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Summary

The upcoming WCPFC annual meeting will review Conservation and Management Measure 2008-01 (CMM-2008-01), the “rescue plan” that was agreed in 2008 to safeguard the Pacific’s valuable tuna, and make decisions on how to strengthen this important conservation and management measure. It is clear that CMM-2008-01, which specifically focuses on addressing the overfishing of bigeye tuna and ensuring yellowfin tuna stocks are managed sustainably, is not going far enough to protect these precious marine resources. The measure was not ambitious enough to halt overfishing, and the many exemptions included in the measure have meant that it was practically impossible to achieve all of its objectives.

Findings presented at the WCPFC Scientific Committee (SC) meeting last year highlighted that despite the success of a number of elements within the current measure, purse seine fishing effort has continued to increase. Bigeye and yellowfin tuna stocks are in decline in the region and have recently been assessed as Vulnerable and Near Threatened by the International Union for the Conservation of Nature (IUCN)\(^1\). While skipjack tuna stocks are not described as being overfished according to current management target reference points there are concerns that high and increasing catches are having a significant negative impact on stock size.

The WCPFC now has an opportunity to be a global leader in tuna management by agreeing to take swift action to significantly strengthen this measure by following scientific advice to further cut fishing, by including additional high seas closures and banning the use of FADs in purse seine fisheries. By agreeing such measures the WCPFC will not only avoid the impending fisheries management disaster, but also meet the growing expectations of the market place in providing sustainable tuna.

Greenpeace therefore urges that the following key elements be included in the outcomes of the WCPFC’s 8th regular session:

- The permanent closure of the four high seas pockets to all fishing;
- a total ban on the use of FADs with purse seine fishing; and
- immediately implement a precautionary 50% cut in the fishing mortality for bigeye tuna including in long-line fisheries.

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1. Tuna: Key Resource for Pacific Island’s Economies

Tuna provides coastal states such as the Pacific Island countries, Philippines and Indonesia with much needed nourishment and a key source of economic activity. However, this vital resource is being fished into certain oblivion, primarily by countries outside the Pacific despite approximately 80% of the rich tuna grounds being found in the EEZs of Pacific Island countries. Countries such as Korea, Taiwan, Japan, the US and the EU – spurred on by corporate lobbyists – are sending increasing numbers of fishing vessels in their many thousands to plunder these waters. To make matters worse, tuna fishing vessels from outside the Pacific are in some cases literally stealing tuna – stealing one of the only exploitable resources from countries that are among the smallest, poorest, least developed, and most vulnerable in the world.

2. Tuna Melt-down

Despite the adoption of CMM-2008-01, tuna catches in the Pacific have continued to increase, signaling its failure to meet fishing effort reduction objectives. The provisional catch of tuna for 2010 was the 2nd highest annual reported catch (2,414,994 metric tonnes) for the Western and Central Pacific Ocean (WCPO), just 80,000 metric tonnes less than 2009’s record-breaking catch. This also represents almost 60% of the global tuna catch. These peaks are accompanied by the upward and record-setting trend of the purse seine fishery, with 2010 levels of purse seine fishing effort being significantly higher than in previous years.

Bigeye: According to the WCPFC Scientific Committee, the bigeye tuna stock has been reduced to less than half of its levels prior to 1970 through overfishing and the increased harvest of juveniles,
mainly from the use of FADs.\textsuperscript{3} Not only is overfishing occurring but based on the average recruitment in recent years, scientists are concluding that the bigeye tuna stock is also likely to be overfished and the spawning biomass is as low as 23% of its potential spawning level.\textsuperscript{4}

The SC meeting recognised that it is currently too early to quantitatively conclude whether CMM-2008-01 has reduced fishing mortality for bigeye tuna to the levels specified in the CMM. Incomplete and insufficient data for 2009 and 2010 has also meant that fisheries models for 2010 are still uncertain and inconclusive.\textsuperscript{5} However, part of the problem is due to the range of exemptions that undermine its success. Removal of these exemptions would remove about 50% of the estimated overfishing\textsuperscript{6}.  

