

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
EXEMPTED FISHING PERMIT (EFP) FOR SARDINE RESEARCH

The Scientific and Statistical Committee (SSC) was briefed by Mr. Tom Jagielo on the west coast sardine survey application for an EFP in 2009. The proposed survey is an expansion of a pilot study that was conducted off the Oregon coast in 2008. Mr. Ryan Howe of the survey team was also present to answer questions about survey design. Dr. Owen Hamel represented the SSC at the May 2009 Stock Assessment Review (STAR) Panel review of the survey methodology, and briefed the SSC on the STAR Panel's report.

The 2009 EFP application is for a combined survey that would range from Monterey Bay to the US/Canada international boundary. Survey design is a two-stage sampling approach that includes: 1) a photographic aerial survey, and 2) an at-sea point set sampling to estimate species composition, school density, and biological characteristics of the fish. The applicants addressed the SSC request from March 2009 to standardize methods throughout the study area and develop a rigorous survey design. In addition, a power analysis was presented in the application to inform the discussion about adequate sample size to characterize school variability. Based upon the results of that analysis, the SSC concurs with the applicants and the STAR Panel report that an EFP set-aside of 2,400 mt would be sufficient to provide an expectation of successful calibration, which is a crucial element of the survey. If only 1,200 mt were to be available for conducting the survey, the SSC suggests that the applicants be asked to develop a revised proposal that presents the trade-offs associated with alternative ways to conduct the study under that undesirable constraint.

The SSC concurs with the STAR Panel that the application has merit and should be approved. Current sardine assessment results are particularly uncertain with respect to the portion of the stock that occurs to the north of Monterey Bay. As discussed in the STAR Panel report, survey results would be expected to underestimate overall abundance. Therefore, the findings from the proposed study would potentially provide a lower bound for the size of the northern portion of the stock, which could inform the next assessment. In addition, the survey has the potential to make even greater improvements to the overall stock assessment if it is continued annually for sufficient years to develop a time series.

PFMC
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