

GROUND FISH MANAGEMENT TEAM REPORT ON  
MID-BIENNIUM ANNUAL CATCH LIMIT ADJUSTMENT AND REBUILDING HARVEST  
RATE ADJUSTMENT POLICIES

The Groundfish Management Team (GMT) discussed the briefing book documents, had a discussion with Mr. John DeVore of Council staff regarding the materials, and offers the following comments.

**Mid-Biennium Annual Catch Limit Adjustment Policy Framework**

*Overarching*

The GMT endorses the exploration of mechanisms to adopt a “green light” policy, by which an annual catch limit (ACL) could be increased mid-biennium, based on a change in stock status from a new stock assessment. The GMT notes that not only would the ACLs increase under this “green light” framework but also the overfishing limit (OFL) and allowable biological catch (ABC). The title of this action may then need to be renamed. The GMT cautions that adding a “green light” framework to the Groundfish Fishery Management Plan (FMP) could have a high workload depending on the scope and structure of the analysis.

The GMT recommends the Council define which harvest control rules would be eligible for action under the “green light” framework, for example: (1) allowing overfished species to change designation from overfished to rebuilt; (2) applying the current rebuilding plan harvest control rules to the most recent estimate of overfished species biomass (e.g., continue to apply the same spawning potential ratio (SPR) harvest rate); (3) allowing species in the precautionary zone (i.e., currently under the 25-5 or 40-10 harvest control rule) to be declared healthy (i.e., establishing  $ACL = ABC$ , or other); (4) allowing select non-overfished species harvest specifications to change based on applying the current harvest control rule to the most recent estimate of biomass.

The Council should also define how the “green light” framework is implemented mid-biennium. The GMT believes that the mid-biennium adjustment could either become a default policy that occurs automatically for any species with a change in stock status (e.g., declared rebuilt) mid-biennium unless the Council chooses otherwise. This would be similar to Amendment 24, but dissimilar to the “red light” policy. Alternatively the mid-biennium adjustment could only be implemented if the Council takes specific action at the time the stock assessment is approved to implement the “green light” framework and corresponding regulations. **The GMT recommends that both pathways be analyzed to determine the trade-offs.**

**The GMT recommends the Council decide whether the framework should include both overfished and non-overfished species or only overfished species (currently 5 species).** On one hand, limiting the scope to only overfished species would provide for a narrower analysis. Alternatively, there could be situations where a mid-biennium ACL change for a non-overfished stock would provide greater socio-economic benefits to fisheries than changing an ACL for a recently rebuilt stock. For example, if the sablefish stock status changed from the precautionary zone to healthy, the corresponding increased ACL may provide greater socio-economic benefits to fisheries than if darkblotched rockfish was declared rebuilt since the current harvest policy is to set the ACL equal to the ABC.

**If the Council chooses to apply the “green light” framework to both overfished species and non-overfished species, the GMT recommends the Council limit the number of species that would be eligible for the mid-biennial ACL increase, at least initially.** For example, the Council could limit the number of species by evaluating the current stock assessment projections and whether large ACL increases are anticipated in the near term. While this would be speculative, indicators exist that could be used to hypothesize large ACL gains such as: (1) stocks that show substantial increases in absolute and relative abundance from the graphs shown by Dr. Hastie from the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC) during the stock assessment prioritization process based on NMFS bottom trawl survey data or, (2) if the last time a stock was assessed less productive priors were used for natural mortality or steepness (i.e. updating to more productive priors would be expected to boost OFLs and ACLs).

The Council could also limit the analysis to those species where the greatest socio-economic benefits would be expected from an ACL increase (e.g., species caught in all sectors, choke species, economically important species, etc.). The GMT also believes there may be merit in starting with a small number of species so that we can evaluate how well the process works before expanding it to all species. The GMT acknowledges the tradeoff of limiting the number of species is that some species may be missed (i.e., unexpected change in stock status) and thus may not be eligible for an increase.

#### *How to Analyze the Framework and Environmental Impacts*

The GMT believes that the environmental impact analysis must be completed before the harvest specifications can be increased and management measures adjusted in regulation. The GMT notes there could be efficiencies gained by first summarizing the long-term impacts disclosed in the Tier analysis (e.g., range of harvest specifications, management measures, socio-economics, etc.) and then focusing the additional analysis on those impacts not previously disclosed but expected when the harvest specifications are adjusted mid-biennium (i.e., conduct a gap analysis).

There are two ways to think about the timing of the impacts analysis; (1) the impacts analysis of any possible harvest specifications increase could come in concert with the policy decision that will lay out the “green light” framework; or (2) the impacts analysis could be done subsequent to the “green light” framework being implemented. The GMT discusses these two options below.

It is our understanding that the proposal contained in the briefing book would combine the analysis of the “green light” framework along with the expected environmental impacts associated with implementing the higher harvest specifications. Such an analysis is expected to be overarching, similar to what has been presented in the Tier.

