## GROUNDFISH ADVISORY SUBPANEL REPORT ON INITIAL STOCK ASSESSMENT PLANS AND TERMS OF REFERENCE (TOR) FOR GROUNDFISH AND COASTAL PELAGIC SPECIES

Dr. Jim Hastie and Mr. John DeVore briefed the Groundfish Advisory Subpanel (GAP) on stock assessment planning for 2017. The GAP offers the following comments and recommendations on stock assessment planning.

## **Full Assessments**

The GAP understands only eight full assessments can be conducted next year given the current resources available in the Northwest and Southwest Fishery Science Centers. The GAP is in agreement with the Scientific and Statistical Committee (SSC) and believes the following stocks are good candidates for full assessments in 2017:

Yellowtail Rockfish Lingcod California Scorpionfish Cabezon Blue/Deacon Rockfish Yelloweye Rockfish Bank Rockfish Gopher Rockfish

Yellowtail rockfish, which ranks at the top of the advisory stock assessment prioritization list provided by Dr. Hastie, is an important target species in trawl and non-trawl fisheries. While yellowtail rockfish north of 40°10' N. latitude was last assessed in 2013 using data-moderate methods, it is important to assure the best science is available to inform future harvest levels. The GAP believes the incorporation of age and length composition data into a full assessment, which is not allowed in a data-moderate assessment, may improve our understanding of current stock status and estimation of sustainable harvest levels.

Lingcod, which was last assessed in 2009, is another important target species in trawl and nontrawl fisheries. The GAP understands there are more age and other informative data available to improve that assessment. The GAP also understands there are structural changes being contemplated for any new lingcod assessment that cannot be accommodated with an update.

California scorpionfish was last assessed in 2005 and is out date for informing future harvest specifications. In fact, the 2005 assessment was out of date in the last specifications cycle and a catch-only update of the assessment was provided to inform 2017 and 2018 specifications. The SSC also notes that uncertainty in current stock status given the age of the assessment compelled the SSC to downgrade the stock from a category 1 to a category 2. Given the importance of this stock to southern California fisheries and the high attainment of recent annual catch limits

(ACLs)<sup>1</sup>, the GAP recommends a new full assessment be done next year to improve our understanding of stock status and sustainable harvest levels.

Cabezon populations off California and Oregon were last assessed in 2009. This is an important target stock in west coast nearshore fisheries as evidenced in the high ranking (#8) in Dr. Hastie's prioritization matrix. The GAP agrees this is a high priority stock for assessment and therefore recommends a full assessment.

Blue rockfish off California north of Pt. Conception was last assessed in 2007 and is, therefore, out of date for informing harvest specifications. In fact, similar to California scorpionfish, a catch-only update of the assessment was provided to inform 2017 and 2018 harvest specifications. While there is no expectation the stock category will be upgraded from category 2 since any new assessment will likely be an assessment of a complex of two species (blue and deacon rockfish), the increasing age of the assessment could result in a future downgrade of the stock category designation. Further, blue rockfish was estimated to have a precautionary status compelling the need to better understand stock status and improve estimation of a sustainable harvest level.

Yelloweye rockfish was last assessed in 2011 as an update to the 2009 full assessment with a depletion of 21 percent at the start of 2011. This overfished stock is the binding constraint to most non-trawl fisheries north of Pt. Conception. Given the importance of yelloweye and its depleted status, this stock is considered one of the highest priority stocks for a new full assessment from the GAP's perspective.

The last suggested candidate for a full assessment is bank rockfish. Bank rockfish was last assessed in 2000 and is so out of date that data-poor methods (DB-SRA) are used to determine overfishing limits (OFLs). With the Council action to reduce targeting of blackgill rockfish south of  $40^{\circ}10^{\circ}$  N. latitude, this is an increasingly important target stock and should use more robust methods to determine status and OFLs.

Gopher rockfish was last assessed in 2005 and therefore was considered out of date for informing harvest specifications for 2017 and beyond. As such, the SSC recommended re-specifying the 2016 OFL for 2017 and 2018 and downgrading the stock from a category 1 to a category 3. This is an important target stock in nearshore fisheries in California and therefore future harvest specifications should be informed by a better current understanding stock status and estimation of sustainable harvest levels.

## **Update Assessments**

The GAP suggests the following stocks for update assessments:

Bocaccio Rockfish Darkblotched Rockfish Blackgill Rockfish Arrowtooth Flounder

<sup>&</sup>lt;sup>1</sup> The ACL and OFL were exceeded in 2014.

Both bocaccio and darkblotched rockfish are projected to be rebuilt this year and new assessments next year are needed to confirm these projections. The SSC recommended updates for both these stocks next time they are assessed.

Blackgill rockfish was last assessed in 2011 and with its importance to industry we feel an updated status determination is warranted.

Arrowtooth flounder was last assessed in 2007 and that assessment is now considered out of date. The biomass projections from that assessment, which were largely influenced by the strong 1999 year class, predicted a steep decline despite evidence in the trawl survey and in trawl catches that stock abundance is increasing at a great rate. Projected OFLs from the 2007 assessment are now getting so low that annual quotas for arrowtooth are changing trawl fishery distribution to avoid arrowtooth effectively turning this abundant stock into a constraining species. While a catch-only update of the 2007 assessment was provided last year to mitigate these impacts for the 2017-2018 management cycle, the increasing age and uncertainty of this out of date assessment could result in a downgrade in the stock category and much less certainty in current status and estimation of OFLs.

## **Terms of Reference**

The GAP also reviewed the revisions to the Terms of Reference and finds those revisions acceptable.

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