



Proposed Revisions to the National Standard 1 Guidelines:

Adding Guidance on Annual Catch Limits and Other Requirements

Public Meetings

July 10, 15, & 24, 2008

NOAA Fisheries Service

Office of Sustainable Fisheries

Silver Spring, MD



Statutory Requirements



National Standard (NS) 1

- “Conservation and management measures shall **prevent overfishing** while achieving, on a continuing basis, the **optimum yield** from each fishery for the United States fishing industry.”
 - MSA Section 301(a)(1)





2007 MSA Amendments

- The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (*MSRA*) amended the Magnuson-Stevens Fishery Conservation and Management Act (*MSA*) on January 12, 2007.
- New requirements to end and prevent overfishing through the use of:
 - “annual catch limits” (ACLs), and
 - “measures to ensure accountability” (accountability measures or AMs).





Annual Catch Limits (ACLs)

- Fishery management plans shall “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.”

MSA Section 303(a)(15)





ACLs (cont.)

- Required for all managed fisheries except*:
 - Species with annual life cycles, unless subject to overfishing
 - Stocks managed under an international agreement to which the U.S. is party
- Implementation in fishing year*:
 - 2010 for fisheries subject to overfishing
 - 2011 for all other fisheries
- May not exceed a Council's Scientific and Statistical Committee's (SSC) fishing level recommendation**

*MSA sec. 303 note, MSRA sec. 104(b)

**MSA sec. 302(h)(6)





New SSC requirements

- “Each scientific and statistical committee shall provide its Council ongoing 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.”

MSA Section 302(g)(1)(B)





For “overfished” stocks

- Effective July 12, 2009*, within **2** years of an “overfished” or “approaching overfished” stock status notification, Councils (or Secretary for Atlantic HMS) must “prepare **and implement**” management measures to:
 - **Immediately** end overfishing
 - Rebuild affected stocks
 - “as quickly as possible”
 - “not to exceed 10 years”, unless biological or environmental circumstances, or management under an international agreement dictates otherwise

MSA Sec. 304(e)

*MSA sec. 303 note, MSRA sec. 104(b)





NMFS Objectives in Revising the NS 1 Guidelines



Strong, Yet Flexible, Guidelines

- Ensure that the MSA mandate for ACLs and AMs to end and prevent overfishing is met and account for U.S. fisheries diversity:
 - Biological and ecological
 - Management approaches
 - Scientific knowledge
 - Monitoring capacity
 - Overlap in management jurisdiction
 - Resource users





Incorporate New Terms

- Provide guidance on new requirements for ACLs, AMs, and acceptable biological catch (ABC)
- Explain their relationship to existing requirements
 - Maximum sustainable yield (MSY)
 - Optimum yield (OY)
 - Status determination criteria (SDC) for defining “overfishing” and “overfished”





Consider Public Input

- Themes from comments received (Feb-Apr 2007)
 - Improve fisheries data
 - Develop guidelines for Optimum Yield - incorporate ecosystem considerations
 - Provide guidance on SSC role
 - Allow Councils flexibility in developing ACLs and AMs
 - AMs should provide short cycle-time; prefer inseason adjustments to corrective ones
 - ACLs for rebuilding stocks must ensure rebuilding
 - Protect sectors (e.g. commercial/recreational) from each other
 - Ensure ongoing review of management effectiveness
 - How ACLs will work for stocks shared with states





Key Proposals:

