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CITIZENS LEAGUE FOR ENVIRONMENTAL ACTION NOW
5120 Woodway, Suite 9004 • Houston, TX 77056

April 13, 2007

04-17-07 P12:12 IN

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Dr. Robert Hogarth, Director
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Dear Dr. Hogarth:

I am writing to submit comments on the Notice of Intent that was recently issued (2/14/07) by the National Marine Fisheries Service on possible changes to National Standard 1 on Fishing. This is a critical time for the health of our oceans. Your leadership is vital for ensuring that our ocean ecosystems are protected and that ocean fish management is improved as your agency moves forward to issue rules for the reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSA), the law governing fishing in U.S. ocean waters.

A strong and effective MSA is crucial for the sake of healthy oceans and the communities that depend on them. We are very pleased by the conservation-oriented tone of the Notice of Intent. It indicates a true appreciation of the tough problems that our fisheries face today and a willingness to challenge 'business as usual' in their management. We believe that the revised National Standard 1 guidance should make the following changes in the way that your agency and regional councils conduct business:

- **Let science, not special interests, set fishing limits.** Every regional council must have a strong, independent, technically proficient Science and Statistical Committee (SSC) that has the resources and data to make conservative, science-based decisions. Appointments to these councils should be tracked carefully by NMFS to ensure competence and independence. These committees should set science-based annual catch limits (ACL's) that incorporate a precautionary approach or buffers to keep fish stocks healthy or recovering from depletion with a high level of certainty.

- **Create accountability for overfishing.** Managers should create clear, equitable, consistent, and concrete accountability measures that keep stocks out of trouble if annual catch limits are exceeded and conversely potentially reward fisheries in some cases where annual catches are under the limits.

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- **Require fishermen to report their catch levels in an accurate, timely fashion.** Without accurate, timely catch data, it's impossible to determine if a fish has been overfished. With this information, we can take the necessary steps to ensure that overfishing in our oceans is less likely to occur. To that end, data from each fishery should be collected online soon after landing the fish.

- **Stop overfishing as quickly as possible.** NMFS should maintain the10-year rebuilding requirement for recovering depleted fish stocks. Congress clearly considered and rejected changes to this requirement in the MSA reauthorization process.

In sum, we are very pleased with the proposals that NMFS has considered so far. We hope to see as many of these good ideas embedded in the final regulations and guidance as possible. We have a unique opportunity to make a quantum jump in the way we manage our fisheries to protect our oceans and our fish.

Thank you,

Geoffrey Castro
Executive Director

cc. Mark Milikin, National Marine Fisheries Service

April 17, 2007

Mark Millikin
National Marine Fisheries Service, NOAA
1315 East-West Highway
Silver Spring, MD 20910
Email: annual.catch.limitDEIS@noaa.gov

Re: Scoping Comments on Annual Catch Limits DEIS

Dear Mr. Millikin,

The Conservation Law Foundation (CLF) is writing in response to the agency's Federal Register Notice of Intent to prepare an Environmental Impact Statement (EIS) analyzing alternatives for guidance on annual catch limits (ACLs) and accountability measures (AMs). CLF participated in the development of comments submitted today by the Marine Fish Conservation Network (MFCN) and we ask that you fully consider those comments in developing the EIS. Rather than repeat those comments, we take this opportunity to supplement them in specific areas important to our interests as a regional participant in the New England Fishery management process.

The Magnuson-Stevens Reauthorization Act of 2006 (MSRA) requires science-based, annual catch limits and accountability measures for all federally managed fish species. Implementation of these statutory changes must ensure that critical improvements to fisheries management are made in regions like New England, where chronic overfishing due to the failure by fisheries managers to set science-based enforceable catch limits has left many of our most important stocks of fish severely depleted and our fisheries in shambles. There are significant biological and economic consequences that will flow from this update of the National Standard 1 Guidelines. We applaud your effort to involve the public and urge you to be both deliberate and precautionary in your decision-making.

The clear intent of Congress in the MSRA was to end overfishing by requiring science-based annual catch limits and accountability measures. The National Marine Fishery Service (NMFS) has acknowledged that the highest priority in the MSRA was to strengthen the MSA to ensure an end to overfishing. The final rulemaking on ACLs and AMs should provide clear, unambiguous guidelines that ensure catch levels are based on unbiased scientific advice, end overfishing, allow timely rebuilding of overfished stocks, and hold fishery managers accountable for meeting those requirements.

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Alternatives Analysis

In response to the preliminary alternatives identified in the NOI, we not only strongly urge that you pursue "Alternative 3," but suggest that pursuing either of the other two alternatives would lead to confusion, waste of resources, litigation, and almost certain failure. It is important to take this opportunity to develop ACL and AM guidelines that provide performance standards and specific guidance on one or more mechanisms to implementing ACLs and AMs that would meet the statutory requirement and the standards for Secretarial approval. For these reasons, it is our view that the overwhelming majority of the alternatives analysis under this EIS should and will fall within the third alternative, as alternative performance standards and mechanisms for ACLs and AMs are analyzed.

The role of the SSC and other peer review processes in setting ACLs and AMs

The role of the SSCs is to provide the councils with unbiased scientific advice on what the ACLs for each managed fish stock should be based on the best scientific information available. In order to ensure that scientific advice on catch limits is based on biological and ecological considerations rather than on economic interests, SSC appointees must have scientific expertise in fisheries science, marine ecology, or related fields.

With regard to setting AMs, NMFS should outline the preferred range of AMs in the revised NS1 Guidelines. In general, AMs must be:

- Proven effective
- Have a high probability of success
- Developed through a process that provides opportunity for public comment
- Approved by the Secretary

While the councils should select which AMs to use, the SSC should be required to evaluate the efficacy of these AMs on an annual basis.

Peer review of recommended ACLs and AMs should be independent of the Council process. An initial peer review should occur within two years of the time the first ACLs and AMs are implemented in each region, and then periodically thereafter. The peer review process should critique the SSC and council's process and methodology for developing ACLs and AMs and, if necessary, make recommendations on how to improve the process or methodology. Where appropriate, the peer review process should identify alternative ACLs and AMs for the SSC and councils to consider.

The relationship between ACL and Optimum Yield (OY)

As noted above, NMFS and Councils should adopt a precautionary approach to specification of ACLs and OY, as recommended in the agency's current technical guidance on NS1. Scientific uncertainty and the difficulties associated with estimating MSY for wild fish stocks requires fishery managers establish precautionary buffers against uncertainty.

Related to this, the revised NS1 Guidelines on setting ACLs and OY should provide additional guidance on how to reduce the catch limit to address ecosystem considerations. The rules should establish criteria for setting ACLs for identified forage fish species which begin by setting an

appropriate (precautionary) amount of these species aside for the other consumers in the food web. The definition of optimum yield clearly authorizes downward adjustments from the maximum allowable single-species fishing rate to account for ecosystem factors, and ACLs for forage fish species should reflect their importance to the food web and the productivity of other species which rely on them.

Variability in the accuracy of management approaches in achieving target fishing levels

The regular review of the efficacy of management measures is critical to achieving target fishing levels. Measures must be adopted through a public process, approved by the Secretary, and their performance must be measurable. In addition to establishing a high probability that an ACL will prevent overfishing for a stock (see below), management measures adopted by a council must also be shown to have high probability of successfully not exceeding the ACL (e.g., 90 percent).

Establishing the appropriate probability that an ACL will prevent overfishing for a stock

Annual catch limits should be set at a level that has a high probability of not exceeding the overfishing level (e.g., 90 percent). If insufficient data exist to prepare a stock assessment and/or estimate the probability that a given ACL will exceed OFL, catch limits should be reduced accordingly.

Establishing recommendations for inseason management authority and methods to be used as AMs to prevent overfishing

The key to inseason management is real time data collection and analysis of catch (landings and discards). In addition to well known technological needs for improving inseason estimates of catch, there is a critical shortage of observer coverage in New England for nearly all of our fisheries. Fishery observers are the best source of information for accurately and precisely estimating bycatch, and thus are vital to measuring and managing catch inseason.

NMFS must also have the authority to slow down and close fisheries and/or areas as required to avoid exceeding ACLs in a given fishing season. In season area closures, bycatch-caps, and other forms of spatial and temporal management of fishing effort should be included to ensure that ACLs are not exceeded and that vulnerable species are protected.

Limiting the extent of overfishing, should it occur

Overfishing should never occur. If overfishing is occurring NMFS must take action to close the fishery, or appropriate area within a fishery, to all gear capable of catching the stock of concern immediately.

The objective is to both avoid situations where the ACL is exceeded, and if it is exceeded to avoid such an overage resulting in overfishing. To reduce the risk that fisheries will exceed OFL thresholds, ACLs should be set well below the OFL and management measures must be set with a high enough probability of success to ensure that catch falls below the ACL. If an ACL should be reached during the fishing season, managers must have the authority to close the fishery immediately.

Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year

In instances where analysis indicates that an OFL was exceeded, managers must be held accountable and be required to deduct the overage from the ACL for the subsequent fishing season.

Thank you for considering these comments. Please contact us should you have any questions or wish to discuss these comments in greater detail.

Sincerely yours,

/S/
Roger Fleming, Esq.
Senior Attorney
Conservation Law Foundation
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Silver Spring, MD 20910
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April 17, 2007

Re: Issues related to Guidance for annual catch limits (ACLs) and Accountability Measures (AMs)

Dear Mr. Millikin,

The Marine Fish Conservation Network (Network) welcomes the opportunity to provide the following comments in response to the agency's Federal Register Notice of Intent to prepare an Environmental Impact Statement (EIS) analyzing alternatives for guidance on annual catch limits (ACLs) and accountability measures (AMs) required by the Magnuson-Stevens Reauthorization Act of 2006 (MSRA). We understand that such guidance will be added to the National Standard 1 (NS1) guidelines of 1998.

The MSRA of 2006 requires science-based, enforceable catch limits and accountability measures for all federally managed fish species. The MSRA of 2006 remedies a major shortcoming of the 1996 Magnuson-Stevens Fishery Management and Conservation Act (MSA), which established a maximum limit on optimum yield (OY) – capped at maximum sustainable yield (MSY) – but failed to require all regional fishery management councils to set enforceable catch limits based on recommendations of the councils' science advisors. The clear intent of Congress in the MSRA was to end overfishing by requiring catch limits and accountability measures.

The Network applauds the agency's efforts to seek public comment on this critical provision of the law and to consider a wide range of issues relevant to setting annual catch limits, including the need to specify the relationship of ACLs to OFL and OY, the need for precautionary buffers between ACLs and OFL, the means by which ACLs may be set in data-poor situations, the need for corrective actions when catch limits are exceeded, the types of accountability measures which should be approved for use by fishery managers, and so on. However, we are concerned that some council and NMFS officials have stated publicly that certain regional councils are already in compliance with the new provisions when implementing regulations are not yet in place. Until new regulations and guidelines are adopted, there is no way to know if, or to what extent, any regional fishery management council is in compliance with them.

NMFS has acknowledged that the highest priority in the MSRA was to strengthen the MSA to ensure an end to overfishing.[1] The final rulemaking on ACLs and AMs should provide clear, unambiguous control rules[2] that ensure catch levels are based on unbiased scientific advice, end overfishing, allow timely rebuilding of overfished stocks, and hold fishery managers accountable for meeting those requirements. These new legal requirements are necessary because too often the fishery management councils do not set annual catch limits, and when they do, the levels have been set counter to scientific advice and have resulted in overfishing, harming fish and fishermen alike.

We recognize the real difficulties involved in setting catch limits indexed to uncertain biological reference points corresponding to MSY, as NMFS cautioned in the NS1 Guidelines of 1998.[3] Uncertainty plays a large role in the scientific assessment of fish stocks even in relatively data-rich situations, and it must be addressed in the setting of annual catch limits. Uncertainty in fishery stock assessment advice must not be an excuse to avoid setting catch limits but rather a reason to set highly precautionary catch limits. Thus NMFS must recognize the need to provide buffers and margins of error to account explicitly for uncertainty in underlying fishery data and fluctuations in environmental conditions. A system of explicit decision rules based on levels of information available for managed stocks should provide clear guidance on the methods of setting ACLs, including rules for setting ACLs in data-poor situations when stock status relative to MSY (or proxy for MSY) is unknown.

In the agency's own technical guidance on the use of precautionary approaches to implementing National Standard 1, Restrepo *et al*. (1998) recommended a precautionary approach to specification of Optimum Yield (OY), based on three guiding principles:

- Target reference points, such as OY, should be safely set below limit reference points, such as the overfishing level (OFL), as defined in the control rules.
- A stock or stock complex that is below the size that would produce MSY should be harvested at a lower rate or level of fishing mortality than if the stock or stock complex were above the size that would produce MSY.
- Criteria used to set target catch levels should be explicitly risk averse, so that greater uncertainty regarding the status or productive capacity of a stock or stock complex corresponds to greater caution in setting target catch levels.[4]

The same principles should guide the setting of annual catch limits (ACLs). As with OY, ACLs should be set safely below the maximum limit reference point corresponding to MSY (the overfishing level, or OFL)[5] to address uncertainty in the scientific advice and other relevant

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[1] Annual Catch Limits (ACLs) and Accountability Measures (AMs): Requirements of the 2006 Amendments to the Magnuson-Stevens Act (MSA). Public information handout prepared by NMFS Office of Sustainable Fisheries, Silver Spring, MD. March 14, 2007.
[2] Defined by Restrepo *et al*. 1998 (p. 3) as pre-agreed plans for making management decisions based on stock size.
[3] NMFS 1998, 63 FR 24215.
[4] Restrepo (Convener) *et al*. 1998. Technical Guidance on the Use of Precautionary Approaches to Implementing National Standard 1 of the MSFCMA. NOAA Technical Memorandum NMFS-F/SPO-## July, 1998.
[5] MSA Section 3 (16 U.S.C. 1802) defines the terms 'overfishing' and 'overfished' as a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.

factors.[6] The new rules for setting ACLs should provide additional guidance on how to reduce the catch limit to account for uncertainty in the scientific advice and address ecosystem considerations.

A precautionary approach to implementing NS1 and setting annual catch limits should include the following guidelines:

- ACLs must be science-based and may not exceed the limits recommended by the Councils' Science and Statistical Committees (SSCs), in keeping with MSRA Section 103(c)(3).
- ACLs should be set a level that has a high probability (e.g., 90%) of not exceeding the overfishing level (OFL).
- ACLs should account for all sources of fishing mortality for each managed species or stock assemblage, including all discards in the fishery and bycatch mortality in other fisheries.
- As a general rule, NMFS should not set ACLs for stock complexes or assemblages. At best such an approach is an interim measure while better data are collected to break out managed species individually.
- The so-called "mixed stock exception" in the present NS1 guidelines must be removed, since it violates the law's clear intent to end overfishing. In instances where multiple species are treated as one "stock" for management purposes, catch limits should be based on the species within the stock assemblage with the lowest productivity and the catch limit should include the bycatch and discard mortality of that species in other fisheries.
- The new rules should affirm the MSA's requirement to restore overfished stocks "as soon as possible." The new rules should not eliminate or modify the existing 10-year rebuilding requirement, and must not permit overfishing during a rebuilding plan, as clarified in MSRA Sec. 104(c).
- The new rules should establish explicit guidelines for addressing ecosystem considerations and moving toward an ecosystem-based approach to fishery management, starting with criteria for setting ACLs for identified forage fish species which ensure that these species remain available to other consumers in the food web, including other managed species on which fisheries depend.
- Spatial and temporal management of fishing effort should be an integral part of effective catch-limit management. Measures that disperse fishing effort across subpopulations of a defined "stock" should, if employed, aim to avoid serial depletion of spatially discrete subpopulations which may undermine the productivity of the "stock as a whole."
- Accountability measures must go hand in hand with ACLs. AMs are required to ensure that catch limits are enforced and that performance can be measured relative to goals for ending overfishing. The range of AMs should be outlined by NMFS in the revised NS1 Guidelines. Measures adopted in a given region must be approved by the Secretary. Regular scientific review of the efficacy of management measures employed in each

[6] A procedure clearly authorized in the MSA's definition of OY. MSA Sec. 301 (National Standards), stipulates that, "*conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery*" (16 U.S.C. 1851). The legal definition caps OY at maximum sustained yield (MSY) and clearly authorizes downward adjustments from the theoretical maximum allowable fishing rate "*as reduced by any relevant economic, social, or ecological factor.*"

region is critical to ensuring that AMs are effective and working as intended. Their performance should be measurable and demonstrable or they should be modified accordingly.

More detailed responses to specific agency questions follow.

- **The role of the SSC and other peer review processes in setting ACLs and AMs**

Congress was clear that ACLs should be set by the councils for each managed fish stock and that the Councils are prohibited from exceeding the ACLs recommended by the SSCs.

The role of the SSCs is to provide the councils with unbiased scientific advice on what the ACLs for each managed fish stock should be based on the best scientific information available.

To ensure that scientific advice on catch limits is based on biological and ecological considerations rather than on economic interests, a significant proportion of SSC appointees should have scientific expertise in fisheries science or marine ecology.

With regard to setting AMs, NMFS should outline the preferred range of AMs in the revised NS1 Guidelines. In general, AMs must be:

- Proven effective;
- Have a high probability of success;
- Developed through a process that provides opportunity for public comment; and
- Approved by the Secretary.

The councils should select which AMs to use, but the SSC should be required to evaluate the efficacy of these AMs on a regular (e.g., annual) basis.

As recommended by the U.S. Commission on Ocean Policy (2004), peer review of recommended ACLs and AMs should be independent of the Council process. The peer review process should critique the SSC's process and methodology for developing ACLs and AMs and, if necessary, make recommendations on how to improve the process or methodology. The peer review process should not provide alternative ACLs and AMs.

- **The relationship between ACL and Optimum Yield (OY)**

The law is clear: OY cannot exceed the estimated MSY value for a given fish stock, and ACLs must be similarly constrained. An ACL may equal OY, but cannot exceed the maximum permissible OY value. More importantly, neither value (ACL or OY) should be set at MSY, which is equivalent to the overfishing level (OFL). In fact, the precautionary approach argues that the annual catch limit corresponding to OY should be safely set below the OFL.

NMFS and Councils should adopt a precautionary approach to specification of ACL and OY, as recommended in the agency's current technical guidance on NS1. The inherent scientific uncertainties and difficulties associated with estimating MSY for wild fish stocks should require fishery managers to provide precautionary buffers against uncertainty. The revised NS1 Guidelines on ACL and OY should provide additional guidance on how to reduce the catch limit to address ecosystem considerations.

As a first step toward the goal of ecosystem-based management, the rules should establish criteria for setting ACLs for identified forage fish species which ensure that these species remain adequately available to other consumers in the food web. The law's definition of optimum yield clearly authorizes downward adjustments from the maximum allowable single-species fishing rate to account for ecosystem factors, and ACLs for forage fish species should reflect their importance to the food web and the productivity of other species which rely on them.

In addition, the revised NS1 Guidelines should address the disparate treatment of OY in different regions. For instance, OY is sometimes a multi-year, multi-species number; sometimes an annual single-species number. The regulations should address this disparity and eliminate the confusion by requiring wherever possible that OY is set for individual species on an annual basis in all regions, so that limit and target reference points corresponding to OFL, OY and ACL mean the same things in each management region.

- **Revision of existing overfishing definitions to include OFL**

In the 1996 reauthorization of the Magnuson-Stevens Act, F_{MSY} was designated as an upper bound or limit to OY, expressed as a rate of fishing mortality (i.e., maximum fishing mortality threshold, MFMT). The rate of fishing corresponding to MSY (or proxy for MSY) in any given year is equivalent to the overfishing level (OFL). The OFL should be specified in each year's ACL specification and the buffer between OFL and ACL should be based on a system of explicit control rules which ensure that ACL is reduced by any relevant economic, social, or ecosystem factor, and accounts for uncertainty in the scientific advice.

- **Variability in data currently available for each stock (data poor vs. data rich)**

In complying with the reauthorized MSA, ACLs will have to be set across the range of data quality situations. In data-poor situations, stock abundance is unknown and/or stock status with respect to overfishing and overfished criteria is unknown. In data-rich situations, information is available to estimate stock abundance and make stock status determinations relative to overfishing criteria.

One example of a system of control rules used to set annual catch limits in situations where different levels of data are available for different stocks comes from the Alaska Region, in which a 6-tiered system of control rules and catch limit criteria provide a basis for setting ACLs in data-poor situations (Tiers 4-6) as well as data-rich situations (Tiers 1-3):

Tier 1 – Reliable B, B_{MSY}, and probability density function of F_{MSY}
Tier 2 – Reliable B, B_{MSY}, F_{MSY}, $F_{35\%}$, $F_{40\%}$
Tier 3 – Reliable B, $B_{40\%}$, $F_{35\%}$, $F_{40\%}$
Tier 4 – Reliable B, $F_{35\%}$, $F_{40\%}$
Tier 5 – Reliable estimates of biomass (B) and natural mortality (M)
Tier 6 – Reliable catch history data

This is only one example of how catch limits can be set for fisheries exploiting stocks whose status relative to MSY or proxy SPR% is unknown, but it illustrates that it is practicable to set numeric catch limits across a wide range of data quality situations.

In general, the less that is known about a stock's status relative to overfishing criteria, the more conservative and precautionary catch limits should be. Any "tiered" approach to control rules based on levels of information for individual stocks should reflect this principle.

- **Setting ACLs for stocks with unknown status**

In instances of a new fishery or significant new fishing effort, a strictly precautionary approach would set catch levels at zero until adequate information is available to assess the status of the stock. This shifts the burden of proof to fishery managers to demonstrate that overfishing will not occur and provides an incentive to gather scientific information before significant new fishing is authorized.

The intent is to avoid the vicious cycle of boom and bust fisheries authorized by councils and NMFS without management plans or information, often as an alternative to fisheries that have already depleted existing stocks. An example is the monkfish fishery of the Northeast and Mid-Atlantic regions during the 1990s, which expanded rapidly in the early 1990s without a management plan as groundfish fleets shifted their effort from overfished cod, haddock, and flounder stocks. Although the monkfish stock initially appeared robust and catches soared to record levels in the history of the fishery, it was apparent by the late 1990s that monkfish was in trouble. In 1999, concurrent with the adoption of a monkfish fishery management plan, the stock was considered overfished and the councils were forced to adopt a rebuilding plan.

If a fishery is already fully developed and if the stock productivity does not show obvious signs of impairment but information is lacking to assess the stock relative to the reauthorized MSA's overfishing criteria, ACLs may be based on alternative criteria such as setting ACL as a percentage or average of catches from prior years (as is done for Tier 6 stocks in the Alaska region) or based on available estimates of biomass and natural mortality (as is done for Tier 5 stocks in the Alaska region).

If the status of a stock relative to overfishing criteria is unknown (as assumed by NMFS's definition of "data poor" situations), even more precaution is warranted than that advised in earlier NMFS Technical Guidance.

Bottom line: the greater the uncertainty, the greater precaution which should be required in setting catch limits.

- **Circumstances in which a numerical ACL cannot be set for a stock and recommendations for alternatives to setting a numerical ACL (e.g. prohibitions)**

ACLs must be numeric (expressed as total pounds or numbers of fish) so that catch limits can be tracked and enforced. Without some numerical value on landings and bycatch, there is no way to hold managers accountable for exceeding limits.

If information is completely lacking and no catch history exists, the precautionary thing to do would be to set catch levels at zero until adequate information is available to assess the status of the stock.

- **Setting ACLs for stock complexes, stock assemblages, and similar stock groupings**

As a general rule, NMFS should not set ACLs for stock complexes or assemblages. At best such an approach is an interim measure while better data are collected to break out managed species individually. While some fish species are very similar to other species, each is unique and picking an "indicator stock," as NMFS has suggested doing in the past, is a poor substitute for individual stock ACLs. The goal should be to move all stocks out of the "data poor" category by obtaining the requisite information for that stock, not by grouping it into an assemblage that masks the lack of information and makes overfishing of an individual stock both more likely, and less likely to be noticed.

In addition, the rulemaking must remove the so-called "mixed stock exception" in the present NS1 guidelines, which is inconsistent with the law's clear requirement to ensure overfishing does not occur. In instances where multiple species are treated as one "stock" for management purposes, catch limits should be based on the species within the stock assemblage with the lowest productivity and the catch limit should include the bycatch mortality of that species in all fisheries.

ACLs should account for all sources of fishing mortality for each managed species or stock assemblage, including bycatch and discard mortality in the fishery and all other fisheries. If fishery observer data are not available to estimate the quantity of the directed fishery catch/discards as well as bycatch mortality in other fisheries, estimates should be developed based on the best available information from stock assessments, fish tickets, logbooks, research programs, etc.

- **Variability in the accuracy of management approaches in achieving target fishing levels**

Regular review of the efficacy of management measures is critical to achieving target fishing levels in all management regions. Currently NMFS does not assess differences in management measures and their relative efficacy across regions, but the new requirement of accountability measures necessitates regular evaluation and performance reviews to determine which measures are truly effective and best suited to the situation. Regardless of the measures adopted in a given region, they must be approved by the Secretary and their performance should be measurable and demonstrable or they should be modified accordingly.

In other words, effective strategies for implementing ACLs and AMs may vary by region, but Councils should not have unlimited discretion to decide which measures are appropriate. NMFS should establish clear national performance standards and provide clear guidance on the best practices, including a range of specific ACLs and AMs approved by the Secretary from which Councils may choose. In addition, the effectiveness of these measures should be subject to regular review by Council SSCs and NMFS.

- **Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed**

The inherent uncertainties associated with estimations of MSY and overfishing for wild fish stocks require fishery managers to set an annual catch limit that is less than the overfishing level (i.e., ACL < OFL) in order to provide a buffer against this uncertainty. The revised NS1 Guidelines on ACLs should provide clear guidance on appropriate buffers to account for uncertainty in the scientific advice, and to address ecosystem considerations which are not explicitly addressed in conventional single-species thresholds indexed to MSY.

In general, larger buffers between ACL and OFL are necessary than those recommended in the existing NS1 Guidelines. For example, the final rule for National Standard 1 guidelines cited sources in the fishery science literature to the effect that the single-species stock size at MSY is approximately 40% (range 36.8% to 50%) of the unfished or pre-exploitation stock size – i.e., $B_{40\%}$, the proxy for B_{MSY}.[7] This approach is sometimes referred to as the "$F_{40\%}$ policy," which is to say the *rate* of fishing mortality that will theoretically approximate the yield at MSY by reducing the quantity of spawning stock to only 40% of its unfished size on average ($B_{40\%}$) if one has been fishing at $F_{40\%}$ over a long period.

The basis for this policy comes from studies of Clark (1991, 1993), who proposed $F_{35\%}$ (i.e., the fishing mortality rate that reduces the spawning potential per recruit to 35% of the unfished level, or "$B_{35\%}$") as a surrogate for F_{MSY} but subsequently recommended a slightly more conservative $F_{40\%}$ mortality rate to account for uncertainties. Mace (1994) recommended $F_{40\%}$ as a conservative proxy for F_{MSY} and the $F_{40\%}$ policy has been used as a default fishing mortality rate

[7] NMFS 1998, 63 FR 24216, 24220.

for stocks with unknown productivity parameters (i.e., MSY unknown) in the Alaska and Pacific regions.[8]

As noted at the West Coast Groundfish Harvest Rate Policy Workshop of 2000, however, $F_{40\%}$ is not necessarily an appropriate exploitation strategy for long-lived rockfish off the West Coast. In that instance, scientists have recommended a more conservative $F_{50\%}$ fishing mortality rate (i.e., target biomass = 50% of unfished stock size, or $B_{50\%}$) to account for differences in life history. Changes in the environment affecting productivity may also require more conservative fishing mortality strategies in times of lower productivity. Thus a "one size fits all" approach to catch limits is not appropriate for all species and situations. A default fishing mortality rate that may be deemed conservative for some species in a narrow single-species context may be too aggressive for others, or may be inappropriate under prevailing environmental conditions.

