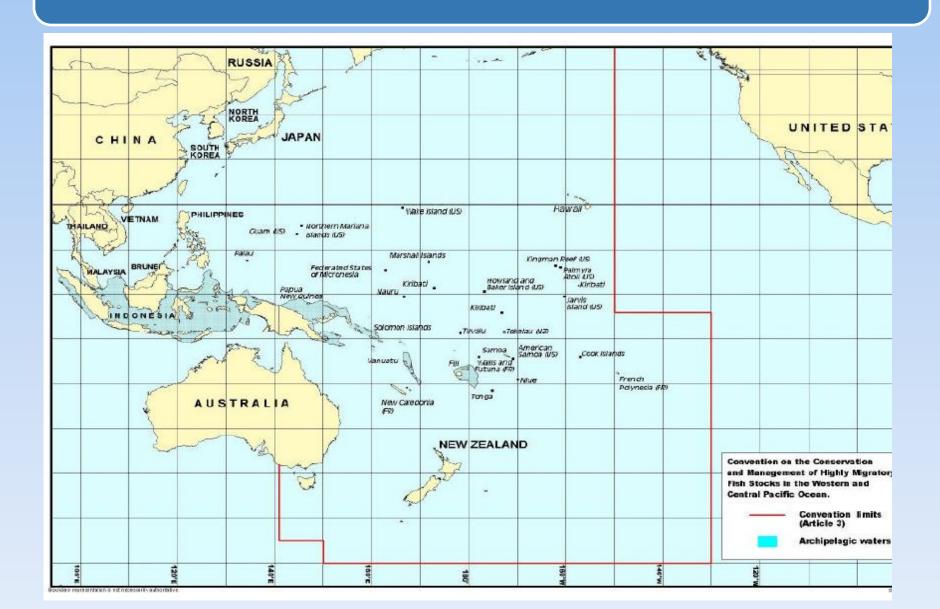


### Western and Central Pacific Fisheries Commission

# OVERVIEW Development of Harvest Strategies

Tony Beeching
Assistant Science Manager

## **WCPFC Convention Area**



## Key Tuna Species

(Provisional Total Catch in the WCPO in 2013 = 2,621,511 mt)

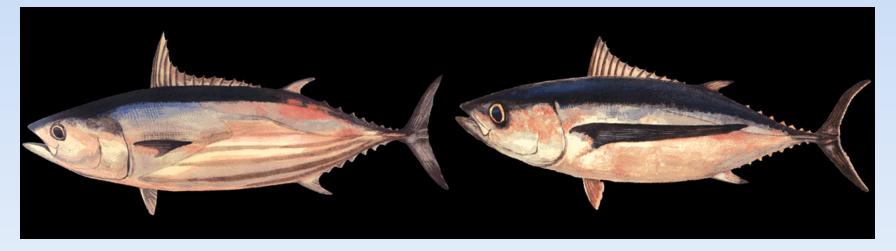
Bigeye Tuna (158,662 mt)

Yellowfin Tuna (535,656 mt)



Skipjack Tuna (1,784,091 mt)

Albacore Tuna (143,102 mt)



## 41 Countries/Territories Involved

#### 26 Members

(FFA)(PNA) Australia, Cook, FSM, Fiji, Kiribati, RMI, Nauru, NZ, Niue, Palau, PNG, Samoa, Solomon, Tonga, Tuvalu, Vanuatu

(Non-FFA) Canada, China, EU, France, Indonesia, Japan, Korea, Philippines, Chinese Taipei, USA

#### 7 Territories

A. Samoa, CNMI, F. Polynesia, Guam, New Caledonia, Tokelau, Wallis and Futuna

### 8 Cooperating Non-Members

Ecuador, El Salvador, Liberia, Mexico, Panama, Senegal, Thailand and Vietnam.

# Developing a Harvest Strategy (a recent history of the WCPFC MOW process)

- 2008: SC4 development of RPs; need for intercessional Management Objectives Workshop (MOW).
- 2009 2011: Work on developing LRPs, and agreeing ToRs for MOW
- 2012 2014: MOW process
- 2015: MOW4

# MOWs: Informal opportunity to express views without commitment

Informal meetings - no formal standing in the Commission – the do NOT pre-empt future views or positions.

