: RRU @0.04mT (RCC); SKJ @0.01mT and YFT @0.02mT, (DGD). Vessel recorded 4 silky sharks (FAL) @0.06mT landed whereas the Observer recorded 2 silky sharks (FAL) @0.05mT landed and discarded dead (DPD)..	#14 @05:12 hrs.
FV Solomon Pearl	Solomon Islands	MSC-F-30002; MSC-C-53088 (2019)	SIMSC-19129	Vessel failed to record in log sheets: 11 silky sharks (FAL) @0.1mT (DPD); MSD @0.5mT, RRU @0.2mT and DOL @0.01mT, (ROR); MSD @0.01mT and YFT @0.05mT, (RCC); SKJ @0.02mT and YFT @0.210mT, (DGD).	#1 @05:27 hrs.
				Vessel recorded in log sheets: 5 silky sharks (FAL) @0.05mT landed and were discarded dead (DPD) whereas Observer recorded a total of 29 silky sharks (FAL) landed, 14 silky sharks (FAL) @0.310mT (DPD) and 15 silky sharks (FAL) @0.34mT (DPU). Vessel failed to record in log sheets: 5 RRU @0.012mT (RCC).	#2 @17:33 hrs.
				Vessel failed to record in log sheets: SKJ @0.03mT and YFT @0.07mT, (DGD); YFT @0.02mT (RCC).	#3 @16:48 hrs.

				Vessel failed to record in log sheets: 3 silky sharks (FAL) @0.04mT (DPD); 12 MSD @0.005mT, 2 GBA @0.06mT, 2 WAH @0.003mT, 8 RRU @0.02mT and YFT @0.06mT, (RCC); RRU @0.15mT and MSD @0.05mT, (ROR); SKJ @0.05mT (DGD).	#4 @05:23 hrs.
				Vessel failed to record in log sheets: 5 silky sharks (FAL) @0.06mT (DPD); 8 GBA @0.018mT, RRU @0.1mT and 4 DOL @0.1mT, (ROR); MSD @0.02mT and YFT @0.06mT, (RCC).	# 5 @05:37 hrs.
				Vessel recorded in the log sheets: 3 silky sharks (FAL) @0.015mT (DPD) whereas Observer recorded 7 silky sharks (FAL) @0.02mT (DPD). Vessel failed to record in the log sheets: 1 GBA @0.003mT, MSD @0.1mT and YFT @0.08mT, (RCC).	#6 @05:41 hrs.
				Vessel failed to record in log sheets: 3 silky sharks (FAL) @0.04mT (DPD); MSD @0.01mT, 12 CNT @0.005mT, 3 DOL @0.006mT and 1 GLT @0.002mT, (RCC); RRU @0.15mT and 3 GBA @0.008mT, (ROR).	#7 @05:27 hrs.

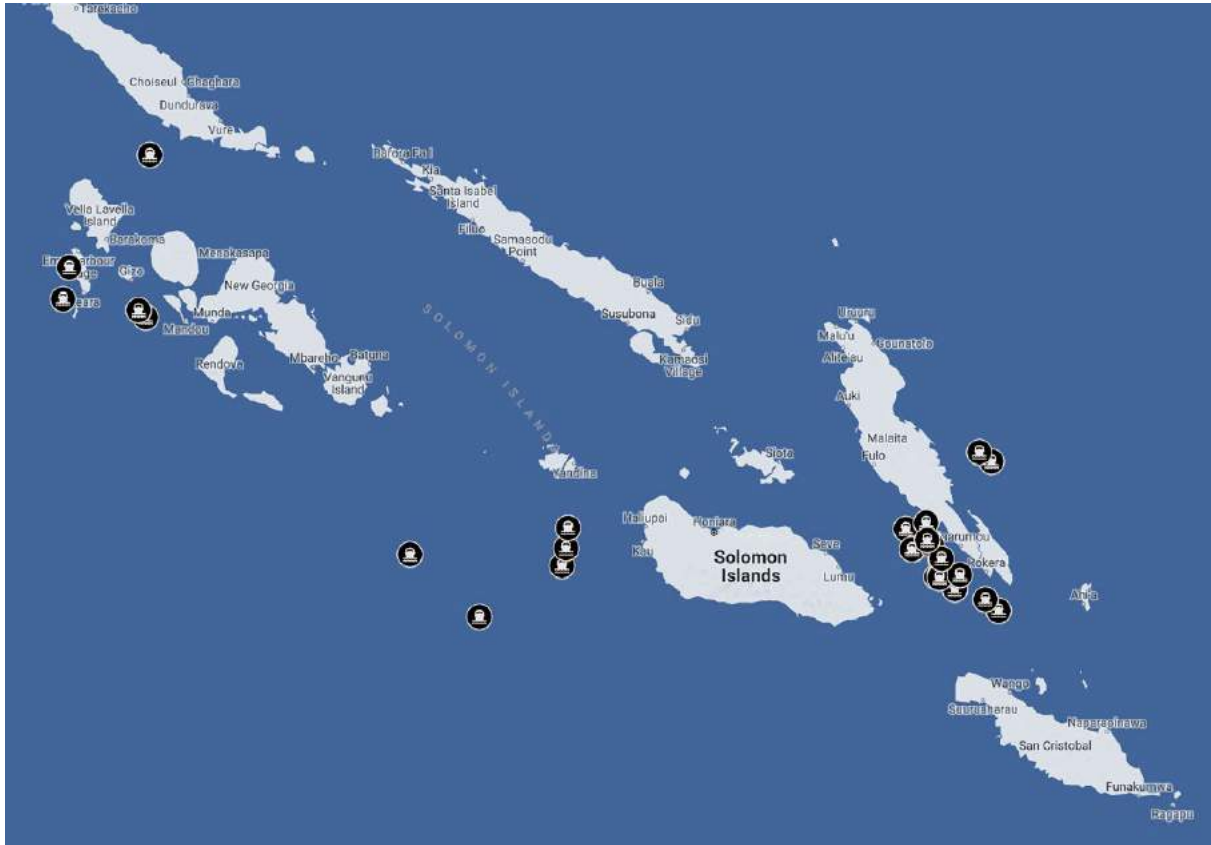
Table 10. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2021.

Year: 2021				No. Of reported violations: 5	
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Jade	Solomon Islands	MSC-F-30002	SIMSC 2104	Vessel failed to record in log sheets: SKJ @0.1mT and YFT @0.02mT, (DGD); YFT @0.03mT (RCC).	#2 @05:30 hrs.
				Vessel failed to record in log sheets: SKJ @0.2mT (DGD); YFT @0.05mT, (RCC).	#6 @05:37 hrs.
				Vessel failed to record in log sheets: SKJ @0.1mT (DGD); YFT @0.05mT (RCC).	#7 @05:43 hrs.
				Vessel failed to record in log sheets: SKJ @0.1mT and YFT @0.05mT, (RCC).	#8 @05:38 hrs.
				Vessel failed to record in log sheets: SKJ @0.4mT and YFT @0.05mT, (DGD); YFT @0.2mT (RCC).	#9 @05:40 hrs.

ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING – FISH-TAKING

The research brought to light cases of fish-taking by locals entering the MSC-certified fishing vessels and removing fish from the vessels without permission. Since vessels do not report these incidents and relevant authorities seem to look the other way, we classified these informal theft incidents as IUU fishing.

Figure 4. Illegal, Unreported and Unregulated (IUU) Fishing – Fish-Taking on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – Solomon Islands Observer Data.



Note: GPS coordinates were only available for some of the observed violations among the data sets.

Fish-taking by locals isn't seen as an issue by Solomon Island authorities, and Observers and compliance officials don't flag such incidents as critical.¹⁰ There is no area allocated in the GEN-3 form for the Observer to flag such incidents, and there is no fisheries regulation that prohibits locals from acquiring fish informally from locally based fishing vessels.

10. Personal communications.

Table 11. Illegal, Unreported and Unregulated (IUU) Fishing – Fish-Taking on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2018.

Year: 2018					
No of reported violations: 3					
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Emerald ^[22]	Solomon Islands	MSC-F-30002	No Record	Observer wrote at the end of his trip report about locals boarding the vessel without permission and fighting over the fish. He cautioned that security should be provided on board or else a bigger problem will arise in the future.	No record.
				No record of catch taken by locals. Observer only mentioned locals 'pirating' fish in his fish sampling form.	#6, #8

Table 12. Illegal, Unreported and Unregulated (IUU) Fishing – Fish-Taking on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2019.¹¹

Year: 2019					
No of reported violations: 4					
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Opal	Solomon Islands	MSC-F-30002; ^[12] C-SCS-0888 (26 July 2019) ¹⁰	SIMSC 1948	Observer recorded 9 local boats from Malaita were around the vessel during the set, waiting for brailing so as to get fish. Local visitors took SKJ @0.5mT and YFT @0.3mT from the vessel.	#4 @05:32 hrs.
			SIMSC 19123	Observer recorded MSD @0.1mT, RRU @0.7mT, CNT @0.03mT, SKJ @0.08mT and YFT @0.1mT taken by local visitors on vessel.	#1 @05:20 hrs.
				Observer recorded bycatch discard (MSD, RRU, CNT, KYC, DOL) @0.32mT and YFT @0.08mT were taken by local visitors/villagers. No record of the incident by the vessel in log sheets	#2 @05:13 hrs.
				Observer recorded MSD @0.05mT; local visitors took SKJ @0.3mT and YFT @0.07mT. No record of the incident by the vessel in log sheets.	#3 @05:14 hrs.

11. Retrieved from: SCS Global Services, "PNA Western and Central Pacific Skipjack and Yellowfin, Unassociated / Non FAD Set, Tuna Purse Seine Fishery," pnatuna.com, 2019. https://www.pnatuna.com/sites/default/files/PNA_Addendum_26July2019.pdf. File no longer available on the website, as of 27 December 2021, however it remains on file with CNS.

Table 13. Illegal, Unreported and Unregulated (IUU) Fishing – Fish-Taking on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2020.

Year: 2020					
No. Of reported violations: 24					
Vessel name	Flag	MSC certification code or certificate number present and at time of incident	MSC trip no	Description	Set no.
FV Solomon Emerald	Solomon Islands	MSC-F-30002; MSC-C-53088 (2019)	No Record	Observer recorded that local fishermen took, SKJ @0.625mT and YFT @0.15mT. No record of the incident by the vessel in log sheets	#1 @05:23 hrs.
FV Solomon Opal	Solomon Islands		SIMSC 19132	Observer recorded that local fisherman took, SKJ @0.8mT and YFT @0.2mT. No record of the incident by the vessel in log sheets	#1 @05:18 hrs.
				Observer recorded that local fishermen from the Langa Langa region of Malaita near to Auki village and other neighbouring coastal villages took, SKJ @2mT and YFT @1.5mT from the vessel. 22 people on board, collecting fish for their respective O.B.M powered fibreglass boats (14). As per Observer, their presence was very disturbing for the host vessel's operations. No record of the incident by the vessel in log sheets	#8 @07:10 hrs.
				Observer recorded that local fisherman took, RRU @1mT, MSD @0.5mT, GBA @0.02mT and mix tuna species @1mT. The vessel did not retain any catch from the set. No record of the incident by the vessel in log sheets.	#9 @05:09 hrs.
			SIMSC-2005	Observer recorded that local fisherman took bycatch discard @0.35mT and tuna @0.5mT. No record of the incident by the vessel in log sheets.	#4 @05:17 hrs.
				Observer recorded that local fisherman took SKJ @1mT and YFT @0.4mT. No record of the incident by the vessel in log sheets.	#6 @05:32 hrs.
				Observer recorded that local fisherman took BLT @0.3mT, FRI @0.2mT, RRU @0.1mT, SKJ @0.2mT and YFT @0.1mT. No record of the incident by the vessel in log sheets.	#7 @05:22 hrs.
				Observer recorded that local fisherman took RRU @0.3mT, SKJ @2mT and YFT @1mT. No record of the incident by the vessel.	#8 @05:38 hrs.

