

MRIP Data Standards: A Perspective for Council-Managed Species in the Southeastern US

Thomas K. Frazer

University of South Florida
College of Marine Science

June 26, 2025



MRIP Data Standards

- **Standard 1: Survey Concepts and Justification**
- **Standard 2: Survey Design**
- **Standard 3: Data Quality**
- **Standard 4: Transition Planning**
- **Standard 5: Review Procedures**
- **Standard 6: Process Improvement**
- **Standard 7: Access and Information Management**

In general, these are practical standards that provide a solid framework to ensure the quality, consistency, and comparability of US recreational fishing data

Concerns for ‘Data Quality’ and Council-Managed Stocks

How were the Standards developed?

- Derived from **existing federal guidelines and best practices** for the dissemination of statistical information. References included:
 - Principles and Practices for a Federal Statistical Agency (NASEM)
 - Standards and Guidelines for Statistical Surveys (OMB)
 - Practices in place at the:
 - CDC, Census Bureau, Department of Education, Environmental Protection Agency, and U.S. Geological Survey
 - United Nations Department of Economic and Social Affairs
 - International Household Survey Network



Development of the standards did not seem to explicitly integrate precision and timeliness criteria needed to meet Federal fisheries management requirements

Paradigm Shift: MSA 2007 Reauthorization

Federal fishery management plans *shall:*

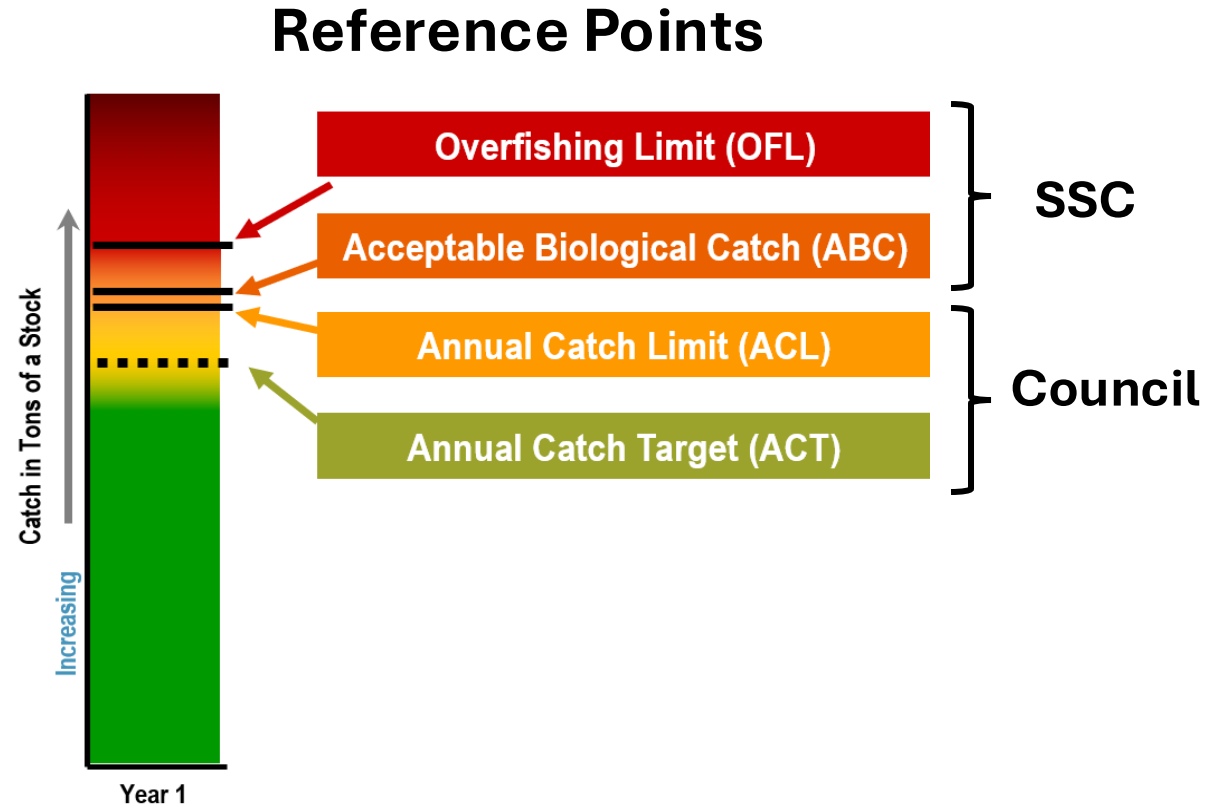
- Establish a mechanism for specifying annual catch limits (ACLs)
- Implement regulations or annual specifications at a level that prevents overfishing
- Include measures that ensure accountability (AMs)



Recreational data collection
in the southeastern U.S.

