HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON REGULATORY MATTERS AND INTERNATIONAL ACTIVITIES

2014 Pacific Bluefin (PBF) Stock Assessment Results

The current status of Pacific bluefin tuna was recently updated, this information was discussed in the NMFS report. The report estimated that the 2012 biomass level is near historically low levels, and experiencing high exploitation rates above nearly all candidate biological limit reference points. These results are similar to the previous 2012 assessment, which also indicated that the stock is overfished and experiencing overfishing. The only projection that resulted in an increase in the spawning stock biomass, under the assumption that current low recruitment continues, was based a 50 percent reduction to the 5,500 metric ton (mt) catch limit in the EPO, where catch is mainly juveniles, as well as a 50 percent reduction of juvenile catches from the 2002-2004 average level and fishing mortality no greater than 2002-2004 levels in the WCPO.

Advisory Meetings and Conservation Advice

The HMSMT has been represented at a number of Advisory meetings in preparation for the July 2014 annual meeting of the IATTC, in Lima, Peru. At these meetings the IATTC scientific staff provided information and advice regarding the stock status of Pacific Bluefin tuna.

IATTC scientific staff recommended:

- Commercial catch in 2014 be limited to 3,154 metric ton (mt), this is based on the estimated commercial catch in 2013 and corresponds to the remaining portion (3,295mt) of the 2012-2013, 10,000mt quota.
- Recreational catches be limited to 208 mt in the Eastern Pacific Ocean, which is based on the same method that was applied to commercial catch to determine that recommended limit.

The Scientific Advisory Subcommittee (SAS) and the General Advisory Committee to the U.S. section of the IATTC generally agree with the scientific community's advice to further reduce catches of bluefin consistent with the conservation advice in the ISC Pacific bluefin tuna 2014 assessment.

U.S. Position for the Conservation and Management of Pacific Bluefin

NMFS has developed a proposal for the US section to be tabled at the upcoming IATTC meeting. The proposal considers recent IATTC staff recommendations and the ISC's conservation advice to reduce commercial catch limits for 2015 and 2016 with a graduated approach intended to achieve more stringent cuts to the 5,000 mt Commission-wide quota of previous IATTC Resolutions (C-12-09 for 2012 and 2013 and C-13-02 for 2014). These reductions to the 2015 and 2016 Commission-wide catch limits represent a 40 percent and a 50 percent cut, respectively. The NMFS proposal preserves the minimum 500 mt catch limit for

countries—such as the United States—with record of historical catch of Pacific bluefin tuna in the eastern Pacific Ocean.

The HMSMT considered the information presented, supports the IATTC staff's advice, and recommends the following:

- Support the NMFS proposal to limit the Commission-wide commercial catch to 3,000 mt in 2015 and to 2,500 mt in 2016.
- Support access by U.S. fleet to the Pacific bluefin tuna stock in order to maintain an economically viable commercial fishery.
- Reduce recreational fishing mortality domestically through the PFMC process (e.g. a reduction in bag limits).

Albacore Precautionary Management Framework

A full stock assessment of albacore in the North Pacific by the ISC Albacore Working Group was completed in spring 2014, and will be submitted to the ISC Plenary in July. It concluded that there is a low probability that overfishing is occurring and low probability that the stock is overfished. Although the current assessment does not suggest management measures are needed, interest in developing a precautionary management framework exists in the event the situation changes in the future.

At the request of the Council, the HMSMT considered the NMFS proposal (Agenda Item E.1.b., Revised Supplemental NMFS Report 4, June 2014) for an IATTC resolution on precautionary management framework of north Pacific albacore, relative to the Council's recommendations to the U.S. Delegation to the Northern Committee (Agenda Item K.3.a., Attachment 2, March 2014).

The bulleted rationales for the Council's recommendations are below (team comment follows each bullet):

- The management framework should enumerate its objectives, including recognition of the importance of recreational fisheries for North Pacific albacore and the need for improved data collection at the international level.
 - The NMFS proposal does not specifically address recreational fisheries or the need for improved data collection. The HMSMT recommends that precautionary management in both the WCPFC and the IATTC, incorporate this objective.
- The management framework should include both target and limit biological reference points to guide management responses with respect to excessive fishing mortality (overfishing) and reduced stock status (depletion), in the event they occur.

