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WWF POSITION STATEMENT FOR WCPFC12

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Smart Fishing Initiative

WWF POSITION

12th Regular Session of the Western Central Pacific Fisheries Commission (WCPFC): Bali, Indonesia – December 3-8, 2015

Introduction

The World Wide Fund for Nature (WWF) would like to again thank the Western and Central Pacific Fisheries Commission (WCPFC) for the opportunity to attend the 12th Regular Session as an observer and to address the critically important role that it plays in the proper management of the (Western Central Pacific Ocean) WCPO fisheries.

WWF once again calls on members of the WCPFC to address the issues and recommendations raised at SC11, TCC11, and WCPFC11 as well as observe the experience of other RFMOs in their own efforts to achieve and maintain improved measures for monitoring and surveillance. WWF would like to note that this Position Statement is not comprehensive, but that fact does not mean that WWF does not think that other issues not included herein are not important. WWF wishes to reiterate its position offered in Apia, Samoa, in December 2014 (WCPFC11) and, taking into account the WCPFC-related meetings held since, the recommendations listed below as well as other documents submitted to the WCPFC for review as Observer Papers.

Reference Points, Harvest Control Rules, and Harvest Strategies

WWF remains supportive of the work of the WCPFC and subsidiary bodies in pursuing the implementation of Reference Points (RP), Harvest Control Rules (HCR), and Harvest Strategies (HS). Consistent with previous WWF position statements and recommendations, WWF encourages the WCPFC12 to develop and implement the adoption of explicit Target Reference Points (TRPs), HCRs, and HSs for all WCPO fishery stocks under WCPFC authority.

Therefore, WWF welcomes CMM 2014-06 to develop and implement a harvest strategy approach for key fisheries and stocks in the WCPO. We support the approach that the CMM seeks the Commission's agreement to formally develop a HS approach to fisheries for the major tuna stocks under the Commission's purview with a goal toward achieving individual harvest strategies for specific fisheries developed in accordance with this CMM that, in turn, set out the management actions necessary to achieve defined biological, economic, and social objectives for each fishery. If WCPFC12 takes appropriate action on this CMM and recommendations from the Harvest Strategy Workshop (HSW), it will provide a sufficient framework for moving forward management in a methodical way to

result in valid and effective RPs and HCRs as well as a formalised Management Strategy Evaluation (MSE) process.

WWF strongly commends the initiative of the Parties to the Nauru Agreement (PNA) to establish and implement a TRP for the SKJ stock in PNA waters. WWF also supports the Pacific Island Forum Fisheries Agency's (FFA) development of CMM for a TRP for South Pacific albacore (SPA) recently presented for review by the WCPFC. Both proposals present well-defined, scientifically-based, and strong commitments to sustainability and precaution. We strongly encourage the Commission to adopt these TRPs for implementation throughout the WCPO. Lastly, WWF notes the SC11 and TCC11 support for the analyses of these important management measures as well as their recommendation that WCPFC12 take the results of the papers presented at this meeting into consideration when considering the adoption of TRPs and HCRs for the key target species.

WWF recommends that the WCPFC:

- Adopt and implement the proposed timelines and recommendations for fully implementing CMM 2014-06;
- Adopt and Implement a CMM consistent with proposed recommendations on a TRP for skipjack tuna at a level of $0.50SSB_{F=0,t1-t2}$;
- Adopt and Implement a CMM consistent with proposed recommendations on a TRP for South Pacific albacore Tuna at a level of $0.45SSB_{F=0}$;
- Support the continued development and implementation of LRPs and TRPs as a priority for proper management of all stocks;
- Support interim precautionary TRPs as a benchmark for further consideration in all other stocks managed by the WCPFC in 2015; and
- Support the continued development and implementation of HCRs that ensure the transparent and efficient management of stocks in relation to LRPs and TRPs.

Sharks and Rays

Many shark species in the WCPO remain subject to high levels of fishing mortality that current stock assessment trends suggest could be unsustainable.¹ Sharks play a critical role in the WCPO marine ecosystem as apex predators and indicators of ecosystem health.² WWF is concerned with shark conservation and sustainability in the WCPFC region as a whole and considers responsible management, trade, and consumption where shark mortality occurs in all fishing activities, not just in circumstances where tuna fishing is occurring. Therefore, WCPFC must also recognise the needs of coastal States in the WCPFC region to manage their shark populations.

