

## HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON INTERNATIONAL MANAGEMENT ACTIVITIES, INCLUDING THE U.S.-CANADA ALBACORE TREATY

### Introduction

The situation summary for this topic identifies two issues: 1) the management framework being developed by the Western and Central Pacific Fisheries Commission (WCPFC) Northern Committee (NC) and 2) the U.S. Canada Albacore Treaty (Treaty). This Report focuses primarily on the international management framework but also includes a brief discussion related to the Treaty.

### International Management Framework for North Pacific Albacore

At the March 2012 meeting the Council tasked the Highly Migratory Species Management Team (HMSMT) to work with the HMS Advisory Subpanel (HMSAS) and Scientific and Statistical Committee (SSC) HMS Subcommittee to further develop information to allow the Pacific Fishery Management Council (Council) to provide input on the development of a management framework at the June 2012 meeting. The HMSMT met April 30-May 2, 2012, to discuss this assignment. This report provides information on the identification of biological reference points (BRPs) for albacore and development of an inventory of potential management measures should domestic management be necessary in response to internationally agreed controls on albacore fishing mortality.

### International Activities

Regional fishery management organization (RFMO) activities regarding management frameworks for albacore and other tunas were described in the March 2012 HMSMT report (Agenda Item B.2.b). The Northern Committee adopted a management framework (also referred to as the Canadian proposal) and will begin developing reference points in September 2012 for the North Pacific albacore stock. The Inter-American Tropical Tuna Commission (IATTC) has not established a timeline for comparable goals in the Eastern Pacific Ocean (EPO) although there has been some discussion by the Secretariat of establishing a complimentary framework for the EPO. In addition, the March 2012 HMSMT Report (Agenda Item B.2.b) described the Strategy Matrix proposal considered at the Kobe II meeting of all tuna RFMOs. Although the Strategy Matrix is different from the Northern Committee's framework, the HMSMT noted that management decisions for both frameworks are consistent in that they could be based upon the level of risk and the timeframe appropriate for the fishery.

Some new information on management strategies for tunas was presented at the IATTC Scientific Advisory Committee meeting during May 15-18, 2012. Regarding management strategy evaluations for tunas in the EPO, Dr. Mark Maunder provided an informative overview of reference points and decision rules (Document SAC-03-09, Agenda Item E.2.a, Attachment 2, June 2012). He also described conditions and complications in developing appropriate reference points for international tuna management. Although North Pacific albacore was not specifically addressed in Maunder's paper, the guidelines he describes would apply to a single species fishery such as the one for albacore.

### Reference Points for Stocks Managed Under the Council's Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP)

The Council plays two roles with respect to establishing biological reference points for North Pacific albacore. First, domestically, there is an obligation to specify them, and the HMS FMP provides specific guidance on how they should be specified in relation to maximum sustainable yield (MSY). Second, the

Council may make recommendations through the U.S. government (NMFS and the State Department) for reference points the U.S. should advocate at the RFMO level.

While the HMS FMP provides a framework for identifying target and limit reference points and the Magnuson-Stevens Act (MSA) requires councils to specify MSY, optimum yield (OY), and status determination criteria (SDC) for managed stocks, the Council has not proposed catch controls for the west coast albacore fishery, in part because the U.S. west coast fishery accounts for a fraction of total catch within the international context. Furthermore, pursuant to National Standard 1 guidelines, managed species in the HMS FMP, including North Pacific albacore, are exempted from the requirement to identify the allowable biological catch (a reduction from the overfishing limit based on scientific uncertainty), and the annual catch limit. The HMS FMP also states that should an RFMO establish reference points for management, those may take precedence over any established under the FMP.

Chapter 4 in the HMS FMP describes BRPs for stocks managed under the FMP: MSY, OY, and SDC.

The MSA requires MSY to be specified in the FMP. Determining a plausible value for MSY for North Pacific albacore is difficult, because of the lack of a stock-recruit relationship ( $h=1$ ). In this case it is necessary to establish a proxy value for MSY. The Council has done this in their Groundfish FMP where proxy values have been established for different species groups, for example  $B_{MSY}=SSB_{40\%}$ .

The MSA also requires specification of OY, which is a target reference point. OY is defined as “The amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems” and is determined by MSY “as reduced by any relevant economic, social or ecological factor.” The HMS FMP defines an OY control rule for species not considered vulnerable in which OY is equal to MSY. In other words, the fishery should be managed (in terms of controlling fishing mortality) so that it produces MSY. MFMT and MSST are limit reference points. The HMS FMP defines the MFMT as  $F_{MSY}$ . Given the default OY control rule,  $F_{MSY}$  would function as both a target and limit reference point (i.e., maximizing yield as a target but over the long term not exceeding this level of fishing mortality). According to the HMS FMP, the MSST for North Pacific albacore would be  $0.7B_{MSY}$  given the natural mortality rate of 0.3 used in the most recent stock assessment (ISC 2011). Note that the Kobe or phase plot frequently produced by RFMO scientists for tropical tunas implies  $F_{MSY}$  and  $B_{MSY}$  as limit reference points in that the quadrants in these diagrams are specified by the quantities  $F_{CURRENT}/F_{MSY}$  and  $B_{CURRENT}/B_{MSY}$ . As noted above, because of the difficulty in determining a plausible value for MSY for North Pacific albacore, it would be necessary to base these limit reference points on proxy values.

