

GROUND FISH MANAGEMENT TEAM REPORT ON FISHERY MANAGEMENT PLAN
AMENDMENT 23, ANNUAL CATCH LIMITS AND ACCOUNTABILITY MEASURES

The Groundfish Management Team (GMT) reviewed the materials for the Pacific Coast Groundfish Fishery Management Plan (FMP) Amendment 23, annual catch limits (ACL) and accountability measures, under this agenda item and provides the following comments for Council consideration.

Clarification of Optimum Yield (OY)

At the April 2010 Council meeting, the GMT discussed the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the concept and definition of OY and the confusion about the relationship to the annual catch limit (ACL) (Agenda Item I.2.b, Supplemental GMT Report). Here we just reiterate that the acronym that represents the annual limit on harvest has changed to the ACL and OY is not an annual harvest specification anymore. It is still the intent of the Council to set annual harvests (ACLs) at the level the Council expects to achieve OY. **The GMT, therefore recommends that the last sentence in Section 4.7 describing OY in the draft FMP language on p. 54 be stricken or modified to make clear that it is the ACL that is now the annual numerical harvest specification.** Otherwise we find the revisions Council staff has made to the proposed FMP language are consistent with the Council's intent and the National Standard 1 (NS1) guidelines.

ACL Control Rule – translating the 40-10 harvest control rule

The objective of the 40-10 harvest control rule is unchanged – it is to provide a default precautionary and rebuilding calculation of the OY (now ACL). This default methodology reduces fishing mortality as stock size declines (for stocks within the precautionary zone).

There are two options for translating the existing 40-10 harvest control rule under the new Amendment 23 framework. Option 1 adjusts the ACL relative to the overfishing limit (OFL) by progressively reducing the ACL from the OFL as depletion decreases below the $B_{40\%}$ target (See Figure 2-3 of the Preliminary Draft Environmental Assessment (PDEA), Agenda Item B.2.a, Attachment 1). Option 2, the preliminary preferred alternative, adjusts the ACL relative to the ABC by progressively reducing the ACL from the ABC as depletion decreases below the $B_{40\%}$ target (Figure 2-4 of the PDEA, Agenda Item B.2.a, Attachment 1).

The GMT offers the following considerations on the Council's decision which option should be chosen as the default policy for setting the ACLs for species in the precautionary zone.

First, this decision should be made at an overarching level and not based on the outcomes for any particular stock. The reasons for this are threefold: (1) post-hoc decisions on how to prevent overfishing are inappropriate for a default policy; (2) under the preliminary FMP language, the Council will retain the ability to make stock-specific decisions on how to make adjustments for species in the precautionary zone that may diverge from the default acceptable biological catch (ABC) control rule; and (3) the stock status changes over time as new scientific information is

gained. Therefore, under either option, the Council maintains flexibility to use other methods for reducing the ACL from the OFL and ABC as the management environment and our understanding of stock status change over time.

For ACLs calculated using Option 1, the resultant yield from the ABC buffer (i.e., P* approach) may be more conservative than the 40-10 adjustment from the OFL, thus subsuming any 40-10 modifications to the ABC. This relationship depends on both P* and the scientific uncertainty. Figure 1 demonstrates under what ABC buffer components and stock status the 40-10 rule will not be applied. For example, under default stock category 1 values of $P^*=0.45$ and $\sigma = 0.36$, the yield calculation will default to the ABC buffer value and not use the 40-10 adjustment when stock status ≥ 0.36 . For a category 2 stock, a status ≥ 0.32 will also not use the 40-10 adjustment. For ACLs calculated using Option 2, the 40-10 adjustment is always used because the adjustment is taken from the ABC, not the OFL. When considering whether to reaffirm the preliminary preferred option, the fundamental questions on why the 40-10 adjustment is being applied in the precautionary zone and whether the ABC buffer is sufficient under certain conditions must be confronted. A management strategy evaluation could help develop methods for more fully accounting for scientific uncertainty (e.g. in the Fmsy proxy and not just in estimates of biomass). This could change how the Council perceives risk that stocks in the precautionary zone will not return to maximum sustainable yield (MSY) levels.