Although WWF supports the minor action taken by the WCPFC in *CMM 2014-05 Conservation and Management Measure for Sharks*³, WWF continues to support recommendations made previously by the SC and drawn from the discussion regarding a proposed comprehensive and integrated shark CMM.⁴ By way of reference, we again endorse the recommendations contained in sections 4.1 and 4.2 of the paper previously presented by Dr. Shelley Clarke in addition to measures recommended below.⁵

Furthermore, WWF endorses the recent action taken by the Inter-American Tropical Tuna Commission (IATTC) to support best practices for safe handling and release manta rays (genus *Mobula* and *Manta*) aboard purse seiners. Consistent with additional calls from CCMs during the SC11 meeting, WWF encourages the WCPFC to pursue equivalent or consistent measures for mantas in the WCPFC Convention Area.

WWF recommends the WCPFC:

- Develop, endorse, and recommend adoption of a Comprehensive Shark CMM that includes efforts to:
 - Mandate bycatch best practices consistent with those found in the Compendium of Best Practice of Conservation and Management Measures (CMMs) for the of Species Bycatch in Tuna RFMOs;

- Implement the recommendations for bycatch that were endorsed at Kobe III and adopt an annually updated report card system against these recommendations for all of the WCPFC fisheries;
 - Require, through data collected from observer programs and other means, estimation of the number of captures and releases of all sharks and rays, including the status upon release (dead or alive), and reporting of this information to the WCPFC;
 - Require, through observer programs, recording what gear is used in longline activities including the use of wire traces and any multi- monofilament traces in order to avoid bite-off by sharks;
 - Introduce a scheme to document the capture and trade of sharks whereby it allows for traceability through to the final market state and consider the recommendations included in the TRAFFIC report produced for the CITES Secretariat when developing such a scheme; and
 - Ensure the implementation requirements for CITES listed sharks are undertaken by CITES Parties and Non-Parties trading with CITES Parties where they are required to make non-detriment and legal findings in order to issue export permits for trade in these species.⁶ Where WCPFC members make non-detriment findings for shark species they should share with the WCPFC details of those findings so that the WCPFC Secretariat can provide information to the CITES Standing Committee working group on sharks before January 2016.⁷
- Develop, endorse, and recommend safe handling and release practices for manta rays (genus *Mobula* and *Manta*) aboard purse seiners;
 - Encourage the development of reference points and management for non-target species, including all shark and ray species, as envisaged under Articles 5 and 10 of the WCPFC Convention;
 - Encourage CCM's to report all shark and ray catches from domestic fleets operating in territorial and archipelagic waters; and
 - Endorse recommendations made in EB-WP-03, EB-IP-05, EB-WP-06, and EB-WP-08 submitted for SC11, including introducing safe handling practices for whale sharks (*Rhincodon typus*) caught within WCPFC purse seine fisheries; and
 - Revise and amend the shark reporting processes to WCPFC to streamline shark-related data and to close data gaps.

Sea Turtles

WWF supports the recent intervention at TCC11 by the United States requesting renewed focus on sea turtle bycatch in the WCPO tuna fisheries. WWF continues to believe that *CMM 2008-03 for the Conservation and Management of Sea Turtles* has not demonstrably reduced bycatch impacts on threatened and endangered sea turtles in the region. The cumulative impact of increasing numbers of longline vessels in the WCPO on sea turtles remains problematic, and there has been insufficient uptake of proven bycatch mitigation measures such as circle hook and/or finfish bait. All 6 species of sea turtles in the WCPO remain threatened or endangered. With no evidence of CMM 2008-03 having slowed or reversed negative trends on threatened and endangered sea turtle populations, the burden of proof remains on the WCPFC to demonstrate that sea turtle bycatch impacts in tuna operations are being minimized, and to take stronger measures if they are not being minimized.

WWF believes that there exists a strong basis for revising CMM 2008-03 to: (1) ensure more suitable requirements for the determination of optimal bycatch mitigation packages (*i.e.* circle hooks and/or other measures, such as finfish bait) for individual fisheries; (2) reduce the ambiguity in language; and (3) improve the definition of the desired outcomes of the CMM. Moreover, evidence suggests that the WCPFC and member states have not suitably monitored the CMM for effectiveness with some parts of the CMM distinguished as providing "excessive room for creative compliance."⁸ While CMM 2008-03 requires all longline vessels to carry turtle de-hookers and line cutters, WCPFC has provided no

monitoring and evaluation of the effectiveness of this requirement, and only a small fraction of member countries have conducted dedicated research on sea turtle mitigation techniques.⁹ Indeed, as recently as 2010 over three quarters of CCMs either did not report on compliance with CMM 2008-03 or did not meet all the CMM measures. Furthermore, only a small fraction of member countries have conducted dedicated research on sea turtle mitigation techniques, and current observer coverage falls well below the recommended level for effectively determining optimal mitigation approaches (*i.e.* 10% coverage over 3 years).

