

## WCPFC HARVEST STRATEGY WORKSHOP Agenda With Recommendations from The Pew Charitable Trusts (in italics)

#### Stones Hotel Kuta, Bali 30 November – 1 December 2015

8:30 a.m.	Agenda Item 1. Opening of the workshop	
Start	1.1 Introduction to the Workshop	Feleti Teo and Rhea Moss-Christian
	1.2 Housekeeping	Tony Beeching
	1.3 Workshop Arrangements	Facilitator
9:00 a.m.	Agenda Item 2. Practical applications of the harvest strategy approach	
	Presentation:	TBA
	a. Examples of the application of harvest strategies in other RFMOs and fisheries/fisheries bodies e.g. SBT, Pacific Halibut and national fisheries	
	b. Examples of, and differences, between effort and catch control-based harvest strategies	
	Too often, governments wait to manage fisheries at a point of crisis, when fish stocks are depleted. Well-thought-out and tested harvest strategies can prevent those populations from being fished unsustainably while helping to protect recovering stocks from future	

declines. Applying the harvest strategy approach to key WCPFC species is in line with Article 6 of the WCPFC Convention, which specifies that WCPFC members shall apply the precautionary approach to management and determine reference points for WCPFC species.

#### Pew recommendations:

- The Commission should adopt precautionary harvest strategies for key WCPFC species to ensure the full recovery of depleted stocks and provide for long-term, sustainable and profitable fisheries.
- Pew welcomes the sharing of information on how harvest strategies have been applied in other contexts and notes the experience of WCPFC members such as Australia in developing domestic harvest strategies.

#### Coffee Break 10:15 to 10:45

### 10:45 Agenda Item 3. Role of MSE in the development of harvest strategies/control rules Presentation:

- SPC
- a. General presentation what MSE delivers and typical outputs, with examples referencing existing measures elsewhere and SPC work to date
- b. How MSEs are developed consultation, combination of management science economics industry inputs

Management strategy evaluation, or MSE, is a process that uses a simulation tool to determine the 'best' performing harvest strategy. The MSE assesses the uncertainties in the system to examine the likeliness of the candidate harvest strategies achieving the chosen management objectives. Management objectives may include social and/or economic objectives — such as maintaining the stability of catches or maximizing profits/fishing licensing revenues — in addition to biological ones. The MSE process also includes weighing of trade-offs among those management objectives. Undertaking an MSE requires a team of scientists, managers and stakeholders.

#### **Pew recommendations:**

	<ul> <li>To ensure the MSE results in a robust output, the Commission should adopt – or at the very least specify – clear, well-defined and quantifiable management objectives at the start of the harvest strategy approach for each species.</li> <li>In determining how to weigh trade-offs among objectives, greater weight should be given to achieving the objectives of the WCPFC Convention to "take measures to prevent or eliminate overfishing" and "ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of the fisheries resources." In other words, the primary management objective for a depleted species should be rebuilding it within a timely fashion, even if that requires a lower catch in the short-term.</li> <li>A range of target reference points should be evaluated in the MSE process for each species; a range allows the Commission to make a more informed choice of which target would best meet the management objectives.</li> <li>Because MSE involves the use of a simulation tool that is new to the WCPFC, the Commission should create a process to communicate its development, involve all stakeholders, and create joint ownership of the results. Communication among parties is critical for achieving buy-in on the results.</li> </ul>	
11:45	Agenda Item 4. Developing acceptable levels of risk for breaching a limit reference point	
	Presentation:	Australia
	a. Previous decisions/work on limit reference points and risk of exceeding them	
	b. Discussion of responses to the SC10 recommendation to identify the level of	
	acceptable risk which should be applied to breaching a limit reference point for the key target species	
	c. Discussion of any proposals for adopting levels of risk available at the time of the HSW	
	The limit reference point is the agreed-upon danger zone for a species, a condition that is to be avoided. The acceptable level of risk quantifies the likelihood of a negative outcome in the fishery. Limit reference points should be based exclusively on the biology of the species and	

its resilience to fishing pressure.