				Observer recorded that local fisherman took FRI @1mT, RRU @1mT, SKJ @1.74mT and YFT @0.746mT. Observer and vessel both recorded the set as unsuccessful.	#9 @05:33 hrs.
			SIMSC-2034	Observer mentions in his trip report and sampling forms, having a hard time observing and measuring fish during brailing as the local fishermen were all over the brailing deck and competing to collect fish. None of the catches, weights or amounts taken by the locals were accounted for by the Observer or the vessel.	#7 @05:37 hrs.
					#8 @05:34 hrs.
					#10 @05:31 hrs.
					#11 @05:37 hrs.
					#13 @05:22 hrs.
FV Solomon Ruby	Solomon Islands		SIMSC-2043	Observer made a general comment in the trip report of locals' disrupting/ interfering in his work when he was sampling fish during brailing processes at the end of his trip report.	N/A
FV Solomon Pearl	Solomon Islands		SIMSC-2080	Observer recorded that local fisherman took bycatch @0.03mT and target tuna @2.5mT. No record of the incident by the vessel in log sheets.	#4 @05:09 hrs.
				Observer recorded that local fisherman took KAW @0.020mT, RRU @0.020mT, SKJ @0.060mT, YFT @0.340m. No record of the incident by the vessel in log sheets.	#5 @05:10 hrs.
				Observer recorded that local fisherman took SKJ @5mT and YFT @1mT. No record of the incident by the vessel in log sheets.	#11 @04:52 hrs.
				Observer mentions in his trip report and sampling forms, about having a hard time observing and measuring fish during brailing as the local fishermen were all over the brailing deck and competing to collect fish. None of the catches, weights or amounts taken by the locals were accounted for by the Observer or the vessel.	#9 @05:48 hrs.
			#10 @05:45 hrs.		
			#11 @05:47 hrs.		
			#15 @05:41 hrs.		
			#16 @05:40 hrs.		

Table 14. Illegal, Unreported and Unregulated (IUU) Fishing – Fish-Taking on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – SBOB Data, 2021.

Year: 2021					
No of reported violations: 2					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
FV Solomon Jade	Solomon Islands	MSC-F-30002	No Record	Observer mentioned that locals from Malaita came on board during brailing to steal fish. This caused disturbance to the Observer in sampling the set.	#4 @09:00 hrs.
FV Solomon Ruby	Solomon Islands		No Record	The Observer reported to having no space on deck to record and gather sampling data due to disturbance from locals coming on deck during brailing to collect fish.	#3 @08:38 hrs.

1.2 VIOLATIONS ON MSC VESSELS DURING MSC TRIPS AND SETS CLASSIFIED AS MSC-ELIGIBLE – PNA OBSERVER AGENCY DATA

The following is an overview of violations found on MSC vessels during MSC trips and sets classified as MSC-eligible, in the data review of the FSMA/POA Observer programme.



SPECIES OF SPECIAL INTEREST INTERACTIONS AND LANDINGS

Figure 5. Species of Special Interest Interactions and Landings on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – PNA Observer Agency Data.



Note: GPS coordinates were only available for some of the observed violations among the data sets.

Table 15. SSI Interaction on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2019.

Year: 2019					
No. Of reported violations: 3					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Simbun 88 ^[23]	Nauru	MSC-C-53088 (27 January 2021); C-SCS-0888 (26 July 2019).	M13750	Observer recorded 1 silky shark (FAL) @0.02mT landed dead during brailing and was discarded (DPD).	#18 @15:42 hrs.
				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.	
				Observer recorded 1 silky shark (FAL) @0.02mT landed dead in a brail and was discarded (DPD).	
				Observer recorded 1 silky shark (FAL) @0.04mT landed dead in a brail and was discarded (DPD).	#29 @07:59 hrs.

				Observer recorded 1 silky shark (FAL) @0.03mT landed alive in a brail and was discarded while still alive (DPA). Another 7 silky sharks (FAL) @0.2mT landed dead in brails and discarded (DPD).	# 35 @07:16 hrs.
				Observer recorded 2 silky sharks (FAL) @0.06mT landed alive and were discarded still alive (DPA). 41 silky sharks (FAL) @1mT landed dead in brails, they were discarded (DPD).	# 37 @12:57 hrs.
				16 SHW interacted with secondary gear, feeding outside the net on discard. SHW were not harmed in any way.	

Table 16. SSI Interaction on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2020.

Year: 2020					
No. Of reported violations:15					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
FV Pacific Journey No.8 <small>[24]</small>	Taiwan	MSC-C-53088 (27 January 2021); C-SCS-0888 (26 July 2019).	M14733	Observer recorded 3 silky sharks (FAL) @0.026mT discarded (DPU) and 5 silky sharks (FAL) landed on deck during hauling, discarded dead (DPD).	#4 @07:09 hrs.
				Observer recorded 1 silky shark (FAL) @0.04mT (DPU).	#5 @09:21 hrs.
				Observer recorded 3 silky sharks (FAL) @0.036mT (DPA).	#8 @07:14 hrs.
				Observer recorded 2 silky sharks (FAL) @0.035mT (DPU).	# 9 @11:36 hrs.
				Observer recorded 1 silky shark (FAL) @0.02mT (DPU).	#14 @12:55 hrs.
				Observer recorded 1 oceanic whitetip shark (OCS) @0.02mT (DPU).	#15 @17:17 hrs.
				Observer recorded 8 silky sharks (FAL) @0.086mT (DPU).	#16 @06:39 hrs.

FV Moakona [25]	Kiribati	MSC-C-53088 (27 January 2021); MSC-C-53088 (11 July 2019) [26]	M14971	Observer recorded 2 silky sharks (FAL) @0.1mT that landed alive and healthy (A1) during set; both were discarded dead (DPD).	#7 @08:29 hrs.	
				Observer recorded 5 silky sharks (FAL) @0.2mT that landed alive and healthy (A1) during set, all discarded dead (DPD). 1 devil ray (RMV) @0.4mT that landed during the set, was discarded as an undesired species (DUS).	#8 @15:04 hrs.	
				Observer recorded 1 silky shark (FAL) @0.03mT that landed alive and well (A1) during the set, it was later discarded dead (DPD).	#9 @08:35 hrs.	
				Observer recorded 6 silky sharks (FAL) @0.42mT that all landed alive and well (A1) during the set, all discarded dead (DPD).	#14 @05:16 hrs.	
FV Moamaeu [27]	Kiribati		M14956	Observer recorded 10 silky sharks (FAL) @0.445mT that all landed alive and injured (A2) during the set, all discarded dead (DPD).	#7 @05:50 hrs.	
				M14579	An oceanic whitetip shark (OCS) was caught inside the net. Observer first sighted the SSI just before brailing process began. The shark was already dead when first sighted. The SSI was brought on deck during the third brail count. It was discarded dead overboard shortly afterwards (DPD).	#6 @10:30 hrs.
					Observer recorded 2 silky sharks (FAL) landed on deck. They were first sighted during brailing process, and both were discarded dead overboard (DPD).	#17 @07:30 hrs.
				Observer recorded 1 silky shark (FAL) landed on deck. It was first sighted during brailing process and was then discarded dead overboard (DPD).	#23 @10:40hrs	

DISCREPANCY IN BYCATCH AND TARGET SPECIES DISCARD REPORTING

Figure 6. Discrepancy in Bycatch and Target Species Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – PNA Observer Agency Data.



Note: GPS coordinates were only available for some of the observed violations among the data sets.

Table 17. Discrepancies in Bycatch and Target Species Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2018.

Year: 2018					
No. Of reported violations: 2					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Kaile 888 ^[26]	Nauru	MSC-C-53088 (27 January 2021)	No Record	Vessel failed to record in log sheets: SKJ @0.012mT (DGD).	#1 @07:59 hrs.
				Vessel failed to record in log sheets: YFT @0.03mT (RCC).	#4 @14:27 hrs.

Table 18. Discrepancies in Bycatch and Target Species Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2019.

Year: 2019					
No of reported violations: 9					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Simbun 88	Nauru	MSC-C-53088 (27 January 2021) ^[10] ; C-SCS-0888 (26 July 2019).	M13750	Vessel failed to record in log sheets: YFT @0.02mT (RCC).	#3 @10:15 hrs
				Vessel failed to record in log sheets: SKJ @0.03mT and YFT @0.02mT (DGD).	#13 @13:18 hrs.
				Vessel failed to record in log sheets: SKJ @0.03mT and YFT @0.08mT (DGD).	#16 @08:34 hrs.
				Vessel failed to record in log sheets: SKJ @0.04mT and YFT @0.02mT (DGD). YFT @0.02mT (RCC).	#18 @15:42 hrs.
				Vessel failed to record in log sheets: SKJ @0.03mT (DGD).	#22 @13:06 hrs.
				Vessel failed to record in log sheets: SKJ @0.04mT (DGD).	#24 @09:20 hrs.
				Vessel failed to record in log sheets: SKJ @0.04mT (DGD); SKJ @0.03mT (RCC).	#29 @07:59 hrs
				Vessel failed to record in log sheets: SKJ @0.02mT (DGD); SKJ @0.02mT (RCC).	#35 @07:16 hrs.
				Vessel failed to record in log sheets: SKJ @0.01mT and YFT @0.04mT (DGD).	#37 @12:57 hrs.

Table 19. Discrepancies in Bycatch and Target Species Discard Reporting on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2020.

Year: 2020					
No of reported violations: 20					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
FV Pacific Journey No.8	Taiwan	MSC-C-53088 (27 January 2021) ^[10] ; C-SCS-0888 (26 July 2019).	M14733	Vessel failed to record in log sheets: SKJ @0.5mT (DGD).	#3 @07:33 hrs.
				Vessel failed to record in log sheets: 3 silky sharks (FAL) @0.026mT (DPU); 5 silky sharks (FAL) (DPD).	#4 @07:09 hrs.
				Vessel failed to record in log sheets: 1 silky shark (FAL) @0.04mT (DPU).	#5 @09:21 hrs.
				Vessel failed to record in log sheets: SKJ @0.5mT (DGD).	#6 @08:34 hrs.
				Vessel failed to record in log sheets: 3 silky sharks (FAL) @0.036mT (DPA).	#8 @07:14 hrs.
				Vessel failed to record in the log sheets: 2 silky sharks (FAL) @0.035mT (DPU); 1 BUM @0.045mT (RWW).	#9 @11:36 hrs.
				Vessel failed to record in log sheets: SKJ @0.08mT (DGD).	#10 @13:58 hrs.
				Vessel failed to record in log sheets: SKJ @0.02mT (DGD).	#12 @16:19 hrs.
				Vessel failed to record in log sheets: 1 BUM @0.05mT (RWW).	#13 @10:30 hrs.
				Vessel failed to record in log sheets: 1 silky shark (FAL) @0.02mT (DPU).	#14 @12:55 hrs.
Vessel failed to record in log sheets: 1 oceanic whitetip shark (OCS) @0.02mT (DPU).	#15 @17:17 hrs.				

