

# Accountability Measures: The How & Why of Fisheries Management

Gulf of Mexico Fishery Management Council



# Background



## Goal:

- Provide a background on the role of “Accountability Measures” in fisheries management to foster discussion regarding improved management and angler satisfaction

## Key takeaways:

- Accountability Measures (**AMs**) are an integral part of the Magnuson-Stevens Act paradigm
- **AMs** can be flexible in design and use
- **AMs** are not always punitive
- There could be opportunities within this framework to improve management and angler satisfaction

# Outline

- Overview of MSA and reauthorization
- Focus on 2006 requirement for Annual Catch Limits (ACLs) and Accountability Measures (AMs)
- How are catch limits determined:
  - Describe how AMs fit into the process
- Challenges of implementing ACLs and/or AMs
- Take home thoughts



# Magnuson-Stevens Fishery Conservation and Management Act



**1976:** Original Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSA) developed to:

- Eliminate foreign fishing
- Promote domestic fishing
- Promote overfishing and rebuild stocks
- Establish Regional Fishery Management Councils
- Balance economic and conservation interests



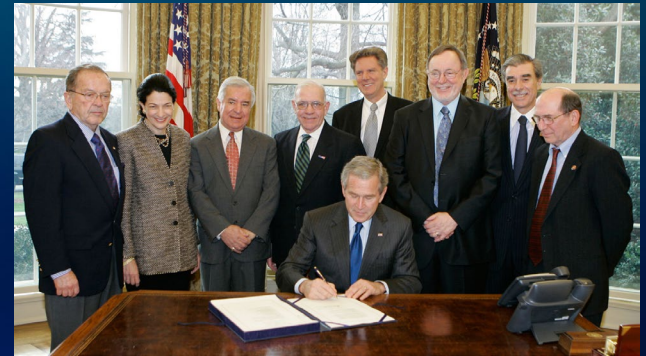


# Magnuson-Stevens Fishery Conservation and Management Act



**2006:** MSA was reauthorized to strengthen role of science in fishery management

- Requires managers to establish science based annual catch limits (ACL's) and accountability measures (AM's) for all federally managed species
- ACLs and AM's are tied together



# What are Annual Catch Limits and Why do we need them?



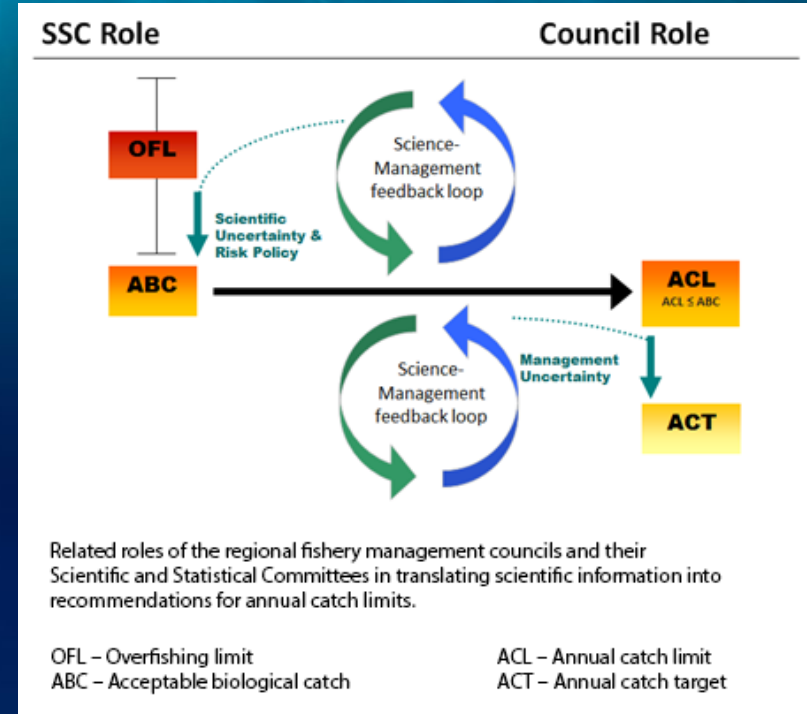
- Create a 'hard limit' on the allowable harvest
  - Aim to prevent overfishing and ensure long-term viability
  - Science-based: Informed by stock assessments and scientific recommendations from the SSC. Catch limits are based to the best available data
- Required for *most* federally managed fisheries
- Intend to balance social and economic benefits along with the requirement to provide sustainable harvest

AMs work in tandem to modify management measures to prevent or mitigate overfishing relative to the ACLs.

