



Revisions to the National Standard 1 Guidelines:

Guidance on Annual Catch Limits and Other Requirements

January 2009

**NOAA Fisheries Service
Office of Sustainable Fisheries
Silver Spring, MD**



Note: This presentation provides only a summary of the National Standard 1 guidelines. Any discrepancies between this presentation and the National Standard 1 guidelines as published in the *Federal Register* on January 16, 2009 (74 FR 3178) will be resolved in favor of the *Federal Register*.





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 of 2006 (*MSRA*) added new requirements for annual catch limits (ACLs) and accountability measures (AMs).
- 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

- Exceptions to ACL requirement*:
 - Species with a life cycle of approximately one year, 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
 - Rebuilding time shall be “as short as possible”
 - “not exceed 10 years”, unless biological or environmental circumstances, or management under an international agreement dictates otherwise

MSA Sec. 304(e)(3), MSRA sec. 104(c)





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

- Define and provide guidance on the terms ACLs, AMs, and acceptable biological catch (ABC) that are required but not defined by MSA.
- Explain the relationship between ACLs, AMs, and ABC and other reference points such as the overfishing limit (OFL) and the annual catch target (ACT).





Consider Public Input

- Scoping: February – April 2007
 - Held 9 scoping sessions
- Proposed Guidelines: 73 FR 32526 (June 9, 2008)
- Public comment period: June 9 – September 22, 2008
 - Held 3 public meetings
 - Made presentations to each of the 8 Councils
 - Received over 150,000 comments
- Final Guidelines: 74 FR 3178 (January 16, 2009)





Themes From Comments Received (June 9th – September 22nd, 2008)

- Proposed definition framework (OFL \geq ABC \geq ACL \geq ACT)
- Buffers between OFL and ABC
- Complexity of the guidelines
- Challenge of implementing ACLs and AMs by 2010 and 2011
- ACT and ACT control rule
- Analysis to support the action (i.e., Environmental Impact Statement)
- Ecosystem component species
- Spatial-temporal management as part of effective ACLs
- Specific guidelines for forage fish management
- Include a description of vulnerability to help classify stocks

See 74 FR 3178 (January 16, 2009) for full summary of comments and responses





Themes From Comments Received (continued)

- Addressing scientific and management uncertainty
- Use of catch shares or limited access privilege programs
- Encourage the use of sectors
- Support and opposition for the use of inseason AMs
- AMs for when the ACL is exceeded
- AMs for recreational fisheries
- ACLs and AMs for state-Federal fisheries
- Rebuilding provisions
- International fishing exception
- Mixed-stock exception

See 74 FR 3178 (January 16, 2009) for full summary of comments and responses





Changes from proposed to final NS1 guidance



Changes in final guidance

- ACTs and ACT control rules are optional accountability measures. For fisheries without inseason management control to prevent ACL from being exceeded, should utilize ACTs set below ACLs so catches do not exceed ACL.*
- If Council recommends $OFL=ABC=ACL$, Secretary may presume the proposal would not prevent overfishing, in the absence of sufficient analysis and justification. In most cases, expect ABC to be reduced from OFL to account for scientific uncertainty and reduce probability that overfishing might occur in a given year. **
- Clarification of statutory/mandatory provisions versus discretionary provisions.

*§ 600.310 (g)(2), **§ 600.310 (f)(3), **§ 600.310 (f)(5)(i)





