



September 22, 2008

Mark Millikin, Domestic Fisheries Division
National Marine Fisheries Service, NOAA
Office of Sustainable Fisheries
1315 East-West Highway, Room 13357
Silver Spring, MD 20910

Re: Proposed Revisions to National Standard 1 Guidelines, 73 Fed. Reg. 32526 (June 9, 2008)

Dear Mr. Millikin:

The Marine Fish Conservation Network (Network), representing 200 organizations nationally, is submitting the following comments on the proposed rule to modify the National Standard 1 (NS1) guidelines to implement annual catch limits (ACLs) and accountability measures (AMs).

In February 2007, the National Marine Fisheries Service (NMFS) announced its intent to revise the 1998 National Standard Guidelines for National Standard 1¹ to assist fishery management councils in the implementation of the new ACL and AM requirements of the Magnuson-Stevens Reauthorization Act (MSRA) of 2006. On June 9, 2008, NMFS published the proposed rule in the Federal Register. 73 Fed. Reg. 32526. The Network submitted extensive comments during the initial scoping period (April 17, 2007), as well as supplemental comments with detailed recommendations for guidance on the setting of ACLs for forage fish stocks (August 8, 2007), and preliminary comments on the proposed rule highlighting the need for guidance on time-area management of ACLs (August 8, 2008), all of which we incorporate by reference in these comments.

Generally, the proposed rule seeks to improve upon the existing NS1 guidelines in important ways that, if fully implemented by the fishery management councils, have the potential to fulfill the intent of Congress and end overfishing by encouraging greater conservation and accountability for staying within prescribed limits. The Network supports the overall approach to ACL-setting outlined in the proposed rule, including the treatment of ACL as a limit not to be exceeded, which triggers AMs, and modified fishing mortality control rules establishing a clear mechanism for specifying science-based catch limits and catch targets that account for both scientific and management uncertainty.

¹ Title III of the Magnuson-Stevens Act establishes 10 national standards for management of U.S. fisheries. National Standard 1 requires any federal fishery management plan (FMP) to include conservation and management measures that “shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery...” 16 U.S.C. § 1851(a)(1).

At the same time, we are concerned that the proposed rule falls significantly short of what is required to implement the MSRA's straightforward instructions to end overfishing and hold fisheries managers accountable for compliance with that objective. Of particular concern is the fact that the proposed rule is written in a way that would permit fishery management councils to continue their risk-prone policy of setting annual catch limits and target catch limits equal to the overfishing level (OFL), thus ensuring a high probability of overfishing. The proposed rule also retains a provision of the existing NS1 Guidelines that plainly violates the letter and spirit of the law – the so-called “weak stock exemption” – which permits overfishing a stock within a stock complex in order to achieve optimum yield for another.

We also note that NMFS has decided that, for purposes of compliance with the National Environmental Policy Act (NEPA), a categorical exclusion is appropriate for this action. 73 Fed. Reg. at 32528. As the Network stated in a letter dated November 29, 2007, the new requirements of the MSRA and the NS1 Guidelines will affect every fish stock and fishery in U.S. waters, and fishery management plans (FMPs) across the country will have to be amended to bring them into compliance with the new provisions. We believe that NMFS should have prepared a thorough NEPA analysis of the new, more stringent provisions of the MSRA for this proposed action.

Network Recommendations for Implementing ACL/AMs

National Standard 1 requires that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the U.S. fishing industry. 16 U.S.C. § 1851(a)(1). The MSRA of 2006 further clarified that overfishing must not occur in a fishery by establishing a system of ACLs and accountability measures, *id.* § 1853(a)(15), and by clarifying that a period of overfishing is not allowed under a rebuilding plan, *id.* § 1854(e)(3)(A). To achieve the two-fold objective of preventing overfishing and achieving optimum yield on a continuing basis, the framework for setting limits and targets in each FMP must do two things: (1) take into account the uncertainty in scientific information and management control of the fishery such that overfishing does not occur and there is a low risk that limits are exceeded, 73 Fed. Reg. at 32539, 50 CFR § 600.310(b)(3);² and (2) address all relevant social, economic, and ecological factors explicitly in the OY specifications for each FMP, stating clearly how they were considered and how they were accounted for in the ACT/OY calculation. 73 Fed. Reg. at 32542, § 600.310(e)(3)(ii). A system of catch limits, catch targets and accountability measures must work together to accomplish the objective of preventing overfishing while achieving optimum yield from each fishery. To achieve these purposes, the NS1 guidance should include the following specific directives:

- **ACLs apply to all stocks in a fishery.** Stocks in a fishery include *not only target stocks in a fishery but also non-target stocks* that are caught unintentionally as bycatch and retained or discarded at sea. All stocks in the FMP should be considered “in the fishery” unless otherwise specified through rulemaking. Consistency with the MSA’s inclusive definitions of “fishery,” “fishing,” and “stocks of fish” requires such an inclusive approach. 16 U.S.C. § 1802 (3), (16), (42).

² All subsequent citations of specific passages from the proposed rule refer to Title 50 of the Code of Federal Regulations as NMFS proposes to amend it.

- **ACLs must be numeric (e.g., pounds, number of fish) and account for all sources of fishing mortality.** Numeric ACLs must be specified for each managed stock or stock complex in a fishery, and ACLs must account for all sources of fishing mortality, including an estimate of all discards in the fishery and bycatch mortality in other fisheries.
- **ACLs are properly conceived as a limit not to be exceeded.** ACLs should be set safely below the OFL and may not exceed the ABC limits recommended by the Councils' scientific advisors, as stipulated at 16 U.S.C. § 1852(h)(6).
- **For assessed stocks in a fishery, status determination criteria (SDCs) are required as the basis for setting ACLs such that overfishing does not occur in a fishery.** Each FMP must contain biological reference points specifying a maximum fishing mortality threshold (MFMT), minimum stock size threshold (MSST), and OFL in order to determine the status of the stock(s) with respect to overfishing and overfished as defined at 16 U.S.C. § 1802(34). To the extent possible, SDC must be expressed in a way that enables the Council to monitor each stock or stock complex in the FMP and determine annually whether overfishing is occurring and whether the stock or stock complex is overfished.
- **For data-poor stocks or stock complexes in a fishery, ACLs should be based on available information.** Catch limits must be established for data-poor stocks in a fishery using available information, such as a percentage or average of catch or bycatch from prior years, fishery-independent research data, and qualitative measures of stock productivity and vulnerability to fisheries. As a general rule, ACLs should not be set for stock "complexes" comprised of many different species with different life histories; at best such an approach is an interim measure and catch limits should be based on the most vulnerable species with lowest productivity in the assemblage.
- **ACLs should be set at a level such that the probability of overfishing is very low, based on a risk assessment.** Each FMP should contain a risk policy that explicitly states the acceptable level of risk of overfishing and should contain a risk assessment procedure designed to evaluate the risk of overfishing associated with a given catch level for each stock. The level of risk should reflect the vulnerability of a stock to the fishery and other relevant factors, based on a risk assessment approach like the one outlined by the Lenfest Working Group report on ACLs (2007).
- **Overfishing must end immediately on overfished stocks and overfished stocks must be rebuilt in as short a time as possible.** Rebuilding should occur within the ten-year rebuilding time frame in most cases; overfishing must not be permitted during a rebuilding program as stipulated in the MSRA. 16 U.S.C. § 1854(e)(3-4).
- **Stocks that have declined below the stock biomass target corresponding to MSY (B_{MSY} or B_{PROXY}) should be fished at a lower rate and level than stocks that are above MSY.** Waiting until a stock has been declared overfished to reduce fishing mortality below the maximum fishing mortality threshold (MFMT, equivalent to F_{MSY}) is not precautionary. The NS1 Guidelines rule should recommend that FMP control rules automatically reduce fishing mortality

once the stock biomass declines below the MSY target biomass. Such a rule is already employed in some FMP overfishing definitions as a proactive way of reducing the likelihood that the stock will decline to the low level that triggers a rebuilding plan.

- **Spatial-temporal management of ACLs should be employed as an integral part of effective catch-limit management.** Apportioning ACLs by seasons and areas can reduce bycatch, protect sensitive habitats, address competition among fishery sectors, avoid localized and serial depletions of fished stocks, and ensure geographic and seasonal availability of prey to key predators. The National Standard 1 Guidelines should include recommendations for explicit consideration of appropriate time and area management measures in the ACL specification process, including their use as part of a package of accountability measures.
- **NMFS should provide explicit guidance for addressing ecosystem considerations when setting ACLs, starting with forage fish.** The central importance of conserving forage fish is recognized in the existing Essential Fish Habitat (EFH) regulations, which establish that loss of prey species constitutes an adverse effect on EFH. The National Standard 1 Guidelines should provide explicit guidance on methods of setting ACLs and achieving OY for forage fish in a fishery to conserve the prey of other managed fish stocks and protect marine food webs. Forage fish stocks should be managed to maintain significantly higher biomass than B_{MSY} to preserve their role as prey in the ecosystem.
- **NMFS should provide specific guidance on the relative responsibilities of the Councils, the SSCs, and other peer review processes in ensuring that overfishing does not occur and establishing a system of accountability.** The MSRA materially strengthened the role of science in the fishery management process. See 16 U.S.C. §§ 1852(g)(1)(A) and (B); 1852(h)(6). In order to ensure that this system is as effective and scientifically rigorous as possible, the NS1 Guidelines should specify: the appropriate qualifications and membership of the science and statistical committees (SSCs) and peer review process; the relative roles of the SSCs, peer review process, and Councils in establishing ACLs; the relative roles of NMFS, the Councils, the SSCs and the peer review process in selecting and evaluating AMs.