ACLs & AMs



Themes of Proposals

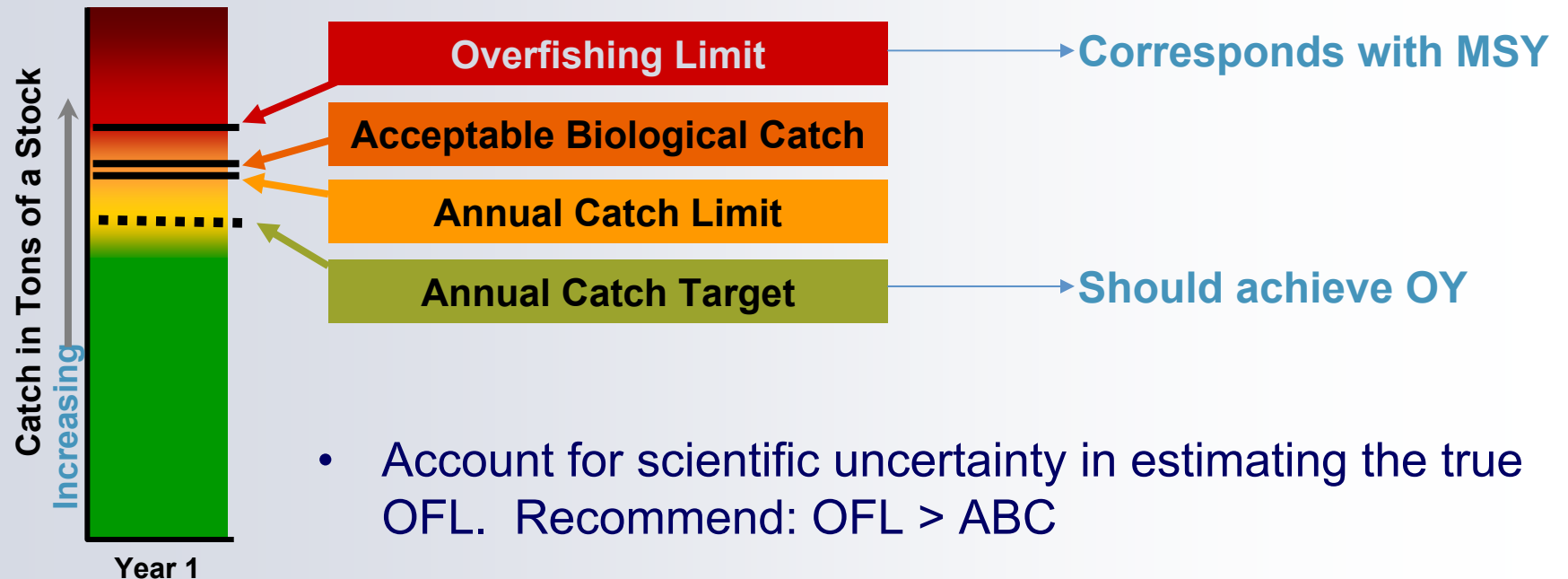
- Revised system of limits and targets
- Incorporating both scientific and management uncertainty to reduce the risk of overfishing
- Accountability





Reference Points

$$\text{OFL} \geq \text{ABC} \geq \text{ACL} \geq \text{ACT}$$



- Account for scientific uncertainty in estimating the true OFL. Recommend: $\text{OFL} > \text{ABC}$
- The ACL may not exceed the ABC.
 - ABC is one of the “fishing level recommendations” under MSA § 302(h)(6).
- Account for management uncertainty in controlling the actual catch to the target. Recommend: $\text{ACL} > \text{ACT}$





Applying ACLs for each “managed fishery”

- MSA section 302(h)(6) requires Councils develop ACLs for “each of its managed fisheries”
- FMPs vary in their inclusiveness of stocks:
 - Only target stocks of the fishery, vs.
 - Both target and non-target stocks for greater ecosystem considerations
- Propose a distinction between “the fishery” and stocks included for ecosystem considerations.





