

**COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON 2018 EXEMPTED  
FISHING PERMITS (EFP) NOTICE OF INTENT**

The Coastal Pelagic Species Advisory Subpanel (CPSAS) and Coastal Pelagic Species Management Team jointly participated in a webinar on November 7 to hear presentations on two 2018 EFP Proposals, the first from the California Wetfish Producers Association (CWPA) and the second from West Coast Pelagic Conservation Group (WCPCG). The two proposals offer different approaches as pilot or “proof of concept” projects to achieve the same goal: develop methods to survey near-shore waters off the west coast to estimate biomass and improve the accuracy of future CPS stock assessments.

*CWPA EFP Proposal*

Diane Pleschner-Steele presented CWPA’s EFP proposal as a continuation of a cooperative pilot study to develop sampling methods for estimating CPS biomass in shallow waters not accessible to NOAA ships. By way of background, the Pacific Fishery Management Council conditionally approved the joint California Department of Fish and Wildlife (CDFW) / CWPA aerial survey for use in future CPS stock assessments, consistent with recommendations in the Southern California Coastal Pelagic Species Aerial Survey Methodology Review (Agenda Item D.2, Attachment 1, June 2017).

This research project intends to sample CPS schools using two aerial spotter pilots with their plane and CWPA’s aerial camera system to fly surveys near shore and photo-document schools, coupled with four qualified, knowledgeable, and committed purse seine vessels chartered to capture a subset of the schools identified while the pilot photographs the “point sets.” The primary focus of the project is to address issues identified in the methods review, for example:

- Conduct replicate transects and surveys to allow estimation of variance for density;
- Because point sets are a core source of information to validate the survey estimate of biomass, the methods panel recommends that additional point set data be collected, and/or alternate approaches applied, such as using the volume of schools combined with estimates of packing density;
- Continue work to develop a variance estimator to account for various sources of uncertainty.

The CWPA EFP proposal requests 500 metric tons of sardine be earmarked as a research set aside for this project, amounting to an average of about 71 mt per day for the seven-day research period. This EFP is needed because of the likely continued closure of the sardine fishery in 2018, and the high probability of capturing sardines in the near-shore survey area. This EFP will enable full capture of random schools even if schools are pure sardine or mixed schools above the allowed incidental take limit. The fish captured in the project are proposed to be sold to avoid wasting the resource and to partially offset expenses and time incurred by participating fishermen and processors, who will be responsible for keeping schools separate onboard, and fully sorting individual schools and documenting both weight and species composition.

This EFP research is essential to develop useful and cost-effective survey methods to quantify the abundance of CPS observed inshore of current NOAA surveys. These survey methods can be expanded to other areas coast-wide, which would improve the accuracy of stock assessments.

In our June 2017 Supplemental CPSAS Report on the Aerial Methods Review (Agenda Item D.2.a, June 2017), the CPSAS commented: “This [nearshore] is an area where fishermen have reported a substantial volume of fish that is now being missed in stock assessments. Both Pacific Northwest and California CPS fishermen strongly support these efforts to improve the accuracy of stock assessments in the future. It should be noted that 70 percent or more of the CPS harvest in California occurs in this near-shore area. The CPSAS is pleased that the near-shore area is now acknowledged as a high priority research and data need.”

The CPSAS continues to voice our support for the aerial survey methods outlined in this project, and we encourage the Council to adopt this EFP for public review at this meeting.

#### *WCPCG EFP Proposal*

Mike Okoniewski presented the EFP request for the West Coast Pelagic Conservation Group (WCPCG) as an extension of the Southwest Fisheries Science Center (SWFSC) – Industry Collaborative “Proof of Concept Project” begun in 2017, in conjunction with the SWFSC Acoustic Trawl Methodology Survey (ATM). Work under this EFP will be primarily near-shore surveillance in northwest coastal waters, and may also be conducted in comparative observation along or near survey transect lines in conjunction with the NOAA survey vessel.

A primary purpose of this project is to provide important supplementary biological data collection and additional sampling techniques for areas inshore of the 2018 NOAA/SWFSC acoustic trawl survey. Sampling will be accomplished at the same general time as the NOAA survey, and in particular inshore of the shoreward extent of NOAA ship transects. CPS schools will be wrapped by a purse seine vessel and samples will be dip-netted or jigged in small amounts (e.g. 5kg-25kg), frozen and retained for biological samples and to validate species composition of the SWFSC Simrad EK60 downsounder (calibrated by SWFSC staff) mounted on the purse seine vessel chartered for this work. Wrapped schools will then be released alive, and no fish will be harvested for commercial sale. This is in part due to logistics, as the survey plan is generally to have the purse seine vessel transect the inner waters in conjunction with the RV Reuben Lasker as it travels down the west coast from Washington to the California border.

An EFP is needed because the sardine fishery will likely be closed again in 2018. However, the amount requested is no more than 10 metric tons of sardine.

This EFP is warranted to augment NOAA surveys both by providing a sufficient abundance of CPS species and information on species composition in adjacent near-shore areas where NOAA ships cannot go. Because the vessel will be outfitted with a SWFSC EK60 downsounder, the acoustic backscatter collected inshore of the NOAA transects will be comparable with offshore data.

As with the CWPA project, this survey method could also be applied in other areas. Ideally the combination of aerial and additional acoustic elements would enhance surveys by providing

abundance data both from the surface and from depth, and allow observation in inshore waters that the NOAA survey vessel cannot survey. The WCPCG project may incorporate an aerial component in at least part of the survey area.

The CPSAS also voices strong support for the WCPCG EFP proposal and encourages the Council to adopt it for public review.

In conclusion, the CPSAS is encouraged that forward progress is now being made to develop effective survey methods for the nearshore area. The CPSAS thanks CWPA, WCPCG and especially the SWFSC for acknowledging the data gaps in current surveys and helping to provide support and funding for cooperative surveys that will hopefully improve the accuracy of future CPS stock assessments.

PFMC  
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