

GROUND FISH MANAGEMENT TEAM REPORT ON COMMENTS ON PROPOSED CHANGES TO NATIONAL STANDARD GUIDELINES 1, 3, & 7

The Groundfish Management Team (GMT) received a presentation from Dr. Wes Patrick of the National Marine Fisheries Service (NMFS) on the proposed change to National Standards (NS) 1, 3, and 7 Guidelines. We note that most of the proposed changes appear beneficial for providing additional flexibility in management. A recurring message throughout the presentation was that the intent of this flexibility was to allow for creative solutions as long as the rationale, sufficient record, and justification are given for the chosen course of action. For some of the specific new provisions, the GMT offers the following comments to the Council. Bolded statements indicate recommended comments to forward to NMFS and Dr. Patrick.

Ecosystem Component Species

Relative to “in the fishery” and “ecosystem component (EC) species,” would be replaced with the 10 proposed factors to consider when determining if “conservation and management” is needed. These proposed factors are not functionally different from how the Council considers whether to actively manage stocks now. The 10 factors are similar in scope and meaning, with additions to point out other relevant considerations.

Calculating T_{max}

The proposed new NS1 guidelines contain two new options for how to calculate T_{max} when a stock is declared overfished, and a new rebuilding plan is being developed. Currently, the only method is $T_{max} = T_{min} + \text{mean generation time}$. The two new options are $T_{max} = 2 * T_{min}$ and $T_{max} = \text{time to rebuild to } B_{msy} \text{ when fished at 75 percent of maximum fishing mortality threshold (MFMT; i.e. approximation of } F_{msy})$. However, the ratio of T_{max} to productivity (i.e. intrinsic rate of growth coefficient) is very similar under all three options. The GMT notes that while allowing alternate means of calculating T_{max} may provide some flexibility, it may also mean more options for analysis, and therefore resources and workload, in the rebuilding analyses. The Council may choose to explore that for future biennial cycles.

Surplus Carryover

The proposed NS1 guidelines contain new guidance regarding carryover. In very plain terms, it would allow the Council to consider raising the acceptable biological catch (ABC) in year 2 (by a level deemed appropriate by the Scientific and Statistical Committee, SSC) if the entire annual catch limit (ACL) is not caught in year 1. It is possible that this guidance would promote the Council’s desire to develop a long-term solution for surplus carryover, particularly for species where the $ACL=ABC$.

For example, formulas may be developed and endorsed by the SSC. Then, for species where the $ACL=ABC$ but catch was less than the ACL in year 1, a calculation would be made based on the established formula(s), and the amount by which to raise the ABC in year 2 could be presented to and endorsed by the SSC. It may be possible to set up ways to implement the ABC increases either through routine inseason action or automatic action by NMFS.

The GMT appreciates the thought put into this proposed guideline and the flexibility it allows. The Council may want to include this proposed concept as an option when developing improvements to the surplus carryover process. Various other options could be considered for species where attainment is very low (e.g. setting the $ACL < ABC$ for English sole to allow carryover of some amount) or for species with very high attainment (e.g. for petrale sole it may not make sense to lower the ACL for the sole purpose to allow surplus carryover).

Rebuilding Progress

There is also new guidance for determining adequate rebuilding progress. Some of the considerations are very similar to those we already use (e.g. comparing catch to the ACL). **However, we note that the focus on maintaining $F < F_{rebuild}$ is new and may reduce the number of revisions to rebuilding plans necessary in the future.** Currently in our groundfish fishery management plan (FMP), adequate progress toward rebuilding is judged against the probability of achieving T_{target} (i.e. probability of less than 50 percent requires revision). The new guidelines suggest that rebuilding plans should focus on F rates rather than T_{target} , T_{max} , etc.

The GMT is currently working with Chantel Wetzel on a rebuilding management strategy evaluation (MSE) to explore the most robust methods for determining progress toward rebuilding. It is our understanding that Chantel is now exploring varying Fs as part of that MSE, which compares what we are doing now to other possible methods (including focusing rebuilding on keeping $F < F_{rebuild}$). This analysis should provide the basis for Council decision-making on the best method for determining progress toward rebuilding.