				Vessel failed to record in log sheets: 8 silky sharks (FAL) @0.086mT (DPU); SKJ @1mT (DGD).	#16 @06:39 hrs.
FV Moakona	Kiribati	MSC-C-53088 (27 January 2021); MSC-C-53088 (11 July 2019)	M14971	Vessel failed to record in log sheets: 1 BUM (blue marlin) @0.07mT (DUS).	#2 @15:13 hrs.
				Vessel failed to record in log sheets: 2 silky sharks (FAL) @0.1mT (DPD).	#7 @08:29 hrs.
				Vessel failed to record in log sheets: 5 silky sharks (FAL) @0.2mT (DPD). 1 devil ray (RMV) @0.4mT (DUS).	#8 @15:04 hrs.
				Vessel failed to record in log sheets: 1 silky shark (FAL) @0.03mT (DPD).	#9 @08:35 hrs.
				Vessel also failed to record in log sheets: RRU @0.03mT and MSD @0.01mT, (DUS); RRU @0.02mT and MSD @0.01mT, (RWW).	#14 @05:16 hrs.
FV Moamaeu	Kiribati		M14956	Vessel failed to record in log sheets: SKJ @0.3mT (DGD).	#7 @05:50 hrs.
			M14579	Observer reported that no SKJ species was witnessed to have landed however vessel recorded that SKJ @5mT was retained from the set.	#9 @12:05 hrs.
				Observer reported that large YFT species @1.591mT landed during the set however vessel reported in their log sheets that only SKJ species were caught.	#23 @10:40 hrs.

OTHER CMM VIOLATIONS – BRIBERY AND INTIMIDATION

The following tables include incidents that happened in sets during MSC trips, but where information regarding MSC eligibility was not available. These incidents describe bribery and intimidation of Observers, an infringement of 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.

Table 20. Bribery and Intimidation on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2019.

Year: 2019					
No. Of reported violations: 1					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Southern Seas No. 301 ^[29]	Solomon Islands	MSC-C-53088 (27 January 2021) ^[10] ; C-SCS-0888 (26 July 2019).	No Record	Observer reported in his journal that the Radio Operator requested the Observer to not report on an event and to share his (the Observer’s) recordings with the vessel.	N/A

Table 21. Bribery and Intimidation on MSC Vessels During MSC Trips and Sets Classified as MSC-Eligible – FSMA/POA Data, 2020.

Year: 2020					
No. Of reported violations: 1					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
FV Moamaeu	Kiribati	MSC-C-53088 (27 January 2021); MSC-C-53088 (11 July 2019)	M14579	Observer reported that the vessel captain bribed him \$100 (USD) to not report on the landing of whale shark (RHN) during set #12 and the discarding of 5mT of undersized tuna during set #13. The Observer mentioned in his journal that he accepted the \$100 bribe money. Nevertheless, he went on and reported the two cases and the incident of bribery in his workbook and journal.	#12 and #13

12. WCPFC, “Conservation and Management Measure on the Application of High Seas FAD Closures and Catch Retention | WCPFC,” wcpfc.int, 2009. <https://www.wcpfc.int/doc/cmm-2009-02/conservation-and-management-measure-application-high-seas-fad-closures-and-catch> (accessed Dec. 31, 2021).

1.3 VIOLATIONS ON MSC-CERTIFIED VESSELS – FJOB DATA

The review found 15 incidents infringing MSC rules and WCPFC CMMs between 2017–2020. These occurred on seven MSC-certified fishing vessels: Cape Finisterre, ^[30] Cape May, ^[31] Dae Jin, ^[32] Hangton 9, ^[33] Pacific Pride/Century Pride (the vessel changed its name to Century Pride in November 2019), ^[34] 13 Tiro II, and Winfull 1. ^[35] Although only a few cases from Fiji came to our attention through limited data, the incidents seem to indicate institutional negligence. From the information we have received it appears that none of these incidents were taken up by relevant institutions for compliance and prosecution. None of the incidents were (publicly) recognised by the MSC and may not have reached the MSC's attention. An outstanding case is the dumping of a helicopter at sea by the Century Pride.

MARINE POLLUTION – HELICOPTER DUMPING

In gross contravention of CMM 2017-04 on Marine Pollution, ^[36] the International Convention for the Prevention of Pollution from Ships (MARPOL), ^[37] and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter ('London Convention'), ^[38] a helicopter was dumped into the sea by the officers and crew of the Century Pride. ^[34] A video documenting the incident was taken in December 2020.



Marine pollution: helicopter dumping on MSC-certified FV Century Pride, December 2020. Screenshots from video taken on board. Anonymous.

13. In November 2019 <https://gisis.imo.org/Public/SHIPS/ShipDetails.aspx?IMONumber=9417397>

The video clip was received through an anonymous source. The source claimed it was recorded by a crew member on board the Taiwanese-owned purse seine vessel Century Pride in mid-December 2020 near Banaba Island, Kiribati. No Observer was present, due to the suspension of the Observer programme at the time. According to the United States Federal Aviation Administration, the helicopter, N539,¹⁴ is a Hughes 500C, model 369A, that belonged to Helifish, Vanuatu until it was deregistered and exported to the Philippines in June 2020. ^[39]

SPECIES OF SPECIAL INTEREST INTERACTIONS AND LANDINGS

The incidents involving interactions with, or landings of SSIs, that occurred on four MSC-certified fishing vessels were in violation of WCPFCs CMM 2019 04 ^[10], CMM 2018 04 ^[40], CMM 2013 08 ^[41], and CMM 2012 04 ^[42], and the MSC Fisheries Standard (PI 2.3.1 The UoA meets national and international requirements for protection of ETP species and GSA3.1.8 Unobserved mortality) ^[43].

Cape Finisterre (PS) landed and discarded 377 silky sharks, of which only 38 were discarded alive. Both the large number of sharks landed, and the large number of sharks subsequently discarded dead, imply negligence on behalf of the vessel (2017).

Cape May (PS) landed 63 silky sharks in total, of which 16 were discarded dead over the course of several days and sets. These repeated landings occurred day after day throughout the trip, possibly due to negligence by the crew. The vessel also landed five oceanic whitetip sharks, all of which were discarded dead (2017).

Table 22. SSI Interaction on MSC-Certified Vessels – FJOB Data, 2017.

Year: 2017					
No of reported violations: 2					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Cape May	USA	MSC-C-53088; PNA MSC Vessel List 6 July 2017	No Record	63 Silky sharks were landed and discarded but 16 were discarded dead, 5 oceanic whitetip sharks were landed and 4 out of 5 were discarded dead.	n/a
Cape Finisterre	USA	MSC-C-53088; PNA MSC Vessel List 6 July 2017	No Record	2 green turtles were interacted with but discarded alive; 377 silky sharks were landed and discarded, only 38 were alive.	n/a

14. Also featured in an article from 2012: M. Price, "Fishy business | Otago Daily Times Online News," Otago Daily Times, 2012. <https://www.odt.co.nz/lifestyle/magazine/fishy-business> (accessed Feb. 21, 2022). In the article a picture of the helicopter can be seen with the call sign clearly visible as N539 alongside characteristic colour markings.

Table 23. SSI Interaction on MSC-Certified Vessels – FJOB Data, 2020.

Year: 2020					
No of reported violations: 3					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Dae Jin	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery ^[44] ; FFIA MSC Group Vessel List 2020 ^[45]	No Record	1.) 3 silky sharks caught and cut free alive. 2.) 1 juvenile silky shark landed dead then dehooked and discarded.	n/a
Tiro II	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	1 oceanic whitetip shark was landed dead, hook removed and discarded.	n/a
Hangton 9	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	Contradictory evidence: 2–4 oceanic whitetip sharks were caught. Descriptions are unclear whether they were landed alive and cut free or caught partially dead. 1.) the Observer stated in GEN-3 form that all 4 OCS were discarded alive while in the referred trip journal, 2 were described discarded dead. 2.) The GEN-3 form referred to 4 journal pages while only 3 pages were actually provided	n/a

DISCREPANCY IN BYCATCH AND TARGET SPECIES DISCARD REPORTING

Table 24. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC-Certified Vessels – FJOB Data, 2017.

Year: 2017					
No of reported violations: 2					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Cape May	USA	MSC-C-53088; PNA MSC Vessel List 6 July 2017	No Record	Target species retained for crew consumption were not recorded, discards due to small size and gear damage were not recorded. (Details for target species retained unavailable since the referred journal page was not available.)	n/a
Cape Finisterre	USA	MSC-C-53088; PNA MSC Vessel List 6 July 2017	No Record	Discarded fish were not recorded due to small size, gear damage, and fully loaded vessel. Combining of yellowfin tuna and bigeye tuna as yellowfin tuna	n/a

Table 25. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC-Certified Vessels – FJOB Data, 2018.

Year: 2018					
No of reported violations: 1					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Pacific Pride (vessel name changed to Century Pride)	USA (flag changed to Nauru, when the vessel renamed)	MSC-C-53088; PNA MSC Vessel List 6 July 2017	No Record	The vessel failed to report 1.) All target and bycatch species retained for crew consumption. 2.) All discards.	n/a

Table 26. Discrepancy in Bycatch and Target Catch Discard Reporting on MSC-Certified Vessels – FJOB Data, 2020.

Year: 2020					
No of reported violations: 4					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Winfull 1	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	Catches discarded were not recorded due to being "uneconomical species" as well as those retained for crew consumption.	n/a
Hangton 9	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	The vessel failed to report: 1.) Target species retained. 2.) Bycatch retained for crew consumption and for sale. 3.) All discarded fish.	n/a
Tiro II	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	The vessel failed to report: 1.) Target species discarded. 2.) Loss of fishing gear (4 buoy). 3.) All discarded fish.	n/a
Dae Jin	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery; FFIA MSC Group Vessel List 2020	No Record	The vessel failed to report: 1.) 1 juvenile yellowfin caught alive and discarded alive at sea (undersize). 2.) Discarded fish: 2 lancetfish, 3 pelagic rays, and 3 spearfish and 8 yellowfin tuna damaged by shark.	n/a

LABOUR AND OBSERVER RIGHTS ABUSE

The data review identified 1 alleged incident of labour rights abuse that occurred on Winfull 1 in 2020. This was in violation of the Maritime Labour Convention, 2006, Regulation 3.2 – Food and catering: “1. Each Member shall ensure that ships that fly its flag carry on board and serve food and drinking water of appropriate quality, nutritional value and quantity that adequately covers the requirements of the ship and takes into account the differing cultural and religious backgrounds.” [46, pp. 51–52]¹⁵

Table 27. Labour and Observer Rights Abuse on MSC-Certified Vessel – FJOB Data, 2020.

Year: 2020					
No of reported violations: 1					
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Msc trip no	Description	Set no.
Winfull 1 ^[6]	Fiji	Vessel List for the Fiji Albacore, Yellowfin and Bigeye tuna Longline Fishery ^[14] ; FFIA MSC Group Vessel List 2020 ^[15]	No Record	Observer reports that all drinking and bathing water for local crew and Observer was: 1) unclean as it was stored in the fish hold and 2) insufficient throughout the trip. In violation of Maritime Labour Convention, 2006 : Regulation 3.2 – Food and catering ^[16]	n/a

I.4 CASE STUDY SOLOMON OPAL – MSC BREAKS ITS OWN RULES AND CERTIFIES SHARK-FINNING VESSEL

Despite more than 200 serious violations reported by various Observers between 2018 and 2020 (see previous chapters and tables), which included CMM violations (deliberately setting nets on cetaceans and sharks, shark finning, discrepancies in bycatch and target catch reporting, and cases of IUU and MSC infringements), the FV Solomon Opal continued to operate under the umbrella of a continued MSC certification. The following chapter sheds light on our investigation’s findings.

SOLOMON OPAL MSC CERTIFICATIONS – PNA

Solomon Opal was on the MSC PNA list in May 2020,¹⁶ and was no longer on the list in June 2020.^[23] Despite being involved in shark finning in 2018, the Solomon Opal remained on the PNA MSC list until June 2020. The vessel was not prosecuted or convicted for shark finning, and it was removed from the PNA certificate before the new version of the MSC Process (v2.2 – MSC 2020) came into force (25 September 2020). It is questionable why the MSC allowed a vessel involved in shark finning to land MSC catch months or years after these incidents occurred.

