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New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

MEMORANDUM

DATE: June 18, 2009
TO: Council Members
FROM: Paul J. Howard
SUBJECT: Background Paper on ACLs and AMs

Attached is a background paper on ACLs and AMs which the Council requested the staff to develop at the April 2009 Council meeting. At that meeting the Council expressed concerns about whether it should take a consistent approach for all its FMPs and asked how our approaches for implementing ACLs and AMs compared to those of the other Councils.

NEFMC BACKGROUND PAPER ON NEFMC ACLs AND AMs

Introduction

The purpose of this paper is to summarize how other fishery management councils are implementing requirements for annual catch limits (ACLs) and accountability measures (AMs), and to outline the New England Council's approach to meeting these requirements with currently approved or developing actions. The intent of this comparison is to identify regionally and nationally both the similarities and difference of these approaches, so it can be determined if more consistency is needed within these actions.

Approaches to Implementing ACLs and AMs by All Councils

The National Standard guidelines for annual catch limits (ACLs) and accountability measures (AMs) allow the eight Councils flexibility in meeting MSRA requirements for including these provisions in their fishery management plans. As a result, Councils have anticipated implementing ACLs and AMs in different ways. Some of the variations in how Councils have proposed to implement these provisions stem from differences in catch reporting systems, the level of scientific information about stock status, the types of management measures currently used (input/effort controls v. output/catch limits), the timing of planned changes to existing FMPs to meet the deadlines for new MSRA provisions, the type of fishery (whether directed or incidental) and the time needed to finalize the ACL and AM guidelines.

Some of the differences in how Councils are proposing to implement the new requirements are:

1. How they define the relationship between ABCs and ACLs
2. Whether the AMs result in in-season changes to fishing regulations or whether they are implemented in subsequent fishing years
3. Whether fisheries are closed before ABCs are potentially exceeded - what type of AMs are chosen – proactive or reactive

In May 2009, the Council Coordinating Committee Meeting provided a chance for Councils to compare how they planned to meet the new MSRA requirements including ACLs and AMs. The Councils responded to a variety of questions including how they anticipated structuring ABCs, ACLs and AMs. Although the questions provided a basis for discussion and the answers provide a very general picture of how the Councils plan to deal with ACL and AM requirements (see Table 1), it would be very difficult to summarize all the details of how each Council plans to deal with implementation of these requirements.

Structure of OFLs, ABCs, ACL and AMs - How Councils anticipated structuring the relationship of OFLs, ABCs, ACLs and AMs are generally described in the information below.

1. **OFL \geq ABC \geq ACL**
 - a. New England (NEFMC)
 - b. Caribbean (CFMC)
 - c. North Pacific (NPFMC)
 - d. South Atlantic (SAFMC)
 - e. Gulf of Mexico (GMFMC)

2. **OFL \geq (ABC = ACL) \geq ACT**
 - a. New England
 - b. South Atlantic
 - c. Gulf of Mexico

3. **Still to be determined**
 - a. Mid-Atlantic (MAFMC)
 - b. Pacific (PFMC)
 - c. Western Pacific (WPFMC)

Several Councils anticipate making ABC = ACL and using an ACT while others anticipate setting the ACL below the ABC and not using an ACT. Some of these Councils anticipate using each of these different approaches in at least some of the fisheries they manage. Three Councils were still in the process of making these decisions.

AMs - In response to the question, "Do any of your FMPs use AMs at the ACL level to prevent exceeding the ABC?" all Councils anticipated they might or would use closures to prevent the ABC from being exceeded. (The NEFMC has a hard-TAC option for major groundfish stocks that would result in a closure to gear capable of catching fish from those stocks). Two Councils indicated that they anticipated using fishery closures when the ACT is reached.

Shared Stocks – Three Councils indicated they would have to make allowances for state or Canadian catch in setting ACLs and all Councils indicated that they had some process for managing shared stocks with other fishery management authorities including the states, the ASMFC, GSMFC, PSMFC, Canada and international treaty organizations.

