



Recommendations to the 13th Regular Session of the Western and Central Pacific Fisheries Commission

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Overview

The Western and Central Pacific Fisheries Commission (WCPFC) has a mandate to sustainably manage and ensure long-term conservation of all highly migratory fish stocks, including tunas and sharks, in the western and central Pacific Ocean. However, the Commission's handling of some migratory fish stocks currently falls short of that mandate and global expectations of best practices, though the WCPFC Convention text incorporates relatively modern principles of fisheries management.

Despite strong scientific and management advice to the Commission, the conservation and management measures (CMMs) now in place are inadequate to end or prevent overfishing of some key stocks. Two of the six commercial tuna stocks managed by WCPFC—Pacific bluefin and bigeye tuna—continue to be fished unsustainably. In addition, while some progress has been made on the conservation and management of sharks, much more is needed to ensure that both targeted and incidental catch of sharks is sustainable.

Ensuring sustainable fisheries in the WCPFC Convention Area requires strong conservation and management actions and strict compliance with measures already adopted. The Pew Charitable Trusts urges all Commission Members, Cooperating Non-Members, and Participating Territories—known collectively as CCMs—to cooperate and compromise in order to:

- Adopt elements of the harvest strategy approach that would specify measurable management objectives, ensure that the risk of breaching limit reference points is no greater than 10 percent, and rebuild Pacific bigeye to its limit reference point within six to eight years.
- Immediately implement a two-year moratorium on all commercial fishing for Pacific bluefin tuna.
- Effectively manage fish aggregating devices (FADs).
- Adopt timely electronic reporting and electronic monitoring standards that meet existing requirements for scientific data provision and compliance.
- Ban transshipment at sea until authorities can ensure that it is verifiable and legal.
- Consider science-based catch limits and improve data collection for sharks.
- Implement a complete ban of wire trace and shark lines.
- Ensure that all targeted shark fisheries provide comprehensive management plans.
- Prohibit retention of manta and mobula rays, and adopt live release guidance for these species.
- Task a small working group to develop a port State measures CMM that can be considered by the Commission in 2017.
- Establish a procedure that permits the addition of vessels found to be engaged in illegal, unreported, and unregulated fishing to the IUU vessel list between annual meetings.
- Improve transparency in Commission processes by allowing observer access to compliance monitoring scheme discussions.

Recommendations

Adopt harvest strategies to protect healthy stocks and rebuild overfished stocks, and effectively manage fish aggregating devices.

Fisheries management in the western and central Pacific must take into consideration the importance of various stocks to the economies of the region and the well-being of the marine ecosystem. In 2014, catches of tuna in the region totaled about 2.85 million metric tons (with an estimated value of more than US\$22.68 billion at the final point of sale). That represents 57 percent of the global tuna catch.¹

The Commission's current approach to fisheries management is not adequate to preserve that value or the sustainability of the stocks. Healthy stocks, such as skipjack—which in 2014 accounted for 68 percent of the catch in the region with a value of \$2.3 billion—should be managed with a long-term view, rather than to maximize short-term gains. Meanwhile, depleted and overfished stocks of Pacific bluefin and bigeye tuna require urgent action beyond business as usual.



Ensure the adoption of well-designed harvest strategies

Members of the Commission face important decisions that will determine the degree to which harvest strategies designed in the western and central Pacific are suitably precautionary and promote the long-term sustainability of the stocks. Adoption of CMM 2014-06 two years ago committed the Commission to developing and implementing a six-part harvest strategy approach for each of the key tuna stocks. Last year, the Commission followed that decision by adopting a workplan that established timelines for decision-making. Separately, the WCPFC Chair has circulated a concept paper to adopt a bridging CMM for the transition from the tropical tuna measure that expires in 2017 to implementation of harvest strategies. Harvest strategies are the next innovation in fisheries management. If designed correctly, they benefit both the fish and fishermen.

Reflecting the importance of these stocks, the Commission should adhere to the timelines in the harvest strategy workplan to:

- **“Record”² stock-specific management objectives that set measurable goals, including:**
 - Target reference points should be met with 80 percent or greater likelihood.
 - Biological objectives, such as maintaining stocks at levels that promote sustainability, should be given greater weight than other objectives.
- Adopt acceptable levels of risk of breaching limit reference points that are no more than 10 percent,³ and in the case of Pacific bigeye, 5 percent, to recognize the need to minimize the likelihood these stocks will fall into the “danger zone.”
- Adopt a timeline to rebuild Pacific bigeye to its limit reference point in six to eight years—a goal that is achievable given the biological characteristics of the stock—as an interim step to rebuilding the stock to a target reference point set to be agreed upon in 2017.
- Adopt a precautionary target reference point for South Pacific albacore.
- Endorse the concept of a bridging measure to manage the transition from the tropical tuna CMM that expires in 2017 to implementation of harvest strategies. Specify a plan to agree on details to be included in the measure.

