

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON FINAL STOCK ASSESSMENTS AND REBUILDING ANALYSES

The Scientific and Statistical Committee (SSC) Groundfish Subcommittee (GFSC) met via Webinar on September 28 to review the additional model runs for Pacific ocean perch requested by the SSC at its September 2017 meeting. The SSC also reviewed the updated rebuilding analysis for yelloweye rockfish. Dr. David Sampson presented the report of the GFSC to the SSC.

Pacific Ocean Perch

The SSC requested additional model runs because there was inadequate rationale for removing the Triennial survey index from the assessment. Two runs bound the range of models investigated: (a) the post-Stock Assessment Review (STAR) model; and (b) the post-STAR model with steepness estimated and including the Triennial survey as a single time series. Both models result in outputs that were judged to be implausible. The SSC concluded that the available data are insufficient to estimate steepness. It is usual in this situation to base the assessment on the mean of the prior for steepness, but this value leads to an unrealistically low estimate of survey catchability. The SSC endorsed the GFSC-recommended base model, which involves setting steepness equal to 0.5 ([Agenda Item F.4, Attachment 1, November 2017](#)) as best available science regarding the current status and productivity of Pacific ocean perch. The stock is assessed to be rebuilt to above the B_{MSY} target, with a 2017 estimated depletion of 77 percent.

Given the considerable uncertainty associated with the assessment, the SSC recommends that the next assessment be a full assessment. In addition, the analysts for the next assessment should reconsider the Triennial survey.

The SSC recommends that the Pacific ocean perch assessment be assigned to Category 2 owing to the extreme sensitivity of the model outputs to changes to the specifications of the model (i.e., Category 2d).

Yelloweye Rockfish Rebuilding Analysis

The SSC reviewed and endorsed the revised Yelloweye Rockfish rebuilding analysis ([Agenda Item F.4, Attachment 2, November 2017](#)), which followed the [Terms of Reference for Groundfish Rebuilding Analyses](#).

The probability of rebuilding changes from 0 to 100 percent over a single year (2027). This is an unexpected result, but for yelloweye this occurs because a sequence of good year classes spawned from 2007 to 2011 will join the spawning population starting around 2020 such that the projected spawning biomass will exceed the target biomass by 2027. The results of the rebuilding analysis do not depend strongly on forecasted recruitment. The rapid change in rebuilding probability is a consequence of this rebuilding analysis not accounting for uncertainty about starting biomass and age-structure, which is acceptable under the Terms of Reference for Groundfish Rebuilding Analyses.

The SSC evaluated progress to rebuilding. Catches have been less than annual catch limits, and the stock is rebuilding faster than anticipated from the previous rebuilding analysis. The SSC

concluded that rebuilding progress has been adequate. T_{MAX} is the maximum rebuilding time allowable under the Magnuson-Stevens Act. It is computed as the sum of mean generation time and the time to rebuild in the absence of removals after the stock was declared overfished. T_{MAX} is reduced from its 2011 value of 2083 to 2070, given the changes to the results from the assessment. T_{MAX} cannot be earlier than T_{TARGET} , the target year for rebuilding. However, this is now the case because T_{TARGET} is currently 2074. T_{TARGET} will consequently need to be reduced. The choice of T_{TARGET} is a policy matter, but the SSC notes that Management Strategy Evaluation analyses have shown that fishery stability is enhanced if the probability of rebuilding by T_{TARGET} exceeds 50 percent.

Marine Stewardship Council and the Limited Entry Bottom Trawl Fishery

The SSC received a report from the GFSC summarizing the review of a report from Mr. Tom Jagielo that describes whether data collected on silvergray rockfish, shortraker rockfish, and California skate are sufficient to estimate outcome status with respect to biologically-based limits. The SSC endorses the GFSC conclusion that all three populations appear to be in a healthy state at the center of their geographic distributions.

PFMC
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