Recreational ACLs and AMs – Six Councils (all except for two that were unable to answer the question) anticipated establishing ACLs for recreational fisheries of recreational components of commercial and recreational fisheries. Of these, three anticipated using in-season recreational AMs.

Table 1. Responses to Questions about ACLs and AMs from Council Coordinating Committee Meeting, May 19-22, 2009

ACLs and AMs

	NEFMC	MAFMC	SAFMC	CFMC	GFMC	PFMC	WPFMC	NPFMC
1. There are several ways under MSRA guidelines that Councils may structure ABCs, ACLs and AMs. Indicate with a Yes, if you have an FMP with the below formula: a. $OFL \geq ABC \geq ACL$ b. $OFL \geq ABC \geq ACL > ACT$ c. $OFL \geq ABC = ACL > ACT$ d. $OFL \geq ABC > ACL > ACT$ e. others	a. y b. y c. y d. n e. n	a. n b. n c. n d. n e. n	a. y b. y c. y d. e.	a. y b. n c. n d. n e.	a. y b. y c. y d. e.	a. n b. n c. n d. n e. Y-has calculati on	a. n b. n c. n d. n e. n	a. y b. c. d. e. Y OFL >ABC ≥ACL/A CT
2. Do any of your FMPs use fishery closures as AMs at the ACL level to prevent exceeding ABC?	Y-GF (option)	Y-using inseason closures	Y	Y	Y	Y	Y	Y
3. Do any of your FMPs use fishery closures at the ACT level but before the ACL is reached?	N	N	N	Y	N	Y	N	n/a
4. Are state catches or catches from other countries for transboundary stocks deducted before setting ACLs?	Y	Y- mackerel	N	N	N-rec	N	N	Y
5. Do you have a process for managing shared stocks with other fishery management authorities?	Y- w/CA; N-states	Y- ASMFC	Y	Y	Y- SAFMC	Y	Y	Y
6. Do you have recreational ACLs?	Y	N-pending	Y	Y	Y	Y	N	Y- pending
7. Do you have any in-season AMs for recreational fisheries?	N	N	N	Y	Y	Y	N	N

NEFMC Approaches to Implementing ACLs and AMs

The New England Council, like the Caribbean and Gulf of Mexico Councils, so far has proposed different approaches for implementing ACLs and AMs in different FMPs. Part of the reason for the different approaches proposed so far has been the need to incorporate ACLs and AMs in ongoing management actions for Multispecies and Skates to meet 2010 ACL and AM implementation deadlines for these fisheries.

1. $OFL \geq ABC \geq ACL$ (operationally $OFL > ABC > ACL$)

- a. Groundfish
- b. Herring

2. $OFL \geq (ABC = ACL) > ACT$ (operationally $OFL > ABC = ACL > ACT$)

- a. Scallops
- b. Monkfish
- c. Skates

3. Still to be determined

- a. Whiting, red hake, offshore hake
- b. Red crab

4. Types of AMs

- Paybacks of overages (Groundfish, Scallops, Skates, Herring)
- No payback of overages – Monkfish
- ACTs (skates, scallops, monkfish)

1. Groundfish

$OFL \geq ABC \geq ACL$

ABC / ABC Control Rule – The SSC recommends setting ABC based on the lesser of $75\%F_{MSY}$ or $F_{rebuild}$, and the definition of optimum yield in the current Multispecies Fishery Management Plan as that associated with $75\%F_{MSY}$. The SSC will recommend ABCs for fishing years 2010 and 2011 based on updated PDT projections for groundfish stocks in late summer/fall.

ACLs – The ACLs will apply to each stock of groundfish as defined in Amendment 16. In addition there will be the sub-ACLs to which AMs will apply for the following:

- Recreational catches of GB and GOM cod, SNE/MA and GOM winter flounder, and pollock
- GB and GOM haddock caught by herring mid-water trawlers
- CC/GOM, SNE/MA and GB yellowtail flounder caught by scallop vessels

ACLs will apply to the U.S. portion of stocks also harvested by Canada but will include catch from state waters. Estimates of state waters catch will be deducted from the overall ACL for the relevant stocks before allocating ACL to federal permit holders or recreational fishing.