The NMFS proposal specifically incorporates target reference points for fishing mortality and limit reference points for biomass. It does not incorporate limit reference points for fishing mortality.

• Fishing mortality (F) based biological reference points should be defined with respect to spawning potential ratio (SPR) and not in terms of historical stock biomass as with the current interim reference point, given uncertainty about the stock-recruit relationship and stock size.

The NMFS proposal defines a suite of potential fishing mortality F-based reference points with respect to SPR; it also includes an F-based reference point in terms of historical stock biomass. The Council proposal is silent on the use of SPR-based reference point.

• Biomass based reference points, used to determine stock status, should be chosen with care, recognizing uncertainty in estimates of stock biomass.

The NMFS proposal specifies two potential biomass limit reference points. The choice of one biomass limit reference point over another is an ongoing discussion and depends upon the resilience of the stock. There is uncertainty in the resilience of the stock which is a function of the steepness of the stock recruitment relationship and natural mortality. The SSC has suggested that there may be incompatibility between some B-based and F-based reference points.

• A simple linear sliding scale harvest control rule-similar to the framework elucidated in the Pacific Council's Fishery Management Plan for West Coast Fisheries for Highly Migratory Species-should be considered; under this type of harvest control rule fishing mortality is proportionately reduced when stock biomass falls below the target to allow it to rebuild to the target.

The NMFS proposal includes a simple sliding scale harvest control rule. The Council proposal also includes the precautionary "ACL-below-OFL" buffer concept. The purpose is to provide a cushion for management and scientific uncertainty.

• Catch-based management measures are favored over effort-based measures, because catch can be more directly related to fishing mortality and easier to monitor; however, catch-based measures could trigger a variety of issues related to the allocation of fishing opportunity.

The NMFS proposal contains both effort- and catch-based management measures and does not favor one over the other. Based on information provided to date, the HMSMT believes that a catch-based management measures may be more appropriate.

In additional, the HMSMT would also like to bring to the Councils attention whether potential irreconcilable differences between these proposals may compromise full consideration and/or implementation of either. For example, limit reference points for fishing mortality aren't specified in the NMFS proposal, but are in the Council's proposal; however, to ensure consistency with the MSA they would need to be defined in the future.

The HMSMT concurs with the SSC's comments on Management Strategy Evaluation (MSE) and recommends engaging managers and scientists to define the operating model at the outset and continue collaboration through completion of the MSE. Completing the MSE by spring 2015 deadline in the NMFS proposal will require resolution of complex technical and logistical resource needs and consensus on a work plan by the relevant science and management bodies.

Harvest control rules differ between the Council and NMFS proposals. The Council proposal includes partial F's by fishing nation, as a basis for national TAC's and "ACL-below-OFL" buffers. The HMSMT supports the HCR's in the Council proposal. The biomass based HCRs in the NMFS proposal are more proscriptive. The NMFS proposal identifies a timeline for developing management measures by 2015, whereas the Council proposal includes some additional management measure concepts but no timeline.

Achieving the goal of maintaining long-term conservation and sustainable catch of north Pacific albacore depends on a common understanding of the stock dynamics and implementation of compatible management approaches across RFMOs. For example, adoption of different biological reference points, harvest control rule metrics (e.g., catch- versus effort-based), and other elements of precautionary management by the IATTC and WCPFC could potential compromise the achievement this goal. Therefore, as called for in the NMFS proposal, the HMSMT encourages IATTC scientific staff and the ISC Albacore Working Group to coordinate and collaborate to refine technical elements (including reference points, control rules, etc.) in support of a precautionary management framework. The timeframe should foster coordination and collaboration without unduly delaying adoption of a precautionary management framework. This should be completed in time for implementation of a precautionary management framework prior to the next stock assessment, scheduled for 2017.