Tab B, No. 10

# Gulf Angler Focus Group Initiative

## NMFS Review of Current Information on Management Options

NOAA FISHERIES
Southeast Regional Office

Gulf Council April 2017 Meeting

# Background

- January 2017 GMFMC meeting
  - "*Examination of Possible Private Recreational Management Options for Gulf of Mexico Red Snapper*" presented by the Gulf Angler Focus Group Initiative
    - Primary objective was to develop a package of *possible management options* for further investigation to ensure a healthy red snapper stock while providing equitable and reasonable public access
    - Developed 7 options

# Gulf Angler Group Initiative Options

- Option A:  Status quo
- Option B: Maximizing fishing days within the current framework
- Option C: Harvest tags
- Option D: Depth/distance-based management
- Option E: Reef fish season
- Option F: Harvest rate/recruitment-based management
- Option G: Hybrid of various options

# Background

- Follow up to the meeting included Council request to analyze the options in terms of:
  - Permissibility under the Magnuson-Stevens Fishery Conservation and Management Act (MSA)
  - Impact to federal season length for private anglers
  - Include assumptions or caveats to the analysis
  - Possibility of achieving a 40-day private recreational season in federal waters

# Option A: Status quo

- Regulations
  - 16-inch minimum size limit
  - Two-fish bag limit
  - For-hire and private angler component annual catch limits (ACLs)
  - June 1 season start date
  - Individual states have different regulations
- This option permissible under MSA
- Will not affect private angler component season
- Assumptions and caveats
  - Season length estimated based on:
    - 2016 catches
    - Historical harvest patterns
- Will not achieve 40-day season

# Option B: Maximizing fishing days within current framework

- Past analyses have shown:
  - 1-fish bag limit – 1.61x increase in season length
  - Size/slot limit – 0-2.09x increase in season length depending on slot limit chosen
  - Reduction in barotrauma related release mortality – would reduce total number of fish killed, but hard to assess affect on season length without updating stock assessment
  - Compatible state and federal regulations – in past years nearly doubled current federal season length

# Option B: Maximizing fishing days within current framework (con't)

- Permissible under the MSA
- Any of these measures would increase the season length
- Each analysis comes with its own assumptions and caveats and are documented in the respective reports
- A combination of the above options may yield a 40-day federal season

# C. Harvest tags

- Estimated number of tags
  - 501,985 tags if use 2016 annual catch target (ACT)
  - Estimate = ACT (3.32 mp)/Avg. rec fish (6.613743 lbs ww)
  - Increased number of tags with a lower buffer, based on reduced uncertainty
- Examples of distribution methods
  - Lottery/auction
  - Through states
  - Eligibility requirements (e.g., eligibility based on past state fishing license)
- MSA issues – National standard 4
  - Fair and equitable
  - Allow for participation by non-Gulf state residents
- Assumptions and caveats
  - No high grading
  - The number of fishermen receiving tags is dependent on the number of applicants and number of tags per applicant
- Season could be year round

