





# **Smart Fishing Initiative**

## **WWF POSITION**

10th Regular Session of the Scientific Committee (SC) of the Western Central Pacific Fisheries Commission (WCPFC): Majuro, Republic of the Marshall Islands – August 6-14, 2014

## Introduction

The World Wide Fund for Nature (WWF) would like to once again thank the Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee (SC) for the opportunity to attend the 10<sup>th</sup> Regular Session of the SC (SC10) 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. Conservation of these ecologically, sociologically, and economically important fishery resources ultimately depends on the timely and efficient collection, assessment, and analysis of fisheries data and information. Therefore, science developed through, vetted, and provided by the SC represents a critical component for the development and implementation of scientifically sound management measures. WWF remains encouraged and impressed by the transparency, integrity, and general quality and quantity of scientific advice that the SC provides to the WCPFC decision making process.

WWF would like to offer the following position and recommendations to the SC regarding significant scientific issues that WWF deems important.

## Reference Points, Harvest Control Rules, and Harvest Strategies

WWF remains supportive of the continued work of the WCPFC and subsidiary bodies in pursuing the implementation of Reference Points (RP), Harvest Control Rules (HCR), and Harvest Strategies (HS). At this meeting, WWF encourages SC10 to further endorse and support the adoption of explicit Limit Reference Points (LRPs) and Target Reference Points (TRPs) for all WCPO fishery stocks under WCPFC authority as well as consider steps toward implementation of effective HCRs.

Reference points provide management decision-makers an objective tool to determine whether a fish stock size is becoming too small or fishing pressure is becoming too great. WWF notes that the WCPFC has discussed and considered RPs since 2006 and that, while the SC has made several recommendations to the WCPFC on appropriate RPs, the WCPFC has failed to adopt formal explicit RPs. Furthermore, while stock assessments conducted by SPC use  $B_{MSY}$  and  $F_{MSY}$  as implicit limit reference points and provide advice to the WCPFC, these proxies do not represent limits consistent with the recommendations of the United Nations Fish Stocks Agreement (UNFSA) and more refined RPs are justified based on the available scientific information.<sup>1</sup>

The SC should strongly recommend the implementation of RPs and HCRs as a priority for the sustainable management of the fishery resources in the WCPO. Existing science supports the implementation of well-defined and precautionary biologically-based LRPs and WWF generally supports the previous recommendations of the SC.

WWF acknowledges the complexity of establishing TRPs, given the multiple factors that go into their consideration. However, while TRPs require additional consideration of socioeconomic considerations, current understanding of the biological and socio-economic conditions does not prevent the implementation of sufficiently precautionary interim TRPs at this time. WWF encourages the SC to recommend a precautionary interim TRP. The interim TRP would serve as an advisory benchmark under which a more refined TRP could be established. Most significantly, all the necessary information to implement such a benchmark TRP currently exists.

WWF continues to strongly urge the WCPFC and subsidiary bodies to formally endorse the adoption of robust and effective LRPs, TRPs, and HCRs. The adoption of explicitly determined RPs for at least the four key tuna species, namely skipjack (SKJ), albacore (ALB), yellowfin (YFT), and bigeye (BET), must be considered an absolute priority for the sustainable management of these resources in the WCPO. Additional steps should also be taken by the SC to establish RPs for other non-tuna species as well. Consistent with previous WCPFC advice, WWF encourages SC10 to review available information on this topic and provide advice on the progress on RPs and HCRs for the WCPFC's consideration.<sup>2</sup>

## WWF recommends that the SC:

- Support the designation of Limit and Target Reference Points as a priority for proper management of stocks under WCPFC authority;
- Further recommend precautionary B-based Limit Reference Points<sup>3</sup> (preferably based on Spawning Biomass)<sup>4</sup> for all WCPO fish stocks under its authority;
- Endorse adoption of precautionary F-based Limit Reference Points as an <u>interim</u> measure to attempt to control the exploitation rate for all WCPO fish stocks under its authority;<sup>5</sup>
- Recommend interim precautionary Target Reference Points as a benchmark for further consideration by the MOW and WCPFC in 2013;
   and
- Consider the probability of breaching the Limit Reference Points and limiting this to 10% or less as a precautionary measure.<sup>6</sup>

