

## COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON MINIMUM STOCK SIZE THRESHOLDS REPORT

The Coastal Pelagic Species Advisory Subpanel (CPSAS) heard a presentation of the National Marine Fisheries Service (NMFS) Minimum Stock Size Thresholds (MSST) Report by Dr. Kevin Hill during the meeting of the Science and Statistical Committee (SSC). Dr. Hill noted that the report made no recommendations, but simply presented a range of potential approaches to determine MSST in fulfillment of the *Oceana, Inc. v. Pritzker, et al.* Amendment 13 Settlement Agreement (Ninth Circuit No. 13-16183; District Court No. C-11-6527 EMC (N.D. Cal.)). The settlement required analysis of MSST alternatives and a NMFS report to be presented to the Council for consideration at or before the September 2016 meeting.

The CPSAS listened to the SSC discussion following Dr. Hill's presentation, and the CPSAS concurs with the comments of SSC members who raised the issue of attempting to develop MSST / overfished levels for highly dynamic CPS stocks that exhibit wide swings in abundance even in the absence of fishing. Studies indicate that fishing pressure on CPS is generally insignificant compared to the large-scale effects of environmental forcing. Further, this research is finding that well managed fisheries, such as CPS, also have a negligible impact on managed stocks and dependent predators (Punt et al, 2016; Hilborn et al, 2016 submitted).

Current MSST levels for actively managed sardine (50,000 mt) and Pacific mackerel (18,200 mt), based on age 1+ biomass, were adopted with Amendment 8 of the CPS FMP, carried over from State of CA regulations. The analysis at that time (Amendment 8, Appendix B) stated that the 50,000 mt MSST level for sardine allowed the population to achieve MSY in 10 years in favorable conditions; the 10-year rebuilding timeline is a Magnuson Act National Standard 1 guideline. Further, this was near the minimum biomass level that could be objectively measured in the absence of fishery data. However, the sardine control rule adopted in the CPS FMP established a cutoff for directed fishing at 150,000 mt, triple the overfished level, accounting for forage needs. This cutoff effectively prevents the fishery from attaining overfished status.

The MSST report noted that the 18,200 mt MSST for Pacific mackerel adopted from California regulations was found to be a "reasonable proxy" (MacCall et al. (1985)). MSSTs for monitored stocks are currently not specified in the CPS FMP, due to the absence of data for all species except the central stock of northern anchovy.

### Considering

- the effects of environmental variability on CPS stocks;
- recent research findings that CPS fisheries have negligible impact on ecosystem function;
- and recognizing the difficulties and serious questions involved in analyzing alternative approaches to develop MSST

A majority of the CPSAS supports existing management measures, including current MSSTs, for both active and monitored stocks until more accurate data can be obtained, and workshop(s) are conducted to address the questions posed in the MSST report. The CPSAS also points out a critical

need to improve field surveys, including surveillance of nearshore habitat that is currently missed. This is essential to qualify survey results for use in stock assessments that reflect the true abundance of CPS in the California Current.

The majority of the CPSAS agree with SSC comments on the MSST issue that there is not enough information to answer questions at this time, and more work is needed. We also point out that in light of the great variability in CPS, particularly anchovy, if a dynamic approach is ultimately adopted, it will require review and reassessment at least every generation (i.e. 4 years for sardine, 5 years for Pacific mackerel, and annually for anchovy) to reflect current conditions and achieve balance between ecosystem function and sustainable fisheries.

The conservation representative notes that MSSTs are required by the Magnuson-Stevens Act for managed fish species and are important for defining an overfished state and quickly recovering stocks in the event they do become overfished. The NMFS report highlights some concerns with the current approach and identifies potential options for improving MSSTs. The conservation representative appreciates the challenges identified by NMFS and the SSC associated with updating MSSTs for some CPS stocks, and recommends that the Council consider scheduling further review and consideration of a process for establishing updated or new MSSTs for all CPS – including northern anchovy and other monitored stocks, particularly as they may become more important to the fishery – to ensure scientifically sound and precautionary overfished thresholds are set in accordance with National Standard 1 guidelines.

Thank you for your time and consideration.

PFMC  
09/15/16