

**NOAA  
FISHERIES**

**Southeast  
Regional  
Office  
&  
Southeast  
Fisheries  
Science  
Center**

# Update on Review of Bycatch Information in the Southeast Region



South Atlantic Council Meeting  
March 2016

# WORKGROUP WAS ASSEMBLED TO:

- Review SBRMs established by the Gulf of Mexico, South Atlantic, and Caribbean Fishery Management Councils.
- Develop ideas for updates to SBRMs that could be made through the FMP process.

# CONTENTS OF PRESENTATION

- 1) **Summary of new SBRM Proposed Rule**
- 2) **Summary of Discards in South Atlantic Fisheries**
- 3) **SBRMs in place for South Atlantic Council FMPs**
- 4) **Ideas from Workgroup for Councils to consider when reviewing SBRMs**



# SBRM Proposed Rule

Published February 25, 2016  
Comments due April 25, 2016



# SBRM PROPOSED RULE

**Magnuson Steven's Act (MSA) Section 303(a)(11) requires FMPs to establish standardized reporting methodologies to assess the amount and type of bycatch in a fishery.**

**Purpose of rule is to articulate an interpretation of the basic requirements of the SBRM provision of the MSA.**

# SBRM PROPOSED RULE

## Key Components

- Defining “standardized reporting methodology” as applicable only to the definition of “bycatch” in the MSA.
- Clarified procedures for establishing, documenting, and reviewing SBRMs under the MSA.
- Option for adaptable implementation to allow for operational flexibility.

# SBRM PROPOSED RULE

## Standardized Reporting Methodology Definition

**Standardized Reporting Methodology means an established procedure or procedures used to collect, record, and report bycatch data in a fishery or subset of a fishery.**

**“Standardized” procedures may vary from one fishery to another, but must provide a consistent approach for collecting, recording, and reporting bycatch data within a fishery.**

# SBRM PROPOSED RULE

## Multiple Steps to Address Bycatch

- (1) Bycatch are collected, recorded, and reported (SBRM);
- (2) Bycatch data from an SBRM and other information used to estimate the amount of bycatch in a fishery;
- (3) Bycatch data and estimates used to inform Council in development of measures to minimize bycatch and bycatch mortality.



# SBRM PROPOSED RULE

## Purpose of SBRM

To inform the assessment of the amount and type of bycatch occurring in the fishery for use in developing conservation and management measures that, to the extent practicable, minimize bycatch and bycatch mortality.



# SBRM PROPOSED RULE

## Contents of FMP

- **Must clearly state the required standardized reporting methodology for each fishery.**
- **Must explain why the methodology is appropriate for the fishery, based on a set of required and discretionary factors.**
- **May incorporate by reference existing analyses or other documents.**



# SBRM PROPOSED RULE

## Required factors for establishing or reviewing a standardized reporting methodology

- Conservation and management objectives of the fishery with respect to bycatch
- Data quality and characteristics of bycatch
  - Amount of bycatch occurring in the fishery (if known);
  - Importance of bycatch in estimating the total mortality of fish stocks;
  - Importance of bycatch to related ecosystems;
- Feasibility of the methodology (cost, technical, operation)
- Each SBRM must be designed to be implemented with available funding

# SBRM PROPOSED RULE

## **Additional factors for establishing or reviewing a standardized reporting methodology**

- Overall magnitude or economic impact of the fishery
- Scientific methods and techniques available to collect and report bycatch data that could improve the quality of bycatch estimates

# SBRM PROPOSED RULE

## **Adaptable Implementation**

- **FMPs may include a process for adjusting the implementation of an SBRM.**
- **The FMP must specify the types of adjustments to be used (changes in intensity or frequency of data collection and reporting).**
- **It must also describe limits of using such a process and how the Council will determine if a reevaluation of the SBRM is warranted.**