When reviewing CMM-2008-01 and agreeing an enhanced new measure (CMM-2012), the TCC agreed to use the existing measure and its elements as the starting point. SC7 did recommend additional measures to ensure further reductions in fishing mortality above those expected at the CMM-2008-01.\textsuperscript{7} Greenpeace believes that many of the elements contained in the original CMM still apply and key elements should be retained, updated and strengthened. The current measure should remain in place unless the Commission agrees otherwise, or there is an explicit cessation date.

Greenpeace recommends a 50% reduction in the catch rates of bigeye tuna from the recent average levels (2006-2009) to ensure that bigeye tuna stocks are given the best chance to recover to more precautionary levels. It is vital that the newly agreed measures are considerably more effective and ambitious than the current 30% reduction that is contained in the CMM-2008-01, in order to take into account poor catch reporting, lack of independent observer data from longliners, and uncertainties of the stock assessments.

\textbf{Yellowfin}: The SC meeting concluded that WCPO yellowfin is not likely to be experiencing overfishing or in an overfished state according to current management objectives, although there are significant uncertainties involved in the assessments. Strong indications were provided, however, showing that this stock is in trouble.\textsuperscript{8} Exploitation rates were the highest in the western equatorial region, which accounts for more than three quarters of the total yellowfin catch, and spawning biomass is estimated to have declined to less than a third of its unexploited levels. Based on the Fmsy reference point currently used, one model showed that there is a possibility that overfishing is occurring. In addition, New Zealand, has reported a decline in catches, which may indicate range contraction as the stock declines in size. The high mortality rate of juvenile yellowfin, primarily due to purse seine FAD fisheries is of particular concern, with the SC concluding the


\textsuperscript{4} See also paragraphs 141 of; SC 2011. Summary Report. Science Committee Seventh Regular Session, 9–17 August 2011, Pohnpei, Federated States of Micronesia, WCPFC. \url{http://www.wcpfc.int/node/3961}


\textsuperscript{7} See page 4, last paragraph; OFP-SPC 2011. WCPFC-TCC7-2011-31|projections-based-2011-stock-assessments

\textsuperscript{8} SC 7 recommended that there should be a minimum of a 32% reduction in fishing mortality from the average levels for 2006–2009 to return the fishing mortality rate to FMSY. This is the equivalent to a minimum of a 39% reduction of the 2004 level in fishing mortality, and a 28% reduction of the average 2001–2004. See page 38, SC (2011). Summary Report. Science Committee Seventh Regular Session, 9–17 August 2011, Pohnpei, Federated States of Micronesia, WCPFC. \url{http://www.wcpfc.int/node/3961}

productivity of the stock would be significantly increased if juvenile catches were decreased. These indicators, along with the uncertainty in stock assessments call for further reductions in yellowfin mortality to be included in the new CMM, particularly with regard to juvenile yellowfin. The importance of yellowfin fisheries to many coastal states underlines the urgent need for a precautionary approach in managing this stock.

**Skipjack:** Skipjack catches in 2010 were the 2nd highest recorded. While the stock is not described as being overfished there are concerns that if recent fishing patterns continue, catch levels are likely to decline as stock levels are fished down to MSY levels. Additionally, high catches in the equatorial region could result in range contractions of the stock, thus reducing skipjack availability to higher latitudes – Japan, Australia, New Zealand, and Hawaii have already reported catch declines. The precautionary approach must be applied in setting management targets to ensure these relatively abundant fish stocks and the economic viability of this fishery are not jeopardised. It is therefore important that the new measure is applicable to skipjack tuna.

**South Pacific Albacore:** Finally, the albacore fishery also requires more protection and must also be covered by the CMM. While this stock is considered relatively healthy without limits placed on this fishery there is a danger that fishing effort will be transferred from the more regulated stocks to albacore. The fishery is particularly important to South Pacific nations, and increases in catches will result in catch rate declines and associated impacts on vessel profitability.