Immediately implement a 2-year moratorium on all commercial fishing for Pacific bluefin tuna

The latest stock assessment for Pacific bluefin tuna, released in 2016, found that nearly a century of overfishing has depleted the population to just 2.6 percent of its historic unfished size. Despite this 97 percent decline, the CMM recommended by the Northern Committee would not end overfishing or implement key elements of a long-term harvest strategy for the species. In fact, an addition to the proposed measure would allow the catch of large bluefin to increase, despite scientific projections showing that there is a less than 1 percent chance that the population will recover under current management measures.

The full WCPFC Commission and its members have the ultimate responsibility for fulfilling the Convention mandate to “maintain or restore stocks at levels capable of producing maximum sustainable yield.” In light of the failure of the Northern Committee to recommend a CMM that would meet this mandate, the Commission should:

- **Not accept the Northern Committee recommendations, and return the matter to the Committee for consideration of appropriate management measures that would end overfishing, fulfill the mandates of the Convention and CMM 2014-06, and rebuild the population to healthy levels.**
- **Implement an initial two-year moratorium on commercial fishing of Pacific bluefin that would be extended until the Commission:**
 - **Agrees on a recovery plan that will rebuild the population to $20\%SB_{current}$ $F=0$ within eight years (two generations time, as per best practice) and then allows the stock to recover further to a target reference point of at least $40\% SB_{current}$ $F=0$ by 2030.**
 - **Adopts limit reference points for Pacific bluefin of at least $20\%SB_{current}$ $F=0$ and a related F_{limit} point. Limit reference points should be defined as the points at which, if breached, the fishery will be suspended and scientific monitoring will be instituted until the population returns to the limits.**
 - **Adopts target reference points for Pacific bluefin of at least $40\% SB_{current}$ $F=0$ and a related F_{target} point to provide an appropriate buffer to avoid breaching the limit reference points.**
 - **Adopts harvest control rules that lead to a less than 5 percent chance of breaching the limit reference points and that have at least a 90 percent chance of achieving the target reference points.**

The Pacific bluefin population will not recover under current measures and without additional help. If the measures noted above are not in place by 2018, an international trade ban through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) listing should be pursued as the only remaining option to safeguard the species.

Effectively manage fish aggregating devices

Developing measures to effectively manage FADs must be an urgent priority for the Commission and part of a balanced strategy to reduce fishing mortality among juvenile and adult bigeye. Nearly all bigeye harvested by purse seine vessels are juvenile fish taken around FADs. The impact can be seen in the mortality rate for juveniles, which was twice that of adults in the 2014 assessment,⁴ the most recent full assessment for the stock. Bigeye mortality decreased in the purse seine fishery in 2015, but the conditions that brought that about were not linked to stock management. Oceanographic conditions associated with a strong El Niño may have made bigeye less available in the eastern portion of the Convention Area.⁵ In addition, some key purse seine fleets did not fish as much as they had in recent years, though they may return to higher levels of effort. Still, even with the unique

circumstances of 2015, scientists estimated that the stock continued to experience overfishing and remained overfished at about 16 percent of its unfished spawning biomass. That is below the WCPFC limit reference point of 20 percent of unfished spawning biomass. The need to adopt measures to directly reduce and manage juvenile mortality remains urgent. With the tropical tuna CMM expiring in 2017, the Commission this year should:

- Review the progress of the FAD Working Group and request further development of management options to directly control the catch of bigeye in the purse seine fishery. Those management options should specify clear steps and timelines and lead to a recommendation to the Commission’s annual meeting in 2017.
- Adopt a FAD research plan to inform management decisions, which includes analyses of bigeye hot spots and how vessel characteristics influence bigeye catches.
- Agree on a plan to physically mark FADs with unique codes to improve data collection, considering the recommendations in the consultant’s report on FAD marking and identification.



Adopt electronic reporting and electronic monitoring standards

Tuna longline fisheries in the western and central Pacific are not effectively managed today, in part because current mechanisms and policies do not ensure sufficient and timely submission of critical data. In 2014, longline vessels caught fish with an end value of almost \$4 billion in these waters.⁶ Given the economic contributions of that sector of the fishery, resource managers should be motivated to ensure its long-term sustainability by addressing gaps in the timely and accurate tracking of longline fishing catch and effort.