Major aspects of the NS1 guidelines



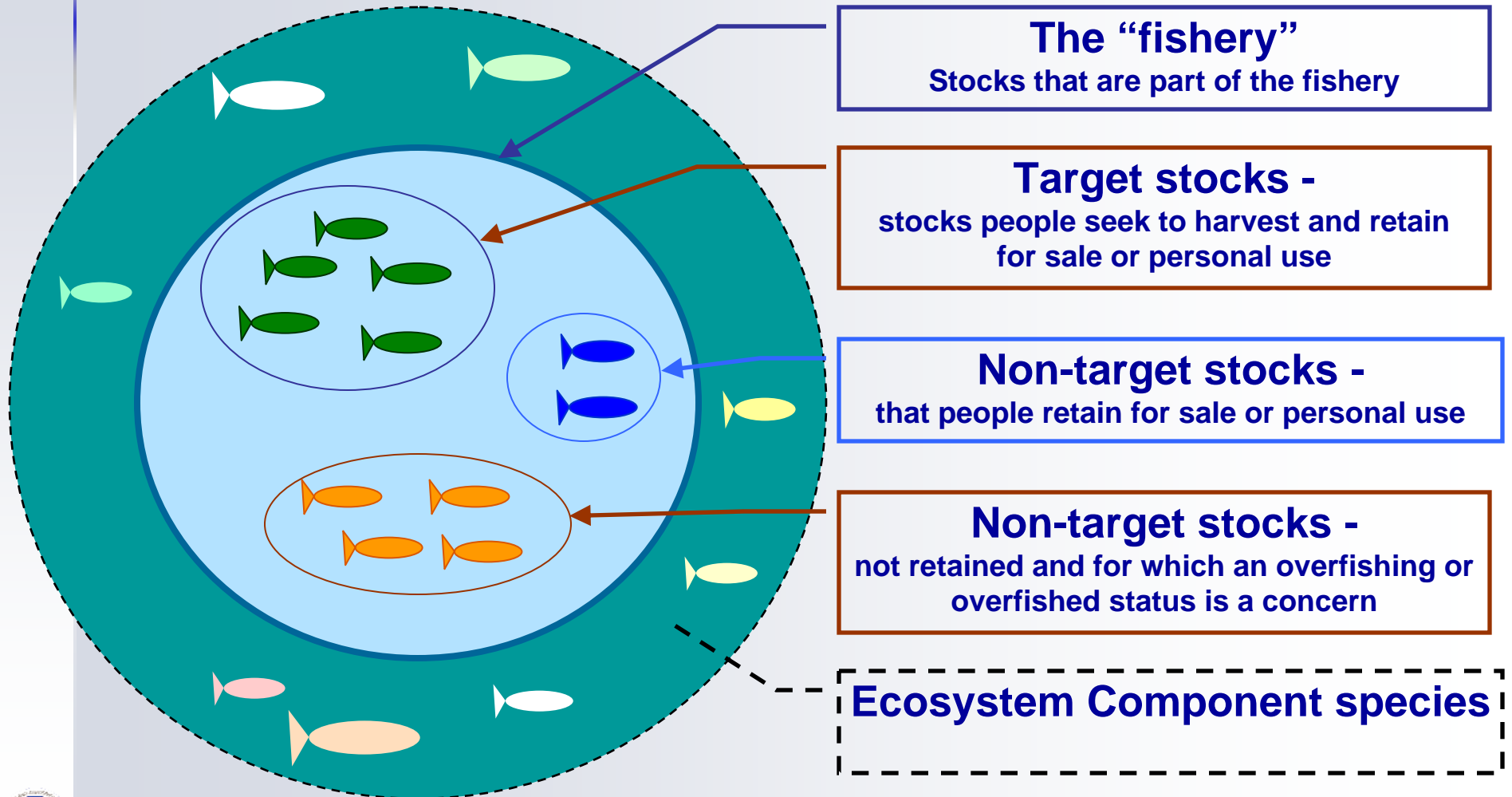
Stock classification in FMPs

- All stocks in FMP are considered “in the fishery” unless specified as ecosystem component (EC) species.
- EC classification is not required but is discretionary.
- To be considered for possible EC classification, species should, among other considerations:
 - Be a non-target species or non-target stock;
 - Not be determined to be subject to overfishing, approaching overfished, or overfished;
 - Not be likely to become subject to overfishing or overfished, according to the best available information, in the absence of conservation and management measures; and
 - Not generally be retained for sale or personal use.





Example of the kind of stocks that may fall into the two classifications.





ACLs Apply to Stocks “in the Fishery”

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

§ 600.310 (c)(4)