The clear intent of Congress to end overfishing *requires* fishery managers to exercise greater precaution, enforce clear catch limits and make substantial changes in how they manage fisheries to implement ACLs and AMs. The revisions to NS1 Guidelines implementing ACLs and AMs must reflect the strengthened provisions of the law as well as guide the implementation of these new requirements in all U.S. fishery management plans. In order to do so, NMFS must strengthen the proposed rule in the ways discussed below.

I. Ending overfishing in all U.S. fisheries is the highest priority of the MSRA, requiring NMFS to strengthen the NS1 regulatory guidelines accordingly

National Standard 1 has long prohibited overfishing. 16 U.S.C. § 1851(a)(1). Specifically, NS1 requires that any federal FMP must include conservation and management measures that “shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery.” *Id.* § 1801(a)(1). The 1996 reauthorization of the Magnuson-Stevens Act (MSA), known as the Sustainable

Fisheries Act (SFA), strengthened this prohibition in important ways. It required that once a population is identified as experiencing overfishing and/or overfished, fishery managers *must* take action to end or prevent overfishing and rebuild overfished stocks. *Id.* § 1854(e)(3). Equally important, the statute requires any fishery management plan to “specify objective and measurable criteria for identifying when the fishery to which the plan applies is overfished and...contain conservation and measures to prevent overfishing or end overfishing and rebuild the fishery.” *Id.* § 1853(a)(10). The SFA also established MSY as a maximum fishing mortality limit that may not be exceeded, and defined “overfishing” and “overfished” as the rate or level of fishing mortality that jeopardizes the stock’s capacity to produce MSY.³

Yet during the reauthorization of the MSA in 2006, frustrated Members of Congress noted that “recent evaluations of stock status have shown that ten years after enactment of the [Sustainable Fisheries Act], overfishing is still occurring in a number of fisheries, even those fisheries under a rebuilding plan established early in the SFA implementation process.”⁴ Scientific experts reached similar conclusions and called for stronger measures to halt overfishing and rebuild the nation’s fisheries.⁵ The report to Congress of the U.S. Commission on Ocean Policy (USCOP 2004) called for basic reforms of fisheries management and recommended specific measures to strengthen the MSA’s overfishing provisions, including science based-based catch limits that trigger management action to cease fishing.⁶ The recommendations of the USCOP were cited by the Senate as a catalyst for the MSA reauthorization.⁷

In order to address the ongoing problem of overfishing in many fisheries, Congress made material changes in the MSRA incorporating key recommendations of the USCOP’s report.⁸ The MSRA strengthens the role of scientific advisors in setting catch limits by requiring fishery management councils to establish SSCs and stipulating that catch limits may not exceed the fishing level recommendations of their SSCs. 16 U.S.C. § 1852(h)(6). The new law also requires fishery managers to set annual catch limits at a level such that overfishing does not occur in the fishery, accompanied by measures to ensure accountability. *Id.* § 1853(a)(15). FMPs must meet this requirement by 2010 for fisheries subject to overfishing and 2011 for other fisheries. *Id.* § 1853 note. The congressional intent of these new requirements is to provide a transparent accounting mechanism to measure compliance with overfishing and rebuilding requirements of the MSA.⁹

³ 16 U.S.C. §§ 1851(a)(1) FMPs must achieve optimum yield, 1802(33)(B), optimum yield limited by MSY as reduced by various factors, and 1802(34), definition of overfishing and overfished.

⁴ Sen. Rep. 109-229 on S. 2012 at 6-7 (April 4, 2006). See also, *e.g.*, _____ Cong. Rec. at S12850 (Nov. 15, 2005), Statement of Senator Stevens: “*Under the 1996 Sustainable Fisheries Act, overfishing of overfished stocks was to end. . . . It has been almost 10 years since we passed the Sustainable Fisheries Act and overfishing of overfished stocks remains a significant problem.*”

⁵ A.A. Rosenberg, J.H. Swasey and M. Bowman. 2006. Rebuilding U.S. Fisheries: progress and problems. *Front. Ecol. Environ.* 4(6), 303-308.

⁶ See final report to Congress of the U.S. Commission on Ocean Policy (USCOP 2004).

⁷ See: S. Rep. 109-229 on S. 2012, April 4, 2006, pp. 3-4.

⁸ *Id.* USCOP (2004), See especially Recommendations 19-1, 19-2, and 19-3 requiring regional FMCs to set catch limits within the bounds recommended by the councils’ science and statistical committees.

⁹ See Sen. Rep. 109-229 on S. 2012 at 21 (April 4, 2006).

The MSRA is equally clear on the need to rebuild overfished stocks as quickly as possible. The law requires councils to submit rebuilding plans for overfished stocks within two years of being identified as overfished or approaching overfished, 16 U.S.C. §1854(e)(3), and clarifies that councils or the Secretary of Commerce must not only prepare but also *implement* a rebuilding plan to end overfishing “immediately,” *id.* §1854(e)(3)(A), while maintaining the existing statutory requirement that rebuilding “shall be as short as possible” and *not exceed ten years* in most cases, *id.* §1854(e)(4)(A)(i-ii). By inserting “immediately” after “to end overfishing” in the statute, Congress clearly wished to emphasize that overfishing should not occur *during* the rebuilding period. This was further clarified in 16 U.S.C. § 1854(e)(4)(A) in which Congress struck the phrase “ending overfishing and,” removing any doubt as to whether a time period of overfishing could be allowed during a rebuilding period.

Ending overfishing and preventing its re-occurrence is the highest priority of the MSRA, requiring NMFS to strengthen the NS1 regulatory guidelines accordingly. Yet the Preamble to the proposed rule leaves the impression that the statutory phrase “at a level such that overfishing does not occur” in new § 1853(a)(15) of the MSRA should be read to apply only to “chronic” overfishing:

[c]ontinued overfishing for a period of years (chronic overfishing), presents the greatest danger to the health of fish stocks, and often leads to stocks becoming overfished. NMFS has noted that overfished stocks with chronic overfishing seem to seldom rebuild, whereas overfished stocks that are rarely subject to overfishing have a better chance of rebuilding.

73 Fed. Reg. at 32528. While we certainly agree that chronic overfishing over a period of years is a problem in a number of fisheries and must be halted,¹⁰ the MSRA plainly requires managers to set ACLs “at a level such that **overfishing** does not occur in a fishery,” 16 U.S.C. § 1853(a)(15) (emphasis added), not such that **chronic** overfishing does not occur. While it may be true as a theoretical matter that “[a]s long as fishing occurs, there is a chance for occasional instances of overfishing due to scientific uncertainty of data, influence of non-fishing factors, and management uncertainty,” 73 Fed. Reg. at 32528, the MSRA mandates a stronger regulatory regime to reduce the likelihood of overfishing to a low level and to implement rebuilding plans for overfished stocks within a time certain that end overfishing *immediately*, 16 U.S.C. 1854 § 1854(e)(3) and (4).

In short, the NS1 guidelines for the implementation of ACLs and AMs must be capable of improving substantially upon past performance in order to achieve the high standards established in the MSRA. Because the proposed buffers and other conservation measures outlined in the proposed rule are required by the MSRA, the proposed rule should be amended in many places to replace many “shoulds” with “musts.” Specifically, in the National Standard Guidelines the word “must” is used “to denote an obligation to act; it is used primarily when referring to requirements of the Magnuson-Stevens Act, the logical extension thereof, or of other applicable law.” 50 C.F.R. § 600.305(c)(1). “Should,” on the other hand, is used to “indicate that an action or consideration is strongly recommended to fulfill the Secretary's interpretation of the Magnuson-Stevens Act, and is a factor reviewers will look for in evaluating a SOPP or FMP.” *Id.* § 600.305(c)(3).

¹⁰ Marine Fish Conservation Network, Taking Stock: The Cure for Chronic Overfishing (December 2007).