Overfishing Determinations

The guidelines also would allow for multi-year overfishing determinations. The most recent one year of catch above the overfishing level (OFL) may meet the definition of “overfishing,” as it may not jeopardize the stock to produce maximum sustainable yield (MSY) over the long term. Therefore, the Council could consider using the geometric mean of the last three years compared to OFL to determine whether overfishing is occurring. **This approach would be most useful for species where catch is quite variable and circumstances exist where catch may occasionally exceed the OFL despite management controls.** However, this flexibility does not allow for choosing which method (e.g. one-year or three-year comparison) to apply in order to prevent a determination of overfishing. Some additional analyses could be done in the future to identify stocks where the use of a three-year average may be appropriate.

Discontinuing Rebuilding Plans

There is also a new provision for discontinuing rebuilding plans for stocks later determined to never have been overfished (but not yet above B_{MSY}). **The GMT notes that discontinuing rebuilding plans while the stock status is still in the precautionary zone would likely mean managing to the 40-10 adjustment (i.e., the default harvest control rule in the FMP for stocks in the precautionary zone).** Harvest specifications set using the 40-10 adjustment may allow more or less catch compared to the rebuilding plan, depending on the level of depletion and the biology of the stock.

Phase-In ABC Control Rules

The new guidance for phase-in of ABC Control Rules allows for slower implementation of either increases or decreases as long as other criteria are met to ensure that overfishing is not occurring. This is similar in philosophy to what we did for yelloweye rockfish in the “ramp-down” in 2007-

2008. **It is our understanding that NMFS is seeking feedback on the 3-year limit on such phase-ins, and why it does or does not make sense (i.e. would something based on life history make more sense).**

“Depleted”

The proposed NS1 guidelines also add a new term; “depleted.” It is the GMT’s interpretation that this term, used to describe a stock that is overfished, would be appropriate to use: 1) when available information does not indicate that fishing is the primary cause of the stock status falling below the overfished threshold, or 2) when available information indicates that curtailing fishing pressure has not resulted in improvements to stock status. The proposed guidelines indicate the use of this term would be appropriate to be used if the stock has not experienced overfishing at any point during a period of two generation times. **For long-lived species, estimating F and FMSY back two generation times could be problematic, and the term “depleted” may be rendered useless.** Additionally, the term “depleted” likely provides very little benefit for groundfish management as we usually do not know habitat needs or what other factors are driving stock dynamics other than fishing (i.e. other than changes to fishing pressure, we do not have tools to control mortality).

Indicator Stocks in Complexes

Proposed NS1 revisions would allow for use of data-rich stocks as indicators within complexes. The GMT notes that there are no “pure” groundfish complexes where all stocks are of similar biology, population dynamics, vulnerability to the fishery, etc. Additional analyses would be needed to understand how we might incorporate this concept into any of our existing complexes, but this could be considered as we continue restructuring complexes to be more in line with NS1. Dr. Patrick indicated that there is currently an MSE underway for managing stock complexes and further pointed out that there may be ways to use closely related stocks as indicators, even if they are not within a complex.

FMP Review and Updates

The new guidance says that all FMPs should be reassessed regularly to ensure that fishery objectives reflect the needs of the fishery. The GMT suggests that this can be incorporated as part of the regular biennial process with little additional workload.

The revisions to NS guidelines are not intended to require changes to FMPs. The GMT notes that it may be prudent, at an appropriate time, to update a variety of sections of the groundfish FMP to improve consistency with the new guidelines once they are finalized. There is language in the groundfish FMP that directly stems from NS guideline language that is proposed to be revised. For example, sections 4.2 and 4.4.4 of the groundfish FMP use terms and descriptions regarding ecosystem component species that are proposed to be deleted or superseded with more flexible guidelines. It is the GMT’s understanding that, given that the intent of the proposed changes as stated by NMFS, antiquated language in the FMP maintains the same spirit as the proposed NS guidelines, and would not necessarily limit the Council’s actions, as long as those actions are well-justified and explained.