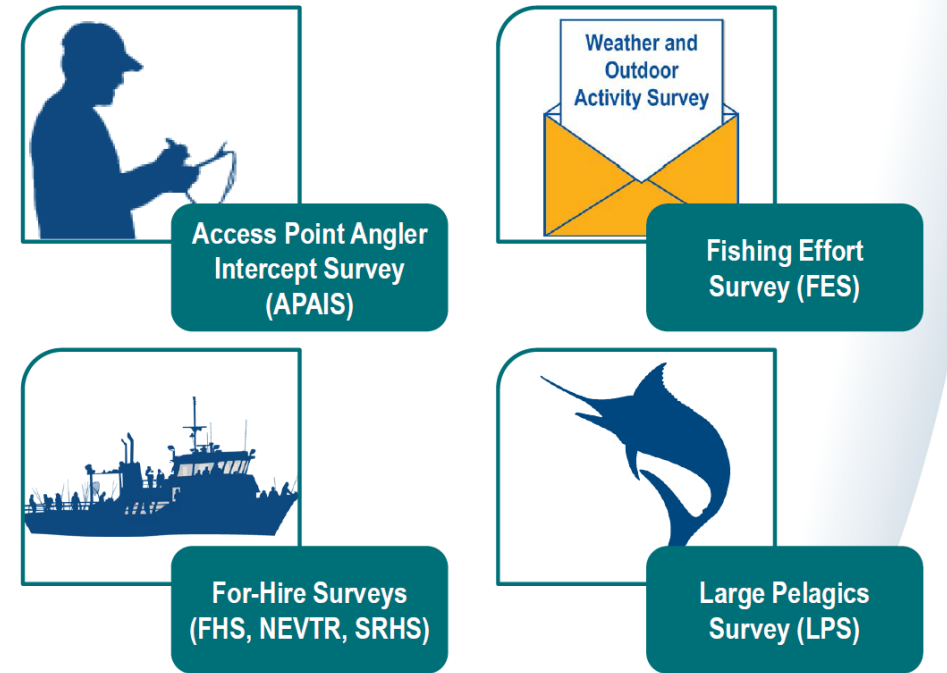
The Importance and Need for Catch Monitoring

- Our management framework is based on the use of reference points
- SSC provides an OFL and a recommendation for an ABC, which cannot be exceeded by the Council
- Council specifies an ACL and/or ACT, and implement AMs
- The level of uncertainty in stock assessments is a key component in setting ABC and consequently ACL