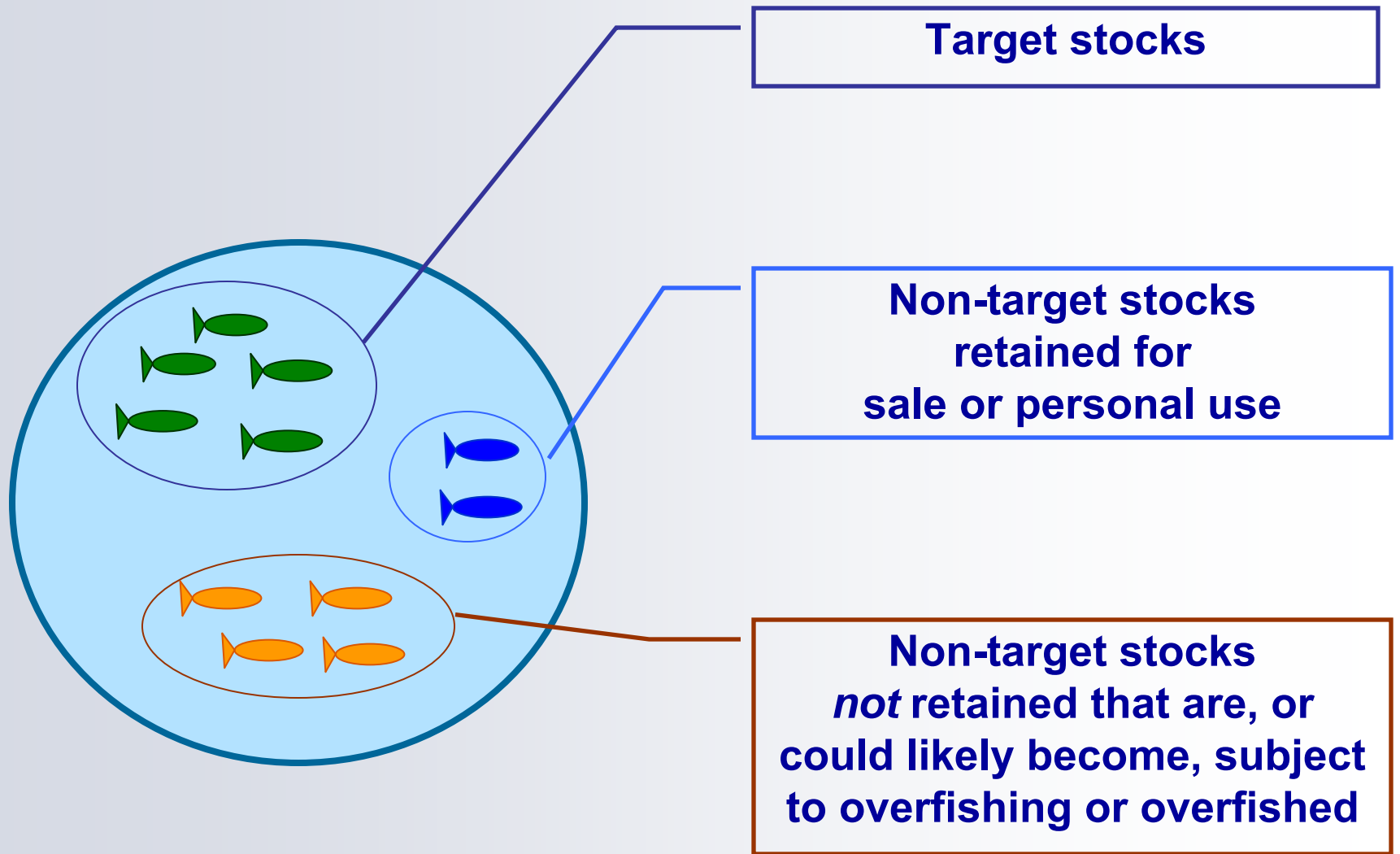
Proposed stock classification in FMPs

- **Stocks “in the fishery”:**
 - Target and non-target stocks retained for sale or personal use.
 - Other non-target stocks not retained but determined by a Council to need management as part of a fishery (e.g., concerns of overfishing, etc.).
- **“Ecosystem component” species:**
 - Non-target species/stocks included in the FMP to account for protection of the marine ecosystem and ecosystem approaches to management, consistent with MSA Sections 2(a)(11), 3(5), and 3(33).
 - Management would be applied to “the fishery” to protect these stocks with which the fishery interacts.
- All stocks in the FMP will be considered “in the fishery” unless otherwise specified through rulemaking.



