

NORTHEAST SEAFOOD COALITION

Comments on Proposed Revisions to the National Standard 1 Guidelines
Proposed Rule ID: NOAA-NMFS-2012-0059-0085 RIN: 0648-BB92
30 June 2015

1) Overfishing Issues

- Definition

As in the existing Guidelines, the proposed guidelines define overfishing according to the statutory definition—i.e. “the fishing mortality level or catch that jeopardizes the capacity of a stock or stock complex to produce MSY on a continuing basis”.

In our previous comments on the ANPR, we raised the question and asked for the Guidelines to address what “jeopardizes the capacity of a stock to produce MSY” actually means, and if a more expansive interpretation could be adopted that would enable Councils to use alternative management strategies.

We appreciate that the proposed revisions include two new and very important alternative strategies for defining, evaluating and applying the concept of overfishing that we believe will substantially reduce the effects of noise in the data and thereby provide for a more stable management and economic environment for our fishery.

- Multi-Year Evaluation of Overfishing:

The interpretation of the statutory requirement to “prevent overfishing” reflected in the current guidelines is that this mandate must be achieved through an annual evaluation of whether an overfishing threshold (MFMT or OFL) has been exceeded during the single most recent year for which data is available. Those guidelines are very specific that “exceeding the MFMT or OFL for a period of one year or more constitutes overfishing”.

However, there is no timeframe specified for evaluating if overfishing is occurring on which these guidelines are based. Further, MSA section 3(34) defines overfishing as that which “jeopardizes the capacity of a fishery to produce the MSY on a continuing basis”.

As we expressed in our comments on the ANPR, absent a statutory mandate to do so, we do not believe it is biologically necessary to evaluate whether overfishing is occurring on an annual basis in order to meet the statutory definition of overfishing. We do not believe a multi-year definition of overfishing would jeopardize the capacity of the stock to produce MSY, and we continue to believe that revising the guidelines to accommodate a multi-year evaluation of overfishing is central to developing new strategies for stabilizing management responses to fluctuations in the results of highly uncertain stock assessments, and thereby bring greater economic stability to our fishery.

Thus, we are very pleased that the proposed revisions include a definition of overfishing that provides for such a multi-year evaluation, and that it sets forth specific Status Determination Criteria (SDC) for the Councils to apply a multi-year period to evaluate whether overfishing is occurring. We strongly support inclusion of this in the final rule.

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We note that it may be necessary to clarify in further detail what a multi-year reference point actually is as it relates to the annual overfishing limit (OFL) or Maximum Fishing Mortality Threshold (MFMT). Is the reference point the average of the OFL or MFMT for the 3 years, or something else? And, is the SDC for a multi-year period a determination of whether the actual catch or fishing mortality rate exceeded either of those two averages, respectively? Or, is the intent to provide flexibility to the Council to resolve these questions?

In any case, we believe that for this new authority to be truly useful in mitigating situations of fishery instability caused by fluctuations in highly uncertain stock assessment results such as in our fishery, catch must be allowed to exceed the catch associated with Fmsy at times during the multi-year period. It is not clear that the proposed Guidelines accommodate this reality.

2) Moderated Management Responses to Fluctuations in Highly Uncertain Stock Assessments

- Phase-In of ABC Control Rule

As expressed in our ANPR comments, we believe the proposed authority for an ABC control rule that allows catch limits to be phased-in over time goes hand-in-hand with the multi-year evaluation of overfishing. This is a critical tool for 'smoothing-out' management responses to the fluctuations in highly uncertain stock assessment results. This is a situation that has plagued the management and economics of our groundfish fishery for many years.

We strongly support the inclusion of this phase-in authority in the final rule, and further request that the linkage between these two new authorities be made unambiguous. For example, any references in the new "Phase-In ABC control rules" to preventing overfishing should explicitly reference the multi-year overfishing definition and SDCs set forth in 600.310(e)(2). We also note an apparent contradiction in the definition of ABC control rule at 600.310(f)(2) which states that the Council's risk policy "cannot result in an ABC that exceeds the OFL". This would seem on its face to conflict with the objectives of the multi-year overfished and phased ABC control rule strategies.

