

New England Fishery Management Council

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Ms. Jenni Wallace Office Directors, Acting Office of Sustainable Fisheries National Marine Fisheries Service 1315 East-West Highway 13th Floor Silver Spring, MD, 20910

Dear Ms. Wallace

Thank-you for providing the Regional Fishery Management Councils the opportunity to review the draft Procedural Guidance for Changing Assessed Stock Status from Known to Unknown (National Marine Fisheries Service Procedure 01-101-11). We welcome development of this guidance. This is a complicated topic and we appreciate the diligent efforts of your staff. Our staff, Scientific and Statistical Committee, and Council reviewed the document. We would like to offer the following comments in an effort to improve the final guidance. Our comments are informed by a number of situations we've encountered over the past few years.

As an underlying principle, the Council believes that the agency's stock status determinations should always be based on the Best Scientific Information Available (BSIA). The draft guidance does not consistently adhere to this principle in those scenarios when it suggests that stock status or status determination criteria (SDC) should revert to some previous determination. The implication is that old certainty is automatically better than new uncertainty. This leads to tortured discussions of, for example, when an old assessment is too old and why an earlier status determination criteria is preferable to new advice that says criteria cannot be determined. These approaches seem to be substituting the use of expediency for BSIA. Perhaps the agency is concerned about the management response if an overfished stock is later determined to be in an unknown status, but we think that rather than revert to a previous status, a better approach would be identify possible management responses should this occur.

This leads to another apparent shortcoming in the guidance. In those cases where a new assessment fails and an old assessment is rejected (e.g. Scenario C3), the guidance does not indicate how to revise management decisions that were based on this old assessment. To illustrate: if the assessment that determined a stock was rebuilt is later rejected and the status is changed to unknown, what happens to the rebuilding plan that was terminated based on the prior determination? We would not expect the guidance to attempt to address every conceivable

situation, but it should at least acknowledge that application of the guidance may require reevaluation of past management responses.

Our last general concern is that the guidance does not acknowledge the rapidly changing environmental conditions that we are experiencing. In some places the guidance refers to comparisons of current conditions to historic conditions as a fallback when status is unknown (e.g. "...stock biomass remains near historic lows..."; "...indices are down relative to previous indices..."). The implicit assumption that stock dynamics are stationary may not be supported by the evidence. As noted in National Standard 1 guidelines, MSY is determined "...under prevailing ecological, environmental conditions and fishery technological characteristics..." Just because status determination criteria are undefined does not mean they are not affected by warming temperatures or different selectivity in the fishery. A careful qualitative examination of these factors may provide evidence that the historic indices do not represent what is achievable at present.

The comments that follow are specific to the proposed scenarios. Clearly, as noted earlier, a policy document cannot identify and address every situation that a Council may encounter. Nevertheless, we believe it is important to highlight situations that we have faced already that do not appear to be addressed.

SCENARIO A – Changes to Management Units

While it may be easiest to rollover existing status determinations to the new stock structure, it may not be logical to do this. If the new stock structure results in splitting a stock, there is increased potential for overfishing at least one stock. There is no reason to expect, a priori, that each stock's contemporary abundance is appropriately high with respect to historic abundance, or that fishing effort will be spread proportionately across stocks. The appropriate advice may be that status is unknown. This would encourage managers and scientists to coordinate new assessments and, if necessary, changes to the management plan.

As a minor point, this scenario seems to use the terms management unit and stock complex interchangeably. Since the guidelines for National Standard 3 define management unit as "...means a fishery or that portion of a fishery identified in an FMP as relevant to the FMP's management objectives," we recommend using the term stock or stock complex in its place. In a multispecies fishery, status is determined for stocks or stock complexes, not the management unit.

SCENARIO B – Aging Stock Assessments

While we agree that an outdated assessment should lead to a reconsideration of stock status, we believe that the ten-year standard proposed here is inappropriate. This does not seem to be based on any analysis of the issue, but instead seems linked to the National Stock Assessment Performance Measure. As noted in a footnote, the ten-year standard in that instance does not necessarily mean adequate for fishery management purposes, but is used only for budget formulation and prioritization. There are numerous studies that indicate assessment results and

projections are valid for management purposes for only around three years. This is particularly true when oceanic conditions are changing or when assessments have severe retrospective patterns. As such, it is difficult to accept that any assessment that is older than five years is adequate for management purposes – including status determinations.

Another issue with this scenario is that it ignores completely whether any management interventions have been implemented since the old assessment. It also ignores that even in the absence of a stock assessment there may be indications in the data that support a modification. If catches are dramatically reduced after an overfishing definition, why is it justified to retain the old determination? If survey indices have changed over time, why is a previous determination valid for up to ten years? Focusing solely on the age of the assessment does not appear to allow consideration of these other factors.