# SBRM PROPOSED RULE

## Review of SBRMs

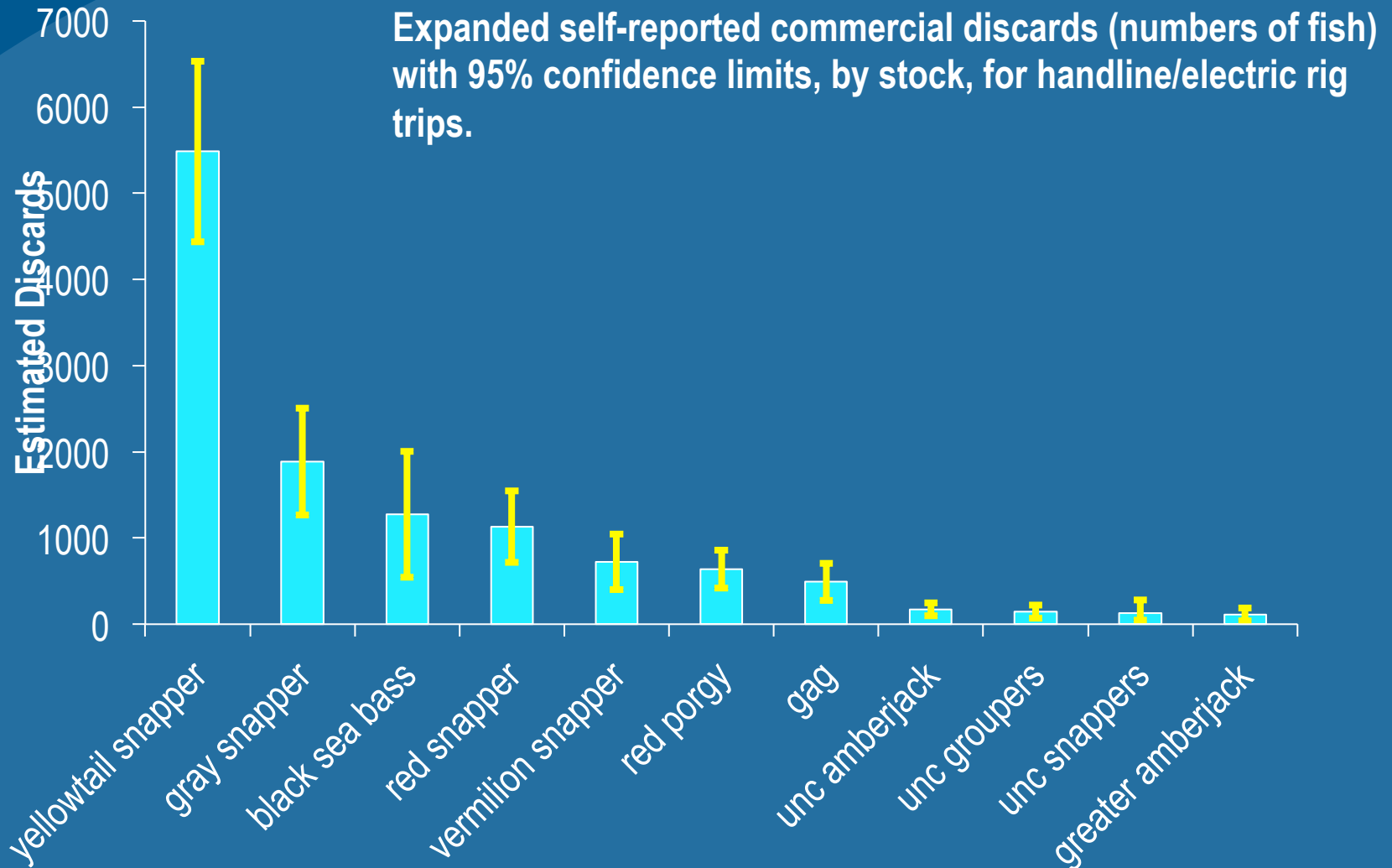
- All FMPs must be consistent with this rule within five years of finalizing the rule.
- Councils should conduct a review of their existing SBRMs.
- The review should provide information on whether or not the FMP needs to be amended.
- After initial review, Council should review SBRMs at least every five years.



# Discards in South Atlantic Fisheries



# Snapper Grouper Discards





# DOLPHIN-WAHOO DISCARDS

Handline / Electric		Longline		Trolling	
dolphin	2801.3	barracuda	6.6	dolphin	2453.4
blue runner	272.9	shark silky	2.3	black sea bass	1858.6
king mackerel	167.8	dolphin	2.2	king mackerel	152.4
yellowtail snapper	97.0	tuna blackfin	0.5	barracuda	44.3
black grouper	50.6	shark blacktip	0.3	greater amberjack	16.5
gag	49.7	sailfish	0.0	sailfish	8.1
lane snapper	44.8			tuna little (tunny)	2.7
greater amberjack	43.5			wahoo	2.5
vermillion snapper	28.4			lesser amberjack	2.1
unc amberjack	18.1			red snapper	1.6

