Snapper Grouper Management Strategy Evaluation

Input needed from the Advisory Panel

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What is a Management Strategy Evaluation (MSE)

- Quantitative approach to evaluate different management approaches.
- Inform, not prescribe, how different management approaches would perform under similar framework and assumptions.
- Compare across different performance metrics to evaluate how the approach could achieve different objectives.
- Repeatable process so that management can adapt based on new information.

MSE for the Snapper Grouper Fishery

- Management of Red Snapper has been a challenge for the Council.
- Did not need to develop acceptable biological catch levels or annual catch limits.
- Some stocks are in rebuilding plans and stock must be rebuilt.
- Number of discards has been increasing and limit potential landings in the fishery
- There was a desire for a new approach to manage the fishery.

Background for the Snapper Grouper MSE

- In 2022, the SAFMC contracted with Blue Matter Science to develop a management strategy evaluation
  - Input – BAM assessments for Black Sea Bass, Gag, and Red Snapper
  - Evaluated – Status quo, full retention, minimum size limits, and spatial closures
  - Performance – probability of rebuilding, relative short-term landings, relative long-term landings, and fraction discarded
  - Robustness test – difference in natural mortality, recreational catch levels, effort, and recent recruitment

Snapper Grouper MSE Outputs

- Developed a modeling framework to work with multiple snapper grouper species
- Matched the BAM assessment outputs
- Developed 132 different management scenarios
  - Five management categories –status quo, full retention, minimum size limits, nearshore spatial closures, and offshore spatial closures
  - Combined different management approaches
  - Evaluated different levels of recreational effort

Trade-Off Plot

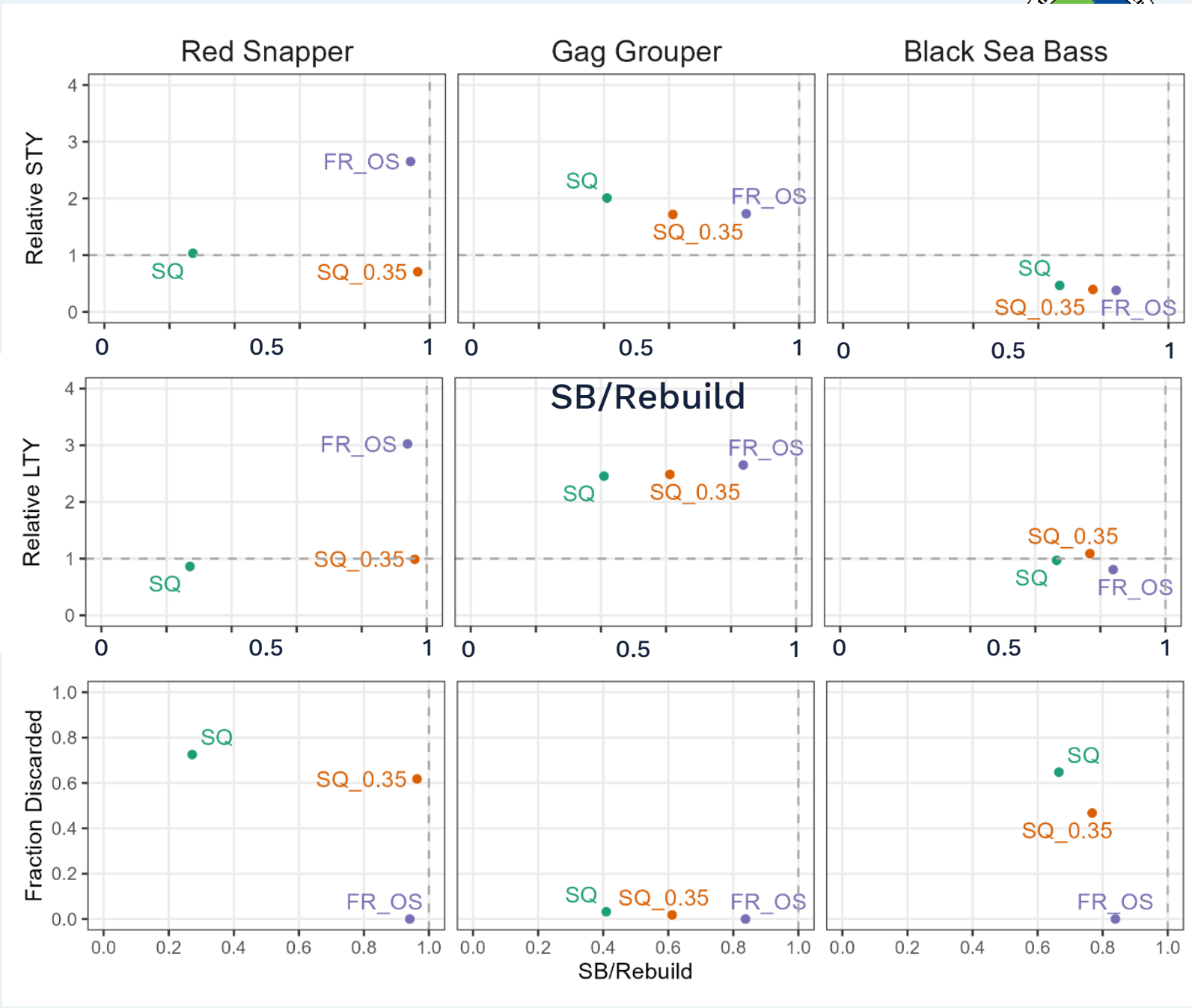
Trade-offs for Red Snapper, Gag, and Black Seas Bass under four objectives