3. **Need for Greater Precaution: Set Reference and Limit Points**

A precautionary and ecosystem-based approach to fisheries management urgently requires the rejection of unsustainable fishing practices such as FADs in purse seine fisheries and the use of area-based management tools such as well enforced marine reserves. Greenpeace strongly urges that a process is set swiftly into place to ensure that ecosystem-based precautionary limit reference points and precautionary target reference points for all stocks (as required by the UN Fish Stocks Agreement) must be set by the WCPFC, as well as management measures to ensure these targets are not exceeded, and necessary actions can be taken swiftly if these targets are surpassed. These reference points must take into account non-target/bycatch species and the ecosystem- with priority made for species that are listed as threatened or endangered and also including economic and social objectives.

4. **Cut Overcapacity**

Overcapacity is at the core of the ever-deepening unsustainable exploitation of the region’s tuna stocks. This needs to be reversed so the Pacific will not be robbed of its opportunity to reap large economic benefits from the tuna resource and lose its edge in marketing these products under better environmental credentials.

The underlying issue to all these management challenges continues to be the fact that there is simply too much fishing capacity operating in the region chasing rapidly declining stocks, and strongly contributing to overfishing. A capacity reduction scheme which results in a significant

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reduction of pressure on these stocks and improves the profitability of the fishery is urgently needed. Radically reducing fishing capacity and effort, starting with a target to reduce big eye catch rates by 50%, following environmental and social criteria, would not only ensure sustainability but also improve the economic performance of the fleets.

In order to effectively eliminate overcapacity it is also essential to address the rights and needs of developing coastal states, in particular small island and least developed States. There also needs to be reliable information, robust systems to coordinate, harmonise and share information, as well as strong compliance and enforcement mechanism. Greenpeace welcomes the discussions amongst tuna RFMOs within the KOBE process to improve tuna fisheries management. We strongly urge the WCPFC to adopt the Kobe III recommendations on compliance and enforcement, including that developed fishing members freeze large-scale purse seine capacity under their flag, as a first (but still insufficient step), based on the status of the stocks the WCPFC should consider a scheme for:

- Reduction of overcapacity in a way that does not constrain the access to, development of, and benefit from sustainable tuna fisheries, including on the high seas, by developing coastal States, in particular small island developing States, territories, and States with small and vulnerable economies; and
- Transfer of capacity from developed fishing members to developing coastal fishing members within its area of competence where appropriate. *\(^{12}\)

5. High Seas Pocket Closures – Stop the Pirates and Protect the Ecosystem

Currently the WCPFC agreed to close two of the four high seas pockets in the WCPO to purse seine tuna fishing in 2010 as part of CMM2008-01. However, Greenpeace does not believe that this alone will achieve full benefits as both legitimate and illegal fishing operations would simply transfer to the open pockets and increase effort in this region to make up for opportunities lost elsewhere. There is therefore a need to close the net on IUU fishing and to prevent fishing effort being redeployed in other areas by agreement by the WCPFC to close fishing in the two remaining eastern high seas pockets. To make sure the closures bring about desired conservation and management benefits a full closure to all gear types including long-lining is also needed to be included in the enhanced CMM. This is especially necessary given the continued practice of transshipments at sea by the region’s long-line vessels. Establishing fully protected marine reserves in the four high seas pockets is an effective tool for maintaining a healthy Pacific ecosystem and will yield both long-term economic and ecological benefits for the region.

According to the SC, such fisheries closures may also have potential economic benefits to the countries surrounding these closed areas, as well as to the stock conservation benefits for tuna. However, this year’s SC meeting concluded that in order for these closures to be effective, especially in relation to bigeye tuna, fishing effort needs to be cut not simply displaced to other areas. Closures should be extended to more areas and include long-line fisheries as these have shown a beneficial effect on the bigeye population in conjunction with other measures outside of these areas.

Additional measures were agreed last year in the eastern high seas pocket (pocket 3) Special Management Area, which surrounds French Polynesia, Kiribati and Cook Islands. This high seas area has long been a playground for IUU fishing vessels, seriously affecting the ability of these

surrounding countries to sustainably manage their shared fish stocks. This “entry-exit notification scheme” requests flag states to report the entry and exiting of their fishing vessels into the high seas pocket. Greenpeace believes that this measure should be implemented across the region to help enforce extended high seas closures to purse seine and long-line fishing. However, we do not believe that this type of measure should replace the need for complete area closures, because without full protection of these areas the benefits to the tuna stocks and ecosystem in general will be lost.