The precautionary principle requires that all CCMs must determine optimal bycatch mitigation strategies based on research and sound science. Most importantly, WWF believes that the WCPFC should reconsider CMM 2008-03 in light of new information available regarding fisheries impacts on sea turtles and the impacts of various mitigation measures on turtle bycatch.¹⁰ Specifically, recent studies in the Eastern Pacific Ocean, as well as at-sea trials by WWF in Vietnam and Papua New Guinea, further confirm the positive impact of turtle bycatch mitigation using circle hooks, thereby indicating a need for further consideration and adoption of circle hooks in the WCPO longline fisheries.¹¹

WWF recommends the WCPFC:

- Consider and develop revisions of CMM 2008-3 aimed at:
 - reducing the ambiguity in language, strengthening key language and reducing the vagueness in desired outcomes of the CMM, thereby enabling better monitoring of CMM effectiveness;
 - introducing new binding measures for the use of circle hooks in all longline fleets, exempted only if an equally effective solution for the mortality of sea turtles can be demonstrated;
 - introducing stronger measures for conducting research on mitigation techniques and reporting on sea turtle impacts, as a means of determining optimal mitigation packages for individual fleets; and
 - setting an appropriate interim catch rate that would trigger move-on provisions.
- Encourage member state involvement and participation in the research conducted under the analysis of sea turtle mitigation measure effectiveness in tuna longline fisheries described in EB-WP-05 presented at SC11.

Tropical Tunas

WWF maintains that the policy choices made repeatedly by the WCPFC fail to achieve meaningful conservation of BET. WWF also believe that there could be substantial improvements to the understanding of the impact of Fish Aggregating Devices (FADs) through the aggressive pursuit of improved monitoring, surveillance, and general research involving FADs followed by appropriately targeted limits or management measures. While there are ongoing efforts within the SPC and PNA to pursue greater understanding of FAD dynamics, we believe that the WCPFC should impose measures in support of FAD research aided by monitoring and surveillance mechanisms which could, for instance, improve the understanding of the impacts on species composition resulting from:

- FAD type/size
- Geographic location
- Drift patterns and prevailing currents
- Ocean depth and depth of FAD materials
- Proximity to benthic relief/hydrogeographic features

The WCPFC absolutely must make effective and enforceable reductions of the catch in all sectors to achieve a meaningful conservation impact for BET. Most importantly, whatever measures the WCPFC selects absolutely must be subject to strong monitoring, control, and surveillance measures

WWF recommends that the WCPFC:

- Establish and support further research and monitoring of FADs;

- Engage in an open and transparent deliberative process based on the best available scientific information to determine the level of reductions in BET catch necessary to achieve meaningful BET conservation; and
- Revise the current Tropical Tunas CMM to achieve substantial reductions in BET mortality.

Regional Observer Programme

Information collected as part of an appropriate observer programme is critically important to the proper management of a fishery. Data collected by observers plays a central role in informing fisheries scientists on everything ranging from stock assessments to non-target species impacts. Furthermore, observers play an indispensable role in monitoring and enforcing very important CMMs in the WCPO. Indeed, observers represent the vanguard of fisheries management through the science and service that they provide. Consequently, observer coverage and the safety and security of those observers must be considered a top priority and greater support must be provided to the relevant authority to see that the capacity of the ROP is strengthened.

Observer Programme Management and Administration

The WCPFC must ensure, through appropriate guidance, that national observer programmes administered under the ROP are fully resourced in terms of human and financial capital as well as governed under appropriate administrative and management structures. Within that consideration, the WCPFC must contemplate different funding models that CCMs may consider for ensuring proper administration and management of the observer program at a national level, including those that incorporate sustainable financing through a valid and functional cost recovery system. The WCPFC has given inadequate consideration to the necessary resourcing of one of the most critical parts of fisheries management in the region, the national and regional observer programmes. Urgent attention must be given to the development and full funding of minimum standards that ensure a national programme can perform to ROP standards, including such efforts as continued annual reviews of the national programs under pre-agreed performance standards as well as continued regular training for all regional and national observer programme staff.

