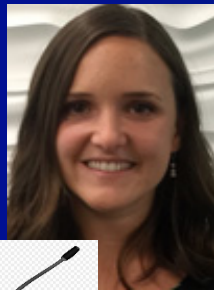




Summer Flounder, Scup, & Black Sea Bass Commercial/Recreational Allocation Amendment: Refining Draft Alternatives

Joint Council and Board Meeting
June 16, 2020





Amendment Purpose

Consider potential modifications to the allocations of catch or landings between the commercial and recreational sectors for summer flounder, scup and black sea bass.



Objectives

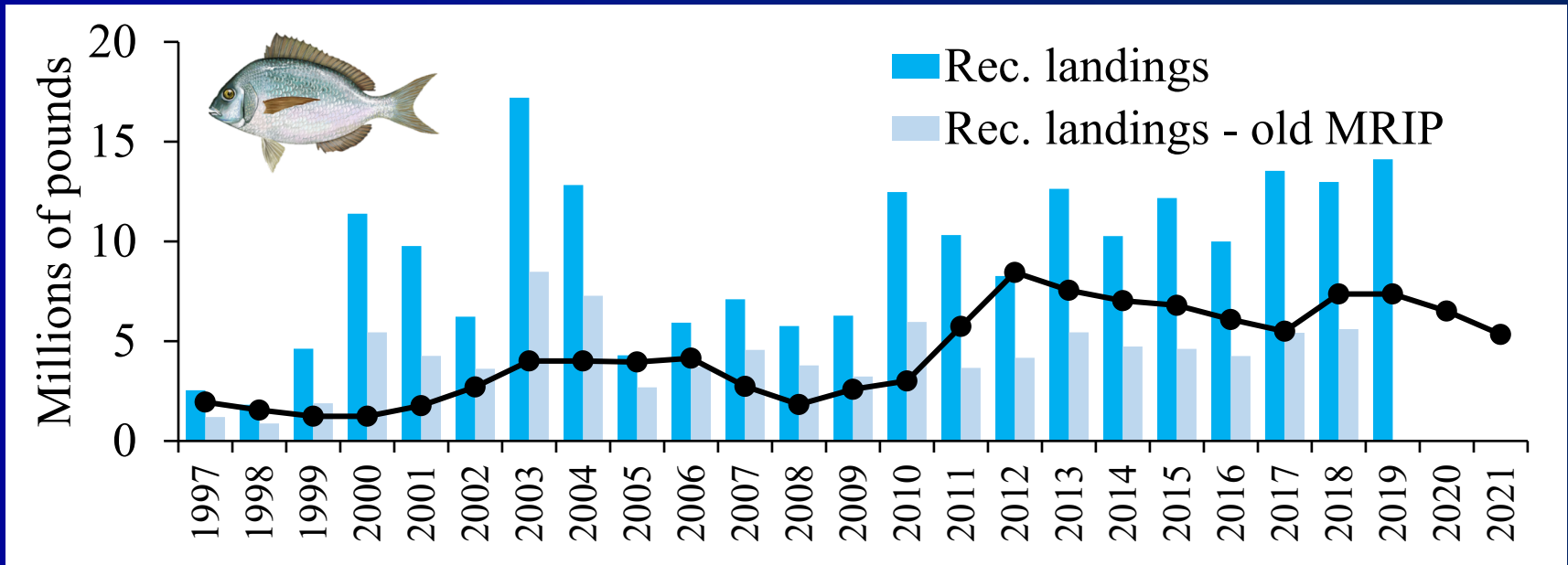
- Refine draft approaches for further development
 - Provide guidance on which approaches to retain; comment on configuration of retained approaches as needed
- FMAT will develop a complete range of draft alternatives for approval at the August joint meeting

Broad alternative categories

1. No Action
2. Revised percentages based on different data or time series
3. Allocations attempting to maintain roughly 2018/2019 levels of harvest by sector
4. Recreational sector separation
5. Harvest control rule-based approaches
6. Recreational accountability alternatives
7. Recreational catch accounting alternatives
8. Dynamic allocation approaches & options for future revisions
9. Allocation transfers between sectors
10. Averaging approach