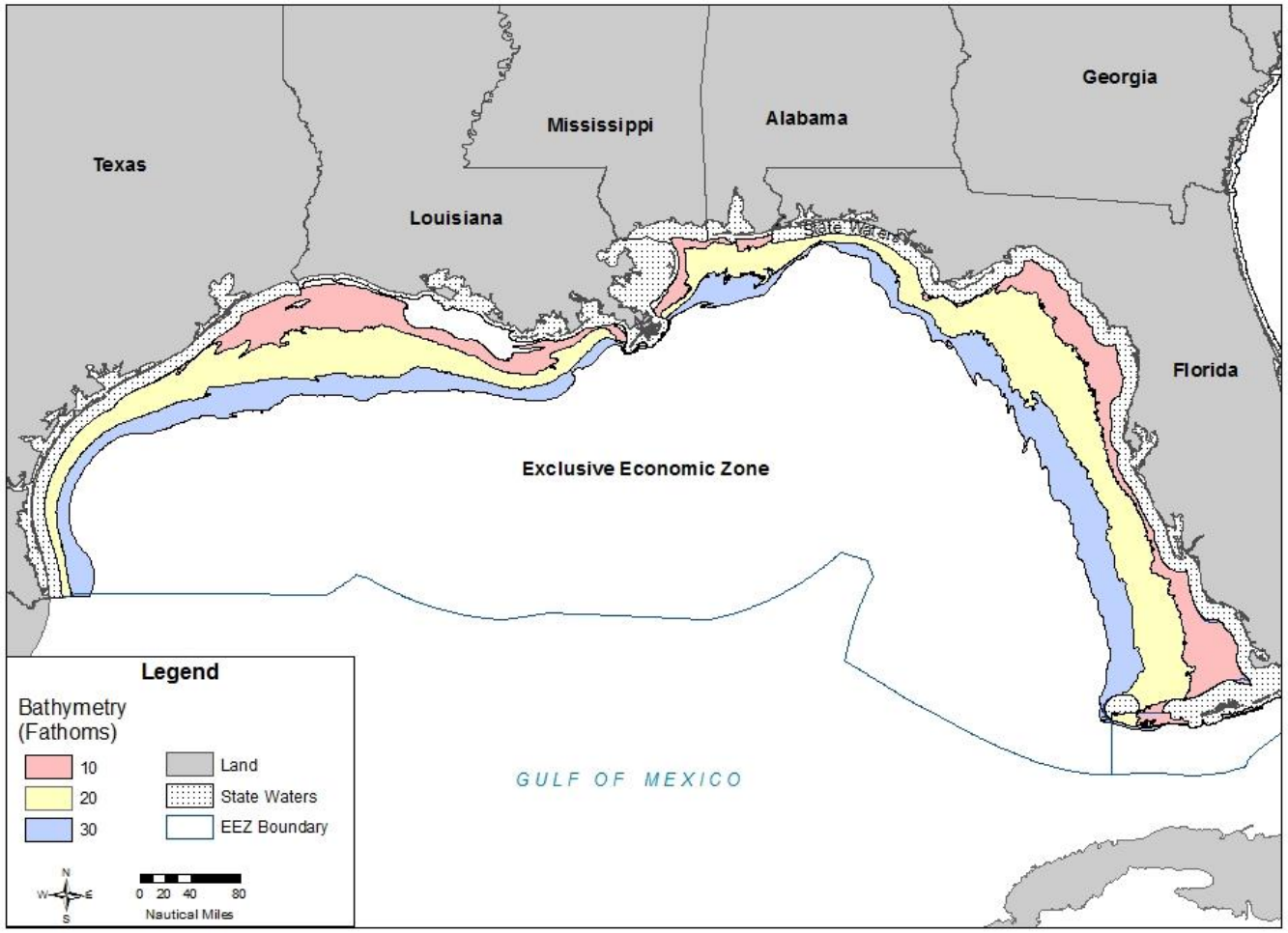
# Option D: Depth/distance-based management

- Would be difficult to analyze given current data
- Discard mortality
  - Increases with depth of capture
  - Increase with water temperature
- One estimate - lethal depth with 20% discard mortality* = 30m (~15 ftm)

20% discard mortality often seen as a threshold for catch and release to be beneficial

*Estimate from Rummer, J. L. 2007. Factors affecting catch and release (CAR) mortality in fish: Insight into CAR mortality in red snapper and the influence of catastrophic decompression. American Fisheries Society Symposium 60:113-132

# Depth contours – 10, 20, and 30 fathoms



# Option D: Depth/distance-based management (con't)

- Permissible under the MSA
- Could increase season length, but by what amount would need further analysis (e.g., new assessment)
- Assumptions and caveats
  - Would need more study of effort and discards based on depth/distance
  - Would need more study of discard mortality with and without barotrauma devices
  - Need to account for regulatory discards in deeper waters if implemented
  - Would the boundary just apply to the private angling component
  - What would the compliance level be with the closure boundary
- Probably not yield a 40-day federal season by itself

# Option E: Reef Fish Season

- Permissible under MSA if approached as stock complexes
- Depending on species groups, could increase or decrease federal season
- Assumptions and caveats
  - Would need to identify indicator and vulnerable stocks
  - Would need to identify regional stock complexes because reef fish species are not distributed equally around the Gulf
  - Would need protections for most vulnerable stocks
  - Would still need to prevent overfishing and rebuild the stock
- Probably not yield a 40-day season and could lead to shorter seasons for other species

