SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON SARDINE HARVEST FRACTION

The Scientific and Statistical Committee (SSC) reviewed the draft Environmental Assessment (EA) related to harvest control rules for Pacific sardine (Agenda Item E.2.a, Attachment 1). Ms. Lorna Wargo (Coastal Pelagic Species Management Team [CPSMT] Chair) gave a presentation on the alternatives for determining the FRACTION parameter in the harvest guideline (HG) control rule, and outlined the CPSMT analysis of the Alternatives (Agenda Item E.2.b, CPSMT Report). The No Action Alternative bases the HG on temperature measured at Scripps Institution of Oceanography (SIO) and a range for FRACTION of 5 to 15%. The Action Alternatives differ from the No Action Alternative by basing the HG on CalCOFI temperature, and a set of ranges for the FRACTION parameter.

Ms. Wargo summarized how often each of the Action Alternatives would have led historically to equal, higher or lower harvest rates than the current HG control rule. The SSC recommends this information be included in the EA.

Table 1 of the draft EA includes performance measures for a No Action Alternative and Alternatives 2a-2d. However, the technical bases for the calculations underlying the performance measures for the No Action Alternative and for Alternatives 2a-2d are different. Any comparisons between these sets of performance measures are consequently misleading. The analyses on which the performance measures for the No Action Alternative are based did not account for the Overfishing Level (OFL) and Acceptable Biological Catch (ABC) control rules, which will be part of management decision making even if the HG control rule is not changed. This is because there was no requirement for OFLs and ABCs when Amendment 8 to the Coastal Pelagic Species Fishery Management Plan (FMP) was adopted.

The SSC provides the following two options to compare Alternatives 2a-2d with what would happen if HGs are computed using a control rule based on SIO temperature and constraining FRACTION to lie between 5% and 15%. The OFL and ABC control rules will need to be applied along with the HG control rules for both options.

1. Conduct two projections setting FRACTION to 5% and 15% respectively. These two projections will provide results which will bound the outcomes of the No Action Alternative.
2. Conduct projections in which actual CalCOFI temperature data (repeated to yield a long-term time-series) drives recruitment. The performance measures for the No Action Alternative would be computed by basing HGs on Scripps Institute of Oceanography temperature, while the performance measures for Alternatives 2a-2d would be computed by basing HGs on CalCOFI temperature. The SIO and CalCOFI indices will need to be paired to ensure valid comparisons can be made.

Either of these options will allow a comparison between the Action Alternatives and the No Action Alternative.