## NATIONAL MARINE FISHERIES SERVICE SOUTHWEST FISHERIES SCIENCE CENTER REPORT ON 2022-2023 CPS WORKSHOPS FOR PACIFIC SARDINE

At the April 2022 Council meeting, the SWFSC stated that it would report at the June meeting on the status of proposed upcoming workshop(s) regarding Pacific Sardine Stock Structure and other research needs, including a methodology review prior to having the next Pacific Sardine benchmark assessment. The STAT along with the SSC has proposed that the next benchmark assessment be postponed until February 2024 in order to address outstanding issues with the current assessment.

Mr. Dale Sweetnam presented a two-workshop schedule to both the CPSMT (May 4, 2022) and the SSC CPS Subcommittee (May 5, 2022) which discussed the following schedule:

## Workshop #1 PACIFIC SARDINE STOCK STRUCTURE WORKSHOP

October 11-13, 2022, in person and on WebEx, SWFSC to Host

- Delineation of northern and southern subpopulations
  - Review current habitat model
  - Temperature
  - Alternative approaches
- Review current literature on genetics, morphometry, spawning habitats, temperature-at-catch
- Improving catch and survey estimates for the Northern Subpopulation
- Implications for changes to stock delineation methods:
  - Can the data collection be scaled to the problem? (e.g. real-time temperature-at-capture versus monthly aggregate SST)
  - Changes to current habitat model will result in corresponding increases/decreases in both catch and survey abundance

## Workshop #2 PACIFIC SARDINE METHODOLOGY REVIEW

February 21-23, 2023, in person, PFMC to Host

- Revisit the habitat model and update assessment model inputs based on the results covered in Workshop #1
- Improvements to estimates of abundance, and how they are incorporated into the model
  - ATM survey revisions
  - Nearshore acoustics
  - Aerial survey estimates,
- Preliminary results of genetics and morphometric studies, if available

A main discussion item centered on when and where to review the Emsy temperature control rule, either in the Stock Structure workshop or the Methodology Review; however, the SSC CPS Subcommittee stated that the assessment model needs to be updated prior to reviewing the status of Emsy and therefore suggested that this item wait until after the 2024 benchmark assessment.