In addition Greenpeace strongly supports the actions of the eight Pacific Island countries making up the Parties to the Nauru Agreement (PNA) that last year announced the closure of the world’s largest area of high seas to purse seine fishing, covering 4.5 million square km of international waters. That’s an area larger than India, the world’s seventh biggest country. We fully support the proposal by the PNA to include these purse seine closures in the open high seas to be included in a new and enhanced conservation and management measure.

Map 1: The highlighted areas 1, 2 and 3 and 4 are the high seas pockets. Pockets 1 and 2 are closed to purse seine fishing from 2010 as per WCPFC decision in December 2008

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13 The Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands and Tuvalu
Ecological Benefits of Closures: A significant increase in bigeye spawning mass appears when high seas areas (pocket 3 & 4 and high seas area proposed under PNA agreement\(^1\)) are closed to longlining in combination with closing off purse seine fishing and eliminating the effort from both pockets 3 & 4 and high seas areas as well as pockets 1 and 2. Therefore closing pockets 3 & 4 and the PNA proposed high seas area to longline fishing has a much greater beneficial effect than just purse seine closures, and the effects are widespread throughout the region. For example, part of a known bigeye spawning area that begins in the Eastern Pacific Ocean lies within pockets 3 & 4 and the PNA proposed high seas area. Longliners target sexually mature adult fish, which is near the size of 50% mature female bigeye. The combination of high levels of juvenile bycatch in purse-seining with catch of adult female bigeye by longliners is having a detrimental impact of the bigeye stock throughout its life history.\(^5\)

The closure of pockets 3 & 4 as well as the other high seas area would also be effective for managing these fisheries as the climate warms. In particular it would ameliorate the dramatic effect that the El Niño-Southern Oscillation (ENSO) is having on the distribution of tropical tunas. Warmer water that is preferred by skipjack tuna is being extended to the east during El Niño episodes. This is resulting in high purse seine catches of skipjack, and presumably high incidental catches of bigeye, in the central region. Closing all 4 pockets and additional high seas area would ameliorate the effects of ENSO on the efficacy of the area closures as conservation measures, and mitigate long-term variability, by reducing catch of juveniles and protecting part of the spawning grounds whatever the ENSO phase. If future changes projected under IPCC scenarios are correct that more frequent El Niño events will occur, there will be a spatial shift of the core habitat of skipjack and bigeye tunas toward the central region.\(^6\)

The further potential benefits of the high seas closure to the fisheries management of the West and Central Pacific include: protection of spawning areas; potential increased yields through the export of larvae and spillover of fish; help compliance and the control of IUU fishing; provide insurance against fisheries collapse and the failure of other management measures, i.e. providing a form of bet hedging for coping with uncertainty and lack of knowledge in order to reduce overall risk.

Much of the documentation of positive impacts of marine reserves on commercial fish species comes from studies relating to small area closures in coastal waters, often in reef areas, as most closures to date have been of this type. These studies highlight that it takes a number of years for the reserves to yield positive effects, especially in terms of increased yields in adjacent waters\(^7\). A 2009 global meta-analysis demonstrates that, globally, old reserves are more effective than young

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\(^1\)All high seas areas between 10N and 20S and 170E and 150W.


\(^4\)The establishment of marine reserves in the Soufriere Marine Management Area of St Lucia and in Egypt’s Red Sea both led to increased yields in adjacent areas after 5 years. See Allsopp, M., Page, R., Johnston, P. and Santillo, D. (2009). State of the Oceans. Pub. Springer ISBN: 978-1-4020-9115-5. One of the best documented cases of the positive effects of closing large areas to fisheries is the closure of the Georges Bank in the Gulf of Maine (USA) where three areas totaling 17,000 km\(^2\) were closed to all forms of fishing that might impact groundfish. Five years after the closures were implemented together with a package of measures that cut fishing effort, the closures were hailed as a success with positive effects on stocks of haddock, yellowtail, witch flounders and cod. See Gell, F.G. and Roberts, C.L. (2003) Benefits beyond boundaries: the fishery effects of marine reserves. Trends in Ecology and Evolution volume 18, issue 9 pp.448-455.