The $F_{40\%}$ policy outlined by NMFS in the NS1 Guidelines of 1998 is a single-species fishing mortality strategy which aims to reduce the spawning stock biomass 60% from its unfished level (on average), and as such it does not account directly for ecosystem needs and food web impacts. For instance, NMFS has elsewhere said that the goal of MSY-based, single-species exploitation strategies is to remove fish before they are "lost" to natural mortality by other ecosystem consumers.[9] In a review of the Alaska region's use of the $F_{40\%}$ policy prepared for the North Pacific Fishery Management Council, Goodman *et al*. (2002) maintained that $F_{40\%}$ is intended to provide a small buffer (5%) between OFL ($F_{35\%}$) in a conventional single-species context but is not explicitly considerate of ecosystem concerns:

> "*The $F_{40\%}$ approach to estimating the ABC, by itself, is inherently a single species approach. It is thought that for most of the target species in the FMP, a fishing mortality rate of $F_{35\%}$ would be appropriate for achieving long-term catches near MSY, under the condition of an unchanged oceanographic regime…That the actual target fishing rate is $F_{40\%}$ rather that [sic] $F_{35\%}$ creates some additional margin of safety, from a single-species perspective, for target species excluding rockfish. The decision to use $F_{40\%}$ rather than $F_{35\%}$ was deliberately protective, and was intended to function as a buffer against several sources of uncertainty, including the concern that theoretical models have shown that managing each species for its single species MSY will not achieve MSY for the aggregate. Nevertheless, it is not clear how much of the margin between $F_{35\%}$ and $F_{40\%}$ was 'allocated' to ecosystem considerations. Nor was a calculation carried out to demonstrate what amount of escapement is needed for ecosystem purposes, or to assess whether the margin between fishing at $F_{35\%}$ and $F_{40\%}$ supplies this amount*."[10]

The National Research Council's Committee on Ecosystem Effects of Fishing, Phase II (NRC 2006) recently concluded that if the United States is to manage fisheries within an ecosystem

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[8] Stephen Ralston (chair) et al. West Coast Groundfish Harvest Rate Policy Workshop. AFSC, Seattle Washington, March 20-23, 2000. Sponsored by the SSC of the Pacific Fishery Management Council.

[9] See NMFS Section 7 Consultation on Steller sea lions and Alaska groundfish fisheries ("FMP BiOp") at p. 225: "In effect, fisheries remove fish from the population before they are 'lost' to natural mortality (e.g., other consumers of groundfish)."

[10] Daniel Goodman (chair), Marc Mangel, Graeme Parks, Terry Quinn, Victor Restrepo, Tony Smith, and Kevin Stokes. Scientific Review of the Harvest Strategy Currently Used in the BSAI and GOA Fishery. Draft report prepared for the North Pacific Fishery Management Council, Nov. 21, 2002: pp. 7, 121.

context, food web interactions, life-history strategies, and trophic effects will need to be explicitly accounted for when developing fishery harvest strategies.[11] The revised NS1 guidelines should provide explicit guidance for addressing ecosystem considerations and moving toward an ecosystem-based approach to fishery management. The rules should address conflicts between conventional single-species goals, which seek to maximize economic benefits from the resource, and broader biological and ecological concerns. As a first step toward this goal, the rules should establish criteria for setting appropriate buffers between ACLs and OFLs for identified forage fish species with the goal of ensuring that these species remain available to other consumers in the food web.

For all these reasons, larger buffers between ACL and OFL (or proxy for OFL such as $F_{35\%}$-$F_{40\%}$) are required to address uncertainties in stock assessment advice, differences in life histories of target species, and ecosystem considerations such as the importance of forage fish species as food for other fish, birds and mammals. This means employing more conservative fishery exploitation rates (e.g., $F_{50\%}$, $F_{75\%}$, etc.), and the new NS1 rules must provide clear guidance.

In addition, revised control rules should require a reduction in the maximum fishing mortality rate whenever a stock is estimated to fall below its B_{MSY} target spawning stock size in order to provide a greater margin of safety at lower stock sizes. A modest version of this approach is employed in the Alaska region for stocks managed under the $F_{40\%}$ policy, such that when the spawning stock is estimated to fall below the target stock size (i.e., $B_{40\%}$), the fishing rate is reduced linearly in proportion to the declining biomass of the spawning stock:

- **Establishing the appropriate probability that an ACL will prevent overfishing for a stock**

By their very nature, fishery stock assessments include a probability that an annual catch limit does not exceed the overfishing level. Usually there are very large error bounds around point estimates of acceptable catch. Therefore, to the extent practicable, annual catch limits should be set at a level that has a high probability of not exceeding the overfishing level (e.g., 90 percent). If data are lacking to prepare a stock assessment and estimate the probability that a given ACL will exceed OFL, catch limits should be reduced accordingly as addressed above for data-poor situations.

- **Establishing recommendations for inseason management authority and methods to be used as AMs to prevent overfishing**

The key to inseason management is near real time catch data. This will necessitate near real time tracking of landings and the deployment of fishery observers on vessels to measure catch and gather other vital biological data, as well as vessel monitoring systems to track compliance with closed areas and other regulations.

[11] National Research Council, Committee on Ecosystem Effects of Fishing, Phase II. Dynamic Changes in Marine Ecosystems: Fishing, Food Webs, and Future Options. National Academies Press, Washington, D.C. (2006). 160 pp.

Based on this information NMFS must have the authority to close fisheries and/or areas as required to avoid exceeding ACLs in a given fishing season. Gear closure areas, bycatch-triggered gear closures, and other forms of spatial-temporal management of fishing effort should be included as needed to ensure that ACLs are not exceeded and that vulnerable species receive adequate protection.

- **Limiting the extent of overfishing, should it occur**

If NMFS and the SSCs determine that overfishing is occurring, immediate action must be taken to halt overfishing. If a catch limit is exceeded during active fishing, inseason managers must have the authority to close the fishery immediately wherever they have access to reliable real-time catch data. In instances where real-time data are lacking and retrospective data indicate that the ACL was exceeded, managers must have the ability to deduct overages from subsequent fishing seasons. Limited overages of the ACL in individual years may not require deductions if the overages are shown to be anomalies rather than chronic problems, but Congress was clear that overfishing must end and mangers must not use "anomalies" as an excuse to allow overfishing.

The objective in all cases is to avoid situations of chronic overages leading to a condition of chronic overfishing, which renders the concept and goal of ACL meaningless. To further reduce the risk that fisheries will exceed catch limits, ACLs should be set well below OFL thresholds. This is another reason to have appropriately large buffers between OFL and ACL, in order to avoid exceeding the maximum limit.

- **Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year**

If managers determine after the fishery has closed that catch in excess of ACL occurred, catch limits in subsequent seasons' or years' should be deducted from ACLs to compensate for earlier overages and avoid chronic overfishing. Limited overages in individual years may not require deductions if the overages are shown to be anomalies rather than common occurrences. The objective is to avoid situations of chronic overages leading to chronic overfishing.

- **Establishing AMs for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock**

Generally speaking, fishery stock assessments do not assess the spatial distribution of stock biomass, the movement of fish over the course of the year, or the spatial and temporal effects of concentrated fishing effort in localized areas and seasons. In regions where catch limits have been employed, limits are usually derived at the area-wide scale of the "stock as a whole" and on a start-of-year basis, but fisheries concentrate effort in highly productive areas and times of high catch per unit of effort (CPUE), for economic reasons. Spatial/temporal concentration of

fisheries increases the risk of overfishing and adversely impacting reproductive success of target stocks, and can pose a threat to competing predators in the ecosystem.

To address these concerns, the catch-setting and catch allocation process should include procedures to evaluate and address the spatial-temporal dimensions of fishing impacts explicitly, recognizing the limits and imprecision of area-specific information. NMFS should encourage and recommend explicit spatial and temporal management of ACLs where information is considered adequate to do so, based on management objectives for target, non-target and protected species, as well as habitat protection. The intent is to provide some spatial and temporal dispersion of the fishery catch in order to guard against localized depletion and serial overfishing of patchily distributed subpopulations.

By and large, the Network is pleased with the direction of this rulemaking process. The purpose of these guidelines is to establish clear standards for establishing ACLs that are based on sound science and for ensuring that the councils comply with these ACLs. This notice of intent, in our view, represents a good faith effort to implement these important provisions. We look forward to working with you throughout this regulatory process so that our nation's fishery resources are sustainably managed. Thank you for your time and consideration.

Sincerely,

Lee Crockett
Executive Director

marine fish conservation network

National Standard 1 Rulemaking
March 9, 2007
Scoping Hearing, Silver Spring, MD

- Good morning, my name is Lee Crockett and I am the executive director of the Marine Fish Conservation Network, a national coalition of 190 environmental groups, commercial and recreational fishing associations, aquariums, and marine science organizations. Thank you for holding this scoping hearing and offering members of the public the opportunity to speak on this important issue regarding the future of America's publicly-owned oceans.

- **The bottom line: clear, strong rules**

  The rulemaking should result in clear, strong rules that ensure catch levels are based on unbiased scientific advice, end overfishing, allow timely rebuilding of overfished stocks, and hold managers accountable. We want to stress that these are new legal requirements. They are necessary because too often councils do not set annual catch limits, and when they do, the levels have been set counter to scientific advice and have resulted in overfishing, harming fish and fishermen alike. Accountability is also lacking and the new rules reflect the need to create accountability in fisheries management. The following comments reflect our initial guidance in response to the notice of intent. We will provide more detailed written comments prior to the April 17th deadline.

- **Produce an environmental impact statement**

  Developing an environmental impact statement ensures a thorough evaluation of the new rule and development of alternatives for decision makers and the public to consider. Most important, an environmental impact statement ensures formal opportunities, like today's hearing, for the public to review and comment on the alternatives and for NMFS to formally respond to those comments.

- **Set catch levels for all managed species**

  We recognize the difficulty in doing this in areas of the country where effort controls are used or proxies for numeric limits are used, but to the extent possible, numeric annual catch limits should be required for each federally-managed stock in a fishery management plan. Without a yardstick, it is impossible to tell whether overfishing is occurring. To that end, I was very disappointed to learn that NMFS staff at this week's Pacific Council meeting assured the council that it was already meeting this requirement and all they had to do was make the case to NMFS. Without these regulations, how can those statements be true?

- **Count all fish**

  Annual catch levels should account for projected estimates for landings and discard mortality from all sectors. Furthermore, the overfishing level should account for all fish caught, including landings and discards. Change the definition of overfishing to indicate that overfishing occurs whenever the total catch – across sectors, including landings and discard mortality – exceeds the overfishing level. The catch level, whether expressed in pounds or total number of fish, must be in the same units as the overfishing level to allow for simple and straightforward monitoring between catch and the overfishing level.

- **Set numeric science-based catch levels that do not result in overfishing**

  The new law requires councils to develop annual catch limits for each managed fishery that may not exceed the recommendations of its science and statistical committee. This will ensure that the resulting catch levels are grounded in the best science possible and are sufficiently precautionary to avoid overfishing and promote economic and ecologic sustainability. No non-numeric catch levels should be permitted.

- **Ensure strong, un-biased scientific advice**

  Clarify that the new law to ensure that scientific advisors have demonstrated scientific expertise in fisheries science, marine ecology, economics, or social science through advanced academic training and publication of peer-reviewed scientific literature. Councils should appoint members who do not have direct financial interest, nor are employed by anyone with a direct financial interest, in any fishery. Clarify the peer review process to include minimum qualifications of reviewers, ensure reviewers have relevant experience, and reviewers are independent and have no financial interest.

- **Manage conservatively for future generations**

  Future management success using annual catch limits depends on such limits being set sufficiently below the overfishing level to avoid exceeding the overfishing level. This is a common sense approach that should be clearly linked to data quality. The poorer the data, the greater the buffer is necessary.

- **Protect all fish stocks from overfishing**

  We recognize that a large number of stocks under management are unassessed, making implementation of the catch limit requirement difficult. But we also have concerns about the use of stock complexes or assemblages to meet this requirement. NMFS' own technical guidance notes that setting catch levels for stock complexes, assemblages, or other groupings runs a high risk of allowing overfishing to occur on an individual stock within the assemblage. Therefore, the use of complexes or assemblages should be viewed as an interim solution. Your

goal should be to obtain adequate information to set annual catch levels for all marine fish stocks managed by the federal government.

- **No mixed stock exception**

  The rulemaking should remove the mixed stock exception that is currently in NS 1 because such an exception is inconsistent with the law's mandate to prevent overfishing. The mixed stock exception encourages unsustainable catch levels for depleted stocks thereby facilitating perpetual overfishing. To implement the clear will of Congress and President Bush, the NS 1 rules should prohibit overfishing on all fish stocks.

- **Hold fishery managers accountable**

  In any business, managers are held accountable for the company's health. Yet, in fishery management no one is held accountable when management actions result in overfishing and oftentimes the same practices are allowed to continue year after year. The new accountability measures should send a clear, strong message: do not allow overfishing to occur. If overfishing occurs, managers should have multiple tools available to correct it during the fishing season.

- **Don't delay the restoration of overfished stocks**

  The rule should not eliminate or modify the existing 10-year rebuilding requirement. Congress clearly considered and rejected changes to this requirement in the reauthorization process. The Congress also added language to overturn the federal court decision which allowed overfishing during a rebuilding plan. The new rule should fortify the existing law's requirement to restore overfished stocks "as soon as possible," specifically excluding increased catch of overfished stocks during rebuilding, for example.

- **Move toward ecosystem-based fishery management**

  One of the overarching recommendations of President Bush's Commission on Ocean Policy called for fisheries management to move toward a more ecosystem-based approach. Such an approach would provide direct benefits to the ecosystem and create a better mechanism for addressing conflicts between socioeconomic and biological goals. This rule should take a first step toward this goal by clearly identifying management of prey fish populations, which form the base of the ocean food chain, as distinct and fundamentally different from standard fishery management. The rule should develop an alternative process to ensure the sustainability of these species that are critical to the health of ocean fish and wildlife. This could be accomplished by setting optimum yield far enough below maximum sustainable yield to allow these forage species to fulfill their critical role in marine ecosystems. We will be providing NMFS with more detailed suggestions later in the rulemaking process.

NATIONAL COALITION FOR MARINE CONSERVATION
4 Royal Street, S.E., Leesburg, VA 20175

April 16, 2007

Mr. Mark Millikin
NOAA/NMFS
1315 East-West Highway
Silver Spring, MD 20910
annual.catch.limitDEIS@noaa.gov

RE: Comments on Modifications to National Standard 1 Guidelines

Dear Mr. Millikin,

In previous testimony at the scoping hearing in Silver Spring on March 9th (written copy attached for the record), the National Coalition for Marine Conservation (NCMC) urged the National Marine Fisheries Service to amend the National Standard 1 Guidelines to provide the Regional Fishery Management Councils with guidance on setting allowable catches within an ecosystem context. We specifically called for guidelines for establishing the Optimum Yield for federally-managed forage fish (e.g., herring, mackerel, sardine, anchovy and squid) in a manner that protects their pivotal role in the ocean food web. The need for such guidance from NMFS is long overdue and increasing in urgency. The agency should take full advantage of the process now underway to revise the NS1 Guidelines as to the setting of annual catch limits.

The Magnuson-Stevens Act requires that the Optimum Yield (OY) for each fishery be the Maximum Sustainable Yield (MSY) as reduced by relevant social, economic *and ecological factors*. The current NS1 Guidelines[1] state that "(a) Council must identify those.....ecological factors relevant to management of a particular fishery, then evaluate them to

[1] 600.310 National Standard 1 – Optimum Yield (f)(6)

determine the amount, if any, by which MSY exceeds OY." We recommend that NMFS consider a range of issues when preparing guidance for determining OY for forage species, including but not limited to the following.

NMFS, the Regional Councils, and/or their Scientific and Statistical Committees should:

- assess the ecological risks associated with using an MSY-based harvest strategy for forage species
- identify the most important ecological factors to consider when specifying OY for forage fish
- recommend both qualitative and quantitative ways to account for ecological factors
- suggest more conservative standards (targets and thresholds) for "ecologically sustainable fishing" for forage fish
- develop *ecological* reference points that can be used in making multi-species assessments[2]
- manage fisheries for forage fish to ensure adequate prey availability to predators in critical areas at critical times, i.e., to prevent "localized depletion"
- develop a mechanism for allocating key prey species to predators *before* allocating prey species to fisheries
- establish "ecosystem overfishing" thresholds for key forage species based on total mortality (natural mortality plus fishing mortality), rather than fishing mortality
- set the overfishing threshold *above* B_{msy}
- design numerical buffers (e.g., 20%, 30%, 50%) between OY and MSY explicitly based on ecological factors
- develop a mechanism for applying the features that are currently used in the Guidelines to characterize the precautionary approach[3] for use when specifying OY for forage fish
- establish a threshold population size to serve as a proxy for allocation of the species as forage

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[2] Single-species assessments use biological reference points, such as fishing mortality and reproductive capacity, designed for stock replacement, not ecological function.

[3] 600.310(f)(5)

- define goals for forage fish beyond population size in order to strengthen ecosystem resiliency, including age structure, diversity, and spatial distribution
- account for environmental changes that influence forage fish availability (such as sea temperature) in the setting of catch limits

We are certain that there is a wealth of knowledge - inside and outside NMFS - on these and other issues relevant to protecting the ecological role of forage species that you can take advantage of as you revise the NS1 Guidelines.

Thank you for considering our views, and we look forward to making significant progress in this important, first step toward an ecosystem-based approach to fisheries management.

Sincerely,

Ken Hinman

Ken Hinman
President

Attachment

NATIONAL COALITION FOR MARINE CONSERVATION
4 Royal Street, S.E., Leesburg, VA 20175

Testimony of the National Coalition for Marine Conservation
NMFS Hearing on National Standard 1 Rulemaking
March 9, 2007

My name is Ken Hinman. I'm the president of the National Coalition for Marine Conservation. I also had the privilege to serve as a member of the NMFS Ecosystem Principles Advisory Panel, and you'll know why I mention that in just a moment. The NCMC supports the general and more comprehensive comments of the Marine Fish Conservation Network. But today, I'd like to devote my remarks to an aspect of setting catch limits that has gone unaddressed for too long.

By amending the National Standard 1 Guidelines in response to the 2006 Magnuson-Stevens Reauthorization Act (MSRA), the National Marine Fisheries Service has an opportunity to provide the regional fishery management councils with long-needed guidance on setting the allowable catch within an ecosystems context. We urge you to take advantage of this opportunity.

National Standard 1 states that "Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery…" The setting of annual catch limits will ultimately be guided by the established Optimum Yield for each fishery.

The OY is defined as "(t)he amount of fish which (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed as such on the basis of the maximum sustainable yield from each fishery, as reduced by any relevant economic, social, or ecological factor."

Guidance on Setting Ecologically Sustainable Catch Limits is Long Overdue

Fishery managers have always been permitted to modify OY with ecological factors. In 1996, Congress refined the definition of OY to underscore the fact that such considerations should be used to reduce overall fishing effort; to fish more conservatively so as to prevent overfishing. Also in 1996, Congress charged NMFS with establishing an Ecosystem Principles Advisory Panel to recommend how ecosystem principles should be implemented in fisheries management. The panel's Report to Congress was issued in 1999.

But it's 2007, and NMFS has yet to provide fishery managers with guidance and direction as to how they should take into account the protection of marine ecosystems when they set catch limits, and how MSY should be reduced by ecological factors, or even what those factors are.

The new MSRA states that "(a)ny FMP which is prepared by any Council, or by the Secretary, with respect to any fishery may include management measures in the plan to conserve target and non-target species and habitats, considering the variety of ecological factors affecting fishery populations." This provision further underscores the need for guidance,

while giving additional justification for revising the NS1 guidelines with regard to consideration of ecological factors in conserving fish populations – whether they are the object of an FMP or are affected by the fisheries and/or management measures under another FMP.

The MSRA contains other provisions designed to advance an ecosystems approach to fisheries management. Along with new research efforts, for instance, into the role of Atlantic herring as forage for numerous other species, NMFS is asked to identify the scientific information and management techniques needed to help the eight regional councils develop pilot programs, in line with the recommendations of the Ecosystem Panel. But assessing the state of the science is impossible without determining what that information is to be used for and how.

Protecting the Ocean Forage Base
As a Critical First Step

The Ecosystems Panel pointedly urged fishery managers to consider the effects of fishing on predator-prey relationships as a first step towards an ecosystems approach to fisheries management. Collectively, we have a lot of experience dealing with overfishing on a single-species basis. There is mounting scientific evidence, however, that even so-called "sustainable fishing" of species whose abundance strongly influences population size of predators or prey can cause dramatic shifts in ecosystem communities. As the NMFS Science for Ecosystem-Based Management Initiative at the Northwest Fisheries Science Center pointed out recently in a paper entitled "Ecologically Sustainable Yield," "the cost of mismanaging a community might be far greater than the cost of mismanaging a fishery. Although overfished

stocks have been known to recover, revival of communities that have changed states can be excruciatingly slow or even impossible."

Therefore, according to the law, the best available science, and our inexorable move into a broader, ecosystems approach to fisheries, the setting of annual catch limits must prevent "ecosystem overfishing;" that is, prevent fishing from reducing one or more components of the ocean food web to the point where it adversely impacts other, associated species in the community.

We urge NMFS to use the process now underway to revise the NS1 guidelines on the setting of catch limits, with particular emphasis on providing guidance for managing forage fish (e.g., herring, mackerel, sardines, squid, anchovy, etc.) to protect their pivotal role in the food chain. MSY is a single-species concept that considers only the stability and sustainability of the target fishery. It is based on reducing a population to half its un-fished level in order to maximize harvest of the surplus production, a "surplus" that may not exist in an ecosystems context. It is entirely inappropriate – and ecologically risk-prone - for species that serve as a main food source for so many other animals – marine mammals, seabirds and fish.

The law gives the councils the authority to set the OY, in other words to set catch limits, for ecological reasons. But as we found in our study and concluded in the resulting report, Taking the Bait: Are America's Fisheries Out-Competing Predators for their Prey?, in most cases forage fish are managed using single-species parameters, for both target population levels and overfishing thresholds. Catch limits are set without explicitly accounting for predator-prey relationships, not just because the councils are

waiting for new science, or new funding. They're waiting for guidance. From NMFS. And the NS1 guidelines are the appropriate place to provide it.

The NOAA Chesapeake Bay Office's FEP, *Fisheries Ecosystem Planning for Chesapeake Bay*, recommends that fishery managers "(c)onsider explicitly strong linkages between predators and prey in allocating fishery resources. Be precautionary by determining the needs of predators *before* allocating forage species to fisheries." The concept of forage first is becoming more widely embraced, but NMFS needs to give managers guidance as to how this can and should be done.

We have a number of suggestions, and we are right now working with members of the fisheries science community to develop science-based regulatory changes for managing forage fish in a more precautionary, ecologically responsible way. We will be submitting additional written comments before the scoping deadline of April 17th. As this is a dynamic and evolving process, other suggestions will likely be available later, during the EIS/Proposed Rule comment period.

Thank you for the opportunity to comment. We look forward to working with you over the coming months.

From Gerry Leape <GLeape@net.org>
Sent Tuesday, April 17, 2007 4:46 pm
To annual.catch.limitDEIS@noaa.gov
Cc
Bcc
Subject ACLDEIS comments

Mark Millikin **April 17, 2007**
National Marine Fisheries Service, NOAA
1315 East-West Highway
Silver Spring, MD 20910
Email: annual.catch.limitDEIS@noaa.gov

Re: Issues related to Guidance for annual catch limits (ACLs) and Accountability Measures (AMs)

To: Mr. Millikin
From: Matt Rand
Director/ NET's Conserve our Ocean Legacy Campaign

On behalf of the Conserve our Ocean Legacy Campaign, I welcome the opportunity to provide the following comments in response to the agency's Federal Register Notice of Intent to prepare an Environmental Impact Statement (EIS) analyzing alternatives for guidance on annual catch limits (ACLs) and accountability measures (AMs) required by the Magnuson-Stevens Reauthorization Act of 2006 (MSRA). We understand that such guidance will be added to the National Standard 1 (NS1) guidelines of 1998. The National Marine Fisheries Service's Notice of Intent is a positive attempt by the agency to create rules that will implement the Magnuson-Stevens Act and ensure that its new conservation provisions are enforced. We applaud the agencies efforts to date in addressing this issue and it's effort seeking public comment. We understanding the complexity of the issue and are encouraged by the leadership of the agency and the direction that it is moving. While we are pleased with this initial effort to propose strengthening the guidance in many respects, these provisions must be retained in the proposed rule to maintain our support. We look forward to working with the agency as it develops new guidelines for National Standard 1, the nations overfishing rules.

The MSRA of 2006 requires science-based, enforceable catch limits and accountability measures for all federally managed fish species. The MSRA of 2006 remedies a major shortcoming of the 1996 MSA, and no longer allows overfishing to occur. The clear intent of Congress and the Presidents was to end overfishing. In Section 104 of the law, it states "establish a mechanism for specifying annual catch limits in the plan, implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery including measures to ensure accountability". With this new mandate it is clear that whatever annual catch limit (ACL) is set it need to ensure that overfishing does not occur. Therefore it is our view that the ACL needs to be set with a high degree of certainty (approaching 100%) so that the overfishing limit (OFL) is not exceeded. When there is a high degree of scientific uncertainty regarding the health of the fish stock, or little ability to control the fishery with in-seasons adjustments the ACL should be set with significant precaution so that the OFL is not exceeded. We want to stress that these are new legal requirements.

The final rulemaking on ACLs and AMs should provide clear, unambiguous rules that ensure catch levels are based on unbiased scientific advice, end overfishing, allow timely rebuilding of overfished

stocks, and hold fishery managers, the National Marine Fisheries Service and ultimately the Secretary of Commerce accountable for meeting those requirements. These new legal requirements are necessary because too often the fishery management councils do not set annual catch limits, and when they do, the levels have been set counter to scientific advice and have resulted in overfishing, harming fish and fishermen alike. With this new emphasis on the role of the Scientific and Statistical Committees (SSC) the agency needs to ensure that there is clear guidance to the councils on what the appropriate make up of the SSCs should be, the role of SSCs and guidance to ensure their scientific independence from the council and other interested parties. Without clear guidance on how the SSCs should function encouraging unbiased science, we are concerned that the SSCs will come under political pressure potentially damaging their scientific credibility. We are concerned that the ANPR does not give this issue enough attention and we hope that the proposed rule more fully addresses our concern. Without creditable SSCs setting the ACL and OFL the management system will not accomplish its goals of ending overfishing, rebuilding overfished fish stocks and ensuring healthy fish populations for all Americans to enjoy.

In addition, a precautionary approach to implementing NS1 and setting annual catch limits should include the following guidelines:

- ACLs must be science-based and may not exceed the limits recommended by the Councils' Science and Statistical Committees (SSCs), in keeping with MSRA Section 103(c)(3).
- ACLs should be set at a level that has a high probability (approaching 100% where possible) of not exceeding the overfishing level (OFL).
- ACLs should account for all sources of fishing mortality for each managed species or stock assemblage, including regulatory discards in a the fishery and bycatch mortality in other directed fisheries.
- As a general rule, NMFS should not set ACLs for stock complexes or assemblages. At best such an approach is an interim measure while better data are collected to break out managed species individually.
- The so-called "mixed stock exception" in the present NS1 guidelines should be removed, since it violates the law's clear intent to end overfishing. In instances where multiple species are treated as one "stock" for management purposes, catch limits should be based on the species within the stock assemblage with the lowest productivity and the catch limit should include the bycatch and discard mortality of that species in other directed fisheries.
- The new rules should affirm the MSA's requirement to restore overfished stocks "as soon as possible." The new rules should not eliminate or modify the existing 10-year rebuilding requirement, and should not permit overfishing during a rebuilding plan.
- The new rules should establish explicit guidelines for addressing ecosystem considerations and moving toward an ecosystem-based approach to fishery management, starting with criteria for setting ACLs for identified forage fish species which ensure that these species remain available to other consumers in the food web, including other managed species on which fisheries depend.
- Spatial and temporal management of fishing effort should be an integral part of effective catch-limit management. Measures that disperse fishing effort across subpopulations of a defined "stock" should, if employed, aim to avoid serial depletion of spatially discrete subpopulations which may undermine the productivity of the "stock as a whole."
- Accountability measures must go hand in hand with ACLs. AMs are required to ensure that catch limits are enforced and that performance can be measured relative to goals for ending overfishing. When possible AM should be enforced in season. The range of AMs should be outlined by NMFS in the revised NS1 Guidelines. Measures adopted in a given region must be approved by the Secretary. Regular scientific review of the efficacy of management

measures employed in each region is critical to ensuring that AMs are effective and working as intended. Their performance should be measurable and demonstrable or they should be modified accordingly.