Promising new technologies can make required reporting and monitoring much faster and more effective. Information on catches can be relayed in near real-time in more standardized formats using electronic reporting (ER) systems. In addition, the WCPFC can expand observer coverage requirements with limited additional onboard personnel by using proven electronic monitoring (EM) technology.

Technological advances, coupled with the increasing cost-effectiveness of ER and EM systems, can help improve fisheries management and ensure high levels of compliance with conservation and management measures. Near real-time electronic catch reporting improves accountability and accuracy, benefiting authorities, fishing boat owners, and associated industries alike. For these reasons and more, many WCPFC member countries have already embraced these technologies as effective management tools for their domestic fisheries, and more are likely to follow.

Pew calls on members of the WCPFC to:

- **Adopt electronic reporting and electronic monitoring standards that meet existing scientific data provision and compliance requirements to allow interested CCMs to commence reporting electronically in a manner aligned with WCPFC requirements.**
- **Adopt guidelines on EM program components, including steps to ensure that EM coverage equates to coverage under the Regional Observer Program.**
- **Require 100 percent electronic reporting to improve timeliness and accuracy of catch reporting.**
- **Adopt strategies and time frames for the design and implementation of electronic reporting and monitoring systems, including training programs and how best to ensure long-term operational sustainability.**
- **Require 100 percent observer coverage on longline vessels, as now required on purse seine vessels, by complementing onboard human observers with electronic monitoring for science and compliance.**



Ban transshipment at sea until it can be ensured that it does not contribute to IUU activity

Illegal, unreported, and misreported transshipment at sea, particularly within the longline sector, contributes significantly to IUU activity unless the movement of catch from vessel to vessel is adequately regulated and controlled. Within the western and central Pacific Ocean region alone, an estimated \$142 million a year of tuna and tunalike product is involved in illegal, at-sea transshipment activities.

Pew has advocated for regional fishery management organizations (RFMOs) to ban all forms of at-sea transshipment of fish until there is clear evidence that such operations are legal and verifiable and do not contribute to IUU fishing. Verification remains difficult. Although there is a 100 percent observer coverage requirement on carrier vessels, the WCPFC Secretariat does not currently receive reports from carrier observers, nor does it maintain a database for this information. That means that no cross verification can be done of seafood product reportedly transshipped between vessels on the high seas.

Data and information on transshipment are collected and relayed to various entities, but no single body, including the WCPFC Secretariat, maintains a full and complete picture of this activity from the point of catch to the point of offloading. As such, additional controls to ensure full and effective monitoring of transshipments at sea are needed.

Some RFMOs have banned transshipment at sea for some authorized vessels, such as purse seiners or small-scale longline vessels, demonstrating that such bans are feasible and economically viable. WCPFC member countries have championed similar provisions for the longline sector or called for complete transshipment bans, but so far the Commission has not been able to implement the measures needed to fully control transshipment at sea.

Pew calls on members of the WCPFC to:

- **Ban transshipment at sea until it can be ensured that it is verifiable and legal. Among other actions, guidelines should be established to determine the impracticability for certain vessels to operate without being able to transship on the high seas.**
- **As a first step, establish formal observer reporting processes, procedures, and forms for observers on carrier vessels to ensure that every high seas transshipment reported via declarations can be cross validated by the Secretariat as to species, quantity, and location.**

Strengthen conservation and management of sharks.

About 100 million sharks, an unsustainable number, are caught and killed in commercial fisheries each year.⁷ Whether this catch is highly sought after or unintended and unwanted, managers must take immediate action to stop the decline in shark populations and mitigate the damage that causes to marine ecosystems.

Until measures are in place to ensure that both targeted and incidental catch of sharks is sustainable, harvest of these animals should be avoided. Those caught should be released alive whenever possible. Fishing gear that increases the likelihood of shark catch, such as wire leaders and shark lines, should be prohibited, and research should be done to determine the best means of avoiding shark catch.

If CCMs are to continue to target sharks, or to catch sharks as bycatch, then the Commission must enact management measures that reflect the precautionary principle. In instances where limited population data for shark species result in uncertain stock assessment results, managers must implement precautionary measures, such as catch limits, that can safeguard these vulnerable stocks.

The Commission also should require that fins be naturally attached when sharks are landed. Adopting this global standard would allow for better enforcement of the WCPFC prohibition on shark finning. Such measures would ensure that all sharks in the Convention Area are sustainably caught and that WCPFC fisheries are not contributing to the global overfishing of sharks.