Scenarios

- Status Quo (SQ, green),
- Status Quo with 35% of current recreational effort (SQ_.35, orange),
- full retention with all fishing effort moved to Offshore (FR_OS, purple).

Results

- Status quo performed worst of spawning stock biomass
- Full retention offshore tend to perform better for Red Snapper and Gag but worse for Black Sea Bass



MSE Continuation

- New contract with Blue Matter through September 2026 to revise the MSE based on feedback
  - Describe management scenarios
  - Review objectives
  - Address additional uncertainties
- Other ongoing work
  - Situation Assessment (University of Florida)
    - Investigated perspectives among stakeholders to help gather future stakeholder input.
  - Stakeholder Input (University of Florida)
    - Panel to help develop survey and aid in the MSE development
    - Survey to gather input from the public on different management scenarios

MSE Management Scenarios

Council recommended management strategies

- ✓Aggregate Bag Limit
- ✓Mandatory stopping once bag limit is reached
  - ✓Council recommended investigating aggregate bag limits for different species grouping based state or region.

If aggregate bag limit does not achieve rebuilding stocks, consider:

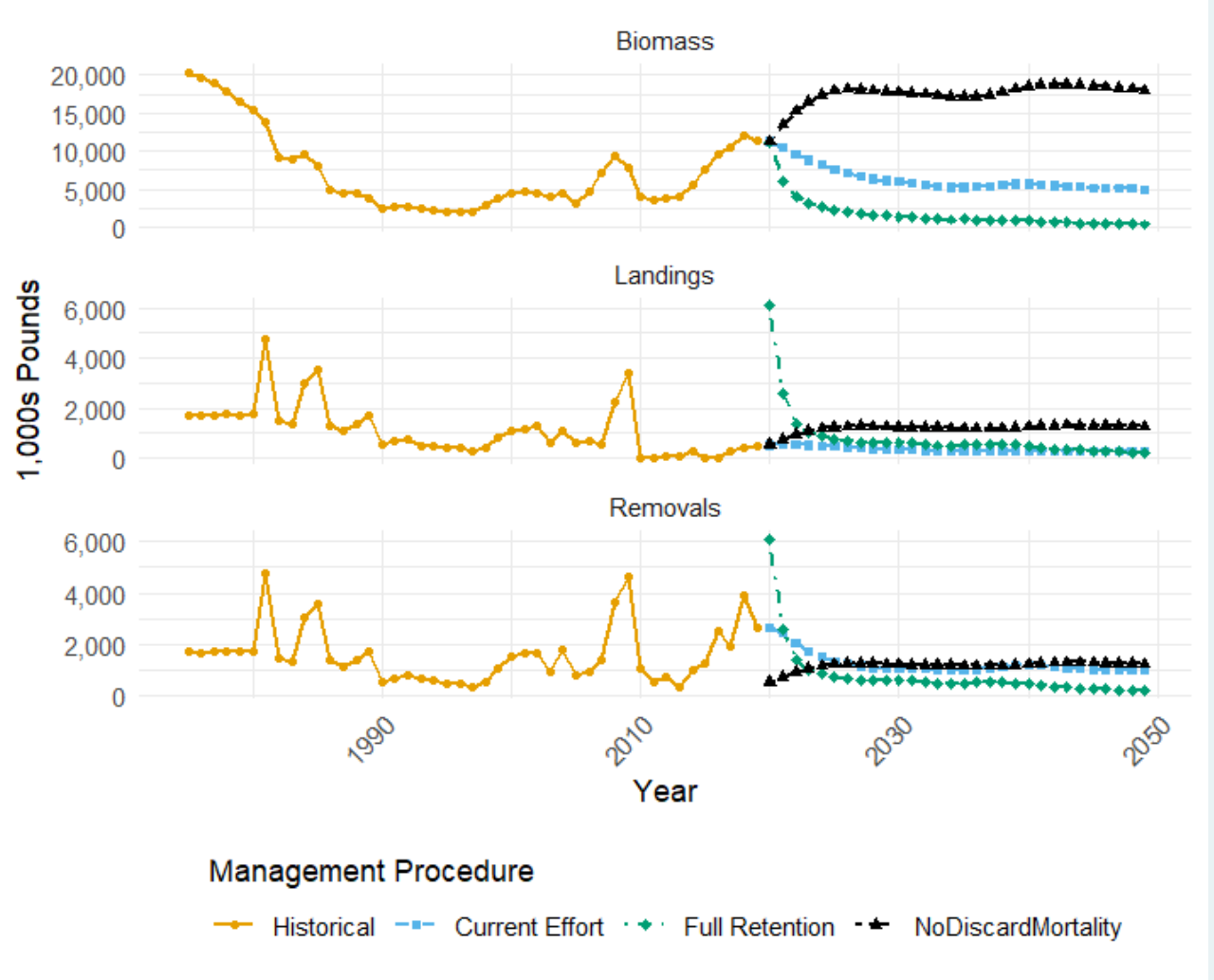
- ➢Spatial management
- ➢Seasonal management

Current management measures will stay in place.

- Size limits
- Bag limits
- Seasons
- Aggregate limits
- See Aggregate Bag Limit Analysis for current aggregates

Clarifying Aggregate Bag Limits

- Aggregate bag limit will not be designed to allow full retention with current level of catch.