- In order to improve fishery management, effectively stop overfishing, and implement timely AMs, the agency should strive to improve fishery data and work toward a goal of real-time data. One of the first steps for improving fishery data would be to implement the National Research Councils recommendations for improving recreational data.

The role of the SSC and other peer review processes in setting ACLs and AMs

Congress was clear that annual catch limits should be set by the councils for each managed fish stock and that the Councils are prohibited from exceeding the ACLs recommended by the SSCs.

The role of the SSCs is to provide the councils with unbiased scientific advice on what the ACLs for each managed fish stock should be based on the best scientific information available.

To ensure that scientific advice on catch limits is based on biological and ecological considerations rather than on economic interests, a significant proportion of SSC appointees should have scientific expertise in fisheries science or marine ecology. The SSC should develop the ACL and OFL based off the scientific data available and should function independently of the council. There should be set procedures to ensure that interested outside parties (including the councils) do not interfere with the review of the scientific information or the development of the scientific catch limits, limits to prevent overfishing, MSY, and achieving rebuilding targets (as discussed in the MSRA as the acceptable biological catch in Sec. 108). With regard to setting AMs, NMFS should outline the preferred range of AMs in the revised NS1 Guidelines. In general, AMs must be:

- Proven effective
- Have a high probability of success
- Developed through a process that provides opportunity for public comment
- Approved by the Secretary

The councils should select which AMs to use, but the SSC should be given the authority to evaluate the efficacy of these AMs on a regular (e.g., annual) basis.

As recommended by the U.S. Commission on Ocean Policy (2004), peer review of recommended ACLs and AMs should be independent of the Council process. The peer review process should critique the SSC's process and methodology for developing ACLs and AMs and, if necessary, make recommendations on how to improve the process or methodology. The peer review process should not provide alternative ACLs and AMs.

Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed

The inherent uncertainties associated with estimations of MSY and overfishing for wild fish stocks require fishery managers to set an annual catch limit that is less than the overfishing level (i.e., ACL < OFL) in order to provide a buffer against this uncertainty. The revised NS1 Guidelines on ACLs should provide clear guidance on appropriate buffers to account for uncertainty in the scientific advice, and to address ecosystem considerations which are not explicitly addressed in conventional single-species thresholds indexed to MSY.

In general, larger buffers between ACL and OFL are necessary than those recommended in the existing NS1 Guidelines.

Produce an environmental impact statement

Developing an environmental impact statement ensures a thorough evaluation of the new rule. Unlike an Environmental Assessment, an Environmental Impact Statement requires that a wide variety of experts evaluate the environmental impacts of a range of fishery management alternatives including the proposed rule. An Environmental Impact Statement allows the public to review the impacts of these alternatives and participate in the decision-making process.

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RE: Comments of the Natural Resources Defense Council on the National Standard 1 Guideline; Notice of Intent to Prepare and Environmental Impact Statement

April 17, 2007

Dear Mr. Millikin:

Thank you for this opportunity to provide comments on NOAA's redrafting of the NS 1 guidelines to meet and implement the congressional mandate stipulated in MSRA 2006. Congress was very clear in the MSRA (Sec. 104(a)(10)) that any fishery management plan, whether prepared by the councils or by the Secretary must establish a mechanism for specifying annual catch limits "at a level such that overfishing **does not occur** in the fishery, including measures to ensure accountability" (emphasis added). Continued and sometimes significant overfishing – both for healthy and overfished stocks and fisheries – has been a significant impediment to sustaining and rebuilding these stocks and fisheries in the past. In fact, according to Rosenberg et al. 2006, cited at the end of this document, nearly half of the fish stocks managed under rebuilding plans are continuing to experience overfishing.

We have provided comments below, per the bullets outlined in the February 14th Federal Notice, largely intended to meet this new and clear mandate: to ensure that annual catch limits are set and implemented in such a manner that overfishing does not occur. This will both require that annual catch limits not exceed SSC and peer review process recommendations, per MSRA Sec. 103(c)(3), and that buffers between the annual catch limits and the overfishing level are of a sufficient enough size to compensate for scientific uncertainty and data gaps. In addition, this basic system, ACL-buffer-OFL, must be paired with accountability measures geared both toward preventing overfishing from occurring, in the case of inseason management techniques, and compensating for overfishing or "excessive fishing"[1], in the case of corrective actions.

Again, we discuss these basic issues in further detail below. In addition, in further fleshing out the ACL and AM alternative, we recommend that you pursue alternative 3, outlined in the February 14th Federal Register Notice. These matters are sufficiently complex, and establishing a level of consistency across Councils sufficiently important, that NMFS should provide specific guidance on appropriate mechanisms to implement ACLs and AMs, to meet MSRA statutory deadlines and to ensure that overfishing does not occur into the future

[1] Meaning a case where the ACL was exceeded, but overfishing did not occur

The role of the SSC and other peer review processes in setting ACLs and AMs

In the 2006 Magnuson-Stevens Act reauthorization, Congress was extremely clear that overfishing must end. Specifically, Sec. 104(a)(10) states that any fishery management plan, whether prepared by the councils or by the Secretary must establish a mechanism for specifying annual catch limits "at a level such that overfishing **does not occur** in the fishery, including measures to ensure accountability". The law is also clear about the relative responsibilities of the Councils, the SSC, and other peer review processes. Sec 103(c)(3) states that one of the new Council functions is to "develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process" established under the reauthorized law.

In order to ensure that this system is effective and scientifically rigorous so that overfishing does not occur in any given fishing year, the NS 1 guidelines should specify:

- The appropriate qualifications and membership of the SSCs and the peer review process
- The relative roles of the SSC, the peer review process, and the Councils in establishing ACLs such that overfishing does not occur
- The relative roles of NMFS, the Councils, the SSCs, and the peer review process in laying out, selecting, and evaluating AMs

Qualifications and membership of the SSCs and the peer review process

The role of the SSCs is to provide the Councils with unbiased scientific advice on what the ACLs for each managed fish stock should be based on the best scientific information available. To ensure that scientific advice on catch limits is based on biological and ecological considerations rather than on economic interests, a significant proportion of SSC appointees should have scientific expertise in fisheries science or marine ecology. The NS 1 guidelines should also provide further clarification regarding the SSC qualifications stipulated in MSRA Sec. 103(b)(1), particularly what constitutes "strong scientific and technical credentials and experience". At a minimum, the guidelines should require that SSC appointees have scientific expertise in fisheries science or marine ecology or economics or social science demonstrated through advanced academic training and publication of peer-reviewed scientific literature. The revised NS 1 guidelines should also suggest that the Councils appoint members who do not have direct financial interest, nor are employed by anyone with a direct financial interest, in any fishery.

MSRA Sec. 103(b) provides the Secretary and each Council the authority to establish a peer review process for that Council. This language should be clarified to include minimum qualifications for peer reviewers, including stipulations that any scientists providing a peer review must have relevant scientific expertise – demonstrated through advanced academic training and publication of peer-reviewed scientific literature. The guidelines should also emphasize the importance that these reviews be independent. To ensure this, the revised NS 1 guidelines should require, per US Commission on Ocean Policy Recommendation 19-4, that a significant portion of the reviewers come from outside the region and be suggested by a group

such as the Center for Independent Experts. The revised NS 1 guidelines should also recommend that potential peer reviewers have no direct financial interest, nor be employed by anyone with a direct financial interest, in any fishery affected by the scientific information under review.

Relative responsibilities in establishing ACLs

The SSCs should provide fishing level recommendations to their Councils that will ensure that overfishing will not occur in the fishery in the next fishing year. The peer review process may critique the SSC's process and methodology for developing ACLs and, if necessary, make recommendation on how to improve that process or methodology. In most instances, the peer review process will not provide an alternative ACL. The Councils should then develop annual catch limits that fall at or below the fishing level recommendations of the SSC and the peer review process or the lower of the two recommendations if the two processes do not reach consensus, per MSRA Sec. 103(c)(3).

Relative responsibilities in establishing AMs

With regard to setting AMs, NMFS should outline the preferred range of AMs in the revised NS1 Guidelines. In general, AMs must be:

- Proven effective
- Have a high probability of success
- Developed through a process that provides opportunity for public comment
- Approved by the Secretary

The Councils should recommend which AMs to use in each fishery, and the SSC may evaluate the efficacy of these AMs.

The relationship between ACL and OY

MSRA Sec. 104(a)(10) states that any fishery management plan, whether prepared by the Councils or by the Secretary must establish a mechanism for specifying annual catch limits "at a level such that overfishing **does not occur** in the fishery." This will require that the ACL be set, <u>through annual specifications</u>, sufficiently below the OFL to ensure that misestimates or unforeseen circumstances do not result in exceedance of that threshold. Overfishing will be a very likely result if the ACL is set at the OFL, a result that runs counter to the requirements of the reauthorized law.

The ACL must also be set consistent with OY. MSRA Sec. 104(b)(3) is very clear on this point, stating that MSRA Sec. 104(a)(10) does not limit or affect the requirements of National Standard 1, SFA Sec. 301(a)(1), or requirements for rebuilding overfished stocks, SFA Sec. 304(e). However, under the reauthorized law, with its emphasis on ensuring that overfishing does not occur, the ACL may need to be <u>lower</u> than OY.

OFL and OY estimates will be most rigorous and effective if they take into account multiple population, community, and ecosystem factors, including but not limited to age structure (a stock or fishery will be able to withstand, without experiencing overfishing, different amounts of fishing pressure depending on the absolute and relative number of fish per age class), spatial distribution, food web dynamics, and ecosystem/habitat condition and health. In fact the law itself, SFA Sec. 3(28)(C), requires that OY take into account these types of ecological considerations stating that OY must be prescribed "on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social or ecological factor." While in an ideal world, both the OFL and OY would take into account multiple factors and the interactions between and among these factors, the information may not always be available to make these calculations. At a minimum, the ACL itself must be set at a level such that overfishing does not occur. Lack of complete information further demonstrates the need for a buffer between the ACL and the OFL.

As a first step toward the goal of ecosystem-based management, the revised NS 1 Guidelines should establish criteria for setting ACLs for identified forage fish species that will ensure that these species remain adequately available to other consumers in the food web. ACLs for forage fish species should reflect their importance to the food web and the productivity of other species which rely on them.

Finally, the revised NS 1 Guidelines should address the disparate treatment of OY in different regions. For instance, OY is sometimes a multi-year, multi-species number; sometimes an annual single-species number. The regulations should address this disparity and eliminate the confusion by requiring wherever possible that OY be set for individual species on an annual basis in all regions. Similar clarity should be provided for application across regions of the ACL and OFL concepts introduced in the reauthorized law.

Revision of existing overfishing definitions to include OFL

The Councils, per the recommendations of the SSC and analysis of the peer review process, should recommend an ACL each year. The buffer between the OFL and ACL should be based on a system of explicit control rules that ensure that overfishing does not occur.

The current NS 1 guidelines state that overfishing occurs whenever the annual fishing mortality rate is greater than the maximum fishing mortality threshold. The definition should be changed to indicate that overfishing occurs whenever the total mortality – across sectors, including landings and discard/bycatch mortality – exceeds the OFL. If fishery observer data is not available to quantity discards, estimates should be developed based on the best available information from fish tickets, logbooks, research programs, and stock assessments. The catch, whether expressed in pounds or total number of fish, must be in the same units at the OFL to allow for simple and straightforward monitoring between catch and the OFL.

Variability in data currently available for each stock (e.g. data rich, data poor, and stocks with data quality falling between data rich and data poor)

In complying with the reauthorized MSA, ACLs will have to be set across the range of data quality situations. In data-poor situations, stock abundance is unknown and stock status with respect to overfishing and overfished is unknown. In data-rich situations, information is available to estimate stock abundance and make stock status determinations relative to overfishing criteria.

In general, the less that is known about a stock's status relative to overfishing criteria, the more conservative and precautionary catch limits should be. Any "tiered" approach to control rules based on levels of information for individual stocks should reflect this principle.

Setting ACLs for stocks with unknown status

In instances of a new fishery or significant new fishing effort, a strictly precautionary approach should be applied and catch levels should be set at zero until adequate information is available to assess the status of the stock. This shifts the burden of proof to fishery managers to demonstrate that overfishing will not occur and provides an incentive to gather scientific information before significant new fishing is authorized.

If a fishery is already fully developed and if the stock productivity does not show obvious signs of impairment, but information is lacking to assess the stock relative to the MSRA's overfishing criteria, ACLs may be based on alternative criteria such as setting the ACL as a percentage of an average of catches from prior years.

If the status of a stock relative to overfishing criteria is unknown (as assumed by NMFS's definition of "data poor" situations), even more precaution is warranted than that advised in earlier NMFS Technical Guidance.

Bottom line: the greater the uncertainty, the greater the precaution that should be required to set catch limits. To the extent that trends in stock size are known, these trends should guide development of ACLs.

Circumstances in which a numerical ACL can not be set for a stock and recommendations for alternatives to setting a numerical ACL (e.g. prohibitions)

ACLs must be numeric (expressed as total pounds or numbers of fish) so that catch limits can be tracked and enforced. Without numerical values, ACLs and AMs will be of little use.

If information is completely lacking and no catch history exists, the precautionary approach would suggest that annual catch limits be set at zero until adequate information is available to assess the status of the stock. For a further discussion of this, see above "setting ACLs for stocks with unknown status".

Setting ACLs for stock complexes, stock assemblages, and similar stock groupings

As a general rule, NMFS should not set ACLs for stock complexes or assemblages. At best, such an approach should be viewed as an interim measure to be employed while better data is

collected to manage stocks individually. While some fish species are very similar to other species, each is unique and picking an "indicator stock," as NMFS has suggested doing in the past, is a poor substitute for individual stock ACLs. The goal should be to move all stocks out of the "data poor" category by obtaining the requisite information for that stock.

In addition, the rulemaking should remove the so-called "mixed stock exception" in the present NS 1 guidelines, which is inconsistent with the law's intent to ensure that overfishing does not occur. In instances where multiple species are treated as one "stock" for management purposes, catch limits should be based on the species within the stock assemblage with the lowest productivity and the overall catch limit should include the bycatch mortality of that least productive stock in other directed fisheries.

Variability in the accuracy of management approaches in achieving target fishing levels

Regular review of the efficacy of management measures is critical to achieving target fishing levels in all management regions. Currently NMFS does not assess differences in management measures and their relative efficacy across regions. The new requirement for accountability measures necessitates regular evaluation and performance reviews to determine which measures are truly effective and best suited to a given situation. Regardless of the measures adopted in a given region, they must be approved by the Secretary and their performance should be measurable and demonstrable. If a given management approach or tool proves ineffective at achieving necessary aims, including ensuring that overfishing does not occur, these management approaches and tools should be modified.

Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed[2]

The need for a buffer between the ACL and the OFL is clear. The inherent uncertainties associated with estimating overfishing and implementing a harvest stratgy requires fishery managers to set annual catch limits that are sufficiently below the overfishing level to ensure that overfishing "does not occur" per the MSRA requirements stipulated in Sec. 104(a)(10).

Past efforts to prevent and end overfishing have not proven entirely successful. Despite Congress' intent in 1996 to arrest overfishing - with the passage of the SFA, adoption of the precautionary approach to OY determination in National Standard 1 Guidelines (1998) (50 CFR Part 600), and the detailed technical guidance provided by Restrepo et al., 1998 – overfishing continues to pose a significant obstacle to sustainable fisheries management (Rosenberg et al., 2006). In fact, according to Rosenberg et al., nearly half of the fish stocks managed under rebuilding plans are experiencing overfishing.

Through passage of the MSRA, Congress has reiterated its commitment to ensuring that overfishing does not occur and has required adoption of new tools to make sure that this commitment is translated into effective fisheries management. To ensure that overfishing does not occur, NMFS should evaluate systems currently in place, what has and has not worked, and what approaches, tools, and methods need to be added to meet relevant MSRA requirements.

[2] Citations for this bullet are included at the end of the document.

A major cause of past failures is the non-uniform adoption of NS 1 Guidelines (1998) on OY determination. The key recommendation of constraining OY below MSY - regardless of the stock status - is generally not adopted. In many regions, Councils continue to "manage on the edge" by setting OY at MSY despite known uncertainties in stock assessments and clear biases in implementation error. In fact, regional Councils that do not routinely incorporate buffers between fishing limits and targets show the highest rates of overfishing (see Rosenberg et al.'s 2006 analysis outlining the proportion of stocks in rebuilding plans that continue to experience overfishing: New England 10/18; South Atlantic 11/14; Gulf of Mexico 4/8). These failures should not be repeated and development and implementation of adequate buffers between ACLs and OFLs must become standard practice. The NS 1 Guidelines should define a set of stable quantitative buffers between OFL and ACL - or a standard methodology for their derivation - to ensure that overfishing does not occur.

The size of the buffer should be influenced by the current stock condition, productivity of the stock, parameter uncertainty, and implementation error. The margin should increase as biomass and productivity decrease and as scientific uncertainty and implementation error increase. In addition, the method for adjusting ACL below OFL should ensure that a previously specified level of confidence that ACL not exceed OFL is achieved.

Examples of precautionary buffers between OFL and ACL exist in the literature. In the technical guidance on NS 1 guidelines (1998), Restrepo et al. recommend a generic safety margin that reduces target fishing mortality rate 25% below the theoretical limit, $F_{MSY.}$ Simulations showed that – across many life history strategies – this buffer results in relatively modest losses of yields (achieving ≅ 95% of MSY) while ensuring optimally high stock sizes (130% of B_{MSY}). In addition, a promising generalized method to derive stock-specific buffers was by proposed by Caddy and McGarvey (1996) and modified by Prager and others (2003). Based on a probabilistic framework, this approach explicitly incorporates the uncertainty in both limit reference points and target reference points to estimate appropriate buffer size. By requiring the estimation of implementation error, it routinizes the much needed evaluation of previous management efficacy and then employs it as a factor in harvest strategy development.

Currently, only two regional Councils routinely implement buffers between limit reference points and fishing targets. The North Pacific Fishery Management Council's (NPFMC) harvest control rules for Bering Sea Aleutian Island and Gulf of Alaska Groundfish Plans provide an example of a modest (Goodman et al., 2002) margin of safety. These plans introduced a tiered system of management in which harvest strategy depends on the quality of information available for the stock. In this framework, the size of the buffer generally increases as scientific uncertainty increases. For a moderate level of scientific knowledge (Tiers 3 and 4 where the majority of the commercially important stocks reside), the control rule reduces the fishing mortality rate by employing a slightly more conservative proxy for $F_{MSY.}$ Instead of striving for the equilibrium spawning biomass ratio of 35% of the unfished biomass, they aim for 40%. At higher levels of scientific uncertainty, the margin of safety increases. For example, in Tier 6, target levels are constrained to be 75% of the average historic catch. Alternatively, the Pacific Fishery Management Council's "40-10" default adjustment provides a schedule of catch reductions as biomass declines. This also can be regarded as a precautionary buffer, though one

based on biomass - not data uncertainty. The "40-10" control-rule stipulates that when biomass falls below B_{MSY}, catch is reduced linearly as stock size declines - eventually becoming zero when stock biomass is 10% of the unfished level. Recent evaluation of this rule, however, raised concerns about its application to stocks with low productivity (certain rockfish) and high recruitment variability (Punt et al., 2006).

The need to account for uncertainty in fisheries management has long been recognized (NRC, 1998). The NS 1 Guidelines provide an important opportunity to require explicit incorporation of uncertainty into harvest strategies in the form of a buffer. It is clear that a variety of approaches exist. A panel of highly qualified, independent expert scientists should be convened – prior to the completion of the NS 1 Guideline revisions – to evaluate alternative approaches. In addition, the panel should discuss the relationship between a buffer between ACL and OFL and catch reductions relating to ecosystem, social, and economic considerations. The process should yield the identification of a standard approach endorsed by the NS 1 Guidelines.

Establishing the appropriate probability that an ACL will prevent overfishing for a stock

Given the MSRA's clear mandate that overfishing not occur, annual catch limits must be set with a high probability that they will not exceed the overfishing level (e.g., 90 percent[3]). If data are lacking to prepare a formal stock assessment and estimate the probability that a given ACL might exceed the OFL, then catch limits should be reduced as addressed above in the case of data-poor situations.

Establishing recommendations for inseason management authority and methods to be used as AMs to prevent overfishing

The key to inseason management is real-time catch data. This will necessitate real-time tracking of landings and the deployment of fishery observers on vessels to measure catch and gather other vital biological data, as well as vessel monitoring systems to track compliance with closed areas and other regulations.

In terms of appropriate AMs, NMFS must have the authority to close fisheries and/or areas as required to avoid exceeding ACLs in a given fishing season. Gear closure areas, bycatch-triggered gear closures, and other forms of spatial-temporal management of fishing effort should be included as needed to ensure that ACLs are not exceeded and that vulnerable species receive adequate protection.

Limiting the extent of overfishing, should it occur

If NMFS and the SSCs determine that overfishing is occurring, immediate action must be taken to halt overfishing. If a catch limit is exceeded during active fishing, inseason managers must have the authority to close the fishery immediately wherever they have access to reliable real-time catch data. In instances where real-time data is lacking and retrospective data indicate that the catch limit was exceeded, managers must deduct the overage accrued in the previous fishing

[3] Given the congressional mandate, this probability should be set at 100%, but we acknowledge that this is unrealistic.

year from the ACL set for the following season, even if that ACL was initially set as part of a multi-year specification. This type of accountability mechanism – deduction of overages – is discussed in more detail in the following bullet regarding correction actions.

The objective in all cases is to avoid situations of chronic overages leading to a condition of chronic overfishing, which renders the concept and goal of ACLs and AMs meaningless and runs counter to the MSRA mandate to ensure that overfishing does not occur. Again, to further reduce the risk that fisheries will exceed catch limits and that potentially painful AMs will need to be implemented in the future, ACLs should be set below OFL thresholds through establishment of adequate buffers.

Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year

If managers determine after the fishery has closed that catch in excess of the ACL has occurred, managers must deduct the overage accrued in the previous fishing year from the ACL set for the following season, even if that ACL was initially set as part of a multi-year specification. The accounting time period should not be extended across multiple years, under the premise that the population will be stronger in the future or that it will be easier to reduce fishing pressure at a later point. This could easily result in compounded overages, which will be harder to compensate in aggregate.

In addition, stock assessments (ie the idea that overages will result in a smaller population size producing a lower OFL and correspondingly lower ACL) must not be viewed as a possible accountability measure, ie a substitute for the deduction of overages. Stock assessments and resulting shifts in management measures do not necessarily occur frequently enough to spot overages and adjust management measures accordingly; this approach has the potential to allow overages to compound over time, making adjustments in management more difficult. In addition, use of stock assessments in this manner may allow managers to maintain biomass levels resulting from the total mortality (including the overage) and recruitment, but will not allow managers to makeup for the overage and return the population to the size it would have been had the overage not occurred (assuming the overage does not result in the stock being classified as overfished).

Again, the objective is to avoid situations of chronic overages leading to chronic overfishing and declining population size.

Establishing AMs for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

Annual catch limits, set sufficiently below the appropriate OFL, can be applied to spatially distributed sub-populations along with standard AMs, including in season adjustments and deduction of overages, to ensure that overfishing does not occur across the stock. Spatial and temporal management and associated tools can be an integral part of effective catch limit based management. Measures that disperse fishing effort across subpopulations of a defined “stock”

should, if employed, aim to avoid serial depletion of spatially discrete subpopulations, which may undermine the productivity of the stock as a whole.

Again thank you for this opportunity to provide comments. We look forward to reviewing your proposed rule.

Submitted by:
Roberta Elias
NRDC, Oceans Advocate

Sarah Chasis
NRDC, Director of Oceans Initiative

Lisa Suatoni
NRDC, Science Fellow

Citations for bullet 9 (Setting a buffer between ACL and OFL to prevent overfishing…)

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Chris Dorsett, the Ocean Conservancy
National Standard 1 Rulemaking Comments
March 27, 2007

On behalf of the Ocean Conservancy, I appreciate the opportunity to comment during this scoping process for NMFS guidance on implementation of the new overfishing and accountability provisions of the Magnuson-Stevens Act. This is a significant opportunity to make major strides forward in conserving our living ocean resources and move U.S. fisheries towards true sustainability.

This will require strong, clear, and specific guidance to the councils so that the annual catch limits and accountability measures they develop will be based on the best scientific information available, set catch limits that truly account for all sources of mortality and at levels that build in appropriate precaution to end overfishing, include accountability measures that are effective at preventing overfishing in the future, and swiftly ending overfishing if it should occur.

The Ocean Conservancy will provide more detailed comments during this scoping process at the regional hearings over the next month and in our written comments to be submitted in April. Today I want to touch on some general themes. However, first I want to applaud NMFS for its good first step in this process with its Notice of Intent. We are generally pleased with the tone, scope and substance of the notice and hope that it leads to a fruitful planning process and ultimately strong guidance.

Overall, we believe it is critical for NMFS to provide councils as much direction, in as much detail as possible. Doing so will make it easier for councils to get the job done of setting ACLs for the hundreds of managed stocks by the 2010 deadline.

Turning to some general themes:

- Given the importance of the process and the long term and potentially profound effect it will have on how fisheries are managed in this country, we urge NMFS to conduct a full review under the National Environmental Policy Act. We encourage NMFS to prepare a full EIS, rather than an EA at this time. NEPA provides an excellent opportunity to fully explore all the environmental effects of this guidance and inform decision makers and the public of all the consequences of decisions made on this guidance, and ultimately for the hundreds of stocks managed by our federal government far into the future.
- Science and Statistical Committees (SSCs) range in form and function from council to council. In light of the new legal requirement for a council to develop annual catch limits that do not exceed the SSC advice, NMFS needs to ensure consistency in how each of the SSCs work. To begin with, NMFS needs to provide proper oversight to ensure councils appoint members that have the proper expertise in fisheries science and are free from the kinds of conflicts of interest that could impede the production of the best scientific advice. SSCs also need to provide "ongoing scientific advice" and NMFS needs to ensure that the needs of science are met in each region on a timely and ongoing basis and have consistency throughout the nation. Finally, NMFS should give more details on how

it envisions the peer review process working and provide guidance to ensure that the peer review process employs qualified and independent reviewers.

- Turning to the annual catch limits themselves, we believe that numeric catch limits should be set for all managed stocks. Without an annual goal that is clear and measurable, we are doomed to more of the missed targets and serial overfishing that has plagued so many fisheries.

- ACLs must include all sources of mortality and the total ACL value should include breakout values for each source of mortality that makes up the whole. At a minimum, ACLs should provide anticipated mortality for a stock from the following sources: directed commercial landings, directed commercial bycatch/discards, directed recreational landings, directed recreational bycatch, and bycatch mortality in other fisheries. NMFS should give guidance on when it would be appropriate to include additional sub-categories. For example, for many stocks, age diversification and gender ratio are critically important to the health of the fish population and the ecosystem, therefore the ACL should consider what kind of mortality is occurring, not simply the source.