- "Sweet Spot" Strategy

NSC requests the agency explore this alternative management strategy, which is also intended to stabilize catch limits by moderating management responses to fluctuations in the results of highly uncertain stock assessments. This strategy is based on a long term evaluation of stock biomass performance relative to catch.

Base example of this concept: For a stock with a long time series of catch and abundance data, can a level of catch be identified that when it occurred in a given year it has been consistently (or with some level of acceptable frequency) followed by a stable or increasing abundance of the stock in the subsequent year?

In this case, the term "consistently" would likely mean that the stock abundance was stable or increased in the next year 100% of time, which is tantamount to the catch when abundance was at its lowest level--a very conservative approach.

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Alternatively, as suggested, there might be an acceptable frequency or probability the stock would remain stable or increase in the following year at that catch level. For example, the stock abundance was stable or increased in the next year 50% of the time, which implies the catch level which has a 50% risk/probability of causing a decline in stock abundance in the following year.

If such a catch level can be identified, can that level of catch (or to be precautionary, some percentage of that catch) be applied as a tool to substantially moderate the management responses to large fluctuations in the results of highly uncertain stock assessments currently required by the guidelines?

In this case, both high and low catch levels (ABCs) generated by the stock assessments would be sacrificed in the interest of stability.

Can this strategy be accommodated by the statute, and therefore by the guidelines? Would this strategy jeopardize the capacity of a stock to produce MSY?

Further, in any given year, this “sweet spot” catch level may exceed the ‘instantaneous’ overfishing level (OFL/MFMT) when the annual evaluation of overfishing is being used as per the current guidelines.

However, as with the smoothing approach previously discussed, the likelihood of exceeding the overfishing threshold would diminish substantially if this “sweet spot” strategy is coupled with a multi-year evaluation of overfishing.

Still further, if necessary, this strategy can also be combined with a ‘smoothing’ type strategy to moderate management responses to fluctuations in the results of highly uncertain stock assessments (or overfishing) such as applying a symmetrical (slow up/slow down) or asymmetrical (slow up/fast down) response to fluctuations in the results of highly uncertain stock assessments .

Some scenarios to consider—

- If the “sweet spot” catch level is followed by a decrease in stock abundance in the following year (but not overfishing), then the management response is—
 - to reduce the catch level to some specific level?
 - or, to reduce the catch level by some specific percentage?
 - or, no response at all; just stay at “sweet spot” catch level?
- If the “sweet spot” catch level is found to cause overfishing to occur in either an annual or multi-year evaluation of overfishing, then the management response is—
 - to reduce the catch level to some level that relates to the OFL?
 - or, to reduce the catch level by some percent that relates to the OFL ?
- If the “sweet spot” catch level causes an increase in the stock abundance the following year, then the management response is to—
 - increase the catch level to a specific level?
 - or, to increase the catch level some percent?
 - or just stay at sweet spot?

NSC hopes to much further develop and explore this concept in consultation with the agency, and encourages the agency to include this concept in its final rulemaking.

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Given the goal is greater stability and predictability for fishermen and associated shoreside enterprises, are there still further strategies for moderating management responses to fluctuations in the results of highly uncertain stock assessments that can be proposed by the agency for further evaluation? Please consider the following.

3) Overfished Issues:

- Multi- Year Evaluation of Overfished

The current guidelines consider a stock to be overfished if its estimated biomass falls below the MSST “in a given year”. Just like overfishing, the current guidelines require an annual evaluation of whether a stock has fallen below the overfished threshold (MSST) during the single most recent year for which data is available.

Also just like overfishing, there is no period of time specified in the statute for evaluating if a stock is overfished. And, the MSA definition for overfished is based on the same conceptual threshold as for overfishing, i.e. that which jeopardizes the capacity of the stock to produce MSY.

Absent a statutory mandate, is it biologically or otherwise necessary to evaluate whether a stock is overfished only on an annual basis in order to meet the statutory overfished definition? Would a multi-year evaluation to determine if a stock is overfished always jeopardize the capacity of the stock to produce MSY?

