SSC Comments on NMFS Procedural Directive for Changing Stock Status from Known to Unknown

At the Coordinating Council Committee (CCC) on May 27-28, 2020, the CCC received a procedural directive on changing the stock status from known to unknown based on different scenarios by the National Marine Fisheries Service. The CCC requested review by the regional fishery management councils before this directive is finalized. Comments are due back to the CCC shortly after the June 2020 South Atlantic Fishery Management Council Meeting. Therefore, there is not sufficient time to have a noticed meeting for the Scientific and Statistical Committee to discuss and provide a consensus statement. The below comments are inclusive of all comments from the SSC. Inclusion of the comment does not mean all SSC members agree with the comment. These are comments from individual members are intended as informational for the SAFMC discussion.

Within the procedural directive, there are four different scenarios when a stock status could be changed from known to unknown including: changes to management unit, aging stock assessment, stock assessment does not provide sufficient information to support a stock status recommendation, and stock assessment deviates from status determination criteria (SDC) specified in the fishery management plan. The SSC provide general comments on the directive and provided pros and cons for each scenario. Under each scenario is a brief description of the scenario and then comments from the SSC.

General Comments:

- Promoting "consistent and transparent agency decisions" is, as always, important and it is good to see that specified in the document.
- The proposed procedural guidance is reasonable in that it encourages flexibility where appropriate (species/context-specific situations allowed).
- The document ensures transparency by requiring all decisions be documented and explained.
- No guidelines are provided in the document for how quickly a stock with an unknown status should be assessed or re-assessed. This could lead to a stock with an unknown status maintaining an unknown status indefinitely.
- If a stock's status is unknown, how will its ABC be determined? Will it follow the ABC control rule? Thus, I think that this is a good place to reiterate concerns with the current ABC control rule framework [e.g., 3rd highest catch performs poorly in MSE analyses].
- The Directive is helpful to both the SSC and the Council.

A. Changes to Management Units

Management units maybe changed through periodic review of the fishery management plans or when new information becomes available. The revisions may result in consolidation or splitting of stocks, or modifications to the stock complexes through the FMP process.

NOAA APPOACH:

When NOAA Fisheries approves changes to management units, the agency would report stock status consistent with the new management units, consistent with BSIA. Where the new management units have not yet been assessed relative to new SDC, or where no new SDC are yet in place, these changes may result in an unknown status determination for the new management unit. However, in some cases it is reasonable to retain the status of the original stock until a new stock assessment, especially for new management units descended from stocks that were overfished or subject to overfishing.

Pros:

- Will address shifting species distributions and potential change in stock definition and distribution under the influence of climate change. Evaluation of the effects of stock status determination of indicator stocks, on the rest of the complex, is important and glad to see it is given consideration.
- Allows unknown status to be assigned to any new units, as appropriate, and allows carry over of old status, as appropriate.

Cons:

- We have a number of complexes that will need re-evaluation as we move species out of a complex for separate assessment (as we have suggested for some complexes). I'm not sure of the status of those species (that we suggested for separate SEDAR) as "indicator species", but they are usually the ones for which we have sufficient data for an assessment and may or may not be typical of the rest of the members of the complex.
- This section specifically mentions indicator stocks. If "choke species" are removed from a stock complex and assigned "unknown" status but not quickly assessed, their status could worsen.

B. Aging Stock Assessment

The guidance suggests that assessment accuracy begins to degrade at 5 years and is no longer adequate after 10 years. The guidance indicates NOAA Fisheries could recommend a change in stock status if an assessment is more than 10 years old, but the decision would be determined on a case by case basis.

NOAA APPROACH

When the status of a stock is based on an assessment that is more than 10 years old, NOAA Fisheries may recommend a change to unknown. However, this decision would be case-specific and should be informed by the SAIP and the agency's stock assessment prioritization process. Thus the actual age of an assessment that serves as the basis for a recommended change will differ among stocks. For example, analysts should consider the stock's life history and assessment characteristics prior to recommending a change to unknown, as those factors – and others – may preclude more frequent assessments or make them unnecessary. If the agency implements a process to set target frequencies for each stock, then those frequencies would provide relevant information for deciding whether to change a stock status to unknown.

Pros:

- Age of the assessment is an important consideration in determining need for a new assessment and for determining if the assessment is still valid (i.e., the stock can be considered assessed). Evaluating this "starting at 5 years with it no longer being considered adequate after 10 years" seems reasonable and covers MOST short-, medium- and long-lived species.
- Consistent with SAIP/prioritization process.