- The ACL value should be set using the precautionary approach to fisheries management and therefore should be set conservatively and sufficiently below the overfishing threshold to ensure overfishing does not occur. This approach was supposed to be accomplished by setting OY levels as the goals of fishery management plans, not simply preventing overfishing. However, as we know, OY values are often exceeded and are set so close to overfishing thresholds that overfishing occurred as well. We urge NMFS to give strong guidance on setting ACLs well below overfishing thresholds and make these annual catch limits are true "limits" as the phrase implies. The limits must also take into account the status of many depleted fish populations and set ACLs not only to prevent overfishing, but to timely rebuild fish populations. Finally, while we urge NMFS to embark on an ambitious plan to improve data on fish stocks, NMFS should also take the quality of data into account when setting ACLs. The less information NMFS has on a fishery's status, the more precaution and buffer should be included. For extremely data poor stocks, ACLs should only allow for minimal mortality from bycatch and prohibit landings until data is improved.

- Accountability measures and mechanisms should be designed with a specificity that meets or exceeds the specificity of the sub-categories of an ACL value. For example, all mortality sources must be held accountable for staying within defined ACLs. Accountability measures must be designed to prevent overfishing of that sub-category in the first place, and should that not be sufficient, to end it in the future and "pay back" the overage. Some of the big "accountability measures" that are used today include in-season adjustments as catch data comes in, hard caps in a fishery to trigger shut downs as caps are approached and overage provisions to "pay back" the overage in the following fishing year. NMFS should explore a broad suite of effective measures and we will provide more details and ideas on appropriate measures during this scoping.

- Annual catch limits should not be set, in most instances, for stock complexes, stock assemblages, or similar stock groupings. NMFS' own technical guidance notes that such management runs a high risk of allowing overfishing to occur on an individual stock

within the assemblage. Such ACLs for more than one stock should only be used where the data is lacking to have a stock specific ACL and a plan is in place to obtain the appropriate data on stocks within a reasonable time period.

- In no event, should NMFS invoke the mixed-stock exception in setting ACLs. This mixed stock exception is currently in NMFS regulations and should be deleted from the regulations because it is inconsistent with current law.
- NMFS is seeking input on what level of risk to assign to ACLs in terms of the risk the ACL and the accountability measures will fail to prevent overfishing. We believe NMFS should be extremely risk averse in setting risk intervals. In 1996 Congress assumed that it has ended overfishing, yet ten years later we know this simply did not happen. In part, there was a failure to adhere to NMFS's own Technical Advice (Restrepo) which called for setting fishing targets such that there was an 80-90% probability that overfishing would not occur. NMFS should review its own advice on use of the precautionary approach and set clear standards on use of the precautionary approach for councils to follow.
- While not necessarily part of this rulemaking process, we note that the new legal requirement in the reauthorization act requires councils to not exceed the scientific advice of their SSCs immediately, rather than in 2010 or later. Therefore, we urge NMFS to be vigilant that councils are following this new legal requirement and reject any plans, amendments, or regulations forwarded by councils that fail to conform to the scientific advice.

Finally, the Ocean Conservancy reminds the agency that urgent and meaningful action is needed now. Over the past few years, two national ocean commissions have issued reports on the threats to our living marine resources, most notably from overfishing. Congress heeded these warnings in passing new legislation requiring ACLs and AMs that prevent overfishing. It is time to heed that advice and provide detailed and meaningful advice to the councils to guide the development of ACLs and AMs for all managed stocks. We all must stay focused on the goal of protecting this public resource for the benefit of all citizens, present and future. Strong guidance on stopping overfishing now will yield healthy ecosystems and for the benefit of all Americans. Thank you.

2007 Projected mortality impacts (mt) of overfished groundfish species under current regulations. Updated with March 2007 inseason adjustments. a/

3/12/07

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	26.1	8.1	1.5	247.4	89.8	1.6	0.4
Limited Entry Trawl- Whiting							
At-sea whiting motherships		4.7		25.0	1.0	220.0	0.0
At-sea whiting cat-proc					2.9		0.0
Shoreside whiting					1.8		0.0
Tribal whiting		0.7		0.0	0.6	6.1	0.0
Tribal							
Midwater Trawl		1.8		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Limited Entry Fixed Gear		1.1		1.3	0.4		2.9
Sablefish	13.4		0.0			0.0	
Non-Sablefish			0.1			0.5	
Open Access: Directed Groundfish		1.0					
Sablefish DTL	0.0		0.1	0.2	0.1	0.0	0.5
Nearshore (North of 40°10' N. lat.)	0.0	1.7		0.0	0.0	0.1	2.0
Nearshore (South of 40°10' N. lat.)	0.0			0.0	0.0		
Other	10.6			0.0	0.0	0.0	0.1
Open Access: Incidental Groundfish							
CA Halibut	0.1	0.0		0.0	0.0		
CA Gillnet c/	0.5			0.0	0.0	0.0	
CA Sheephead c/				0.0	0.0	0.0	0.0
CPS- wetfish c/	0.3						
CPS- squid d/							
Dungeness crab c/	0.0		0.0	0.0	0.0		
HMS b/		0.0	0.0	0.0			
Pacific Halibut c/	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pink shrimp	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Ridgeback prawn	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Salmon troll	0.2	0.8	0.0	0.0	0.0	0.3	0.2
Sea Cucumber	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spot Prawn (trap)							
Recreational Groundfish e/							
WA		5.7					6.2
OR						1.4	
CA	98.0	8.3	0.4			8.0	1.7
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs. f/							
	2.0	7.5	0.1	3.8	3.6	0.9	2.0
TOTAL	151.4	43.1	2.2	277.8	103.9	279.0	18.5
2007 OY	218	44.0	4.0	290	150	368	23
Difference	66.6	0.9	1.8	12.3	46.1	89.1	4.5
Percent of OY	69.4%	98.0%	55.0%	95.8%	69.3%	75.8%	80.3%
Key		= either not applicable; trace amount (<0.01 mt); or not reported in available					

a/ All numbers reflect projected annual total catches except that the non-tribal "Limited Entry Trawl- Whiting" numbers are the total bycatch caps for canary, darkblotched, and widow rockfish.

b/ South of 40°10' N. lat.

c/ Mortality estimates are not hard numbers; based on the GMT's best professional judgment.

d/ Bycatch amounts by species unavailable, but bocaccio occurred in 0.1% of all port samples and other rockfish in another 0.1% of all port samples (and squid fisheries usually land their whole catch).

e/ Values in scorecard represent projected impacts. However, harvest guidelines for 2007 are as follows: canary in WA and OR combined = 8.2 mt and in CA = 9.0 mt; yelloweye in WA and OR combined = 6.8 mt and in CA = 2.1 mt.

f/ Research projections only updated for canary rockfish in November 2006. The other species' updates will be updated in April 2007.

Submitted via email:
Annual.catch.limitDEIS@noaa.gov
"Scoping comments on annual catch limit DEIS"

Submitted via fax:
301-713-1193

April 17, 2007

Mark Millikin
National Marine Fisheries Service, NOAA
1315 East-West Highway
Silver Spring, MD 20910

RE: Scoping Comments on Annual Catch Limit DEIS (72 Fed. Reg. 8971)

Dear Mr. Millikin:

The Ocean Conservancy[1] is writing to provide the following scoping comments on the National Marine Fisheries Service's intent to prepare an environmental impact statement (EIS) in accordance with the National Environmental Policy Act (NEPA). NMFS initiated this process to analyze alternatives for guidance regarding annual catch limits (ACLs) and associated accountability measures (AMs) and other overfishing provisions of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

As you know, the MSRA directs fishery managers to set ACLs to prevent overfishing for *all* managed stocks and mandates accountability measures to ensure this goal is met. The flagship conservation requirement on the Magnuson-Stevens Act, National Standard 1, states that "conservation and management measures shall prevent overfishing," 16 U.S.C. § 1851(a)(1). (emphasis added) Yet, 11 years after passage of the Sustainable Fisheries Act, which was *also* supposed to prevent overfishing for *all* managed stocks, overfishing continues to plague fisheries across the United States. In fact, NMFS is only sure that overfishing is *not* occurring for a mere

[1] The Ocean Conservancy is a non-profit organization with more than 900,000 members and volunteers who are committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research and public education, The Ocean Conservancy informs, inspires and empowers people to speak and act for wild, healthy oceans.

31% of the 530 stocks or stock complexes individually managed by the agency.[2] While many factors could be cited for this failure to end overfishing and rebuild fish stocks, some of the main causes include failure of fishery managers to follow scientific advice, failure to set catch levels safely below overfishing thresholds, little or no accountability to ensure those catch levels are not exceed, and poor data collection to properly assess and account for all sources of fish mortality.

It is clear that much work still needs to be done to fulfill Congress' mandate to ensure overfishing is prevented on all managed stocks and urgent attention is especially needed to end overfishing for the 48 stocks currently experiencing overfishing and to gather adequate data to ensure overfishing is not occurring on the 288 stocks for which information is lacking. However, we believe this scoping process and the guidance NMFS will issue later this year provide a rare opportunity to make major strides forward in conserving our living ocean resources and move U.S. fisheries towards true sustainability.

Ensuring an end to overfishing for all managed fish stocks will not be easy and will require strong, clear, and specifically tailored guidance that will lead to workable ACLs and AMs that account for the unique challenges faced by each and every fishery management council. It is critical that the annual catch limits and accountability measures they develop will be based on the best scientific information available, and that they set catch limits that truly account for all sources of mortality at levels that build in appropriate precaution. Only then can we at long last end overfishing and rebuild depleted stocks. Finally, the guidance must provide performance standards for AMs and a suite of specifically tailored accountability measures that are effective at preventing overfishing for all sources of mortality that make up an ACL, and provide for swiftly ending it in the unlikely event it should occur.

This scoping process is a critical step in complying with the requirements of the National Environmental Policy Act and ensuring that all appropriate issues are identified early in the process and properly studied. We encourage NMFS to consider a full range of alternatives as identified in more detail below, to allow for development of a thorough and balanced Draft Environmental Impact Statement that appropriately addresses the new statutory requirements to adhere to scientific advice, prevent overfishing, and ensure accountability while complying with all the other conservation requirements of the law. We are encouraged by NMFS's initial efforts and preparations in this scoping process and applaud the initial statements of the agency regarding its intent to account for all sources of mortality, provide an effective suite of accountability measures and imbue each ACL and AM with sound science, appropriate precaution, and buffers to provide a high probability of success.

I. Summary of Major Points

- NEPA process – NMFS should prepare an EIS, not an environmental assessment. The purpose of this scoping process is to provide a broad range of reasonable, legally-sufficient alternatives for consideration by decision makers and the public that provide a

[2] NMFS 2005 Status of the Stocks report and the 2006 updates show that only 194 of the 530 stocks are confirmed to not be experiencing overfishing, while overfishing is occurring on 48 stocks and the status is unknown or undetermined for the remaining 288 stocks.

thorough review of the environmental consequences of those alternatives so that the best decisions possible can be made while implementing the substantive new legal requirements of the Magnuson-Stevens Act. Because of the complexity of the work ahead, and the long-term importance of the guidance to be provided, NMFS should make full use of the NEPA environmental review process. All of the alternatives developed by NMFS and included in a Draft EIS should be at a minimum, legally sufficient to comply with the new Congressional mandate to end overfishing in federally managed fisheries and provide timely accountability to ensure overfishing does not return in the future.

- General guidance to managers – NMFS should give guidance to fishery managers to begin the process of setting ACLs and AMs by first considering all pertinent components of a specific fishery and measures currently in place to collect data and monitor each fishery. Managers should be directed to evaluate whether additional and improved data collection and monitoring measures will be required to adequately comply with the requirement to set ACLs and AMs such that overfishing is prevented. This effort will lay the groundwork for more successful ACLs and AMs.

- Data quality, quantity and timeliness improvement plan – NMFS should devise a national plan to improve the timeliness, quantity and quality of fishery data. Obviously the vast majority of managed stocks lack adequate information to determine their overfishing status and population biomasses. This reality may make it difficult to set numeric ACLs for many stocks. NMFS should take this opportunity and obligation from Congress to devise a work plan to move all stocks out of its "data poor" category. The work plan should also address how to quickly develop the data collection and monitoring systems for AMs that will be necessary to ensure ACLs are not exceeded from any discrete mortality source. This new management regime of ACLs and AMs requires better and more timely information, something that all interested parties want. This cannot happen overnight, but if NMFS develops a plan now, and all interested parties work together to bring it about, NMFS can get there in the next few years. By gathering the needed information now, the chances that ACLs and AMs will work as Congress intended will increase greatly.

- Annual Catch Limits – In all alternatives developed in this scoping process, NMFS should apply three overarching principles: First, the ACL must include each and every source of mortality for a particular fish stock. Without requiring fishery managers to identify all sources of mortality, it will be impossible to truly ensure overfishing is avoided. Second, the ACL, which should be expressed as a numerical value of total fish or pounds of fish, should include sub-totals for each discrete source of mortality. Finally, the actual ACL value should be set with an adequate buffer between the overfishing limit (OFL) such that there is a very high degree of certainty that overfishing will not occur. In particular, NMFS should review its own technical guidance on the use of precautionary approaches to implementing National Standard 1, Restrepo *et al*. (1998). The more uncertainly of any value in setting ACLs, the more precaution should be applied, and thus the lower the ACL value compared to the OFL value.

- Accountability Measures – Guidance should direct fishery managers to provide a high degree of certainty that overfishing is prevented from each and every discrete source of mortality, or if overfishing does occur, that any overfishing is slight, is swiftly ended and is accounted for as soon as possible. AMs should accomplish two distinct goals – First, ensuring that the information relating to total catch is as accurate and as timely as possible so that managers can quickly identify whether or not the ACL and the overfishing limits have been exceeded. Second, that concrete steps are taken to avoid exceeding a limit when it is clear mortality limits will soon be reached, account for any overages when they do happen such as through an overage deduction in the following fishing season, and to adjust future management measures to better assure that an excedance does not occur in future fishing seasons.

- Science and Statistical Committees – Science and Statistical Committees (SSCs) range in form and function from council to council. In light of the new legal requirement for a council to develop annual catch limits that do not exceed the SSC advice, NMFS needs to ensure consistency in how each of the SSCs work. To begin with, NMFS needs to provide proper oversight to ensure councils appoint members that have the proper expertise in fisheries science and are free from the kinds of conflicts of interest that could impede the production of the best scientific advice. SSCs also need to provide "ongoing scientific advice" and NMFS needs to ensure that the needs of science are met in each region on a timely and ongoing basis and have consistency throughout the nation. Finally, NMFS should give more details on how it envisions the peer review process working and provide guidance to ensure that the peer review process employs qualified and independent reviewers that are under the control and oversight of NMFS, not the Councils. As recommended by the U.S. Commission on Ocean Policy (2004), peer review of recommended ACLs and AMs should be independent of the Council process. The peer review process should critique the SSC's process and methodology for developing its scientific advice to councils and, if necessary, make recommendations on how to improve the process or methodology. If councils are allowed to, or choose to, use other peer review methodologies (such as SAW/SAC/SEDAR, etc.), it will be critical that NMFS revise the standards that govern these processes since often standard are wholly inadequate to ensure quality, un-biased reviews.

- Guidance on considering ecosystem affects of fishing – NMFS should establish explicit guidelines for addressing ecosystem considerations and moving toward an ecosystem-based approach to fishery management, starting with criteria for setting ACLs for identified forage fish species which ensure that these species remain available to other consumers in the food web, including other managed species on which fisheries depend.

II. Legal and Statutory Background

The MSRA requires fishery managers to establish ACLs and AMs in fishery management plans by 2010 for stocks currently experiencing overfishing and for all other stocks by 2011. Importantly, this new required provision of fishery management plans "shall not limit or otherwise affect the requirements of section 301(a)(1) [National Standard 1] and 304(e) [rebuilding requirements] of the" Magnuson-Stevens Act. Therefore, NMFS should make clear in its guidance to councils and

fishery managers that ACLs and AMs are not to replace critical requirements like "achieving optimum yield on a continuing basis," and reduced fishing rates necessary to timely rebuild stocks. Rather, ACLs and AMs should work in conjunction with these other requirements to enhance their purpose and effectiveness. To achieve optimum yields, catches must not just prevent overfishing, but must also "achieve optimum yield on a continuing basis."

We urge NMFS to give strong guidance on setting ACLs well below overfishing thresholds and make these annual catch limits true "limits" as the phrase implies. The limits must also take into account the status of many depleted fish populations and set ACLs not only to prevent overfishing, but to timely rebuild fish populations. Finally, while we urge NMFS to embark on an ambitious plan to improve data on fish stocks, NMFS should also take the quality of data into account when setting ACLs. The less information NMFS has on a fishery's status, the more precaution and buffer should be included. For extremely data poor stocks, ACLs should only allow for minimal mortality from bycatch and prohibit landings until data is improved.

The MSRA also requires that each council's science and statistical committee immediately begin providing "ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets." While "mechanisms" for specifying ACLs need not be established in fishery management plans until at least 2010, councils must develop annual catch limits now. See § 103(c)(6) of MSRA. Councils are also required to immediately constrain catch limits for their managed fisheries such that catches do not exceed the levels provided in the SSC advice. NMFS should provide guidance to councils and fishery managers prior to issuance of the guidance that is the subject of this scoping to both alert them to the immediately applicable nature of these requirements and how to comply with it.

Given the importance of the process and the long term, and potentially profound, effect it will have on how fisheries are managed in this country, we urge NMFS to conduct a full review under the National Environmental Policy Act. NMFS should prepare a full EIS and analyze a broad range of legally sufficient alternatives. Pursuant to the NEPA, an EIS serves as a key decision making tool for federal officials to assess the impacts of proposed federal actions on the human environment. Furthermore, it provides a vehicle for exploring alternative management approaches that can provide better avenues for setting precautionary ACLs and effective AMs such that overfishing is ended once and for all. As such, NEPA provides an excellent opportunity to fully explore all the environmental effects of this guidance and inform decision makers and the public of all the consequences of decisions made on this guidance, and ultimately for the hundreds of stocks managed by our federal government far into the future. We should not shortchange the environmental review on such an important undertaking for expediency sake.

In conducting the scoping for an EIS, and ultimately preparing the Draft and Final EIS, the National Environmental Policy Act regulations require that NMFS rigorously explore and objectively evaluate all reasonable alternatives, including alternatives not within the jurisdiction of NMFS. 40 C.F.R. § 1502.14. For major federal actions significantly affecting the quality of the human environment, a detailed statement (EIS) must be prepared that includes the environmental impact of the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, alternatives to the proposed action, the relationship between local

short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.[3]

Therefore, for each issue NMFS provides guidance on, such as setting appropriate ACLs, AMs and weighing the specific facts and circumstances of each fishery, it should explore a wide range of guidance alternatives that range from the status quo to alternatives that provide a very high level of precaution and certainty that the ACLs and AMs set through this process achieve their goals.

The Council on Environmental Quality has developed a number of guidance documents for implementing NEPA, including two that are particularly applicable to the development of ACLs that completely account for all sources of mortality, incorporate adequate precaution and buffers to account for uncertainty, consider the role of excessive mortality on both the target stock and other species in the food web, and the long term consequences of that excessive mortality. These include *Incorporating Biodiversity Considerations into Environmental Impact Analysis under the National Environmental Policy Act*[4] and *Considering Cumulative Effects*[5]. We urge NMFS to consult these documents in preparation of this draft EIS.

NEPA regulations require that an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action be conducted.[6] This process, referred to as scoping, gives the public and others an opportunity to define the scope and significant issues to be analyzed in depth in the EIS.[7] While we appreciate that NMFS has also been instructed by Congress to review its NEPA compliance process and update agency procedures for compliance with NEPA, it should not delay the development of this scoping and timely promulgation of guidance on ACLs and AMs.

III. Detailed Comments on "Issues for Developing Guidance for ACLs and AMs"

A. Use of the precautionary approach

As an initial matter, we urge NMFS to develop a range of reasonable alternatives for its draft EIS that give strong guidance on setting ACLs well below overfishing thresholds and make these annual catch limits true "limits" as the phrase implies. The limits must also take into account the status of many depleted fish populations and set ACLs not only to prevent overfishing, but to timely rebuild fish populations. While we urge NMFS to embark on an ambitious plan to improve data on fish stocks, NMFS should also take the quality of data into account when setting ACLs. The less information NMFS has on a fishery's status, the more precaution and "buffer" between overfishing limits and ACLs should be included. For extremely data poor stocks, ACLs should only allow for minimal mortality from bycatch and prohibit landings until data is improved.

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3 42 U.S.C. §4332
4 Council on Environmental Quality, January 1993.
5 Council on Environmental Quality, January 1997.
6 40 CFR §1501.7.
7 40 CFR §1501.7(a).

In providing fishery managers with guidance on setting appropriate "buffers" between overfishing limits and ACLs, we urge NMFS to provide a range of alternatives to its guidance that all embrace the precautionary approach to fisheries management. We recognize the real difficulties involved in setting catch limits that will ensure that overfishing does not occur given a variety of factors including, gaps in scientific understanding and data as well as lack of complete predictive power regarding the impacts of implementing fisheries management measures and levels.[8] Uncertainty plays a large role even in relatively data-rich situations, and it must be addressed in the setting of annual catch limits. Uncertainty in fishery stock assessment advice is not an excuse to avoid setting catch limits but rather a reason to set highly precautionary catch limits that incorporate buffers explicitly targeted to ensuring that overfishing does not occur despite uncertainty. A system of explicit decision rules based on levels of information available for managed stocks should provide clear guidance on the methods of setting ACLs, including rules for setting ACLs in data-poor situations when stock status relative to MSY (or proxy for MSY) is unknown.

In the agency's own technical guidance on the use of precautionary approaches to implementing National Standard 1, Restrepo *et al*. (1998)[9] recommended a precautionary approach to specification of Optimum Yield (OY), based on three guiding principles:

- Target reference points, such as OY, should be safely set below limit reference points, such as the overfishing level (OFL), as defined in the control rules.
- A stock or stock complex that is below the size that would produce MSY should be harvested at a lower rate or level of fishing mortality than if the stock or stock complex were above the size that would produce MSY.
- Criteria used to set target catch levels should be explicitly risk averse, so that greater uncertainty regarding the status or productive capacity of a stock or stock complex corresponds to greater caution in setting target catch levels.[10]

The same principles should guide the setting of annual catch limits (ACLs). ACLs should be set sufficiently below the maximum limit reference point – the overfishing level (OFL) – to ensure that overfishing does not occur.[11]

The new rules for setting ACLs should provide additional guidance on how to reduce the catch limit to account for uncertainty in the scientific advice. In particular, the less information NMFS has on a fishery's status, the more precaution should be applied and a buffer between OFL and ACL built into the calculation. NMFS should revisit its own technical advice developed in 1998, which called for setting fishing targets (OYs) with 80% probability that overfishing not occur, and apply this as the basis for clear standards on use of the precautionary

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[8] NMFS 1998, 63 FR 24215.

[9] Restrepo, et al., "Technical Guidance On the Use of Precautionary Approaches to Implementing National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act" (NOAA Technical Memorandum NMFS-F/SPO-## 1998).

[10] Restrepo (Convener) *et al*. 1998. Technical Guidance on the Use of Precautionary Approaches to Implementing National Standard 1 of the MSFCMA. NOAA Technical Memorandum NMFS-F/SPO-## July, 1998.

[11] MSA Section 3 (16 U.S.C. 1802) defines the terms 'overfishing' and 'overfished' as a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.

approach. However, NMFS should also consider alternatives for its guidance that set this likelihood of successfully staying below OFL at values above 80% and approaching 100%. Setting values to prevent exceeding limits, especially limits that, if exceeded, could cause major disruptions to the fishery, fish populations and ecosystem health, should be given a high priority. In addition, including such reasonable alternatives is required under NEPA to properly and fully inform decision makers and the public.

Use of the precautionary approach counsels setting ACLs, wherever possible, for each individual stock. As a general rule, annual catch limits should not be set for stock complexes, stock assemblages, or similar stock groupings. NMFS' own technical guidance notes that such management runs a high risk of allowing overfishing to occur on an individual stock within the assemblage. Such ACLs for more than one stock should only be used where the data is lacking to have a stock specific ACL and a plan is in place to obtain the appropriate data on stocks within a reasonable time period.

Moreover, the so-called "mixed stock exception" in current NS1 guidelines should be removed, since it violates the MSRA's clear intent to end overfishing. In instances where multiple species are treated as one "stock" for management purposes, catch limits should be based on the species within the stock assemblage with the lowest productivity and the catch limit should include the bycatch and discard mortality of that species in other directed fisheries.

B. Preliminary ACL and AM alternatives

1. NMFS should include several alternatives that provide detailed guidance on performance standards and a range of acceptable mechanisms for accomplishing goals

NMFS's February 14, 2007, Federal Register notice identified three preliminary alternatives for ACL and AM guidance, ranging from no action (no guidance – Alt. 1) to providing guidance that sets out performance standards that ACLs and AMs must meet and guidance on "one or more mechanisms to implementing ACLs and AMs that NMFS considers to meet the statutory requirements and standards for Secretarial approval." (Alt. 3) 72 Fed. Reg. at 7019.

Overall, we believe it is critical for NMFS to provide councils as much direction, in as much detail as possible, and therefore we believe the third alternative presented is the most instructive of these initial alternatives and will be the most likely to lead to the development of sound and precautionary ACLs and AMs. However, we encourage NMFS to develop some other alternatives at this end of the range of reasonable alternatives to provide a full range of reasonable alternatives.

Providing as much detail as possible in guidance to fishery managers, with consistent national performance standards for secretarial approval, will accomplish at least two worthy goals. First, it will make it easier for councils to get the job done of setting ACLs for the hundreds of managed stocks by the 2010 deadline, because it will have a suite of detailed management tools and options available to them to apply to their particular fishery. With 530 stocks to address in the various FMPs, a lot of work will need to be accomplished over the next few years. While

each fishery is somewhat unique, the concept of ending overfishing by establishing and enforcing annual catch limits applies to all fisheries. Furthermore, certain elements of the fishery may be similar to other fisheries (e.g. same type of gear, or co-occurring species, or data collection method), thus lending themselves to national guidance on particular tools for setting appropriate ACLs and AMs. In addition, it is clear that some councils and fishery managers have skirted agency advice and the legal requirements of the Magnuson-Stevens Act in the past. More explicit guidance, with consistent national performance standards that serve as a basis for secretarial review and approval, are essential to ensure that all fisheries are managed up to those standards.

As NMFS notes in its second proposed alternative, "performance standards may be hard to develop, or it may be hard to judge the degree to which proposed mechanisms will satisfy the performance standards." However, this concern simply underscores the need for NMFS to provide as much guidance as possible. While this is a challenging task, the concepts of counting all mortality and controlling through accountability measures is fairly straightforward. And many good examples already exist in various fisheries. Drawing together all these "good practices" and adding new ones is best done at the national level where NMFS has access to all these examples. In any event, it will be more productive to issue guidance on a national set of fisheries management metrics than to allow each of the eight councils to develop their own.

To this end, the Ocean Conservancy recommends that the majority of the alternatives reviewed in the draft EIS contain detailed components for setting each ACL and AM. Such a step would provide a broad range of reasonable alternatives as contemplated by NEPA and lead to better compliance with the conservation goals of the MSRA. Following is an overview of what this particular guidance could include:

2. Performance standards and mechanisms for ACLs and AMs

We urge NMFS to develop a range of performance standards alternatives for ACLs that all require ACLs to include all sources of mortality and should be presented as numeric catch limits for all managed stocks. Without an annual goal that is clear and measurable, we are doomed to more of the missed targets and serial overfishing that has plagued so many fisheries.

The total ACL value should include breakout values for each source of mortality that makes up the whole. At a minimum, ACLs should provide anticipated mortality for a stock from the following sources: directed commercial landings, directed commercial bycatch/discards, directed recreational landings, directed recreational bycatch, and bycatch mortality in other fisheries. NMFS should give guidance on when it would be appropriate to include additional sub-categories. For example, for many stocks, age diversification and gender ratio are critically important to the health of the fish population and the ecosystem, therefore the ACL should consider what kind of mortality is occurring, not simply the source. Finally, spatial and temporal fishing mortality is also critical to the overall "health" of a fish population. Defining ACLs, and subsequent management measures to stay within those ACLs that consider spatial and temporal fishing mortality should be an integral part of effective catch-limit management. Measures that disperse fishing effort across subpopulations of a defined "stock" should, if employed, aim to

avoid serial depletion of spatially discrete subpopulations which may undermine the productivity of the "stock as a whole."