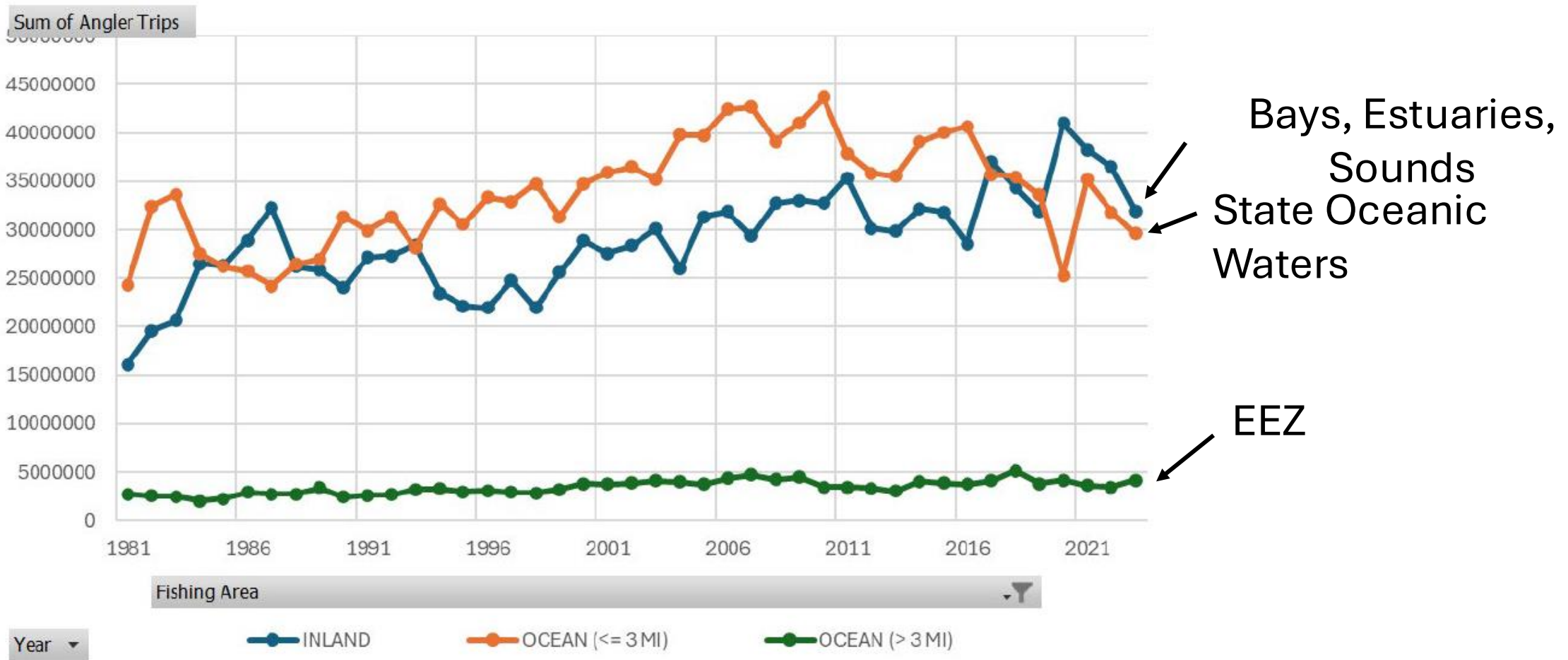


MRIP: Necessary But Not Sufficient

- Mainly a “general survey program” to monitor recreational landings and discards for different fishing modes, fleets and fisheries
- Designed to provide recreational catch estimates at the annual and regional scales
- Not well-suited for in-season management



Example: South Atlantic MRIP Trips By Area Fished

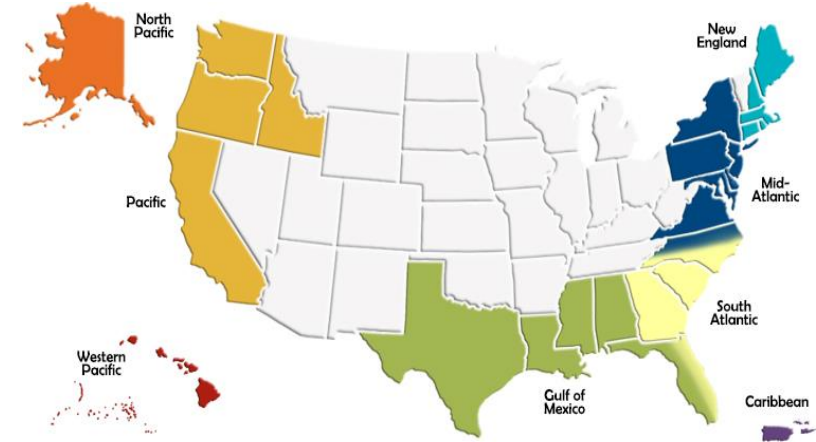
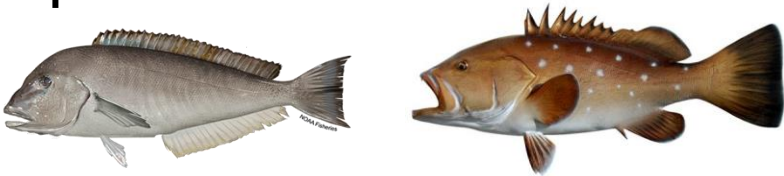