Statutory requirements that must be fully integrated into the revised NS1 Guidelines:

1. FMPs must include conservation and management measures that shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery (16 U.S.C. § 1801(a)(1))
2. FMPs must specify objective and measurable criteria for identifying when the fishery to which the plan applies is overfished and to contain measures to prevent overfishing or end overfishing and rebuild the fishery (*Id.* § 1853(a)(10))
3. Councils must establish and maintain a Science and Statistical Committee (SSC) (*Id.* § 1852(g)(1)(A))
4. Councils SSCs must make recommendations for acceptable biological catch (ABC), preventing overfishing, and other related management advice (*Id.* § 1852(g)(1)(B))
5. Councils must establish annual catch limits that may not exceed fishing level recommendations of the SSC or the peer review process (*Id.* § 1852(h)(6))
6. FMPs must establish a mechanism for specifying annual catch limits such that overfishing does not occur in a fishery, including measures to ensure accountability (*Id.* § 1853(a)(15))
7. Fishery managers must prepare and implement a rebuilding plan within two years of notification to end overfishing immediately (*Id.* § 1854(e)(3)&(4))
8. Fishery managers may not allow a period of overfishing under a rebuilding plan (*Id.* § 1854(e)(4)(A))

II. Clarifying the scope of ‘stocks in the fishery’ as a basis for establishing which stocks require ACLs

2.1 The proposed rule properly defines “fishery” and the scope of stocks in a fishery requiring ACLs

As noted in the Preamble, 73 Fed. Reg. at 32529, the Magnuson-Stevens Act defines “fishery” broadly (see 16 U.S.C. § 1802(13) and 50 CFR § 600.10) and the proposed rule properly follows this approach in its clarification of the scope of “stocks in a fishery.” Stocks in a fishery would include (1) target stocks, (2) non-target stocks retained for sale or personal use, and (3) non-target stocks that are not retained for sale or personal use and that are either determined to be subject to overfishing, approaching overfished, or overfished. 73 Fed. Reg. at 32529. In order to remove any ambiguity as to what is and is not included in a fishery, the last two sentences of § 600.310(d)(4) must be revised to read as follows: “Non-target species identified as in a fishery in subparagraph (2) above must be identified at the stock level. Non-target species not included in a fishery in subparagraph (2) may still be identified in an FMP and included as ecosystem component (EC) species or stocks.” 73 Fed. Reg. at 32539. Thus, stocks in a fishery include *not only target stocks in a fishery but also non-target stocks* that are caught unintentionally as bycatch and retained or discarded at sea. 73 Fed. Reg. at 32539, § 600.310(c)(2)(3-4). Importantly, and properly, “catch” includes fish that are retained for any purpose *including incidental bycatch as well as fish caught but discarded at sea.* 73 Fed. Reg. at 32533; 73 Fed. Reg. at 32543, §

600.310(f)(2)(i). Consistency with the MSA’s inclusive definitions of “fishery,” “fishing,” and “stocks of fish” requires such an inclusive approach. See 16 U.S.C. § 1802 (13), (16), (42).

The proposed rule correctly concludes that ACLs apply to all stocks in the fishery, requiring SDC and reference points corresponding to MSY, OY, ABC, ACL and ACT. Thus, FMPs or FMP amendments should establish ACL and AM mechanisms for all stocks and stock complexes in the fishery, 73 Fed. Reg. at 32544, § 600.310(h), with exceptions for short-lived “life cycle species” with only one breeding season, *see* 16 U.S.C. § 1853(a)(15); 73 Fed. Reg. at 32545, § 600.310(h)(2)(i), and “stocks or stock complexes subject to management under an international agreement.” 73 Fed. Reg. at 32545, § 600.310(h)(2)(ii). While exempt from the ACL and AM requirements unless they are determined to be experiencing overfishing, we agree that FMPs or FMP amendments for short-lived species must still specify SDC, MSY, OY, ABC, and an ABC control rule, 73 Fed. Reg. at 32545, § 600.310(h)(2)(i), in order to make determinations of overfishing and overfished status. All stocks in the FMP should be considered “in the fishery” unless otherwise specified through rulemaking, 73 Fed. Reg. 32539, § 600.310(c), and ACLs apply to all stocks in the fishery.¹¹

2.2 NMFS should provide clarification and additional guidance on the appropriate use of stock complexes

NMFS proposes that stocks may be grouped into stock complexes for various reasons, 73 Fed. Reg. 32540, § 600.310(d)(8), and sanctions the use of ‘indicator stocks’ in a stock complex to evaluate the status of complexes, 73 Fed. Reg. 32540, § 600.310(d)(9). The proposed rule states that the vulnerability of stocks should be evaluated when determining if a particular stock complex should be established or reorganized, but NMFS provides no guidance on *how* to evaluate them. There is a high risk of overfishing weak stocks in a stock complex when using indicator stocks to represent the status of an entire stock “complex.”

In addition, current scientific research finds little ecological basis for the use of indicator species to set ACLs for stock complexes. For instance, a study of South Atlantic snapper-grouper species by Shertzer and Williams (2008) found little evidence of synchrony in population dynamics and no support for use of indicator species:

¹¹ The MSRA requires ACLs in every federal fishery, but the proposed rule provides some flexibility in the application of the NS1 Guidelines for exceptional cases and circumstances “that may not fit the standard approaches to specification of reference points and management measures set forth in these guidelines,” particularly “conservation and management of ESA-listed species . . . and stocks with unusual life history characteristics (e.g. Pacific salmon . . .).” § 600.310(h)(3) at 73 FR 32545. While the flexibility provision at § 600.310(h)(3) should not be widely invoked or used to avoid the ACL requirement, the Network believes that the Pacific salmon fisheries managed under the Pacific Council’s salmon FMP represent such an exceptional case to which the application of the flexibility provision is appropriate. The Council’s salmon conservation objectives are generally expressed in terms of an annual fishery escapement believed to be optimum for producing MSY over the long-term. Managing to an annual escapement level is a direct quantitative measure that functions, in effect, as an annual catch limit. Additional management measures provide accountability, and a well-established annual specification process provides regular review and oversight of fishery performance. In these specific circumstances, we believe that § 600.310(h)(3) should apply.

Despite its possible appeal, the use of indicator species to extrapolate trends of other species should be viewed with considerable skepticism. From the perspective of niche theory, fishes that coexist are able to do so, in part, because they have adapted to use different niches in their shared environment. Consequently, species within assemblages differ in reproductive characteristics, foraging behavior, habitat requirements, and population-level responses to such factors as competition, predation, disease, and environmental variation. Because of these differences, population trends of one species (or stock) do not readily extrapolate to others in the assemblage...¹²

On the other hand, the researchers did find evidence of species assemblages on the basis of fishery landings. The fact that fisheries catch these loosely associated species together does not justify their inclusion and management as a single unit in the absence of more precise information, but from a practical standpoint this approach may be employed in data-poor situations that do not permit stock-specific analysis if NMFS and the Councils proceed first by identifying those species and stocks with similar life histories and choose indicator species in the assemblage that are most vulnerable to overfishing:

From another perspective, even without strong evidence of synchrony, indicator species may be still useful in a restrictive sense. That is, if fishing effort occurs at the level of assemblages, regulations to reduce effort on one species (the indicator) could transmit to others of unknown status. The cost of this approach would be the forgone yield of any species that could sustain increased rates of exploitation. Ideally, the indicator species should be the weakest link of the assemblage, although defining weakest link could be problematic, along with choosing the correct species...If achievable, however, such a restrictive use of indicator species could be considered a precautionary approach to management.¹³

Yet the proposed rule lacks any guidance on how to determine which species share similar life histories and which are most vulnerable to fishing due to lower productivity. If the use of indicator stocks to set ACLs for an entire complex is unavoidable, the most vulnerable stocks in the complex should be used to prevent overfishing in the fishery. If an indicator stock is chosen whose life history characteristics are more resilient to fishing pressure than other stocks in the complex, management measures need to be more conservative to prevent the weaker stocks from being overfished. Therefore, the proposed rule's weak language, which states that indicator species "*should* be chosen to represent the *more* vulnerable stocks within the complex," 73 Fed. Reg. at 32540, § 600.310(d)(9) (emphasis added), must be strengthened to state that if use of an indicator stock is necessary, the most vulnerable stock within the complex must be chosen in order to comply with the MSRA's prohibition on overfishing within the fishery.

In the absence of clear guidance on how to determine the productivity and susceptibility of stocks to fishing, efforts to develop biologically and ecologically meaningful stock "complexes" will be difficult indeed. A 2007 scientific report by the Lenfest Oceans Program recommended the adoption of a

¹² Kyle W. Shertzer and Erik H. Williams. Fish assemblages and indicator species: reef fishes off the southeastern United States. *Fish. Bull.* 106: 257-269 (2008).

¹³ *Id.* Shertzer and Williams (2008).

Productivity and Susceptibility Analysis (PSA) as a part of the assessment toolkit that managers use to evaluate the risks to data-poor stocks.¹⁴ The final ACL rule should include guidance on such a methodology and how it may be used to identify stock complexes and establish catch limits for data-poor stocks and stock complexes.

It is our understanding that NMFS has tasked a technical working group to develop a PSA tool that could be used to evaluate data-poor stocks in current and future stock complexes, which the agency intends to publish separately as technical guidance. While supplemental technical guidance on the designation of stock complexes and indicator species in data-poor fisheries would be extremely helpful, it is imperative to incorporate explicit guidance into the NS1 Guidelines as well.

2.3 Need for clarification and guidance on the appropriate use of Ecosystem Component species

NMFS proposes to create this stock designation for non-target species in FMPs to account for protection of the marine ecosystem and ecosystem approaches to management, saying this designation is consistent with MSA § 3(5) and 3(33). The intent is laudable, but there is great potential for mischief with this category. For example, these stocks would not be considered “in a fishery” and therefore would not have an ACL requirement or other requirement to determine their status. It is not clear when an EC designation should apply and the proposed rule provides no examples of existing FMP species that would fall into this category. The final rule must provide clearer guidance on when an EC designation is appropriate, as well as examples of which species could fall into this category, in order to ensure that it is not used to avoid the setting of ACLs for stocks that should properly be considered “in a fishery.” In the absence of clearer guidance on the application of this species category and examples of its appropriate use, this concept should be omitted.

