



# ABC Control Rule Modifications

**SAFMC SSC  
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(with thanks to Luiz Barbieri)**

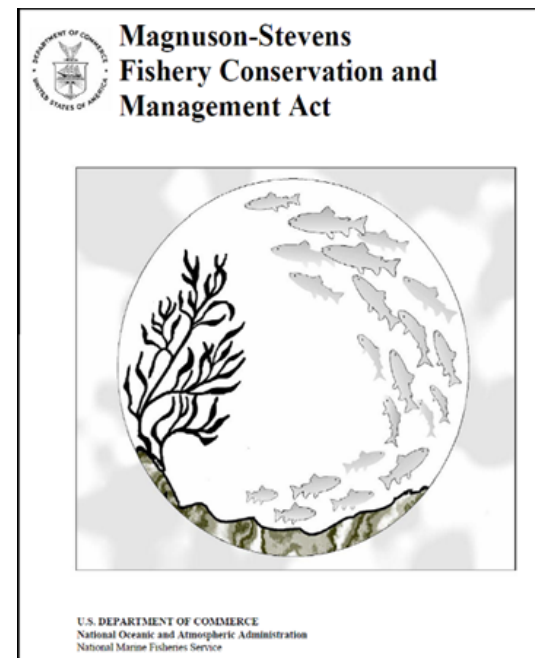
# Regulatory Framework

## MSA: FMP Contents

(15) 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.

## National Standard 1 (§ 600.335)

Councils must build into the reference points and control rules appropriate consideration of risk, taking into account uncertainties in estimating harvest, stock conditions, life history parameters, or the effects of environmental factors.



# Does the SSC have a role to play?

Slide from ACL Science Workshop  
Feb 2011

..from Luiz Barbieri



NOAA  
FISHERIES  
SERVICE



## Science – Management Flow

Science informs development and evaluation of a potential harvest policy

Council adopts policy (the control rule) and codifies in FMP amendment

Annual implementation of policy according to Best Scientific Information Available

**Science does not decide the policy; policy-makers cannot make informed policy without the science**



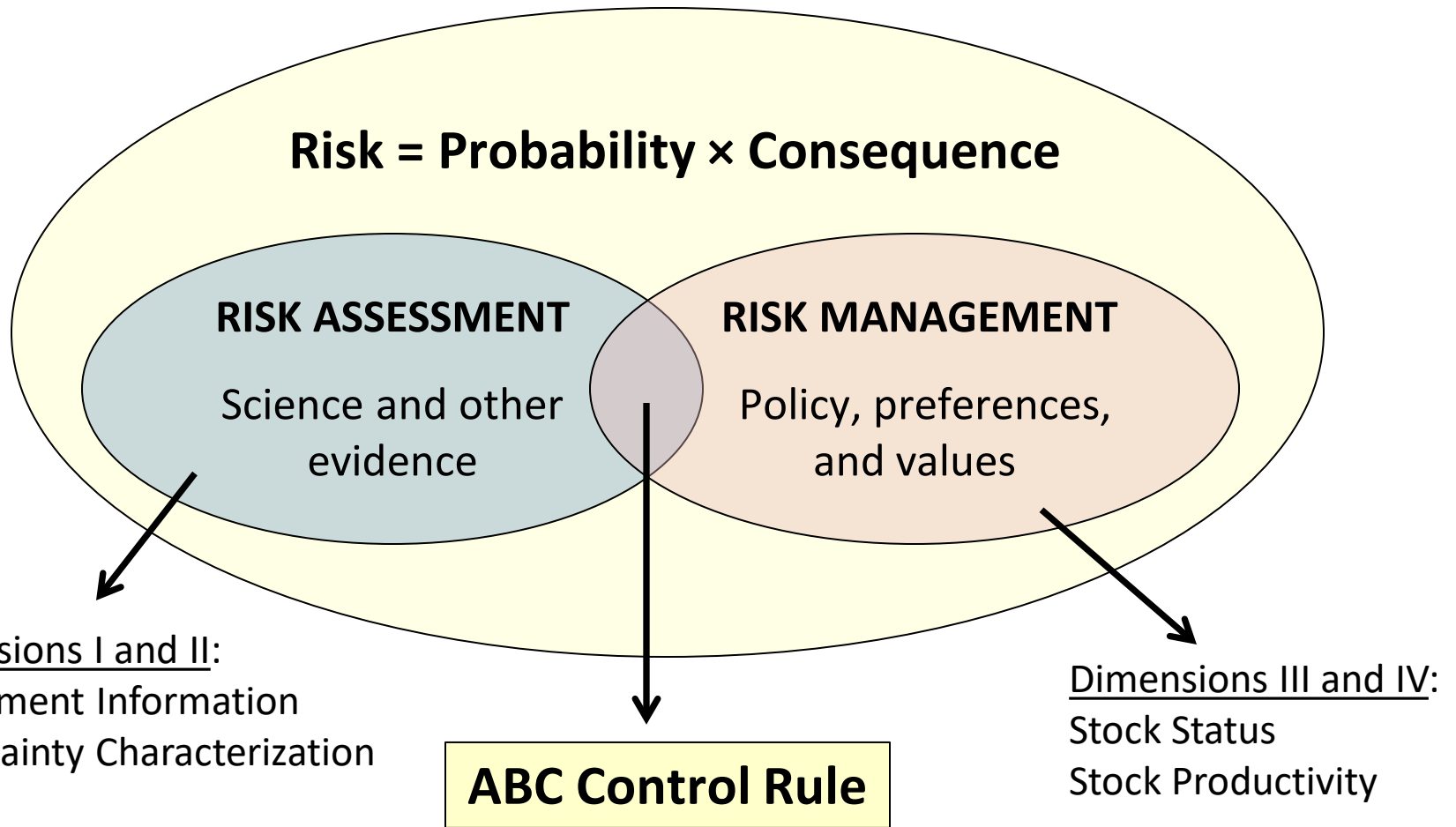


# SAFMC ABC Control Rule

- **Initially Developed in 2008**
- **Dimensions with Tiers**
- **All encompassing**
  - **Intended to address all types of assessments and unassessed stocks**
- **P-Star Focused**
  - **Designed to adjust the probability of overfishing based on scoring of Dimensions**
- **Considers Assessment Uncertainty and Risk Tolerance simultaneously**