- Rebuilding Management Response to Overfished

The current guidelines trigger an immediate, maximum management response to a determination that a stock was overfished in a single year—which is to establish a rebuilding plan to a predetermined, often static estimate of Bmsy in some arbitrary timeframe. This is a major, long-term commitment of management and financial resources to an often highly uncertain target that can have a substantial long term adverse impact on the fishery.

We note that one of the findings of the National Research Council’s (NRC) report on rebuilding plans was that the most common reason that stocks are declared rebuilt is that a new stock assessment finds that a stock is not overfished and wasn’t overfished in the first place. As discussed above, the proposed Guidelines recognize and address in a significant way the problem of responding to ‘noise’ in stock assessment results with respect to fishing mortality rates and overfishing determinations by allowing for both a multi-year definition of overfishing and the phase-in of catch limits under the ABC control rule. In our view, the very same problems occur with overfished determinations, and the very same principles to address these problems should apply.

With that in mind, we have suggested and continue to suggest that authority for a multi-year evaluation of stock biomass relative to MSST be incorporated into the definitions and SDCs for overfished and MSST. Perhaps the process for applying this authority could be that if the results of a stock assessment suggest the stock biomass has fallen below MSST (eg 50% Bmsy), then a second stock assessment must be conducted in no more than X years – with X being determined on a stock-by-stock basis depending on its biology or other relevant considerations. And, if the results of that second stock assessment also indicate that the biomass is below the MSST, then the Council must implement a rebuilding plan. During

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the interim between those assessments the Councils could be required to adopt measures that are risk-averse but which do not go so far as to throw the Council and fishery into another formal rebuilding plan process. This would be consistent with the concept underlying the “interim measures” authority set forth in the statute at sec. 304(e)(6).

The authority to use a multi-year evaluation of whether a stock is truly overfished should be permissive and based on the Council’s evaluation of certain circumstances. Such circumstances should include, just like for the proposed ABC control rule, the degree of uncertainty in a stock assessment.

These circumstances could also include the degree to which the biomass fell below the MSST as well as the previous trajectory of stock biomass prior to falling below MSST. For one example, if sequential stock assessments have consistently indicated there has been a continuous, significant decline in stock biomass over some period with no indication of sufficient recruitment or other parameter to alter that biomass trajectory, then it might be appropriate to determine the fishery is indeed overfished and trigger a rebuilding response once it falls below the MSST. On the other hand, if stock assessment results show the biomass to fluctuate somewhere above the MSST over a relatively long period of time but in just one year suddenly drops below MSST, would it be wise to trigger a 10+ year commitment of Council and agency resources to a rebuilding plan and endure the substantial impacts on industry – particularly if those stock assessment results are uncertain?

Given, as the NRC has pointed out, that there is some probability that a subsequent stock assessment may lead to a rebuilding plan being discontinued because the stock was never overfished in the first place, a prudent and necessary response is for the Guidelines to provide this authority for avoiding that costly result.

It is an insufficient and costly response for the Guidelines to simply provide for such rebuilding plans to be discontinued as set forth at 600.310(j)(5). While that authority to discontinue a rebuilding plan is necessary, for US fishery management to rely solely on an “oops” strategy is simply too costly in terms of the unnecessary loss of industry revenue and the waste of taxpayer dollars.

In reality, fish stocks can be safely and sustainably managed indefinitely to achieve a biomass that is something less than 100% Bmsy. In fact, under the statute and current guidelines, any stock not subject to overfishing or a rebuilding plan could remain indefinitely at any biomass above the MSST and below Bmsy. And, in fact, deliberately managing for that result may provide the greatest benefit to the nation if that stock is a relatively lower value stock in a multispecies complex. Yet, once any stock falls below 50% Bmsy in a single year, the current Guidelines trigger a massive, long term commitment to achieve nothing less than 100% Bmsy. This discontinuity is difficult to rationalize given the downside consequences we have experienced.