III. Establishing New Limit and Target Control Rules: The Catch-Setting Framework

The current NS1 guidelines include “limit” control rules corresponding to MSY and “target” control rules corresponding to OY. The proposed revisions to the NS1 guidelines would replace these rules with a new, and potentially more conservative, limit control rule corresponding to a science-based ABC and a new target control rule corresponding to the ACT. 73 Fed. Reg. at 32534; 73 Fed. Reg. at 32543, § 600.310(f). Importantly, the existing MSA 303(a)(10) requirement to specify objective and measurable criteria for identifying when a fishery is subject to overfishing or overfished still applies, as provided in the existing NS1 guidelines for MFMT, OFL, MSST. 73 Fed. Reg. at 32532-33; 73 Fed. Reg. at 32540, § 600.310(e)(2). Regarding specification of SDC and overfishing/overfished determinations, the Network agrees that “SDC must be expressed in a way that enables the Council to monitor each stock or stock complex in the FMP and determine annually, if possible, whether overfishing is occurring and whether the stock or stock complex is overfished.” 73 Fed. Reg. at 32540, § 600.310(e)(2)(ii) (emphasis added).

¹⁴ Andrew Rosenberg *et al.* Setting Annual Catch Limits for U.S. Fisheries, Report of the Lenfest Working Group on Annual Catch Limits. Lenfest Ocean Program (September 2007). 36 p.

The catch-setting framework described in the proposed rule relies on two buffers associated with the limit and target control rules in order to achieve its objective of reducing the risk that overfishing will occur, 73 Fed. Reg. at 32534: one between OFL and ABC to account for the scientific uncertainty in calculating OFL, and one between ACL and ACT to account for management uncertainty in preventing a fishery from exceeding the ACL. However, the buffers recommended by NMFS in the proposed rule remain discretionary. Because buffers that adjust management limits and targets to account for scientific and management uncertainty are required to provide a high probability of preventing overfishing, the proposed rule should be amended to require mandatory buffers based on a quantitative assessment of both types of uncertainty.

Given that some Councils are already suggesting that the ACL is a more appropriate place to account for matters such as management uncertainty, NMFS should consider incorporating the management uncertainty (and any relevant OY considerations) directly into the ACL calculation. This procedure would provide a clear basis for setting $ACL < ABC$. The proposed rule does not provide any guidance on this procedure, however – an omission the final rule must remedy if this approach is recommended by NMFS. The Network could support this alternative approach as long as there is a quantitative assessment of both types of uncertainty. The objective is to ensure that both types of uncertainty are accounted for in order to reduce the risk that overfishing will occur. See 73 Fed. Reg. at 32534.

3.1 The catch-setting framework must be strengthened by requiring explicit buffers to account for uncertainty in order to achieve a high probability of not overfishing and achieving OY

The proposed rule outlines a conservation-minded, science-based approach to ending overfishing as required by the MSRA, but its key provisions regarding specification of OY, ABC, and ACL remain discretionary. Of particular importance, to comply with the new MSRA mandates, NMFS must *require*, rather than merely recommend, explicit buffers as a *preventative* form of accountability and the first line of defense against overfishing. NMFS states numerous times that councils “should” integrate buffers between management limits (such as the fishing mortality rate that constitutes overfishing, or OFL) and targets (such as the annual catch target, or ACT). 73 Fed. Reg. at 32534. Although buffers are encouraged, they are discretionary, and there is no guidance on determining the recommended buffers for setting the ABC and ACL – See, *e.g.*, 73 Fed. Reg. at 32542, § 600.310(e)(3)(v) (“The specification of OY must be consistent with preventing overfishing and should be reduced from MSY to account for scientific uncertainty...” (emphasis added); “To the degree that such MSY estimates and management controls are lacking or unavailable, OY should be farther from MSY...” (emphasis added); “to achieve OY in the long term, catch targets (i.e., ACT) should be set below catch limits (i.e., ACLs)...” (emphasis added)); see also 73 Fed. Reg. at 32543, § 600.310(f)(4) (“The ABC control rule should clearly articulate how far below the OFL...the ABC will be set...” (emphasis added); “The ABC control rule should take into account uncertainty in factors such as...”(emphasis added)); see also 73 Fed. Reg. at 32544, § 600.310(f)(6)(i) (“Two sources of uncertainty should be accounted for in establishing the ACT control rule...” (emphasis added)).

The proposed rule outlines a catch-setting framework that can be summarized as follows:

$$OFL (=MFMT/MSY) \geq ABC \geq ACL \geq ACT (=OY)$$

In this formulation, the SSC-recommended ABC would be set no higher than the OFL, the ACL would be set at an amount not to exceed the ABC (and ACL would serve as the limit that triggers accountability measures), and the ACT would be set at an amount not to exceed ACL, 73 Fed. Reg. at 32543, § 600.310(f)(1). Moreover, NMFS recommends a buffer between OFL and ABC to account for scientific uncertainty, *id.*, as well as a buffer between ACL and ACT to account for management uncertainty by ensuring that the catch target does not exceed the ACL, 73 Fed. Reg. at 32544, § 600.310(f)(6).

However, *the catch-setting formula is structured so that Councils may still set ACT(OY) = OFL (MSY) unless a council's SSC reduces its ABC recommendation below OFL to account in some measure for the uncertainty in estimation of OFL, in which case a Council's ACL recommendation may not exceed the SSC's ABC recommendation.*¹⁵ NMFS is relying heavily upon swift and certain accountability measures as a backstop against overfishing in the event that Councils set ACL = OFL and fishing exceeds the limit. Buffers between limit and target fishing levels reduce the chance that overfishing will occur and should be recognized as a preventative accountability measure. No matter what approach is ultimately used, the system should account for scientific and management uncertainty as well as any relevant OY considerations. NMFS should also require that FMPs show how sources of uncertainty were considered and accounted for and where they were accounted for.

To prevent the ACL from being set equal to the overfishing level, the final rule's catch-setting framework should be modified to build in mandatory buffers. The reason for requiring buffers is that all fisheries information is imprecise: scientific estimates of overfishing levels are uncertain, and managers' ability to track and control all sources of fishing mortality is far from exact or complete. Indeed, NMFS uses just this analysis to explain its recommendation of buffers in the proposed rule. Setting clear buffers to account for scientific and management uncertainty is the only way to reduce the probability of overfishing to an acceptable level. In addition to tasking a technical working group to develop guidance on the means of establishing buffers between fishery catch limits and catch targets, which the agency intends to publish separately as technical guidance, we feel it is imperative to incorporate explicit guidance concerning the size of the buffer and how the SSCs should determine it into the NS1 Guidelines as well.

3.2 The determination of OY for all stocks or stock complexes in a fishery must consider all relevant social, economic, and ecological factors and Councils must address these factors explicitly in their OY specifications for each FMP, stating clearly how they were considered and how they were accounted for in the ACT/OY calculation

The 1996 amendments to the Magnuson-Stevens Act stipulated that OY cannot exceed the limit reference point corresponding to MSY in any circumstance. The Act's definition of OY acknowledges the importance of protecting marine ecosystems and authorizes downward adjustments from the maximum allowable fishing rate "as reduced by any relevant economic, social, or ecological factor." 16 U.S.C. § 1802(33)(B). We agree that an FMP must address these factors explicitly in its OY specification:

¹⁵ 16 U.S.C. § 1852(h)(6) stipulates that fishery management councils shall develop ACLs for each managed fishery that may not exceed the fishing level recommendations of their scientific and statistical committee or the scientific peer review process established under 302(g).

To the extent possible, the relevant social, economic, and ecological factors used to establish OY for a stock, stock complex, or fishery should be quantified and reviewed in historical, short-term, and long-term contexts. Even where quantification of these factors is not possible, the FMP still must address these factors in its OY specification.

73 Fed. Reg. at 32542, § 600.310(e)(3)(iv) (emphasis added). Similarly, we agree that the specification of OY "...should be reduced from MSY to account for scientific uncertainty in calculating MSY, and economic, social, and ecological factors such as those described in paragraph (e)(3)(iv) of this section." 73 Fed. Reg. at 32542, § 600.310(e)(3)(v). Once again, however, we find the proposed rule lacking in any specific guidance on how Councils should do this through their catch specification process.

Regarding ecological factors to consider, for example, the proposed rule cites fishery impacts on EC species in FMPs, impacts on forage fish stocks, impacts on predator-prey interactions, and species interactions not accounted for in the calculation of MSY. 73 Fed. Reg. at 32542, § 600.310(e)(3)(iv)(C). While the Network agrees that these are all important factors to consider when specifying OY, the proposed rule provides no specific guidance on how fishery managers should address these considerations explicitly in the catch specification process. We discuss the following example of OY specification for forage fish to illustrate the need for explicit guidance on a procedure for reducing OY from the maximum permissible level to account for the role of forage fish as prey in the ecosystem.