SOLOMON OPAL EXCLUSION FROM THE PNA SCOPE EXTENSION

The July 2021 PNA scope extension assessment report, indicates that:

- “One incidence of fins being retained, and the trunk discarded was reported for 2018 (fate code ‘DFR’). The ‘Solomon Opal’, as the vessel involved, is no longer eligible to fish on the PNA certificate (client, pers. comm.). So, as can be seen, the ACDR¹⁷ states that the vessel concerned was the ‘Solomon Opal!’ [47, p. 211]

15. Fiji ratified the Maritime Labour Convention (2006) in October 2014, its current status is ‘in force’ according to the ILO [64].

16. Reference was removed from the PNA website but remains on file with CNS.

17. Editor’s note ACDR = Announcement Comment Draft Report.

- Furthermore, the same assessment report indicates that “With regard to the content of the above extract, please see further below (regarding PI 3.2.3). The rationale goes on to refer to MSC’s systematic shark-finning interpretation (which was retracted in September 2020) and to v2.2 of the FCP.¹⁸ The rationale states that: This interpretation is valid under the current version of the MSC Fisheries Process (v.2.1 – MSC 2014b). However, under the new version of the MSC Process (v2.2 – MSC 2020), from September 25th, 2020, fisheries in the MSC programme simply cannot include entities that have been prosecuted for a shark-finning violation in the last two years¹⁹ – such entities will be considered out-of-scope.” [47, p. 210]
- “The above statement contains an error where it uses the word ‘prosecuted’, in that v2.2 refers to convictions rather than prosecutions. In principle, an entity could be prosecuted without the prosecution leading to a conviction. The rationale then refers to MSC’s new finning interpretation and states that under that interpretation: the MSC has clarified that any vessel engaged in shark finning (irrespective of 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.” [47, pp. 210–211]

SOLOMON OPAL MSC CERTIFICATIONS – SOLOMON ISLANDS SKIPJACK AND YELLOWFIN TUNA FISHERY MSC CERTIFICATION

The Solomon Islands Skipjack and Yellowfin Tuna Fishery has been MSC-certified since 12 July 2016. The certification client group is Tri Marine International Pte. Ltd., on behalf of National Fisheries Developments, Ltd. (NFD). According to the public certification report, only NFD vessels will be eligible. Solomon Opal was listed on the initial Public Certification report and was one of the NFD vessels authorised to use the certificate. [48, p. 107]

The scope of the Solomon Island purse seiner MSC certification was extended in June 2021 to include FAD fisheries. Solomon Opal was recertified on 1 June 2021 under the Solomon Islands Skipjack and Yellowfin Tuna Fishery ^[49] (assessment started in June 2020), along with four other purse seiners: Solomon Pearl, Solomon Emerald, Solomon Ruby, Solomon Jade. The five purse seiners are owned by the Tri Marine group. ^[50]

SOLOMON OPAL RECERTIFICATION

In its MSC Fisheries Certification Process v2.2 25 March 2020 ^[51] (applicable from 25 September 2020), the MSC clarified that any vessel engaged in shark finning (irrespective of prosecution) is not eligible to access an MSC certificate for a period of two years from the point it is excluded from a certificate. [47, p. 211] The Solomon Opal was excluded from the PNA certificate in June 2020, yet it was recertified on 1 June 2021 under the Solomon Islands Skipjack and Yellowfin Tuna Fishery ^[14] (assessment started in June 2020). This recertification clearly goes against the MSC’s own rules, as described above.

A SharkProject analysis of the December 2020 scope extension for the PNA fishery quoted the relevant Conformity Assessment Body (CAB) with regards to Observer data for 2018 and 2019 provided for the scope extension reports on shark interactions and fate codes stating that “one incidence of fins being retained and the trunk discarded was reported for 2018 (fate code ‘DFR’²⁰). The ‘Solomon Opal’, as the vessel involved, is no longer eligible to fish on the PNA certificate.” [7, p. 24]

18. Editor’s note: FCP = Fisheries Certification Process.

19. Emphasis by editor.

20. Editor’s note: DFR = Discarded trunk – fins retained (shark only). See: WCPFC, “WCPFC ROP Minimum Standard Data Fields & Instructions,” wcpfc.int, accessed October 20, 2021, <https://www.wcpfc.int/system/files/Table-ROP-data-fields-instructions.pdf>.

RETRACTION OF SHARK-FINNING REPORTS ON BOARD FV SOLOMON OPAL

According to local sources and discussions in open social media forums, the Ministry of Fisheries and Marine Resources (MFMR) has a poor reputation in the Solomon Islands, with widespread allegations of corruption within the ministry. A clear example of this can be seen in the case of the two fisheries Observers who were asked to retract their reports of shark finning on board FV Solomon Opal in 2019 and early 2020. According to a source, who spoke with Shark Guardian researchers, two fisheries Observers were coerced on 15 September 2020 into denying observed and reported shark-finning activities on FV Solomon Opal.²¹ According to the source, this was the culmination of a longer process, started early 2020 when the Observers were first approached by the ministry to write a letter retracting the shark-finning cases. The Observers had reported incidents in 2019 and 2020, retractions were made more than 8 to 12 months after the incidents. The July 2021 PNA scope extension assessment report refers to an additional case of shark finning on the Solomon Opal in 2018 as the reason for its MSC certificate withdrawal. [47, p. 211] The PNA withdrew Solomon Opal's certificate in June 2020 (as described above), which took the vessel off the MSC PNA list.^[26] The timing suggests the MFMR may have been reacting to the PNA's withdrawal of the vessel's 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. Box 1 presents a selection of relevant quotes from the conversation.

21. Personal communication 8 October 2021.

Box 1. Conversation with a source within the Solomon Islands fisheries sector concerning the Solomon Opal retraction of shark-finning allegations.

Source: *The Observer coordinator told the Observers to write up the letter against their reports to reduce the weight their reports had... so yeah, they actually met up, fisheries officers and company representatives and they are the ones who came up with the idea for them to write up the letter to withdraw the case.*

[...]

Source: *They [the fisheries officers and company representative] said that if they proceeded with the Observer's reports then the company (NFD) will shut down, that was what they mentioned. They said that the reported cases are very serious. They wanted for the Observers to help the people working for the company so had to write the letter so that the company will continue to operate for the economy of the country."*

Interviewer: *What would you think might have happened to them if they hadn't retracted their observation report regarding shark finning on board?*

Source: *I think that had they refused to write up the letter then the ministry will take up the next step to do anything that may have affected their job so since they didn't want to lose their job, they went ahead with writing up the letter to withdraw the case.*

[...]

Interviewer: *What advantages did Solomon Opal get or how did Solomon Opal benefit from the withdrawal of their report?*

Source: *After they withdrew their reports about the shark-finning cases, the advantage Solomon Opal had is that they continued with MSC fishing until now... as if nothing had happened...*

Interviewer: *You think that because of the Observers withdrawing their reported cases of shark finning, it helped the Solomon Opal keeping its MSC status?*

Source: *Yes, I believe that because of the Observer's letters, that is why Solomon Opal is still continuing to engage in MSC fishing, even after the Observers reported the cases, until now...*

[...]

Source: *For bilateral trips, I think, if the Observers go back, they won't be reporting on anything (infringements) because most of the cases they have reported, it's the same thing, it comes to the ministry and then gets washed out. So, I don't think that they will perform up to standard or report on any critical case if they get another chance to monitor domestic vessels again.²¹*

OTHER INFRINGEMENTS OBSERVED ON MSC-CERTIFIED SOLOMON OPAL

Our review of Observer data for the last five years found other incidents of shark finning and additional infringements on board the Solomon Opal, in addition to the PNA's retraction of the Solomon Opal's MSC certificate referring to a case in 2018, and the cases reported by the two Observers mentioned above. This raises serious concern about the vessel's on-going MSC certification (see also chapters 1, 3 and 4).

1.5 CASE STUDY TIRO II, FIJI

On 18 May 2021, a New Zealand Air Force Airborne Surveillance and Response Force aircraft established radio contact with the crew of the tuna long liner Tiro II. According to media reports, most of the Tiro II's crew had abandoned ship. Only two crew remained on board, and they were incapable of navigating the vessel. Unverified accounts of what had happened, ranged from a beheading to a crew member falling into a knife during an argument, with the injured subsequently thrown overboard ^[52], ^[53]. The vessel was found off the Yasawa Islands, about 90 nautical miles west of Fiji, and soon sank in dubious circumstances on 21 May 2021. To our knowledge only three of the eight crew members were found in subsequent search and rescue missions. ^[54] An analysis of the vessel's AIS data by Shark Guardian revealed that the vessel stayed within the Fijian EEZ, but further investigation is needed to determine the details and sequence of events.



Tiro II © Steven Watkins

Complicating the case is the fact that the Tiro II was an MSC-certified vessel without WCPFC registry at the time of the incident, which then disappeared from the updated MSC list on 28 May 2020 ^[55]. In accordance with CMM 2018-06 "WCPFC Record of Fishing Vessels and Authorization to Fish" ^[56], the Tiro II should have been authorised and listed in the WCPFC's record of fishing vessels by Fijian authorities. Fiji is a WCPFC member country. ^[57] Tiro II's missing registration should raise concerns in a case already mired in suspicion and doubt.

2. SUMMARY – SOLOMON ISLANDS OBSERVER DATA REVIEW ON PURSE SEINE VESSELS

In addition to the above-described incidents, which occurred on MSC-certified vessels during MSC trips and sets classified as MSC-eligible, further incidents on MSC-certified vessels were found in the SBOB Observer data review for purse seine fishing vessels. Of note, only 3% of the data reviewed concerned vessels that weren't MSC certified. The following summaries and Table 22 give a general overview of findings in both MSC and non-MSC-certified trip reports.

2.1 SHARK FINNING

The Observer data revealed a total of 24 incidents of shark finning for the years 2019 and 2020. Shark finning took place on board the vessel FU Kuan 808, with one incident reported in June 2019; there were 23 incidents on Solomon Opal during three separate fishing trips from late 2019 and early 2020; and one on Solomon Pearl in 2020 carried out by local fisherman who were 'pirating' fish on board the vessel. 161 silky sharks (FAL) carcasses were specifically reported 'Discarded Fins Retained' (DFR) and a weight of 3mT and 20 kilos of shark carcasses DFR overall (the Observer did not report on the number of sharks that were DFR but used the overall weight of the sharks instead). Shark species that were DFR include silky sharks (FAL) and blacktip reef shark (BLR).²² Critically, all 24 incidents of shark finning took place on vessels which were and are currently certified by the MSC. 19 occurred during MSC trips and sets classified as MSC-eligible (Tables 2 and 3). This is a gross violation of the MSC's ban on shark finning.^{[58] [43]}

In an additional case, shark fins were allegedly found on board the MSC-certified tuna purse seiner Southern Seas 301. The vessel was sent from Noro to Honiara for investigation, where according to online discussions, it was released after only two days without being investigated. An eyewitness, present during the unloading of the tuna catches from the Southern Seas 301 at Noro port in December of 2020, alleged that shark fins amounting to around 25–30 kg were confiscated from the vessel. According to the witness, the shark fins were found inside the engine room and confiscated by Noro compliance officers. However, after the Southern Seas 301 finished unloading her catch on Monday 7 December 2020, it left for Honiara port and departed to fishing grounds shortly afterward. No further investigation was carried out by fisheries compliance officers on the Southern Seas 301 at either Noro or Honiara.