## **Tropical Tunas**

In December 2013, WCPFC10 adopted Conservation and Management Measure (CMM) 2013-01 in an attempt to address continuing conservation challenges involving BET.<sup>7</sup> While WWF maintains that the policy choices made at previous WCPFC Regular Meetings continue to fail to achieve meaningful conservation of BET, we believe that there could be substantial improvements to the understanding of the impact of Fish Aggregating Devices (FADs) if the SC recommends the aggressive pursuit of improved monitoring, surveillance, and general research involving FADs. While there are ongoing efforts within the SPC and PNA to pursue greater understanding of FAD dynamics, we believe that the SC should support a strong recommendation 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

Because a significant reduction in fishing mortality on BET remains elusive, additional measures to reduce the fishing mortality on BET must be considered. While WWF supports precautionary measures to protect vulnerable stocks like BET, WWF also believes that a better understanding of FAD dynamics would help inform the "additional and alternative targeted measures" that the FFA seeks to implement.

#### WWF recommends the SC:

• Endorse the further research and monitoring of FADs used in fisheries that target bigeye, yellowfin, or skipjack tuna stocks.

### **Sharks**

Many shark species in the WCPO remain subject to high levels of fishing mortality that current stock assessment trends suggest could be unsustainable. Sharks play a critical role in the WCPO marine ecosystem as apex predators and indicators of ecosystem health. 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.

WWF recommends the SC endorse measures proposed during 2013 to ensure that sharks stocks are not adversely impacted in the region, while also ensuring that some key shark species are not being substantially depleted. Therefore, we encourage the SC to recommend precautionary measures to reduce fishing mortality consistent with recommendations made previously at SC9 and drawn from the discussion regarding a proposed integrated shark CMM.<sup>10</sup> By way of reference, we again endorse the recommendations contained in sections 4.1 and 4.2 of the paper presented by Dr. Shelley Clarke to the WCPFC in 2013 in addition to measures recommended below.<sup>11</sup>

#### WWF recommends the SC:

- 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;
  - o 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;
  - o Require, through observers programs, recording what gear is used in longline activities including the use of wire traces and any multimonofilament traces in order to avoid bite-off by sharks.
  - o Introduce a scheme to document the capture and trade of sharks whereby it allows for traceability through to the final market state; and
  - o Ensure the implementation requirements for CITES listed sharks are fully understood and planned for in preparation for CITES Parties and Non-Parties trading with CITES Parties needing to make Non-detriment (Sustainability) and legal findings in order to issue export permits for trade in these species by September 2014.<sup>12</sup> Where WCPFC members make non-detriment findings for shark species they should share with the WCPFC details of the basis of those findings.<sup>13</sup>
- Encourage the development of reference points and management for non-target species, including all shark species, as envisaged under Articles 5 and 10 of the WCPF Convention.
- Encourage CCM's to report all shark catches from domestic fleets operating in territorial and archipelagic waters.

## Pacific Bluefin Tuna

Technical reports of both the ISC and the IATTC indicate that the North 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%. 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.

WWF maintains strong 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 are 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.

If the WCPFC fails to adopt sufficient management measures, the stock will be subject to potential collapse. Should the WCPFC fail to adopt sufficient management measures that are consistent with scientific advice, the fishery could ultimately be subject to more draconian management measures such as extended closed seasons and areas until such time that managers can prepare a rigorous and scientifically defensible recovery plan.

The SC, consistent with the best scientific information, must recommend that fishing mortality on North 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 sufficient management measures are not adopted, the SC should consider that fishing should not be allowed to continue on such a depleted stock.

#### WWF recommends that the SC:

- Recommend a long-term Pacific bluefin tuna recovery plan, candidate limit and target reference points, and harvest control rules that are welldefined, 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.
- Recommend juvenile Pacific bluefin tuna catch be reduced by at least 50% from 2002-04 harvest levels.
- Recommend a moratorium on fishing for North Pacific bluefin tuna in the event that scientifically defensible management measures are not clearly and firmly implemented.

#### **Turtles**

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, and that the cumulative impact of increasing numbers of longline vessels in the WCPO on sea turtles remains problematic. 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.