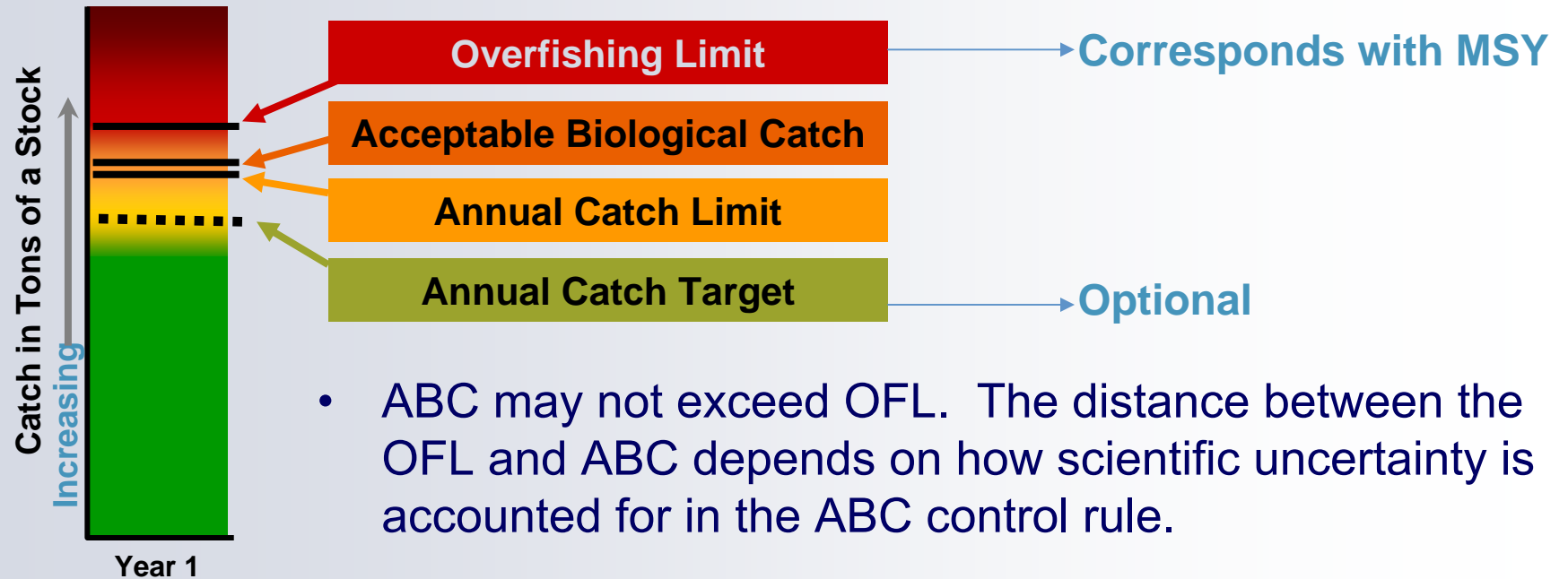
§ 600.310 (f)





Definition Framework

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



- ABC may not exceed OFL. The distance between the OFL and ABC depends on how scientific uncertainty is accounted for in the ABC control rule.
- The ACL may not exceed the ABC.
 - ABC is one of the fishing level recommendations under MSA section 302(h)(6).