# Option F: Harvest Rate/Recruitment Based Management

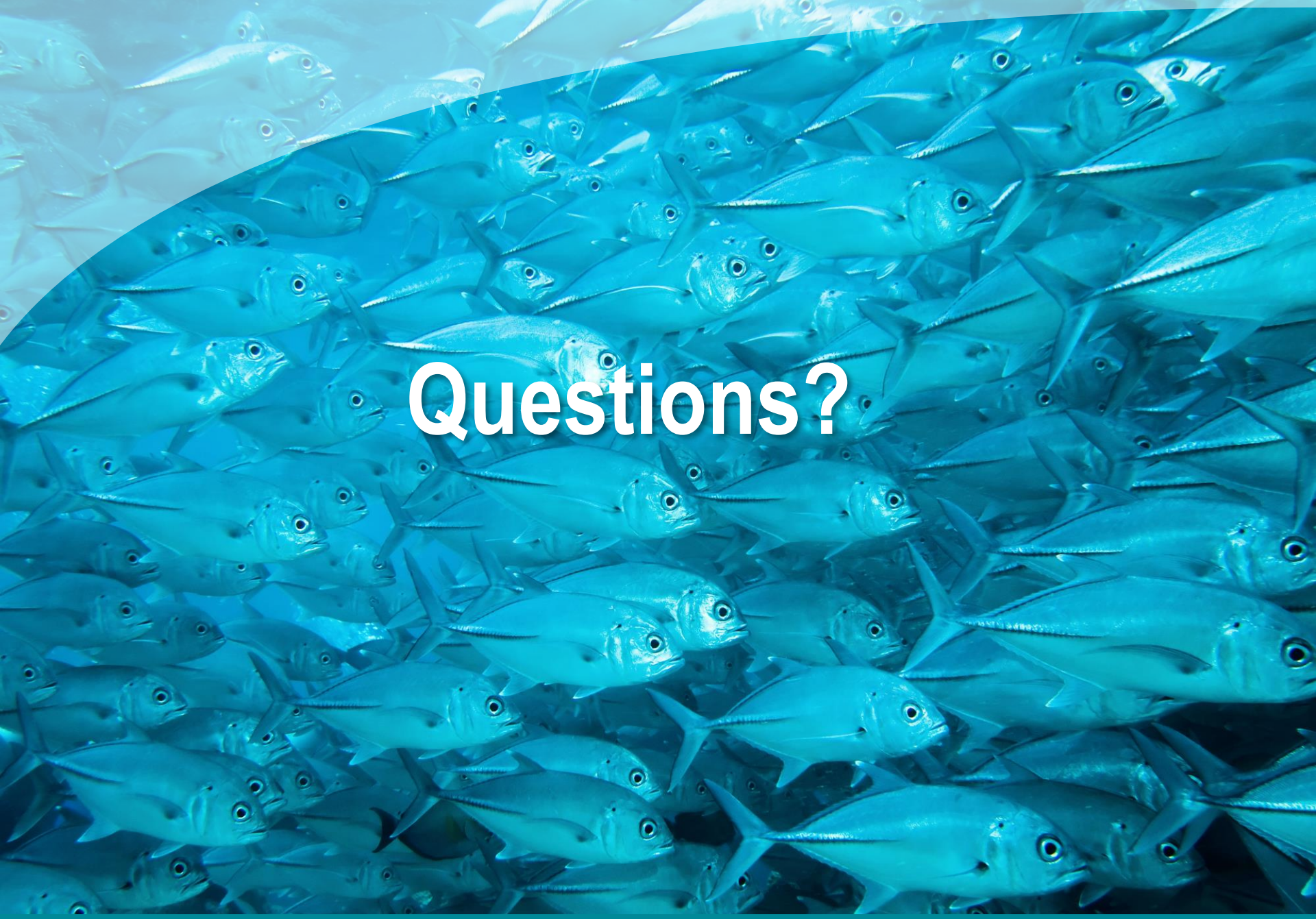
- Permissible under MSA as long it is unlikely the harvest would exceed the ACL
- Could increase season length, but would require further analysis
- Assumptions and caveats
  - Would need additional commitment of resources
    - Expand fishery independent monitoring to be able to better predict recruitment
    - Require surveys of fishing practices to improve the predictability of fishermen's behavior
  - Poor recruitment could decrease season length
- Unknown if this option would achieve a 40-day season

# Option G: Hybrid of various options

- Permissible under MSA as long it is unlikely the harvest would exceed the ACL
- Season length would likely increase but is dependent on options selected
- Assumptions and caveats
  - Dependent on options selected
  - Might also have a regional component
- Depending on options selected, could achieve a 40-day season

# Summary

| Feature | Option | | | | | |
|---|---|---|---|---|---|---|
| | Option A Status quo | Option B Current framework | Option C Harvest tags | Option D Depth/ distance | Option E Reef fish season | Option F Harvest rate/ recruitment |
| Permissible under MSA | Yes | Yes | Yes, with caveats | Yes | Yes, with caveats | Yes |
| Extend the season | No | Yes | Yes | Possibly | Possibly | Possibly |
| Achieve a 40-day season | No | Yes, in some combinations | Yes | Unlikely by itself | Unlikely by itself | Unknown |


Questions?