Cons:

- Some exceptions (e.g., shrimp, Dolphinfish, Wreckfish maybe) might need separate consideration of a shorter or longer time span for evaluation. Note that the document already indicates that the approach should be case specific, so maybe this is not really a con and is actually a pro.
- Setting 10 years as a hard ceiling seems arbitrary. Species-specific max assessment ages would make more sense to me. Each max age could be suggested by analysts and reviewed by SSCs. When considering the diversity of life histories across all of NOAA's managed species, many invertebrate stock assessments would be unacceptably out of date way before 10 years while other more long-lived, late-maturing species could probably go longer than 10 before we'd see a response to management in an assessment.
- No mention is made of major changes to the fishery that would make an assessment out of date, only life history and assessment characteristics, which are not specified.

C. Stock Assessment does not provide sufficient information to support a stock status recommendation

The stock assessment review process may conclude that an assessment is not suitable to determine the stock status. There were three categories defined for this scenario: C1 Reject new assessment and accept a previous assessment model with new data, C2 Reject new assessment and use previous assessment results with no new data, C3 Reject new assessment and the previous model is flawed.

NOAA APPROACH FOR C1

> *Where the results of the previous model with new data are accepted, determined to be BSIA and consistent with the SDCs in the FMP, NOAA Fisheries would recommend a known stock status based on this assessment.*

Pros

- This section all seems good and reflects what has been done with the SA stocks (Black Grouper, etc).
- Continuity run provides timely management advice with updated data in interim while a new modeling approach is developed.

Cons

- Presumably there were concerns with the old model which led to development of a new model. The review panel and SSC would need to weigh those concerns against the age of the old assessment when determining if the continuity run is BSIA.

NOAA APPROACH FOR C2

In this scenario, where a stock assessment provides no new numerical estimates to measure against the SDC, yet there is evidence to support the current known stock status, the agency would maintain that known stock status. Evidence in an assessment or noted during peer review may support maintaining known status for both overfishing and overfished. Conversely, where a stock assessment provides no new numerical estimates to measure against the SDC, and there is no evidence to support retaining the current known status, the agency would change the status to unknown.

Pros

- Prevents qualitative/subjective change to overfished/overfishing status if there is no solid assessment support for it.
- Seems to fit what we do for determining when assessments need to be done and what kind of assessment is needed (e.g., research, operational).

Cons

- In practice, this will be super subjective and likely to be review panel/SSC-specific with regard to how "conservative" they tend to be. This could lead to major inconsistencies between review panels/SSCs. Should the Council's acceptable level of risk for that species help inform this decision?

NOAA APPROACH FOR C3

In this scenario, where the results of the previous assessment have been invalidated, and no new assessment is available, the agency would move the stock status to unknown unless there is evidence to support maintaining the current known stock status (see c2).

In these situations, when known status is maintained, within quarterly and annual stock status reporting, the agency would provide a footnote in the stock status table explaining the rationale for the continued known status.

Per scenario (b), if the last known status was based on an assessment that was more than 10 years old, it may be appropriate to change the stock status to unknown, based on a case-specific determination.

Pros

- Allows NOAA/Council flexibility to respond appropriately when review panel/SSC identifies flaws in previous assessments.

Cons

- No comments were provided

D. Stock Assessment deviates from SDC Specified in the FMP

New assessments may deviate from the status determination criteria. Research track assessment terms of reference may specify the status determination criteria be re-evaluated and/or updated.

NOAA APPROACH

> *Where NOAA Fisheries determines the new assessment, including new overfishing and overfished SDC, to be based on BSIA,the agency will maintain the last known stock status based on SDC contained in the FMP until the new assessment SDC are adopted into the FMP.*
>
> *In these situations, within quarterly and annual stock status reporting, the agency would provide a footnote in the stock status table explaining the rationale for the reported status, noting the more recent assessment results will be reported after the new SDC are adopted into the FMP.*
>
> *Letters to the relevant Council regarding stock status changes should request the Council amend SDC in a timely manner. NS1 guidelines at § 600.310(e)(2)(ii) provide for a flexible and adaptive process that allows SDC to be quickly updated to reflect BSIA in an FMP. Such a process may prevent ambiguity and ensure stock status is always consistent with the BSIA.*

Pros

- Provides consistent protocols.
- This seems to fit what we do for determining when assessments need to be done and what kind of assessment is needed (e.g., research, operational).

Cons

- No time frame is suggested for how quickly FMPs should be changed. Language indicates that NOAA will request that FMP changes are timely, but if they are not, slow processes may result in delays in ending overfishing and/or rebuilding.