CMM 2019-04 stipulates that CCMs shall take measures necessary to prevent their fishing vessels from retaining any fins harvested on board (including for crew consumption), transshipping and landing. The cases from the Solomon Opal and Southern Seas are evidence of the contravention of this CMM.

2.2 DISCREPANCY IN BYCATCH AND TARGET CATCH DISCARD REPORTING

The 22 Observer data sets reviewed from 2018 to 2021 identified a total of 96 cases with discrepancies in bycatch and target catch recordings found on National Fisheries Development (NFD) operated purse seine vessels fishing within the Solomon Islands EEZ.

Observers reported cases of bycatch, including species such as rainbow runner species (RRU), mackerel scad (MSD), silky sharks (FAL), oceanic triggerfish (CNT), great barracuda (GBA), mahi mahi/dolphinfish (DOL) landings during fishing sets, and vessels not reporting or inaccurately reporting bycatch species in their log. Furthermore, target species discarded, and inaccurate recordings of target species were commonly misreported, or not reported at all, in the vessel's logbook.

As noted in CMM 2013-05, non-compliance with this measure shall be considered in accordance with CMM 2010-06, the CMM set up to establish a list of vessels presumed to have carried out illegal, unreported and unregulated fishing activities in the WCPO.

22. Editor's note: According to local sources, the fins were likely removed by the vessel crews for sale at the local market in port Noro, Solomon Islands (unverified).

2.3 SPECIES OF SPECIAL INTEREST INTERACTIONS AND LANDINGS

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 and CMM 2019-04), before being discarded overboard as unwanted or unmarketable species. SSIs were routinely neglected and left on deck until after the set before they were discarded overboard (Table 22).

2.4 ILLEGAL, UNREPORTED AND UNREGULATED FISHING PRACTICES

32 cases of local people in small boats trespassing onboard NFD purse seiners at sea and taking fish from the catch, were reported by Observers between 2018 and 2021. Video clips from the incidents show local people on board of several respective vessels, disrupting fishing operations and disregarding the safety of crew trying to carry out their duties, while simultaneously putting themselves in danger by taking fish directly out of, and from under, the brailing net in an uncoordinated manner.

Fish-taking by locals isn't seen as an issue of concern by Solomon Island authorities. Observers and compliance officials don't flag such incidents as critical. There is no area allocated in the GEN-3 form for the Observer to flag them and no fisheries regulation exists that prohibits locals from acquiring fish from locally based fishing vessels. Given the failure of some Observers and vessels to report on the disruption of fishing operations, and the substantial amounts of fish being removed by the locals, the cases were interpreted and then labelled as an IUU practice by the authors of this report.

Table 28. Review of Violations on Board Purse Seine Vessels from 2018 To 2021

Year	No. Of observer trip data reviewed ²³	Type of observation	Number of reported violations	Description	Vessel name(s)	
					Msc certified	Not msc certified
2018	3	DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	12	Vessels not reporting on bycatch and target catch discard – DUS, RCC, DGD, DVF and DTS.	Solomon Ruby	
		SSI INTERACTIONS AND LANDINGS	4	Silky sharks (FAL) landings.	Solomon Ruby	
		IUU	3	Locals trespassing on board and stealing fish from the catch and the vessel not reporting the incident.	Solomon Emerald	
2019	4	DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	36	Vessels not reporting on bycatch and target catch discard – DUS, RCC, DGD and DTS.	Solomon Jade, Solomon Opal and FU Kuan 808	
		SHARK FINNING	17	A total of 127 carcasses and silky sharks (FAL) @2mT were DFR and 8 carcasses and blacktip reef shark (BLR) @1mT were also DFR. BFR @1mT was also DFR.	Solomon Opal and FU Kuan 808	

23. Editor's note: Number of Observer trip data: One Observer trip data = Any information that was available for one specific trip, which could include Form PS-3, Trip Report, GEN-3, etc.

		SSI INTERACTIONS AND LANDINGS	23	Silky sharks (FAL) landings and deliberate sets on tuna school associated with whale sharks (whale shark (RHN)).	Solomon Jade, Solomon Opal and FU Kuan 808	
		IUU	4	Fish-taking by locals.	Solomon Opal	
2020	12	DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	41	Vessels not reporting on bycatch and target catch discard – DUS, RCC, DGD and DTS.	Solomon Opal, Solomon Pearl and Solomon Jade	
		SHARK FINNING	7	A total of 26 silky sharks (FAL)s plus silky sharks (FAL) @20kgs were finned (DFR) by vessel crew members.	Solomon Opal, Solomon Pearl ²⁴	
		SSI INTERACTIONS AND LANDINGS	30	Silky sharks (FAL) landings and discarded overboard, majority of them already dead and a critical incident of a deliberate set around a tuna school associated with a live Bryde's whale (BRW) on FV Solomon Opal.	Solomon Opal, Solomon Pearl and Solomon Jade	
		IUU	23	Locals trespassing on board and stealing fish from the catch and the vessel not reporting the incident.	Solomon Opal, Solomon Pearl, Solomon Ruby and Solomon Emerald	
2021 ²⁵	3	DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	7	Vessel not reporting on bycatch and target catch discard – DUS, RCC, DGD and DTS.	Solomon Jade	
		IUU	2	Locals trespassing on board and stealing fish from the catch and the vessel not reporting the incident.	Solomon Ruby and Solomon Jade	

24. Editor's Note: On Solomon Pearl trip TRI SIMSC-2080, the finning was done by local fisherman who came on board during the set.

25. Editor's Note: Only very limited data available for 2020 and 2021, due to low Observer coverage.



Koo's 108 © TM-Tracking

3. SUMMARY – PNA OBSERVER AGENCY DATA REVIEW ON PURSE SEINE VESSELS

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.
- 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.

Table 29 gives an overview of the above cases identified.

Table 29. Review of Violations on Board Purse Seine Vessels under FSMA Licence.

Year	No. Of observer trip data reviewed	Type of observations	Number of reported violation(s)	Description	Vessel name(s)	
					Msc certified	Not msc certified
2018	1	CRITICAL INCIDENTS	2	A baleen whale identified by the Observer as a minke whale (MIW) was caught inside the net and then escaped. A whale shark (RHN) landed on deck.	Kaile 888	
		DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	9	Vessel failed to report on bycatches that landed and were DUS and RCC. Vessel failed to report on target catches that were RCC and DGD.		
		SHARKS and RAY INTERACTIONS or LANDINGS	2	4 silky sharks (FAL) landed on board dead and were discarded whole overboard. 1 devil ray (RMV) landed on board alive and discarded back into the ocean.		
2019	9	CRITICAL INCIDENTS	31	Deliberately setting the net on a live whale or whale shark. Landing of cetaceans on deck. 2 incidents of requesting an event not to be reported by the Observer. SSI were caught inside the net and the vessel made no attempt to ensure the safe release of the SSI. Inhumane treatment of silky sharks (FAL) species. Particular bad handling: On board the Taiyo Tofol: 89 silky sharks (FAL) were landed and killed by vessel crew with a knife for safe handling (DPD) on 9 different sets.	Southern Seas No. 301, Mariraoi, KOO'S 108, KOO'S 101 and Simbun 88	Taiyo Tofol
		DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	48	Vessel failed to report on bycatch and target catch landings discarded (DUS, DVF and DGD) and retained (RCC).		
		SHARKS and RAY INTERACTIONS or LANDINGS	20	Multiple shark and ray landings, namely silky sharks (FAL), devil ray (RMV) and manta ray (RMB) species.		

2020	10	CRITICAL INCIDENTS	22	Deliberately setting the net on a live whale or whale shark. Landing of cetaceans on deck. Requesting an event not to be reported by the Observer. High grading the catch. SSI caught inside the net and the vessel made no attempt to ensure the safe release of the SSI.	Trinidad III, Moamaeu, Moakona, Pacific Journey No. 8 and Mathawmarfach
		DISCREPANCY IN BYCATCH and TARGET CATCH DISCARD REPORTING	68	Vessel failed to report on bycatch and target catch landings discarded (DUS, DVF and DGD) and retained (RCC).	Pacific Journey No.8, Moakona, Queen Anne 959, Trinidad III and Mathawmarfach and Moamaeu
		SHARKS and RAY INTERACTIONS or LANDINGS	65	Multiple shark and ray landings, namely silky sharks (FAL), devil ray (RMV) and manta ray (RMB) species.	Pacific Journey No.8, Moakona, Queen Anne 959 and Moamaeu
		SHARK FINNING	1	A 25 kg bag of shark fin was confiscated from the vessel in port Noro.	Southern Seas 301 ²⁶

4. SUMMARY – SOLOMON ISLANDS OBSERVER DATA REVIEW ON LONGLINE VESSELS

As in the previous chapter, further incidents on MSC-certified vessels were found in the SBOB Observer data review for longline fishing vessels. The following summaries and Table 23 give a general overview of the types of observations and vessels involved.

4.1 SHARK FINNING

From the four Observer data sets reviewed for 2018, one case of illegally retaining fins from a protected shark species was reported: silky shark (FAL). From the seven Observer data sets reviewed for 2019, one case of illegally retaining fins from a protected shark species was reported: oceanic whitetip shark (OCS). In both cases, the Observers reported that the fins were retained mainly for crew consumption. However, according to CMM 2019-04, CCMs are prohibited from retaining on board, transshipping, storing on a fishing vessel, or landing, any oceanic whitetip sharks (OCS) or silky sharks (FAL) in whole or in part, in the fisheries covered by the convention.

4.2 SHARK RETAINED WHOLE (RFR)

Researchers reviewed 11 longline trips from the years 2018 and 2019. A total of 83 blue sharks, shortfin mako sharks and longfin mako sharks, were either processed and their fins retained, or retained whole with their fins naturally attached, mainly for commercial purposes.²⁷ Shortfin and longfin mako sharks, as well as blue sharks, are regarded as Near Threatened globally according to CITES Appendix II and the IUCN Red List of Threatened Species respectively.^[59]

26. Editor's Note: These allegations are based on unverified online discussions backed up by personal communications.

27. Editor's note: Retained Fins Retained (RFR) can imply that a shark was either finned and stored with the corresponding carcass or that a shark was retained with the fins naturally attached.

CMM 2019-04 requires that all sharks retained on board should either have their fins naturally attached to the carcass or ensure that individual shark carcasses and their corresponding fins can be easily identified on board the vessel at any time.

Given that around 100 long liners are licensed to fish within the Solomon Islands EEZ, and that long liners usually make around 8–10 fishing trips a year with an Observer coverage of only 5%, the fact that 52 incidents of shark-retained cases were reported by fisheries Observers across 2018 and 2019, from a total of 11 fishing trips, is staggering and points to a widespread problem.

4.3 SPECIES OF SPECIAL INTEREST INTERACTIONS (SSI)

According to the reviewed data, the most common Species of Special Interest caught on longline fishing trips was silky sharks (FAL). Out of the total of 70 reported incidents of silky sharks (FAL) caught, some did not land on deck because the lines were cut to release the species while they were still in the ocean. Of those that did land on deck, some were discarded alive, some were discarded already dead and in one incident, the Observer reported that the shark was discarded in an unknown condition (see Table 23 for details).

An Observer reported a case of an unknown dolphin species hooked to the line on a 2018 fishing trip. The Observer reported that the crew wanted to land the species and remove its teeth saying it would be very valuable if sold in Fiji or Taiwan. However, the Observer further detailed that the captain intervened, instructing the crew to cut free the line to release the species because an Observer was present on board. The Observer alleged that if he wasn't present during the trip, they would have landed the species and done whatever they wished with the SSI.