If an ACL is exceeded in year one, the amount of the overage could be evaluated to determine if the ACL in year two should be adjusted in order to prevent overfishing. The Council may adjust sub-component ACLs so that, to the extent practicable, components not responsible for the overage are not subject to reductions in their ACL and resultant changes in fishing opportunities.

AMs - There are several options for AMs in Amendment 16:

A. Common Pool Vessels

Accountability Measure Alternative 1 – "Hard" Total Allowable Catch (TAC)

- Stock area closures - In any trimester, when it is projected that ninety percent of the TAC for a stock will be caught, NMFS will close the area where the stock is caught to all groundfish fishing using gear capable of catching that species.
- Possession limits for smaller stocks - Windowpane flounders, ocean pout, and Atlantic halibut are typically incidental catches in the groundfish fishery – they are rarely targeted. In order to avoid closing the groundfish fishery because catches of these minor stocks approach a TAC, the Regional Administrator if given the ability to establish trip limits to further discourage any possible targeting of these stocks if necessary to reduce the likelihood the TAC will be exceeded.
- Possession limit for white hake - If this AM is chosen, the white hake possession limit will be reduced to 500 lbs./DAS with a maximum of 2,000 lbs./trip.

Accountability Measure Alternative 2 – Differential DAS/DAS Adjustment

- If an ACL for any stock is exceeded, NMFS will calculate the differential DAS rate change needed to prevent the ACL for that stock from being exceeded the following year. Since every ACL is evaluated, unless the mixed-stock exception is invoked as discussed below, this approach means that in a given area the differential DAS rate applied will be the most onerous rate determined.

B. Sectors

- Should a hard TAC allocated to a sector be exceeded in a given fishing year, the sector's allocation will be reduced by the overage in the following fishing year, and the sector, each vessel, and vessel operator and/or vessel owner participating in the sector may be charged, as a result of said overages, jointly and severally for civil penalties and permit sanctions pursuant to 15 CFR Part 904. If the sector exceeds its TAC in more than one (1) fishing year, the sector's share may be permanently reduced or the sector's authorization to operate may be withdrawn.

C. Recreational AMs

Option 1

- Separate AMs will be determined for the private boat and party/charter components of the recreational fishery

- It is anticipated that the AMs for an overage in fishing year one will be implemented at the end of fishing year two.
- to determine if the AM needs to be implemented, the three-year average of recreational catch (calculated consistent with the catch used on the assessment) will be compared to the three-year average of the ACL
- Either/or adjustments to season, adjustments to minimum size, or adjustments to bag limits

Option 2

Recreational fishery catches in a fishing year will be monitored using the MRIP data. As soon as data are available for the entire fishing year (expected to be by June or July of the fishing year immediately following), recreational catches will be totaled for the fishing year and compared to the ACL (see below for additional details on this comparison). If catches exceed the ACL, NMFS will determine the measures necessary to prevent exceeding the ACL in future years, following consultation with the Council, and publish the accountability measure that would be put into effect.

2. Herring

OFL ≥ ABC ≥ ACL

ABC Control Rule – The ABC control rule is still under development. The PDT will revisit the discussion in the Amendment 4 document and clarify it as necessary based on SSC feedback. An ABC for the herring fishery will be included in the 2010 Specifications which will be completed in the fall (2009).

ACLs – An ACL for the overall herring stock complex in the U.S. EEZ would be established as well as sub-ACLs for the management areas. This would mean there would be four sub-ACLs for management areas 1A, 1B, 2 and 3.

Canadian Landings – In addition to state landings Canadian landings from the New Brunswick weir fishery would have to be deducted from ABC before the ACL is calculated.

AMs - Amendment 4 proposes both pro-active and reactive AMs as described below.

Proactive AMs - Draft Amendment 4 includes an alternative similar to current measures that would close a management area to directed fishing when 95% of the TAC is projected to be reached to minimize the risk of a TAC overage in any area while still allowing for incidental catch (areas with set-asides for cooperative research close to directed fishing when 92% of the TAC is projected to be reached). Existing regulations also authorize the Regional Administrator to adjust any management area TACs during the fishing season, after consultation with the Council.