Consider science-based catch limits and improve data collection for sharks

Stock assessment analyses of shark species are often limited by inadequate datasets, which make it more difficult to formulate comprehensive scientific advice. For example, a limited number of available data sets severely constrained the recent assessment of the South Pacific blue shark. As a result, at its 2016 meeting, the Scientific Committee noted that no management advice could be provided for this stock. In order to safeguard blue sharks until a more reliable assessment can be conducted, the Commission must implement a precautionary cap of effort at current levels. Additionally, improvements to data recording and reporting on the catch of shark species will help ensure sustainable fishing of stocks.

Pew calls on the Commission to:

- **Consider capping the fishing effort for blue sharks at current levels.**
- **Expand observer coverage for longline fleets operating in the Convention Area.**
- **Consider the adoption of a “no data, no fish” measure for sharks, which would prohibit CCMs that do not submit landing data on key shark species from retaining shark catches.**

Prohibit the use of wire trace and shark lines

CMM 2013-08 and CMM 2011-04 prohibit retention of silky sharks and oceanic whitetip sharks in the Convention Area. The Commission implemented these measures to drastically reduce fishing mortality of these highly vulnerable species. However, a separate measure, CMM 2014-05, allows the choice of using either wire trace or shark lines, which undermines these efforts. Removing the choice of gear and imposing a ban of both gear types would reduce fishing-related mortality by 24 percent for silky sharks and 37 percent for oceanic whitetip sharks.⁸

Pew urges the Commission to:

- **Implement a complete ban on wire trace and shark lines to reduce catch of silky and oceanic whitetip sharks.**

Ensure that all targeted shark fisheries provide comprehensive management plans

Having clearly defined components in a shark management plan can safeguard highly vulnerable stocks and ensure an acceptable level of fishing mortality for all shark species caught.

Pew urges the Commission to:

- **Consider the components of a targeted shark fishery management plan recommended by the Scientific Committee in 2016 and propose a clear timeline for the review of submitted plans.**

Prohibit retention of manta and mobula rays and adopt live release guidance

The family Mobulidae, which includes manta rays and mobula rays, is extremely vulnerable to overfishing. Observer reports show that manta and mobula rays are often killed as bycatch in WCPFC purse seine fisheries; 284 metric tons were recorded from 1994 to 2009.⁹ WCPFC13 should strongly consider the 2016 Scientific Committee advice and recommend that purse seine observer training programs emphasize species identification of Mobulid rays.

Pew urges the Commission to:

- **Consider banning the retention of manta and mobula rays, and implement the Scientific Committee's 2016 recommendation to adopt guidelines for safe release of such rays when caught incidentally in WCPFC fisheries.**



Enhance CCM transparency and accountability.

Adopt minimum standards for port inspections

Port State measures (PSMs) are cost-effective tools to monitor compliance with management arrangements and prevent illegal fish from entering the market. PSM proposals have been considered by the Commission for several years and also were recommended as part of the WCPFC Performance Review in 2013. Recent efforts to adopt a CMM on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing have fallen short, but the entry into force this year of the international Port States Measures Agreement should provide a strong basis for establishing a regional scheme within the WCPFC. In addition, the Commission's Technical and

Compliance Committee this year discussed the paper produced by the Secretariat¹⁰ that summarizes measures adopted by other RFMOs. The Commission must move toward adopting a formal port State measures CMM.

Pew urges the Commission to:

- **Adopt a port State measures CMM as soon as possible. If there is no agreement at the annual meeting, task a small working group to develop text on a port State measures CMM that can be considered by the Technical and Compliance Committee in 2017 and formally adopted by the Commission next year.**

Enhance the effectiveness of the IUU vessel list

Placing a vessel on WCPFC's IUU vessel list helps to highlight, and ultimately deter, unacceptable practices in the Convention Area. However, the effectiveness of this list is diminished because vessels found to be engaged in IUU fishing can only be added once a year. As a result, IUU vessels operate unhindered until the Commission meets and CCMs put them on the list. The WCPFC permits vessels to be removed from the IUU vessel list between annual meetings. In the same spirit, the Commission should permit the listing of IUU vessels intersessionally.

Pew calls on members of the WCPFC to:

- **Establish a procedure that permits the addition of vessels found to be engaged in IUU fishing to the IUU vessel list between annual meetings.**

Compliance monitoring scheme and transparency

The Second Joint Meeting of Tuna RFMOs in 2009 recommended that organizations develop robust compliance review mechanisms so that the records of each member of the Commission could be examined on an annual basis. As a result, the WCPFC established a Compliance Monitoring Scheme (CMS) to ensure that CCMs meet their obligations. The CMS is designed to assess CCM compliance. It also helps identify areas where technical assistance or capacity building may be needed and determine aspects of conservation and management measures that require refinement or amendment for effective implementation.