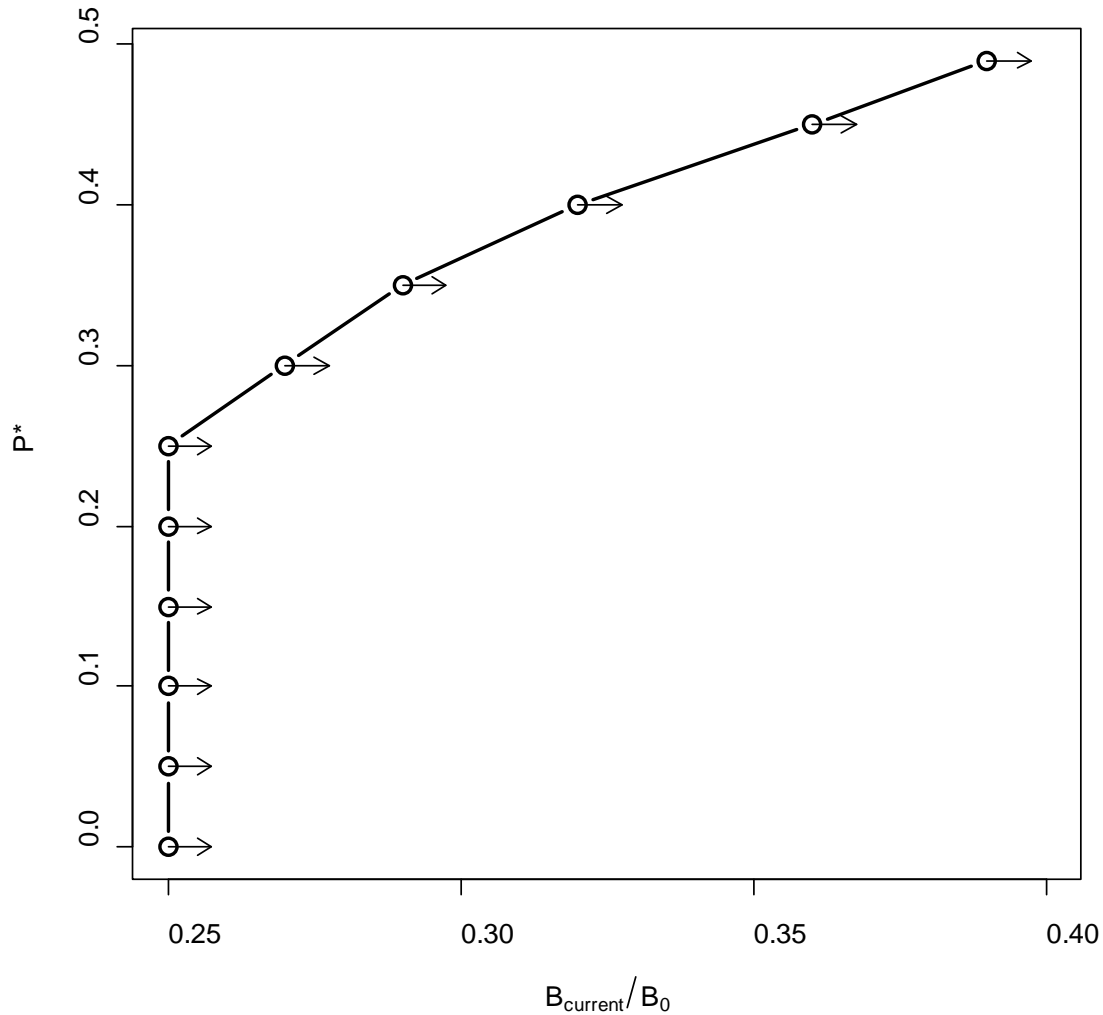


Figure 1. Stock status (current biomass (B_{current}) relative to unfished biomass (B_0)) as it relates to P^* for different measures of scientific uncertainty (σ) relating to each stock category (category 1 = 0.36; category 2 = 0.72). Arrows indicate that depletion values greater than the point are subsumed by the ABC control rule under ACL Option 1, thus the 40-10 rule is not used. The broken line indicates the Council default $P^* = 0.45$.