Reactive AMs - Amendment 4 options under consideration:

Option 3A – Proposed Modification (Herring Committee). This option would establish a process to address ACL/sub-ACL overages in the Atlantic herring fishery. Once the final total

catch for a fishing year is determined during the subsequent fishing year using the best available information (including VTR reports to account for incidental catch in other fisheries), any ACL/sub-ACL overage would result in a reduction of the corresponding ACL/sub-ACL for the fishing year after the final total catch is tallied. The ACL/sub-ACL deduction would be equal to the amount that was exceeded. NMFS would make these determinations and publish any changes to the ACLs in the *Federal Register* prior to the start of the fishing year during which the deduction would occur.

Option 4: Haddock Catch Cap Accountability Measure. This option would establish an accountability measure for the current haddock catch cap, consistent with the establishment of the catch cap as a sub-ACL in the groundfish fishery (Amendment 16) and consistent with current regulations regarding the catch cap. When the Regional Administrator has determined that the haddock catch cap (§648.85(d)) has been caught, all vessels issued an Atlantic herring permit or fishing in the Federal portion of the GOM/GB Herring Exemption Area, would be prohibited from fishing for, possessing, or landing herring in excess of 2,000 lb per trip in or from the GOM/GB Herring Exemption Area unless the vessel has a multispecies permit and is fishing on a declared groundfish trip. Upon this determination, possession of haddock would be prohibited for all vessels that possess a limited access Category A or B permit, regardless of where they were fishing.

3. Scallops

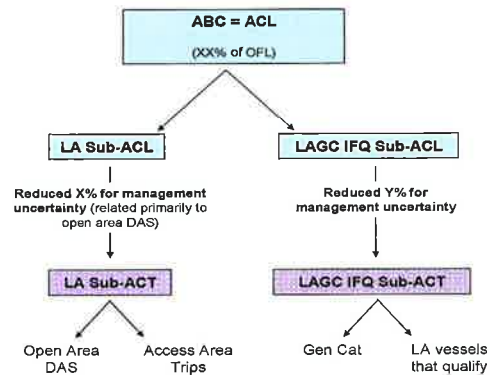
$$\text{OFL} \geq (\text{ABC} = \text{ACL}) > \text{ACT}$$

ABC / ABC Control Rule – The ABC control rule is still under development. The SSC is developing a control rule with assistance from the PDT. A specific ABC recommendation for FY 2010 will be included in Framework 21 to be completed in the fall (2009).

ABC will be set below OFL (this amount will be determined by the SSC). The ACT will be set 10% lower than ACL. After Amendment 15, management measures will be set to meet ACT. The overall buffer between the OFL and the ACT is expected to be similar to the current, approximately 20% buffer between the $F_{\text{Threshold}}$ (the overfishing level) and the F_{Target} used to determine current management measures.

ACLs - An overall ACL will be applied to the overall scallop fishery with two sub-ACLs for the LAGC and limited access permits (after taking into account discard mortality). Research and observer set-asides (2%) and LAGC incidental permits are allocated off the top before allocating the sub-ACLs. The primary reason there will be two ACLs is so that if catches are excessive corrective measures can be applied to the appropriate component of the fishery. For example, one component of the fishery will not shut another out. Each sub-ACL will have accountability measures associated with them.

The diagram below summarizes how the Council proposes to structure the ACLs and ACTs for the scallop fishery.



AMs

Limited Access AM: The primary AM for the limited access fishery is the use of an ACT. The buffer between ACL and ACT would act as a proactive in-season AM. If the sub-ACL for the limited access fleet is exceeded the (reactive) AM would be an overall DAS reduction in the subsequent year to account for any overages.

General Category AM: If an individual exceeds their IFQ or leased IFQ in a given fishing year, their IFQ the following fishing year would be reduced by the same amount. If they exceed their IFQ in excess of their allocation the following year any outstanding overage would carry over to future fishing years.

