



Agenda Item C.2.b
Supplemental NMFS Report (Rick Methot)
April 2007



Public Scoping: Guidance for Annual Catch Limits (ACLs) and Accountability Measures (AMs)

**Requirements of the
Magnuson Stevens Fishery Conservation and
Management Reauthorization Act (MSRA) of 2006
to End and Prevent Overfishing**

March 2007

Requirements of the 2006 MSRA

Annual catch limits and accountability measures must be implemented:

- in fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing
 - MSRA Section 104 (b)(1)(A)
- in fishing year 2011 for all other fisheries
 - MSRA Section 104 (b)(1)(B)



Annual Catch Limits (ACLs) & Accountability Measures (AMs)

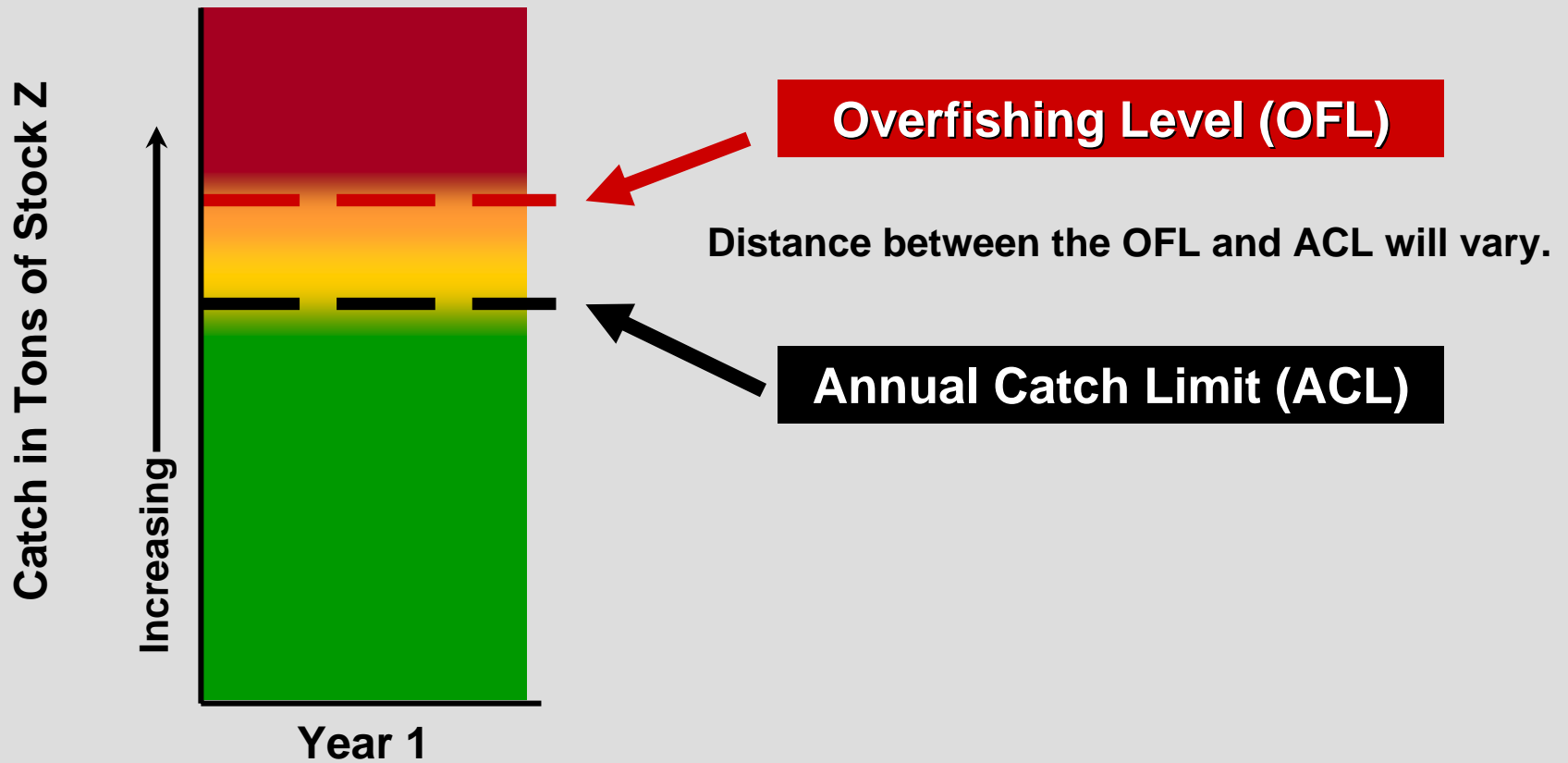
- ACLs and AMs work together as a system to ensure that overfishing will not occur
- ACLs & AMs must:
 - end overfishing on stocks subject to overfishing
 - prevent overfishing on stocks not subject to overfishing

