



FACTSHEET

2012

Fishing within Limits

Ensuring Sustainability through Technical Measures for the Efficient, Consistent, and Reliable Management of Fisheries

Currently, fisheries in the Western Central Pacific Ocean (WCPO) are subject to management measures imposed on a relatively opportunistic basis under a consensus-based system subject to many competing interests and values. The broad range of competing interests can often lead to decisions that maximize short-term economic interests at the expense of long-term productivity and sustainability, which can further lead to wide variation in catch levels and, potentially, overfishing and inconsistent market supply. Implementation of Harvest Policies that are guided by Reference Points and Harvest Control Rules allow managers to act swiftly and efficiently under a pre-agreed standard to ensure that harvest does not exceed any acceptable limits, thereby ensuring the sustainability of the resource and the consistent supply of fish to our markets.



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WHAT IS A REFERENCE POINT?

A Reference Point is a benchmark value that helps managers decide how the fishery is performing and is often based on an indicator such as fishery stock size or the level of fishing. Fisheries scientists conduct a fishery stock assessment to provide estimates of a fishery stock size and fishing mortality over time. Reference Points serve as a standard to compare those estimates based on our understanding of the biological characteristics of the targeted species. Reference points can mark a **limit**, which represents a level that managers aim to avoid, or a **target**, which managers strive to achieve and maintain. Managers can also establish a **trigger** that is independent of the limit or target that is designed to meet other objectives.

■ **Limit Reference Point** – similar to a red light. When you approach it, you stop. It is a fishery stock size or level of fishing that managers do not want to reach or exceed. It typically considers only the biological state of the stock.

■ **Trigger Reference Point** – similar to a yellow light. When you approach it, you should slow down or exercise caution. It represents an intermediate fishery stock size or level of fishing that alerts managers and may initiate a management action to, for instance, slow the level of fishing to avoid exceeding a limit reference point. In essence, the trigger can provide a “buffer” between the limit and target reference points.

■ **Target Reference Point** – similar to a green light, but more like a bull’s-eye on an archery target. It is a fishery stock size or level of fishing mortality that we aim for. It incorporates biological, ecological, social, and economic considerations. It should never be lower than the Limit Reference Point and should be sufficiently higher to ensure managers have a buffer to account for uncertainty.

WHAT IS A HARVEST CONTROL RULE?

A Harvest Control Rule is a pre-agreed action to be taken by a management body designed to achieve a medium or long-term target reference point while avoiding reaching a limit reference point. Simple Harvest Control Rules can be described as an “if, then” statement. An example of a very simple Harvest Control Rule would be “**if** the fishery stock level falls below the target level, **then** the level of fishing must be reduced by 20 percent.” Managers may additionally agree in advance what the specific management actions are to reach that 20 percent reduction in the level of fishing, such as a regional closure or gear restriction.

WHY USE REFERENCE POINTS AND HARVEST CONTROL RULES?

Current management of WCPO fisheries relies on annual decision-making processes that can be heavily influenced by sporadic, and sometimes unrelated, political factors which can lead to bureaucratic gridlock and inaction when the biological, ecological, or socioeconomic situation calls for swift and decisive action. Using pre-established Reference Points and Harvest Control Rules minimizes excessive decision debates on allowable catch or effort levels from the complicated annual political negotiation that is currently common, allowing managers to act quickly and decisively when the fishery reaches a pre-defined state (e.g. limit or target reference point).

In short, Harvest Control Rules:

- Streamline and facilitate informed management decisions;
- Improve transparency and accessibility of harvest management decisions;
- Set clear, distinct targets and limits;
- Define explicit intended responses to changes in stock status;
- Lay the foundation for developing well-defined fisheries management plans that are grounded in sound science; and
- Promote sustainability.



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WHAT IS A HARVEST POLICY OR STRATEGY?

A **Harvest Policy**, sometimes referred to as a **Harvest Strategy**, represents the basic guidelines that stipulate how managers go about setting general harvest levels or allowable fishing levels. The choice of Harvest Policy affects the yield from the fishery and the risk of overfishing. Efforts to define Reference Points and Harvest Control Rules help to clearly inform the Harvest Policy. An example of a basic Harvest Policy might be the following:

- Maintain fish stocks, on average, at a Target Reference Point equal to a stock size required to produce Maximum Economic Yield;
- Ensure that stocks remain consistently above a level at which the risk of overfishing considerably increases, or the Trigger Reference Point;
- Ensure that stocks always stay above a defined Limit Reference Point; and
- If a stock goes below the Limit Reference Point, managers must enact a rebuilding plan to rebuild the stock to the Target Reference Point.

Please encourage the support and promotion of strong, science-based Reference Points, Harvest Control Rules, and Harvest Policies at the WCPFC to ensure the integrity, reliability, and consistency of the global tuna supply!



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.