MOW1 To assist the Commission to understand:

- the purpose and implications of management objectives appropriate reference points
- the process of evaluating potential management measures in the achievement of management objectives.
- Develop a list of recommended management objectives

### **MOW1:** Educational and informative

Expert panel to refine candidate objectives; performance indicators and RPs for WCPFC fisheries

### Independent expertise:

- Dr Robin Allen
- Dr James Ianelli

#### Facilitator:

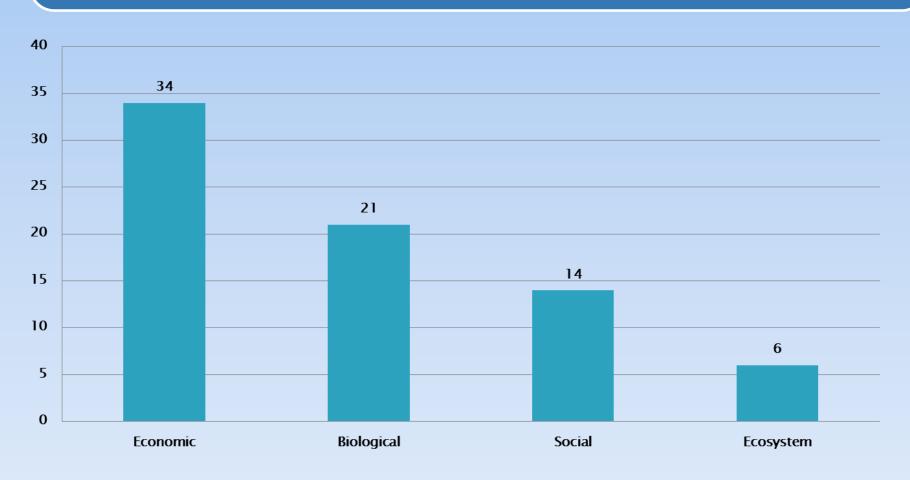
lan Cartwright

Plus: SPC & FFA

**WCPFC9** agreed LRP 20% SB <sub>F=0</sub> **Kobe** MSE e-WG formed



## Quick and Dirty Survey Members Objectives



## Reference Points

### WCPFC adopts a hierarchical approach

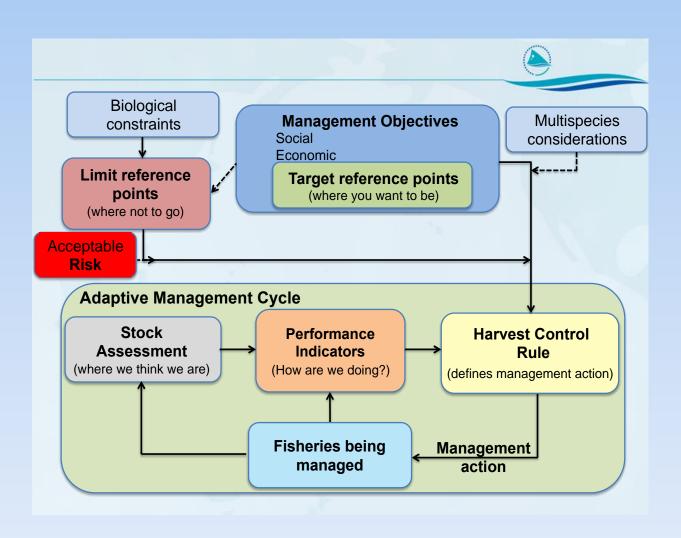
Level	Condition	LRPs
Level 1	A reliable estimate of steepness is available	FMSY and BMSY
Level 2	Steepness is not known well, if at all, but the key biological (natural mortality, maturity) and fishery (selectivity) variables are reasonably well estimated.	FX%SPRo and either 20%SBo or 20%SBcurrent,F=0
Level 3	The key biological and fishery variables are not well estimated or understood.	20%SBo or 20%SBcurrent,F=0

Initial drive for F-based LRPs but...

