Tab A, No. 7(b)



Update on Review of Bycatch Information in the Southeast Region

NOAA FISHERIES

Southeast Regional Office

&

Southeast Fisheries Science Center



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 Gulf Fisheries
- 3) SBRMs in place for Gulf 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



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.



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.



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.



Multiple Steps to Address Bycatch

- (1) Bycatch data 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) 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.



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 consideration when 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



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



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.



Review of SBRMs

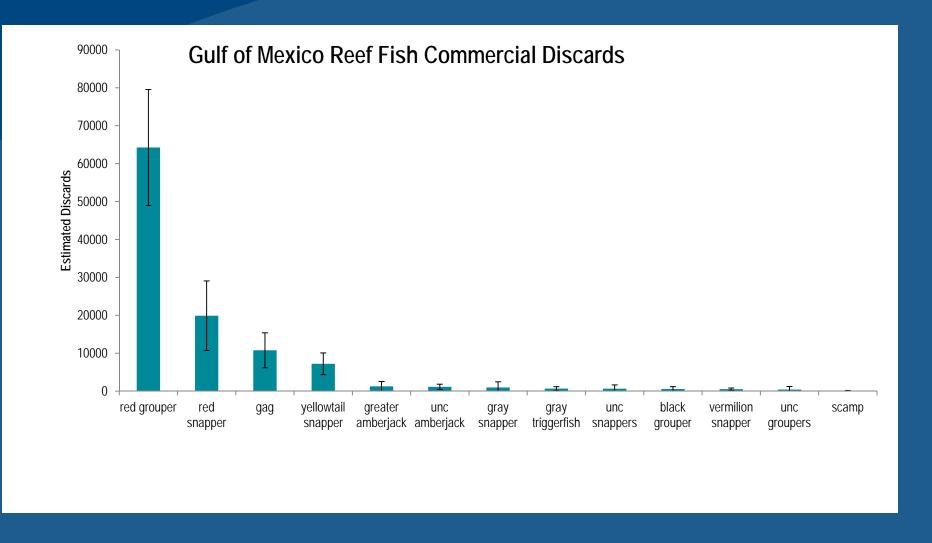
- Councils should conduct a review of their existing SBRMs.
- The review should provide information on whether or not the FMP needs to be amended.
- All FMPs must be consistent with this rule within five years of implementation.
- After initial review, Council should review SBRMs at least every five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



Discards in Gulf Fisheries



Reef Fish Discards



Expanded self-reported commercial discards (numbers of fish) with 95% confidence limits, by stock, for handline/electric rig trips.



CMP Discards

Commercial

| | | | Handline/ | | |
|-------------------|---------|---------------|-----------|--------------------------|-------|
| Stock | Gillnet | Stock | Electric | Stock | Troll |
| | | king | | | |
| lemon shark | 699.0 | mackerel | 4,2547.0 | king mackerel | 52.9 |
| sea trout spotted | 55.8 | red snapper | 4,076.3 | red snapper | 9.2 |
| smooth dogfish | 30.3 | red grouper | 2,495.4 | crevalle jack | 2.5 |
| cobia | 2.4 | cobia | 800.6 | blacktip shark | 2.0 |
| grunts | 0.9 | crevalle jack | 787.2 | Atlantic sharpnose shark | 1.5 |
| | | unc | | | |
| red grouper | 0.5 | amberjack | 239.7 | unc amberjack | 0.7 |
| | | greater | | | |
| bonnethead shark | 0.5 | amberjack | 217.8 | dolphin | 0.7 |
| shark unc | 0.2 | barracuda | 156.4 | spanish mackerel | 0.6 |
| | | Spanish | | | |
| shark blacktip | 0.0 | mackerel | 141.7 | shark unc | 0.4 |
| | | blacktip | | | |
| | | shark | 117.1 | Gag | 0.3 |