Observer Coverage on Longline Vessels

WWF notes that observer coverage on longline vessels operating in the WCPO, regardless of the metrics used to calculate it, remains substantially less than 5% region-wide. Moreover, WWF wishes to point out that the 5% observer coverage value identified by the WCPFC represents an arbitrary benchmark that was never intended to represent an “end goal,” but rather a minimum starting point toward appropriate observer coverage. Even a consistently applied level of 5% coverage is statistically and practically useless for most management or monitoring, control, and surveillance (MCS) purposes. Therefore, WWF supports efforts to improve the observer coverage of all longline fisheries in the WCPO. As such, WWF supports calculating observer coverage according to the proposed hierarchy of four metrics for assessing observer coverage, but notes that best practice would be to use “number of hooks deployed” as an appropriate metric. If other metrics for calculating coverage are used, terms must be very clearly defined in advance and each metric must be calculated in a way to be comparable to the other metrics.

WWF also notes that different levels of observer coverage may be required for management or compliance purposes, depending on specific identified objectives, and recommends that appropriate analyses be conducted to determine each of those levels respectively in the context of identified objectives. Most importantly, the WCPFC must demand that the ROP and national observer programmes receive full funding and support to ensure their continued operation and that the level of observer coverage on longline vessels be increased immediately to achieve management and compliance objectives.

Transshipment Monitoring

Transshipment remains one of the most prominent weaknesses in catch documentation and verification that leads to Illegal, Unreported, and Unregulated (IUU) catch in the WCPO. WWF notes that the most simple, efficient, and effective solution to the challenges of transshipment-related IUU is to simply prohibit all at-sea transshipment and require all fishing vessels to land their catch at the nearest available designated port in the WCPO following the conclusion of fishing activity. However, acknowledging that a prohibition on transshipment is unlikely at this point, WWF supports an unequivocal 100% observer monitoring requirement for all transshipments.

WWF further encourages the Commission to consider the recommendations of the IWG-ROP to adopt the proposed amendments to CMM 2009-06, to establish additional reporting requirements for receiving vessels operating in the Convention Area.¹² WWF also supports the guidelines and suggested format for reporting to the Secretariat, although WWF would also encourage the development of fully electronic templates.¹³ Most importantly, WWF strongly recommends that, due to the prominent compliance monitoring role of transshipment observers, that they receive two-way communication devices described in the following section as a matter of urgent priority.

WWF also recommends that transshipment requirements be buttressed by verification and validation of transshipment activities through the use of a vessel monitoring system (VMS) and supplemented by an operating automated identification system (AIS). If through investigation of suspected unreported transshipment activity indicated by VMS and corroborated by AIS, it is determined that transshipment activity was conducted in violation of transshipment rules, the offending vessel should be subject to sanctions up to and including listing on the IUU vessel blacklist.

Observer Safety and Security

In the course of their official duties, observers are vulnerable to assault, obstruction, resistance, delay, intimidation, or interference, which are all very clear violations under CMM 2007-01 Attachment K, Annex 1, Paragraph 1(i). Thus, observer providers and authorities have a discrete obligation to address alleged violations reported by observers quickly and effectively. When national or regional observer programmes and other authorities fail to address these reported violations effectively and in a timely manner, it signals to the observer that providers either do not care or are incapable of providing support for their welfare. Moreover, the failure of providers or the national authorities to act on a report has an additional effect of signalling to vessel captains and crew that they may conduct violations against observers without retribution.

Following recent tragedies involving observers both in the WCPFC and IATTC Convention areas, the WCPFC must urgently address observer safety and security standards. The WCPFC must immediately adopt standards that include the means for an observer to independently report or otherwise signal in real time any emergency including interference or assault. Currently available technology could allow direct and independent communication between observers and observer providers. Many of the devices also operate as a waterproof Personal Locator Beacons (PLBs) in cases of an accidental overboard situation. Furthermore, observer programmes must also urgently adopt an Emergency Action Plan (EAP) that designates procedures to ensure that observer emergencies can be quickly and effectively responded to by authorities. The technology tools are effectively useless to the observer if there is nobody designated to respond on the other end. WWF believes that every observer should be issued one of these devices and observer programmes must have a well-defined and effective EAP in place prior to any observer deployment.