3.2.1 The NS1 final rule should include explicit guidance on procedures for determining OY for forage fish in a fishery with the aim of maintaining significantly higher stock biomass than B_{MSY} to ensure their availability as prey to predators in the ecosystem

Specific to achieving optimum yield for forage fish stocks, the proposed rule states that Councils should *consider* managing forage fish stocks for higher biomass than B_{MSY} to enhance and protect the ecosystem. 73 Fed. Reg. at 32542, § 600.310(e)(3)(iv)(C). The Network certainly agrees with that objective, but NMFS should strengthen and elaborate on this provision in several important ways in the final rule:

- Modify the language in § 600.310(e)(iv)(C) to say that the Councils *should* manage forage fish for higher biomass than B_{MSY} to enhance and protect the ecosystem.
- Include criteria for identifying key forage fish in FMPs and recommend that Councils should employ the criteria to develop separate forage fish FMPs
- Include explicit guidance on procedures to reduce catch levels and disperse catches spatially and temporally to preserve the ecological role of forage fish in their respective ecosystems, which should be factored into the ACT/OY specification process for forage fish.

As with procedures for setting the ABC and ACT control rules, NMFS should provide explicit guidance on procedures to achieve OY for forage fish by reducing catch levels significantly below MSY to preserve the ecological role of forage fish as essential prey species in their respective ecosystems. The basis for explicit guidance aimed at preserving the ecological role of forage fish as prey is well established in the scientific literature. For instance, 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 context, food web interactions, life-history strategies, and trophic

effects will need to be explicitly accounted for when developing fishery harvest strategies.¹⁶ As a first step toward this goal, the NS1 Guidelines should establish criteria for determining OY for identified forage fish stocks in a fishery with the aim of maintaining significantly higher stock biomass than B_{MSY} to ensure their availability as prey to predators in the ecosystem.

The Network's detailed recommendations for guidance on forage fish conservation and management, which we submitted August 8, 2007, outline such an approach and provide specific regulatory language for inclusion in the NS1 Guidelines that calls for establishing forage fish classification criteria in the NS1 guidelines, identifying forage fish stocks in fishery management plans, reducing catches of forage fish stocks in a fishery to protect predators' food supply, and dispersing fishery catches geographically and seasonally in order to avoid localized depletions of prey at key times and in sensitive areas. We incorporate those comments by reference here and we urge NMFS to include our specific recommendations in the final rule. See Attachment 1.

IV. Implementing Accountability Measures To Prevent Overfishing And Achieve Optimum Yield On A Continuing Basis

Accountability measures are defined as "management controls that prevent ACLs or sector-ACLs from being exceeded (inseason AMs), where possible, and correct or mitigate overages if they occur." 73 Fed. Reg. at 32544, § 600.310(g)(1). At the same time, NMFS says that AMs may include area closures, changes in gear, changes in trip size or bag limits, reductions in effort, overage adjustments, and other appropriate management controls for the fishery. *Id.* 73 Fed. Reg. at 32544, § 600.310(g)(2) and (3). In the final rule, NMFS should specify that AMs should be approved by the Secretary of Commerce, should be subject to regular scientific review, and should provide opportunities for public comment; performance must be measurable and AMs must be modified if not working.

If management information is not available to prevent ACLs from being exceeded within the current fishing season, AMs should mitigate overages in subsequent fishing seasons if they are found to occur after the fishing season has closed. Crucially, AMs should correct the problems that caused the overage in as short a time as possible. 73 Fed. Reg. at 32544, § 600.310(g)(1). Thus the proposed rule would require Councils to establish management controls that prevent ACLs or sector-ACLs from being exceeded (in-season AMs) and correct/mitigate overages if they occur, including inseason AMs, 73 Fed. Reg. at 32544, § 600.310(g)(2), AMs for when the ACL is exceeded, 73 Fed. Reg. 32544, § 600.310(g)(3)), and AMs based on multi-year average data, 73 Fed. Reg. 32544, § 600.310(g)(4).

The Network supports this formulation of AMs in broad outline and underscores the need for AMs to correct problems that lead to overages of ACLs in as short a time as possible. At the same time, the proposed rule introduces a category of AMs for when the ACL is exceeded, 73 Fed. Reg. 32544, § 600.310(g)(3), which is intended to address situations in which the initial AMs fail to prevent overages. This type of AM could include modification of inseason AMs or overage adjustments, and is intended "correct the operational issue that caused the ACL overage, as well as any biological consequences to

¹⁶ 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.

the stock or stock complex resulting from the overage when it is known,” *id.* This category of AMs provides an important backstop to address overages when they occur, but should not be used as a substitute for AMs to prevent overages in the first place. The final rule should emphasize that *post hoc* (or “payback”) AMs must not be used as an excuse to minimize preventative measures that make overages less likely to occur, such as buffers between ACL and OFL.

The Network also believes that, wherever possible, FMPs must include inseason closure authority to prevent catch from exceeding ACLs. See 73 Fed. Reg. 32544, § 600.310(g)(2). It is essential that FMPs include inseason closure authority to close the fishery on or before the date when the ACL for a stock or stock complex is projected to be reached in order to prevent ACLs from being exceeded, see *id.*, and therefore NMFS must make inseason closure authority a *required* element of FMPs, not a discretionary one. The Network believes that NMFS should amend § 600.310(g)(3) to state that if an ACL is exceeded, AMs must be triggered and implemented as soon as possible upon learning of the overage. Crucially, for stocks or stock complexes in rebuilding plans, the Network believes that § 600.310(g)(3) should be amended to read that AMs should include overage adjustments that reduce the ACLs in the next fishing year by the full amount of the overage as a general rule. In addition, NMFS should require in § 600.310(h)(1) that FMPs describe AMs and their relationship to appropriate control rules, including how AMs are triggered and what sources of data will be used. See 73 Fed. Reg. at 32544.

4.1 Accountability Measures should be reviewed annually as part of the catch specification process to ensure that they are working as intended to avoid exceeding the ACL

In the proposed rule, the ACL would be the limit that triggers AMs. 73 Fed. Reg. at 32533, Preamble; 73 Fed. Reg. at 32543, § 600.310(f)(2)(iv). The Network agrees that accountability measures should prevent ACLs from being exceeded and correct overages of ACLs if they occur. An essential goal of a system of ACLs and accountability measures (including multiyear ACL/AMs) is to ensure that overfishing does not occur in a fishery on an annual basis. 73 Fed. Reg. 32543, § 600.310(f)(5)(i). This is in keeping with the clear intent of Congress in 16 U.S.C. § 1853(a)(15), which requires accountability measures to ensure that catches stay within prescribed fishing limits and “at a level such that overfishing does not occur in the fishery.” The development of an annual or multiyear ACL-setting catch specification process for stocks managed in a fishery will provide the opportunity to evaluate and modify AMs, as discussed in the Preamble. 73 Fed. Reg. at 32536. The Network believes an annual review of the performance of AMs during an annual catch specification process is appropriate and would provide a timely, consistent method for evaluating AMs that the public can understand in addition to providing an opportunity for public comment, *id.* We discuss the establishment of Council catch specification procedures in more detail in Section VI below.

4.2 Where data permit, the ACL performance standard should be based on annual achievement of the management objective (i.e., to avoid exceeding ACL) and any overage of ACL should automatically trigger an *immediate* re-evaluation of AMs to determine what went wrong and correct any problems as quickly as possible

NMFS proposes an ACL Performance Standard to ensure that the ACL/AMs decrease the risk of overfishing and trigger action to correct overages of ACLs, a concept that the Network supports. However, NMFS proposes that the standard would only trigger a re-evaluation of the system of ACLs,

ACTs and AMs if the catch of a stock exceeds its ACL more often than once in the last four years (i.e., more often than 25 percent of the time). 73 Fed. Reg. at 32528, Preamble; 73 Fed. Reg. at 32544, § 600.310(g)(3&4) (“If catch exceeds the ACL more than once in the last four years, the system of ACLs, ACTs and AMs should be re-evaluated to improve its performance and effectiveness” (emphasis added); “If the average catch exceeds the ACL more than once in the last four years, the system of ACLs, ACTs and AMs should be re-evaluated to improve its performance and effectiveness” (emphasis added)). In effect, NMFS is saying that overages of ACLs would be acceptable as long as the AMs meet their objective 75% of the time (i.e., three out of four years).

NMFS should make clear that the “reevaluation” called for in the proposed rule does not authorize simply raising ACLs or other numeric fishing restrictions in order to avoid the inconvenient fact that they have been exceeded. A system in which overages result in simply raising the applicable ACL lacks any kind of accountability whatsoever, and will ultimately produce the same kind of widespread overfishing that Congress sought to remedy in the MSRA – or, for that matter, the SFA. In order to eliminate any potential ambiguity, and to avoid virtually encouraging councils to avoid deducting overages from the following year’s ACL as the existing language appears to do, we propose that NMFS amend § 600.310(g)(3) (73 Fed. Reg. at 32544) as set forth in the margin.¹⁷

The Network believes that the MSRA requires an ACL performance standard that triggers automatic improvement of AMs in any year in which the ACL is exceeded as well as immediate action to correct the problem. Creating a performance standard aimed at achieving the objective only 75% of the time (i.e., three out of four years) directly undermines the intent of annual achievement of annual catch limits. Therefore, any overage of ACL should trigger an *immediate* re-evaluation of AMs to correct the problems that resulted in the overage. This is the only way to ensure that the system of ACLs and AMs works as intended by the proposed rule. See § 600.310(e)(3)(ii) at 73 FR 32541. To be effective, the ACL performance standard must require Councils to revisit the accountability measures annually during the catch specification process and to modify them as often as necessary to ensure their effectiveness and correct overages of the ACL as soon as possible.

