GROUNDFISH MANAGEMENT TEAM REPORT ON FINAL ACTION ON STOCK ASSESSMENT PLAN AND TERMS OF REFERENCE FOR GROUNDFISH AND COASTAL PELAGIC SPECIES

The Groundfish Management Team (GMT) thanks Dr. Jim Hastie from the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC) for his presentation on the NMFS' final recommendations for 2017 stock assessments. The GMT discussed all of the available materials and offers the following thoughts.

2017 Assessments

The GMT supports the proposed species for full stock assessments adopted by the Council at the April meeting for review, which included: blue/deacon rockfish, lingcod, yelloweye rockfish, yellowtail rockfish, Pacific ocean perch, and California scorpionfish. The GMT concurs with the Scientific and Statistical Committee (SSC) recommendation to limit the blue/deacon rockfish assessment to the waters off of Oregon and California only based on data availability. This list of species contains a broad portfolio of stocks for the 2017 assessment cycle in terms of nearshore/slope/shelf species and geographical range.

The GMT notes that one of the factors proposed for use in the Factor Scoring Overview presented by Dr. Hastie includes the use of "Unexpected Changes in Stock Indicators" which relies on recent survey trends. The preliminary analyses presented fit linear trends using data from the NMFS bottom trawl survey. The results presented are informative, but the GMT notes that these trends are not standardized as they would be for a stock assessment model. The standardized trends may look different than the unstandardized linear trends presented, and the bottom trawl survey may not be the most appropriate survey indicator for all rockfish species. The GMT encourages the continuation of work to develop methods to produce standardized indices from the appropriate survey to use in future stock assessment factor scorings.

The GMT also supports the recommended updates of bocaccio and darkblotched rockfish. The recommendation by NMFS to conduct one or two additional update assessments of arrowtooth flounder and blackgill rockfish are also supported by the GMT. However, if NMFS and state staff limitations preclude the ability to conduct two additional update assessments, the GMT recommends prioritizing arrowtooth flounder. Neither arrowtooth flounder nor blackgill rockfish were ranked as high priority species, 28 and 35 respectively, in the stock assessment prioritization exercise, but recent discussions have indicated that these two species might need to be given higher priority given the possibility of becoming constraining.

Given that increased bottom trawling is expected to occur on the shelf now that canary rockfish are rebuilt, arrowtooth flounder may become a constraining species for some participants in the Individual Fishing Quota (IFQ) fisheries. Although the last Stock Assessment Review Panel (STAR) panel and Scientific and Statistical Committee (SSC) recommended the next assessment of arrowtooth flounder be a full assessment, the SSC recognized the majority of issues with the 2007 assessment, e.g., catch histories, could be addressed with an update. Similarly for blackgill rockfish, the 2011 STAR panel and SSC reports recommended use of future data updates. The 2011 blackgill rockfish assessment was highly uncertain with data too limited to estimate key

parameters such as natural mortality, steepness, and recruitment deviations. The Council recommendation to remove blackgill rockfish from the Slope Rockfish complex south of $40^{\circ}10'$ (would be effective 2018), removes flexibility to buffer blackgill rockfish impacts with other slope species. This would be the first assessment of blackgill rockfish since this Council recommendation.

The GMT is in agreement with the NMFS NWFSC recommendation to conduct three STAR panels, and has no issue with the proposed pairing of species (California scorpionfish and blue/deacon rockfish; lingcod and yelloweye rockfish; and Pacific ocean perch and yellowtail rockfish). When scheduling the STAR panels, the GMT suggests that consideration be given to the complexity of the individual stock assessments. The number of area models in Table 1, <u>Agenda Item G.8, Attachment 1</u>, provide a sense of model complexity, but are not meant to be prescriptive. The GMT also recommends the number of model areas be based on available data. The blue/deacon rockfish is likely going to require a high workload on the part of NMFS staff and the state representatives; therefore the GMT suggests consideration that the blue/deacon rockfish assessment be one of the later STAR panels.

Final Terms of Reference

The GMT highly recommends holding a pre-assessment data workshop in Spring 2017. The data workshop held in 2015 prior to the assessments was extremely productive and aided in the collaborative efforts between NMFS and state staff. Pre-assessment data workshops are proposed in the TOR in Section 4.3 Stock Assessment Team Responsibilities, and the GMT supports this addition.

The following language is proposed in Section 4.6 Management Team Responsibilities, "...GMT representative, in collaboration with the Council staff, is responsible for providing the STAT with the information needed to conduct projections, including the default harvest control rules, the σ and P* values needed for the default projections, and specifications for any additional projection requests." The determination of σ and P* is not the purview of the GMT. We recommend it be struck from the final TOR, replaced with the language recommended in the SSC report (Agenda Item G.9.a. Supplemental SSC Report). The GMT, in collaboration with Council staff, can provide guidance to the STAT teams on P* for catch projections.

Recommendations:

- Conduct full stock assessments for blue/deacon rockfish (OR/CA), lingcod, yelloweye rockfish, yellowtail rockfish, Pacific ocean perch, and California scorpionfish to be reviewed at three STAR panels
- Conduct update assessments for bocaccio, darkblotched rockfish, and arrowtooth flounder, with consideration to include blackgill rockfish
- Hold a pre-assessment data workshop in Spring 2017 as suggested by Section 4.3 of the TOR
- Adopt the SSC proposed language for Section 4.6 of the TOR

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