SDC are defined as the maximum fishing mortality threshold (MFMT) and the minimum stock size threshold (MSST). The MFMT, when translated into an annual quantity, is referred to as the overfishing limit (OFL). Figure 1 (reproduced from the HMS FMP), below, is a graphical representation of control rules related to these reference points, based on guidance for complying with MSA National Standard 1 published in 1998 (Restrepo, *et al.* 1998). This figure is similar to, although more specific in defining targets and limits, as that shown in *Developing a fishery management regime for stocks managed by the Northern Committee* (WCPFC-NC6-DP-01). The March 2012 HMSMT Report (Agenda Item B.1.b) provides a summary of WCPFC-NC6-DP-01.

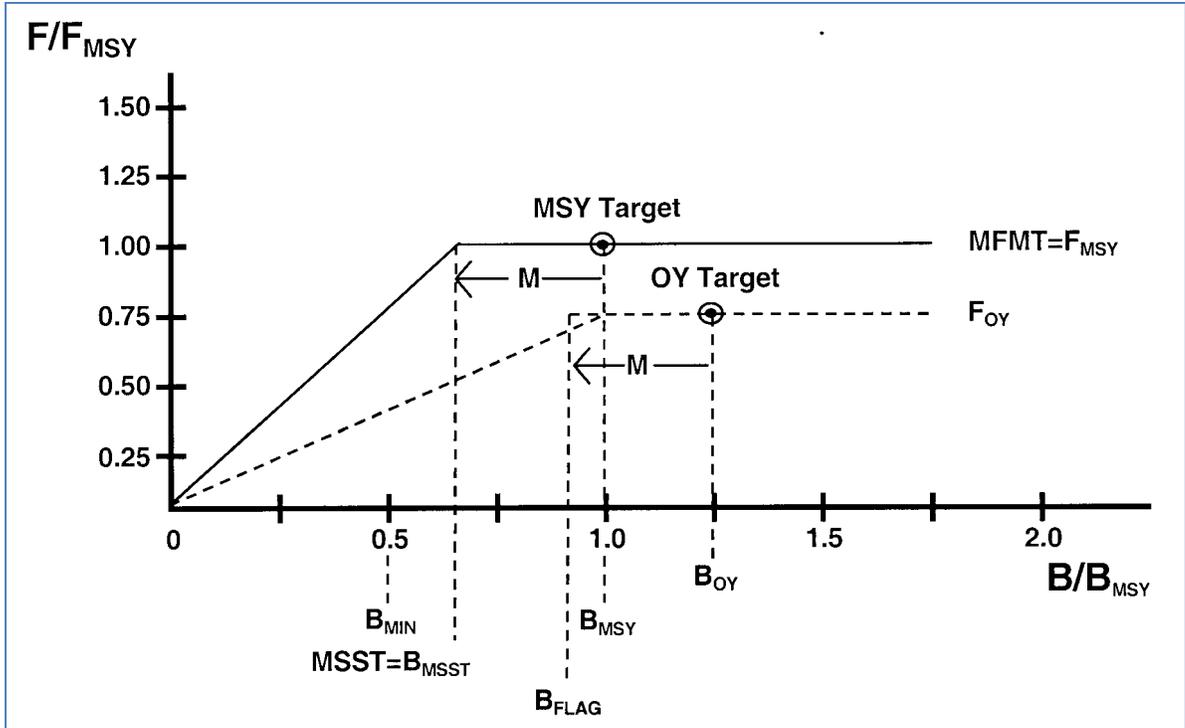


Figure 1. General model of MSY and OY control rules (Figure 4-1 in the HMS FMP).