1. No Action

- Transition to revised MRIP data → difficulty constraining to rec limits without substantial restrictions
 - Near term issue for scup and BSB in particular
 - Final 2019 scup harvest 54% higher than 2020 RHL
 - Final 2019 BSB harvest 48% higher than 2020-21 RHL



1. No Action

- FMAT Comments:

- Concerns with continued use of 1980s-90s data, especially since old vs. new MRIP differences are more pronounced in recent years
- Fisheries have changed notably since base years
- MRIP data has been peer reviewed and used in assessments; consistency needed in data used throughout management system unless regulations are decoupled from assessments (not advisable)

2. Revised percentages based on different data or time series

- 2.1 Existing base years with revised data
- 2.2 Revised base years based on recent landings/catch
- 2.3 Revised base years: post rebuilding years
- 2.4 Socioeconomic basis
- 2.5 Allocate in numbers instead of pounds

2.1 Keep existing base years but update with the most recent recreational and commercial data

Species	Sector	Catch-based		Landings-based	
		Current	<i>Revised</i>	Current	<i>Revised</i>
Summer flounder: 1981-1989	Com	N/A	N/A	60%	<i>55%</i>
	Rec	N/A	N/A	40%	<i>45%</i>
Scup: 1988-1992	Com	78%	<i>65%</i>	N/A	<i>57%</i>
	Rec	22%	<i>35%</i>	N/A	<i>43%</i>
Black sea bass: 1983-1992	Com	N/A	N/A	49%	<i>45%</i>
	Rec	N/A	N/A	51%	<i>55%</i>

2.1 Keep existing base years but update with the most recent recreational and commercial data

■ FMAT Comments:

- Summer flounder: discards not available pre-1989; catch-based option could theoretically be calculated using nearby years or assuming discards = 0, but may not be necessary given range of other options
- FMAT confirmed data sources used are appropriate
- **Keep for further development**
- Further exploration of changes in fisheries since base years may be informative

2.2 Revised base years based on recent landings/catch

- Last 5, 10, or 15 years of catch or landings

Species	Sector	Catch-based				Landings-based			
		Current	5 yr 2014- 2018	10 yr 2009- 2018	15 yr 2004- 2018	Current	5 yr 2014- 2018	10 yr 2009- 2018	15 yr 2004- 2018
Fluke	Com	N/A	40%	43%	44%	60%	41%	45%	45%
	Rec	N/A	60%	57%	56%	40%	59%	55%	55%
Scup	Com	78%	62%	61%	60%	N/A	57%	57%	56%
	Rec	22%	38%	39%	40%	N/A	43%	43%	44%
BSB	Com	N/A	25%	24%	28%	49%	22%	22%	27%
	Rec	N/A	75%	76%	72%	51%	78%	78%	73%

2.2 Revised base years based on recent landings/catch

- Recent base year catch and landings confounded by existing allocation constraints
- Rec . performance relative to limits inherently more variable than commercial
- Should consider fishery performance and mgmt. history (e.g., years with limits not based on an approved stock assessment)
 - Summer flounder: variable RHL performance
 - Scup: Quotas raised substantially in 2011; both fisheries under limits since then
 - BSB: Rec fishery exceeded RHL in most years since 2009. Constant catch approach used in management 2010-2015 due to lack of approved assessment

2.2 Revised base years based on recent landings/catch

FMAT Comments:

- Recent years reflect the current needs of the fisheries better
- But, concerns about reallocating based on time periods when the recreational fishery was effectively less restrained to their limits than commercial fishery
- New allocations should avoid rewarding large past overages
- **Keep for further development**

2.3 Revised base years based on time period after rebuilding (e.g. 5 years)

- Suggested through scoping to provide base years when availability was high for both sectors and increasing biomass
- FMAT discussion:
 - This does not hold true for all three stocks; biomass was not necessarily at peak nor was it increasing for all three species
 - The allocation outcomes are very similar to the range of alternatives under section 2.2
 - No strong rationale for using post-rebuilding years
 - **Recommend removal from this amendment**

2.4 Allocations based on socioeconomic considerations

- Contract for summer flounder: economic model to maximize marginal benefits to the commercial and recreational sectors
 - Not currently being developed for BSB and scup