# CMP Discards

Gillnet		Handline/Electric		Trolling	
menhaden	675.7	king mackerel	641.6	king mackerel	523.5
finfishes unc for food	401.8	blue runner	142.5	black sea bass	82.0
rudderfish (sea chubs)	135.5	spanish mackerel	86.9	vermilion snapper	35.5
shark atlantic sharpnose	99.3	tuna little (tunny)	69.1	blue runner	26.3
bluefish	34.4	black sea bass	62.2	spanish mackerel	19.4
mackerel unc. (scomber)	33.6	cobia	55.6	tuna little (tunny)	17.0
spanish mackerel	29.9	yellowtail snapper	54.4	cobia	16.8
shark bonnethead	18.3	gray triggerfish	42.2	red snapper	16.7
shark blacktip	15.0	red snapper	39.5	gag	7.8
red porgy	12.5	dolphin	38.0	shark atlantic sharpnose	6.5

# Spiny Lobster Discards



## **Matthews et al. (1997):**

Examined 21,309 lobster traps

32% contained bycatch

65% of bycatch was stone crabs, grunts, spider crabs, and sea urchins

## **Matthews & Donahue (1997):**

Bycatch primarily tomtate, white grunt, stone crabs, spider crabs

Very low daily bycatch mortality rates, with wire traps higher than wood traps

# Golden Crab Discards



## Discard Logbook

~10% golden crab fishers report discards

Mean discards 2009-2013 = 1,473 lb/yr deep-sea isopods

## Perry et al. (1995):

Bycatch predominantly isopods, with some crabs, hagfish, sharks, and hake

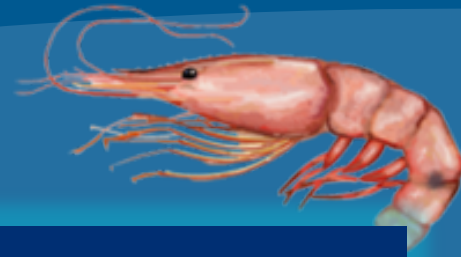
## Observer Program:

Required to carry observers if selected

11 permitted fishermen, no observer coverage



# Shrimp Discards



## **Southeastern *Penaeid*:**

Most bycatch are discards of no value to the vessel

Limited regulatory discards

Without BRDs, bycatch is ~51% finfish (including ESA-listed sturgeon), 18% shrimp, 13% non-commercial shrimp and crustaceans, and 18% non-crustacean invertebrates (NMFS 1998).

## **Rock Shrimp:**

With BRDs, catch from 448 nets was ~37% rock shrimp, 13% finfish, 12% inshore lizardfish, and 10% dusky flounder.



# SBRMs in Place for South Atlantic FMPs



# SBRMs FOR SNAPPER-GROUPER, DOLPHIN-WAHOO, CMP



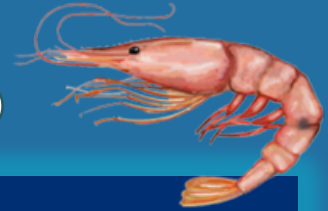
## Comprehensive Amendment Addressing Sustainable Fishery Act Requirements:

“Include reporting requirements as specified in the Atlantic Coastal Cooperative Statistics Program (ACCSP).”

### Snapper-Grouper Amendment 15B:

“Adopt the ACCSP Release, Discard and Protected Species Module as the preferred methodology. Until this module is fully funded, require the use of a variety of sources to assess and monitor bycatch, including observer coverage on vessels, logbooks, electronic logbook, video monitoring, MRFSS, state cooperation, and grant funded projects. After the ACCSP Bycatch Module is implemented, continue the use of technologies to augment and verify observer data. Require that commercial vessels with a snapper-grouper permit, for-hire vessels with a for-hire permit, and private recreational vessels if fishing for snapper-grouper species in the EEZ, if selected, shall use observer coverage, logbooks, electronic logbooks, video monitoring, or any other method deemed necessary to measure bycatch by NOAA Fisheries.”

# SBRMs FOR SOUTH ATLANTIC SHRIMP



## Amendment 6:

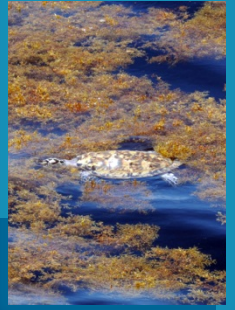
**“Adopt the ACCSP Release, Discard and Protected Species Module as the preferred methodology. Until this module is fully funded require the use of a variety of sources to assess and monitor bycatch including observer coverage on shrimp vessels, logbooks, state cooperation, grant funded projects, and federal penaeid shrimp permits.”**

## Specifics:

- 1) 20% of the total at-sea observer funds (South Atlantic and Gulf of Mexico) are allocated to the South Atlantic.**
- 2) Current observer coverage 1% Penaeid shrimp trips; <1% rock shrimp trips.**



# SARGASSUM SBRM



## SBRM from Sargassum FMP

- 100% observer coverage required with gear restrictions
- No reported harvest of *Sargassum* since FMP final rule published

# Workgroup Ideas for SBRMs

- Workgroup has identified possible ideas for improving the existing SBRMs.
- These are not a determination on adequacy of existing programs.
- Ideas *could* be implemented pending an evaluation of current SBRMs.