\(^5\)Page 2009 global meta-analysis demonstrates that, globally, old reserves are more effective than young
reserves at increasing fish densities. The results imply that reserves should be maintained for up to 15 years following establishment, even if they initially appear ineffective.\(^\text{18}\)

As the actual establishment of marine reserves and marine protected areas, especially in the high seas and for highly migratory fish species is a relatively new endeavour, there are few data, but some models suggest positive benefits. A recent modelling exercise demonstrates that fisheries benefits can be derived from reserves not just for overexploited stocks of low-mobility species, but also (to a lesser extent) for underexploited stocks and high-mobility species.\(^\text{19}\) The researchers also note that greatly increased resilience to overfishing is also found in the majority of cases. The authors conclude that a reserve provides benefits additional to those obtained from simple effort control. However, benefits from reserves depend to a major extent on the amount of effort redistribution following reserve establishment and on fishing selectivity; hence, these factors should be key components of any evaluation of reserve effectiveness.

6. Say No to FADs in Purse Seine Fisheries

The use of fish aggregating devices (FADs) in purse seine tuna fisheries has major consequences for the sustainability of tuna fisheries as they increase the efficiency of purse seiners in a way that is difficult to control and measure; they increase the catch of juvenile skipjack bigeye and yellowfin tunas; and they result in bycatch of non-target (and vulnerable) species such as sharks, turtles and other fish species.

Of utmost concern is the shocking practice by some purse seine vessels that intentionally set their destructive nets on whales, dolphins and whale sharks – animals protected under numerous international agreements – in order to get to the prized tuna. Often these animals are killed in the process. For example, in 2009, it was estimated that there were 1,323 toothed cetacean deaths and 60 whale shark deaths due to encirclement by purse seine nets.\(^\text{20}\) Greenpeace strongly supports the proposal by Australia for an urgent new CMM that specifically bans purse-seining on whale sharks and cetaceans and sets best practice guidelines for the release and reporting of these animals if accidentally caught.

In 2008 the WCPFC adopted measures within its CMM that restricted the use of FADs. Evidence provided to the SC noted that while it was still early days to fully assess the impact of the FAD closure, trends are encouraging. As was illustrated again in 2010, the three-month ban on the use of FADs was found to be effective in significantly reducing the catch of bigeye tuna compared to the other months of the year. Overall, total catch was below average during the FAD ban period in 2009 and 2010. Purse seine catch of bigeye tuna was significantly reduced\(^\text{21}\) during these closure periods compared to other months of those years.

However, total purse seine effort increased between 2008 to 2010 with 2009 being a near record high for associated school effort in spite of the two month FAD closure. It is clear from the


preliminary results that FAD bans are effective for the time that they are in effect. However, if purse seine effort is increasing outside the three-month FAD closure, and exemptions still exist to the CMM, any benefits accrued during the ban period are being offset in the rest of the months, therefore rendering the short ban ineffective. It is also difficult to get a full picture due to lack of relevant data, as data was presented for the area 20N and 20S only, and did not include the purse seine catches outside this area, nor did it include catches from the Indonesian and Philippine fleets where catch of juvenile tuna is known to be particularly high.

Given the scientific recommendation for bigeye mortality reduction is a 39% reduction on 2004 levels,\(^2\) it is clear that the WCPFC urgently needs to extend the FAD ban measure as an effective means of reducing the fishing mortality of bigeye, and to allow the recovery of the stock to precautionary levels. The SC made the conclusion that “Limitation of FADs use would have a strong positive impact on bigeye stock conservation.”

Greenpeace believes that the use of all objects that are deployed artificially as FADs or fishing on non-intentional FADs by purse seine fisheries should be banned globally by all the tuna RFMOs. A total FAD ban in purse seine fisheries within the WCPO would clearly be the best means of reducing the bigeye purse seine catch as well as bycatch of threatened and endangered marine life such as sharks and to some extent turtles that are known to be attracted to FADs and get caught up in purse seine nets. Overall the fishery is better off without FADs as: “the projections predict that total catch is quite stable (and in fact increases slightly) for increasing duration of FAD closure. This is because of the higher yield per recruit that is achieved for all species resulting from the larger average size of tuna taken in unassociated sets compared to FAD sets”\(^2\) In addition recent studies demonstrate an overall economic benefit of reducing FAD use\(^2\).

