

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
LOWER COLUMBIA RIVER NATURAL COHO HARVEST MATRIX

The Scientific and Statistical Committee (SSC) reviewed the document "Review of allowable fishery impacts to Lower Columbia River natural coho, Lower Columbia Natural Coho Workgroup Report, Working Draft Analyses" (Agenda Item D.2.a, Attachment 1). Mr. Chris Kern of the Oregon Department of Fish and Wildlife was available to answer questions.

The Workgroup Report provides little methodological detail, however much can be inferred from the "Harvest strategy risk assessment for Lower Columbia natural coho" document from the November 2013 Council meeting (Item C.2.a Attachment 2). The SSC previously noted that "numerical estimates of extinction risk from the model should be considered as index values only, and in no way represent actual probabilities of extinction." Thus, while rankings of different management scenarios in terms of population risk are likely to be relatively robust, there is substantial uncertainty in the baseline magnitude of risk, and also the amount of change in risk among alternatives.

The SSC identified multiple arguments for retaining at least some parental seeding categories in the harvest matrix. Although the Workgroup Report states that low seeding levels were rarely observed in the past, the time series for many populations span only a few years, and even the longest time series are inadequate to characterize the probability of occurrence of rare events. Simulated population dynamics should not be considered a reliable quantitative prediction of the frequency of low seeding levels in the future. In addition, seeding levels are determined from data on wild populations, while the current marine survival index is derived from a hatchery proxy.

Lack of clarity on methodological details, as well as apparent inconsistencies among tables, figures, and text in the report hindered thorough review, and the SSC requests that future workgroup reports identify a point of contact for technical clarifications.

The SSC supports re-assessing the suitability of the harvest matrix periodically as additional information on population capacity and productivity becomes available.

PFMC
09/12/14