Preliminary Interpretation

For each managed stock an:

- **Overfishing Level (OFL)** should be established
 - An annual numerical amount of catch that would result in overfishing if exceeded
 - Not identified in the Act but it is essential for developing accountability measures and monitoring ACL performance
- **Annual Catch Limit (ACL)** must be established
 - An annual numerical target catch level
 - Set below the OFL to ensure that overfishing does not occur

Relationship between ACL & OFL



Criteria for ACLs & OFLs

To accurately compare ACLs and OFLs, they need to contain the same criteria.

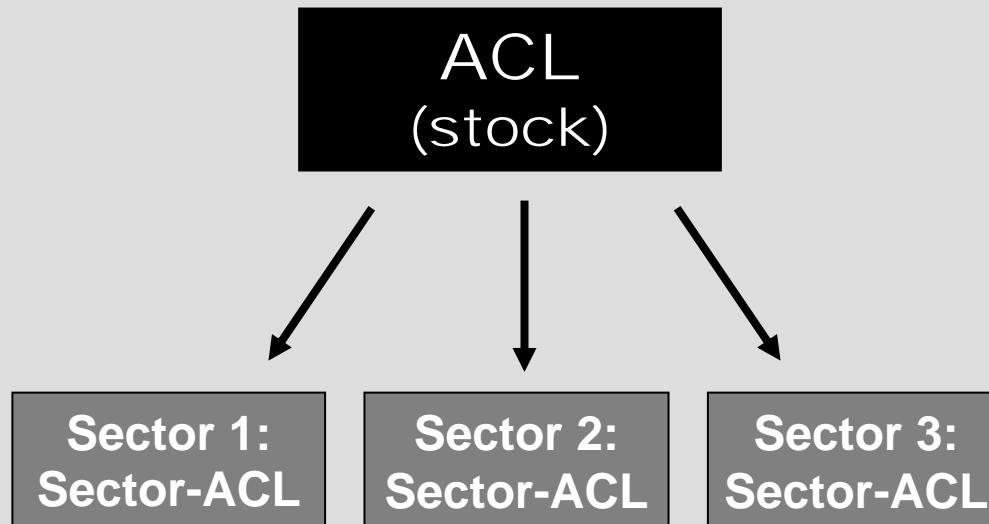
Based on our preliminary interpretation, these criteria would be needed for an ACL and OFL:

- Set for each managed fishery/stock
- Can be set for multiple year periods
- Numerical annual value set in weight or numbers of fish
- Includes all sources of fishing mortality, where possible:
 - Landings
 - Discards/Bycatch
 - All sectors and user groups

Issue: Sector Allocations

Allocation issues between sectors are of concern and can be addressed under ACLs.

- An ACL is required to be set for each managed fishery/stock
- The Councils and NMFS could:
 - Subdivide an ACL (set for each fishery/stock) into “*sector-ACLs*”
 - Develop AMs for each sector



Accountability Measures (AMs)

- Management measures established with ACLs to end and prevent overfishing
- Two basic types:
 - Preventive in-season management actions
 - e.g., in-season fishery closure if the target catch limit has been reached
 - Corrective management actions
 - e.g., overage payback in the next fishing year
- Must be established for each fishery/stock
- Could be established for each sector

Issue: Sector Allocations

Discussion

- What are the issues and concerns about:
 - allocating ACLs among sectors?
 - developing sector specific AMs?