Northern Gulf of Maine (NGOM) AM: Technically, the NGOM already has an in-season AM because when the TAC is predicted to be reached, the fishery is closed. The PDT recommends that if that component of the fishery exceeds the overall TAC after all data is final, then the hard TAC the following year could be reduced by that amount mid season (i.e. reduction on June 1 if necessary).

4. Monkfish

$$OFL \geq (ABC = ACL) > ACT$$

ABC/ ACB Control Rule – So far, due to limitations about monkfish stock dynamics, the SSC has set an interim ABC control rule for monkfish that will not be reevaluated until after the next benchmark stock assessment. ABCs are specified for each of the Northern and Southern Monkfish Management Areas.

ACLs – The ACL in draft Amendment 5 is described as the level of annual catch that serves as the basis for invoking AMs and to prevent exceeding the OFL. It maybe be set annually or on a

multi-year basis and cannot exceed the OFL. The Monkfish OS Committee has recommended that $ACL = ABC$. ACLs will be set for each of the Northern and Southern Monkfish Management Areas.

AMs - The Monkfish Committee is proposing both “proactive” AMs to prevent exceeding ACLs, and “reactive” AMs if ACL is exceeded.

Reactive AMs – Any ACL overage would be deducted from the ACT in the future by adjusting the management measures in the 2nd year after the overage year. If the Councils do not take appropriate action, the Regional Administrator will use a formulaic approach to adjust DAS and trip limits and implement by notice action.

Proactive AMs – As a proactive AM, the Monkfish Committee has recommended options for buffers between the ABC/ACL to account for uncertainty from the effort controls and other sources of management uncertainty.

Northern Management Area	Southern Management Area
ABC /ACL - 17,485 mt	ABC /ACL - 13,326 mt
ACT	ACT
Option 1 - 5,375 mt (current TAC plus discards)	Option 1 - 6,579 mt (current TAC plus discards)
Option 2 - ,063 mt (50% increase in TAC plus discards)	Option 2 - 9,211 mt (40% increase in TAC plus discards)
Option 3 - 10,750 mt (100% increase in TAC plus discards)	Option 3 - 11,469 mt (75% increase in TAC plus discards)

If the ACT is exceeded in year 1, effort controls would be adjusted in year 3. They would not be adjusted in year 2 because of the lag in receiving catch and landings data.

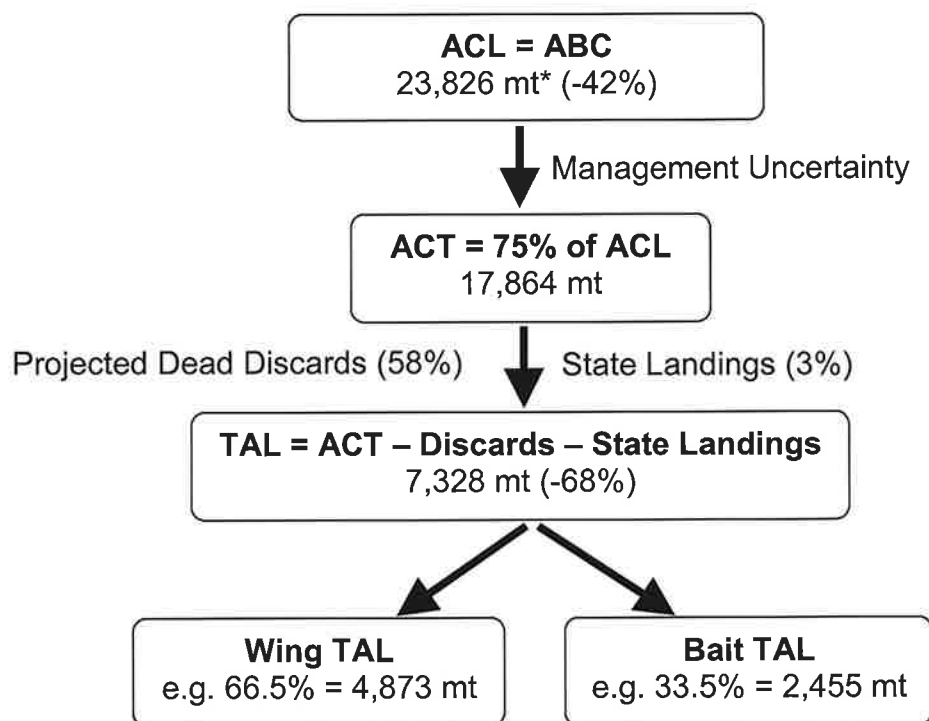
- The ACT would be the basis for setting management measures (either DAS/trip limits, or allocations of ITQ or sector shares) after accounting for incidental catch in other (non-directed) fisheries and discards
- The Committee proposes three options (in terms of the size of the ACT) for setting the ACT for each management area based on current TTACs and landings, plus estimated discard rates.
- Exceeding or falling below an ACT would not trigger management action, but if either occurs, the cause would be determined, and appropriate adjustment to the management measures could be taken through regulatory action or specifications process.
- Provides a buffer against approaching ACL and invoking reactive AMs

