1998 STAR Panel Report on Black Rockfish

STAR Panel members:
Jim Packer, WDF&W
Han-Lin Lai, NMFS
Gary Stauffer, NMFS, SSC representative
Frank Henry, CDF&G, chairperson

STAT Team members:
Farron Wallace, WDF&W
Annette Hoffmann, WDF&W
Jack Tagart, WDF&W
Thomas Jagielo, WDF&W

Brian Culver, WDF&W, GMT representative
Rod Moore, GAP representative

Overview

The STAR panel reviewed the draft black rockfish document, as submitted on June 5, 1998. The black rockfish STAT team stated that the assessment is still in the developmental stage, and population model and production model runs had not yet been conducted. The STAT team and STAR panel unanimously agreed that the document was insufficently complete to accept for the 1998 management cycle. The panel chose to discuss the introductory sections (species distribution, stock structure, fishery review, sampling regime, model data components) and provide recommendations for future modeling efforts. The STAT team anticipates an early to mid-1999 completion date for a draft comprehensive black rockfish assessment.

Comments on the technical merits and/or deficiencies of the document

The 1994 stock assessment used the stock synthesis program. The current assessment uses a likelihood-based model constructed using AD Model Builder computer software. The current model differs from the earlier black rockfish assessment in that it is built with less restrictive statistical assumptions by including more sources of variance, for example. Core data inputs are from trawl, commercial line, and recreational fisheries, and a mark/recapture study. The STAT team chose to use AD Model Builder because of its interpretive properties and its flexibility. As part of this ongoing model development, the STAR panel concurred with the STAT team's plan to conduct simulation studies with an artificial dataset with inherent sufficient variability to determine if the model could reflect these data accurately.

The STAR panel noted that future model runs may be hindered by the considerable variability in the commercial fishery data. The panel also observed that

the 14-year series of catch proportion-at-age data from the sport fishery contained little interannual variability, thus providing little information on the response or dynamics of the stock over time.

Prioritized recommendations for future research and data collection

The panel recommended that the complete assessment document provide: a more explicit description of the recreational-fishery sampling protocol for catch and effort; and a review of the fishery effects from the recreational bag limit reductions in 1992 and 1995, and a discussion of concerns about localized fish depletion and the resultant effort shifts.

Given the uncertainty about the development of a successful model for the black rockfish stock, the panel discussed whether or not to recommend continuance of the assessment effort for this species. The STAT team and the STAR panel agreed that: 1) the assessment scientists need to determine if meaningful inferences about the stock can be drawn from past and current data collection efforts; 2) considerable effort has already been invested in the stock assessment and the assessment should continue to completion; 3) the effects of commercial and recreational fishery regulation changes since the last assessment report should be reported to the fishing community and the public; and 4) the model investigation will reveal whether the recreational fishery survey is supplying the requisite types and quantities of data for assessment purposes.

The STAT team hopes to complete the model runs (with the addition of the most recent fishery data) by winter 1998. If the STAT team cannot complete the assessment document by the time a STAR panel is convened in February 1999 to review the Pacific whiting assessment, then it's the intention of the STAT team to submit the document during the regular 1999 review cycle.