Alternatively, the “green light” framework could be analyzed separately from the environmental impacts of changing the harvest specifications. Furthermore, the number of species could be limited to those anticipated to be assessed mid-biennium. The development of the Prioritization Rankings and Assessment Recommendations for Pacific Coast Groundfish Prioritizing Fish Stock Assessments (e.g., Dr. Hastie’s rankings) could provide an indication of the likely stocks for future assessments which could be candidates for a “green light” analysis. The GMT could propose the list of species for Council consideration that would be included in the biennial analysis in support of the possibility of a mid-biennium harvest specification change. Under this scenario, it is more likely that detailed impact analysis within the biennial analysis would be available to support a potential harvest specifications adjustment. The GMT acknowledges, however, that incorporating

additional analysis into the biennial process may be challenging given the historical workload encountered each biennium.

The stock assessment prioritization schedule could also be modified such that the species scheduled for upcoming stock assessments (i.e., those scheduled for assessments mid-biennium) were known earlier, additional analysis could be incorporated within the biennial analysis to support the possibility of a mid-biennium harvest specifications change. That is to say, if the Council could identify the stocks that would be assessed in 2019 by its June 2017 meeting (start of the 2019-2020 analysis), we could anticipate and analyze such adjustments within the biennial analysis. The GMT also acknowledges that this proposal would move the stock assessment prioritization process one year earlier (e.g., from 2018 to 2017) and would allow the Council to consider ACL adjustments for 2020; such changes require coordination with the Fisheries Science Center, Scientific and Statistical Committee (SSC), etc. Changing the timing of the stock assessment prioritization process may also provide additional benefits because it may lead to more effective planning for future stock assessment development (e.g., age reading, catch reconstructions, abundance index development).

### Conclusion

If the Council adopts the “green-light” framework, the Council could consider selecting a preliminary list of stocks to be assessed for 2019-2020 by the June 2017 meeting. The GMT and NMFS would then analyze potential higher harvest specifications during the biennial harvest specifications and management measures to expedite the adoption of a “green-light” harvest specification into rule. The GMT believes that the best potential path for selecting potential “green-light” stocks would be based on two main criteria: (1) would an ACL increase be beneficial (regardless of stock status) and (2) if we expect a large ACL increase to occur.

### Rebuilding Harvest Rate Adjustment Policy

The GMT reviewed the report [Agenda Item F.8, Attachment 1](#) submitted by Ms. Chantel Wetzel and Dr. Owen Hamel, NMFS NWFSC, which described simulated rebuilding strategies for Pacific ocean perch and yelloweye rockfish. The simulations compared rebuilding times between the status quo policy and a hybrid policy (as proposed by the Groundfish Advisory Subpanel (GAP) in June 2016, [Agenda Item G.6.a, Supplemental GAP Report](#)) that used a 40-10 harvest control rule when spawning biomass of species was projected to increase above the minimum stock size threshold (MSST).

Under the hybrid rebuilding plan, the time to rebuild was extended by 79 years for Pacific ocean perch and 98 years for yelloweye rockfish. For these two species, the hybrid rebuilding strategy does not appear to meet the standard for rebuilding a stock within an appropriate timeframe established in the Magnuson-Stevens Act (MSA) regulations nor the National Standard (NS) Guidelines. However, the GMT notes that this type of policy (rebuilding plan based on the 25-5 harvest control rule) was successfully used to rebuild petrale sole. Because of the species specific differences in the success of this harvest control rule-**the GMT cannot endorse the harvest rate adjustment policy as the default rebuilding policy for all stocks.**

**The GMT continues to recommend that alternative strategies to rebuild stocks, consistent with the MSA and NS guidelines, be explored using tools such as management strategy evaluations to maximize benefit to communities.**

**GMT Recommendations:**

1. The Council consider which harvest control rules would be eligible under the “green light” framework
  - a) To allow overfished species to change designation from overfished to rebuilt;
  - b) to apply the current rebuilding plan harvest control rules to the most recent estimate of biomass of overfished species (e.g., continuing to apply the same SPR harvest rate);
  - c) to allow species in the precautionary zone (i.e., currently under the 25-5 or 40-10 harvest control rule) to be declared healthy (i.e., establishing ACL =ABC or other);
  - d) to allow selected non-overfished species harvest specifications to change based on applying the current harvest control rule to the most recent estimate of biomass.
2. The Council choose whether to apply default harvest control rules for setting harvest specifications under the “green light” framework or whether action would be needed to trigger the “green light” framework and harvest specifications adjustment.
3. The Council consider the following range of alternatives for what species would be eligible for mid-biennium harvest specification increase using the “green light” framework:
  - a) All species, or
  - b) Overfished species, and/or
  - c) Select species (e.g., where the ACL is projected to increase substantially and/or species of significant socio-economic value or other criteria)
4. The alternatives be structured such that the Council would have to take specific action at the time the stock assessment is approved to implement the “green light” framework and corresponding regulations
5. The alternative strategies to rebuild stocks, consistent with the MSA and NS guidelines, continue to be explored using tools such as management strategy evaluations tong maximum benefit to communities.

PFMC  
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