4.4 OBSERVER RIGHTS

On a 2019 trip on the MSC-certified vessel Ocean Bountiful No.338, the Observer reported that, for the entire trip, the vessel failed to provide him with necessary supplies and safety gear such as raincoats, safety gloves for working on deck, safety shoes, and a hard hat, as well as toiletries. He also reported that when the vessel's officers were sharing extra drinking water cartons and noodles with the vessel crew, he was not given any. The trip was very difficult for him.

According to CMM 2007-01 Attachment K, Annex A, Section 1, The rights of Observers: the vessel operator is obligated to provide the Observer, while on board, at no expense to the Observer or the Observer provider, food, accommodation, access to safety gear and medical facilities equivalent to those normally available to an officer onboard the vessel. ^[60]

4.5 NON-MSC-CERTIFIED VESSELS

Longline vessels mentioned in Table 23 were not MSC certified in 2018 or early 2019. However, San Sheng Shiang No.668 and Shuenn Shing 66 were later MSC certified on the 28 November 2019 by SCS Global Services. ^[61] This is a violation of MSC regulations, since vessels involved in incidents of shark finning, whether prosecuted or not should not be certified for two years following an incident. Once again, the MSC has broken its own rules and has certified shark-finning vessels.

Table 30. Review of Violations on Board Longline Vessels, SBOB Data, Non-MSC Certified.

Year	No. Of observer trip data reviewed	Type of observation	Number of reported cases or violation(s)	Description	Vessel name(s) (non msc certified)
2018	4	Shark retained whole	16	Retaining of shark carcasses (RFR). 10 blue shark (BSH), 4 shortfin mako shark (SMA) and 4 longfin mako shark (LMA) species altogether were processed and retained on board.	San Zai Fa No.12, Yu Shun No.888, San Sheng Shiang No.668 and Jin Fu Shiang No.36
		Shark finning	1	1 case of shark finning (DFR) on silky sharks (FAL) species for crew consumption (RCC).	Yu Shun No.888
		SSI interactions	38	Species of Special Interest (silky sharks (FAL), TUG, LKV) caught on the line and discarded as either DCF, DPA, DPD or DPU. 1 case of unknown dolphin species caught on the line and discarded as either DCF, DPA, DPD or DPU.	San Zai Fa No.12, Yu Shun No.888, San Sheng Shiang No.668 and Jin Fu Shiang No.36
2019	7	Shark retained whole	47	Retaining of shark carcasses (RFR). 54 blue shark (BSH), 15 shortfin mako shark (SMA) and 6 longfin mako shark (LMA) species altogether were processed and retained on board.	Ocean Bountiful No.338, Shuenn Shing 66, San Zai Fa No.12, Jin Fu Shiang No.36 and Jin Jinn Yi No.36
		Shark finning	1	A single case of shark finning (DFR) on oceanic whitetip shark (OCS) species for crew consumption (RCC).	Jin Tsai Fu No.888
		SSI interactions	31	Species of Special Interest 12 cases of silky sharks (FAL) and 1 case of unknown dolphin species caught on the line and discarded as either DCF, DPA, DPD or DPU.	Ocean Bountiful No.338, Shuenn Shing 66, San Zai Fa No.12 and Jin Fu Shiang No.36
		Observer rights	1	Vessel failed to provide, while on board, necessary supplies and safety gear equivalent to those normally available to an officer.	Ocean Bountiful No.338

4.6 LEEROY WHARF – UNLOADING AND TRANSHIPMENTS OF LONGLINE CATCHES IN UNDESIGNATED PORT

While investigating violations reported by Observers, interviewees brought the Leeroy Wharf to the authors' attention. Following local reports, unloading and the transshipment of catches from longline fishing vessels are taking place at Leeroy Wharf, situated on the outskirts of Honiara city eastern boundary. The two designated ports for transshipment in the Solomon Islands, in accordance with CMM 2017-02, are Honiara and Noro. [62] As it is not a nominated port, as stipulated in a letter from the Director of MFMR addressed to the Executive Director of the Western and Central Pacific Fisheries Commission, unloading and transhipping catches from longline fishing vessels at Leeroy Wharf violates CMM 2017-02. The wharf is not situated inside Honiara, but within the boundary of the Province of Guadalcanal, and therefore is under the mandate of the Guadalcanal Provincial Government (Figure 7).

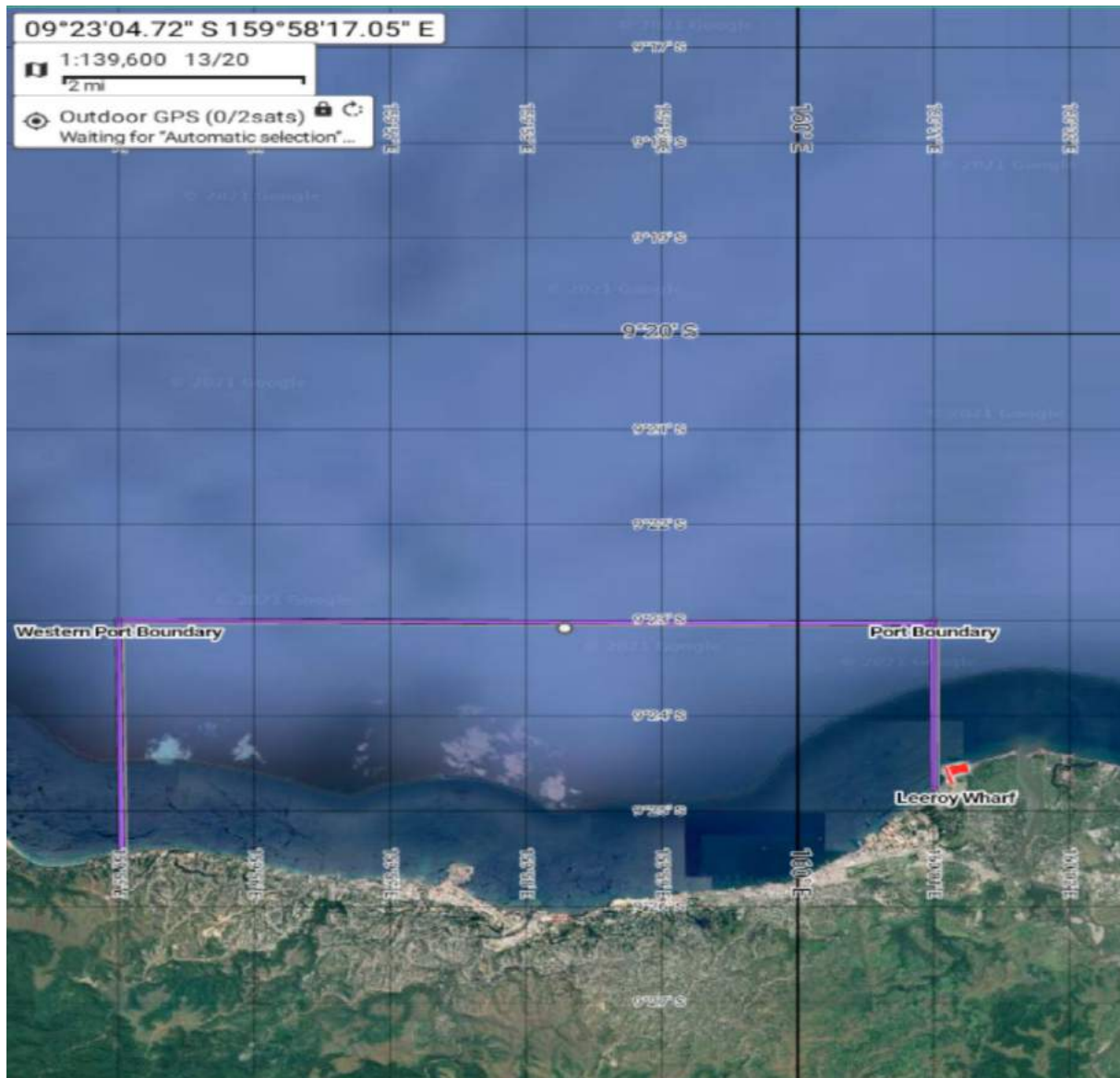
Figure 7. Leeroy Wharf Location Versus Honiara Port Boundaries.



Referring to the latitude and longitudinal coordinates given in the Declaration of Ports Limits Chapter 161, Ports Subsidiary Legislations;²⁸ Leeroy Wharf is situated outside the Honiara Port Sea boundary.

28. According to personal communication.

Figure 8. Honiara Port Sea Boundary (Marked in Purple).



According to AIS data obtained for the month of August 2021, the majority of the monitored longline vessels were observed to be heading straight to Leeroy Wharf from high seas fishing grounds. It should be clarified whether the vessels were following procedures set by the Solomon Islands Ports Authority (SIPA) Act, and the State of Public Emergency (SOPE) protocols implemented by the Solomon Islands Government (SIG), to safeguard the wellbeing of its citizens from importation of the COVID-19 virus on incoming foreign vessels. Additional research is needed to establish the impact of the lack of on-board Observers and the absence of fisheries compliance officers during unloading and transshipment activities.

According to customs documentation, there were several MSC-certified vessels among the vessels unloading and transshipping at Leeroy Wharf (Table 25). It is noteworthy, that one of these three vessels, the Hong Rong cannot be found on the WCPFC Record of Fishing Vessels. ^[63]



Hong Rong © TM-Tracking

Table 31. MSC Long Liners Unloading and Transhipping at an Undesignated Port (Leeroy Wharf).

Year: 2020			
No of vessels: 3			
Vessel name	Flag	Msc certification code or certificate number present and at time of incident	Description
FV Yi Siang No 1	Taiwan	MSC-F-31452 ^[61]	Unloading bait fish.
FV Yi Siang No 8			Unloading bait fish.
FV Hong Rong			Present in port, not clear what it was doing.

5. INFRINGEMENT OF MSC STANDARD PRINCIPLES²⁹

5.1 PRINCIPLE 2 INFRINGEMENTS – SHARK FINNING AND SSI MORTALITY INCIDENTS

5.1.1 SHARK FINNING

The authors of this report identified 24 incidences of shark finning, 19 of which took place during MSC-eligible sets. At the 2011 December meeting, the MSC Board of Trustees stated that shark finning would not be allowed within MSC-certified fisheries. The MSC Guidance to the Fisheries Standard v2.01 goes on to state: “regardless of a fishery’s performance against these PIs [PIs 1.2.1, 2.1.2, and 2.2.2], the CAB should not certify or maintain the certification of a fishery when there is objective verifiable evidence that indicates shark finning is taking place. Objective verifiable evidence could be any documented statement of fact based on observations, measurements or tests which can be verified.” [43, p. 36] Based on the above statement alone, the fisheries identified in this report should not be allowed to maintain their current certification, nor should they be able to obtain recertification.

The fisheries would also fail to meet the minimum requirements for PIs 1.2.1, 2.1.2, and 2.2.2 (SG 60) to show that shark finning is taking place, as nominal Observer coverage (5%) is rarely attained in the longline fisheries identified in this report and there are no alternative mechanisms for validating shark-finning activities. It cannot be said that there is “some external validation”. [43, p. 37]

5.1.2 SPECIES OF SPECIAL INTEREST MORTALITY

Several instances of the deaths of SSIs, or likely subsequent death of SSIs, on MSC-eligible sets were identified in this report. Principle 2.3.2 ETP Management Strategy is of greatest concern with regards to SSI mortality. It is important to note that scoring guidance for these PIs states, “SA3.1 1.1.1 All sources of direct mortality shall be considered, including, but not limited to, direct deaths and injuries leading to death.” [43, p. 47] The table below identifies specific scoring issues where the fisheries would fail to meet the MSC requirements.

Table 32. Principle 2 Infringements.