#### Pew recommendations:

- The acceptable level of risk of breaching a limit reference point in the WCPFC should be no greater than 5 percent. This would ensure limit reference points act as true limits and avoid undesirable management actions, such as suspending fishing should a of the limit reference point be breached.
- Such a level of risk is within the guidance provided to the Commission. The United Nations Fish Stocks Agreement states that the risk of breaching the limit reference point should be "very low." In a 2008 paper to the Commission, Davies and Basson recommended levels of risk of 5 or 10 percent "at the most." Australia, in most respects with its domestic fisheries management, sets the level of risk for breaching limit reference points at 10 percent.<sup>4</sup>
- Because the aim of each harvest strategy should be to maintain the species at a
  healthy target, the Commission should require that each species be maintained at its
  target reference point with greater than 50 percent probability, taking into account
  the size of the buffer between the target and limit reference points, the level of risk of
  breaching the limit reference point, and the species' status.

#### Lunch 12:45

There will be presentations in plenary on i) skipjack and ii) albacore under agenda items 5 and 6, followed by break-out working groups

# Agenda Item 5. Developing a harvest strategy for skipjack Skipjack presentation a. Introduction referencing any draft CMMs on the table b. SPC paper on purse seine dynamics and target reference points (as revised) Alternative purse seine dynamic formulations demonstrating impacts on alternative purse seine dynamics with some simple examples c. SPC presentation on the application of a potential harvest strategy framework (including HCRs) to manage the WCPO skipjack/purse seine fisheries

	Members of the Pacific Islands Forum Fisheries Agency are proposing that the WCPFC adopt an interim target reference point for skipjack of $0.50SB_0$ , which is roughly equivalent to the level of biomass today, and is twice the biomass required to produce maximum sustainable yield. There is no risk of breaching the limit reference point if that target reference point is adopted.	
	<u>Pew recommendations</u> :	
	<ul> <li>Pew strongly recommends adoption of this interim target reference point. The WCPFC Scientific Committee has recommended steps to avoid further increases in fishing mortality for skipjack and to maintain the stock near current levels. This interim target reference point is in keeping with that advice.</li> </ul>	
2:45	Agenda Item 6. Developing a harvest strategy for south Pacific albacore	
	Albacore presentation	
	a. Revised bio-economic target reference point based on the 2014 Stock Assessment, including risk of exceeding the limit reference point	SPC
	b. Discussion of any proposed target reference point CMM for south Pacific albacore	FFA/TKA
	Members of the Pacific Islands Forum Fisheries Agency are proposing that the WCPFC adopt an interim target reference point for skipjack of $0.45SB_0$ , which is slightly above the current level of biomass and would require reductions in catch and effort to achieve. The proponents also specify that the acceptable level of risk of breaching the limit reference point should be no more than 5 percent.	
	Pew recommendation:	
	<ul> <li>Pew strongly recommends adoption of this interim target reference point. The WCPFC Scientific Committee recommended that longline fishing mortality and longline catch of south Pacific albacore be reduced to avoid further declines in the vulnerable biomass so that economically viable catch rates can be maintained.</li> </ul>	

	Afternoon Tea 3:15 to 3:30	
3:30 to 5:00	Breakout groups for Agenda Items 5 and 6  1.) Question for skipjack group:  What are the example alternative harvest control rules, including indicators, for skipjack, including consideration of factors raised during the presentation?	Facilitator
	2). Question for albacore group:  Does the proposed target reference point(s) (to be finalized at the Tokelau Agreement meeting) and as raised by FFA members at SC and TCC, address your objectives for the fishery?	Facilitator
	As the first species to go through the harvest strategy approach, skipjack and south Pacific albacore will set precedents within the Commission. Therefore, it is crucial that best practices for the development of harvest strategies are followed. A discussion on concepts for harvest control rules should occur early in the process. Harvest control rules are the pre-agreed upon management responses to the indicators of the species. Well-designed harvest control rules ensure the species is maintained at the target reference point and kept away from the limit reference point.	
	<ul> <li>Pew recommendations:</li> <li>Harvest control rules should suspend fishing when limit reference points are breached. Support for suspending the fishery in that circumstance is recommended in several concepts related to best practices for the harvest strategy approach. <sup>5,6</sup>         However, it is important to note that the aim of well-designed harvest strategies is to create management actions that can be implemented successfully so as to avoid breaching limit reference points and having to suspend fishing as a consequence.</li> <li>Evaluations should be conducted regularly of the performance of harvest control rules. For a stock such as skipjack, the harvest control rule can be evaluated every five years. For vulnerable stocks such as bluefin, the harvest control rule should be</li> </ul>	