4.3 In recreational fisheries, ACLs could be based on a multi-year rolling average and the performance of AMs could be evaluated using multi-year average data

The Network believes it is appropriate to consider the use of multiyear average ACLs and AMs based on achievement of a rolling average catch. In recreational fisheries, the use of a three-year rolling

¹⁷ 50 CFR § 600.310(g) (3) *AMs for when the ACL is exceeded*. On an annual basis, the Council should determine as soon as possible after the fishing year if an ACL was exceeded. If an ACL was exceeded, AMs must be triggered and implemented as soon as possible to correct the operational issue that caused the ACL overage, as well as any biological consequences to the stock or stock complex resulting from the overage when it is known. These AMs could include, among other things, modifications of inseason AMs or overage adjustments. For stocks and stock complexes in rebuilding plans, the AMs should include overage adjustments that reduce the ACLs in the next fishing year by the full amount of the overage. If catch exceeds the ACL, the system of ACLs, ACTs and AMs must be re-evaluated to improve its performance and effectiveness. Such re-evaluation should not result in raising the ACL, ACT, or related catch restrictions as a way of avoiding corrective measures to mitigate overages.

average ACL would moderate wild swings in ACLs due to variable fishing conditions and participation from year to year. For instance, an overage in one year may be followed by an underage of that amount in the following year. Thus a system of annual AMs based on exceeding ACL in one year would not necessarily be appropriate or feasible in such fisheries.

Our rationale for using rolling average ACLs and AMs based on multi-year average data is based on two factors related to recreational fishing. First, recreational fishing data come from the Marine Recreational Fisheries Survey Statistics (MRFSS) program or its successor, which the National Research Council has deemed inappropriate for making annual management decisions. Second, the way recreational fishing is managed does not lend itself well to annual adjustments. Recreational fishery management measures aim to control fishing effort, e.g., the number of fish that can be kept (bag limit), the size of fish that can be kept, and the length of the season. What is not regulated is the number of fishermen participating. If fishing is good or the weather is nice, there will be more fishermen and therefore more fish caught and kept, all in accordance with the regulations. If the weather is bad, or gas prices go up, the number of fishermen decreases and the number of fish landed may decline sharply. The result is often wide annual fluctuations in recreational fishing landings.

Even when AMs are based on multi-year average data, however, it is still appropriate to conduct an annual evaluation of the moving average catch to the average ACL to determine if the ACL has been exceeded. If the annual evaluation determines that the average catch has exceeded average ACL, AMs should be triggered and implemented as soon as possible. To make this clear, § 600.310(g)(4) should incorporate language similar to that in paragraph (g)(3), as follows:

Some fisheries have highly variable annual catches and lack reliable inseason or annual data on which to base AMs. If there are insufficient data upon which to compare catch to ACL, either inseason or on an annual basis, AMs could be based on comparisons of average catch to average ACL over a three-year moving average period, or if supported by analysis, some other appropriate multi-year period. Evaluation of the moving average catch to the average ACL must be conducted annually. If an annual evaluation determines that the average catch has exceeded average ACL, AMs should be triggered and implemented as soon as possible to correct the operational issue that has caused the ACL overage, as well as any biological consequences to the stock or stock complex resulting from the overage when it is known. If the average catch exceeds the average ACL more than once in the last four years, then the ACL, ACT and AM system should be re-evaluated. The initial ACL and management measures should incorporate information from previous years so that AMs based on average ACLs can be applied from the first year.

73 Fed. Reg. at 32544, § 600.310(g)(4) (emphasized language added).

V. Rebuilding Overfished Stocks: The MSRA Unambiguously Forbids NMFS and the Councils From Knowingly Allowing Overfishing

In the Preamble to the proposed rule, NMFS says that the statutory phrase “at a level such that overfishing does not occur” in new 16 U.S.C. § 1853(a)(15) of the MSRA (requiring the specification of annual catch limits) is subject to different interpretations. Preamble at 73 FR 32528. As previously

noted above, we believe that the statutory language leaves no doubt as to the intent of Congress: the MSRA plainly requires NMFS and the councils to end overfishing wherever it occurs to prevent overfishing from re-occurring, and to prepare and implement rebuilding plans for overfished stocks within a time certain (not to exceed two years) that end overfishing *immediately* and ensure that rebuilding occurs in as short a time as possible. See 16 U.S.C. § 1854(e)(3)&(4).

In the past, NMFS has engaged in a number of activities that violate the law’s rebuilding requirements by allowing regional councils to extend rebuilding periods to the ten-year limit on a routine basis, allowing the councils to establish rebuilding periods that extend for more than 150 years, and working with the councils to delay adopting rebuilding plans in a way that prolongs the rebuilding period. The plain language of the MSRA clearly states that the rebuilding time line for overfished stocks requires rebuilding to be accomplished in as short a period as possible, and that in most cases the ten-year rebuilding period contained in the MSRA is an outer limit for rebuilding. Amended portions of the MSRA’s rebuilding provisions strengthen the requirements by underscoring the need for rebuilding plans to end overfishing immediately and to prohibit any period of endorsed overfishing, 16 U.S.C. § 1854(e)(3), while maintaining the existing statutory requirement that rebuilding times for overfished stocks shall be as short as possible and not exceed ten years in most cases, *id.* § 1854(e)(4)(A)(i-ii).

Given the troubled history of rebuilding programs to date, the Network is pleased to see that the proposed rule specifies that a rebuilding plan must end overfishing *immediately*, 73 Fed. Reg. at 32545, § 600.310(J)(2)(ii)(B), as required by the MSRA at 16 U.S.C. § 1854(e)(3)(A). For an overfished fishery, a council must specify a period for rebuilding based on MSRA 16 U.S.C. § 1854(e)(4) and the target time for rebuilding shall be as short as possible. 73 Fed. Reg. at 32545, § 600.310(j)(3)(i). The time period for rebuilding shall not exceed ten years, except where biology of the stock, other environmental conditions or management measures under an international agreement to which the U.S. participates dictate otherwise. 73 Fed. Reg. at 32545-46, § 600.310(j)(3)(i). These provisions clearly follow the MSRA in requiring Councils or the Secretary of Commerce to prepare and implement a rebuilding plan no later than two years after identifying a stock as overfished or approaching an overfished condition to end overfishing immediately and to disallow overfishing during the plan. We are also pleased to see that, for stocks or stock complexes undergoing rebuilding, the AMs should include overage adjustments that reduce the ACLs in the next fishing year by the full amount of the overages as a general rule, 73 Fed. Reg. at 32544, § 600.310(g)(3), and that if a stock has not rebuilt by T_{max} then the rebuilding F should not exceed 75% of MFMT until the stock is fully rebuilt to B_{MSY} , 73 Fed. Reg. at 32546, § 600.310(j)(3)(ii). Furthermore, the explicit out contained in § 600.310(g)(3) for this approach to accountability must be struck: i.e., end relevant sentence on page 32544 after “overages” and strike “unless the best scientific information available shows that a reduced overage adjustment, or no adjustment is needed to mitigate the effects of the overages.”

In general, the guidance on rebuilding improves upon the existing guidelines in important ways (See § 600.310(e)). The proposed rule correctly states that the target rebuilding time (T_{target}) shall not exceed the maximum permissible rebuilding time (T_{max}), *and that priority shall be given to rebuilding in as short a time as possible*. 73 Fed. Reg. 32546, § 600.310(j)(3)(i)(E). It is important to remember that the notion of rebuilding in as short a time as possible is not just a “priority” but a mandate of both the SFA of 1996 and the MSRA of 2006. If the minimum time for rebuilding (T_{min}) is ten years or less, then the maximum time for rebuilding a stock to its B_{MSY} is ten years. 73 Fed. Reg. 32546, § 600.310(j)(3)(i)(C). However, based on our experience of past rebuilding plans, we remain concerned

that the language in the rule treats T_{target} as an optional, fuzzy deadline and T_{max} as the only rigorous deadline, 73 Fed. Reg. 32546, § 600.310(j)(3)(i)(E)(ii), which can become a serious problem for slow-growing, long-lived stocks whose T_{min} is significantly greater than ten years and whose T_{max} is calculated such that rebuilding may take many decades. In order to clarify the guidance and bring it into compliance with 16 U.S.C. § 1854(e)(4), § 600.310(j)(3)(i)(E) must be modified to clarify that T_{target} must be set at a time period that is “as short as possible.” Further, the phrase in § 600.310(j)(3)(ii) that states “If the rebuilding plan was based on a T_{target} that was less than T_{max} , and the stock or stock complex is not rebuilt by T_{target} , rebuilding measures should be revised, if necessary, such that the stock or stock complex will be rebuilt by T_{max} must be revised to include a directive to revise rebuilding measures as it becomes clear that a stock or stock complex will not be rebuilt by T_{target} . This addition is crucial to ensure that T_{target} is seen as a true deadline and that proper actions are taken to rebuild a stock or stock complex within that timeframe.