NMFS' Preliminary Alternatives

- Alternative 1: No action
- Alternative 2: Performance standards that ACL and AM mechanisms have to meet for approval by the Secretary
- Alternative 3: Performance standards *and* specific guidelines on appropriate implementation approaches that would be acceptable to the Secretary

Alternative 1 – No Action

Considerations

- Councils still required to implement ACLs and AMs
- The Act does not provide a definition of these terms or detailed explanations for implementation

Alternative 2 – Performance Standards

Considerations

- Specified performance standards would be used by NMFS and the Councils to:
 - design ACL & AM mechanisms
 - establish criteria for Secretarial approval
 - evaluate their success after implementation
 - ensure that ACLs in all fisheries meet national performance standards

Alternative 3 – Performance Standards & Guidelines on Approaches

Considerations

- Performance standards would be developed, as under Alternative 2.
- Guidance on specific ACL and AM mechanisms would be developed.
 - e.g. establish best practices for several different tiers of stocks based on varying data quality and past management performance

Overarching Issue: Diverse Fisheries

- U.S. fisheries are biologically & ecologically diverse
 - 530 stocks and stock complexes: range from Arctic to tropical regions
- Management approaches vary
 - 46 FMPs: some use hard TACs, some use effort controls
- Data available for each stock vary

ACL and AM guidance must address diversity in the fisheries to develop effective strategies able to meet the requirements of the Act.



Creating Performance Standards

Discussion

- Given that knowledge and management of stocks is imperfect and uncertain:
 - What level of risk of overfishing would be tolerated in designing ACL & AM mechanisms?
 - What frequency and amount of overfishing would indicate that ACL and AM mechanisms are ineffective and must be revised?

Key Factors in Design and Implementation of ACLs & AMs

- Management / Regulatory Approach
 - Some approaches are more effective than others at achieving actual catch levels close to targets
- Monitoring / Catch Data Availability
- Scientific Knowledge of Stocks
- Uncertainty

All these factors combined affect fisheries management success and the feasibility of designing ACLs and AMs.