# Workgroup Ideas for Snapper Grouper FMP

## Commercial

- Observer coverage - begin pilot observer program.
- Electronic technology - supplement observer coverage.
- Collect set level data in electronic commercial logbooks (identify target; landed; and discarded stocks, area and depth fished, and gear by set.)
- Require all commercial fishermen report discards in logbooks, and not just 20% of permit holders.
  - Compare self-reported discards from discard logbooks to discards reported by observers.
- Include corals, marine mammals, protected species, and Sargassum as specific items to report in discard electronic logbook.



# Workgroup Ideas for Snapper Grouper FMP

## Recreational

- Add headboat observer coverage to SBRM and enhance as needed.
- Add to SBRM discards reported through existing MRIP program and existing electronic reporting of discards for headboat survey.
- Add to SBRM electronic reporting of discards in the for-hire charter sector.
- Conduct observer or electronic studies to assess potential differences between actual discards, and MRIP reported discards.



# Workgroup Ideas for Dolphin Wahoo FMP

## Commercial

- **Observer coverage** - It is expected that most discards would be surveyed under the recommended snapper-grouper observer program.
  - Conduct a one year observer pilot program for South Atlantic Dolphin-Wahoo to test this.
- **Collect set-level data in electronic logbooks.**
- **Require all commercial fishermen report discards in logbooks, and not just 20% of permit holders.**
  - Compare self-reported discards from discard logbooks to observer coverage.
- **Include corals, marine mammals, protected species, and Sargassum as specific items to report in discard logbook.**



# Workgroup Ideas for Dolphin Wahoo FMP

## Recreational

- Add headboat observer coverage to SBRM and enhance as needed.
- Add to SBRM discards reported through existing MRIP program and existing electronic reporting of discards for headboat survey.
- Add to SBRM electronic reporting of discards in the for-hire charter sector.
- Conduct observer or electronic studies to assess potential differences between actual discards, and MRIP reported discards.



# Workgroup Ideas for CMP FMP



## Commercial

- Low discards for trolling component – conduct observer study every 5 years to calibrate between self-reported and actual bycatch.
- Explore electronic monitoring options as alternative to observers.
- Enhance observer coverage in the gillnet sector.
- Require all commercial fishermen report discards in logbooks, and not just 20% of permit holders.
- Collect set-level data in electronic logbooks.
- Include corals, marine mammals, protected species, and Sargassum as specific items to report in discard logbook.



# Workgroup Ideas for CMP FMP



## Recreational

- Add headboat observer coverage to SBRM and enhance as needed.
- Add to SBRM discards reported through existing MRIP program and existing electronic reporting of discards for headboat survey.
- Add to SBRM electronic reporting of discards in the for-hire charter sector.



# Workgroup Ideas for Coral FMP

- Incorporate bycatch reporting from the “active” fisheries in the South Atlantic.
- Add corals as specific component to discard Coastal Logbook Form for reef fish, snapper-grouper, dolphin and wahoo, and coastal migratory pelagics.
- Make logbooks electronic.



# Workgroup Ideas for Shrimp FMP

- Increase observer coverage, especially in areas with sawfish.
- Use electronic monitoring as alternative to observers, if feasible.
- Establish an electronic logbook program for effort data collection.
- Link location-specific catch and bycatch data to VMS data for the rock shrimp sector.



# Workgroup Ideas for Golden Crab FMP

- **Electronic logbooks to improve timeliness with 100% discard reporting.**
- **Fishery appears to have low bycatch – observer coverage every five years would allow calibration between self-reported and actual bycatch.**



# Workgroup Ideas for Spiny Lobster FMP

- Electronic logbooks to improve timeliness, with 100% discard reporting.
- Fishery appears to have low bycatch – observer coverage every five years would allow calibration between self-reported and actual bycatch.
- Establish electronic logbook and include sea turtles, sawfish, and *Acropora* as specific items.
- Include spiny lobster in the MRIP survey.



# QUESTIONS?