> *ACL Component Examples: The following examples, here and below, are meant to show a minimum level of detail ACLs should be broken into when accounting for all sources of mortality. Even in these examples, the actual ACLs may need even more specificity on discrete mortality sources: 1) Red Snapper fishery (Gulf of Mexico) – prior to the commercial IFQ program, the Gulf Council broke mortality sources into 10 discrete sources in the stock assessment: Commercial open season East, commercial open season West, Rec open East, Rec open, West, Comm closed East, Comm closed West, Rec closed East, Rec closed West, shrimp trawl East, and shrimp trawl west. In addition to landings mortality, the discard mortalities are different in each of the ten "fisheries"; 2) Atlantic Herring (New England) is managed as a single stock but hard TACs (which would be similar to ACLs) are applied to four discrete sub-areas because effort is not distributed uniformly. Vessels have strong economic incentive to fish grounds closest to markets, therefore, without area-specific TACs, nearly all the Atlantic Herring ABC would come from the coastal Gulf of Maine. Additionally, the Herring FMP closes areas of the inshore Gulf of Maine timed to spawning aggregation; 3) Gag grouper in the Gulf & South Atlantic – gender and spawning aggregation overfishing - because gag grouper are protogynous hermaphrodites and tend to spawn in discrete locations, sex ratios can get badly skewed and loss of spawning aggregations can have significant localized impacts -- while the annual catch does not break out mortality for this factors, the ACL should do so to prevent overfishing of these important components of the stock (spiny dogfish are another good example in the Atlantic – where overfishing of spawning females should be prevented); 4) Bottomfish in Hawaii are another good example of localized overfishing and depletion concerns because even though they are managed throughout their range, the population around the main Hawaiian islands is very depleted (lingcod is another good example of where localized depletions can be a problem – lingcod is managed throughout its range on the west coast; however, the population is healthier north of CA than off CA. While the population as a whole is no longer overfished, the southern population is lagging behind.)*

ACL performance standards should also provide calculations for how the various sub-values of an ACL interact with each other. For example, a certain value for mortality from regulatory discards may depend on the management measures for the directed fishery such as allowed landings, trip limits and gear requirements. As these measures change, the amount of mortality from regulatory discards will change and must be anticipated.

> *ACL sub catch limits interaction example: 1) Rockfish complex (Pacific) - decreased trip limits for badly depleted Pacific rockfish, such as bocaccio, led to higher discard rates. The Pacific Council and NMFS neglected this point in the past, but providing performance standards for calculating such interactions will be critical to developing adequate ACLs (and their companion AMs); 2)Reef fish (Gulf of Mexico) - size limit increases to limit landings mortality (one component of an ACL) can greatly increase bycatch mortality by leading to greater discards (Pacific groundfish trip limits also have produced this result) – developing limits for discrete ACL sub-parts must consider the*

effect on other sub-parts and the management measures (including the AMs), must account for, and control, all these mortality sources together.

Each component value for an ACL (such as directed commercial catch) should have its own AM. Developing AMs for each component of an ACL value will have the value of controlling problems in a fishery at their source. This level of accountability, coupled with adequate information collection, will provide timely notice and correction of problems with catch limits and have the added value of encouraging specific sectors of a fishery to stay within its specific ACL.

Discrete ACL component/AM Companion Component Examples: Fisheries that have discrete sector hard TACs, like the Atlantic herring fishery mentioned above is an example of discrete ACL components (here, area TACs) working in conjunction with discrete AM components (here, area hard TACs). These discrete AM components, aligned closely with discrete ACL components, also help align incentives properly with conservation. If a sector is held accountable for their portion of total mortality of a species in order to reap the benefits of rebuilding populations, they have an incentive to stay within allowable limits. Furthermore, sectors who are meeting their annual catch limit performance standards aren't penalized for other sectors failing to meet their ACL goals.

Each specific AM should have several tiered component management measures to help achieve appropriate accountability, including both appropriate in-season and post-season measures. Most critically, the Ocean Conservancy strongly favors AMs for FMPs designed to ensure that ACLs and OFLs are not exceeded in the first instance. This is a "preventive approach." Ideally, catch would be closely monitored and when an ACL is met, would trigger closure of a stock area. These sort of AMs could also include triggers that adjust management measures as certain threshold mortality levels are met during the fishing season (e.g. – 25% of the ACL, 50% of the ACL, etc.). We recognize that such real-time monitoring is costly, and that the systems to support this approach may take time to implement. In the near-term, methodologies should be developed that can overcome existing data limitations to the extent possible. NMFS should look at regions where in-season monitoring and adjustments are being utilized today in order to determine management methodologies that can be applied nationally. Where even this is not immediately possible, an AM suite of measures, where fisheries lack sufficient information to use in-season adjustments, would have to fall back on its post-season measures, such as deducting overages to the ACL from the subsequent year ACL.

While AMs that provide corrective action after a limit has been exceeded are critical to returning fish populations to healthier levels, these sort of corrective actions are a poor alternative to preventing the overage in the first place. An overage deduction, while necessary to correct the failure to meet management goals, will create complications for both the resource users and the resource. For fishermen, an overage deduction in the subsequent year causes economic disruption due to lower landing limits. For the resource, it can lead to increased regulatory discards that subvert the goal of reducing overall fishing mortality. Moreover, a straight one-for-one deduction may not return the resource to the population levels prior to the overage due to "lost breeding opportunity" costs.

In-season AM examples: 1) There are range of general in-season components used across the nation in various fisheries including hard TACs, triggered input control changes (for example, switching from a trip limit that encourages directed fishing to trip limits that make it a bycatch fishery), use of sector allocation TACs and IFQ programs. All of these in-season measures should be available to fishery managers and used where appropriate to achieve successful prevention of overfishing.; 2) The South Atlantic Council is looking into a predictive modeling system based on limited observer and logbook information in their (data-poor) fisheries in the development of Amendment 15 for reef fish. This system could compare landings data to dead discard rations to produce catch quotas. Such a system could potentially provide a level of accountability for bycatch mortality not previously attained in this region; 3) the Pacific council uses a total mortality scorecard to monitor mortality for overfished species that is updated regularly throughout the year. Adjustments are made as needed to ensure mortality stays within identified limits. This technique is another promising in-season accountability measure; 4) The Pacific Council has utilized buffers below annual mortality targets where the fishery has shown a pattern of exceeding the limits. This was an effective tool in keeping bocaccio mortality below limits.

While AMs should include measures to prevent overages in the first instance, each AM should still include additional measures for instances where overages do occur. When an overage to an ACL does occur, the Ocean Conservancy urges NMFS to require overage deductions to be subtracted from ACL values in the following fishing season for any overage of the ACL. This overage should be taken as soon as the information is available and deductions should account for all mortality in each and every ACL sub-category (a good example here is the overage deduction in the large coastal shark fishery – the problem with that fishery is that in-season measures aren't used, thus leading to overages that can exceed 100% of the TAC – not the best way to manage the fishery). We appreciate that several fishery information collection systems lack timely and precise information, and obtaining adequate information (even at the lower quality and timeliness level needed for taking post-season corrective actions such as an annual overage deduction versus real-time, in-season adjustments) will be costly. However, the answer is not to do nothing and provide no accountability. Rather, we urge NMFS to require performance standards for improving both the quality and timeliness of data collection to make in-season adjustments possible, and to the extent that cannot be achieved, at least provide for deductions in the following fishing season. Since AMs need not be incorporated into plans until 2010 or 2011, NMFS can work with fishery managers now to develop the information systems needed to comply with these new requirements.

C. The role of the SSC and other peer review processes in setting ACL and OY

As noted above, fishery management councils use Science and Statistical Committees in different ways and we encourage NMFS to provide a range of reasonable alternatives that establish consistent national guidelines for SSCs. The guidelines should draw from examples of well functioning SSCs in some regions. For example, in the Northeast, the New England Fishery Management Council evolved an outstanding stock assessment infrastructure and process. Consistent with this established process, one role of a reconstituted New England SSC (and other

SSCs) could be to serve as intermediary conveyors of stock assessment information and advice to managers.

In the end, the Ocean Conservancy urges NMFS to provide strong guidance to all councils to vest their SSCs with authority to apply the precautionary approach when setting both OFLs and ACLs (in addition to the other ongoing scientific advice required by law). In doing so, a different risk analysis is required. SSCs should be directed to apply expert judgment when setting OFL values, taking into account the quality of data and other mitigating factors.[12] Moreover, NMFS should ensure that the SSCs & any peer reviewers employed in that process, are briefed on their new roles and responsibilities, including keeping them apprised of legal requirements under the Magnuson-Stevens Act. Finally, NMFS should provide appropriate safeguards to ensure the SSCs remain independent and capable of fulfilling the role envisioned by the new statute.

IV. Conclusion

In conclusion, the Ocean Conservancy would again like to thank NMFS for the opportunity to comment on this scoping process. We urge the agency to develop strong and detailed guidance to ensure that urgent and meaningful action is taken now to end overfishing in U.S. fisheries. Over the past few years, two national ocean commissions have issued reports on the threats to our living marine resources, most notably from serial overfishing. Congress heeded these warnings in passing new legislation requiring ACLs and AMs that prevent it. It is now NMFS's turn to provide detailed and meaningful guidance to the councils and fishery managers to guide them in the development of appropriate, and legally adequate ACLs and AM for all managed stocks. In so doing, NMFS will advance the goal of protecting this public resource for the benefit of all citizens, present and future. Strong guidance on stopping overfishing now will yield healthy ecosystems for the benefit of all Americans. We look forward to the next phases of the process and the development of a comprehensive draft EIS.

Sincerely,

/s/

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[12] A example of an SSC adeptly handling this task is the New England Council's SSC's handling of the recent retrospective pattern affecting the Georges Bank Yellowtail assessment.

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The Ocean Conservancy

Re: Scoping Hearing on Overfishing Guidelines, Mystic, CT, April 10, 2007

Thank you for the opportunity to offer comments on guidelines for implementation of the new overfishing and accountability provisions of the Magnuson-Stevens Act. The Ocean Conservancy will be providing more detailed written comments through our national fishery team, but today I'd like to offer thoughts on how we would see these provisions being applied in New England.

In general, the Ocean Conservancy supports the strategies and criteria described in the NOAA Fisheries Scoping presentation. We agree that Annual Catch Limits (ACL) should be expressed as numeric catch amounts for every managed stock, providing annual goals which are clear and measurable.

We agree that Annual Catch Limits should be sufficiently below Overfishing Levels (OFL) to ensure that overfishing will not occur. The less information NMFS has on a fishery's status, the more precaution should be applied and a buffer built into the calculation. NMFS should revisit its own technical advice[1] developed in 1998 which called for setting fishing targets with 80% probability that overfishing not occur, and apply this as the basis for clear standards on use of the precautionary approach.

We agree that Annual Catch Limits must account for all sources of mortality. At a minimum, Annual Catch Limits should identify values for mortality from directed commercial landings, bycatch and discards, directed recreational landings and discards, and bycatch mortality in non-directed fisheries.

Though not covered in the Scoping presentation, we would encourage NOAA Fisheries to also offer guidance on applying Annual Catch Limits to sub-categories of stock structure. For example, age diversification and gender ratio are important factors for healthy populations in an ecosystem context.

We urge that Annual Catch Limits should not be set for stock complexes or assemblages. NMFS' own technical guidance notes that such management runs a high risk of allowing overfishing to occur on an individual stock within the assemblage. We believe that NMFS must strike reference to the mixed-stock exception from regulations because it is inconsistent with current law.

[1] Restrepo, et al., "Technical Guidance On the Use of Precautionary Approaches to Implementing National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act" (NOAA Technical Memorandum NMFS-F/SPO-## 1998).

We strongly favor accountability measures for FMPs designed to ensure that Annual Catch Limits are not exceeded. This is a "preventative approach". Ideally catch would be closely monitored and when an ACL is met, would trigger closure of a stock area. We recognize that such real-time monitoring is costly, that the systems to support this approach may take time to implement. In the near-term, an alternative may be to deduct overages from the subsequent year ACL; though legal, the Ocean Conservancy discourages this "corrective approach" because it compounds the challenge of achieving mortality goals in successive years.

Fishery Management Councils use Science and Statistical Committees in different ways. In the Northeast, we have evolved an outstanding stock assessment infrastructure and process. Consistent with this established process, we would expect that the role of a reconstituted New England SSC would be to serve as intermediary conveyors of stock assessment information and advice to managers.

In the end, the Ocean Conservancy expects to see the New England SSC vested with authority to apply the precautionary approach, when setting both OFLs and ACLs. In either instance, a different risk analysis is required. We would expect the SSC to apply expert judgment when setting OFL values, taking into account the quality of data and other mitigating factors; the recent retrospective pattern affecting the Georges Bank Yellowtail assessment offers a good example. On the other hand, ACL values are linked to the history and reliability of FMP mortality controls; therefore, we would expect the SSC to derive appropriate ACLs in a consultative process with the NEFMC over policy-driven results.

Finally, in the future Ecosystem Based Fishery Management increasingly will be a mitigating consideration for scientists and managers alike. The Ocean Conservancy applauds the New England Council for leadership in incorporating ecosystem principles in management planning. We would therefore encourage that top tier ecologists as well as population scientists, be considered for appointment to the Science and Statistical Committee, to broaden its vision.

Again, thank you for the opportunity to input the development of these important guidelines.

John Williamson
Fish Conservation Program Manager
Ocean Conservancy, New England Regional Office

The Ocean Conservancy strives to be the world's foremost advocate for the oceans. Through science-based advocacy, research, and public education, we inform, inspire and empower people to speak and act for the oceans. Headquartered in Washington, DC, with more than 900,000 members and volunteers The Ocean Conservancy has regional offices in Alaska, California, Florida, and New England and field offices in Santa Barbara and Santa Cruz, CA, Florida Keys, the U.S. Virgin Islands and the office of Pollution Prevention and Monitoring in Virginia Beach, VA.

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April 17, 2007

By E-mail

Mr. Mark Millikin
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway
Silver Spring, Maryland 20910
Email: annual.catch.limitDEIS@noaa.gov

Re: Scoping comments on annual catch limits DEIS

Dear Mr. Millikin,

Oceana is encouraged by the improvements to the Magnuson Stevens Act that have been included in the recent Magnuson-Stevens Reauthorization Act (MSRA). The provisions of the new Act have the potential to expand approaches to management that have been successful in a limited number of fisheries to all federally managed fisheries. Establishing strong Annual Catch Limits (ACL's) and Accountability Measures will be the foundation for improving the nation's troubled fisheries.

Without firm guidance from the Agency, region-by-region interpretation of the Act will continue the past pattern of manipulation of the law. This manipulation has allowed overfishing to take place despite the requirements of the Sustainable Fisheries Act (SFA). To fulfill the intent of Congress to end overfishing, the National Marine Fisheries Service must issue a set of guidelines to the regional fishery management councils which give firm guidance about the exact manner in which the new elements of the Act must be included in Fishery Management Plans and carried through in fishery management actions.

Ultimately, the combination of Annual Catch Limits and Accountability Measures should:

Count--Count all sources of fishing mortality.

Cap--Limit fishing mortality to acceptable and scientifically supportable limits.

Control--Manage fisheries' limits to end overfishing and limit bycatch.

<u>Annual Catch Limits</u>

The Act clearly lays out the standardized process by which Annual Catch Limits (ACL) will be established for every Fishery Management Plan (FMP) managed by each of the Councils. Oceana believes that the agency should direct the Councils to follow a process where the Scientific and Statistical Committee (SSC) will develop recommendations for fishing mortality limits that will meet rebuilding

targets[1] and a process in which the Councils will be obliged to set mortality limits each year that do not exceed the limits recommended by the SSC[2].
In addition to a straightforward process that the Councils and its SSCs will follow to set ACLs, Oceana believes that the agency should issue guidance and clarification of the following issues to prevent jeopardizing the success of efforts to end overfishing in federal FMPs.

Overfishing Definition--The Agency should strengthen the guidance related to the definition of overfishing to avoid inconsistency among regions and to reduce political pressure on the SSC and stock assessment process. The Councils should be required to comply with these definitions in all of its FMPs. Allowing the Councils flexibility to define overfishing could lead to continued overfishing under new, more lenient definitions of overfishing.

Optimum Yield--The MSRA continues to include the strong language defining Optimum Yield (OY) which requires fishing levels to be set with consideration of the ecological role of the species[3]. The development of Annual Catch Limits must explicitly consider the effects of fishing on the ecological role of the target species and the effects of fishing on all other relevant ecological factors, and specify how OY was calculated with consideration of those ecological factors.

Fishing Mortality--All fish or other marine life killed or injured as a result of fishing--whether landed catch or bycatch--should be factored into the calculation and monitoring of Annual Catch Limits. If the ACLs focus solely on landed catch, the unreported or underreported mortality associated with bycatch and discards could undermine efforts to end overfishing. Guidance to Councils must mandate that bycatch and discard mortality be included in ACL calculations.

Allocation of Catch/Bycatch--After ACLs are established it will be the responsibility of the Councils to allocate mortality to directed fisheries and bycatch in other fisheries. Over time, it will be the responsibility of the Councils to minimize bycatch under the ACL to meet the requirements of National Standard 9.

<u>Accountability</u>

The MSRA requires all Fishery Management Plans to include measures which ensure accountability[4].

Fully accountable Fishery Management Plans will:

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[1] Each scientific and statistical committee shall provide its Council on going scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices. Sec. 302 (g) (1) (B)

[2] develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g); SEC. 302 (h) (6)

[3] (33) The term "optimum", with respect to the yield from a fishery, means the amount of fish which--
(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, *and taking into account the protection of marine ecosystems*;
(B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or *ecological factor*; and
(C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

[4] Establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability. Sec 303 (a) (15)

Mandate Public Reporting/Accounting Protocols--All dead or injured fish and other marine life affect the success of an FMP--whether caught and landed or thrown back as discards. FMPs must include measures which will require at a minimum, annual public reporting of all mortality and injury under the auspices of the FMP. Failing to discuss the potential impacts of bycatch on the success of a management or rebuilding plan is shortsighted, and the agency should issue strong guidance to the Councils to factor bycatch information into all assessment and management actions.

Provide a transparent discussion of calculations of OY, ABC, MSY and ACL--The Agency should use this opportunity to advance ecosystem-based management and wide use of the precautionary approach to managing our nation's oceans. Rather than focusing on exploitation and removal of marine resources for profit, fisheries management should fully consider the role of managed species in the marine ecosystem and manage the oceans as a whole. A full account of the calculations of overfishing metrics such as Optimal Yield, Maximum Sustainable Yield and Annual Catch Limits must be provided as part of the mortality accounting report in a way that the public can comprehend. Included in this discussion must be a full analysis and discussion of the known information on the ecological role of a species, the effect of the current level of fishing on overall optimal yield, a risk assessment of the proposed limits, and the probability that the limits will achieve the goals of the management action.

Mandate Monitoring of ACLs--Without a strong mandate to accurately and precisely monitor ACLs the efficacy of the law may be significantly diminished. The agency should use this opportunity to commit to developing the necessary tools and programs to monitor catch and bycatch in all fisheries by the 2010 deadline established in the MSRA. Included in this program should be real time catch and landings reporting, bycatch monitoring and reporting, a program to provide precise and accurate information about catch and bycatch to managers in a timely fashion, and the authority to manage fisheries in real time to avoid overages.

Mandate requirements to account for overages--The agency must provide strong guidance to the Council to ensure that when an ACL is exceeded that the overage will be deducted from the following year's ACL. The MSRA *requires* the development of ACLs to be set 'such that overfishing does not occur in the fishery, including measures to ensure accountability'. Failing to mandate the way that Councils account for overages would allow overfishing to continue in fisheries despite fishermen knowingly exceeding an established limit. This is illegal and cannot be encouraged by the agency's guidelines.

Oceana looks forward to the Agency's EIS and to participating in the development of the guidelines for the Councils. The expansion of successful fisheries management approaches in some councils to other regions is a promising way forward for the nation's oceans. Oceana hopes that the agency will take strong action with this opportunity to safeguard our oceans for the future.

Sincerely,

Beth Lowell
Federal Policy Director
Oceana
Washington, DC

PEW INSTITUTE FOR
OCEAN SCIENCE

April 17, 2007

RE: Comments on the National Standard 1 Guidelines.

Mark Millikin
National Marine Fisheries Service, NOAA
1315 East-West Highway
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The reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act provides a unique opportunity to strengthen fisheries management in the United States, to rebuild all overfished stocks, and prevent overfishing. We appreciate the opportunity to provide comments to the agency as it determines how best to implement the requirements to end overfishing by 2010, thereby improving fishery conservation. The Pew Institute for Ocean Science would like to comment on the relationship between the Annual Catch Limit (ACL) and the maximum fishing mortality threshold (MFMT).

The ACL for each stock should be set so that there is a high probability that the realized fishing mortality rate (F) in the fishery will be below MFMT. There are two reasons that the realized F might be higher than the MFMT: (1) the fishery might catch more than the ACL, or (2) because of uncertainty in the stock assessment, the ACL may be set at a level that turns out to be too high.

To prevent fisheries catches from exceeding ACL, it will be necessary to have adequate in-season fishery monitoring, and a mechanism to reduce fishing mortality if projections show that the ACL may be reached early. For example, if an ACL is likely to be exceeded, the fishing season could be stopped early, or effort control measures such as trip limits could be used to reduce fishing mortality. We support payback provisions in cases where ACL is exceeded, so that any overage of the ACL is subtracted from ACL in the next year. However, especially for species that are severely overfished, it is preferable to avoid exceeding ACL in the first place, by adequate in-season management. Also, more stringent measures should be taken to prevent overages if ACL is exceeded for two years in a row.

In-season management requires adequate in-season monitoring. The ACL includes all sources of mortality, including commercial landings, discards and recreational mortality. Thus, it is imperative that commercial fisheries be monitored with an adequate level of observer coverage to provide estimates of total discards, by species and fishing sector, with a high level of precision. Recreational fisheries must also be adequately monitored.

We have the following suggestions for dealing with uncertainty in setting ACL. As a general rule, the precautionary principle would suggest that where data is limited or data quality is poor, the buffer between ACL and the overfishing level (OFL) must be widened. Specifically, the

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ACL should be set so that, given the uncertainties in the estimates of biomass and fishing mortality rates from the assessment, there is a high probability that the ACL would correspond to a realized F less than MFMT. For example, if the MFMT was equal to the F that would allow an overfished population to rebuild in 10 years (Frebuild), some stock assessment software can calculate the probability that F will exceed Frebuild at a specified ACL. ACL could be chosen so that the probability that F is less than Frebuild is greater than, for example, 80% or 90%. This probability should be quite high, as meeting the target fishing mortality rate is a necessary first step toward rebuilding. Even for stocks that are not overfished, there should be a high probability that the realized F is below the MFMT.

If it is not possible to calculate the probability of F<Frebuild from the assessment, then it would be possible to use a rule of thumb. For example, the target F could be set at the lower 80% confidence bound of Frebuild. The ACL would then be calculated based on this reduced F and the estimated available biomass. For data poor fisheries, where it is not possible to calculate an appropriate ACL based on an assessment, precautionary rules of thumb should be used to set the catch at a level that is low relative to historic catches, until data quality improves.

We also suggest that, given the uncertainty in estimates of stock size and fishing mortality rates, NMFS should consider using control rules that reduce the target fishing mortality rate when stock sizes are low, and allow higher fishing mortality rates when stock sizes are higher. Increasing the level of precaution for depleted stocks allows such stocks to rebuild more rapidly, and reduces the risk of continued overfishing and further stock decline if the ACL is exceeded or the stock assessment is uncertain.

For multispecies fisheries in which more productive and less productive species are caught with the same gear, it is important to ensure that weaker stocks are not overfished. To prevent the necessity of closing a multispecies fishery when the ACL is reached for a weaker stock, it may be necessary to develop new mechanisms to protect the weaker stocks, such as time/area closures in the important habitat for weaker stocks, improved gear selectivity, bycatch quotas of weaker stocks, etc. Many of these measures would require high levels of observer coverage to estimate the dead discards of weaker stocks caught in multispecies fisheries.

We also strongly urge that ecosystem considerations be included when setting ACLs, especially for target species that play important roles in the local ecosystem. This approach is already being implemented in some cases (e.g. menhaden) where forage fish are not only a target fishery, but are also an important food source for predatory fish. In such cases, ACL for the ecologically important species should be reduced.

Finally, we commend the increased emphasis on peer reviewed science in fishery management required by the revised Magnuson-Stevens Act. However, we are concerned that increased requirements for peer review might slow down the development of management plans and delay needed management actions. We suggest that, for overfished stocks, there should be some mechanism to apply precautionary catch restrictions while the science is in the process of being revised and peer-reviewed, so that any delays will not jeopardize rebuilding

Thank you for the opportunity to comment on the National Standard 1 Guidelines.

Sincerely,

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From David Dow <ddow@cape.com>

Sent Sunday, April 15, 2007 10:44 pm

To annual.catch.limitDEIS@noaa.gov

Cc Cape Group <ccg@sierraclubmass.org> , newviv@adelphia.net , nelsonMASierra@aol.com

Bcc

Subject Comments on Annual Catch Limits DEIS

National guideline number 1 needs to define overfishing (adjustments in fishing mortality based on targets in the fishery management plans) and overfished stocks (adjustments in spawning stock biomass required to produce maximum sustainable yield levels)in terms of more realistic target baselines that will promote recovery of depleted stocks and ensure sustainable fishing in the future. Certainly the virgin stock biomass with no fishing is not a realistic SSB target, but a historical level should be chosen when the fishing stock of concern were much more abundant and occurred throughout their historic range (since stock range tends to contract when a population is reduced in size through density-dependent effects). The fishing mortality will also need to be reduced as we move towards an ecosystems approach to fishery (EAF) management (as recommended by the US and Pew Ocean Commissions) in order to allow more of the fish production to be utilized by the other components of the ocean ecosystem. This will probably require a fishing mortality target at less than MSY levels. It should be the job of the academic and state/federal fishery scientists to develop the Total Allowable Catch levels (TAC) and then the fishery management councils (FMCs) can decide how they wish to divide this quota amongst various sectors of the commercial industry and saltwater anglers (another recommendation from the Oceans Commissions).

As NOAA Fisheries makes the transition from single species management to EAF, they will need to engage with a wider range of stakeholders (animal rights activists, environmentalists,seafood consumers, recreational users of the ocean, etc.) than is served by the fishery management councils (commercial and recreational fishing interests). The transition to EAF will also require incorporating information on the impacts of habitat loss/degradation (by either fishing gear or non-fishing human activities) on fish production; changes in the bottom up forcing of the food chain that supports living marine resources (LMRs) as a result of climate change; effective reduction of bycatch of target and non-target species through the use of no take marine protected areas and conservation engineering; etc. A switch from use of a precautionary management approach to one based on the precautionary principle would place more onus on the harvesters to show that their activities don't diminish SSB and maintain fishing mortality at levels less than Fmsy. The fishing industry should also be asked to financially support some of the required research to support the management information needs required for EAF. The saltwater anglers should be required to obtain licenses to fish in federal jurisdictional waters and the permit fees should be increased for commercial fishermen/women (a permit fee that varies with fish abundance might encourage better stewardship). Finally since ecosystem regime shifts can occur due to excessive harvesting (top down effects) or climate-related changes in the ocean ecosystem (bottom-up effects),

some buffer should be incorporated in the FMP overfishing and overfished reference points to accomodate this possibility.