	evaluated at least every three years.		
Tuesday 1 [	Tuesday 1 December, Day 2		
8:30 a.m. Start	Working groups resume and wrap up		
9:30	Presentation of skipjack working group to plenary and discussion	Facilitator	
	Morning tea 10:30 to 11 a.m.		
11:00	Presentation of south Pacific albacore working group to plenary and discussion	Facilitator	
	Lunch 12:00 p.m.		
1:30 p.m.	Agenda Item 7. Harvest strategy workplan presentation  Presentation:  a. Development of the workplan framework  b. Process for review/amendment  c. Consideration of the extra workload for SC12 and TCC12  Members of the Pacific Islands Forum Fisheries Agency are proposing that WCPFC adopt a harvest strategy workplan for skipjack, bigeye, yellowfin and south Pacific albacore, in keeping with the requirements of CMM 2014-06. The workplan establishes timelines for the six elements of the harvest strategy approach as described in the CMM. The CMM also directed the Northern Committee to develop a similar workplan for north Pacific albacore and Pacific bluefin by no later than its annual meeting that occurred earlier this year.	Australia	
	<ul> <li>Pew recommendations:</li> <li>The Commission should adopt the harvest strategy workplan at its annual meeting in Bali this year.</li> <li>However, the Commission should alter the workplan to accelerate the timelines for</li> </ul>		

3:30	reaching agreement on management objectives, reference points and harvest control rules for skipjack, bigeye, yellowfin and south Pacific albacore as soon as possible, but no later than 2018. The adoption in Bali of the interim target reference points for skipjack and south Pacific albacore would represent progress toward completion of two components of this workplan.  • In addition, the Commission should direct the Northern Committee to draft a more robust workplan for Pacific bluefin. The current Northern Committee workplan is missing important elements of the harvest strategy approach for Pacific bluefin, including timelines for adopting management objectives, a target reference point, acceptable levels of risk for breaching the limit reference point, and a monitoring strategy. As with other WCPFC species, the Northern Committee workplan should be changed to specify that the harvest strategy identified as the most effective by the MSE process should be presented to the Northern Committee and then the Commission for adoption no later than 2018.  Afternoon Tea 3:00 to 3:30 p.m.	WWF
3:30	Agenda Item 8. Links between harvest strategies and CMMs  Presentation:	VVVVF
	<ul> <li>a. How will the Commission give effect to the elements of the harvest strategies, including target reference points and harvest control rules</li> <li>b. How best to integrate and simplify Commission instruments and measures into an operational fisheries management framework</li> </ul>	
	Pew recommendation:	
	Outputs of the harvest strategy process should be adopted by the Commission as conservation and management measures to ensure that they are binding and long-lasting, and that all members of the Commission take ownership of the process.	
4:15	Agenda Item 9. Where to from here	
	Presentation:	Commission

	<ul><li>a. Consider options for progressing harvest strategies work including restructuring/tasking existing WCPFC bodies (TCC/SC)</li><li>b. Capacity building for Commission members</li></ul>	
5:15 to Close	Agenda Item 10. Concluding Remarks and Workshop Close	Facilitator

#### **References Cited:**

1,440,500

<sup>&</sup>lt;sup>1</sup> WCPFC Convention, Article 5, Paragraph G. <sup>2</sup> A process was recommended by Davies, C. and Polacheck, T. (2007), A brief review of the use of the precautionary approach and the role of target and limit reference points and Management Strategy Evaluation in the management of highly migratory fish stocks. WCPFC-SC3-ME SWG/WP-3.

<sup>&</sup>lt;sup>3</sup> Davies, C. and Basson, M. (2008), Approaches for identification of appropriate reference points and implementation of MSE within the WCPO. WCPFC-SC4-2008/GN-WP-10.

<sup>&</sup>lt;sup>4</sup> Australian Government (2007), Commonwealth Fisheries Harvest Strategy, Policy and Guidelines, p. 40.

<sup>&</sup>lt;sup>5</sup> Smith, A.D.M. et al. (2007), Scientific tools to support the practical implementation of ecosystem-based fisheries management. ICES Journal of Marine Science, 64: 633-639.

<sup>&</sup>lt;sup>6</sup> Australian Government, p. 17.