# ABC Control Rule in a Risk Analysis Framework



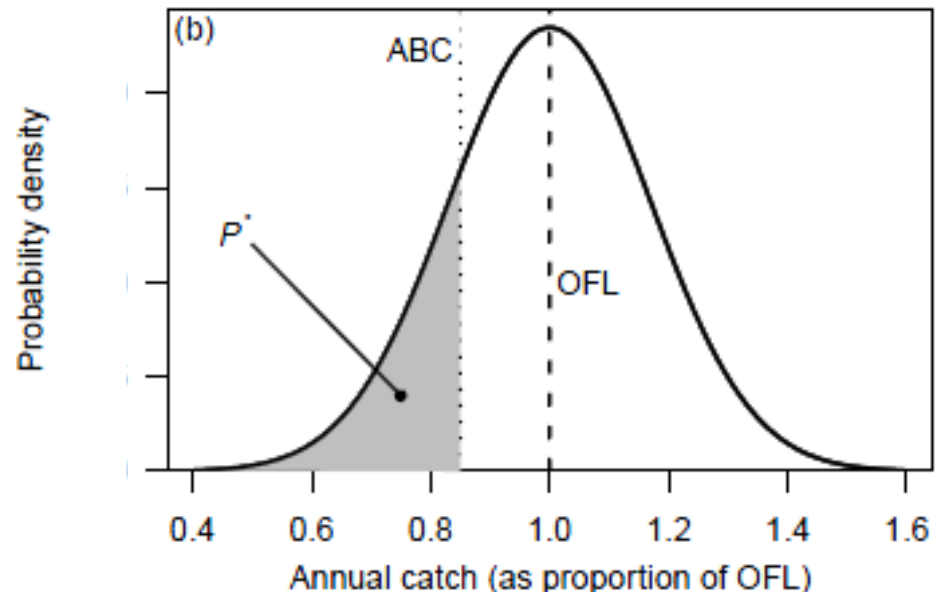
.....Thanks again to Luiz



# ABC Control Rule

NS1 → Account for scientific uncertainty in estimating the true OFL

The determination of ABC should be based, when possible, on the probability that a catch equal to the stock's ABC would result in  $P^*$  of overfishing. The probability of overfishing cannot exceed 50% and should be a lower value.



→ Involves components of RISK and UNCERTAINTY

.....Thanks again to Luiz





# ABC Rule Modifications

- **Initial: 2008**
- **2010 Addenda**
  - Added “Tiers” to address more situations
- **2011 Addenda (April)**
  - Added the Decision tree for “Tier 4” – Catch only
- **2011 Addenda (November)**
  - Added the ORCS approach for “Tier 4” – Catch only
- **All addressed in the SSC Control Rule document.**
  - *included in the background pkg*



# 2014 Workshop

- Conspired rule performance and incorporating new methods.
- Performance was difficult to evaluate, due to lack of assessed applications.
- Considerable discussion on modifications and issues.
- Recommendations made for revising Tiers and Dimensions.
- *Workshop report included in background pkg*





# April 2015 SSC Meeting

- Reviewed Workshop report and recommendations
- Noted interest in adding flexibility and addressing social or economic information
- Created sub-committee to draft proposal



# May 2016 SSC Meeting

- sub-committee report
  - Further evaluation of performance, remain hindered back lack of assessment evaluations of applied CR and management action
  - Suggested removing stock status
  - Requested guidance on next steps for further revisions
  - *Report included in background pkg*
- No specific guidance provided by the SSC



# MODIFICATIONS

1. Dimension 3: remove stock status
  - Suggested by sub-committee & requested by Council
  - Addresses risk tolerance
2. Dimension 4: remove or modify the PSA approach
  - SSC has questioned values and method
  - This addresses risk tolerance rather than uncertainty
- If retained, consider:
  - clarifying that these Dimensions address Council decisions on risk tolerance or management
  - separating from uncertainty evaluation
  - Council should address whether the simultaneous consideration of risk and uncertainty remains preferred



# MODIFICATIONS

3. Dimension 1: remove catch adequacy
  - this dimension now only applies to assessed stocks
  - other components now address unassessed stocks
4. Tier/Level 1: soften requirement for P\*
  - Uncertainty evaluation not provided the same way in all assessments



# MODIFICATIONS

- 5. Revise Tiers/Levels to address new data limited methods
  - Currently specifies DCAC & DBSRA
- Propose 3 new LEVELS (not *Tiers*)
  - 1. Comprehensive (catch-based) assessments
  - 2. Data limited approaches
  - 3. Data poor approaches



# MODIFICATIONS

6. Clarify application to rebuilding stocks
  - In practice and precedent, annual ABCs are based on the rebuilding schedule
7. Revise scoring of rule as required based on the suite of changes.
  - Consider developing a broad list of key assessment and uncertainty characteristics to consider when developing tolerance adjustments