Principle	Scoring issue	Minimum sg requirements	Reason for failing to meet minimum requirement
2.3.2 ETP Management Strategy	(a) Management strategy in place (national and international requirements)	There are measures in place that minimise UoA-related mortality of ETP species and are expected to be highly likely to achieve national and international requirements for the protection of ETP species. SG 60	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 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.
	(d) Management strategy implementation	There is some evidence that the measures/strategy is being implemented successfully SG 80	This report provides 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.

29. See Appendix 4 for MSC Standard Principles of concern.

5.2 PRINCIPLE 3 INFRINGEMENTS

The findings of this report are disaggregated into issues of shark finning, poor handling of SSI, discrepancy in reporting, bribery and intimidation, and the unloading of catch at undesignated ports. Despite these incidents pointing to a blatant failure to meet several of the conditions for Principle 3 (Effective Management – namely Pls 3.1.1, 3.2.2, and 3.2.3), the fisheries in this report have managed to obtain and maintain MSC certification. The following table identifies the Pls and Scoring Issues which the fisheries identified in this report fail to meet.

Table 33. Principle 3 Infringements.

Principle	Scoring issue	Minimum scoring issue requirements	Notes
3.1.1 Legal and/or customary framework	(a) Compatibility of laws or standards with effective management*	There is an effective national legal system and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2. ³⁰	The report identified the following CMMs as being infringed upon, consequently evidencing the failure to meet minimum scoring requirements: <ul style="list-style-type: none"> • CMM 2007-01 • CMM2007-02 • CMM 2009-02 • CMM 2011-03 • CMM 2013-06 • CMM 2019-04
	(b) Resolution of disputes	The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system	
3.2.2 Decision-making processes	(b) Responsiveness of decision-making processes	Decision-making processes respond to serious issues identified in relevant research, monitoring, evaluation, and consultation in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.	Failure to address issues such as the ones outlined in this report show that while they may theoretically exist, the decision-making processes to respond to serious issues are not being employed and, in some instances, are being actively suppressed (see sections on bribery and intimidation).
	(e) Approach to disputes	Although the management authority may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	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.

3.2.3: Compliance and enforcement	(a) MCS Implementation	Monitoring, control, and surveillance mechanisms exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	
	(b) Sanctions	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	
	(c) Compliance	Fishers are generally thought to comply with the management system under assessment, including, when required, providing information of importance to effective management of the fishery.	
	(d) Systematic non-compliance	There is no evidence of systematic non-compliance.	

CONCLUSIONS AND RECOMMENDATIONS

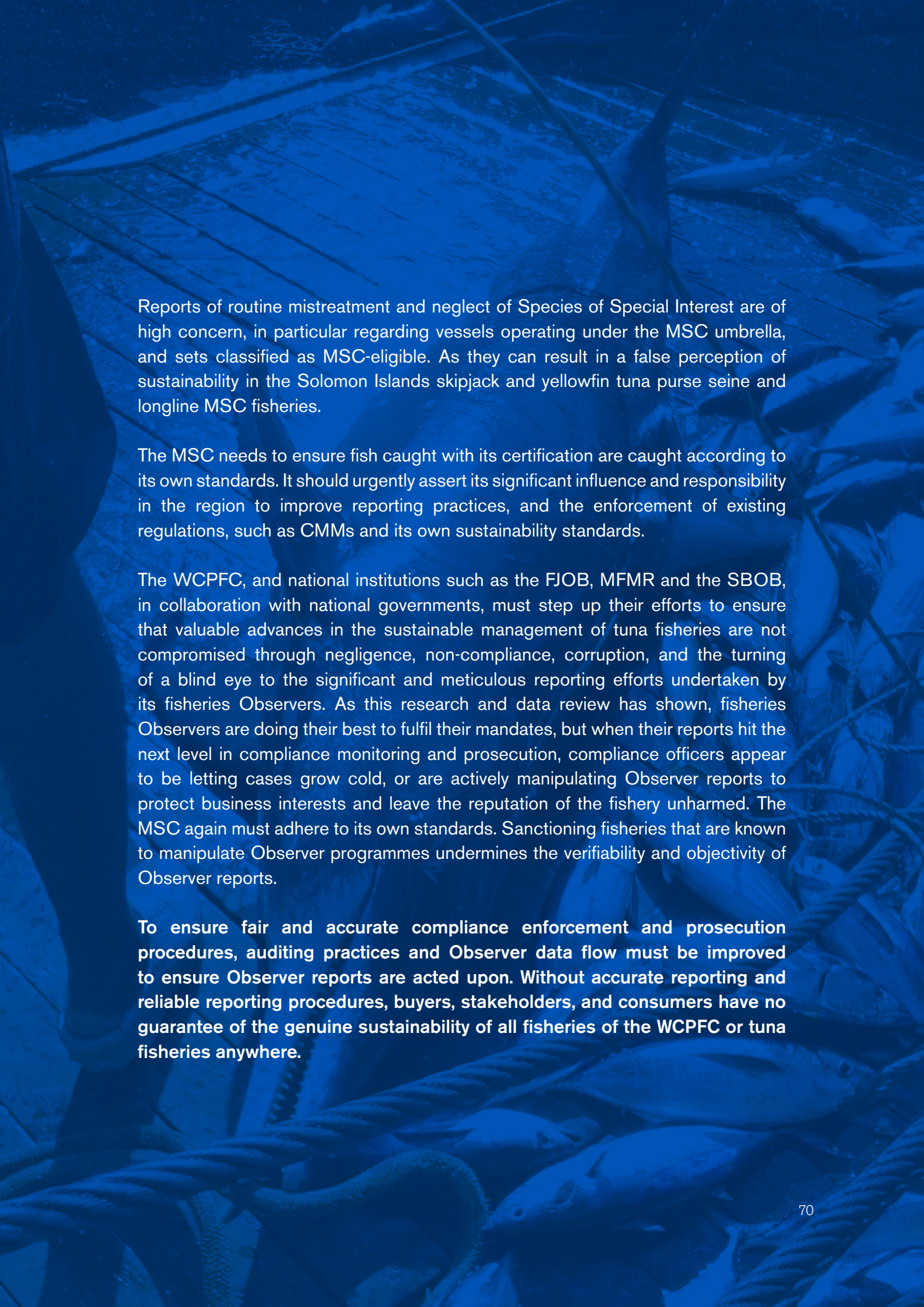
Analysis of the 22 purse seine and 11 longline vessels' Observer trip data from the Solomon Islands National Observer programme, and the 19 purse seine Observer trip data from the PNA Observer Agency, has identified more than 600 cases of interest within the research objectives.

Researchers identified corruption as a major issue of concern within the Solomon Islands tuna industry, with tuna processing companies such as NFD, and purse seine and longline vessel agents unduly influencing government decisions. Cases such as the retraction of Observer reports related to shark finning to safeguard the integrity of the tuna processing company, and refusing to investigate violations against 'Fisheries Acts', are both examples. The transshipments and unloading of catches from longline vessels at Leeroy Wharf on the outskirts of the eastern Honiara town boundary are also questionable.

Breaches of WCPFC CMMs by MSC-certified and non-MS-C-certified vessels are common. Of particular concern is the classification of sets that involve violations of WCPFC and MSC regulations for the protection of protected species and fish stocks, as MSC-eligible. Researchers observed that a discrepancy in the reporting of bycatch and target catch discard by purse seine vessels is the most common practice, and the majority, if not all, of the purse seine vessels operating in the WCPO, may be guilty of the offence.

MSC-certified vessel Solomon Opal has been implicated in on-board shark finning, as reported by two Observers on two separate trips. Despite significant evidence of infringements, the Solomon Opal is still MSC certified, and her catches continue to be approved and certified under the MSC label.

Discrepancies in bycatch and target catch discard reporting were found to be prevalent at a problematic level. Weak warnings are issued to vessel operators, and misreporting is an unfortunate but common practice. Misreporting needs urgent attention and an ongoing effort to counter, particularly as incorrect reporting leads to a false interpretation and assessment of the fish stock in the WCPO.



Reports of routine mistreatment and neglect of Species of Special Interest are of high concern, in particular regarding vessels operating under the MSC umbrella, and sets classified as MSC-eligible. As they can result in a false perception of sustainability in the Solomon Islands skipjack and yellowfin tuna purse seine and longline MSC fisheries.

The MSC needs to ensure fish caught with its certification are caught according to its own standards. It should urgently assert its significant influence and responsibility in the region to improve reporting practices, and the enforcement of existing regulations, such as CMMs and its own sustainability standards.

The WCPFC, and national institutions such as the FJOB, MFMR and the SBOB, in collaboration with national governments, must step up their efforts to ensure that valuable advances in the sustainable management of tuna fisheries are not compromised through negligence, non-compliance, corruption, and the turning of a blind eye to the significant and meticulous reporting efforts undertaken by its fisheries Observers. As this research and data review has shown, fisheries Observers are doing their best to fulfil their mandates, but when their reports hit the next level in compliance monitoring and prosecution, compliance officers appear to be letting cases grow cold, or are actively manipulating Observer reports to protect business interests and leave the reputation of the fishery unharmed. The MSC again must adhere to its own standards. Sanctioning fisheries that are known to manipulate Observer programmes undermines the verifiability and objectivity of Observer reports.

To ensure fair and accurate compliance enforcement and prosecution procedures, auditing practices and Observer data flow must be improved to ensure Observer reports are acted upon. Without accurate reporting and reliable reporting procedures, buyers, stakeholders, and consumers have no guarantee of the genuine sustainability of all fisheries of the WCPFC or tuna fisheries anywhere.

APPENDICES

APPENDIX I. OBSERVER STATEMENT LETTER I.PDF



Solomon Islands Government
MINISTRY OF FISHERIES AND MARINE RESOURCES
P. O. Box G2
Honiara, Solomon Islands

BRIEF INCIDENT REPORT ONBOARD SOLOMON OPAL DURING 28 MAY- 16 JUNE
2019

I hereby make this update statement after I was interviewed and scrutinized by the MFMR Observer Coordinator [REDACTED] on 15th September 2020 [REDACTED]

On date 2019/05/28, I [REDACTED] boarded Fishing Vessel Solomon Opal as a Fishery observer under the Jurisdiction of the Solomon Islands Ministry of Fisheries and Marine Resources' National Observer Program with issued Trip ID [REDACTED]. The trip was arranged by [REDACTED] with the request of the host vessel's company NFD to observe, monitor and record the fishing activities conducted by the host vessel.

During the trip, I have some personal arguments with few crew members in relation to by-catch fish and my interest in getting a share of the by-catch sales. Also, I was complaining about my welfare on board especially quality of meals and no one seems to be concerned so with retaliation feelings, I come to report on some infringements which was actually not directly observed but under suspicion and recorded in the Gen-3 form of the observer workbook.

The incidents include landing of bycatch species such as protected SILKY SHARK which is common on FAD fishing sets and I have reported the handling code as DFR (Discarded fins retained) on my PS3 forms. I do admit that shark finning was not directly observed but merely suspected and therefore with the pressure I have on board with the crew, I intentionally reported the finning and the crew doing finning because I want these crew to be disciplined by their Management. All the crew names involved in my report are the ones dealing with the sharks prior to their landing. And actually they dragged them to the side of the starboard deck awaiting for discarding.

And for that, I'm truly sorry for any inconvenience I may have cause to the ship's owner NFD for the false report and crew members I falsely accused.

[REDACTED]

Fisheries Observer

15th September 2020

APPENDIX 2. OBSERVER STATEMENT LETTER 2.PDF



Solomon Islands Government
MINISTRY OF FISHERIES AND MARINE RESOURCES
P. O. Box G2
Honiara, Solomon Islands

BRIEF INCIDENT REPORT ONBOARD SOLOMON OPAL

15th September 2020

Following my interview on 15th September 2020 [REDACTED] with our Observer Coordinator [REDACTED] I hereby present this updated statement. On date 7th February 2019, I [REDACTED] boarded Fishing Vessel Solomon Opal as the Fishery Observer. I was issued with the trip ID [REDACTED]. The trip ended on 25th December 2019.

