

COASTAL PELAGIC FISHERIES ADVISORY SUBPANEL REPORT ON 2018 EXEMPTED
FISHING PERMITS (EFPs) – FINAL ACTION

The Coastal Pelagic Species Advisory Subpanel (CPSAS) reviewed two revised exempted fishing permit (EFP) applications presented by the California Wetfish Producers Association (CWPA) and the West Coast Pelagic Conservation Group (WCPCG) (Agenda Item C.2, Attachment 1 and Attachment 2). Both collaborative projects are intended to address the need for data to assess coastal pelagic species (CPS) biomass inshore of current National Marine Fisheries Service (NMFS) Acoustic Trawl Method (ATM) surveys.

The need to include the nearshore biomass in stock assessments was identified as a serious problem in both the 2017 Pacific sardine assessment review and the 2018 ATM review. Therefore, the CPSAS recommends the Council approve these two EFP applications for implementation.

The WCPCG project proposes to expand and extend a collaborative “proof of concept” project begun in 2017 with the industry seiner *F/V Lisa Marie*. The *Lisa Marie* will be outfitted with a Southwest Fisheries Science Center (SWFSC) Simrad EK 60 acoustic downsounder to survey inshore of the offshore transects to be conducted during the SWFSC 2018 ATM summer survey. The goal is to provide supplementary acoustic data and collect CPS samples using “loose purse” seine sets for the areas inshore of acoustic-trawl survey. Loose purse sets are a standard industry practice that allows the seine vessel crew to determine if the captured fish meet regulatory requirements, and if not, to release that catch without mortality.

The National Oceanic and Atmospheric Administration (NOAA) survey vessel cannot safely navigate or survey shoreward of the 27 fathom (50 meter) depth contour. In some coastal areas, this is over 10 miles offshore. The *Lisa Marie* can survey in waters as shallow as seven fathoms and cover a large area of coastal waters that have been primary fishing grounds for industry.

In addition to conducting surveys and taking samples inshore, the *Lisa Marie* will attempt to sample farther offshore in conjunction with the NOAA survey vessel, both at night and during daylight hours. This year the *Lisa Marie* will also use their “side-scan” sonar to observe and record fish school behavior and avoidance in proximity to the vessel.

The WCPCG project requests a maximum of ten tons of CPS, including sardine. There will be no commercial usage of CPS samples or catch.

The longer-term objective of this collaborative NW industry/Science Center(s) project is to provide additional acoustic and biological data that can be used to inform the CPS stock assessments. If successful, this collaborative proof of concept may be utilized for other fishery surveys.

The CWPA project, conducted in partnership with the California Department of Fish and Wildlife (CDFW) since 2012, has documented a substantial abundance of CPS. In 2016-17 surveys, the collaborative project saw and photographed 1,920 CPS schools, estimated at 107,040 mt, with 32 percent estimated as sardine. The CWPA EFP proposal aims to address questions and

recommendations from the SSC following an earlier methods review. The objective is to qualify nearshore aerial surveys for use in future stock assessments. The Council in 2017 conditionally endorsed the CDFW/CWPA aerial surveys for future use, subject to SSC approval of a variance estimator to quantify uncertainty in spotter pilot estimates.

The CWPA project proposes to conduct “point sets” to validate pilot estimates of tonnage and species composition. The EFP was revised at the request of the SSC to conduct a power analysis to document the amount of fish needed. Based on that analysis, the goal of this project is to fly three aerial survey replicates of nearshore transects in the southern California bight in summer 2018 and attempt to wrap 23 schools of various sizes, with an estimated total point set capture tonnage of 1,272 mt of CPS. Thirty-two percent of the total is estimated as sardine; however, our EFP request is not to exceed 600 tons of sardine to account for the potential of catching larger schools, the amount requested in the revised EFP application. This is expected to produce a coefficient of variance (CV) of 3.3 percent. Aerial surveys are an efficient way to survey a long expanse of nearshore coastline (and islands) and can be conducted several times a year more cost effectively than NOAA and charter surveys.

The recent ATM review report emphasized that acoustic trawl biomass estimates can be used for anchovy only if the inshore area is addressed and recommended “nearshore distribution information needs to be included as part of the abundance estimation process.” The same caveat should also apply to sardine. In fact, 70 percent or more of California’s sardine and anchovy catch is taken in this nearshore area. But this abundance is not included currently in stock assessments.

It is critically important for the future of CPS fisheries in both California and the Pacific Northwest that nearshore biomass of CPS be included in stock assessments. Both the WCPCG and CWPA are committed to help the SWFSC improve the science with the goal of achieving more accurate biomass estimates and better-informed fishery management. The CPSAS urges the Council to help by recommending the approval of these EFP applications. In light of the variability of CPS stocks, we further recommend that future CPS stock assessments include multiple indices conducted during different times of year, rather than attempting to rely on only one acoustic trawl survey-based estimate for sardine and other CPS.

PFMC
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