- Will be designed to encourage anglers to stop bottom fishing once limit is reached to reduce number of discards.



Species to Consider

- Modelers have suggested a maximum of 5 to 6 species to develop the MSE.
- Council requested investigating important recreational species by state.

Performance Objectives

- ✓Successfully rebuilds overfished stock in rebuilding timeframe or avoiding overfished status
  - ✓Must haves for monitoring health of population
- ✓Short-term landings
  - ✓Use average landings from Yrs 1-3
- ✓Long-term landings
  - ✓Use average landings last 10 years of projection
- ✓Discard fraction
  - Lower is better
- ✓Access for recreational anglers
  - ✓Angler days or trips
- ❑Economic proxy

AP Input

Discuss Management Scenarios

Aggregate Bag Limit with Mandatory Stopping

- ❑What is an appropriate range of aggregate bag limits to consider?
- ❑What level of compliance is likely to occur:
  - ❑First 3 years
  - ❑After 3 years

Spatial Management, if needed

- ❑Council requested no large spatial closures
  - ❑What would the AP consider large spatial closures?
    - ❑ Deepwater MPAs
    - ❑ Spawning Special Management Zones

Seasons, if needed

- ❑How should seasons be designed?
  - ❑Start after spawning closure
  - ❑Keep June through September open
  - ❑Should south Florida have a different season?

Advisory Panel Input

Recommend Species

- Five to Six species per state
  - What species does the AP recommend including in the analysis?
  - Include recommendations for north and south of Cape Canaveral for Florida.

Questions and Council Discuss