COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON PACIFIC MACKEREL ASSESSMENT AND MANAGEMENT MEASURES

The Coastal Pelagic Species Advisory Subpanel (CPSAS) joined the Scientific and Statistical Committee (SSC) webinar and heard a presentation by Dr. Kevin Hill on the catch-only assessment for management in 2021-22 and 2022-23, followed by SSC discussion. The CPSAS thanks Dr. Hill for his presentation and work, and the SSC for their comments.

CPSAS fishery representatives continue to express concerns regarding the Pacific mackerel assessment (See June 2019 Agenda Item F.3.a, Supplemental CPSAS Report 1). The catch-only Pacific mackerel assessment, based on the 2019 benchmark assessment, assessed age 1+ biomass with a new Model Alt_19, which was based mainly on the Acoustic Trawl (AT) survey. Fishermen continue to question AT survey methods and assumptions. Increased collaboration with industry, both in expanding surveys and acknowledging fishermen's observations of CPS stock presence/abundance on the fishing grounds and focusing surveys, accordingly, would improve the accuracy of future stock assessments.

Although mackerel fishery catches have been low for several years in California, Pacific mackerel are known for sharp fluctuations in abundance. This catch-only stock assessment is the basis for two years of harvest limits until the next full assessment is scheduled. This condition could preclude substantial harvest opportunity if Pacific mackerel abundance spikes in the interim. Veteran fishermen observe that when anchovy are abundant, mackerel will follow. There's no question that anchovy are at record abundance. Fishermen are now observing Pacific mackerel around the northern Channel Islands in southern California. But due to reduced effort because fishermen are focusing on other fisheries, and the tendency for mackerel to school with sardine, fishermen report not targeting mackerel. Pacific mackerel is a key alternative CPS fishery in California, particularly in southern California.

To address this concern, we recommend that the Pacific Fishery Management Council (Council) allow sufficient flexibility to schedule stock assessment updates and revised harvest limits as needed between scheduled benchmark assessments. The SSC suggested conducting update assessments, rather than catch-only projections, on at least a bi-annual frequency. The CPSAS supports that recommendation. The Terms of Reference (TOR) for update assessments also need more flexibility built into the process to enable the Stock Assessment Team, SSC and Council to consider conducting benchmark assessments as needed.

Based on the information presented, the CPSAS recommends the following management measures, based on a tier 3 sigma value, as recommended by the SSC. We also recommend that the Council approve a P* of 0.45, following the longstanding precedent set for Pacific mackerel. These are consistent with the Coastal Pelagic Species Management Team recommendations.

Table 1. CPSMT Proposed 2021-22 Pacific Mackerel Harvest Specifications (mt)

Biomass	57,832
OFL	12,145
ABC _{0.45} (Tier 3)	9,446
ACL (=ABC)	9,446
HG	8,323
ACT	7,323
Incidental at 45% by weight	1,000
Incidental per landing in non-CPS fisheries	3mt

Table 2. CPSMT Proposed 2022-2023 Pacific Mackerel Harvest Specifications (mt)

Biomass	45,925
OFL	9,644
ABC _{0.45} (Tier 3)	7,501
ACL (=ABC)	7,501
HG	5,822
ACT	4,822
Incidental in other CPS fisheries at 45% by weight	1,000
Incidental per landing in non-CPS fisheries	3mt

The CPSAS also recommends in-season check-ins at the March 2022 and March 2023 Council meetings, if needed, to consider potentially moving incidental allowances to the directed fishery or other alternative approaches to management, if the mackerel fishery attains or comes close to attaining the annual catch target.

Thank you for your consideration of our recommendations.

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