# How are Annual Catch Limits Established?



- **Overfishing Limit (OFL)**
- **Acceptable Biological Catch (ABC)**  
Informed by stock assessments and scientific recommendations from the SSC
- **Annual Catch Limit (ACL)**
- **Annual Catch Target (ACT)**
- **Accountability Measures (AMs) Can be associated with one or more catch limits**



# What are Accountability Measures?



**Accountability measures (AMs)** include specific actions to address and prevent overfishing and ensure compliance with **annual catch limits (ACLs)**. They fall into two main categories:

- 1. In-season AMs:** Measures taken before or during a fishing season to prevent exceeding ACLs. Examples include:
  - **Seasonal closures** when harvest approaches the ACL
  - **Changes in management to slow harvest** (i.e., reductions in trip limits (commercial) or bag limits as harvest limits are approached)





# What are Accountability Measures?

**Accountability measures (AMs)** include specific actions to address and prevent overfishing and ensure compliance with **annual catch limits (ACLs)**. They fall into two main categories:

2. **Post-season AMs:** Measures implemented after a season when ACLs are exceeded. Examples include:
  - Reducing future harvest to compensate for overages
  - Requiring in-season monitoring and closures of future years to prevent subsequent overages
  - Re-evaluating the management regime to determine if changes are necessary to prevent repeated overages

# Challenges implementing ACLs and AMs

- **Administrative and Regulatory Burden:** Developing, implementing, and enforcing ACLs requires significant financial and administrative resources which can strain management agencies
  - Balancing input from diverse stakeholders creates complexity in decision making and timeliness
- **Science-based management:** The scientific information underlying management advice is often less than desired (e.g., too old, imprecise, poor spatial resolution, or important metrics unknown)
- **Timelines:** Catch limit advice may lag current conditions of the fishery or ecosystem creating mismatches between management and current conditions. This can contribute to resource depletion, forgone yield, or angler dissatisfaction

# Take Home Thoughts



- **ACLs and AMs should:** consider the data quality and the management responsiveness in design and implementation
- **Regarding the data:** best isn't always good but doesn't not absolve us from responsible management
  - Inaction while improving the data is unlikely to lead to long-term success.
- **The scope of AMs** for potential use is large and flexible
  - Forward looking AMs are likely to provide better social and economic benefits (e.g., a planned fishing season of fixed length is likely better than an open-ended season subject to unpredictable closures. Both methods fit within the AMs paradigm.

# Take Home Thoughts cont.



- **ACLs and AMs are here to stay:** Simply put, unrestrained fisheries are likely to become depleted and will not provide long-term social, economic, or ecological benefits
- **Properly designed and implemented,** ACLs & AMs should promote achieving long-term benefits to humans and ecosystems
- **In that light,** suggest efforts to improve functional, feasible, and sustainable concepts to improve existing management



An underwater photograph showing sunlight rays (crepuscular rays) filtering down from the surface, creating a serene blue background. The rays are most prominent in the upper half of the image, where they appear as bright, diverging lines of light against the darker water.

**Questions?**

## Terms and Definitions

**OFL – Overfishing Limit** - annual estimate of the catch level above which overfishing is occurring

**ABC – Acceptable Biological Catch** – a level of a stock or stock complex's annual catch that accounts for the scientific uncertainty in the estimate of OFL - is recommended by SSC

**ACL – Annual Catch Limit** – the level of annual catch that serves as the basis for invoking AMs. ACL cannot exceed ABC, but may be divided into sector ACLs

## Terms and Definitions

**ACT – Annual Catch Target** - amount of annual catch that is the management target of a fishery. Takes management uncertainty into account and is optional.

**AMs – Accountability Measures** - management controls to ensure ACLs are not exceeded.

Examples

in-season closures such as quotas or reduced bag limits

post-season measures such as shorter fishing season or reduced bag limits

# National Standards



The MSA includes 10 national standards for management, which declare that conservation and management measures shall:

1. Prevent overfishing while achieving optimum yield.
2. Be based upon the best scientific information available.
3. Manage individual stocks as a unit throughout their range, to the extent practicable; interrelated stocks shall be managed as a unit or in close coordination.
4. Not discriminate between residents of different states; any allocation of privileges must be fair and equitable.
5. Where practicable, promote efficiency, except that no such measure shall have economic allocation as its sole purpose.
6. Take into account and allow for variations among and contingencies in fisheries, fishery resources, and catches.
7. Minimize costs and avoid duplications, where practicable.
8. Take into account the importance of fishery resources to fishing communities to provide for the sustained participation of, and minimize adverse impacts to, such communities (consistent with conservation requirements).
9. Minimize bycatch or mortality from bycatch.
10. Promote safety of human life at sea.