In addition, we think the rebuilding provisions should be strengthened in the following ways.

5.1 The NS1 final rule should establish a policy that a stock or stock complex below the size that would produce MSY (B_{MSY}) should be fished at a lower rate or level of fishing mortality than if the stock or stock complex were above the size that would produce MSY

The proposed rule correctly emphasizes that the ACL requirement must address overfishing and ACLs must be set at a level to facilitate rebuilding of overfished stocks. 73 Fed. Reg. at 32528. We are pleased to see the inclusion of a provision stating that if a stock has not rebuilt by T_{max} then the rebuilding fishing mortality rate (“rebuilding F”) should be no greater than 75% of the MFMT until rebuilt to B_{MSY} . 73 Fed. Reg. at 32546, § 600.310.(j)(3)(ii). To ensure that the failure of a rebuilding plan is not used to increase fishing rates, however, the rule language should specify that “The rebuilding F should not exceed 75% of MFMT or the rebuilding F of the last year of the rebuilding plan, whichever is lower.” However, it is not adequate to wait until the end of a rebuilding plan to reduce the rebuilding F below the MFMT, or overfishing level. Indeed, a more precautionary rule that reduces fishing mortality linearly once the stock biomass declines below the MSY target biomass could, in many instances, prevent the stock from declining to the low level that triggers a rebuilding plan. Therefore we think the final rule should establish a policy that a stock or stock complex below the size that would produce MSY (B_{MSY}) should be fished at a lower rate or level than if the stock or stock complex were above the size that would produce MSY. In the North Pacific Council control rule, for example, the fishing mortality rate is automatically reduced in a linear fashion for any stock whose biomass has fallen below B_{MSY} , or proxy thereof, so that fishing mortality declines in proportion to the stock biomass. Such a policy should be incorporated into the final rule’s rebuilding provisions.

5.2 The NS1 final rule should modify the recommended MSST guidance to state that MSSTs should be set at levels that take into account the life history and vulnerability of stocks, and that MSSTs should be *no lower than 50%* of the stock size that would produce MSY (B_{MSY}) under any circumstance

“Overfished” status is determined with reference to a measure of stock abundance or biomass (minimum stock size threshold, MSST), which NMFS continues to recommend as one-half of the MSY target stock size (50% of B_{MSY}), or the minimum stock size at which rebuilding to the B_{MSY} level would be expected to occur within ten years if the stock or stock complex were exploited at the MFMT. 73

Fed. Reg. at 32541, § 600.310(e)(2)(ii)(B). However, the MSY target stock biomass is typically estimated as only 30-40% of the estimated unfished stock biomass, and therefore one-half of this target stock size is only 15-20% of the unfished stock size. We are concerned that this recommended MSST is dangerously low for many stocks and leaves too little margin for error in estimates of the stock abundance. NMFS continues to recommend a one-size-fits-all MSST that fails to account for the life history characteristics of individual stocks that should properly require more precautionary MSSTs. In an effort to address that concern, some Councils derive a more precautionary MSST by factoring natural mortality (M) into the calculation to increase the spawning stock biomass at MSST – e.g., multiplying a fraction derived from $1 - M$ times MSST $(1 - M)(SSB_{MAX})$. Therefore, we urge NMFS to recommend that MSSTs should be set at levels that take into account the productivity and vulnerability of stocks, and that MSSTs should be set *no lower than* 50% of B_{MSY} under any circumstance.

VI. Establishing A Regular (Annual or Multiyear) Catch Specification Process

Establishing annual catch limits and accountability measures that prevent overfishing, as required by the MSRA, will require each Council to establish a well-defined set of procedures for receiving SSC-recommended ABCs; making recommendations to NMFS for ACLs, ACTs, accountability measures and other appropriate management measures; and assessing the sufficiency of existing accountability measures and monitoring their implementation and efficacy on a regular basis. These activities must be incorporated into each Council's annual cycle of meetings.

6.1 Councils should be required to modify their Statement of Organization, Practices and Procedures to incorporate a mechanism for specifying ACLs and reviewing AMs annually through regular catch specification procedures

The proposed rule correctly states that any FMP prepared by any Council “shall establish a mechanism for specifying ACLs in the FMP...” 73 Fed. Reg. at 32538, § 600.310(b)(2)(iii) (emphasis added), as required by new § 1853(a)(15) of the MSRA. Elsewhere the proposed rule calls on Councils to develop a process for receiving and scientific information and advice in the specification of ABC. 73 Fed. Reg. at 32543, § 600.310(f)(3). The NS1 proposed rule clearly entails the development of an annual or multiyear ACL-setting catch specification process for stocks managed in a fishery, which will also be the opportunity to evaluate and modify AMs, as discussed in the Preamble. 73 Fed. Reg. at 32536. NMFS calls on Councils to modify their Statement of Organization, Practices and Procedures (SOPPs, see 50 CFR § 600.115) to incorporate these procedures formally. 73 Fed. Reg. at 32532.

Given the ACL-setting requirement and other requirements of the MSRA, such as the stipulation that SSCs will recommend ABCs, the majority of Councils will be required to revamp their operating procedures to incorporate a regular (e.g., annual or multiyear) catch specification process with a working SSC that recommends ABCs. There is currently no standard approach to catch specifications at the regional fishery management councils, and some Councils do not have a regular specification process of any kind. Under the proposed rule, all stocks managed in a fishery should have an annual or multiyear catch specification process for setting ACLs, evaluating the annual performance of fisheries relative to ACLs, and assessing the efficacy of accountability measures. 73 Fed. Reg. at 32536. NMFS correctly notes that a regular Council catch specification process would provide a timely, consistent method for

setting ACLs and evaluating AMs that the public can understand and would provide an opportunity for public comment. *Id.* at 32536.

VII. Strengthening the Proposed Rule to Fulfill the Terms of the MSRA: Additional Modifications

In addition to the comments outlined above, the Network believes the proposed rule must be modified and improved in the following important ways.

7.1 The NS1 final rule must eliminate proposed 50 CFR § 600.310(m), known as the “weak stock exemption”

The proposed rule retains an existing “exception to requirements to prevent overfishing” where fishing for “one stock at its optimum level may result in overfishing of another stock.” 73 Fed. Reg. at 32547, § 600.310(m). The so-called “weak-stock exemption” is a carry-over provision from the existing NS1 Guidelines that has been modified slightly. Even in its modified form, this provision acts as a loophole that plainly violates the letter and spirit of the law by permitting overfishing on a stock within a stock complex in order to achieve optimum yield for another stock. This provision should be removed from the final rule in its entirety, notwithstanding NMFS’ proposed modification to state that any overfishing of weak stocks will not cause a stock to fall below its MSST more than 50 percent of the time “on average.”

As we have stated in past communications on this subject, NMFS should not allow overfishing of individual stocks contained in mixed stock fisheries.¹⁸ Too often NMFS has failed to prevent overfishing in mixed stock fisheries in situations that were avoidable, and the amendments to the MSRA of 2006 only underscore the need to end such overfishing, not to excuse it. For example, NMFS has failed to prevent overfishing of individual groundfish stocks off the Pacific coast: the agency has allowed fishing to proceed without the needed stock assessments and catch limits, permitted excessive bycatch and discards in that fishery, and failed to institute adequate procedures to account for discard mortality. NMFS has also allowed overfishing of reef fish complexes in the Gulf of Mexico and the South Atlantic. In each of these instances, excessive bycatch and inadequate accounting for discards has resulted in overfishing in mixed-stock fisheries.

The MSRA does not provide for exceptions to the prohibition on overfishing. It simply prohibits overfishing in plain, unambiguous terms. See 16 U.S.C. §§ 1851(a)(1), 1853(a)(15). NMFS can not rewrite the statute and qualify the overfishing prohibition. The MSRA requires NMFS to end overfishing and the agency must strike this obviously illegal provision.

7.2 The NS1 final rule should withdraw proposed 50 CFR § 600.310(e)(2)(iii)(B) requiring Councils to modify FMP status determination criteria based on assumed or hypothetical changes in the underlying environmental conditions

¹⁸ For instance, see Group Letter of April 16, 2003 to NMFS in response to National Standard 1 Advance Notice of Proposed Rulemaking, issued by NMFS at 68 FR 7492 on February 14, 2003.

The proposed rule contains a provision that would direct fishery management councils to modify a stock's status determination criteria if it is found that environmental changes affect the long-term reproductive potential of stocks or stock complexes. 73 Fed. Reg. at 32541, § 600.310(e)(2)(iii)(B). Oddly, this is one of the few provisions in the proposed rule that states that councils "must" take an action, even though the provision has *no statutory basis*. It should be stricken.

Fishery managers have sometimes used the environmental change argument to circumvent rebuilding targets for overfished stocks by arguing that environmental conditions have changed such that a stock is no longer capable of achieving its historic abundance level. It is well known that declines of heavily fished stocks are popularly ascribed to climate or other environmental changes as a way of deflecting responsibility from the fisheries and denying that stocks are simply overfished. NMFS does not explain in the proposed rule how such determinations will avoid confounding environmental effects with fishing effects, nor does NMFS provide any guidance to prevent this provision from serving as a convenient loophole to allow overfishing on overfished stocks.