7. Enhanced Enforcement: Key Role of NGOs

Greenpeace commends efforts by the Commission to establish an enhanced compliance monitoring scheme (CMS) to ensure compliance with CMMs. At WCPF7 a proposal put forward by Australia included the participation of NGOs in such a measure to provide information to the Commission on non-compliance by CCMs. The Commission Chair, reflecting on experience from various committees and governance bodies, suggested that the benefits of allowing interested parties to make information available outweighed the drawbacks, citing the effectiveness of this approach in development of the UN Fish Stocks Agreement. The Commission asked Australia to continue to work inter-sessionally to identify a range of possible responses to non-compliance (as provided in Para 23 of CMM 2010-03) and report to TCC7.

Allowing NGOs to supply information for compliance purposes, given the lack of surveillance capacity in the region, would add to the Commission’s efforts of ensuring compliance with CMMs. Such practice is already formalised in other tuna RFMOs such as ICCAT. Observers, in particular environmental NGOs, are playing an increasingly participatory role in the Commission’s monitoring, control and surveillance responsibilities, particularly with regards to maritime surveillance of both the high seas managed areas and national waters. A formal process for the submission and

\(SC\) 7 recommended that there should be a minimum of a 32% reduction in fishing mortality from the average levels for 2006–2009 to return the fishing mortality rate to FMSY. This is the equivalent to a minimum of a 39% reduction of the 2004 level in fishing mortality, and a 28% reduction of the average 2001–2004. See page 38, SC (2011). Summary Report. Science Committee Seventh Regular Session, 9–17 August 2011. Pohnpei, Federated States of Micronesia, WCPFC. [http://www.wcpfc.int/node/3961](http://www.wcpfc.int/node/3961).


consideration of such information has substantial benefits for the effective operation of the Commission, and would help achieve the objectives of the WCPFC Convention.

Recalling the advice and recommendation of the WCPFC Chair at WCPFC7 in highlighting the benefits of NGO participation in a compliance monitoring scheme, Greenpeace calls on the WCPFC to ensure that a formal process is agreed allowing NGOs to participate in the work of the Commission, including, but not limited to, the submission of information on non-compliance with CMMs as part of an enhanced Compliance Monitoring Scheme (CMS).

8. Greenpeace’s Key Recommendations for WCPFC8

Greenpeace urges governments attending the WCPFC 8 to support measures that will have a beneficial impact on its valuable tuna species, rich marine life and livelihoods of Pacific Island Nations. Short-term and unsustainable economic interests must not be defended at the cost of long-term sustainability – not only ecologically but also economically. In summary we urge action on the following issues:

- Extend the current high seas pocket closures to include all types of fishing.
- Adopt and implement the closure of the additional 2 high seas pockets further east to all fishing in order to strengthen the benefits derived from the existing high seas pockets closures and to prevent any transfer of high seas effort, in particular IUU fishing effort, from the closed pockets into new areas.
- Support the PNA proposal for the closure of the open high seas area to purse-seine fishing;
- Support the immediate ban of purse-seine fishing on cetaceans and whale sharks.
- Adopt and implement a complete year-round ban on the use of FADs in association with purse seine fishing.
- Reduce fishing mortality of bigeye by 50%.
- Agree further precautionary reductions in yellowfin catch.
- Support the inclusion of skipjack tuna in future measures to ensure an ecosystem-based approach to the management of tuna resources within well-defined precautionary limits. Apply the measure to the area 20 N and 20 S (to take into account skipjack management).
- Support the Kobe III recommendations for the WCPFC to put in place a scheme to reduce overcapacity.
- Ensure a process goes forward to set precautionary limits and reference points.
- Agree a process that allows greater involve of NGOs in MCS activities, including allowing NGOs to submit information on non-compliance with CMMs.