Issue: Management Precision

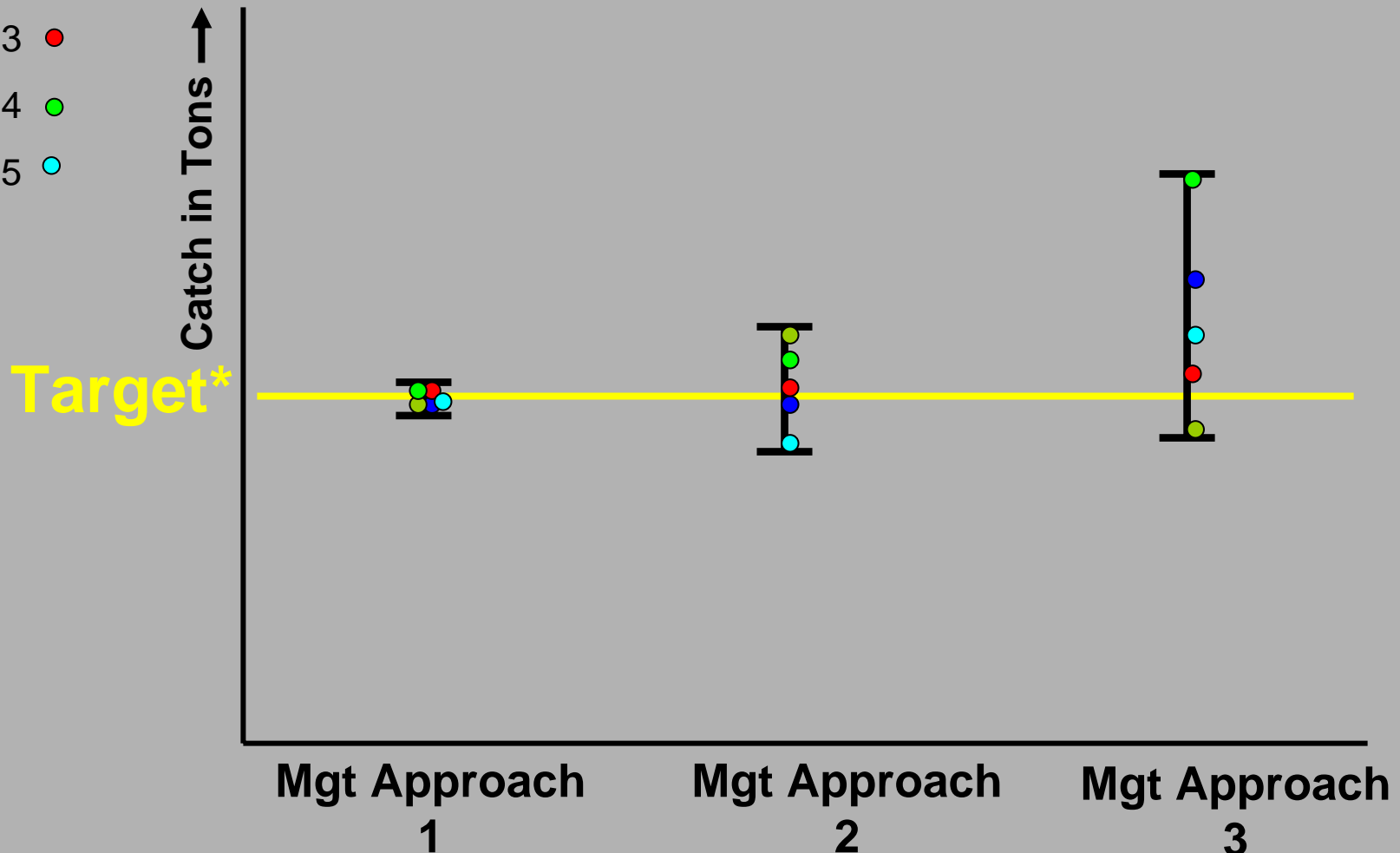
Discussion

- Given variability in managing to target catch levels, where should the ACL be set in relation to the OFL?

Conceptual Illustration of Management Precision: Targets and Overages