NMFS has noted elsewhere that scientists have not demonstrated a clear, unambiguous relationship between cycles of environmental change and productivity of individual fish populations.¹⁹ Attempts to link fish recruitment to a regime shift event may produce spurious correlations or mislead fishery managers to assert a strong linkage where none actually exists.²⁰ In fact, there are very few examples where fish stock dynamics and productivity have been unambiguously linked to oceanographic cycles, and even fewer where those dynamics can be predicted in advance. A period of lower or higher recruitment for a single species is not evidence of a regime shift, for instance. By the time scientists have compiled enough data to determine that longer-term changes in environmental conditions may have occurred, it is too late to address specific stock rebuilding concerns. Lacking clear relationships between cycles of environmental change and the productivity of certain fish species, we believe NMFS should adopt "no regime change" as a default assumption and should establish a high burden of proof to modify the status determination criteria based on changes in environmental conditions.²¹

Given the uncertain state of the science of climate-induced effects on recruitment of fish stocks, it is extremely unwise to propose altering status determination criteria based on assumed or hypothesized changes to an underlying climate "regime," and therefore this provision should be

¹⁹ See, for example, NMFS ESA Section 7 Biological Opinion on the North Pacific Groundfish Fisheries and Steller Sea Lions (November 30, 2000).

²⁰ See, for example, the analysis of long-term pollock and herring recruitment trends in Alaska by Lowell W. Fritz and Sarah Hinckley, A Critical Review of the Regime Shift - "Junk Food" - Nutritional Stress Hypothesis for the Decline of the Western Stock of Steller Sea Lion, MMS, 21(3): 476-518 (2005).

²¹ See V.R. 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 Tech. Memo. NMFS-F/SPO-##, July 17, 1998), p. 40: "...one should be cautious in interpreting a long run of good or poor recruitments as indicative of an environmentally-driven change in stock productivity. In particular, for a period of declining abundance, the 'burden of proof' should initially rest on demonstrating that the environment (as opposed to fishing) caused the decline, and that, therefore, the target control rule should be modified."

withdrawn from the final rule. As written, this provision could be misused by Councils to justify a short-term increase in fishing on a stock due to a recruitment event that may be part of the normal environmental variability rather than evidence of a basic change in environmental conditions requiring a change in SDCs. Under no circumstances should NMFS allow an increase in fishing pressure on an already depleted stock on the theory that the population reduction is attributable to a climate “regime shift” or other environmental factors. In addition, should that underlying changes in climate and environmental conditions allow rebuilding of overfished stocks to occur faster than predicted in the rebuilding plan, NMFS should allow that rebuilding to be completed before agreeing to any increases in fishing pressure on the affected stock.

7.3 The NS1 final rule should include explicit guidance on spatial-temporal management of ACLs as an integral part of effective catch-limit management

To underscore the importance of, and need for, explicit guidance on spatial-temporal management of ACLs, the Network submitted preliminary comments on August 8, 2008, in advance of submitting these more detailed comments on the NS1 proposed rule. We incorporate those comments by reference and ask NMFS to include specific guidance on this subject in the final rule. Spatial-temporal apportionment of ACLs is an integral part of effective catch-limit management. Apportioning ACLs by seasons and areas can reduce bycatch, protect sensitive habitats, address competition among fishery sectors, and avoid localized and serial depletions of fished stocks. The NS1 Guidelines should address the use of such measures explicitly, including the potential of time-area closures to serve as part of a package of accountability measures.

The proposed rule provides no guidance on the use of spatial and temporal management measures to distribute fish catches geographically and seasonally. Fish stocks are assessed on a start-of-year basis and at the scale of the “stock as a whole,” which may encompass a geographic area as large as the entire eastern Bering Sea, the California Current, the Gulf of Mexico, or Northeast Continental Shelf. As such, the stock assessments do not tell fishery managers anything about the patchy distribution of the stock biomass relative to the times and areas where fishing actually occurs. Sustainable yield levels calculated on the basis of an assessment of the stock as a whole do not account for the tendency of fisheries to concentrate in times and areas of high catch per unit of effort, which can result in localized exploitation rates far higher than the standing stock in that area can sustain. Intense fishing on spawning grounds, for example, can decimate breeding subpopulations, resulting in localized or serial depletions that undermine the reproductive potential and resilience of the stock over time.

Spatial-temporal regulations are essential tools in the management toolkit for addressing the shortcomings of relying solely or principally on *how much* fishing to permit without also considering carefully *when* and *where* and *how* the ACL is taken. To that end, we urge NMFS to incorporate explicit guidance into the final NS1 Guidelines specifying that councils should include available spatial-temporal information on the distribution stock biomass and fishing effort in FMPs, including maps of EFH and habitat areas of particular concern. See 73 Fed. Reg. at 32539, § 600.310(c). The NS1 final rule should also include guidance on methods of apportioning ACLs across management areas and seasons using available location and catch data from the fisheries, fishery-independent resource survey data on stock biomass distribution, evaluation of the productivity and susceptibility of stocks to fisheries, and other relevant socioeconomic and ecological considerations. See 73 Fed. Reg. at 32540,

§ 600.310(e)(3)(iv). In establishing ACL and AM mechanisms, FMPs should include descriptions of any time-area apportionments of ACLs. See 73 Fed. Reg. at 32544, § 600.310(h).

7.4 The NS1 final rule should provide recommendations for a precautionary risk policy such that ACLs have a very low probability of exceeding the overfishing level

Fishery stock assessments and scientific advice are inherently uncertain owing to imprecise and incomplete information. Usually there are very large error bounds around point estimates of acceptable biological catch in a scientific stock assessment. Thus there is always a risk – often a very considerable risk – that the scientifically recommended ABC fishing level will unintentionally result in overfishing. Too often, however, fishery managers fail to acknowledge this risk or treat it explicitly when they make recommendations to NMFS for catch limits. Therefore, in our scoping comments on the ACL rule in 2007, the Network urged NMFS to include guidance on the acceptable level of risk of exceeding the prescribed OFL and to recommend that the Councils adopt a policy that annual catch limits should be set at a level that has a high probability of not exceeding the overfishing level. The scientific recommendations of the Lenfest Working Group on ACLs also highlighted the need for fishery managers to consider the acceptable level of risk of exceeding the prescribed OFL when setting ACLs.²²

In the NMFS public meeting presentation on the proposed rule (July, 2008), NMFS emphasized that “Managers [should] establish a policy, in consultation with the SSC, to use in specification of ABC and ACT...such that there is an acceptably low risk that overfishing will occur.” However, there is no explicit guidance regarding the acceptable risk of overfishing in the proposed rule. The proposed rule dodges the crucial question of how much risk of exceeding the overfishing level fishery managers should accept when setting ACLs. While there is always some risk of overfishing unintentionally, owing to the imprecise nature of fisheries data, the MSRA’s strong mandate to end overfishing requires a risk-averse policy to setting ACLs such that there is a high probability of not exceeding the OFL. Therefore, the final rule should recommend that Councils set ACLs and ACTs such that there is a 90 percent probability of not exceeding the OFL.

VIII. Summary and Conclusion

On balance, the Network believes that the proposed rule’s positive attributes outweigh its flaws. It makes a number of improvements that should reduce the risk of overfishing substantially and enhance efforts to rebuild depleted fish stocks – if the fishery management councils adopt the recommendations. As such, the Network supports the proposed rule if its key provisions are made mandatory and with the modifications outlined above.

Finally, we also call on the Fisheries Service to increase funding from Congress for expanded stock assessment work and fishery data collection to support establishing science-based catch limits in all U.S. fisheries, by re-programming funds from inappropriate and wasteful projects such as the promotion of offshore aquaculture development and by seeking greater funding from Congress to assess

²² Andrew Rosenberg *et al.* Setting Annual Catch Limits for U.S. Fisheries. Report of the Lenfest Working Group on Annual Catch Limits, Lenfest Ocean Program, September 2007. 36 p.

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the nation's marine fish populations. Without increased investments in programs to support the development of scientific stocks assessments, the status of most stocks in U.S. fisheries will remain unknown or very uncertain with respect to overfishing. Although catch limits often must be set without a stock assessment due to lack of available information, fishery managers have substantially greater confidence that catch limits will prevent overfishing when the ACLs are based on an assessment. The Network is prepared to help NMFS seek the funding from Congress required to do this job with the best information possible, but NMFS must do its part by providing Congress and the interested public a clear picture of how much money is required to support the current level of stock assessment work and how much additional funding will be required to assess all major stocks in U.S. fisheries. Under no circumstances should the process of seeking more funding be used as an excuse not to meet the clear mandates and deadlines in the MSA for establishing ACLs and AMs in all U.S. fisheries to prevent overfishing and rebuild overfished stocks.

On behalf of the members of the Marine Fish Conservation Network,²³ thank you for the opportunity to present these comments. I and my members are available to discuss them or any questions you may have at your convenience.

Very truly yours,



Bruce J. Stedman
Executive Director

Attachments

²³ Network Advisory Board Member Jersey Coast Anglers Association, and Network Member American Sportfishing Association are not able to agree to the above comments.