SCENARIO C – Stock Assessment Does Not Provide Sufficient Information to Support a Stock Status Determination

In our view, this is the most critical section of the guidance, and is the section most relevant to our recent experience. This is also the scenario that is the most difficult to prepare since there are seemingly an infinite number of possible assessment results. An example from the introductory description highlights this problem. While in some regions a lower tier assessment may be consistent with the SDC as defined on the FMP, in our region the lower tier assessments often are not consistent and do not provide alternative SDCs.

Scenario C1 – Reject New Assessment, Accept Previous Assessment Model With New Data

This scenario seems straightforward and we have no comments to add.

Scenario C2 – Reject New Assessment, Use Previous Assessment Results With No New Data

We have several concerns with this scenario. In our experience, when peer reviews have rejected a new assessment, and the old assessment with new data, often they do not state that the previous assessment results should be used for management advice, including status determination criteria. They may conclude that the status of the stock is unknown¹, and at times, they may reach different conclusions for the overfished and overfishing status. Sometimes they go so far as to state the status determination criteria are unknown. This creates a conflict that is not addressed by this scenario. A scientific review has concluded that the stock status is currently unknown, yet the scenario recommends using a previously determined status. This does not seem consistent with BSIA and is rooted in the belief that uncertainty is not scientific, and that old certainty is somehow more valid than new uncertainty.

Another issue is that the SDCs are supposed to be based on "objective and measureable criteria." If the assessment is rejected, the established criteria can no longer be measured. This is ignored in the scenario's approach. This approach also assumes the old SDC remain valid, which may

¹ See, for example, 2017 assessment of witch flounder; 2014 assessment of Georges Bank yellowtail flounder; 2020 assessment of Southern red hake; 2012 assessment of Gulf of Maine winter flounder.

not be the case. Our recent Southern Red Hake stock assessment illustrates this concern. The peer review re-ran the assessment model and wrote "As a result, the WG concluded the AIM model should not be used for estimating reference points and stock status for red hake, and the SARC Panel agreed with this conclusion." In light of a conclusion like this, how can the agency justify maintaining the previous stock status?

Scenario C3 – Reject New Assessment, Flawed Previous Model

This scenario seems straightforward, but also unlikely. The Terms of Reference for our stock assessments do not typically ask the review panel to verify that a previous assessment was valid. Doing so would dramatically increase the workload for the panel and the assessment scientists. Also, our experience has been that there is great reluctance to criticize the work of a previous review panel. We can cite numerous examples where dramatic changes in the understanding of past stock status are not attributed to any previous errors but are explained away as "new data has revised our earlier understanding of stock status." Even the Southern Red Hake example cited above did not go so far as to state the previous assessment was flawed and the status determination was invalid.

SCENARIO D – Stock Assessment Deviates From SDC Specified in the FMP

The Council fully supports this scenario: status determinations should be based on the SDC that are specified in the FMP. Indeed, Amendment 13 to the Northeast Multispecies FMP adopted this concept in 2004. We note that Amendment 13 differentiated between changes to the parameter (i.e. FMSY, F40%, etc.) and the numerical estimate of that parameter. Numerical estimates are automatically updated based on assessment results. A recent amendment to our Atlantic Herring FMP immediately implements any changes to the parameter or the numerical estimate if approved at a stock assessment. The concerns expressed in this scenario can be mitigated if, as in the Greater Atlantic Region, stock assessments are required to report results using both current and any proposed new status determination criteria.

Where this scenario falls short, however, is when the assessment results cannot be compared to existing status determination criteria and do not provide new criteria. This has happened several times with the rejection of a previously accepted analytic assessment and the adoption of an empirical approach. Review panels have been hesitant to suggest new SDCs for several of these approaches. This leads to a situation where there is an accepted assessment model without SDCs, and no way to compare the current results to the previous SDCs. This situation is increasingly common and does not appear to be covered by any of the scenarios.

An example is the witch flounder stock assessment in 2017.² The analytic assessment was rejected, an empirical approach was adopted, and the review panel said SDCs were unknown. The Council modified the FMP to adopt these results, but the agency disapproved that measure

² Northeast Fisheries Science Center 2017. 62nd Northeast Regional Stock Assessment Workshop (62nd SAW) Assessment Summary Report. US Dept. Commer, Northeast Fish Sci Cent Ref Doc. 17-01; 37p.

and relied on the earlier status determination criteria. As a result, we have SDCs based on an assessment that was rejected, and no way to measure current status against those SDCs.

Other Issues

It may be helpful if the guidance document addressed situations where either or overfishing or overfished status can be determined, but not both. These two metrics appear linked under the MSA. It is difficult to understand how one can be determined if the other cannot – particularly when it comes to specifying SDCs.

{Summary paragraph to be added}

Sincerely,

Thomas A. Nies Executive Director