Even though some of the mandates in NOAA Fisheries national guidelines provide conflicting guidance on how to manage fisheries, number 1 on overfishing and overfished stocks should receive precedence over the others. The rationale behind this is that fishers are harvesting public resources and bycatch is negatively effecting natural trust resources, protected resources and the biodiversity of the ocean ecosystem. Hopefully NOAA Fisheries and the FMCs will exert better stewardship over these public resources as we move to EAF than the past single species management record. Past management has diminished the nation's wealth and caused hardship in coastal fishing communities, while creating excess fishing mortality and decreased SSB (a lose-lose outcome). Hopefully NOAA Fisheries will take this new opportunity to improve their management performance. The NOAA Administrator and NOAA Fisheries Director should be held accountable for the performance of our fisheries program in meeting National Guideline #1. Thanks for the opportunity to comment on this issue.

Billie Bates
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email: ccg.billie@sierraclubmass.org

From dkeifer@comcast.net

Sent Thursday, April 5, 2007 9:54 am

To annual.catch.limitDEIS@noaa.gov

Cc

Bcc

Subject MSA Scoping - NS1 Comments

Attachments 00166315.000[1].DOC 62K

Attached please find the
Magnuson Stevens Act Reauthorization Scoping Comments of the
Sierra Club National Marine Wildlife and Habitat Committee

for the Committee
David R. Keifer, Sr.
302-678-2712

Magnuson Stevens Act Reauthorization Scoping Comments

Sierra Club National Marine Wildlife and Habitat Committee

1 April 2007

GENERAL COMMENTS

The National Marine Fisheries Service (NMFS) is seeking comments on the process for developing regulations to implement the recently adopted reauthorization of the Magnuson-Stevens Fishery Management Act (MSA) in general and on the specific measures relative to National Standard 1 (NS1). The following are the comments of the National Marine Wildlife and Habitat Committee Marine Wildlife and Resources Committee of the Sierra Club.

The rulemaking should result in clear, strong rules that ensure catch levels are based on unbiased scientific advice, end overfishing, allow timely rebuilding of overfished stocks, and hold managers accountable. These new legal requirements are critical. They are necessary because too often councils do not set annual catch limits, and when they do, the levels have been set without regard to scientific advice and have resulted in overfishing, harming fish and fishermen alike. Accountability is also lacking and the new rules reflect the need to create accountability in fisheries management.

Developing an environmental impact statement ensures a thorough evaluation of the new rule and development of alternatives for decision makers and the public to consider. Most important, an environmental impact statement ensures formal opportunities for the public to review and comment on the alternatives and for NMFS to formally respond to those comments.

To the extent possible, numeric annual catch limits should be required for each federally managed stock in a fishery management plan. Without a yardstick, it is impossible to tell whether overfishing is occurring.

Annual catch levels should account for projected estimates for landings and discard mortality from all sectors. The overfishing level should account for all fishing mortality, including landings and discards. The definition of overfishing should be changed to indicate that overfishing occurs whenever the total catch – across sectors, including landings and discard mortality – exceeds the overfishing level. The catch level, whether expressed in pounds or total number of fish, must be in the same units as the overfishing level to allow for simple and straightforward monitoring between catch and the overfishing level.

The reauthorized MSA requires councils to develop annual catch limits for each managed fishery that may not exceed the recommendations of either its science and statistical committee or a peer review process. This will ensure that the resulting catch levels are grounded in the best science possible and are sufficiently precautionary to avoid overfish-

ing and promote economic and ecologic sustainability. No non-numeric catch levels should be permitted.

The new regulations should be clarified to ensure that scientific advisors have demonstrated scientific expertise in fisheries science, marine ecology, economics, or social science through advanced academic training and publication of peer-reviewed scientific literature. Councils should appoint members who do not have any direct financial interest, and are not employed by anyone with a direct financial interest, in any fishery. The peer review process should be clarified to include minimum qualifications of reviewers, ensure that reviewers have relevant experience, and that reviewers are independent and have no financial interest.

Future management success using annual catch limits depends on such limits being set sufficiently below the overfishing level to avoid exceeding the overfishing level. This is a common sense approach that should be clearly linked to data quality. The poorer the data, the greater the buffer is necessary.

NMFS' own technical guidance notes that setting catch levels for stock complexes, assemblages, or other groupings runs a high risk of allowing overfishing to occur on an individual stock within the assemblage. The goal should be to obtain adequate information to set annual catch levels for all marine fish stocks managed by the federal government.

The rulemaking should remove the mixed stock exception that is currently in NS 1 because such an exception is inconsistent with the law's mandate to prevent overfishing. The mixed stock exception encourages unsustainable catch levels for depleted stocks thereby facilitating perpetual overfishing. The NS 1 rules should prohibit overfishing on all fish stocks.

In any business, managers are held accountable for the company's health. Yet, in fishery management no one is held accountable when management actions result in overfishing and oftentimes the same practices are allowed to continue year after year. The new accountability measures should send a clear, strong message: do not allow overfishing to occur. If overfishing occurs, managers should have multiple tools available to correct it during the fishing season.

To enhance accountability of Councils, all votes on catch limits and rebuilding plans, as well as on fishery management plans and amendments, should be roll call votes to provide for accountability. This will also provide for a better record of abstentions for conflict of interest

The rule should not eliminate or modify the existing 10-year rebuilding requirement. Congress clearly considered and rejected changes to this requirement in the reauthorization process. The Congress also added language to overturn the federal court decision which allowed overfishing during a rebuilding plan. The success of this provision in restoring fish stocks and fishing opportunities was demonstrated in a recent *Science* article. The new rule should fortify the existing law's requirement to restore overfished stocks "as soon as

possible," specifically excluding increased catch of overfished stocks during rebuilding, for example.

One of the overarching recommendations of President Bush's Commission on Ocean Policy called for fisheries management to move toward a more ecosystem-based management approach. Such an approach would provide direct benefits to the ecosystem and create a better mechanism for addressing conflicts between socioeconomic and biological goals. The rule should take a first step toward this goal by clearly identifying management of prey fish populations, which form the base of the ocean food chain, as distinct and fundamentally different from standard fishery management. The rule should develop an alternative process to ensure the sustainability of these species that are critical to the health of ocean fish and wildlife.

SPECIFIC SCOPING COMMENTS

The role of the SSC and other peer review processes in setting ACLs and AMs

The Scientific and Statistical Committees (SSCs) and other peer review processes can be extremely useful in providing the best possible stock assessment and economic impact information to the Councils, but should not be seen as a substitute for the judgment of the Councils in actually setting Annual Catch Levels (ACLs).

The model established by the Fishery Conservation and Management Act (FCMA) and its successor reauthorizations is an appointed body (the Council) taking scientific input (from the SSC) and industry input (from the advisory committees) and generating the best possible fusion. If the policy - setting aspect of that mission is pushed back onto the SSC it merely puts the SSC members under the pressure that should be reserved for the Council members and could influence the scientific quality of the SSC's advice. Every effort should be made to assure the best possible quality of advice from the SSC and to assure that the Councils pay appropriate attention to that advice when setting ACLs.

Variability in data currently available for each stock (e.g., data rich, data poor, and stocks with data quality falling between data rich and data poor)

Specifications of Optimum Yield (OY), ACL, and related numbers must be made in light of the quality of available data, with an increased conservation bias with decreased data quality. However, there are few, if any, "data rich" stocks. Hence, specification setting must be done with an eye toward uncertainty, even if measuring the extent of uncertainty may not be feasible.

Overfishing Issues

NMFS posed a series of issues in the *Federal Register* notice that relate to questions of preventing overfishing, adjustment mechanisms should catch exceed target levels, etc. The very fact that these questions were raised is evidence that a full EIS must be done on the regulations that are to implement the new MSA language. Issues raised included:

- Setting ACLs for stocks with unknown status
- Circumstances in which a numerical ACL can not be set for a stock, and in such situations, recommendations for adequate and appropriate alternatives to setting a numerical ACL (e.g., prohibitions)
- Setting ACLs for stock complexes, stock assemblages, and similar stock groupings
- Variability in the accuracy of management approaches in achieving target fishing levels
- Setting a buffer between ACL and Overfishing Level (OFL) to prevent overfishing, and how to determine the size of the buffer needed
- Establishing the appropriate probability that an ACL will prevent overfishing for a stock
- Establishing recommendations for in season management authority and methods to be used as AMs to prevent overfishing
- Limiting the extent of overfishing, should it occur
- Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year
- Establishing AMs for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

The best possible management system would assure that fishing mortality was managed within a year so actual catch in that year does not exceed allowed levels. However, there must also be provision for adjustments in year two for overages in year one. The key point is that the monitoring and adjustment processes must be identified in advance in the fishery management plan and implementing regulations so that corrective actions may be taken without delay.

For purposes of these scoping comments, the critical point is that the above matters require great care in crafting the implementing regulations, so a full EIS process is needed to develop the regulations implementing the MSA reauthorization legislation.

COMMENTS ON PRELIMINARY ACL AND AM ALTERNATIVES

No action. Do not publish ACL and Annual Mortality (AM) guidelines.

“No action” is a mandatory EIS alternative and has no utility in the current case. Without regulations (“guidance”) the Councils could submit virtually anything and FMP approval would be more of a political process than ever.

Alternative 2. Develop ACL and AM guidelines that provide performance standards that ACLs and AMs must meet, but do not provide guidance on specific mechanisms.

The notion of performance standards assumes that standards can be set and compliance / success measured. This can work with such things as gasoline consumption by motor vehicles, because standards can be set, tests run, and results measured immediately. NMFS has already set the stage for failure of this notion for fisheries by raising the ques-

tion of data availability for fisheries matters (data poor species). The simple fact is measurements of success (if "success" could be defined) are virtually impossible in the near term, even if there were data rich species. How many year classes would need to recruit to a fishery for success of a particular strategy to be determined?

Alternative 3. Develop ACL and AM guidelines that provide performance standards that ACLs must meet, and develop ACL and AM guidelines that provide specific guidance on one or more mechanisms to implementing ACLs and AMs that NMFS considers to meet the statutory requirement and the standards for Secretarial approval.

The problem with this alternative is not only the measurement problems associated with Alternative 2, but the thought that the "specific guidance" on implementation mechanisms would directly lead to doing it NMFS' way for Secretarial approval. There would be no room for innovation and, more troubling, NMFS may not have answers for all fisheries. If NMFS had the answers, would they not have suggested or imposed them years ago? Hence, at best, the result would be delay while NMFS figured out the implementing mechanisms.

Proposed Alternative 4. Develop ACL and AM guidelines that provide performance standards that ACLs must meet, and develop ACL and AM examples that provide specific on one or more mechanisms to implementing ACLs and AMs that NMFS considers to meet the statutory requirement and the standards for Secretarial approval.

This is like Alternative 3 but changes what NMFS might approve from "guidance" to "examples", the "guidance" implies approvability criteria, while "example" is intended to imply suggestions. Hence, this alternative could be considered superior to Alternative 3 because it gives the Councils some freedom is devising strategies.

Additionally, the regulations must require that any deviation of OFL, ACL and/or AM from Maximum Sustainable Yield (MSY) be fully explained and justified. This would tie the whole system back to the basic biological benchmark of the MSA process.

Process Comments

The *Federal Register* notice introduces a new vocabulary and set of acronyms into the fishery management process. This gives rise to the question of how the processes engendered by the reauthorization legislation fit within the dogma of the MSA as it existed prior to the reauthorization. Is the new process parallel to the old, does it fit within, or does it replace anything? It is suggested that a first order of business, before formulating alternatives, would be to flow chart the process with the requirements instituted by the reauthorization integrated.

Some of these questions are identified in the "Issues for Developing Guidance for ACLs and AMs" section of the *FR* notice. However, unless there is a clear pathway integrating

the MSA with the reauthorization amendments, there is the possibility that a relationship might have been missed. The purpose of raising this basic question is to reduce the probability of successful appeal of an FMP rebuilding strategy later. In simple terms, the process is becoming more and more complicated with each reauthorization, and each complication, while introduced for the best purposes, also potentially creates a loophole to be exploited.

CONCLUSIONS

Given the time that passes between MSA reauthorizations, it is critical that the regulations implementing any reauthorization are a good as they can be. It is understood that NMFS is under a statutory time schedule to promulgate at least some of the regulations, but the best way to do that is within the context of a full EIS since it will allow fuller participation by all stakeholders as they are being developed rather than the possibility of delays generated by opposition to unilateral NMFS action.

Mark Millikin
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April 16, 2007

Re: Notice of Intent on National Standard 1 Guidelines

Dear Mr. Millikin,
We are pleased to submit the following in response to your February 14, 2007 announcement in the Federal Register asking for comments and policy advice on ways of setting Annual Catch Limits and creating Accountability Measures to implement the new provisions of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

Introduction

We are happy to see the progressive tone set by the National Marine Fisheries Service (NMFS) in this Notice of Intent and applaud your common sense reading, so far, of what the new law requires in terms of ending overfishing, preventing future overfishing, setting of annual catch limits with precautionary buffers, and introduction of systematic accountability measures into the management system. We are pleased to see that the Agency appears to be leaning towards preparing a full Environmental Impact Statement rather than an Environmental Analysis because we feel that is a more sustainable position.

We support the choice of Alternative 3 for preparation of revisions to National Standard 1(NS1), that is developing specific guidance and performance standards for Annual Catch Limits and Accountability Methods, because we feel that without very specific guidance the regional fishery management councils may not choose the most effective techniques and might apply principles of good management inconsistently across fish stocks and councils. We believe that achieving management consistency across the diverse regional councils, fish stocks, and marine environments requires that the Agency issue specific guidance to the councils rather than relying on more generalized performance standards.

The comments included in this letter focus on Accountability Measures rather than setting Annual Catch Limits. Other conservation groups will focus in detail on setting Annual Catch Limits with appropriate levels of precautionary buffers to ensure that overfishing does not occur even in data poor situations such as those with scant data on the stock or unreliable data on recreational fishing effort.

However, we do want to emphasize that MSRA clearly states that NMFS and the regional councils must manage fisheries so that overfishing does not occur. MSRA does not say that a little overfishing can occur in data poor situations. It does not say that overfishing can occur because there is always some margin of error in model estimates, or that overfishing is OK every few years, or in data poor situations. The only way to effectively prevent overfishing in each of these situations is to build a buffer or margin of error into the Annual Catch Limit that prevents the sector from ever going over the Overfishing Level.

We focus on Accountability Measures in these comments because we believe that strong, clear, consistently applied accountability measures are key to a well functioning fishery management system.

General Comments on Notice of Intent

We support the apparent intention of NMFS to implement the new requirements of MSRA and modify NS1 Guidance to accomplish:

- Science based annual catch limits established by the independent Science and Statistical Committees.
- An end to overfishing by setting catch limits with precautionary buffers that are larger or smaller depending on: variability, quality and timeliness of the biological and catch data, biology of the fish stock (e.g. age to sexual maturity), percentage of unfished biomass and spawning biomass remaining, and other factors. Use of appropriate buffers will keep catch limits consistently and appropriately below the level of overfishing so as to ensure with a high percentage of certainty that overfished stocks recover, healthy stocks do not drop into overfishing territory, and enough forage fish are left in the ocean to support prey species
- Strong, clear, equitable, and consistent accountability measures that keep stocks out of trouble if annual catch limits are exceeded.
- Strong, independent, technically proficient Science and Statistical Committees (SSC's) for each regional management council which have the resources and data to make science-based decisions on a variety of fishery management rates and limits.

Addressing General Issues of Accountability Measures

Regulatory regimes that rely on large amounts of self-reporting and self-regulation work best when the regulated community believes that the regulatory regime is: 1) equitable, 2) reasonable, and 3) consistently applied. Accountability measures must also reflect these three principles. From the regulated community's perspective, measures must feel equitable, be reasonable, and be applied consistently. From the regulator's point of view, accountability measures should be: 1) proven effective, 2) have a high probability of success in the given circumstance, 3) be selected in a process that includes public input, 4) be easy to communicate to the regulated community, and 5) be easy to verify compliance when invoked.

Accountability measures do not exist in a vacuum. They require an **accountability system** to be effective. A good accountability system includes:

- Accurate data on total catch (i.e., catch and bycatch including regulatory and economic discards) from all sectors: commercial, charter, and recreational.
- Some reasonable amount of independent monitoring of catch to ensure truthfulness in reporting.

- Timely reporting so that fishery managers can institute changes quickly to eliminate large undershooting or overshooting of catch limits.
- Measures which are tailored to the fishery (e.g., biology, quality of the data, state of the stock, ecosystem variability, etc.) and the fishermen themselves.
- A precautionary or conservative approach which explicitly recognizes the uncertainty of marine ecosystems and favors concrete accountability measures with a high confidence of rebuilding overfished stocks and keeping others healthy.
- Accountability for the managers of the system as well, meaning they pay some administrative or other 'price' if they do a poor job of management. Managerial accountability is a standard practice in business; we see no reason why it should not be used in fisheries management.

Accurate and Timely Data on Catch is the Foundation of All Effective Systems
Accurate, timely reporting of total catch from all sectors is a key building block. Without good catch data, no system of accountability however well thought out will work well. We recommend by 2010 when the first new Fishery Management Plans go into effect that:

- Commercial catch data should be reported electronically within 24 hours of landing in every fishery unless there is a 'poverty' situation where fishermen do not have access to the internet in which case telephone reporting should be required.
- Charter boat catch data should be reported electronically within 24 hours of landing in every fishery unless there is a 'poverty' situation where fishermen do not have access to the internet in which case telephone reporting should be required. We see no reason to treat charter boat landings any differently than commercial landings as fish are caught for economic reasons. Captains and mates are typically available to count and categorize fish and discards. This is a business.
- Recreational fishermen should be licensed at a state or federal level and they should be required to report catch unless there is a 'poverty' situation where fishermen do not have access to the internet in which case mail in or telephone reporting should be required. To ease recreational fishermen into reporting, we recommend that NMFS start by requiring reporting only for fish under fishery management plans, not for healthy fish stocks.
- MSRA Section 401(g) requires a federal marine recreation and charter registration where no state program exists and an improved MRFSS program by 1/1/09 unless the Secretary finds a better way to achieve the goal of improving recreational data more efficiently and effectively. We believe the 'most efficient and effective way' for recreational fishermen to report catches is by internet, phone or mail like everyone else will. Telephone surveys completed months later paired with dock intercepts are by their very nature less accurate.
- The regional councils (and NMFS) must invest in simple on-line reporting systems to capture data from commercial, charter and recreational sectors and invest in systems to aggregate the data for timely analysis of each sector's catch versus annual catch limits by sector.

Until better data is available for recreational catch in fisheries where this sector has a significant impact, for the purposes of calculating overages and underages for accountability measures, it may be advisable to use a rolling average of catch values for say 3 years rather than an annual value. Using a rolling average also enables faster feedback on accountability measures since you don't have to wait until well after the season ends and MRFFS data are available to adjust a multi-year Annual Catch Limit. Whether the two or three year averaging process turns out to be an interim tehcnique employed until the recreational data gets better in 2009 and thereafter, or whether this technique should be used even when more accurate data are available is an open question.

We don't believe that recreational fishermen should be arbitrarily 'punished' for small overages or unanticipated fluctuations in stock size, environmental conditions, the number of fishermen fishing, or their effort. But we do believe that Annual Catch Limits and Accountability Methods do need to be used to effectively control recreational catch to keep fish mortality well under the limit for overfishing. In the same way that fish populations are dynamic over time, we must ensure that recreational fishing catch adapts to help keep the stock and rest of ecosystem healthy.

Aggregated fishing data should be available on timely basis to the public so that the process of accounting and comparison with Annual Catch Limits is as transparent as possible. This should in turn increase public confidence in the system.

Timely reporting is the key to enabling inseason adjustments in fishing, or other accountability measures, wherever possible.

Managerial Accountability

If fishermen are asked to be responsible for staying within Annual Catch Limits and pay some price if they exceed those limits, would it be equitable for those managing the whole system to not pay some price when they badly manage a stock over a long period of time and have many chances to improve their management? We think not.

Accountability measures for fishery managers, primarily the regional management councils, should potentially include the loss of control over a fishery. So, if a fishery is badly managed over an extended period and exogenous environmental factors like pollution are not to blame, we believe that NMFS should reclaim responsibility for management of the fishery. Specifically, NMFS would prepare the draft Fishery Management Plan and EIS and the council would be able to comment on them just like any other member of the public. If a regional fishery management council's administrative load decreased through loss of management plan authority, it would correspondingly lose budget and staff allocated by NMFS.

Specific Notice of Intent Questions and Answers

1. Establishing recommendations for inseason management authority and methods to be used as AM's to prevent overfishing

We strongly believe that there is a premium on having inseason adjustments or accountability measures for as many commercial and charter fisheries as possible. This will minimize the tendency of fisheries to undershoot or overshoot annual catch limits and make the likely corrective actions much less large or significant in size and therefore less draconian if there is an overage situation.

We acknowledge that inseason measures for recreational fisheries are harder to carry off because of communication problems with thousands or hundreds of thousands of fishermen. On the other hand, an important advantage of requiring marine fishing licenses for recreational fishermen is the ability to collect email addresses for them and communicate changes in rules during a season.

We strongly favor concrete Accountability Measures that limit actual total catch (including bycatch and discards) in very predictable ways, not effort or input controls. Limitations on effort or input are not workable unless catch data is real time, accurate, and the imposition of further controls can be swift if the effort controls are not working. Concrete Accountability Measures designed to limit catch in a more direct fashion include things like:

- Deduction in next year's Annual Catch Limit
- Area closures
- Spreading fishing effort out over time or space
- Gear restrictions or changes
- Bycatch device or usage changes
- Discard rules
- Fishing season length adjustments or closures
- Size and bag limits for recreational fishermen and charter boats
- Trip limits (although these are not desirable if they encourage dumping of unintended catch that is within the ACL but over the trip limit)

Use of different accountability measures should be tailored to the fishery, but obviously managers would want to use measures whose outcomes are more predictable or where we are more confident in the effect for situations where the ACL has been exceeded more grossly or where the fish stock is least healthy. Stronger, more predictable measures mitigate the risk that the measure in itself doesn't function as planned.

2. Limiting the extent of overfishing, should it occur

The best way to limit overfishing is to have Annual Catch Limits with healthy buffers that separate the catch limit from the level of overfishing. Should overfishing be occurring, the best way to limit it is with inseason management measures if catch data are timely enough to allow for that. If catch data are not collected and aggregated on a timely enough basis, then measures must be taken between seasons. Accountability Measures should then be imposed between seasons whenever material overfishing occurs. Accountability Measures should include deducting for overfishing overages.

3. Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in the previous year

This is perhaps obvious, but underages and overages should be calculated based on exceeding or going under the Annual Catch Limit, not from the Overfishing Limit or some other benchmark.

Calculating the size of overage to be used as the penalty or compensatory reduction should be based on single season of numbers where catch data is accurate and perhaps a two or three year average where science and statistics indicate the catch data is probably inaccurate. This may be the situation for the next several years in the recreational sector until recreational fishing data is improved.

Accountability measures for overages that occur when one sector exceeds its allowable catch should be imposed as quickly as the data permits. Tight, fast feedback loops such as inseason adjustments listed above are much better than loose, slow feedback loops for fishery systems. Therefore, wherever possible, accountability for catching too many fish should happen in the same season. If this is not practical, debits or penalties for too many fish caught should be

imposed in the following fishing season. Unless there is something unique about the biology of the fish or functioning of the ecosystem or very different status information from a new stock assessment is available, such penalties should occur in the next season and not be stretched over a number of seasons.

Situations where fewer fish are caught than the Annual Catch Limit allows are called underages. Whether sectors should get credit or more fish the next season because of an underage this season, is a very controversial idea. If we impose penalties for overages, equity would seem to demand that we grant credits for underages. The problem is that the marine environment is so dynamic and many fish stocks are in fragile health even though they are not designated as overfished or subjected to overfishing. Also, to date the whole fishery management system has been biased towards optimistically large catch limits. Therefore, granting credit for underages is a risky business from the point of view of ecosystem health.

We recommend the following rules for handling underages:

- In fisheries under rebuilding plans or designated as subjected to overfishing by NMFS, there should be no credit given in the following year or any later year when any sector goes under its Annual Catch Limit. The extra fish 'left' in the water will speed rebuilding progress or lower the rate of overfishing. Both objectives are important enough to outweigh some sense of equity that the fishermen deserve a reward for undershooting their Annual Catch Limit.

- For data poor fisheries that are not officially overfished or subjected to overfishing where there is an Annual Catch Limit but very poor data on stock status, we suggest that there not be any underage credits. The principle used here is that if we don't have good information about stock status, then all management decisions should be very precautionary, including decisions about paybacks or credits.

- This leaves us to consider fisheries that are not overfished or subjected to overfishing where the fishery is data rich. We believe that a precautionary approach to this situation would require that underage siturations not be credited with more fish the next year. We believe that the appropriate and conservative approach is to wait until the next stock assessment and revise the Annual Catch Limit upward if the stock is in better shape than it might otherwise have been. It is true that fishermen might have to wait two or three years to capture the economic benefit of their underage, but dynamic ecosystems require precautionary approaches to be managed well.

4. Establishing AM's for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock.

One way to interpret this question is that you want to know how to prevent overfishing if one sector (e.g., commercial versus recreational) of a fishery goes over its Annual Catch Limit but the others do not. We do not believe in collective punishment. The sector that goes over its particular Annual Catch Limit should be the sector that has its limit reduced the following year.

If the question refers to the spatial-temporal distribution of a fish stock, that is, different sectors of a stock that occur in different places or times each have individual Annual Catch Limits, the answer is different. We would suggest that stock sub-area boundaries be drawn, Annual Catch Limits for fishing inside those areas be established, and Accountability Measures established for each sub-area.. This would prevent depleting a localized stock of

the fish in a sub-area at a time when the overall stock stays under the aggregate catch limit for the stock and looks healthy at an aggregate level.

Conclusion

We sincerely appreciate the chance to comment on your questions and proposals and look forward to participating in your attempt to craft the best possible National Standard 1 regulations. It is now incumbent on all of us- regulators, environmental groups, and fishermen- who want healthier oceans and fish to put MSRA to work on the water, in fishing boats, at regional fishery management council meetings, and at NOAA in Silver Spring.

Thank you,

Michael Gravitz,
Oceans Advocate

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Accountability Measures for Fishery Conservation: Comments to National Marine Fisheries Service NS1 Scoping Hearing in Silver Spring, MD

March 9, 2007

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Statement of Michael Gravitz, Oceans Advocate, US PIRG

Accountability Measures for Fishery Conservation: Comments to National Marine Fisheries Service NS1 Scoping Hearing in Silver Spring, MD March 9, 2007

Introduction

- Michael Gravitz and US PIRG. We are a member of MFCN but this is not MFCN testimony.
- Thank you for holding this scoping hearing and allowing interested parties the ability to comment.
- We intend to submit more formal comments by the April 17th deadline.

Preliminary Remarks

- We are glad to see the progressive tone set by NMFS in this Notice of Intent. And we applaud the common sense reading, so far, of what the new law requires in terms of ending overfishing, preventing future overfishing, setting of annual catch limits with buffers, and introduction of systematic accountability measures into the management system.
- We are pleased to see that the Agency appears to be leaning towards preparing a full EIS rather than EA because we feel that is a more sustainable position.
- We support Alternative 3 for the Notice of Intent, that is the Agency will develop specific ACL and AM guidelines in addition to generalized performance standards that ACL's and AM's must meet. We believe that achieving management consistency across the diverse regional councils, fish stocks, and marine environments requires that the Agency issue specific guidance to the councils rather than relying on more generalized performance standards.
- We strongly support buffers in setting catch limits using the precautionary principle which are larger or smaller depending on: variability and quality and timeliness of the biological and catch data, biology of the fish stock (e.g. age to sexual maturity), percentage of unfished biomass and spawning biomass the stock is at, and other factors.
- We look forward to working in a constructive fashion with NMFS to ensure that this excellent start on modifying NS1 ends with regulations that are equally thoughtful and conservation minded.