When establishing the Compliance Monitoring Scheme, CCMs said the process would be conducted in a responsible, open, transparent, and nondiscriminatory manner. Such a process would ensure that the Commission was aware of information relevant to efforts to identify instances of noncompliance and hold parties accountable. To help meet transparency requirements detailed in Article 21 of the Convention and Rule 15 of the Rules of Procedures, the Commission should allow observer access to Compliance Monitoring Review discussions related to development of both Provisional and Final Compliance Monitoring Reports.

Pew urges the Commission to:

- **Improve transparency by formally adopting a process that will allow observer access to all discussions about the Compliance Monitoring Scheme related to development of CCM Compliance Monitoring Reports that occur at the Commission and the Technical and Compliance Committee meetings.**

Endnotes

- 1 The Pew Charitable Trusts, "Netting Billions: A Valuation of Tuna in the Western and Central Pacific Ocean" (September 2016), <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2016/09/netting-billions-a-valuation-of-tuna-in-the-western-and-central-pacific-ocean>.
- 2 The harvest strategy workplan for 2016 tasks the Commission with "recording" a range of candidate management objectives for use in the development of harvest strategies. Indicators developed to measure these objectives will be used to assess the performance of various harvest strategies. The use of "record" rather than "agree" indicates that agreement on final sets of objectives will be made at a later stage.
- 3 Both the U.N. Fish Stocks Agreement and WCPFC Convention recommend that the risk of breaching a limit reference point be set "very low," particularly in cases of greater uncertainty. "Very low" has been defined as less than 10 percent probability in other international fora, such as the Commission for the Conservation of Antarctic Marine Living Resources. Campbell Davies and Marinelle Basson in a 2008 paper to the WCPFC recommended risk levels of 5 or 10 percent "at the most." (*Approaches for Identification of Appropriate Reference Points and Implementation of MSE Within the WCPO*, Western and Central Pacific Fisheries Commission [2009], <https://www.wcpfc.int/system/files/SC5-ME-WP-03%20%5BReference%20Points%20and%20MSE%20-%20from%20SC4%5D.pdf>.)
- 4 Shelton Harley et al., *Stock Assessment of Bigeye Tuna in the Western and Central Pacific Ocean*, WCPFC-SC10-2014/SA-WP-01 (2014), https://www.wcpfc.int/system/files/SC10-SA-WP-01%20%5BBET%20Assessment%5D_rev1_25July.pdf.
- 5 The Western and Central Pacific Fisheries Commission, "Summary Report" (paper presented at the 12th Regular Session of the Scientific Committee, Bali, Indonesia, 3-11 August 2016), Page 45, Paragraph 9.
- 6 Grantly Galland et al., "Netting Billions: A Global Valuation of Tuna," The Pew Charitable Trusts (2016), http://www.pewtrusts.org/-/media/assets/2016/05/netting_billions.pdf. Dock value and end value in 2014 for longlines in the west-central Pacific Ocean were \$1.3 billion and \$3.9 billion, respectively.
- 7 Boris Worm et al., "Global Catches, Exploitation Rates, and Rebuilding Options for Sharks," *Marine Policy* 40 (2013): 194–204, <http://www.sciencedirect.com/science/article/pii/S0308597X13000055>.
- 8 Shelton Harley and Graham Pilling, "Potential Implications of the Choice of Longline Mitigation Approach Allowed Within CMM 2014-05," WCPFC-SC12-2016/EB-WP-06 (2016), <https://www.wcpfc.int/system/files/EB-WP-06%20%20MC%20sharks%20LL%20choice%20REV1.pdf>.
- 9 Oceanic Fisheries Programme, "Non-Target Species Interactions With the Tuna Fisheries of the Western and Central Pacific Ocean," WCPFC SC6-2010/EB-IP-8 (2010), http://www.wcpfc.int/system/files/WCPFC-SC6-2010-EB-IP-08_Non_target_spp_interactions.pdf.
- 10 WCPFC Secretariat, "Summary of Port State Measures Adopted by RFMOs," (2016), <https://www.wcpfc.int/system/files/WCPFC-TCC12-2016-22%20Summary%20of%20Port%20State%20Measures%20adopted%20by%20other%20RFMOs.pdf>.

For further information, please visit:

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