Lastly, the WCPFC must also implement a recordkeeping and reporting mechanism that requires any violations against observers to be forwarded to the WCPFC Secretariat (Secretariat) as soon as possible after the incident has occurred. By informing the Secretariat, the Secretariat may then alert and potentially coordinate with other observer programmes immediately, such as in cases of man overboard situations that require search and recovery coordination. The Secretariat could also offer assistance to the programme and the observer where possible as well as provide follow-up to ensure corrective actions have been taken on behalf of the observer. More importantly, the Secretariat could

maintain a record of vessels and crewmembers involved in violations against observers, which could be made available to observer providers to better assess future placement of observers and avoid potential escalation of threats against observers.

WWF recommends the WCPFC:

- Further implement of a binding, consistent, and consolidated set of standards for the ROP;
- Develop an analysis of the observer programme in the context of proper management, including an analysis of different sustainable funding models;
- Endorse an analysis of levels of observer coverage required to achieve management or compliance purposes while ensuring that the metrics and methodologies used support development of appropriate comparative analyses;
- Support or endorse the use of VMS and AIS to verify and validate 100% observer coverage on all transshipments as well as supporting strong penalties and sanctions for violations;
- Mandate authorised observer programmes to provide observers before any boarding for a trip;
 - An approved independent two way communication satellite device; and
 - A waterproof personal lifesaving beacon
- Mandate authorised observer programmes to develop and implement an “Emergency Action Plan” (EAP) to accommodate any observer emergency including interference or assault; and
- Mandate recordkeeping and reporting requirements that compel all CCMs to report all instances of violations against of observers as soon as possible to the WCPFC Secretariat.

Pacific Bluefin Tuna

Technical reports of both the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) and the IATTC indicate that the Pacific Bluefin tuna stock is in extremely poor condition. The ISC confirmed that overfishing is occurring, the stock is heavily overfished, and its spawning stock biomass has declined by as much as 96%.¹⁴ This is a clear indicator that the management measures taken both in the Western and Central Pacific and in the Eastern Pacific are proving insufficient to conserve the biological integrity of this stock. The IATTC and WCPFC must assume their share of responsibility.

The last assessment confirms that the stock is highly depleted, that fishing mortality exceeds all reasonable proxies for F_{msy} . The recovery of the stock may be further delayed if the current scenario of low recruitment continues which is heavily reliant on a major adult cohort in the population. While the WCPFC adopted conservation measures calling for reductions in catch for Pacific bluefin tuna of <30 kg in size, conservation of spawning stocks is also needed.

WWF maintains deep concerns regarding this stock with an aim of restoring and rebuilding this ecologically, sociologically, and economically important fishery resource. The current science strongly indicates that there is only one reproductive cohort that is reaching the end of its life. Additionally, about 90% of the stock fished is comprised of young fish that have not yet reproduced. Thus, the continued reproductive success of the entire stock depends on the reproductive success of a single cohort, leaving the stock in a critical situation that may seriously jeopardize recruitment.

WWF encourages close monitoring of fisheries and catch as well as completion of a revised stock assessment for Pacific bluefin in early 2016. WWF urges both IATTC and WCPFC to adopt a long-term Pacific bluefin tuna recovery plan targeting $20\%SSB_{F=0}$, and harvest control rules that are well-defined, pre-agreed, and contain mandatory actions for a determined course of management action in response to changes in indicators of stock status with respect to reference points.

The WCPFC, consistent with the best scientific information, must act to ensure that fishing mortality on Pacific bluefin tuna be urgently reduced, especially on juveniles, in order to reduce the risk of

recruitment collapse and allow spawning stock to rebuild. If the WCPFC fails to adopt sufficient management measures at this meeting, it may be forced to consider a prohibition on continued fishing of the stock in the near future.

WWF recommends that the WCPFC:

- Adopt a long-term Pacific bluefin tuna recovery plan targeting at least 20%SSB₀ by 2030; and
- Implement a size limit for Pacific bluefin tuna of >30kg to conserve spawning stock in addition to the current temporary management measure.

¹ Clarke, Shelley C., *et al.* (2013). Population Trends in Pacific Oceanic Sharks and the Utility of Regulations on Shark Finning. *Conservation Biology*, Volume 27, Issue , pages 197–209, February.

² See Stevenson, C., *et al.* (2007). High apex predator biomass on remote Pacific islands. *Coral Reefs* 26: 47-51; See also Friedlander, A.M. and DeMartini, E.E. (2002). Contrasts on density, size, and biomass of reef fishes between the northwestern and the main Hawaiian islands: the effects of fishing down apex predators. *Marine Ecology Progress Series* 230: 253-264.