5. Skates

$$\text{OFL}^* \geq (\text{ABC} = \text{ACL}) > \text{ACT}$$

ABC/ABC Control Rule - It was not possible to specify a fishing level associated with the survey abundance indexed-based the overfishing definition. As a result the SSC set ABC at a level based on the median catch/biomass exploitation ratio of the time series because catches below this level had a much greater than average chance of allowing biomass to increase. Until the SSC next reevaluates the ABC, the amount of the ABC will be fixed and will not vary with changes in the level of biomass for the skate complex.

ACL - The Council has set the ACL for fishing years 2010-2011 for the skate complex equal to the ABC recommended by the SSC.



AMs

ACL Overages - Based on final landings and discard estimates for a given year, if the ACL for that year was exceeded, an automatic increase in the buffer between ACL and ACT, based on the percent overage, will be implemented in the next fishing year (i.e. two years after the overage occurred). The regulations would require the buffer to be appropriately set either through the Council's specifications process or rulemaking by NMFS, depending on the timing of the determination of the ACL overage.

ACT - To account for management uncertainty in monitoring skate catch, the Council initially set the ACT at 75% of the ACL. During the specifications process for the subsequent two fishing years (2012-2013), the Skate PDT will project total skate discards based on estimates of the average total skate discards from the preceding 3 years (2007-2009), incorporating anticipated

regulatory changes in other fisheries that discard skates, and subtract that amount from the ACT to generate total allowable landings (TAL). Estimated skate landings from state waters (currently about 3-4% of total landings) will then be subtracted from the TAL. The remaining Federal waters TAL will then be allocated to the wing and bait fisheries according to the ratio selected by the Council (refer to Table 6). This procedure will be followed in the specification process for subsequent two year periods.

Comments

A. In FMPs where the $ABC = ACL$ and an ACT is used, a conservative buffer is needed between the ACT and ACL/ABC . This is because, given scientific uncertainty, exceeding the ABC may result in overfishing. The SSCs set a buffer between ABC and OFL because they cannot determine with sufficient certainty that overfishing is not occurring at any catch level greater than the ABC.

In contrast, if $ACL < ABC$, exceeding the ACL is less likely to result in possible overfishing (as long as ABC is not exceeded).

B. Considerations in determining the type of AMs are whether a species or stock is primarily targeted or whether it is caught as an incidental catch and the status of the species/stock. If a species is primarily caught incidentally to other species, the Council may want to have more flexibility to avoid unnecessary closures of fisheries for other species.

Conclusions / Recommendations

Because of the confusion over handling ACLs, AMs and ACTs differently in different NEFMC plans, the Council may want to consider a consistent approach for all FMPs under development. An approach, such as implementing ACLs and AMs using the rule that $OFL > ABC > ACL$, may provide greater assurance that ABC would not be exceeded. (AMs would be triggered at a catch level less than the ABC). This approach would not prevent the Council from also using catch targets or ACTs that were less than the ACLs if it thought necessary.

In addition, the Council may want to consider including an option in each amendment which would require that if ABC is exceeded in an FMP using input controls, then the very next year output controls a hard TAC would be implemented.