Actual Catch

- Year 1 ●
- Year 2 ●
- Year 3 ●
- Year 4 ●
- Year 5 ●



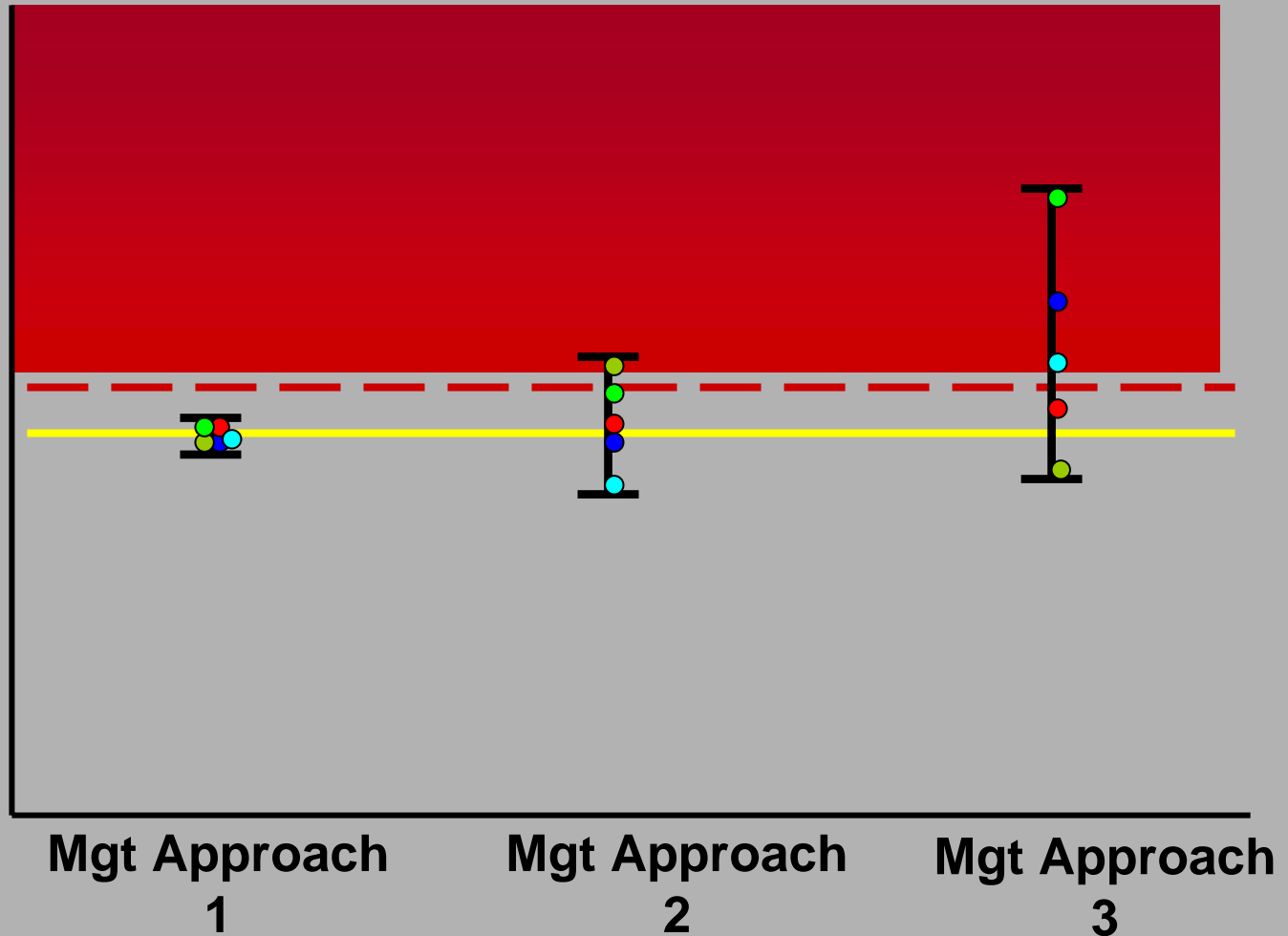
*For simplification, the target catch level is static here. In reality, targets fluctuate.