Further, does it make any biological sense to make a commitment to rebuild every stock in a multispecies fishery complex that falls below 50% Bmsy in a single year to the level of 100% Bmsy? Is the objective of seeking 100% Bmsy for every stock in a complex one that always provide the greatest overall benefit to the nation given the sacrifice in yield of other stocks? Is that even biologically achievable given all of the species interactions in a stock complex that affect each other’s productivity? In our view, these are rhetorical question with a clear NO answer. In our view, MSST is, at best, secondary ‘backstop’ to what must become the primary focus of managing a fishery according to its MFMT. Once triggered, the consequences of an overfished status are profound and long term—often even more so than ending overfishing.

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To reiterate, we believe the statutory definition of overfished provides the flexibility for the Guidelines to provide authority for the Councils after a careful evaluation to apply a multi-year definition of overfished in order to reduce the very costly errors of initiative a rebuilding plan unnecessarily and to achieve greater benefits to the Nation.

- **Setting the MSST for Overfished**

The proposed guidelines redefine the MSST as the biomass below which the capacity of the stock to produce MSY on a continuing basis has been jeopardized. Then, it sets forth an SDC that essentially defines “jeopardized” as when any stock’s biomass falls below 50% Bmsy (or an even higher Bmsy threshold).

We do not believe that the limit threshold of 50% Bmsy is a precise and consistent threshold for what would jeopardize the capacity of every stock to produce MSY. The determination of what this threshold is should be evaluated on a stock-by-stock basis reflecting its biological parameters and life history, etc.

Further, this threshold has effectively nullified the utility of the mixed stock exception for overfishing in the current Guidelines.

As an alternative to the proposed definition and SDC for overfished and MSST, we believe it would be permissible under the statute for the Guidelines to allow the Councils to select a stock in a multispecies fishery to be deliberately managed to fall within a relatively stable (sustainable) range of, for example, 30 to 70 percent of Bmsy, if that would achieve greater utilization of the OY of other stocks within that multispecies fishery with a larger or more valuable biomass. Such a stock might be one of lesser value ecologically and economically but has become a choke-stock for achieving the OY for other more valuable stocks.

We believe that a mixed stock exception to MSST (overfished) combined with the mixed stock exception for overfishing currently in the Guidelines will substantially improve the ability of the Councils to achieve the greatest benefit to the nation in multispecies stock complexes such as our fishery and, therefore, should be incorporated into the revised Guidelines.

4) MSY Issues

In our view, the process set forth in the proposed guidelines for specification of MSY and associated reference points and SDCs remains unable to respond in a timely fashion to the environmental and ecological dynamics affecting our NE groundfish fishery. While we appreciate the numerous enhancements to the attention given in the text to environmental and ecological considerations in the proposed revisions, the process for using that information and responding to such changes must be far more nimble in order to respond effectively and in a timely manner to the rate of change we are experiencing in New England.

For example, the considerations set forth at 600.310(e)(3)(iii) regarding the relationship between SDC to environmental and habitat change depends on science being able to discriminate between what long and short term environmental changes are *while they are happening*, and further to determine whether or not such changes are affecting the long term reproductive potential of a stock, before decisions can

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be made to change SDCs. Making these determinations during a period of rapid environmental and ecological change in a timeframe that is sensitive to the economic realities of a fishery is simply impossible. By the time science can come to a decisive determination to adjust SDCs, MSY and the associated reference points to reflect a new environmental and ecological reality (if ever), a fishery may have been destroyed financially by being required to meet management goals that have been rendered unachievable by a changing environment.

Perhaps, as we have previously suggested, much more attention needs to be given to operationally defining what “prevailing conditions” are in the definition of MSY, and how and in what specific time frame those conditions are to be accounted for. But fundamentally, as long as the ability of the Council to respond quickly to the effects of rapid change on MSY and associated reference points and SDCs remain mired in debates over such things as what constitutes a ‘long term change in the productivity of a stock’, the management process- and our fishery- are doomed. The science is simply not up to this task.