2.4 Allocations based on socioeconomic considerations

FMAT Comments:

- Theoretically support exploring options based on socioeconomic analyses, but timeline and feasibility problematic for this action
- Many ways to look at social and economic data; objectives would need to be further refined
- At this point, likely not possible to develop alts. with socioeconomic basis with possible exception of summer flounder model

2.4 Allocations based on socioeconomic considerations

FMAT Comments:

- Other ongoing projects (e.g., NEFSC employment statistics project) could inform impacts analysis of other alternatives, but not likely appropriate as basis for options
- Variety of social/economic evaluations and datasets will be considered for impacts evaluation of all allocation options
- **Recommend against further consideration as basis for alternatives given timing & resource constraints**
 - Possible exception of applying summer flounder model, conditional on model results (model results can be used to inform impacts analysis either way)

2.5 Allocations in numbers instead of pounds

- Council and Board previously expressed interest in exploration of managing rec fishery in numbers of fish
- FMAT discussion:
 - Not directly related to com/rec allocation; more related to recreational management
 - Numbers & pounds easily converted back and forth at various points in process
 - Theoretically easy to manage RHL in numbers; already done for setting state measures
 - Could explore if FMP changes are needed to set/evaluate ACL and RHL in #, but amendment not needed (specifications or framework/addendum)
 - **Recommend removal from this action**

3. Allocations to maintain roughly 2018/2019 levels of harvest by sector

- Can allocations be modified such that both sectors could maintain approximate landings levels from the last year(s) prior to recent catch limit revisions (2018-2019)?
 - Would modify allocation % going forward and would not guarantee status quo landings long term
- Preliminary analysis suggests possible for summer flounder; close, but not quite for scup and black sea bass.
- After most recent assessments:
 - SF and BSB ABCs increased by more than 50%, but rec. sector could not liberalize
 - Scup ABC decreased. Com. scup sector has under-harvested since 2007

3. Allocations to maintain roughly 2018/2019 levels of harvest by sector

Sector	Catch-based			Landings-based		
	Summer flounder	Scup	Black sea bass	Summer flounder	Scup	Black sea bass
Com.	43%	59%	32%	43%	50%	29%
Rec.	57%	41%	68%	57%	50%	71%

3. Allocations to maintain roughly 2018/2019 levels of harvest by sector

FMAT discussion:

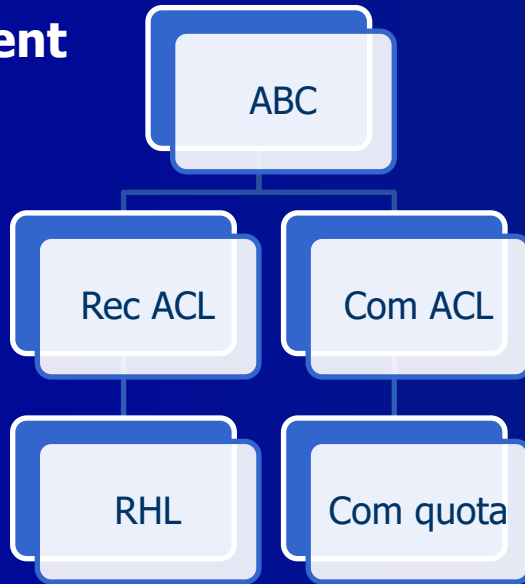
- Rationale behind this approach is important as it considers current ABCs and is an attempt at some stability.
 - Important to emphasize that this would not be true stability as it consider change from current specifications.
- **Recommended further consideration**
- **Consider additional alternative to average across multiple approaches**