... later the Commission 'rejected' analysis based on F-levels compatible with SB LRP levels

Use of Fishing Mortality now refocused on TRP discussions (and HCR performance measures)

## Management Framework



# ISSF San Diego RP Workshop MOW2

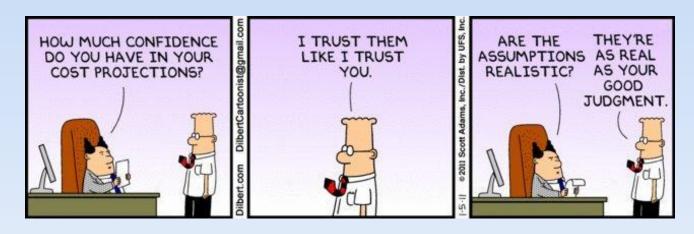
External panel draft a **consultative document [Strawman]** – presented to WPCFC Subcommittees, MOW and regulars session of the WCPFC.

Workshop Focus on target reference points consistent with the objectives developed in MOW1 i.e. **economics** with **consideration of spatial issues** etc.

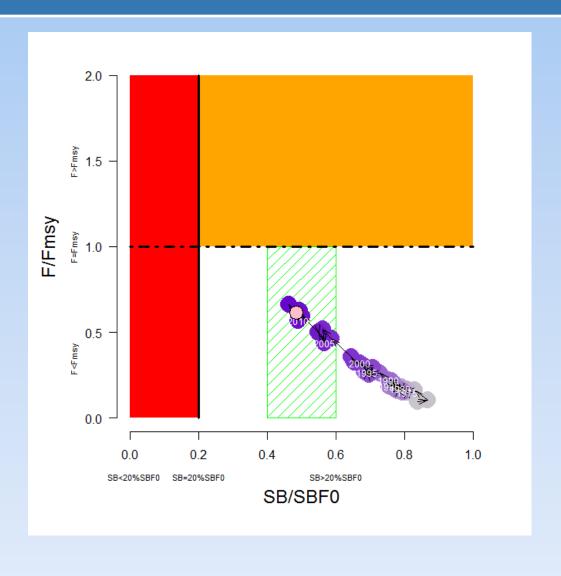
**MOW recommended**: interim/provisional TRP be set for SKJ P/S fishery, not precluding a parallel development of a management framework and process - Process to include how MSE can be applied in general and more specifically in the case of an interim provisional TRP for SKJ.

### MOW3 [1day]:

- ➤ Considered a TRP for SKJ and associated multispecies impacts (PNA:50%) (Japan:60%)
- > SPC Presentations on methods for determining risk levels to be associated with LRPs; plus explanation of uncertainty
- > Reviewed a proposed new HS measure



## Kobe Plot Variations



## CMM-2014-06

### WCPFC11 adopted CMM 2014-06 HS approach.

#### **Para 13:**

- ➤ By Dec 2015 agree a harvest strategy work-plan and indicative timeframes for:
  - > Skipjack
  - > Bigeye
  - > Yellowfin
  - South Pacific albacore
  - > Pacific bluefin
  - > northern albacore
- ➤ Work-plan subject to review in 2017.
- ➤ The Commission may agree timeframes to adopt harvest strategies for other fisheries or stocks.

Para 14 – plans to include required resources and associated budget

- ISSF Monterey HCR and uncertainty WS ☑
- ISC MSE WS ☑
- MOW4 preparatory meeting likely late May/early June.
- ABNJ WS, including Kobe MSE e-WG, end June/early July
- WWF MOW workshop Date? Agenda?
- MOW4 likely focus CMM-2014-06 (SKJ & SPA)
- WCPFC MOW External Funding
  - EU: MSE dedicated SPC staff member, and external MSE expert panel – to review and advise
  - ABNJ: support to hold MOW4 December
  - ABNJ: funds to WWF to hold a capacity building MOW