Conceptual Illustration of Management Precision: Targets and Overages

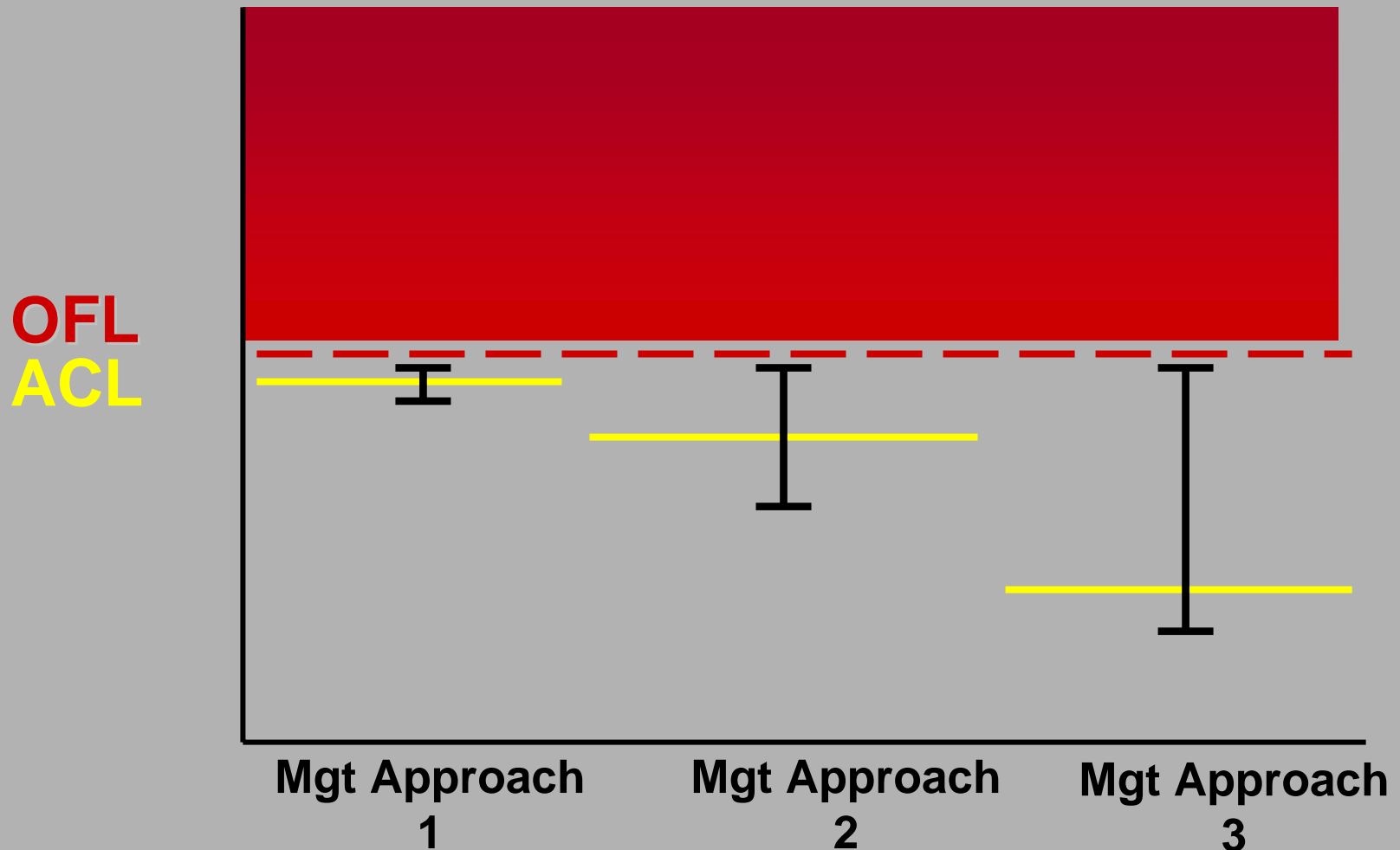
Actual Catch

- Year 1 ●
- Year 2 ●
- Year 3 ●
- Year 4 ●
- Year 5 ●

OFL
Target



Setting Annual Catch Limits to Prevent Overfishing: Accounting for Uncertainty and Past Performance



Issue: Scientific Knowledge of Stocks Varies

Considerations

- Quality of catch data varies
 - Completeness of catch data
 - Landings and discards data from all sectors & user groups
 - Landings data only, no discards
 - No catch data at all
 - Precision of catch data estimates
 - e.g. size of confidence intervals, statistical methods used
 - Many different data collection methods are used and each have different data quality issues
 - Commercial: logbooks, port sampling, landings reports, processor/dealer reports, observers
 - Recreational: MRFSS, other surveys

Issue: Scientific Knowledge of Stocks Varies

Considerations (continued)

- Biomass and fishing mortality estimates are not known for every stock
- Stock status varies: Known, Unknown, Undefined
 - Subject to overfishing
 - Overfished
 - Approaching overfished
- Existence of other academic research varies
- Existence of anecdotal information varies
- No information exists on the stock

Issue: Timeliness of Catch Data Varies

Considerations

- Timing of catch data availability (including analysis time):
 - in-season allows for in-season adjustments to catch
 - in time to make adjustments to next year's target catch
 - in time to make adjustments to target catch two or more years later
- No catch data at all

Issue: Data Varies

Discussion

- For stocks with little or no data, how could ACLs and AMs be developed?
- For fisheries where catch data is not timely or does not exist, what types of AMs can be developed?



Summary

Developing ACL and AM Guidance

Development of national ACL and AM guidance must account for:

- Diversity in U.S. fisheries:
 - Biological and ecological
 - Management approaches
 - Monitoring capabilities
 - Scientific information available
- Uncertainty

All these factors work together and will affect our ability to develop, implement, and evaluate ACLs and AMs.

Considerations in Developing ACLs and AMs for Each Fishery

1-Management Strategies

Set goals

Design mgt approaches

Set target catch levels

Evaluate performance

Incorporate new information

2-Data Collection
Need appropriate, reliable,
timely data

4-In-season
Management
Need authority to close a
fishery when necessary
(timely closures)

3-Data Analysis
Need adequate resources
and timely analysis

Estimated Implementation Timeline

Scoping Meetings (see website)	March-April 2007
DEIS: Issue NOA and 45-day comment period	July 2007
Proposed Rule: Issue rule and 45-day comment period	July 2007
FEIS: Issue NOA	October 2007
Final Rule	November 2007
Councils & NMFS amend FMPs / mgt measures	Jan 2008 – June 2009
Secretarial Review of FMP amendments / mgt measures	June 2009 – Dec 2009
ACL & AM mechanisms implemented for “overfishing” stocks	2010
ACL & AM mechanisms implemented for all other stocks	2011

Seeking Comments

- NMFS is seeking comments on:
 - ACLs and AMs
 - Creating national performance standards and/or guidance for ACLs and AMs that account for various characteristics of each fishery
 - Other related issues or topics
 - Do any other issues related to NS1 guidelines need to be addressed during this process?



Email Comments to:

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Visit Our Website:

<http://www.nmfs.noaa.gov/msa2007/>

