

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
IDENTIFICATION OF MANAGEMENT OBJECTIVES AND PRELIMINARY DEFINITION
OF 2016 SALMON MANAGEMENT ALTERNATIVES INCLUDING TEST FISHERY
ALTERNATIVES

Mr. Brett Kormos (CDFW) briefed the Scientific and Statistical Committee (SSC) on a proposed test fishery, based on coded-wire tags (CWTs), to evaluate potential differences in the Klamath River Fall Chinook and Sacramento River Fall Chinook contribution rates north and south of the Klamath River mouth (Agenda Item E.4, Attachment 4). This proposal was unchanged from that reviewed by the SSC in November 2015. The proposed sampling design was not sufficiently developed for the SSC to evaluate whether it would achieve its goals. To do this evaluation, a projection of the expected number of CWT recoveries given the sample rates and quotas proposed would be needed.

The SSC discussed a test fishery proposal from the California Salmon Council titled “Fine scale ocean distribution patterns of Klamath River Chinook salmon, in comparison to other stocks of interest, including the ESA-listed California Coastal Chinook” (Agenda Item E4.b, Supplemental NMFS Report). The proposal is based on geo-referenced genetic stock identification (GSI) samples collected at-sea. Its focus is to evaluate the distribution of Klamath River Chinook and California Coastal Chinook in the Klamath Management Zone, Fort Bragg, and San Francisco Management areas. Sampling is stratified by area and month and includes proposed non-retention sampling in areas that have typically been closed to commercial fishing. The targeted sample size ranges from 200 to 400 for each month-area stratum in the study area. The sample sizes in this proposal are about 25 to 50 percent of those in the 2007 proposal reviewed by the SSC. The sample plan in the proposal projects 3,000 non-retention samples collected in time-area strata expected to be closed to commercial fishing. The SSC notes that the resolution of the GSI stocks is not at the same level as stocks used for management.

This study would provide information on stock distribution in areas that have usually been closed to commercial fishing and would provide finer spatial resolution than CWTs because all samples are geo-referenced upon capture. Because GSI can identify Klamath River fish of either hatchery or natural origin, tagged or not, GSI would be expected to yield more recoveries of Klamath River Chinook-identified fish (albeit not distinguishing fall from spring) for a given number of impacts compared to CWTs.

Fully evaluating the usefulness of the information generated by either test fishery would require an analysis of the uncertainty in stock-specific CPUEs and the ability to detect stocks that are a small proportion of the total Chinook abundance in a given area/time.