General Comments on the Notice of Intent

We support the apparent intention of NMFS to follow the new requirements of MSRA 2006 and modify NS1 to accomplish:

- Science based annual catch limits established by the independent Science and Statistical Committees that incorporate a precautionary approach or buffers to keep catch limits appropriately below the level of overfishing <u>and</u> below optimum yield so as to ensure with a high percentage of certainty that overfished stocks recover,

healthy stocks do not drop into overfishing territory, and enough forage fish are left in the ocean to support prey species.

- Strong, clear, equitable, and consistent accountability measures that keep stocks out of trouble if annual catch limits are exceeded and conversely potentially reward fisheries in some cases where annual catches are under the limits.
- Strong, independent, technically proficient Science and Statistical Committees (SSC's) for each regional management council which have the resources and data to make science-based decisions on a variety of fishery management rates and limits.

Addressing the Specific Issue of Accountability Measures

Regulatory regimes that rely on large amounts of self-reporting and self-regulation work best when the regulated community believes that the regulatory regime is equitable, reasonable, and consistently applied. Accountability measures must also reflect these principles.

Accountability measures do not exist in a vacuum. They require an accountability '**system**' to be effective. A good accountability system includes:

- Accurate data on total catch (catch and bycatch or discards) from all sectors: commercial, charter, and recreational.
- Some reasonable amount of independent monitoring of catch to ensure truthfulness in reporting.
- Timely reporting so that fishery managers can institute changes quickly to eliminate large undershooting or overshooting of catch limits.
- Measures which are tailored to the fishery (e.g., biology, quality of the data, state of the stock, ecosystem variability, etc.) and the fishermen themselves.
- A precautionary or conservative approach which explicitly recognizes the uncertainty of marine ecosystems and environments and favors plans and catch limits with a high confidence of rebuilding overfished stocks and keeping others healthy.

Accurate, timely reporting of total catch from all sectors is a key building block. Without good catch data, no system of accountability will work well. We recommend by 2010 that:

- Commercial catch data should be reported electronically within 24 hours of landing in every fishery unless there is a 'poverty' situation where fishermen do not have access to the internet in which case telephone reporting should be required
- Charter boat catch data should be reported electronically within 24 hours of landing in every fishery unless there is a 'poverty' situation where fishermen do not have access to the internet in which case telephone reporting should be required
- Recreational fishermen be licensed at a state or federal level and they be required to report catch unless there is a 'poverty' situation where fishermen do not have access to the internet in which case mail in or telephone reporting should be required.
- The regional councils (and NMFS) must invest in simple on-line reporting systems to capture data from commercial, charter and recreational sectors and invest in systems to aggregate the data for timely analysis of each sector's catch versus annual catch limits by sector.

- Until better data is available for recreational fishing catch in fisheries where this sector is thought or known to have a significant impact, for the purposes of calculating overages and underages it may be advisable to use a rolling average of catch values for say 3 years rather than an annual value. Using a rolling average also enables faster feedback on accountability measures since you don't have to wait until well after the season ends and MRFFS data are available.
- Aggregated data should be available on timely basis to the public so that the process of accounting and comparison with annual catch limits is as transparent as possible which will increase public confidence in the system.
- Timely reporting is the key to enabling in season adjustments in fishing, or accountability measures, wherever possible.

In Season vs. Between Season Accountability Measures
We strongly believe that there is a premium on having in season adjustments or accountability measures for as many commercial and charter fisheries as possible. This will minimize the tendency of fisheries to undershoot or overshoot annual catch limits and make the likely corrective actions much less large/significant in size and therefore less draconian if there is an overage situation.

We acknowledge that in season measures for recreational fisheries are harder to bring off because of communication problems with thousands or hundreds of thousands of fishermen. On the other hand, an important advantage of requiring marine fishing licenses for recreational fishermen is the ability to collect email addresses for them and communicate changes in rules during a season.

Accounting for Annual Catch Limit (ACL) Underages or Overages
This is perhaps obvious, but underages and overages should be calculated from the Annual Catch Limit not from the overfishing limit or some other benchmark.

For underages, that is where a sector's total catch is lower than its ACL:
- Our initial thinking is that in fisheries under rebuilding plans or designated as subjected to overfishing by NMFS, there should be no credit given in the following year or any later year when any sector goes under its ACL limit. The extra fish 'left' in the water will speed rebuilding progress or lower the rate of overfishing. Both objectives are important enough to outweigh some sense of equity that the fishermen deserve a reward for undershooting their ACL.
- For fisheries that are <u>not</u> overfished or subjected to overfishing whenever a sector comes under its ACL limit for the season, we believe that the sector may ask the Science and Statistical Committee (SSC) in the region to examine if and how much credit it should get for the next season in terms of additional ACL. The SSC should examine the situation, and if it can make a finding that releasing incremental ACL to that sector for the following season will cause the fishery no damage, then the sector should be awarded additional quota. The burden of proof should be on proving 'no damage' caused by the incremental ACL.

- Rolling an underage forward past the next year and/or aggregating a number of underages year after year and using them in some outyear should not be an option. It is simply too potentially damaging to fish stocks.
- For data poor fisheries where there is an ACL but very poor data on stock status, we suggest that there not be any underage/overage accounting and that the buffers used in establishing the ACL's be unusually generous.
- Historically, there have been a few fisheries where one sector's underage (eg., Pacific ocean salmon in commercial sector) has sometimes been transferred in season or just post season to another sector (e.g., recreational fishermen in the rivers). Again, if the SSC determines that this causes no damage to the fishery, then this accountability method seems fair. In other cases, we can imagine that reallocating one sector's underages to another sector would not be appropriate.

Accountability measures for overages that occur when one sector exceeds its allowable catch should be done as quickly as the data permits:

- Tight, fast feedback loops such as in season adjustments are much better than loose, slow feedback loops for fishery systems. Therefore, wherever possible, accountability for catching too many fish should happen in the same season. If this is not practical, debits or penalties for too many fish caught should be imposed in the following fishing season.
- Unless there is something unique about the biology of the fish or functioning of the ecosystem or new and very different status information from a new stock assessment, such penalties should occur in the next season and not be stretched over a number of seasons.

Types of Accountability Measures

We strongly favor concrete accountability measures that limit actual total catch in very predictable ways not effort or input controls. Limitations on effort or input are not workable unless catch data is real time and accurate and feedback to impose further controls can be swift if the effort controls are not working. Concrete accountability measures designed to limit catch in a more direct fashion include things like:

- Deduction in next year's ACL
- Area closures
- Gear restrictions or changes
- Fishing season length adjustments or closures
- Bycatch rules
- Size and bag limits for recreational fishermen and charter boats
- Trip limits are not desirable if they encourage dumping of unintended catch that is within the ACL but over the trip limit

Use of different accountability measures should be tailored to the fishery, but obviously managers would want to use measures whose outcomes are more predictable or where we are more confident in the effect for situations where the ACL has been exceeded more grossly or where the fish stock is least healthy. Stronger, more predictable measures mitigate the risk that the measure in itself doesn't function as planned.

Human Accountability Systems

Another type of accountability system and set of measures which can be quite effective at regulating fishing behavior and achieving ACL's is one set up by a group of fishermen who use similar gear types, target the same fish stock, and live near each other. These community based or cooperative based accountability systems rely on formal agreements between fishermen and informal social norms to enforce good behavior. The systems require accurate, timely reporting and a collective will to achieve some specified goal in the fishery such as sustainability or preserving family fisheries or some such. Successful examples of such fisheries include: the Cape Cod Commercial Hook Fishermen's Association and several Community Quota Entities in Alaska.

Given a specified sector ACL, the group decides among its members who, how, and when to catch the quota. With timely, accurate reporting and group enforcement of its own rules, the human accountability system requires less regulatory effort from fishery managers to control.

APPENDIX G6: All letters and e-mails from government agencies and representatives

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Paul J. Diodati
Director

April 17, 2007

Mr. Mark Millikin
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Silver Spring, Maryland 20910

Dear Mr. Millikin:

We offer the following "scoping" comments on NMFS' proposed "guidance" on development and implementation of MSRA new requirements to end and prevent overfishing. We had anticipated a more balanced NMFS approach to revising "guidance," i.e., instead of a piecemeal approach disconnecting one National Standard from the next (e.g., NS 1 from 8), we expected an approach recognizing that National Standard considerations overlap and making changes in "guidance" for one without doing so for the others risks ignoring how one National Standard affects another.

We are influenced by our knowing that the term "guidance" is somewhat of a misnomer. Only with great difficulty can Councils deviate from "guidance," even though it's not law. For all practical purposes, National Standard "guidance" has no movable boundaries or flexibility and is more akin to a set of strictures.

Our preference is for true guidelines describing the large arena in which we can move and work, not the narrow yard-lines between which we must be confined. This is especially important for the Commonwealth of Massachusetts and other states expected to support federal management even when we disagree with the federal management approaches and have concluded that states' interests and concerns have been given little weight in the decision-making process. It appears to us that your MSRA "guidance" will lead to those sorts of management approaches.

We're also influenced by MSRA changes that appear to be almost entirely based on dealing with overfishing and with "fishery" or "fisheries." We suggest now is the time for NMFS to broaden the scope of its understanding of these terms (defined in MSRA) and how they comport with the mixed-stock fishery(ies) exception described in current guidelines.

This exception was a wise addition to National Standard 1, although it has not been applied as yet. There's no mistaking the mixed-stock nature of the New England groundfish fishery. For the most part the fishery is a "mixed bag" greatly complicating and adding to the complexity of Council groundfish management approaches. Magnuson-Stevens' definition of "fishery" fits well with our understanding of groundfish

catches throughout New England, especially catches by trawlers and gillnetters – the primary groundfish gear types.

Since the MSRA emphasis is on overfishing, we recommend guidelines be revised to allow councils to manage with an emphasis on fishing mortality targets – not biomass targets that generally are theoretical, based on data-poor science, or index-based and derived from evolving and potentially incomparable bottom trawl surveys (e.g., Albatross vs. Bigelow surveys and U.S. vs. Canadian Georges Bank surveys). SSCs can provide advice regarding targets for stocks or mixed-stock complexes, but achieving those targets according to rigid timetables thereby potentially crippling councils and the fishing industry obliged to reach those targets, should not be required in all instances. Some targets may be unrealistic and unreachable due to reasons beyond the councils' control (e.g., unexpected, prolonged below average or poor recruitment created by environmental or some indeterminate ecosystem factor).

This approach will be especially desirable when dealing with Canada and Georges Bank groundfish management. We emphasize this consideration. If the U.S. continues its current approach as part of its "understanding" with Canada, U.S. fishermen potentially will be closed out of Georges Bank groundfish fisheries due to our falling behind schedule for achieving very high biomass targets (e.g., Georges Bank cod). Canada will keep fishing because it is not ruled by U.S. biomass targets; fishing mortality targets dictate how the Canadians deal with their negotiations with the U.S., and Canada may refuse to accept or cooperate with NMFS MRSA "guidelines." States' and industry support for the "understanding" will wane or end if our "rules of engagement" unfairly disadvantage the U.S. in a way contrary to the "understanding." We suspect the U.S. might be conciliatory and give Canada flexibility and latitude to the detriment of U.S. interests.

Of course, we understand that NMFS simply cannot divorce itself from biomass considerations. Nevertheless, Magnuson-Stevens does define "overfishing" and "overfished" in the same way: "a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis." Note the sole reference to fishing mortality and use of "fishery," – not stock(s). We hope this will provide you with the means to better deal with the reality of fisheries management – not all stocks, especially in a mixed stock fishery can rebuild to high biomass targets. Ecosystem considerations are ignored when we try to do so.

Since NMFS favors ecosystem management, we encourage you not to close the door on this better way of managing fisheries in an ecosystem context. As it stands now, your proposed "guidelines" will make creative and effective ecosystem-based management very difficult, if not impossible. This will run counter to the direction councils are headed at NMFS' urging.

Knowing when a stock(s) is overfished obviously is still important. We don't and cannot downplay this element of fisheries management; however, we do want to avoid ratcheting down fishing mortality targets every year to extremely low and unrealistic levels to "force" some stocks to rebuild to hypothetical biomass targets by some required time.

Our state-federal, recent experience with fluke has been very instructive. Extending the summer flounder rebuilding timeline by a few years appears to have been the primary motivation for last year's MSRA. These few years may not be enough to

prevent even further dramatic cuts in catch if rebuilding doesn't proceed as "planned," i.e., recruitment fails to live up to expectations for reasons unrelated to fishing.

Your proposed rule hints at your desire to continue status quo, i.e., fluke-like management scenarios and tribulations, by stressing "more rapid and more certain rebuilding" the more that F is reduced below MFMT, the maximum fishing mortality threshold." Of course, the lower we set F, the greater the chance we rebuild at a faster pace. But at what cost? This approach neglects necessary consideration of socioeconomic impacts and slights National Standards 1 and 8.

We ask NMFS to reflect on its recent experience with fluke rebuilding and Congress' influence through MSRA to prevent immediate, adverse socioeconomic impacts on commercial and recreational fluke recreational fishermen. Congress did not amend the Magnuson Act to force a quick return to management mandates causing socioeconomic impacts the MSRA temporarily addressed.

We now offer comments tied to the specific National Standard 1 scoping questions you have asked.

Role of SSC and other peer review processes in setting ACLs and AMs

MSRA appears to have established part of this role, i.e., "recommendations" are made by the SSC or the peer review process for setting annual catch limits (ACLs) for "managed fisheries." Councils "may not exceed the fishing level recommendations." However, proposed NS 1 guidelines potentially and likely will oblige councils to go far beyond what is necessary to prevent or reduce overfishing, i.e., NMFS requirement that "buffers" be established, i.e., set levels below, perhaps far below, overfishing levels (OFLs) – the MFMTs (maximum fishing mortality thresholds). MFMTs are what define overfishing according to current NS guidelines. It must be clear in revised guidelines that the SSC and peer review recommendations refer to OFLs and not ACLs.

NMFS proposed guidance appears to tweak MSRA terminology so SSCs and peer reviews will dictate the amount of buffer, i.e., determine ACLs, and not OFLs. It was not the intent of Congress to force councils to cut catch more than that required to deal with overfishing concerns (i.e., OFLs in NMFS terminology). Labeling MSRA-required ACLs as NMFS' OFLs, to be reduced by some amount of catch thereby creating even lower ACLs than mandated by Congress, is a NMFS imposition of extra precautionary management potentially to the disregard of social and economic considerations. Councils will lose much if not all of their abilities to factor those considerations into fisheries management decisions. State fisheries management agencies will be seriously disadvantaged.

SSCs and peer review certainly can and should provide details of their analyses and review regarding what levels of catch correspond to different levels of fishing mortality. Councils then can use that information to make their own informed judgments as to what ACLs should be set, i.e., to what extent should allowable catch be reduced below catch corresponding to MFMT.

Furthermore, it is the councils' responsibility to set accountability measures (AMs) – not the SSC or through peer review. It's notable that in the NOAA formal presentation given to the council, examples of AMs are in-season fishery closure if the target catch limit has been reached or overage payback the next fishing year. These examples are not very creative and certainly don't require SSC or peer review

involvement. They are straightforward, standard approaches for dealing with fisheries managed with hard TACs.

We note that in the same presentation NMFS stated AMs must be established for "each fishery/stock." Perhaps now is the time for the councils and NMFS to be innovative and to consider Congress's focus on fishery(ies), not on stocks. For example, throughout the MSRA there are many references to "fishery," such as: "The term 'limited access system' means a system that limits participation in a fishery..." Also, the councils must "develop annual catch limits for each of its managed fisheries..." There is no reference to stock-by-stock catch limits; therefore, we interpret this to mean that for a mixed stock fishery, such as for groundfish, there should and can be some flexibility with catch-setting to enable, for example, use of the mixed stock exception to better ensure the fishing industry isn't forced to lose significant optimum yields from "healthy" stocks.

We suspect NMFS intends to rid itself of the mixed stock exception. We strongly oppose that initiative, if indeed it is NMFS' intent. Our suspicion is based on January 31 correspondence between the New England Council's chairman and Bill Hogarth. Dr. Hogarth noted that the reauthorization requirements specified that "beginning in July 12, 2009, any fishery (our emphasis) newly determined to be overfished, must have a plan in effect to end overfishing two years after the date that NMFS notifies a regional management council that a fishery is overfished. Given the new requirements under the 2006 Magnuson-Stevens Act, I recommend that you not consider the use of the mixed stock exception..." We disagree with Dr. Hogarth's assumption that the MSRA explicitly or implicitly requires the exception's removal. We believe it is critical for NMFS to keep the exception, and then use it, thereby enabling other National Standards to be met, e.g. NS 1 and 8.

Regarding peer review, we caution NMFS to heed the advice of scientists, including its own, regarding external peer review. Refer to the 2006 published paper, "The Center for Independent Experts: The National External Peer Review Program of NOAA's National Marine Fisheries Service (Fisheries 31:590-600). This peer review process needs to be improved before councils are obliged to rely on it entirely and accept "recommendations" that in reality will become dictates due to the MSRA requirements.

The authors of the aforementioned paper noted that the CIE helped "improve the regional stock assessment process and reduced contentious challenges to the agency's science." However, important improvements are needed such as there is "no formal mechanism for obtaining feedback from NOAA Fisheries on the quality or relevance of the reviews," and "quality assurance for the reviewers and the review process need attention." We refer you to that important paper for more details.

Relationship between ACL and OY

This is an important relationship to discuss because NMFS has indicated that before the end of 2007 NMFS will "review each Council's current provisions for ACLs and AMs and recommend any revisions it deems are appropriate." Then NMFS indicates that FMPs without ACLs and AMs "consistent with the MSRA requirement and revised NS1 guidelines" will have to be amended by relevant statutory guidelines.

These statements are very suggestive because they seem to indicate that NMFS will "recommend" ACLs, and even AMs, before SSC or peer review involvement.

Granted, the SSCs' responsibilities have become Herculean as a consequence of the MSRA. Time will be short.

Nevertheless, NMFS or Plan Development Teams should neither determine ACLs (especially AMs) nor performance standards beforehand. All this important work on ACLs must be left to the SSCs and/or peer review. Council and SSC options will be foreclosed and restricted to those provided de facto through NMFS performance standards.

Frankly, the real issue is whether it's appropriate to set "guidelines" that oblige Councils to set catch levels below OFLs and how large should those "buffers" be. Optimum yield still will be as described in Magnuson-Stevens, and for an overfished fishery, provides for rebuilding "to a level consistent with producing the maximum sustainable yield in such fishery." Notwithstanding our stance that MSY values are theoretical and can change dramatically with changing environmental conditions or other ecological factors, we see in these instances of having to rebuild an overfished fishery that OY should equal catch corresponding to some fishing level less than OFL, i.e., $F_{rebuild}$. We suppose that in these cases, ACL would equal catch at $F_{rebuild}$.

Revision of existing overfishing definitions to include OFL

This is unclear. OFL is not a MSRA-specific term. NMFS has introduced this acronym, even though the concept seems self-explanatory and appears to be $F_{threshold}$.

You say OFLs must be established because they are "essential for developing accountability measures and monitoring ACL performance." We disagree; they are not essential. As noted above, NMFS is proposing to add more layers of precaution through the setting of OFLs. As we suggested at the scoping hearing held in Mystic, Connecticut, it appears NMFS is using MSRA to formally implement its precautionary approach for fishery management, an approach that will drive annual mortality targets to levels, even below that assumed for natural mortality for many stocks. This was not the intent of Congress.

Variability in data currently available for each stock (data rich...data poor)

Your question is not clearly phrased; however, we suspect you're asking how councils should manage a fishery when stocks that comprise a fishery have a mix of data-poor and data-rich situations, as well as situations in between. This question should rise to the top of the list. It already has prompted NMFS to convene a workshop to develop advice as to how this question can be answered.

This issue is fraught with difficulty – perhaps even peril – for the fishing industry and managers. If a fishery is "mixed-stock," such as with New England groundfish, and some stocks in the mix are data-poor thereby potentially dictating very precautionary measures for those stocks (one possible workshop recommendation), yields from the mix of stocks that are not overfished and for which overfishing is not occurring will be sacrificed. For this reason the mixed stock exception must be maintained and its use made easier; otherwise, management approaches for dealing with data poor stocks – and there will be many stocks classified in this manner – will be devastating for mixed-stock fisheries, e.g., New England groundfish. Consider that: (1) with the Bigelow replacing the Albatross in NEFSC bottom trawl surveys; (2) with a new net design being used in future Bigelow surveys; and (3) with little time for both vessels to perform required

comparative tows to develop species- and stock-specific conversion factors to preserve use of decades of past survey data, many stocks will become "data-poor" overnight. The start of a new time-series will be necessary, and this will have all sorts of science and management repercussions.

A related science issue is what criteria will be used to establish the data-poor or rich (and in-between) classifications? We suspect the workshop will contribute to this discussion. Furthermore, we imagine that with so-many NE groundfish being assessed in an index-based manner and with the Bigelow (and new net) replacing the Albatross, data-poor stocks will become the norm. For this reason, guidelines should not ratchet down allowable catches for those stocks that suddenly become "data-poor" due to an inability of the federal government to keep the data "good" or at least not "poor." In some way NMFS should seek ways to remain flexible in the manner which stocks are classified and then how those stocks should be managed in the context of a mixed-stock fishery.

Setting ACLs for stocks with unknown status

Do not set ACLs for stocks with unknown status. There will be no basis for setting ACLs. Guesswork is not an appropriate substitute for science. Use of the "best scientific information available" is required. But when the "best" is "bad" or "non-existent," then we do Congress and those we regulate an injustice by our pretending we know stock status, and just as important, that we know how that stock(s) will respond to different levels of catch.

If status is unknown, how can targets be set, unless a dart is thrown at a board, and we all say, "that's where we must head." NMFS is too responsible for that strategy and has a reputation it needs to protect and bolster through wise choices and common sense action.

The focus will have to be on research and our acquiring at least a rudimentary understanding of stock status before we embark on plan development and EISs.

Circumstances in which a numerical ACL cannot be set for a stock, and in such situations, recommendations for adequate and appropriate alternatives to setting a numerical ACL (e.g., prohibitions)

An example of a circumstance in which a numerical ACL cannot be set for a stock would be for skates. Fishermen, processors, and law enforcement officers cannot identify many of the skate species. Species identification guides haven't worked.

When the New England Council's Skate Plan was developed and implemented, we agreed it would take time for fishermen and everyone else to know what they were catching by species and stock. According to the Council's Skate Plan Development Team, we're still faced with the same insurmountable species identification problems.

Without this species/stock-specific information calculations of fishing mortality and assessments of stock status for the purpose of generating numerical ACLs are impossible. Moreover, we're currently obliged to use NEFSC bottom trawl survey data and so-called index-based determinations of mortality and abundance, and those determinations may no longer be possible once we switch from the Albatross to the Bigelow. Time will tell.

To require numerical ACLs for the skate species in the skate complex or assemblage would result in our having another opportunity to use the phrase, "The emperor has no clothes."

Consider that for barndoor skates and thorny skates, for which mortality is believed to be very low when they are returned to the sea, the New England Council simply requires all to be released. Of all the skate species these two can be identified, although with difficulty. The rest pose huge identification problems.

Setting ACLs for stock complexes, stock assemblages, and similar stock groupings

Here's where consideration of the mixed stock exception becomes paramount. Otherwise, assemblages must be managed with emphasis on the stock with the lowest ACL. Other stocks in the assemblage with higher, perhaps much higher ACLs, must be harvested far below what otherwise will be allowable. Large yields will be lost. Socioeconomic impacts will be very large and difficult to justify.

New England is witnessing this situation now, and it might worsen. For example, so-called Gulf of Maine/Cape Cod yellowtail flounder at this time only can support low/modest yields, and fishermen must avoid yellowtail even though this flounder is caught as part of an assemblage. To deal with needed reductions in yellowtail catch, the Council was obliged to reduce by half the days-at-sea (DAS) available for fishermen to fish in the inshore portion of the Gulf of Maine – the 2:1 DAS counting area. A low yellowtail ACL, especially one set below, perhaps far below your proposed OFL, would further devastate inshore fishermen fishing for "assemblage" groundfish "ruled" by the "weak link" in the assemblage – yellowtail.

Variability in the accuracy of management approaches in achieving target fishing levels

We do not quite understand this "question." If you mean should NS 1 require that all management approaches achieve target F with close to 100% probability to obtain "accuracy," then we indicate there's way to obtain that high a probability. There are too many variables, such as level of discarding and mortality of those discards.

Furthermore, there is much uncertainty as to when we achieve any target. Confidence intervals usually are wide. F is not easily calculated, and often F proxies (poor ones at that) must be chosen. Consequently, expecting accuracy in achieving target Fs is a fool errand when the calculation of F itself is far from accurate. We suggest NMFS not overwhelm itself and others, i.e., state partners, by demanding more than data and analyses can provide.

Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed.

We've noted above that OFL values should not be set. They are not required by the MSRA. Instead, ACLs must be determined and set with accompanying AM's. Perhaps the best approach will be to reflect on what councils have been doing, especially as of late. For example, when setting TACs for some stocks, the New England council considers setting those TACs with a 75% probability of not being exceeded based on scientific advice, e.g., Georges Bank yellowtail flounder. Furthermore, when large retrospective errors in assessments have been identified, an extra reduction in the TAC

can applied. It seems in these instances that precautionary steps have been taken for those stocks where data are adequate to allow such probability and retrospective error calculations.

A possible NS 1 guideline would be to require the setting of ACLs with 75% probability. However, we suggest that before doing so NMFS should examine how successful past "probability predictions" have been. We're unaware of any past analyses to investigate whether probability predictions in fact have come true. Probability distributions are based on computer multiple runs of a data set(s); however, if data inserted into a model are inaccurate or unrepresentative, then re-sampling a sample one-thousand or more times to generate probability statistics only creates useless probabilities. We suspect this is a current, frequent problem that should not be perpetuated. A thorough critique of the approach must occur.

Another guideline could be to account for assessment retrospective errors for those stocks with assessments enabling calculation of those errors, e.g., VPAs. Of course, the problem is that fewer and fewer stocks are lending themselves to these sorts of analyses and calculations, and they must become survey index-based.

Even index-based assessments are at risk with the advent of the Bigelow, assuming believable comparison or conversion factors to preserve survey time-series data cannot be calculated. We await those critical comparisons that will occur this summer and fall, and we hope next year as well. This is a watershed moment for NMFS' spring and fall bottom trawls surveys.

Establishing the appropriate probability that an ACL will prevent overfishing for a stock

It seems sensible to require a higher probability for achieving F corresponding to ACL, provided you do not establish an OFL and then reduce it to an ACL. By requiring a higher probability you add another layer of precaution, and you become excessively or inordinately precautious thereby sacrificing yield from "healthy" stocks, especially in a mixed stock situation, e.g., NE groundfish.

Establishing recommendations for in-season management authority and methods to be used as AMs to prevent overfishing

In-season management authority will be important, especially to respond to problems as they arise, e.g., reported discarding of a year-class – discarding that should be addressed through area closures. Quick in-season adjustments to many management measures will be paramount as we continue our "understanding" with Canada and we ready ourselves in New England for the next groundfish amendment (May 2009).

AMs, as you proposed, will be difficult to construct. Requiring hard TACs and closing a fishery that is multispecies when the TAC is reached, or subtracting TAC overages off the next year's TAC sounds straightforward and easy to apply. But, experience in New England with hard quotas applied to just a few of the groundfish stocks back in the late 1970s should not be forgotten. Thirty years later emphasis continues to be on hard quotas with no reflection back to the chaos created by New England hard TAC management after implementation of the FCMA back in the 1970s.

AMs for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

Do not establish AMs for a sector. Current mechanisms for holding sectors accountable seem sufficient. Furthermore, the New England Council currently is addressing sector management for all its plans through an omnibus action.

We appreciate all the work that went into your scoping document as you prepare for National Standard 1 guideline revisions. We're all faced with new challenges caused by the MSRA.