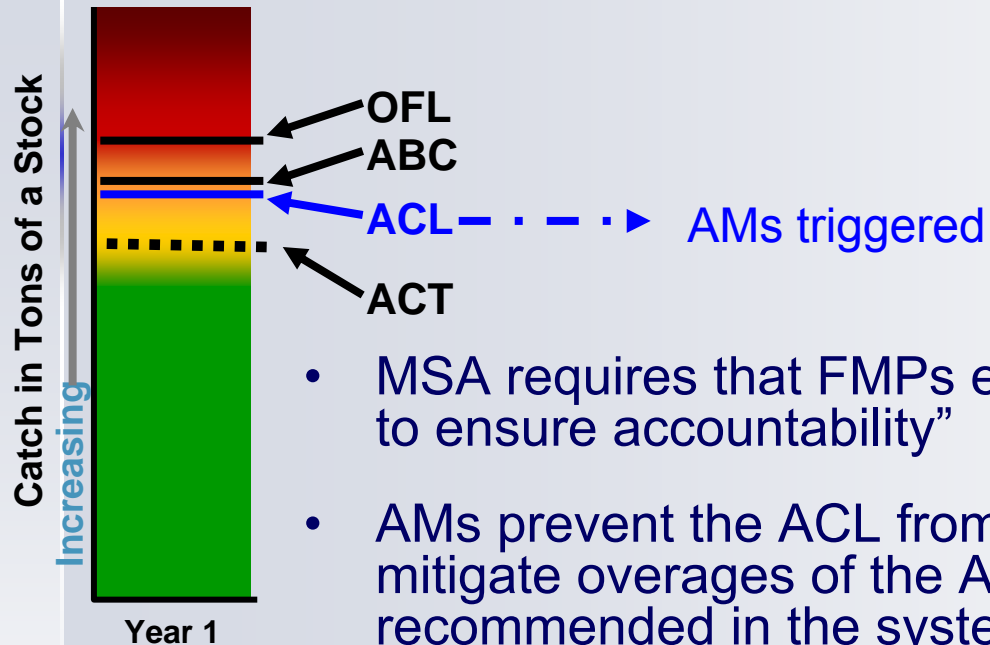
Approach for Setting Limits and AMs

- Councils must take an approach that considers uncertainty in **scientific** information and **management** control of the fishery.
- Scientific Uncertainty
 - 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 and any other scientific uncertainty. § 600.310 (f)(2)(iii)
 - Risk policy is part of ABC control rule: The determination of ABC should be based, when possible, on the probability that an actual catch equal to the stock's ABC would result in overfishing. This probability that overfishing will occur cannot exceed 50 percent and should be a lower value. § 600.310 (f)(4)
- Management Uncertainty
 - Address through a full range of AMs.
 - For fisheries without inseason management control to prevent the ACL from being exceeded, AMs should utilize ACTs that are set below ACLs so that catches do not exceed the ACL.
§ 600.310 (g)(2)





Accountability Measures (AMs)



- MSA requires that FMPs establish ACLs, “including measures to ensure accountability”
- AMs prevent the ACL from being exceeded and correct or mitigate overages of the ACL if they occur. ACTs are recommended in the system of accountability measures so that ACL is not exceeded.
- Two types of AMs:
 - Inseason measures to prevent exceeding the ACL
 - AMs for when the ACL is exceeded
 - Operational factors leading to an overage
 - Biological consequences to the stock, if any

§ 600.310 (g)(1)-(3)





Performance Standards

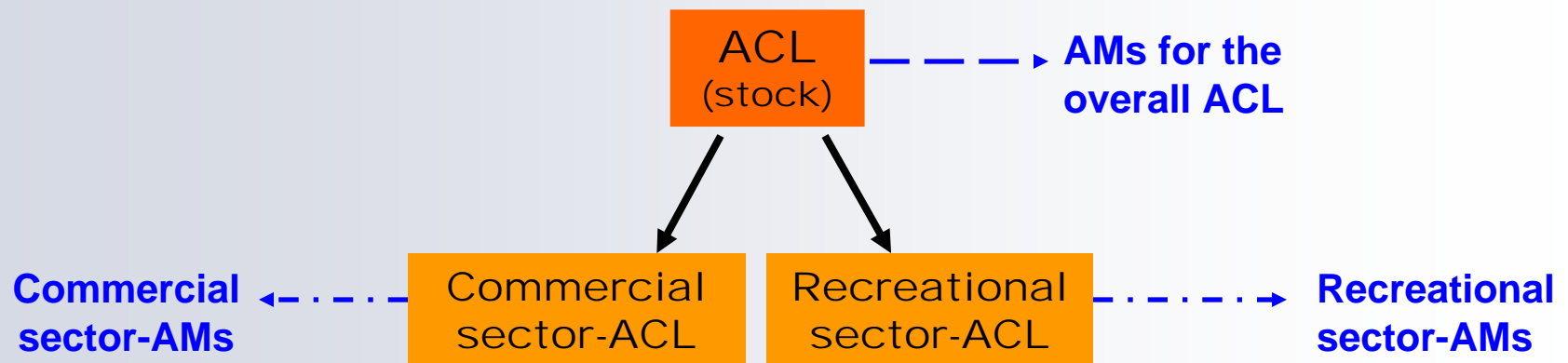
- Because of scientific and management uncertainty, there is always a chance that overfishing could occur.
- The system of ACLs and AMs should be re-evaluated and modified if necessary, if the ACL is exceeded more than once in the last 4 years.
- A higher performance standard could be used if a stock 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".
- If the management measures for different sectors differ in the degree of management uncertainty, then sector ACLs may be necessary so that appropriate AMs can be developed for each sector.
- The sum of sector-ACLs must not exceed the overall ACL.
- For each sector-ACL, "sector-AMs" should be established.
- AMs at the stock level may be necessary.





State-Federal Fisheries

- ACL should be specified for the entire stock and may be further divided (e.g., Federal-ACL and state-ACL)
- AMs required for portion of fishery under Federal authority
- Goal should be to develop collaborative conservation and management strategies (including AMs) with Federal, state, tribal, and/or territorial fishery managers.





ABC and ACL for Rebuilding Stocks

- For rebuilding stocks, the ABC and ACL 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 schedule of 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, 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 of the Major Aspects of the NS1 Guidelines

- 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.
- NS1 guidelines:
 - 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
 - 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.