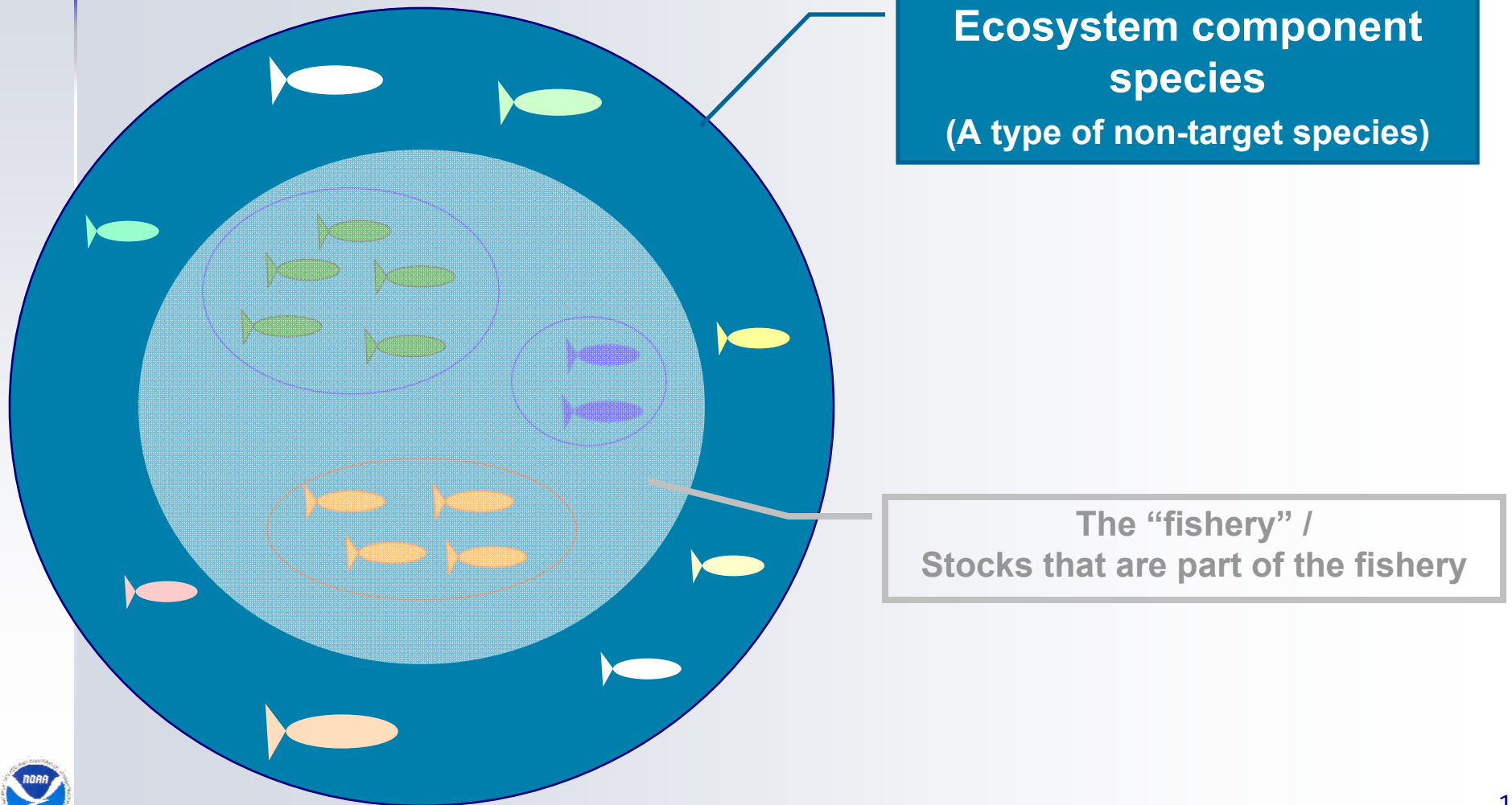


Stocks “in the Fishery”





“Ecosystem Component” Species





ACLs Apply to Stocks “in the Fishery”

- In practice, overfishing is determined at the stock level. Therefore, NMFS proposes that ACLs also be applied at the stock level.
- ACLs would apply only to stocks “in a fishery.”
- ACLs would not apply to “ecosystem component species.”





Acceptably low risk of overfishing

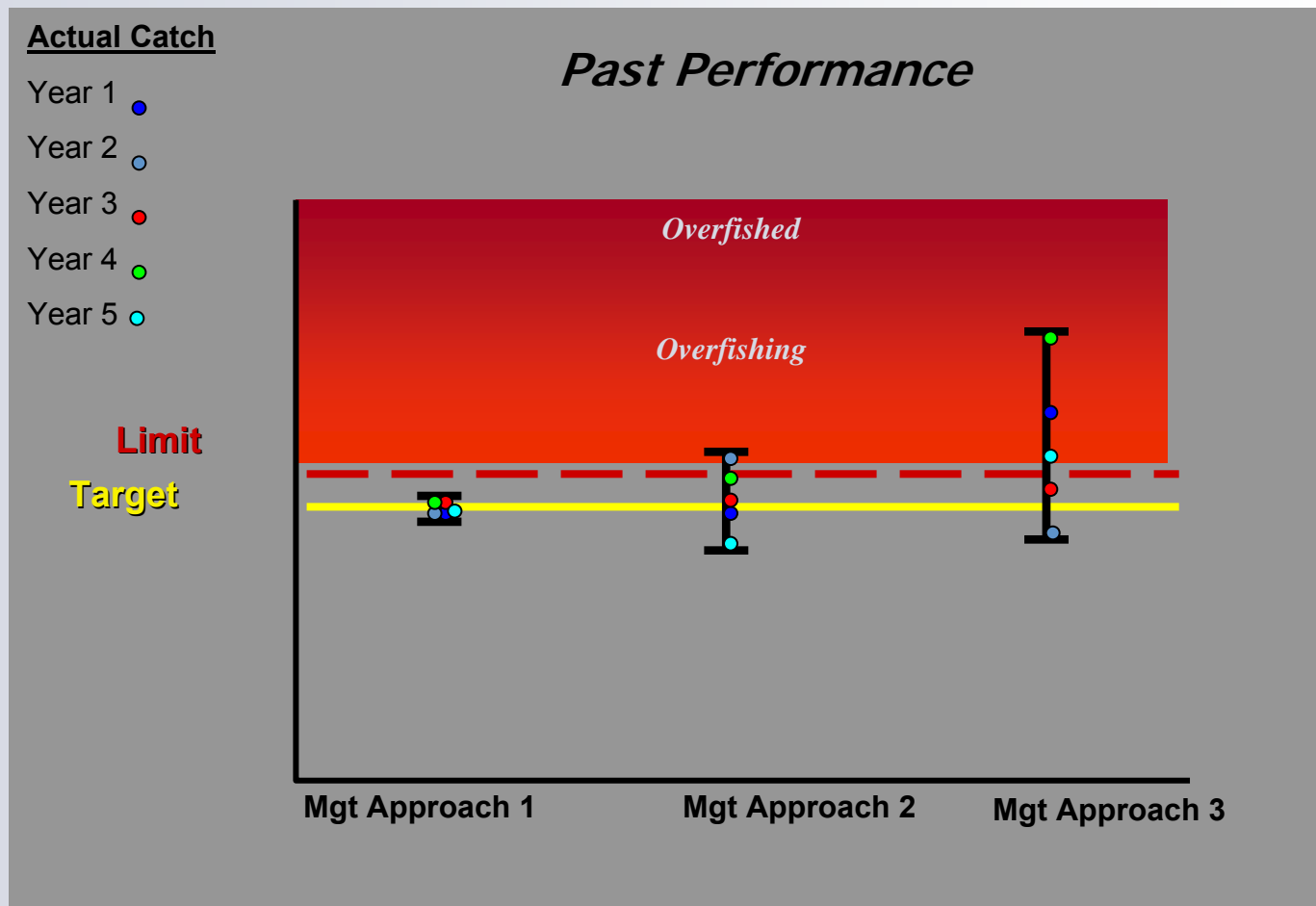
- Managers establish a policy, in consultation with the SSC, to use in specification of ABC and ACT such that there is an acceptably low risk that overfishing will occur.
- ABC control rule
 - A specified approach to setting the ABC for a stock as a function of the scientific uncertainty in the estimate of OFL.
- ACT control rule
 - A specified approach to setting the ACT for each stock such that the risk of exceeding the ACL due to management uncertainty is at an acceptably low level.