4. Recreational sector separation

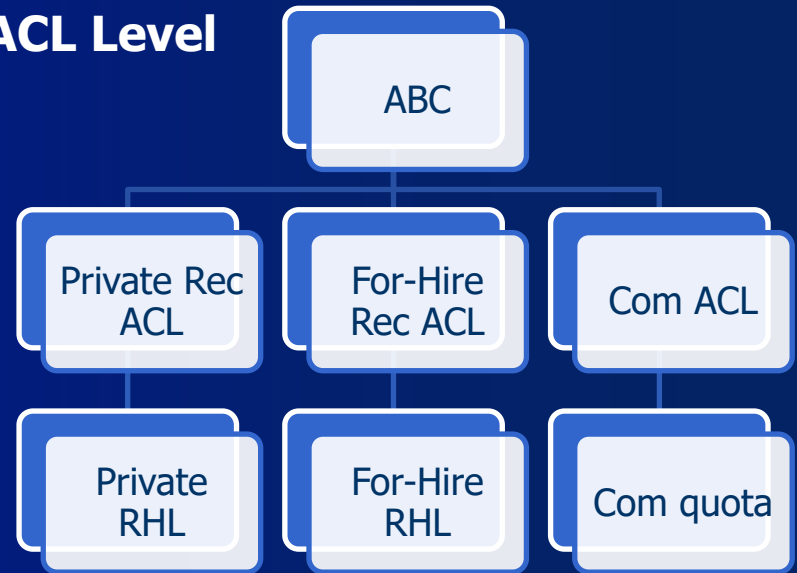
- 4.1 Separate allocations to for-hire vs private
- 4.2 Separate measures

4.1 Recreational sector separation: separate allocations to for-hire vs private

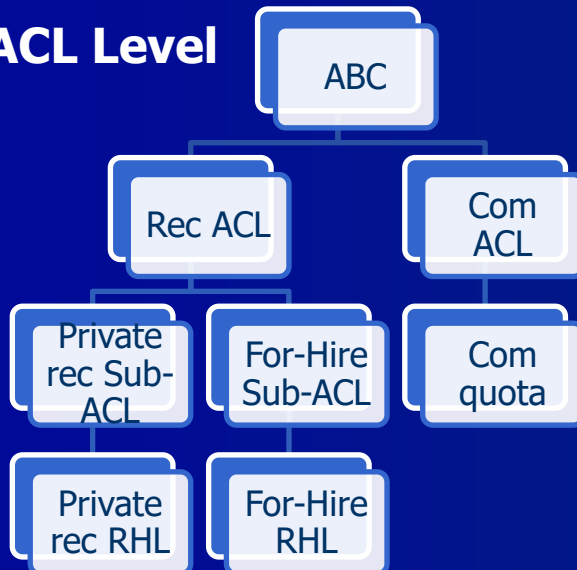
A: Current



B: ACL Level



C: Sub-ACL Level



D: RHL Level



4.1 Recreational sector separation: separate allocations to for-hire vs private

- FMAT Comments: Allocation Structure
 - **Recommended further exploration** of each for now; recommend picking one in August
 - ACL and sub-ACL options are similar
 - FMAT can further explore nuances
 - Both would require separate accountability measures for each rec sector
 - If at ACL level, would impact broader discussion of com/rec split; sub-ACL level maintains more separation

4.1 Recreational sector separation: separate allocations to for-hire vs private

- FMAT Comments: Allocation Structure
 - If objective is mostly different measures and harvest targets (not separation of total catch accounting and accountability measures), RHL level would be most appropriate
- FMAT Comments: Data
 - Currently some sharing of length/weight data between private and for-hire fisheries in estimation process

4.1 Recreational sector separation: separate allocations to for-hire vs private

FMAT Comments: Data

- Rec sector allocation basis could be dead catch in numbers of fish, harvest in number, or harvest in pounds
 - Catch vs. harvest tied to whether allocation is at ACL or RHL level
 - Catch in weight separated by rec sector not currently available
- Example allocations in Table 7 in FMAT summary

4.2 Recreational sector separation: separate management measures

FMAT Comments:

- **Recommend removing from this action**
- If separate allocations adopted (4.1), option of separate measures would be inherent part of that
- If pursuing separate measures without separate allocations, FMAT recommends development of transparent policy through separate process

5. "Harvest control rule" based approaches

- Proposal submitted by 6 rec. orgs
- Rec. "allocation" not defined as set % of ABC but as a combination of bag/size/season limits preferred by rec. fishermen
 - More restrictive when biomass declines below the target level
- Commercial "allocation" would be quota preferred by the commercial industry when biomass is high
 - Reduced as biomass declines below the target level

5. “Harvest control rule” based approaches

FMAT Comments:

