



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

MAY 25 2012



Capt. Paul J. Howard
Executive Director
New England Fishery Management Council
50 Water Street
Newburyport, MA 01950

Dear Paul:

Thank you for your January 20th letter regarding a carryover policy. We have carefully considered your questions with respect to the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSA) and the National Standards (NS) guidelines. I regret it has taken a while to get a response to you, but we have been looking at this issue from a national perspective to ensure consistency to the extent possible. A few of your questions overlap, but I have tried to address each of them separately below.

(1) The analysis is based on the primary constraint that "...the realized fishing mortality rate could not exceed the overfishing threshold of F_{MSY} ." It is often the case, however, that due to scientific uncertainty or rebuilding requirements the Acceptable Biological Catch (ABC) for multispecies stocks are usually based on a fishing mortality rate that is less than F_{MSY} . The constraint used in the analysis thus implicitly acknowledges that the carry-over levels suggested could lead to catches that exceed the ABC recommendation of the [Scientific and Statistical Committee (SSC)]. Is it consistent with the provisions of the [MSA] to authorize a carryover amount that results in allocating an amount of fish that is greater than the ABC? Is it consistent with the [NS] guidelines to allow a carryover amount that reduces the buffer for scientific uncertainty between the Overfishing Level (OFL) and ABC to zero without explicit SSC concurrence?

The analysis by the Northeast Fisheries Science Center that we forwarded to you was only intended to be an initial analysis of the potential biological implications of a carryover policy and, as such, used F_{MSY} as an example threshold that cannot be exceeded. As acknowledged in the draft paper, the analysis did not address the larger policy questions that would need to be considered in designing any carryover program (e.g., harvest policies). However, your letter raises legitimate questions as to whether a carryover policy, in general, is consistent with the MSA and NS guidelines.

The NS guidelines do not explicitly discuss carryover programs. However, we believe that a carryover policy could be consistent with the guidelines and the MSA, in principle, provided it does not result in exceeding the Annual Catch Limit (ACL) or ABC in the fishing year in which the carryover applies. Some small amount of carryover, where under-harvest in year 1 would not be expected to result in an appreciable change in biomass in year 2, could be



allowed for safety or operational reasons (e.g., to prevent vessels from fishing to their last pound of allocation and increasing the likelihood of an overage). Such a policy could be consistent with the guidelines if analysis showed that this small amount of carryover would likely be offset by under-harvest by other participants in year 2 for the same reasons the year 1 catch was below the catch limit and, thus, would not be expected to increase the likelihood that total catch would exceed the ACL or ABC in year 2. This small amount of carryover, even if not expected to be offset by under-harvest by other participants in year 2, could also be explicitly accounted for in management uncertainty when specifying ACLs so that the ACL or ABC is not exceeded.

To justify larger amounts of carryover where under-harvest in year 1 may result in an appreciable increase in stock biomass in year 2, the impact of the year 1 under-harvest on the year 2 biomass would need to be evaluated and the year 2 ABC and ACL updated, to ensure they are not exceeded. Ideally, this could be done through an assessment update, or by re-running the assessment model with revised catch estimates and then applying the ABC control rule to arrive at an updated ABC recommendation and subsequent ACL for year 2. This method is currently used in the Alaska groundfish fishery to determine the amount of additional harvest that may be allowed in year 2 following an under-harvest in year 1. Alternately, the ABC control rule could be revised to explicitly consider under-harvests. This method may be timelier, if it could be done formulaically or through an abbreviated SSC and New England Fishery Management Council (Council) process. We recognize that some of these methods may be more feasible than others, depending on data availability and resource and timing constraints. Therefore, the Council may want to keep in mind other ways of achieving the same flexibility. For example, a carryover program that would rely on regular under-harvest by other fishery components to offset carryover landings could be achieved by redistributing the ABC to shift the unused allocation to the fishery in need of a carryover buffer.

An additional consideration is the potential for the carryover program to impact the effectiveness of accountability measures (AM) in place for different fishery components. In the case where an AM is triggered only when the overall ACL is exceeded, the system already relies on under-harvest by some fishery components to offset over-harvest by others. Thus, unless there is still a net under-harvest of the ACL, there would be no additional biomass in year 2 to account for carryover by the under-harvesting component.

- (2) *The analysis is based on assuming an equilibrium age structure under a constant recruitment assumption. Many multispecies stocks are at low levels of abundance and in rebuilding programs, and recruitment is often highly variable and, for some stocks, recent recruitment is at low levels. How do these deviations from the underlying assumptions affect the amounts of permissible carryover?*

Whatever method is used, the amount of carryover allowed must be based on the best available information regarding the expected impact of the year-1 under-harvest on the stock's biomass in year 2. As you correctly point out, this may require taking into account a number of factors, such as stock characteristics (e.g., natural mortality), uncertainty in the assessment model or other method used to set catch advice, and trends in stock indicators

(e.g., recruitment). The carryover policy should also consider the potential reasons for under-harvest (e.g., depressed stock condition vs. reduced effort).