Management Uncertainty

Example, could assess past performance of achieving the target catch.

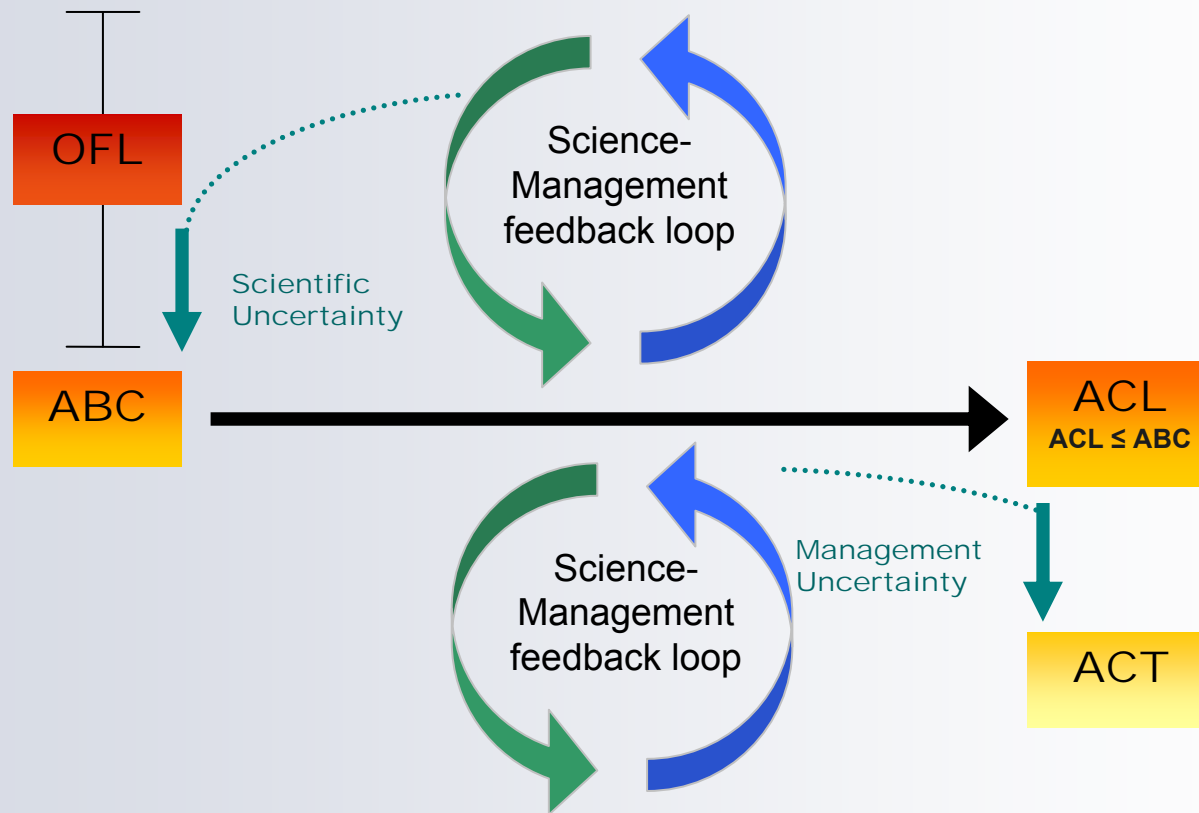




Roles in Setting ACLs

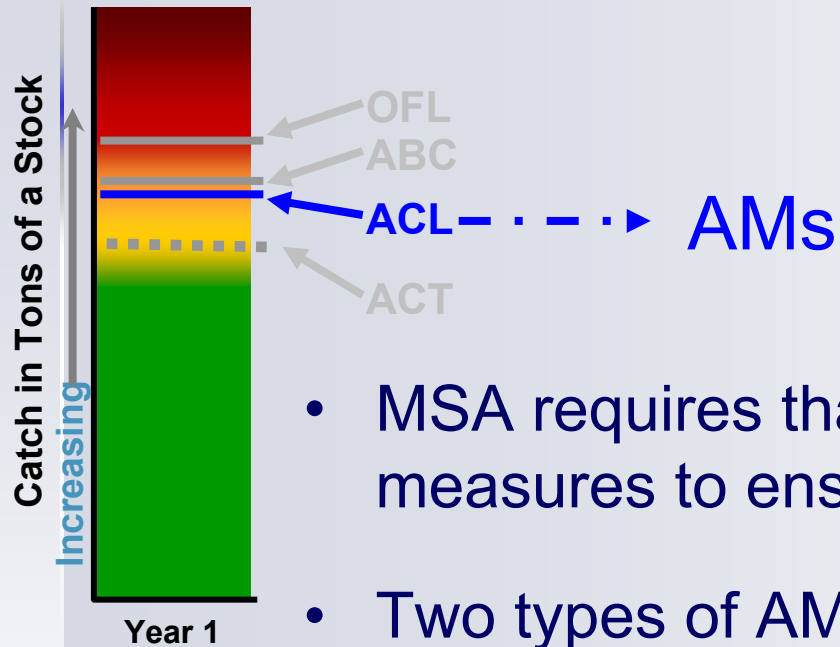
SSC Role

Council Role





Accountability Measures (AMs)



- MSA requires that FMPs establish ACLs, “including measures to ensure accountability”
- Two types of AMs:
 - Inseason measures to prevent reaching the ACL
 - AMs to address an overage of the ACL
 - Operational factors leading to an overage
 - Mitigate biological harm to the stock, if any





Performance Standards

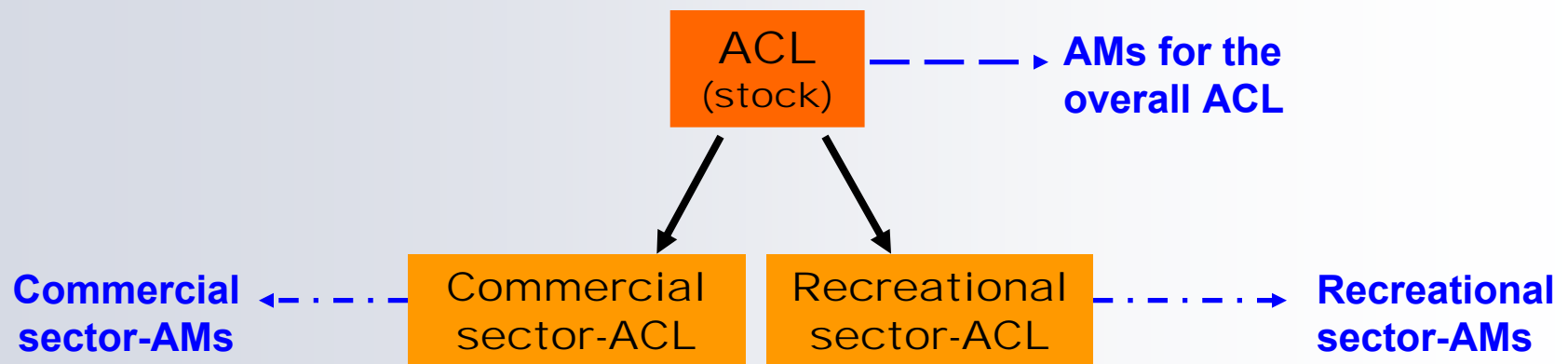
- Because of uncertainty, there is always a chance that overfishing could occur.
- To prevent chronic overfishing:
 - The system of ACLs and AMs should be re-evaluated and modified if the ACL is exceeded more than 1 in 4 years.
 - A higher performance standard could be used if a stock is particularly vulnerable to the effects of overfishing.





ACLs & AMs for a Fishery Sector

- **Optional** to sub-divide a stock's ACL into "sector-ACLs".
- The sum of sector-ACLs should not exceed the overall ACL.
- AMs required for the overall ACL to protect the stock as a whole.
- For each sector-ACL, "sector-AMs" and "sector-AMs" should be established.
- Sector-AMs should be fair and equitable.





State-Federal Fisheries

- Could be a challenge to establish ACLs and AMs for stocks with most catch occurring in state waters.
- State-Federal collaboration to establish ACLs and AMs.
- Where agreement cannot be reached:
 - The ACL should be specified for the entire stock,
 - Identify a Federal portion of the ACL, and
 - Apply AMs to catch in Federal waters.
 - Similar approach as “sector-ACLs”.





