

ESTABLISH MAXIMUM SUSTAINABLE YIELD (MSY) REFERENCE POINT FOR NORTHERN ANCHOVY

At its June 2013 meeting, the Pacific Fishery Management Council (Council) considered a recommendation from the National Marine Fisheries Service (NMFS) to establish maximum sustainable yield (MSY), or a reasonable proxy, for the northern subpopulation of northern anchovy (NSNA). The need to establish MSY stems from the U.S. District Court for the Northern District of California order issued on April 14, 2013. A 2012 complaint filed by the conservation organization Oceana argued that NMFS, in approving the Council's Amendment 13 to the Coastal Pelagic Species (CPS) Fishery Management Plan (FMP), violated the Magnuson-Stevens Act, National Environmental Policy Act, and the Endangered Species Act. The Court ruled in favor of NMFS on all counts except for the failure to establish MSY for NSNA.

The Council considered MSY for NSNA during development of the CPS FMP (approved in 1998), but did not establish MSY, citing lack of information about the stock's biomass, variability over time, and the proportion of the stock in U.S. (vs. Canadian) waters. The stock was categorized as Monitored (and remains in that category), meaning it was not subject to active management, and was not considered to be facing any conservation concern. Monitored stocks do not have periodic stock assessments or periodic adjustments to target harvest levels, although they may be subject to management measures.

Amendment 13 established mechanisms to determine annual catch limits, overfishing limits (OFL), and acceptable biological catches (ABC) for the species managed under the CPS FMP, including NSNA. These revisions to the FMP were based on biological benchmarks already established in the CPS FMP, including MSY (or a reasonable proxy). However, the original FMP did not specify MSY for NSNA, citing a lack of reliable information available at the time. For the same reason, the Council did not adopt an MSY of Amendment 13 either.

During the development of Amendment 13 to the CPS FMP, the CPS Management Team (CPSMT) investigated many potential sources of stock information for NSNA. This included an acoustic survey estimate, egg and larval surveys from the 1970s, a 1999-2009 relative abundance estimate based on the 1970s egg and larval surveys, landings data, and other sources of information. However, the CPSMT was not able to produce a single recommendation for establishing MSY, and instead provided two options for the SSC and the Council to consider.

Also during development of Amendment 13, the Scientific and Statistical Committee (SSC) considered OFLs and ABCs for CPS monitored stocks, and stated that the reference points for monitored CPS stocks are difficult to determine due to limited data for estimating biomass and productivity. Recognizing that the NSNA stock was lightly fished and had inconsistent fishery-dependent data on which to base estimates of stock status, the SSC recommended that the OFL be set by multiplying the best biomass estimate (130,000 mt) by 0.3. The 0.3 figure is the default fishing mortality rate (F_{msy}) value for Pacific mackerel, and the SSC determined that it was appropriate to use, because NSNA are likely at least as productive as Pacific mackerel. The Council adopted an OFL of 39,000 mt and an ABC of 9,750 mt, which incorporated a buffer of

75 percent. The Council did not take final action on establishing MSY for NSNA, and neither the CPSMT nor the SSC made explicit recommendations to do so. However, the SSC did make a clear recommendation regarding an appropriate F_{msy} .

NMFS will provide a report regarding whether Council action would require an FMP amendment and any other necessities for the Council prior to taking Council action.

Council Action:

Consider MSY for the Northern Subpopulation of Northern Anchovy

Reference Materials:

1. Agenda Item E.3.a, Supplemental Attachment 1: NMFS Report.
2. Agenda Item E.3.c, Public Comment.

Agenda Order:

- a. Agenda Item Overview
 - b. Reports and Comments of Advisory Bodies and Management Entities
 - c. Public Comment
 - d. **Council Action:** Adopt MSY for the Northern Subpopulation of Northern Anchovy
- Kerry Griffin

PFMC
10/10/13