The GMT recommends that the Council reaffirm Option 2 (the Preliminary Preferred Alternative) for translating the 40-10 harvest control rule as the default precautionary rebuilding strategy, or provide rationale for choosing Option 1. Depending on which control rule Option is chosen, the Council may want to revisit ACLs for precautionary zone species (sablefish and blue rockfish) under Agenda Item B.3.

Annual Catch Targets (ACTs) and Harvest Guidelines (HGs)

The Council’s preliminary preferred Amendment 23 alternative incorporates annual catch targets (ACTs) as an accountability measure (as described in the revised NS1 guidelines) and as a harvest specification in the FMP. An ACT is a numerical value that results after the ACL is reduced for management uncertainty. The GMT requests that the Amendment 23 FMP language include several examples of how an ACT would be used, including how mortality in relation to an ACT will be tracked; whether or not action will be required or not if an ACT is attained (or projected to be attained); who would be responsible for taking action, if necessary; etc. **The GMT recommends that ACTs be used consistently across species/complexes, as an accountability measure to account for management uncertainty, and that guidance is provided in the FMP on how an ACT should be used for management.**

Relative to harvest guidelines, the GMT notes that the proposed measures to initiate implementation of Amendments 20 and 21 to the Pacific Coast Groundfish Fishery Management Plan (June 10, 2010, 76 FR 32994) include changes to how harvest guidelines are defined. For example, this rule defines the “Fishery harvest guideline” as the harvest guideline or quota after subtracting from the OY [ACL] any allocation or set-asides for the Pacific Coast treaty Indian tribes, projected research catch, deductions for fishing mortality in non-groundfish fisheries, as necessary, and set-asides for EFPs. The GMT notes that there are likely other instances where the proposed regulations under FMP Amendments 20 and 21 may need to be amended for consistency with FMP Amendment 23. As with ACTs, **the GMT recommends that HGs be used consistently across species/complexes. The GMT also recommends that guidance is provided in the FMP on how HGs should be used for management, and that that guidance under Amendment 23 is consistent, to the extent practicable, with the Amendment 20 and 21 FMP language.**

Inseason Adjustments to HGs

FMP section 5.5. “Inseason Procedures for Establishing or Adjusting Specifications” specifically states that HGs and quotas may not be adjusted inseason unless they resulted from incorrect data or from computational errors. **The GMT recommends correcting section 2.1.1.1 of the preliminary draft EA (Agenda Item B.2.a Attachment 1) which states that under the no action alternative HGs may be “changed inseason as determined by a Council/NMFS decision”.**

GMT Recommendations:

- 1. The GMT therefore recommends that the last sentence in Section 4.7 describing OY in the draft FMP language on p. 54 be stricken or modified to make clear that it is the ACL that is now the annual numerical harvest specification.**
- 2. The GMT recommends that the Council reaffirm Option 2 (the PPA) for translating the 40-10 harvest control rule as the default precautionary rebuilding strategy, or provide rationale for choosing Option 1.**
- 3. The GMT recommends that ACTs be used consistently across species/complexes, as an accountability measure to account for management uncertainty, and that guidance is provided in the FMP on how an ACT should be used for management.**

4. **The GMT recommends that HGs be used consistently across species/complexes. The GMT also recommends that guidance is provided in the FMP on how HGs should be used for management, and that that guidance under Amendment 23 is consistent, to the extent practicable, with the Amendment 20 and 21 FMP language.**
5. **The GMT recommends correcting section 2.1.1.1 of the preliminary draft EA (Agenda Item B.2.a Attachment 1) which states that under the no action alternative HGs may be “changed inseason as determined by a Council/NMFS decision”.**

PFMC
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