WWF believes that there exists a strong basis for revising CMM 2008-03 to: ensure more suitable requirements for the determination of optimal bycatch mitigation packages (i.e. circle hooks and/or other measures) for individual fisheries; reduce the ambiguity in language; and 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." While CMM 2008-03 requires all longline vessels to carry turtle dehookers 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. 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.<sup>17</sup> Specifically, recent studies in the Eastern Pacific Ocean 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.<sup>18</sup>

With respect to sea turtles, WWF recommends the SC:

- Review all pertinent scientific data and reporting related to sea turtle bycatch and clarify whether a scientifically defensible interim catch rate can be assigned, in particular, to consideration of sea turtle population status and recovery requirements, and if such a determination cannot be made, to recommend a catch rate as close to zero as possible;
- Endorse the consideration of CMM 2008-3 revisions aimed at:
  - o 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.
  - o introducing new binding measures, including stronger measures for conducting research on mitigation techniques and reporting on sea turtle impacts, to be implemented on an interim basis pending the determination of optimal mitigation packages.
  - o setting an appropriate interim catch rate that would trigger moveon provisions.

#### Conclusion

WWF calls on the SC10 to continue to address scientific issues in the WCPFC CA such that they ensure the quality, objectivity, utility, and integrity of information. With respect to each of the agenda items addressed at the SC10 meeting, we call on the SC members to carefully and genuinely address each issue with logic, intellectual rigor, personal integrity, and an uncompromising respect for truth.

The WCPFC shares the distinction as both the youngest RFMO and also, arguably, the most effective. However, we all must constantly quard against the complacency that leads to poor decision making resulting in a lack of management action and a risk of collapsing fish stocks which is occurring in other regions.

The WCPFC currently maintains the ability and opportunity to chart the course towards sustainable fishery resources, especially tuna, in the WCPO. Science plays an irreplaceable role in the WCPFC process by representing the foundation of all decision making by the WCPFC. The WCPFC and its subsidiary bodies must continually promote and adopt strong and effective conservation and management action to maintain and rebuild tuna stocks, implement appropriate monitoring and enforcement measures, promote a viable tuna industry, and support vibrant coastal communities throughout the South Pacific.

## **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



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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For more information

Alfred "Bubba" Cook WCP Tuna Programme Manager acook@wwf.panda.org Tel: +6799035008

WWF Smart Fishing Initiative Moenckebergstr. 27 20095 Hamburg

Tel. +49 40 530 200 310

www.panda.org/smartfishing

#### References

<sup>5</sup> *Id.* (Fishing Mortality (F) relates to the proportional impact of fishing on the total deaths in a stock during a given period.)

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<sup>8</sup> Clarke, Shelley C., et al. (2013). Population Trends in Pacific Oceanic Sharks and the Utility of Regulations on Shark Finning.

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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.

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<sup>12</sup> 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.

<sup>13</sup> 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).

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.

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

<sup>16</sup> 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.)

<sup>17</sup> 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.131896011, 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.

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<sup>&</sup>lt;sup>1</sup> United Nations Fish Stocks Agreement, 34 ILM 1542 (1995); 2167 UNTS 88. (The fishing mortality rate which generates maximum sustainable yield should be regarded as a minimum standard for limit reference points. (Annex II UNFSA 1995)).

WCPFC (2013) Summary Report of the Tenth Regular Session of the Western Central Pacific Fisheries Commission (Adopted version) –

<sup>24</sup> April 2014, WCPFC, Cairns, Australia, 2-6 December 2013. p.23.

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WCPFC-SC5-2005/ME-WP-01. (Biomass (B) represents the weight of all fish in the water.)

<sup>&</sup>lt;sup>4</sup> Id. (Spawning biomass (SB or SSB) is the weight of all mature [reproductive and generally female] fish in the water, or [preferably] the reproductive potential of the population. Gives a better indication than B of the reproductive capacity of the stock, and tends to be more

<sup>&</sup>lt;sup>6</sup> United Nations Fish Stocks Agreement, 34 ILM 1542 (1995); 2167 UNTS 88. (Fishery management strategies shall ensure that the risk of exceeding limit reference points is very low. If a stock falls below a limit reference point or is at risk of falling below such a reference point, conservation and management action should be initiated to facilitate stock recovery. Fishery management strategies shall ensure that target reference points are not exceeded on average. (Annex II UNFSA 1995)).