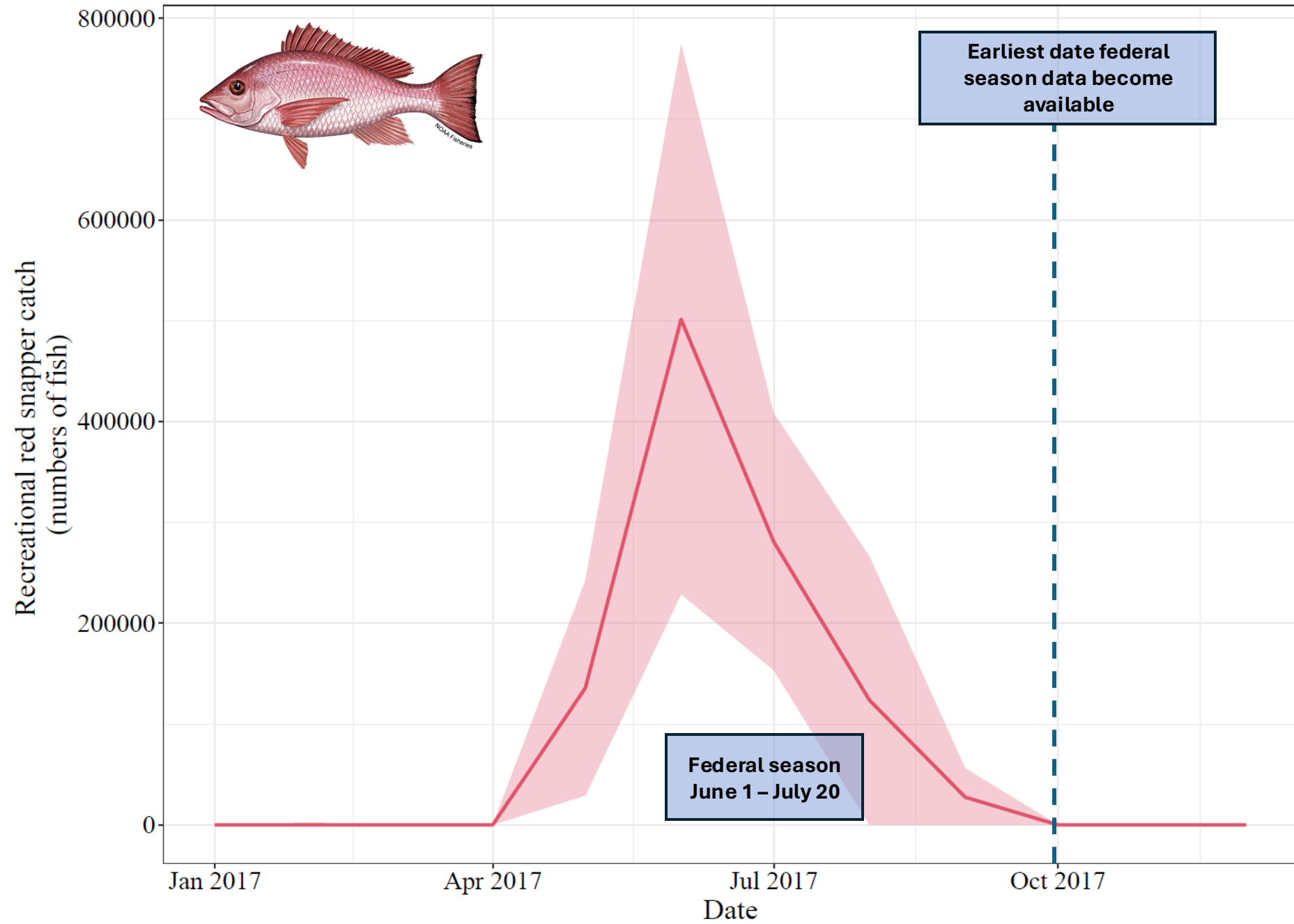
Council Needs Are More Complex

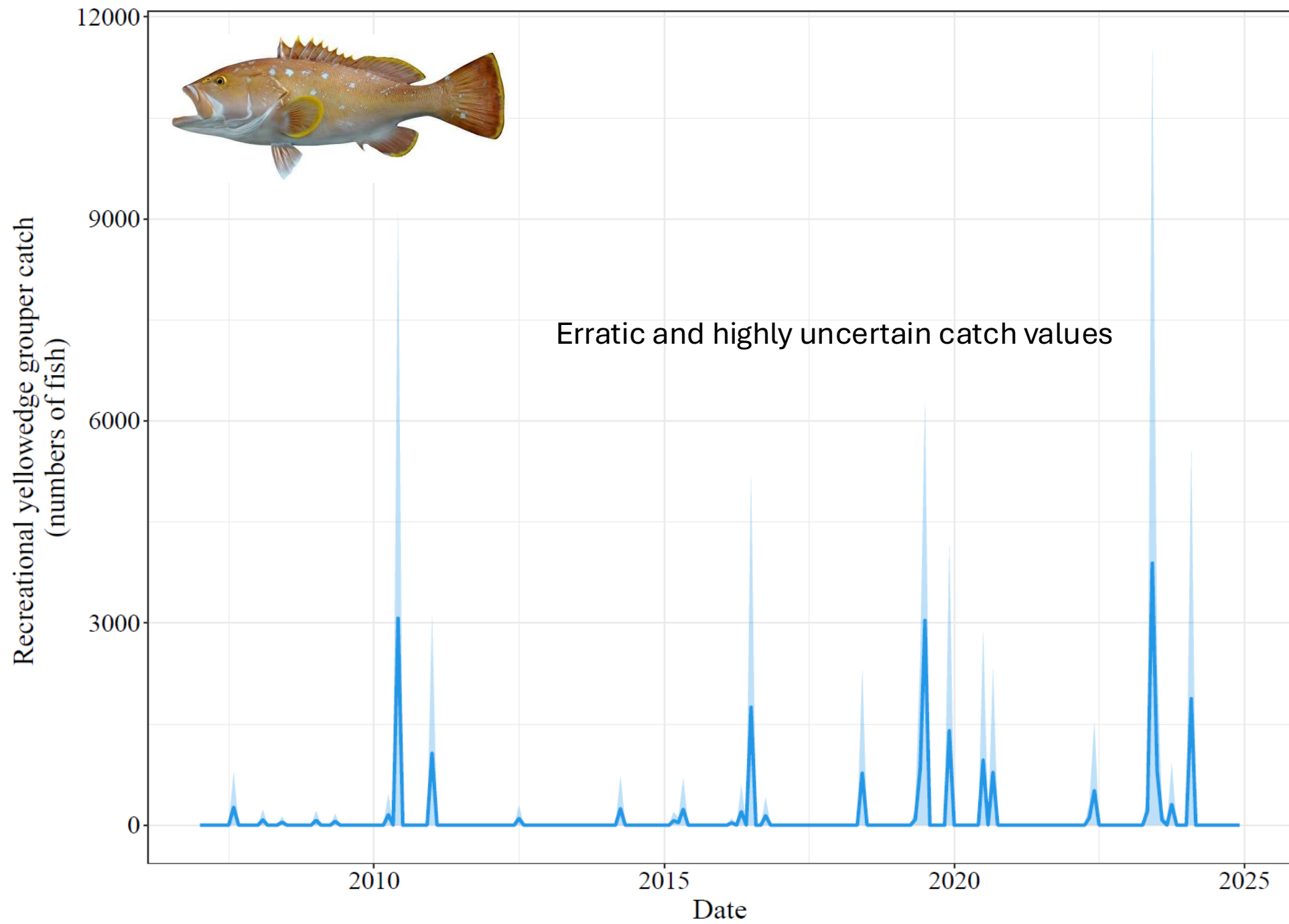
- Council-specific management needs have stretched MRIP's capabilities to provide accurate, precise data on a timely manner:
 - Short recreational seasons



- Low catch and rare-event species







Need to Adapt to Current Assessment and Management Requirements

	Historic Data Needs	Current Data Needs
Stock Assessments More Complex	<ul style="list-style-type: none">• Annual landings• Size of landed catch• CPUE of landed catch	<ul style="list-style-type: none">• Annual landings <i>and</i> discards• Size/age of landed catch and discards• Discard mortality• Selectivity• Effects of recent management on historic CPUE time series
Fisheries Management More Proactive	<ul style="list-style-type: none">• Effectiveness of size limits, bag limits, gear restrictions	<ul style="list-style-type: none">• Precise landings over shorter time-scales to ensure overfishing is not occurring• Landings available in-season to avoid accountability measures

Concerns Regarding Stock Assessments: Precision

- In the southeastern US, MRIP data often do not achieve adequate levels of precision (i.e., $PSE < 50\%$) to support assessment of several Council-managed stocks.
- Even at the annual level, high, low or zero estimates in the time series occur fairly regularly.
- Particular concern for small-scale fisheries, rare-event species, and species that have short fishing seasons.



Concerns Regarding Stock Assessments: Discards

- Estimates of in- and out-of-season discards are needed for fisheries with high levels of discarding
 - Out-of-season discards constitutes the largest component of mortality for several Council-managed species (e.g., Red Snapper, Gag, Greater Amberjack)
 - Lack of reliable discard information increases uncertainty in stock assessment and reference point estimation



Concerns Regarding Management: ACLs and AMs

- Management of several Council-managed fisheries require in-season recreational Accountability Measures (AMs)
 - Lack of timeliness in MRIP data causes AMs to not be applied efficiently
 - Some estimates have PSEs so large they are unreliable
 - Estimates by wave are less precise than annual estimates:
 - Creates problems developing accurate projections and implementing season closures.



Main Takeaways

- In general, the MRIP Data Standards provide a solid framework to ensure the quality, consistency, and comparability of US recreational fishing data
- However, the 2007 reauthorization of MSA fundamentally changed US fisheries management and set very high standards for federally-managed fisheries
- Explicit integration of precision and timeliness in the MRIP Data Standards would greatly improve assessment and management of Council-managed fisheries



Questions?