ABC, ACL, & ACT for Rebuilding Stocks

- For rebuilding stocks, the ABC, ACL, and ACT should be set at lower levels during some or all stages of rebuilding than when a stock is rebuilt for two reasons:
 1. Overfishing should not occur, and
 2. Rebuilding at a rate commensurate with the stock's rebuilding plan should occur.
- ABC for overfished stocks: For overfished stocks and stock complexes, a rebuilding ABC must be set to reflect the annual catch that is consistent with the target fishing mortality rates in the rebuilding plan.





AMs for Rebuilding Overfished Stocks

- If a stock is in a rebuilding plan and its ACL is exceeded, the AMs should include overage adjustments that reduce the ACL in the next fishing year by the full amount of the overage, unless the best scientific information available shows that a reduced overage adjustment is sufficient, or no adjustment is needed to mitigate the effects of the overage.
- This AM is important to increase the likelihood that the stock will continue to rebuild.





Summary



Summary

- MSA requires:
 - ACLs and AMs to prevent overfishing,
 - ACLs not exceed fishing level recommendations of SSCs, and
 - ACLs and AMs in all managed fisheries, with 2 exceptions.
- NMFS proposes:
 - ACLs and AMs for all stocks and stock complexes in a fishery, unless the 2 MSA exceptions apply.
 - Clearly account for both scientific and management uncertainty in the ACL specification process.
 - AMs should prevent ACL overages, where possible, and always address overages, if they occur.
 - An optional “ecosystem component” category could allow flexibility in FMPs for greater ecosystem considerations.





Questions



Other Proposals



Timeline for Implementing Rebuilding Plans After July 12, 2009

- For notifications that a stock or complex is **overfished**, a Council (or Secretary for Atlantic HMS) must prepare management measures within 2 years of the notification.
- For timely implementation, NMFS proposes:
 - Councils should submit an FMP, FMP amendment, or proposed regulations within 15 months of the identification or notification.
 - This provides the Secretary 9 months to implement the measures, if approved.
- For notifications of an **approaching an overfished condition** made after July 12, 2009, a Council should take immediate action to reduce the likelihood that the stock or complex will become overfished. Otherwise, the stock or complex would likely be overfished by the time the 2-year timeline to implement management measures expired.





Establishing rebuilding time targets

- NMFS proposes clarifying guidance for calculating the **target time to rebuild (T_{target})** for stocks in rebuilding plans, based on experiences with FMPs since the last NS1 guideline revisions.
- Purpose: to emphasize that the rebuilding time must be “as short as possible,” taking several factors into account (see MSA sec. 304(e)(4)(A)(i)):
 - the status and biology of the overfished stock,
 - the needs of fishing communities,
 - recommendations by international organizations in which the U.S. participates, and
 - interaction of the stock within the marine ecosystem.
- SSCs (or agency scientists or peer review processes in the case of Secretarial actions) shall provide recommendations for achieving rebuilding targets (see MSA sec. 302(g)(1)(B)).





Minimum time for rebuilding (T_{\min})

- MSA section 304(e)(4)(A)(ii) requires that the time period shall not exceed 10 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.
- NMFS proposes that establishing the T_{target} should be based on the **minimum time for rebuilding a stock (T_{\min})**, and the above factors with priority given to rebuilding in as short a time as possible.
 - T_{\min} is the amount of time the stock or complex is expected to take to rebuild to its MSY biomass level in the absence of any fishing mortality. In this context, the term “expected” means to have at least a 50% probability of attaining the B_{MSY} .





Maximum Time Allowable for Rebuilding (T_{\max})

- T_{target} shall not exceed the **maximum time allowable for rebuilding (T_{\max})** and should generally be less than T_{\max} .
- If T_{\min} is ≤ 10 years, then T_{\max} is 10 years.
- If T_{\min} is > 10 years, then T_{\max} is T_{\min} + the length of time associated with one generation time for that stock or stock complex.
 - **Generation time** is the average length of time between when an individual is born and the birth of its offspring.





Action at the end of a rebuilding period if a stock is not yet rebuilt

- NMFS proposes that if a stock reaches the end of its rebuilding plan period and it is not yet determined to be rebuilt, then the rebuilding F should not be increased until the stock has been demonstrated to be rebuilt.
- If the rebuilding plan was based on a T_{target} that was less than T_{max} , and the stock is not rebuilt by T_{target} , rebuilding measures should be revised if necessary, such that the stock will be rebuilt by T_{max} .
- If the stock has not rebuilt by T_{max} , and the rebuilding F is greater than 75% of MFMT, then the rebuilding F should be reduced to no more than 75% of MFMT until the stock has been demonstrated to be rebuilt.