CMP Discards

Recreational

| | HEADBOAT | | | CHARTER | | | PRIVATE | | |
|---------------|----------|---------|-------|---------|---------|-------|-----------|-----------|-------|
| | | | | | | | | | |
| | Landing | Discard | Ratio | Landing | Discard | Ratio | Landings | Discards | Ratio |
| Species | s (N) | s (N) | (D:L) | s (N) | s (N) | (D:L) | (N) | (N) | (D:L) |
| | | | | | | | | | |
| Cobia | 933 | 231 | 25% | 4,836 | 4,265 | 88% | 28,360 | 56,437 | 199% |
| | | | | | | | | | |
| King Mackerel | 16,199 | 144 | 1% | 95,477 | 17,124 | 18% | 190,576 | 84,120 | 44% |
| Spanish | | | | | | | | | |
| Mackerel | 2,749 | 24 | 1% | 201,510 | 93,214 | 46% | 1,762,996 | 2,237,620 | 127% |



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



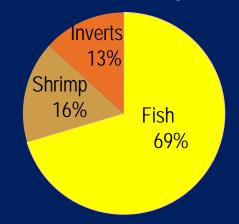




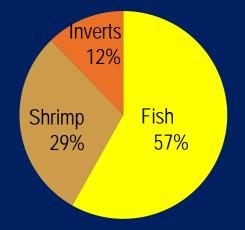
Southeastern *Penaeid*:

Most bycatch is discards of no value to the vessel Limited regulatory discards

Historical Shrimp Catch



Recent Shrimp Catch





DISCARD REPORTING PROGRAMS X: Directed coverage \text{\text{\coverage}} \text{\text{\coverage}}

X: Directed coverage

| | Recreational | | | | Commercial | |
|-------------------------------|----------------------|------------------|-----|--------------------|------------------------|--------------------|
| Fishery Management Unit | Headboat Observer | MRIP- Charter | FWC | Headboat Survey | Commercial Observer | Discard Logbook |
| Gulf of Mexico | | | | | | |
| Reef Fish | Χ | X | n/a | Χ | X | Χ |
| Coral and Coral Reefs | n/a | n/a | n/a | n/a | \ | / |
| Shrimp | n/a | n/a | n/a | n/a | X | - |
| Red Drum | Χ | X | n/a | X | - | Χ |
| Joint South Atlantic and Gulf | | | | | | |
| CMP | Χ | X | n/a | Χ | 1 | Χ |
| Spiny Lobster | n/a | n/a | Χ | n/a | - | - |



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 Reef Fish FMP



Commercial

- Maintain observer coverage
- Integrate electronic technology supplement observer coverage and replace paper logbooks
 - Compare logbooks to observer coverage and electronic technology to determine optimal combination for accurately estimating total discards and for monitoring catch rates.
 - Explore the use of electronic monitoring for marine mammal interactions to augment observers.
- Change commercial logbook to identify target, landed, and discarded stocks; area and depth fished; and gear by set.
- Include corals, marine mammals, and protected species as specific items to report in discard logbook.



Workgroup Ideas for Reef Fish 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

- Given the limited 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, and protected species 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.
- Add corals as specific discard component in logbooks for reef fish and coastal migratory pelagics.
- Make logbooks electronic.



Workgroup Ideas for Shrimp FMP



- Retain and enhance current SBRMs for ELBs and observers
- Enhance bycatch estimates and reporting consistency for marine mammals and other protected species, including sawfish.
- Electronic monitoring could potentially serve as an alternative to observers for documenting protected species interactions
- Camera systems could be used for accounting for smalltooth sawfish interactions onboard Southwest Florida shrimp vessels.



Workgroup Ideas for Red Drum FMP



- Incorporate bycatch reporting from the "active" fisheries in the Gulf.
- Require all fishermen with federal commercial permits for reef fish and coastal migratory pelagics report discards in logbooks, and not just 20% of permit holders.
- Change commercial logbook to identify target, landed, and discarded stocks; area and depth fished; and gear by set.
- Make commercial logbooks electronic.
- In the recreational sector, add headboat observer coverage to SBRM.
- Add to SBRM, discards reported through MRIP program, electronic reporting of discards for headboat survey, and electronic reporting of discards in the for-hire charter sector.



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.



