

**HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM  
(HMSMT) REPORT ON INTERNATIONAL MANAGEMENT ACTIVITIES**

Proposed Rule to Revise 2018 Commercial Pacific Bluefin Tuna (PBF) Regulations

National Marine Fisheries Service (NMFS) intends to propose a 1 metric ton (mt) trip limit for all fleets---except large mesh drift gillnet, which would be subject to a 2 mt trip limit---throughout 2018, or until the 2018 catch limit is met and the fishery is closed. The HMSMT supports these reduced 2018 trip limits.

North Pacific Albacore Management Strategy Evaluation (MSE) Workshop

Supplemental NMFS Report 1 ([Agenda Item H.2.c, November 2017](#)) provides an overview of the outcomes of the 3<sup>rd</sup> Albacore Management Strategy Evaluation (MSE) Workshop recently hosted by the International Scientific Committee (ISC) for Tuna and Tuna-like Species. As noted in this report, two management strategies, and associated candidate reference points, performance measures and harvest control rules were proposed for testing. Following the workshop, an inconsistency within one of the strategies was identified, and to resolve it, a third strategy was developed. Also, the ISC Albacore Working Group (ALBWG) considered the workshop outcomes and slightly revised them, mainly to account for data issues and stock assessment model parameters. Given these changes, a draft MSE Workshop Report, provided to participants in recent days, is currently being reviewed by workshop participants. A final report with the outcomes of this workshop is expected to be available after the ISC meeting in July 2018. For ease of reference, brief descriptions of general terms used in an MSE are shown in Attachment 1. These are slightly modified from the draft MSE Workshop Report.

Preliminary results of the initial MSE are expected to be presented to the Inter-American Tropical Tuna Commission Scientific Advisory Committee meeting in May 2018, and at other Regional Fisheries Management Organization meetings in subsequent months. The ALBWG may host another workshop to make any revisions in advance of the second round of MSE.

Western and Central Pacific Fisheries Commission (WCPFC) Activities

As recommended by the Northern Committee, the WCPFC is scheduled to consider a PBF harvest strategy and a revised conservation and management measure (see [Attachments F and G in the NC13 Report](#)). The Council expressed support for these at its September 2017 meeting. The proposed harvest strategy contains a work plan to conduct an MSE on PBF, similar to that being developed for North Pacific albacore. The first step is a stakeholder workshop in 2018 that has yet to be scheduled. The HMSMT believes it would be beneficial to send HMS advisory body representatives to the anticipated PBF MSE workshop.

## **Attachment 1: General Terms for Management Strategy Evaluation**

**Management Strategy Evaluation (MSE)**--a structured process used to compare the relative effectiveness of alternative management measures in achieving specific management objectives.

**Management Objectives**--statements describing things that are important to decision-makers and stakeholders (e.g., ecological, socio-economic, cultural aspects) and expected achievements for a stock/fishery. Objectives are important because they guide the development of specific benchmarks used to evaluate the performance of management strategies.

**Performance Indicators**--management objectives translated into measurable quantities that can be computed. Performance indicators corresponding to each management objective are evaluated to identify trade-offs between objectives.

**Harvest Strategy**--a framework that specifies the pre-agreed management actions necessary to achieve management objectives and consists of several components such as management objectives, reference points, harvest control rules and acceptable levels of risk.

**Reference Point**--a benchmark used to determine stock status or change in management action.

1) **Target Reference Point (TRP)**--a benchmark that should be achieved according to the management objectives, and indicates that the stock and/or fishery is in a desirable condition (e.g.  $B_{TARGET}$  and  $F_{TARGET}$ ).

2) **Limit Reference Point (LRP)**--a benchmark that should not be breached with any substantial probability according to the management objectives, and indicates that the stock is likely in an undesirable condition and management action is likely required to help the stock and/or fishery recover (e.g.  $B_{LIMIT}$  and  $F_{LIMIT}$ ).

3) **Threshold (or Trigger) Reference Point**--a benchmark used to specify a change in management actions, and acts as a buffer between TRPs and LRPs. Such reference points can be parameters of harvest control rules, specifying control points when management actions (measures) should be taken.

**Harvest Control Rule (HCR)**--a pre-agreed rule for fisheries management, whereby the management action (e.g. allowable catch and/or effort limitation) is determined in response to changes in stock status and/or other indicators. There are two basic types of rules, empirical and model-based:

a) **Empirical Rule**--when the decision rule is based on trends in scientific research data and/or commercial fishery observations (e.g. catch-per-unit-effort; CPUE).

b) **Model-based Rule**--when the decision rule is based on the stock status estimates from a stock assessment model.