- (3) *If carryover amounts are allowed to result in catches that exceed the ABC for a rebuilding program, how would that affect the prospects for rebuilding?*

Any carryover policy must be consistent with the stock's rebuilding program, if applicable. Furthermore, a carryover program should be monitored using the performance standard outlined in the guidelines (50 CFR 600.310(g)(3)). If catch exceeds the ACL for a given stock more than once in a 4-year period, the system of ACLs and AMs should be re-evaluated and modified where appropriate.

- (4) *In some cases ABCs decline due to expected fluctuations in the stock; in other cases it may be due to change in assessment results. This creates the possibility that the proposed carryover amounts may result in allocating an amount of fish greater than the OFL. Is this consistent with the [MSA]? Does a declining ABC affect the amount of permissible carryover? Do these fluctuations need to be considered when setting carryover levels?*

As discussed in the response to question 1, the amount of allowable carryover should be based on the impact of year 1 under-harvest on year 2 biomass. A carryover policy should take into account the possibility of changing stock status and ABCs, and the amount of allowable carryover should be able to be modified to account for such changes. The Pacific Fishery Management Council has attempted to address this issue by incorporating a provision for an automatic downward adjustment to the amount of allowable carryover when there is a decline in the ACL from year 1 to year 2, and by giving NMFS the discretion to implement carryover to the extent allowed by the MSA. The carryover policy should never allow OFL to be exceeded.

I recognize the Council already has carryover programs in place for the Atlantic sea scallop and Northeast (NE) multispecies fisheries. In light of the guidance provided in this letter, it may be necessary to review and clarify those programs. With respect to the Atlantic sea scallop limited access fishery DAS carryover and compensation trip program, Amendment 15 to the Atlantic Sea Scallop Fishery Management Plan (FMP) addressed carryover by establishing a buffer between the fleet's sub-ACL and sub-ACT. This buffer reduces the risk that carryover would cause the ACL to be exceeded, and ensures any carryover catch is taken into account when setting the ABC. In addition, an AM would be triggered if this fleet exceeded its sub-ACL, so carryover is explicitly considered in the decision to trigger an AM. In this way, the limited access scallop fishery carryover program appears to be adequately addressed in the ACL and AM system, consistent with the guidance provided above.

Amendment 15 also implemented a carryover provision for the scallop IFQ fishery, allowing carryover of up to 15% of an individual's IFQ allocation into the following year. However, unlike the limited access fishery, the IFQ fishery sub-ACT is set equal to the sub-ACL, and no deduction is made for management uncertainty. As a result, the current accounting system could potentially exceed the SSC's recommended ABC. This is unlikely, as the total of all IFQ carryover is very small when compared to the overall ACL and it was expected that not all

vessels would carryover the full 15%. Recognizing that the IFQ carryover provision has only been in place since fishing year 2011, it would be beneficial for the Council to gain more information in order to see if the amount of carryover varies widely from year to year. However, we recommend that the Council consider establishing a management uncertainty buffer to account for carryover in the scallop IFQ fishery as it has done with the limited access fishery.

Regarding the NE multispecies fishery Annual Catch Entitlement (ACE) carryover program for sectors, it does not appear that this potential additional catch was taken into account in establishing management uncertainty buffers for the commercial groundfish or sector sub-ACLs in Amendment 16 to the NE Multispecies FMP or subsequent framework adjustments. Given the large participation in sectors in the last 2 years, the allowable carryover can be a large portion of the ABC, particularly when the ABC declines from year 1 to year 2. If caught, this amount of carryover risks exceeding groundfish ACLs and sub-ACLs and potentially triggering an AM for the sector that fished its carryover. We do not think this was the Council's intent, but it is not clear from the regulations or Amendment 16 how else overages of the sector sub-ACL or total ACL due to sector carryover should be handled. Therefore, we recommend the Council review and clarify the existing sector carryover program, in order to ensure it is consistent with the NS guidelines and the FMP. In the meantime, we are currently monitoring catch of a sector's carryover separately from catch toward an ACL, to ensure sectors are not unfairly penalized for using their allowable carryover.

The DAS carryover program for the NE multispecies common pool fishery does not appear to have the same issues. Although it is not clear whether carryover DAS were explicitly taken into account in the management uncertainty buffers, trimester TACs and the Regional Administrator's inseason authority greatly reduce the likelihood that this particular measure will cause a common pool sub-ACL to be exceeded.

My staff will be available to provide support and further guidance as the Council addresses this topic in the coming months. If you have any further questions regarding this letter, please contact Melissa Vasquez at the Sustainable Fisheries Division at (978) 281-9166.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Morris', with a long horizontal flourish extending to the right.

Daniel S. Morris
Acting Regional Administrator