³ WCPFC (2014) Summary Report of the Eleventh Regular Session of the Western Central Pacific Fisheries Commission (Adopted version) – 29 July 2015, WCPFC, Apia, Samoa, 1-5 December 2014. Attachment S. p.262.

⁴ Clarke, Shelley C. (2013). Towards an Integrated Shark Conservation and Management Measure for the Western and Central Pacific Ocean. WCPFC-SC9-2013/ EB-WP-08. WCPFC-SC, Pohnpei, Federated States of Micronesia, 6-14 August 2013.

⁵ *Id* at 24-27.

⁶ Into the deep: Implementing CITES measures for commercially-valuable sharks and manta rays. TRAFFIC Wildlife Trade Monitoring Network. Available from <http://www.traffic.org/home/2013/7/30/new-study-gets-its-teeth-into-shark-trade-regulations.html>.

⁷ Mundy-Taylor, V., *et al.* (2014). CITES Non-detriment Findings Guidance for Shark Species. A Framework to assist Authorities in making Non-detriment Findings (NDFs) for species listed in CITES Appendix II. Report prepared for the Germany Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN).

⁸ WCPFC Scientific Committee (2009) Monitoring the Effectiveness of Conservation and Management Measures for Bycatch, EB-WP-09, Port Vila, Vanuatu, 10-21 August 2009.

⁹ WCPFC (2012) Performance Assessment of RFMO Bycatch Governance: Criteria Suite Design and Results for Assessment of the WCPFC, WCPFC8-2011-OP/02, 10 August 2012, WCPFC, Guam, USA, 26-30 March 2012.)

¹⁰ See e.g. Lewison, Rebecca L. *et al.* (2014). Global patterns of marine mammal, seabird, and sea turtle bycatch reveal taxa-specific and cumulative megafauna hotspots. *PNAS* 2014 ; published ahead of print March 17, 2014, doi:10.1073/pnas.1318960111, March; Wallace, Bryan P. *et al.* (2013). Impacts of fisheries bycatch on marine turtle populations worldwide: toward conservation and research priorities. *Ecosphere* 4:art40. <http://dx.doi.org/10.1890/ES12-00388.1>, March; Shamblin B.M., *et al.* (2014) Geographic Patterns of Genetic Variation in a Broadly Distributed Marine Vertebrate: New Insights into Loggerhead Turtle Stock Structure from Expanded Mitochondrial DNA Sequences. *PLoS ONE* 9(1): e85956. doi:10.1371/journal.pone.0085956. January.; Beverly, Steve, and Mark Schreffler. (2012).

Preliminary comparison of fishing efficiency of circle hooks and Japan tuna hooks in the Port Moresby, Papua New Guinea-based longline fishery. *Unpublished. Available on request.*; WWF. (2011). Results of Testing Circle Hook in the Tuna Long Line Fisheries in the Offshore Waters of Central and Southeast Vietnam, Ministry of Agriculture and Rural Development, Research Institute of Marine Fisheries. *Unpublished. Available on request.*

¹¹ Andraka, Sandra, *et al.* (2013) Circle hooks: Developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. *Biological Conservation*, Issue 160, pages 214–224, March.

¹² WCPFC Technical and Compliance Committee (2015) Independent Working Group – Regional Observer Programme (IWG-ROP) Meeting Report, WCPFC-TCC11-2015-17, Attachment 5, Pohnpei, Federated States of Micronesia, 23-29 September 2015.

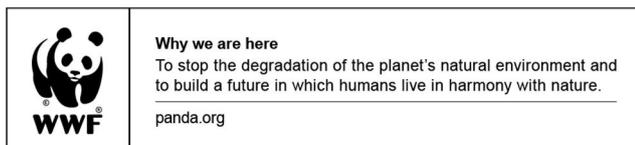
¹³ WCPFC Technical and Compliance Committee (2015) Independent Working Group – Regional Observer Programme (IWG-ROP) Meeting Report, WCPFC-TCC11-2015-17, Attachment 6, Pohnpei, Federated States of Micronesia, 23-29 September 2015.

¹⁴ Yukio Takeuchi, *et al.*, 2014, Updated future projections of Pacific bluefin tuna with draft results to answer the requests from NC9..ISC/14/PBFWG-1/10re.

Our Smart Fishing Vision and Goals:

Vision: The world's oceans are healthy, well-managed and full of life, providing valuable resources for the welfare of humanity.

2020 Goals: The responsible management and trade of four key fishery populations results in recovering and resilient marine eco-systems, improved livelihoods for coastal communities and strengthened food security for the Planet.



For more information

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