New MSA Sec. 304(i), International Overfishing

- If the Secretary determines that a stock is overfished or approaching overfished “due to excessive international fishing pressure, and for which there are no management measures to end overfishing under an international agreement to which the U.S. is a party”, the Secretary and/or appropriate Council shall take action under MSA Section 304(i).
 - The Secretary, with Secretary of State, should immediately take action at the international level to end overfishing
 - Within 1 year, the Secretary and/or appropriate Council shall:
 - Recommend domestic regulations to address “relative impact” of U.S. vessels
 - Recommend to Secretary of State and Congress, international actions to end overfishing and rebuild, taking into account “relative impact of vessels of other nations and vessels of the U.S.”

MSA Sec. 304(i)





Proposed Guidelines on MSA Sec. 304(i), International Overfishing

- For Council recommendations to the Secretary of State and to Congress, NMFS proposes that Councils should, in consultation with the Secretary of Commerce, develop recommendations that take into consideration relevant provisions of the MSA and NS1 guidelines, including MSA section 304(e) and other applicable laws.
- NMFS proposes considerations for assessing “relative impact”:
 - May include consideration of factors that include, but are not limited to: domestic and international management measures already in place, management history of a given nation, estimates of a nation’s landings or catch (including bycatch) in a given fishery, and estimates of a nation’s mortality contributions in a given fishery.
 - Information used to determine relative impact should be based upon the best available scientific information.





Forming Stock Complexes

- Stock complex = a group of stocks sufficiently similar in geographic distribution, life history, and vulnerabilities to the fishery such that the impact of management actions on the stocks is similar.
- May be formed for various reasons, including where:
 - stocks in a multispecies fishery cannot be targeted independent of one another;
 - there is insufficient data to measure their status relative to SDC; or
 - it is not feasible for fishermen to distinguish individual stocks among their catch.
- The vulnerability of stocks to the fishery should be evaluated when establishing or reorganizing a complex.
- May include:
 - 1 or more indicator stocks, each with SDC and ACLs, and several other stocks;
 - several stocks without an indicator stock, with SDC and an ACL for the complex as a whole; or
 - 1 or more indicator stocks, each of which has SDC and management objectives, with an ACL for the complex as a whole (might be applicable to salmon species).





Indicator Stocks

- Used to help manage and evaluate stocks that are in a stock complex and do not have their own SDC.
- If one is used to evaluate the status of a complex, it should be representative of the typical status of each stock within the complex, due to similarity in vulnerability.
- If the stocks within a complex have a wide range of vulnerability, they should be reorganized into different complexes with similar vulnerabilities; otherwise the indicator stock should represent the more vulnerable stocks within the complex.
- Where an indicator stock is less vulnerable than other members of the complex, management measures need to be more conservative so that the more vulnerable members of the complex are not at risk from the fishery.
- More than 1 indicator stock can be selected to provide more information about the status of the complex.
- Although the indicator stock(s) are used to evaluate the status of the complex, individual stocks within complexes should be examined periodically using available quantitative or qualitative information to evaluate whether a stock has become overfished or may be subject to overfishing.





Status Determination Criteria (SDC)

- SDC must be expressed in a way that enables the Council to monitor each stock or complex in the FMP and determine annually, if possible, whether overfishing is occurring and whether the stock or complex is overfished.
- In specifying SDC, a Council should provide an analysis of how the SDC were chosen and how they relate to reproductive potential.
- Two approaches may be chosen for SDC to determine overfishing:
 - **Fishing mortality rate exceeds MFMT.** Exceeding the MFMT for a period of 1 year or more constitutes overfishing. The MFMT must not exceed F_{msy} .
 - **Catch exceeds the OFL.** If the annual catch exceeds the annual OFL for 1 year or more, the stock or complex would be considered subject to overfishing.





Summary

- Rebuilding proposals:
 - changing the timeline to prepare new rebuilding plans
 - revised guidance on how to establish rebuilding time targets
 - advice on action to take at the end of a rebuilding period if a stock is not yet rebuilt.
- Proposals for implementing MSA Section 304(i)
- Proposals for forming stock complexes and use of indicator stocks
- Two proposed approaches for making status determinations of overfishing





To submit comments:

- Proposed guidelines published in the **Federal Register** Vol. 73, No. 111; June 9, 2008. Also available at <http://www.nmfs.noaa.gov/msa2007/catchlimits.htm>
- Comment period ends Sept. 8, 2008.
- You may submit comments, identified by 0648-AV60:
 - Electronic Submissions: Submit all electronic public comments via the Federal e-Rulemaking portal: <http://www.regulations.gov>
 - Fax: 301–713–1193, Attn: Mark Millikin
 - Mail: Mark R. Millikin, National Marine Fisheries Service, NOAA, Office of Sustainable Fisheries, 1315 East-West Highway, Room 13357, Silver Spring, MD 20910 (mark outside of envelope “Comments on Annual Catch Limits proposed rule”)
 - All comments received are a part of the public record and will generally be posted to <http://www.regulations.gov> without change.