Those challenges must be met with creativity linked to the new so-often-touted need for councils to manage in an ecosystem-based manner. Your proposals will prevent that from happening because they will tie the councils' hands by obliging a continuation and worsening of single specie/stock management. Fortunately, you appear to be open to suggestions; otherwise, you wouldn't have asked so many thought-provoking questions, including those that relate to stock complexes and assemblages.

Still, we come away with the feeling that NMFS intends to accomplish two principal objectives through the MSRA: (1) to use the MSRA and revised NS 1 to formally implement NMFS' precautionary fisheries management approach; and (2) to implement a revised fisheries management agenda far more stringent than desired by Congress. Perhaps you feel Congress wants a management program that is far more restrictive without an awareness and consideration of socioeconomic impact. That was not the intent of Congress. We're certain many in Congress will respond to your scoping comments and echo our concerns.

Sincerely yours,

David Pierce

David E. Pierce, Ph.D.
Deputy Director

Cc: Paul J. Diodati, Director
Mass. Marine Fisheries Advisory Commission
Paul Howard, NEFMC
Daniel Furlong, MAFMC
Vince O'Shea, ASMFC

North Carolina Department of Environment and Natural Resources
Division of Marine Fisheries

Michael F. Easley, Governor
William G. Ross Jr., Secretary

Dr. Louis B. Daniel III, Director

March 30, 2007

Mark Millikin
NOAA/NMFS
1315 East-West Hwy.
Silver Spring, MD 20910

Dear Mr. Millikin,

The N.C. Division of Marine Fisheries appreciates the opportunity to comment on ways to meet the new mandates of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

To avoid duplication of the excellent comments provided by the North Carolina Marine Fisheries Commission, we would simply concur with their comments. We would restate in the strongest possible terms, however, our concerns over the quality and quantity of the data used to make difficult management decisions. While the revised Magnuson-Stevens Act provides language to facilitate improving these data, it is incumbent on NMFS, together with the Regional Fishery Management Councils and state partners to ensure this occurs. North Carolina would also emphasize the need for the Council's Science and Statistical Committees to clearly indicate whether the data are representative of the range of the species to a degree that is adequate for making rational management decisions and not rely on the fact that the data are best available simply because they exist.

North Carolina is hopeful that our issues can be resolved by working with the NMFS and the Councils to develop these guidelines. The reauthorized Magnuson-Stevens Act provides us with a great opportunity to improve critical data shortcomings and make measurable steps forward in ensuring sustainable U.S. fisheries.

Sincerely,

Dr. Louis B. Daniel III, Director
NC Division of Marine Fisheries

LBD/JBC/cb

cc: Mac Currin
Marine Fisheries Commission
Richard Rogers
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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

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Cedar Island
MARSHALL WILLIFORD
Edenton

March 29, 2007

Mr. Mark Millikin
NOAA/NMFS
1315 East-West Hwy.
Silver Spring, MD 20910

Dear Mr. Millikin:

The N.C. Marine Fisheries Commission appreciates the opportunity to comment on ways to meet the new mandates of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

We support the need to end overfishing and set annual catch specifications; however, we remain concerned over the quality and quantity of the data oftentimes used to determine stock condition. The Magnuson-Stevens Act states that councils must "specify objective and measurable criteria for identifying when a fishery is overfished (with an analysis of how the criteria were determined and the relationship of the criteria to the reproductive potential of stocks of fish in that fishery)." This language should provide the opportunity to require each council's Science and Statistical Committee to report, not only if the data being used for setting annual catch limits are best available, but also to indicate whether the data are representative of the range of the species to a degree that is adequate for making rational management decisions. To continue to manage based on best available data simply because the data exist should no longer be acceptable.

The National Marine Fisheries Service monitors the annual catch limits set by the various councils. Our experience with quotas managed by the regional offices has generally been favorable. The management of quotas by the Highly Migratory Species division; however, has not. In recent years, catches of large coastal sharks were allowed to exceed the quota by as much as 100 percent or more, jeopardizing the participation of other states in the fisheries. Conversely, underharvest of blue fin tuna with unexplained closed seasons from February through March, and the inability to manage the green stick gear in a rational manner adds to coastwide frustration. Owing to the significant value and importance of these fisheries, it is critical that NMFS and the HMS develop a real time quota monitoring system for these and other HMS species.

P.O. Box 769, Morehead City, NC 28557-0769

A related quota monitoring issue is how to manage underharvested quotas, not only for HMS, but council plans, as well. In some years, North Carolina has not met its allocated quota for summer flounder and bluefish. Most fishery management plans are very specific in detailing how overages will be compensated for in the future. However, FMPs tend to be silent on how to deal with underages. Not adding underages to the next year's quota may result in a more conservative biological stance, but at a greater socioeconomic cost to fishermen. Total allowable catch levels are set to determine maximum allowable levels of harvest in a given annual period. Adding some portion of adjusted underages to the next year's quota will not violate a total allowable catch. It simply will allow for the later harvest of fish that would have been allowed if caught earlier. The Magnuson-Stevens Act allows for management based on socioeconomic considerations as long as biological goals are being met. Clearly, adding a portion of underages to the next year's quota is an example of making sure biological quotas are not being violated and at the same time supporting the socioeconomic needs of fishermen. Specific guidance should be developed to assist the councils in determining a consistent approach to this issue.

We look forward to working with the NMFS and the councils to develop these guidelines and believe the reauthorized Magnuson-Stevens Act provides great opportunity to make measurable steps forward in ensuring sustainable U.S. fisheries.

Sincerely,

Mac Currin, Chairman
N.C. Marine Fisheries Commission

Cc: Dr. Louis B Daniel III, Director NCDMF
North Carolina Marine Fisheries Commission

Congress of the United States
Washington, DC 20515

April 17, 2007

Mr. Mark Millikin
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Millikin,

We are writing to offer our comments, pursuant to the NOAA announcements of February 14 and March 19, 2007, regarding the Annual Catch Limit provisions, Accountability Measures and related issues arising from passage of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

The enactment of the MSRA elevates the role of science in the management of our nation's fisheries. This is appropriate, as virtually all stakeholders have urged improvements in fishing research and sought a greater reliance on science in the development of fishery management plans. However, the elevation of science also presents three key challenges, which must be addressed as a regulatory regime for implementation of the new law is developed. Specifically, it is essential that 1) the process by which the scientific information is gathered and analyzed draws from a wide range of sources and methodologies and is reasonably transparent; 2) the science includes serious analysis of the economic and social impacts of management measures as the amended law clearly requires; and 3) the Regional Fishery Management Councils and National Marine Fisheries Service (NMFS) retain the flexibility and the ultimate authority to implement the recommendations of the Scientific and Statistical Committees in ways that are appropriate for the relevant fisheries.

It is also essential that the new law be implemented in a manner that maximizes safety within the commercial fishing industry. Fishing will remain an inherently dangerous job regardless of any steps the government may take. However, it is of utmost importance for fishery managers to avoid any actions which could increase those dangers. No one from New England who makes a living from the sea needs to be reminded of the hazards fishermen face, but the tragic losses of several vessels from the region in recent years have underlined these dangers for members of the general public. Some of the steps that need to be taken to improve safety fall largely outside the scope of the Magnuson Act, and are in the province of the Coast Guard. We are working directly with the Coast Guard and the House Transportation Committee to address these points. But, National Standard 10 remains an integral part of the Act, and, with the adoption of new safety language in the MSRA, it is a statutory mandate that this aspect of the law also receive increased focus as implementing regulations are developed.

We would add that a number of the new initiatives required under the MSRA, as well as some of the specific interpretations of aspects of the new law, involve the need for increased funding, and we urge NMFS to join Congressional supporters of the fishing industry in securing the necessary additional funds. In particular, it is evident that, in order to achieve a level of fishery data quality that will allow for the type of science based fishery management contemplated under the new law, the agency needs to have the ability to gather and analyze fishery data on closer to a real time basis than is currently the norm.

A graphic illustration of the difficulties that can arise under the current system can be seen in the agency's work relating to Section 215 of the MSRA, which called for a study on the impact of New England's Framework 42. Unfortunately, because of a lack of up-to-date data, this study was unable to utilize any data from the final version of Framework 42, which went into effect in November of 2006. The most current available data was from several months before that date, meaning that the study, though it did include useful information, was unable to evaluate the most relevant data for its fundamental purpose. The lack of more current data has prevented fishery managers in New England from doing as good a job as they would have liked in developing Framework 42 and other management measures.

In order to help prevent such occurrences in the future, and to make it more likely that the increased role of scientific information in fishery management that is mandated by the MSRA actually takes place in a meaningful way, it will be necessary to devote more funds to data gathering, technology upgrades and other aspects of fishery management. Again, we urge NMFS to provide these funds, and, to the extent the agency is unable to allocate sufficient levels of funding from its budget to accomplish the actions detailed in this letter, we urge the agency to seek the necessary funds from Congress. We will certainly be supportive of any such efforts.

The above matters and others relating to the implementing regulations for the MSRA are discussed in more detail below.

Role of Scientific and Statistical Committees

As detailed in the colloquy (a copy of which is attached) between Congressman Frank and then-Ranking Resources Committee Member (now Chairman) Rahall during the House Floor debate when the MSRA was passed last year, it is crucial that the Scientific and Statistical Committees (SSC) charged with developing annual catch limits (ACL) and making other scientific recommendations draw upon a wide range of scientific sources and opinion as they perform their duties. This colloquy was an important part of the process of building support for the MSRA's easy passage. Taking into account a wide array of fishery science will help ensure both that the science is as accurate and up to date as possible, and that those in the industry whose activities will be in part governed by the SSCs' findings and recommendations will have higher levels of confidence in the those findings and recommendations. In cases where relevant data is acknowledged to be "poor", SSCs should be encouraged to present a range of ACLs, reflecting varying levels of optimism about rebuilding projections, and economic and social impacts, for consideration by the Regional Fishery Management Councils.

In effect, the SSCs should, to the extent they can, act in ways that are as consistent as possible with traditional understandings of the scientific method, and that use appropriate mechanisms to ensure scientific integrity. This means that membership on the SSCs should in general not include either those who are responsible for gathering the raw data, or those who will decide how the recommendations will be implemented. It will be necessary to develop strong conflict of interest standards to ensure that those who have ties to, or have received funding or grants from, fishing industry organizations, conservation groups, the Federal Government, or other levels of government, disclose that information.

In addition, to the extent possible, the raw data, the analysis thereof, and the ACL and other recommendations that flow from that analysis should be made public in easily accessible fashion in as close to real time as possible, and should be subject to a thorough peer review process (this latter point is discussed in greater detail below). As in the academic world, it would make sense for pre-publication drafts of this information to be made available by means of a publicly accessible web site, and this should be required in the implementing regulations. In addition, the regulations should require that the publicly available information include minority reports or opinions and some discussion of the process by which a consensus or majority opinion was achieved.

It is also essential that the work of the SSCs include focused analysis of the economic and social impacts of scientific findings, as integrated components of the SSCs' scientific work. This reflects not only the importance of National Standard 8, but also the numerous requirements in the MSRA for enhanced consideration of economic and social impacts. In order to ensure that these impacts are fully considered, the implementing regulations should require that specialists in economic and social analysis of fishery management measures be appointed to the SSCs.

Peer Review Process

The MSRA (in Section 103(b)) states that the Secretary and the Councils "may" establish a peer review process. We believe that a genuine peer review process is an essential element in the effort to ensure that the science used to develop fishery management measures is as robust and accurate as possible. A well designed peer review process will lead to increased confidence by fishermen in the data that is used to formulate management measures, which will in turn foster greater levels of cooperation within the industry in developing and complying with the management measures. While it may not be necessary to provide a full peer review for every action or recommendation of the SSCs, we believe it ought to be required for particularly significant recommendations which are likely to have substantial impacts on fisheries or fishing communities In emergency situations, cases where there is insufficient funding to conduct a thorough peer review, or otherwise compelling circumstances in which the time needed to conduct the peer review could potentially compromise an important aspect of fishery management, it may make sense not to conduct a peer review. But, absent those conditions, where a recommended ACL or other important SSC finding or recommendation will have a significant impact on a large fishery or multi-species complex, we believe it should be the policy to require or at least strongly encourage the use of the peer review process, and the regulations should reflect that. Again, if additional funding is necessary in order to achieve this goal, NMFS should request it from Congress.

The peer review process should, in addition to drawing on the expertise of relevant scientific specialists including economists and social scientists, include input from municipal and state government officials, and representatives of non-profit, advocacy groups and trade associations that have involvement in the fishing industry or knowledge or expertise in fishery, ocean, environmental and maritime matters. As in the case of the SSCs' work, the peer review process should be appropriately transparent, with public access to the findings and recommendations, including minority reports or opinions if any, and some discussion of the process by which a consensus or majority opinion was achieved, as well as required disclosure of any information that may be relevant from a conflict of interest perspective.

Role of Regional Fishery Management Councils

While the role of the SSCs in recommending ACLs and relaying other important scientific information is central to the process by which management plans will be developed under the MSRA, the new law's implementing regulations must make it clear that the ultimate authority for determining how to reach the ACL targets lies with the Regional Fishery Management Councils, subject to NMFS approval. There will no doubt in many cases be a range of possible management approaches for achieving a given ACL recommendation, particularly when more than one species is involved, as in a multi-species complex. Whether the recommended ACL should be achieved by means of input or output controls, a quota or point mechanism, or in some other fashion should be decided by those who have been chosen to serve on the Councils based on their own areas of expertise, which will tend to encompass disciplines beyond the purely scientific that will generally be the areas of focus for SSC members. Indeed, this model would follow a well accepted approach for public decision making, in which scientific or technical experts develop recommended targets, after which policy makers determine the best methods for allocating resources into order to achieve those technical goals.

Given the continuing importance of the Councils in the fishery management process, it is vital that increased funds be provided to allow for more time to review relevant documents, scientific findings and recommendations before decisions are made by Council members. This is one more benefit that will result from making fishing data available in real time or very close to it.

In Council deliberations, as in SSC deliberations, there must be an openness to alternative methodologies. The regulations should make it clear that, as with the SSCs, a range of opinions on how to achieve relevant targets should be considered, and significant alternative approaches should not be ignored because of time pressures. In particular, innovative management approaches like the point system that has emerged in New England should be given a full opportunity to be reviewed, especially in multi-species settings, where that concept is most relevant. By the same token, the regulations should make it clear that the Councils should have some authority to shift ACL targets among individual stocks within multi-species complexes (if such stocks are not overfished) provided the total projected level of fishing remains below the overall ACL for the multi-species complex.

Finally, the regulations should make it clear that the input of outside entities that are part of the peer review process should be incorporated into management plans if relevant, and that Council members, as part of the training required under the MSRA, should receive training in economic and social impacts of fishery management measures.

Accountability Measures

The concept of accountability when recommended fishing levels are exceeded is logical, in light of the greater reliance on scientific information under the MRSA. If the necessary financial resources are provided to enhance the overall research and analytical efforts, the instances of significant divergences from projected stock levels will be fewer. On the other hand, the science in this area is still developing, and the roles of non-fishing contributors (including ocean and weather cycles, climate change, and agricultural runoff) on the health of stocks are not fully understood. Thus, there it little doubt that there will continue to be cases of missed targets. However, with the term "accountability measures" undefined in the MSRA, it will be necessary for the Agency to be cautious in developing regulations in this area. The concept of accountability should apply broadly to the entire process of developing projected fishing levels and assessing whether they have been achieved, meaning that the term should apply to the scientific underpinnings of the management measures and the estimates that are used to determine allowable fishing levels, as well as whether the ACL targets are met.

Of particular importance in this discussion, the legislative history on this provision makes it clear that it is not mandatory to deduct "overages" in one year from the subsequent year's allowable level of fishing. The initial Senate-passed version of the new law called for a reduction in fishing effort in the following year by the amount of the previous year's overages. This provision was dropped in the final legislation and replaced by a provision that refers to accountability measures as options. It is clear from this history that overage deductions in the subsequent year, though allowable, are not required. Instead, the regulations should make it clear that there are a range of possible options when ACLs are exceeded.

If, despite the ACL being exceeded, the relevant stock has also exceeded its projected rebuilding levels, no accountability measures might need to be imposed to achieve the law's goals. Alternatively, if the stock levels are determined to require the application of accountability measures, they do not necessarily have to be on a one to one basis (if for example, the relevant stock continues to rebuild at a satisfactory pace), and the accountability measures can also be spread out over a period of years. Furthermore, when it is possible to determine "responsibility" for overages, consideration should be given to allocating accountability measures – if required – on that basis, meaning that efforts should be undertaken to determine the extent to which commercial or recreational fishing activity has played a greater role in any causing overages, taking into account their relative importance within a given fishery or component thereof. Finally, if a stock rebuilds at a significantly faster rate than projected, accountability (for the inaccurate or incomplete science that led to the faulty projections) could mean that higher than anticipated levels of fishing in the subsequent year could be allowed, particularly in the case of a stock that has not been designated as overfished. Accountability must apply in both directions.

The regulations should be drafted so as to reflect all of these possibilities. While the MSRA does not explicitly address accountability in the sense of what should happen when required reductions in fishing effort are met, but the anticipated rebuilding goals are nonetheless not achieved, logic and fairness suggest that in such cases, at a minimum, future ACL recommendations or management measures ought to give greater consideration to alternative models and methodologies, both for rebuilding and for economic and social impacts.

Rebuilding Flexibility

We have long believed that it is vital to amend the Magnuson Act to expand upon and clarify the circumstances under which the standard 10-year rebuilding period can be extended. The previous law allowed – and these provisions were not explicitly changed in the MSRA – three exceptions to the general 10 year rebuilding period: "where the biology of the stock of fish, other environmental conditions, or management measures under an international agreement in which the United States participates dictate otherwise". (16 U.S.C. 1854 § 304(e)(4)(A)(ii).) Regardless of the specific reasons for extension, we strongly believe that all extensions must have a time limit, and must be structured so as to require continued rebuilding and to reach the original rebuilding target by the end of the extension period.

While the rebuilding flexibility language was not extended on a generic basis in the MSRA, the new law does include (in Section 120) language that would permit an extension of up to three years, if certain conditions are met, for summer flounder. Though Section 120 was drafted for the purpose of addressing specific problems within the summer flounder fishery, the section makes it clear that the Secretary of Commerce has the authority to extend rebuilding periods for other species as well. Specifically, Section 120 states that the Secretary has the authority to extend the rebuilding period for summer flounder "only if" the six enumerated conditions are met, and it then adds that nothing in the section shall be construed to amend the Magnuson Act "or to limit or otherwise alter the authority of the Secretary under that Act concerning other species." These provisions should clearly be interpreted to mean that the Secretary can extend the rebuilding periods of other species – though perhaps in less limited ways than for summer flounder – beyond the three general exceptions in the law. There is no scientific basis for restricting these considerations to only one species, and the law clearly recognizes that.

When the biomass targets for several New England species were significantly increased in 2002, NMFS Administrator Hogarth agreed in 2003 to extend the rebuilding period beyond the 10-year limit by "re-starting the clock", which achieved the same purpose as extending the limit beyond 10 years. Considering that 1) the Secretary (acting through the NMFS Director) evidently possessed the authority in 2003 to permit an extension for reasons other than the three grounds explicitly contained in the law; 2) the new law explicitly states that Section 120 does not change that authority; and 3) Section 120 allows an extension for summer flounder "only if" certain conditions are met, it flows logically that the Secretary has and retains the authority to grant extensions for other species for reasons other than the three explicitly in the law, and the MSRA implementing regulations should explicitly so state.

We would add that the six conditions that apply to summer flounder offer a reasonable set of limits for other species, and the Agency may want to consider using those conditions (along with the maximum 3-year extension) for extensions that may apply to other species. But, it is essential in any case that the regulations make it clear that rebuilding extensions for species other than summer flounder for reasons other than the three explicitly in the law are permitted.

Safety

Section 104(a)(5) of the MSRA raises the profile of safety within the Magnuson Act by requiring that the fishery impact statements that are a mandatory part of any Fishery Management Plan or amendment assess, specify and describe the likely effects of the management measures on "the

safety of human life at sea, including whether and to what extent such measures may affect the safety of participants in the fishery". The purpose of this provision is to ensure that safety is considered on an ongoing basis as management measures are developed, as opposed to being addressed on an ad hoc basis following a recognition, because of a vessel sinking or other serious safety concern, that some element of a management measure may inadvertently increase the likelihood of fishing boats being caught in bad weather or other unsafe conditions. While many factors contributed to the losses of the New England boats in recent years, no one can disagree with the idea that management measures should avoid having the effect of making fishing more hazardous.

Several years ago, it became clear, after their adoption, that New England scallop fishery regulations could have the unintended consequence of making fishing more dangerous than it would otherwise be for those who were governed by the regulations. Specifically, the regulations in certain cases barred vessels, once they left a geographically designated fishing area, from returning to that area even if they only chose to leave temporarily to avoid adverse weather conditions. This had the potential to produce situations in which captains faced pressure to remain in hazardous weather zones longer than they normally would. Similarly, other management measures that limit the number of days on a trip or require steaming time to be counted toward Days at Sea limits, can also have this effect. In addition, there is currently no standardized mechanism by which fishing vessels can be assured that breaking off a trip because of impending bad weather will not produce some reduction or penalty in their allocations. Some recent management regulations affecting the New England area have been more sensitive to these concerns, but until the adoption of this new provision in the MSRA, there was no affirmative requirement (beyond the general requirements of National Standard 10) that safety be explicitly considered in the development of management measures. The implementing regulations should as strongly as possible make it clear that safety must be formally considered as each significant management measure is debated and that safety to the extent possible should be made an integral part of such measures.

As in many other areas of human activity, technological improvements in fishing have had mixed results. Vessel Monitoring Systems (VMS) have proven useful from an enforcement perspective, and less so from a safety perspective. We believe it is essential that NMFS continue to promote upgrades in VMS technology in order to expand the methods by which safety can be improved. The need to strengthen VMS technology so its safety applications can be developed was underlined by several participants at a recent public forum on fishing safety in New Bedford, Massachusetts. They expressed some frustration that the technology was not now reliable enough for safety purposes. The Federal Government Representatives at the meeting (including both Coast Guard and NOAA personnel) indicated that additional funding would be necessary in order to achieve the required improvements. We strongly support additional funding for this purpose, and will be joining with the Agency in seeking the funds, but we also urge that the possible expanded use of VMS for safety purposes be incorporated into the regulations that are drafted to implement Section 104(a)(5) of the MSRA.

Limited Access Privilege Programs (LAPP)

Subparagraph 106(c)(6)(D) of the MSRA details the process by which referenda on adoption of LAPPs are to be conducted for the New England and Gulf of Mexico fisheries. Clause (v) of

that subparagraph requires the Secretary to promulgate criteria for determining whether additional fishery participants (other than permit holders) are eligible to vote in a New England referendum "in order to ensure that crew members who derive a significant percentage of their total income from the fishery under the proposed program are eligible to vote in the referendum." As proponents of this provision, we urge that the regulations be drafted so as to give it full effect. Crew members will obviously be affected in significant ways by any program that is adopted under this section of the MRSA, and we strongly believe they should have a say in whether to move forward with a program that will affect their livelihoods. It would be appropriate for the regulations to establish either a specific income percentage or a range of percentages, taking into account crew members' earnings over a period of years including non-fishing earnings, to establish what constitutes a "significant" percentage. But, the percentage should not be set at a level that permits only a small segment of the crew member population in a given area to be eligible to vote. In general, those for whom fishing is their primary means of making a living should be eligible, unless their involvement in the industry has been negligible.

Clause (vi) of subparagraph 106(c)(6)(D) provides that the 2/3 referendum requirement does not apply to sector allocations (as opposed to individual fishing quotas (IFQ), for which the 2/3 requirement does apply). The regulations should make it clear that the term "sector allocation" is intended to apply to relatively small, easily identifiable, discrete components of a fishery, and should not be interpreted to mean, for example, the entire commercial sector in a large geographical area, or a substantial component of a mixed-stock fishery. The mere fact that particular groups self-identify as sectors does not necessarily mean that such groups should be treated as sectors under this subparagraph, absent additional factors relating directly to their methods of fishing that set them apart from others participating in the same fishery. The regulations should clarify that a sector allocation exemption should not lead to a situation in which other participants in the same fishery must comply with an allocation system that operates effectively as an IFQ system, unless there has been in advance an open 2/3 referendum involving all those eligible under the referendum requirements. In general, the regulations should make it clear that the sector allocation exemption cannot be used to evade the 2/3 referendum requirement for IFQs.

The "point system" concept, a version of which has been developed within the New England fishery as a possible mechanism for managing that region's multi-species complex, should not be treated as being subject to the MSRA's LAPP provisions, because a point system does not allocate a quantity of fish or a fixed percentage of a Total Allowable Catch or Annual Catch Limit. Rather, a permit holder has a range of choices on how to access the fishery resource, as is also true, for example, in a Days at Sea format. The implementing regulations should make it clear that a point system would not be governed by the LAPP requirements.

Research Priorities

The MSRA calls for a significant increase in fishery related research, and in Section 103(d) requires a more comprehensive process for establishing research priorities. While there are many areas that would benefit from increased study and analysis, among the areas that we believe would be especially important to designate as priorities, particularly for research relating to New England fisheries, are the following:

* The extent to which similar fish stocks that tend to inhabit different geographical areas should be treated as separate stocks for fishery management purposes. Research conducted by the University of Massachusetts Dartmouth School of Marine Science and Technology has determined that there is considerable migration between Gulf of Maine Cod and Georges Bank Cod populations, raising the question of whether the two stocks (or other stocks that interact in similar fashion) ought to continue to be considered as separate stocks.

* The role of non-fishing related factors, including climate change, agricultural and sewer runoff, and coastal development, in fish stock declines.

* The appropriateness, from an historical perspective, of biomass targets that have been set for various rebuilding stocks.

* The ways in which the role of humans can and should be incorporated into ecosystem management initiatives.

Transition to Sustainable Fisheries

Section 112 of the MSRA expands upon the previous law's provisions relating to vessel and permit buy-back programs. While reducing overcapacity within a fishery can provide important long-term benefits from a sustainability point of view, such programs are obviously also designed in the short-run to reduce fishing activity, and the financial impacts of this reduction go beyond the boat owners and permit holders, affecting also crew members and others who are employed within the industry in shoreside occupations. We have long believed that buy-back programs should be structured so that some of the short-term financial benefit that flows from such programs reaches those who are not boat owners and permit holders, because, as participants in the industry, these other groups are also affected by a reduction in fishing effort in their areas. In general, it is not appropriate for the Federal Government to take action that has a negative financial impact on working people, without providing some form of compensation. Accordingly, we recommend that the MSRA implementing regulations include authority for the Secretary to design, when it is practicable to do so, buy-back programs so as to allow a percentage of the financial gain realized from the programs to be reserved for those who are not boat owners or permit holders.

We appreciate the opportunity to comment on these matters. We are of course available to discuss these points in more detail or if there are any questions.

Rep. Barney Frank

Rep. John Tierney

cc: Dr. William Hogarth, NMFS Administrator
Adm. Conrad Lautenbacher, NOAA Under Secretary
Carlos Gutierrez, Secretary of Commerce

MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT REAUTHORIZATION ACT OF 2006

House of Representatives - December 8, 2006

U.S. House of Representatives
December 8, 2006

Mr. FRANK of Massachusetts. Mr. Speaker, I would ask for a colloquy. One of the key provisions in this is the requirement that the Regional Fishery Management Councils develop annual catch limits based on the Science and Statistical Committees. This annual catch limit provision has the potential to contribute in important ways to the process of improving science. But it is vital that in analyzing the options and preparing recommendations, the committees consider a wide range of scientific opinion to ensure that the management plans that are based on their work represent the best possible scientific understanding of the current state of the relevant fisheries as well as projections for the future.

Is it the ranking member's, soon to be chairman's, understanding that the Science and Statistical Committees will in fulfilling their role under this legislation consider this broad array of scientific opinion and sources?

Mr. RAHALL. Mr. Speaker, will the gentleman yield?