For comparison, the Council has considerable experience setting reference points for groundfish and coastal pelagic species. For example, the Council extensively deliberated over appropriate reference points and harvest policies for groundfish (Ralston, et al., 2000). As described in Chapter 4 of the Groundfish and Coastal Pelagic Species (CPS) FMPs, the Council set reference points and selected  $F_{MSY}$  proxy values to account for uncertainty and the Council's risk policies. Due to uncertainties in the stock-recruitment relationship for many groundfish species,  $SSB_{40\%}$  was selected as a reasonable proxy to strike a balance between obtaining a large fraction of the MSY if recruitment is highly insensitive to reductions in spawning biomass and preventing a rapid depletion if recruitment is found to be extremely sensitive to reductions in spawning biomass. For CPS a different approach was selected, based on their life histories and management goals. MSY is defined to be a harvest strategy that provides CPS biomass levels at least as high as the  $F_{MSY}$  approach while also providing relatively high and relatively consistent levels of catch. The Allowable Biological Catch (ABC) for the portion of the stock in the United States is a reference point proxy that accounts for scientific uncertainty and the Council's risk policy. In cases where the SSC has quantified a range of probability of overfishing, the Council applies a Buffer based on their preferred level of risk aversion ( $ABC=B*Buffer*F_{MSY}$ ). The general harvest control rule for actively managed CPS is compatible with MSA guidelines to prevent overfishing and useful for CPS that are important as forage. To protect the stock when biomass is low, the control rule specifies a biomass value below which directed harvest is not allowed; and when directed harvest is allowed, it is limited to a fraction of the biomass available to the fishery, assuring the harvest rate will not exceed  $F_{MSY}$ . As discussed above, the Council role in setting reference points for HMS may be more complicated, because of the potential role played by RFMOs.

## Management Measures

The HMSMT has prepared a presentation for their joint meeting with the HMSAS at the June 2012 Council meeting entitled “Potential Alternatives for North Pacific Albacore Management.” This presentation will orient HMSAS members to the international management context in which the North Pacific albacore fishery operates, and reviews potential management alternatives in case a future international RFMO conservation measure requires Council action to manage the domestic fishery. The HMSMT plans to use HMSAS input on potential management strategies to inform the design of a decision document template for domestic management, which could be used to address a future management need. It is expected that the results of these discussions will be included in a supplemental HMSMT Report.

## References

ISC. 2011. *Stock Assessment for Albacore Tuna in the North Pacific Ocean in 2011*, Report of the Albacore Working Group Stock Assessment Workshop. July 2011.

Ralston, S., J.R. Bence, W.G. Clark, R.J. Conser, T. Jagielo, and T.J. Quinn II. 2000. West Coast Groundfish Harvest Rate Policy Workshop, Appendix to *Status of the Pacific Coast Groundfish Fishery through 2000 and Recommended Acceptable Biological Catches for 2001*. Pacific Fishery Management Council, October 2000. Available at [http://www.pcouncil.org/wp-content/uploads/SAFE\\_October\\_2000.pdf](http://www.pcouncil.org/wp-content/uploads/SAFE_October_2000.pdf).

Restrepo, V.R., G.G Thompson, P.M. Mace, and 8 others. 1998. *Technical Guidance on the Use of Precautionary Approaches to Implementing National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act*. NOAA Technical Memorandum F/SPO. July 1998.

## U.S.-Canada Albacore Treaty

At this time the HMSMT offers no recommendations on negotiations for a fishing regime pursuant to the U.S.-Canada Albacore Treaty. However, the HMSMT would like to set the record straight regarding an allegation made in a widely circulated email on this subject. In a May 21, 2012, email Mr. Chip Bissell, fishery consultant for the American Albacore Fishing Association, states in part:

I have particular concern regarding the apparent landings by Canadian vessels at ports that are not on the list set forth in the treaty.

It also appears that NMFS has provided the Council with incomplete and misleading data with respect to treaty-related landings. ...[T]he Council was not informed of the existence and extent of landings by Canadian vessels to “non-treaty” ports. ...I have made a preliminary review of Council materials and am inclined to believe that NMFS, the HMS-MT, and the SWFSC may have been selectively misrepresenting treaty-related landings data from the Council, stakeholders, and this delegation. (emphasis in original)

The HMSMT would like to make clear that we have never intentionally misrepresented landings by Canadian albacore vessels in U.S. ports. Mr. Bissell's claim is based on data presented in Agenda Item I.1.a, Attachment 2, November 2011. This report was prepared by Council staff. Staff ran a query on PacFIN landings filtered by the ports named in Annex B of the U.S.-Canada Albacore Treaty, which lists authorized U.S. ports. As a result landings in Ilwaco were omitted from the data used in that report. Staff was unaware that the U.S. Customs Service, the Federal agency responsible for enforcing these landings requirements, classifies the Annex B ports by customs district. In an explanatory note to NMFS Mr. George R Kisel, Port Director for the Port of Astoria, explained that "CBP's Port of Astoria (Port Code 2901) consists of Astoria, Oregon, and the outlying areas of Warranton, Oregon, Ilwaco, Washington, and Chinook, Washington. Any entries filed at the outlying areas are considered filed at the Port of Astoria, with the 2901 port code. While Canadian-flagged vessels have been authorized to fish for tuna in U.S. waters, they have been required to file entries on their cargo as foreign merchandise."

The HMSMT is responsible for compiling the annual HMS SAFE Report, the principal public data source for HMS landings on the west coast. Where the HMS SAFE has separately reported Canadian landings (in the section on commercial fisheries in Washington State) no ports were excluded from the report. The HMSMT has never misrepresented or selectively omitted information about albacore landings. The HMSMT encourages any entity or individual requiring a better understanding of data to seek our assistance.

PFMC  
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