Other Aspects of the NS1 Guidelines



Timeline for Implementing Rebuilding Plans After July 12, 2009

- For notifications that a stock or complex is **overfished or approaching an overfished condition**, a Council (or Secretary for Atlantic HMS) must prepare and implement management measures within 2 years of the notification.
- For timely implementation:
 - Councils should submit an FMP, FMP amendment, or proposed regulations within 15 months of notification.
 - This provides the Secretary 9 months to implement the measures, if approved.
- If the stock is overfished and overfishing is occurring, the rebuilding plan must end overfishing immediately.

§ 600.310 (j)(2)(ii)(B)





Establishing rebuilding time targets

- 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)).
- NS1 guidelines clarify calculation of **target time to rebuild** (T_{target}) for stocks in rebuilding plans.





Minimum time for rebuilding (T_{\min})

- T_{target} must be “as short as possible,” taking into account factors set forth under MSA sec. 304(e)(4)(A)(i), and may not exceed 10 years, except as provided under sec. 304(e)(4)(A)(ii). See NS1 guidelines at § 600.310 (j)(3).
- T_{target} should be based on the **minimum time for rebuilding a stock (T_{\min})** and the above factors.
- 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} .

§ 600.310 (j)(3)(i)





Maximum Time Allowable for Rebuilding (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.
- T_{target} shall not exceed T_{\max} , and should be calculated based on the factors described in § 600.310 (j)(3)





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

- 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} , then the fishing mortality rate should be maintained at F_{rebuild} or 75 percent of the MFMT, whichever is less.





International Overfishing

- MSA section 304(i)

- Section 304(i) applies if the Secretary determines that a fishery 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. Actions under section 304(i) include:
 - The Secretary, with Secretary of State, immediately takes 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. fishing vessels
 - Recommend to Secretary of State and Congress, international actions to end overfishing and rebuild affected stocks, taking into account relative impact of vessels of other nations and vessels of the U.S.





“Relative Impact”

- NMFS describes “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 and MSY cannot be defined on a stock-by-stock basis;
 - 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 be comprised of:
 - 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 & Vulnerability

- An indicator stock is a stock with measurable SDC that can be used to help manage and evaluate more poorly known stocks that are in a stock complex. 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.
- A stock's vulnerability is a combination of its productivity, which depends upon its life history characteristics, and its susceptibility to the fishery.
 - Productivity – refers to capacity of the stock to produce MSY and to recover if the population is depleted
 - Susceptibility – potential for the stock to be impacted by the fishery, which includes direct captures, as well as indirect impacts to the fishery





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 must 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.
 - **Catch exceeds the OFL.** If the annual catch exceeds the annual OFL for 1 year or more, the stock or complex is considered subject to overfishing.

§ 600.310 (e)(2)(ii)





Fisheries Data

- In their FMPs, or associated public documents such as SAFE reports as appropriate, Councils must describe general data collection methods, as well as any specific data collection methods used for all stocks in the fishery, and EC species, including:
 - Sources of fishing mortality;
 - Description of the data collection and estimation methods used to quantify total catch mortality in each fishery; and
 - Description of the methods used to compile catch data from various catch data collection methods and how those data are used to determine the relationship between total catch at a given point in time and the ACL for stocks and stock complexes that are part of a fishery.





Mixed stock exception

- Exceptions to the requirement to prevent overfishing could apply under certain limited circumstances.
- Fishery must not be in overfished condition and analysis must be performed that demonstrates the below conditions are satisfied:
 - Will result in long-term net benefits to the Nation;
 - Mitigating measures have been considered and it has been demonstrated that a similar level of long-term net benefits cannot be achieved by modifying fleet behavior, gear selection/configuration, or other technical characteristic in a manner such that no overfishing would occur; and
 - The resulting rate of fishing mortality will not cause any stock or stock complex to fall below its MSST more than 50 percent of the time in the long term, although it is recognized that persistent overfishing is expected to cause the affected stock to fall below its Bmsy more than 50 percent of the time in the long term.





Summary

- The NS1 guidelines provide guidance on the following topics:
- Rebuilding plans:
 - changing the timeline to prepare new rebuilding plans
 - 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.
- Implementing MSA Section 304(i)
- Forming stock complexes and use of indicator stocks
- Two approaches for making overfishing status determinations
- Fisheries Data
- Mixed stock exception





Additional Information

- Additional information about ACLs and NS1 can be found at the following website:
 - <http://www.nmfs.noaa.gov/msa2007/catchlimits.htm>
- Public comments on the proposed revisions to the NS1 guidelines can be viewed at the Federal e-Rulemaking portal:
 - <http://www.regulations.gov>
 - You can search for documents regarding the NS1 guidelines under “Advanced docket search” using “0648-AV60” as the RIN keyword.