Finally, we see no clear proposed change to the Guidelines that acknowledges much less addresses the fundamental ecological fallacy that all stocks in a stock complex, such as in our groundfish multispecies complex, can be managed to achieve their respective ‘single species’ Bmsy simultaneously. Perhaps that is in part the thinking behind some of the changes proposed to defining and managing ‘stock complexes’ and ‘the fishery as a whole’, but even those changes appear to continue to depend on achieving SDCs at both the single stock (indicator stocks) and aggregate levels that are still based on the results of ‘single-species’ stock assessments and the setting of ‘single-species’ MSY’s and associated reference points. Again, perhaps much greater thought needs to go into how to actually apply quantitatively the definition of MSY to reflect “prevailing ecological... conditions” so that the Bmsy calculated for each stock in a stock complex actually reflects its productivity within that ecological context rather than as a single species/stock existing in a vacuum.

But until that challenging objective is realized, a more expansive use of a ‘mixed stock exception’ to avoid the currently inevitable ‘choke stock’ scenario, which results in enormous wasted yield and destroys fisheries, must be authorized in these Guidelines. Notwithstanding the recommendations of the NRC and many others previously, the proposed Guidelines have again fallen short of addressing this need.

5) Rebuilding Issues

- Flexibility

We note that the proposed Guidelines would provide for alternate methods for determining rebuilding timeframes that, depending on the stock and its life history characteristics, may provide more flexibility to managers under the statutory requirements. This can be useful and we support it.

We further note, however, that the discontinuity in setting rebuilding timeframes between stocks where T_{min} is more or less than 10 years remains. This should be corrected as suggested by the NRC.

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- Alternative Rebuilding Strategy

However, as the NRC also emphasized, we still believe there is too much emphasis-- in the current and only rebuilding strategy provided for in the Guidelines-- on trying to determine reliable estimates of biomass far into the future as well as the timeframe and associated rebuilding trajectory that must be achieved. This strategy is premised on the pretense that we are able to measure and predict with a relatively high degree of certainty what recruitment, growth and natural mortality will be over the course of the rebuilding timeframe. This is, of course, a complete fallacy in a fishery such as ours which is subject to rapid changes in the environment and ecosystem. Our science is nowhere near able to predict what is, in reality, unpredictable. Thus, it is no surprise that this biomass/timeframe-based rebuilding strategy – the only strategy accommodated in the current guidelines - has largely been a failure in our fishery.

Perhaps the conclusion presented by the NRC in its Summary section is more compelling than our views:

“...the focus on trying to achieve a rebuilding target by a given time places unrealistic demands on the science, and forces reliance on forecasts and estimates of biomass-based reference points, which may be very uncertain. Emphasis on meeting fishing mortality targets rather than on exact schedules for attaining biomass targets may result in strategies that are more robust to assessment uncertainties, natural variability and ecosystem considerations, and less prone to rapid changes in management measures, which have social and economic impacts that may be more severe than more gradual changes.”

Consequently, we continue to advocate for the inclusion in the Guidelines (and statute) of an alternative rebuilding strategy that is founded on achieving a fishing mortality target that is referenced to Fmsy. As we all know, managing a fishery to maintain the fishing mortality rate at or below Fmsy will not only prevent overfishing, it will also by definition rebuild an overfished stock-- but in a timeframe that reflects what recruitment, growth and natural mortality really is – not what the science attempted but failed to predict.

As noted by the NRC, this strategy is more robust to the profound stock assessment uncertainties we have encountered in our fishery as well as to the environmental and ecosystem dynamics of our region. As the NRC further noted, this strategy will also provide more management stability and, by extension, more stability in the economics of our fishery.

We feel there is an overwhelming need for the Agency to find a way under the statute to incorporate this alternative strategy into these Guidelines instead of waiting for an explicit statutory amendment. Congress clearly intended in the statute for rebuilding timeframes to reflect both environmental and ecological conditions as well as the biology (eg. life history and population dynamics) of a fish stock.

What rebuilding timeframe could be more responsive to and reflective of the biology of a stock-- or of the environmental and ecological conditions affecting that stock - than the fishing mortality based strategy recommended by the NRC?

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The Guidelines should provide for a rebuilding timeframe to be whatever the timeframe is for a given stock of fish to be rebuilt when managing the fishery for it to achieve a fishing mortality rate that is at or below F_{msy} .