Agenda Item C.1.b
Supplemental SSC Report
March 2011

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON EXEMPTED FISHING PERMITS (EFP) FOR 2011

The Scientific and Statistical Committee (SSC) was briefed by Mr. Kerry Griffin of the Council staff on the West Coast Aerial Sardine Survey Exempted Fishing Permit (EFP) application for 2011. Mr. Tom Jagielo, the sardine survey science advisor, provided additional information. The permit would continue EFP research conducted in 2009 and 2010 (and a non-EFP pilot project in 2008), and the proposed survey follows essentially the same methodology as in previous years. The survey area is reduced in areal extent from both the 2009 and 2010 surveys, covering the region off the coasts of Washington and Oregon, but not extending into California.

The survey design is a two-stage sampling approach that includes: 1) a photographic aerial survey, and 2) at-sea point set sampling to estimate species composition, school density, and biological characteristics of the fish. In addition to the latitudinal reduction in survey coverage, the 2011 survey design includes a doubling in transect density between Tillamook, Oregon and the U.S./Canadian border, where the vast majority (>95%) of sardine school surface area north of 42º N latitude has been found, increasing the number of transects from 27 to 41, which should reduce the variance of the estimates.

The EFP proposal in the Briefing Book requests 2,100 mt for the survey, while the applicant intends to request another 600 mt to cover the cost of a third plane while also increasing the number of point set samples (from ~56 to ~72). The third plane is needed to increase the number of aerial transects and to allow more of the visual survey, but not the point sets, to occur earlier, reducing the impact of poor weather by allowing more data to be collected on each good weather day.

The SSC continues to be concerned about the lack of explicit protocols for the spatial distribution of point sets, which are needed to address a concern that the sets tended to be geographically clustered in the 2009 and 2010 surveys, and therefore, might not have captured possible spatial variability in the relationship between school size and biomass. Since length composition and other biological data are also collected from the point sets, spatial variation in the biological characteristics might also have been missed. The EFP proposal should address how adequate length samples will be collected spatially.

A separate survey may occur in Canadian waters during 2011. However this will depend upon Canadian governmental approvals. The addition of a Canadian survey would not only result in more complete stock coverage, but would provide additional information on the selectivity of the U.S. portion of the survey. The results of any Canadian survey in 2011 are, however, unlikely to be included in the 2011 sardine assessment.

There is a strong scientific basis for the EFP proposal. The continuation of the time series and additional year's data on the surface area to biomass relationship will add to the upcoming and future sardine stock assessments. The SSC recommends that the EFP proposal be approved for public review following any changes in the requested set-aside and related additional justification.

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