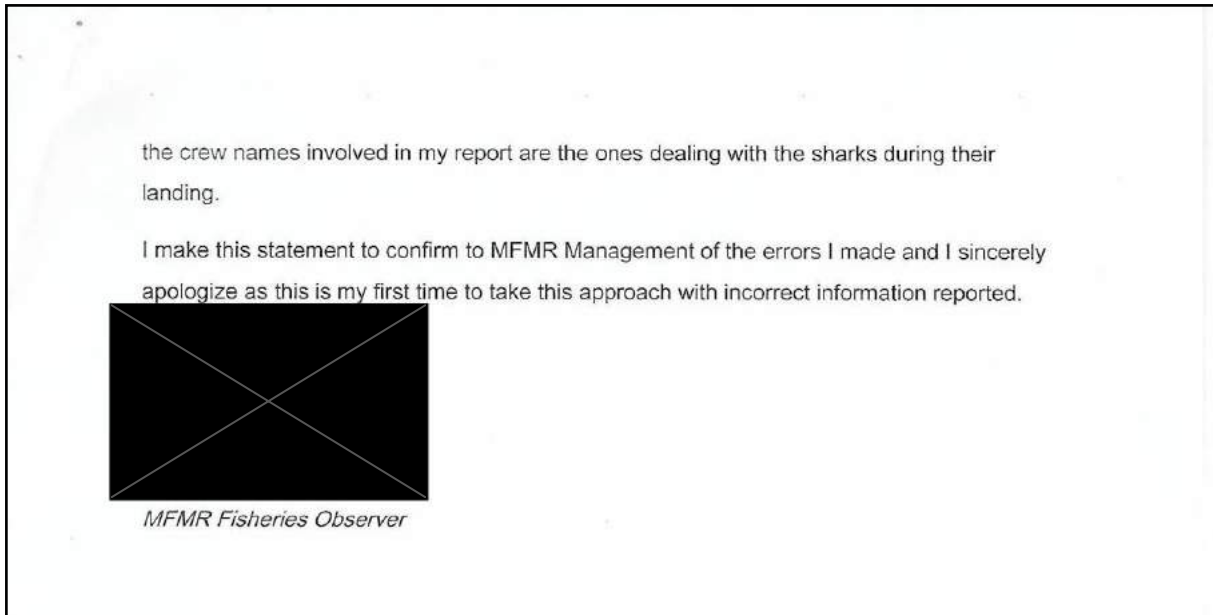
During trip [REDACTED] I have some personal financial problems especially in preparation for Christmas and was very disappointed as to why the Deck Bosun and the crew on the boat did not help me with cash allowance from sale of by-catch or advance in between trips unlike my previous experiences on other company boats. I approached the responsible Deck Bosun on the vessel about my demands for assistance with by-catch fund but nobody seemed to care.

I am provided by a trip allowance by the Company and am thinking that over and above this allowance I also should get some help from the sale of by-catch including rainbow runners and island bonito. I understand that this was the practice with other vessels.

So with feeling of not getting support I saw an opportunity during the trip to report the shark finning activity by the crew on board the Solomon Opal.

I continued with this same approach and reported shark finning again during trip ID [REDACTED] [REDACTED] from 6 January to 2 February 2020.

I can say that shark finning was not directly observed, but merely assumed because the sharks got stuck in the net mesh were placed at the stern of the boat and sharks brailed were moved to the starboard side of the purse winch where I was standing during the sets. Therefore, with the pressure I have with personal problems and dissatisfaction with the way the crew did not show interest to help me I tend to report them with intention for revenge. All



APPENDIX 3. EXAMPLES OF DATA COLLECTION METHODS ACCORDING TO THEIR LEVEL OF VERIFIABILITY

Column A (higher level of verifiability, lower bias)	Column B (lower level of verifiability, higher bias)
Observer programmes	Standardised logbooks
Electronic monitoring of location/position (e.g. VMS, AIS)	Interviews with fishers
Other technologies to monitor compliance (e.g. Enforced mandatory retention of all catch with full dockside monitoring)	
Independent research projects or programmes	Information obtained from co-management and community-based management

Source: Marine Stewardship Council, "MSC Fisheries Standard," msc.org, 2018. https://www.msc.org/docs/default-source/default-document-library/for-business/program-documents/fisheries-program-documents/msc-fisheries-standard-v2-01.pdf?sfvrsn=8ecb3272_19#page=182&zoom=100,92,674 (accessed Dec. 17, 2021), page 72.

APPENDIX 4. MSC VIOLATIONS

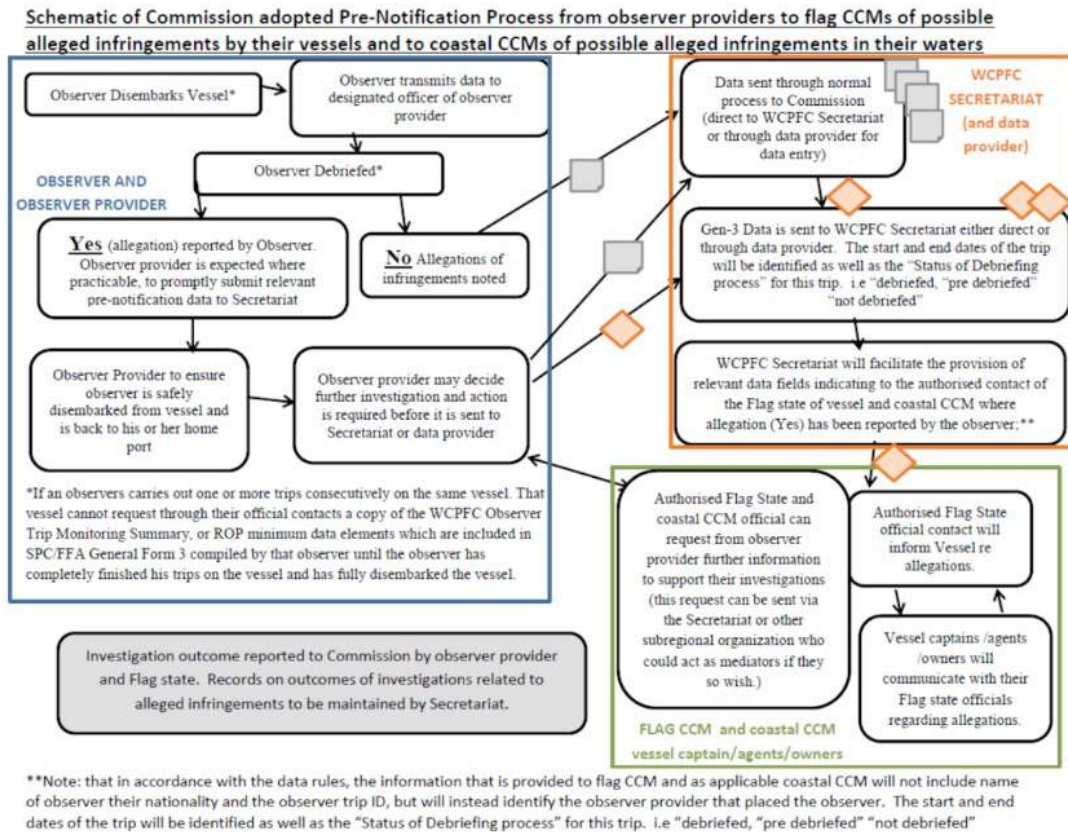
Violation	PI	Relevant Scoring Issue	Recommended scoring	Requirement for relevant scoring	
Shark finning	2.3.1 ETP Species outcome	a. Effects of the UoA on population/stocks within national or international limits, where applicable	<SG 60	Where national and/or international requirements set limits for ETP species, the effects of the UoA on the population/stock are known and likely to be within these limits	
	2.3.2 ETP Management strategy	a. Management strategy in place (national and international requirements)	<SG 60	There are measures in place that minimise UoA-related mortality of ETP species and are expected to be highly likely to achieve national and international requirements for the protection of ETP species.	SA3.11.1 When scoring the ETP management strategy PI SGs teams shall consider the need to minimise mortality. SA3.11.1.1 All sources of direct mortality shall be considered, including, but not limited to, direct deaths and injuries leading to death.
		c. Management strategy evaluation	<SG 60	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species)	
		d. Management strategy implementation	<SG 80 (minimum)	There is some evidence that the measures/strategy is being implemented successfully	
	2.3.3 ETP Species Information	a. Information adequacy for assessment of impacts	<SG 60	Qualitative information is adequate to estimate the UoA-related mortality on ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for ETP species.	

Discrepancy in bycatch and target catch discard reporting	3.2.3 Compliance and enforcement	a. MCS implementation	<SG 60	Monitoring, control and surveillance mechanisms exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.
		b. Sanctions	<SG 60	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.
		c. Compliance	<SG 60	Fishers are generally thought to comply with the management system under assessment, including, when required, providing information of importance to effective management of the fishery.
		d. Systematic non-compliance	<SG 80 (minimum)	There is no evidence of systematic non-compliance.
Bribery & intimidation	2.3.3 ETP Species Information	a. Information adequacy for assessment of impacts	<SG 60	Qualitative information is adequate to estimate the UoA-related mortality on ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for ETP species.
	3.1.1 Legal and/or customary framework	a. Compatibility of laws or standards with effective management	<SG 80	There is an effective national legal system and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.

		b. Resolution of disputes	<SG 60	The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system	Alternatively <SG 80: The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues that is appropriate to the context of the UoA.
3.2.2 Decision-making processes		b. Responsiveness of decision-making processes	<SG 60	Decision-making processes respond to serious issues identified in relevant research, monitoring, evaluation, and consultation in a transparent, timely and adaptive manner and take some account of the wider implications of decisions	
		e. Approach to disputes	<SG 60	Although the management authority may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	Alternatively <SG 80: The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.

APPENDIX 5.

COMMISSION ADOPTED PRE-NOTIFICATION PROCESS FROM OBSERVER PROVIDERS TO FLAG CCMS OF POSSIBLE ALLEGED INFRINGEMENTS BY THEIR VESSELS AND TO COASTAL STATE CCMS OF POSSIBLE ALLEGED INFRINGEMENTS IN THEIR WATERS.



Source: WCPFC, Commission Twelfth Regular Session, Bali, Indonesia. 3–8 December 2015.

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GLOSSARY

CAB	Conformity Assessment Body
CCM	Commission Members, Cooperating Non-Members, and Participating Territories of the WCPFC
DWFF	Distant Water Fishing Fleet
EEZ	Exclusive Economic Zone
ETP species	Endangered, Threatened and Protected Species
FAD	Fish Aggregating Device
FFA	Pacific Islands Forum Fisheries Agency
FJOB	Fiji National Observer Programme
FSMA	Federated States of Micronesia Arrangement for Regional Fisheries Access
IUU	Illegal, unreported and unregulated (IUU) fishing
MCS	Fisheries monitoring, control and surveillance
MFMR	Solomon Islands Ministry of Fisheries and Marine Resources
MGA	Solomon Islands Main Group Archipelago
MSC	Marine Stewardship Council
NFD	National Fisheries Development Limited
PNA	Parties to the Nauru Agreement
POA	PNA Observer Agency
RFMO	Regional fisheries management organisation
SBOB	Solomon Islands National Observers programme
SIG	Solomon Islands Government
SPC	Secretariat of the Pacific Community
SSI	Species of Special Interest
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and Central Pacific Ocean

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