- After extensive discussion, **recommended removing from further consideration** due to:
 - a) Concerns that this approach is not consistent with MSA without substantial changes
 - b) Lack of strong connection to commercial/recreational allocations
 - c) Concepts well suited to exploring through other processes (e.g., recreational measures setting process, recreational reform initiative)

5. “Harvest control rule” based approaches

FMAT Comments: Magnuson

- MSA requires ACLs in pounds or numbers of fish, and associated AMs
- Measures would need to be translated into associated projected catch and catch held to ACL
 - Could result in substantial changes from intent of proposal
 - Projecting rec. catch particularly uncertain; difficult to account for external factors influencing effort

5. “Harvest control rule” based approaches

FMAT Comments: Process/Analysis

- Determining sector needs at each threshold would require extensive analysis and stakeholder input
 - Difficult to base on historic measures given changes in availability, effort, policy, etc.
 - Rec catch often scales with biomass despite measures
 - Economic analysis needed for commercial sector
- Would require a process to negotiate/balance commercial/recreational access
 - **Still need to demonstrate that combined measures will prevent exceeding ABC/OFL**

5. “Harvest control rule” based approaches

FMAT Comments, Cont.:

- Several concepts worthwhile to further explore for rec fishery, through rec reform or other process
- Transparency provided by clearly defined management tiers
- Tiered allocation approaches could also be considered through “dynamic allocation approaches” (approach # 8)

6. Recreational accountability alternatives

- More frequent overage paybacks or in-season closures

Previous FMAT discussion:

- Would be a reversal of changes made through Amendment 19 (2013): Omnibus Recreational Accountability Amendment

6. Recreational accountability alternatives

- Current recreational AMs:
 - **Proactive:** adjusting measures for upcoming fishing year to avoid exceeding RHL
 - **Reactive:** 3-year evaluation of avg. dead rec catch to avg. rec ACL
 - If overage, response tied to stock status (B/B_{MSY}); could include full payback, scaled payback, or adjustments to measures (more details in FMAT summary)

6. Recreational accountability alternatives

- FMAT Comments:
 - **Recommend removing as separate alternative(s)**
 - Accountability could be considered as related to other alternatives
 - Major changes to the system of AMs are beyond current scope of action; would extend timeline
 - Rationale for 2013 amendment still valid: changes made in response to rec data timing and uncertainty concerns

7. Recreational catch accounting alternatives

- Examples suggested through scoping:
 - Mandatory private angler reporting
 - Mandatory tournament reporting
 - Requiring VTRs for state for-hire vessels
 - Reinstating did not fish reports

FMAT discussion:

- **Recommend removal from this action** but support exploring improvements to recreational catch accounting through other avenues.
- May be more appropriate to pursue for multiple species outside this amendment.

8. Dynamic allocation approaches and options for future revisions

- 8.1 Moving average approach
- 8.2 Trigger approach
- 8.3 Framework/addendum options

8.1 Moving Average Approach

- Allocations based on a moving average of the past years' catch or landings

FMAT discussion:

- **Recommend removal of this approach.**
- Concerns that could create incentive for sectors to exceed catch limits
- May only be useful for fisheries where underages regularly occur
 - May be addressed more effectively by transfers or other allocation options.

8.2 Trigger Approach

- Catch up to a specified ABC level would be allocated using the current (or modified) allocations; additional allowable catch above that level would be divided differently between sectors.

FMAT Comments:

- **Recommend further development.**
- Could provide more flexibility in years of high abundance.
- Evaluation of the historical com/rec share of catch and landings at different biomass levels could help inform the development of this approach.

8.2 Trigger Approach

FMAT Comments, cont.:

- Board/Council input on development of alternatives:
 - What might be an appropriate trigger threshold level?
 - Is it appropriate to allocate a higher percentage of landings or catch to the recreational fishery when the ABC is above a certain level?
 - If so, how much should the allocations change?

8.3 Framework/addendum options

- Consider whether future changes to sector allocations could be made through framework/addenda.
- Could allow for more expedient process, but could reduce opportunities for public input
- Would not require future changes to be made through FW/addenda.

FMAT discussion:

- **Keep for further development.**
- Develop language to clarify when to use FW/addenda vs amendment process

9. Allocation transfers

- Considerations for quota transfers:
 - Bidirectionality
 - Transfer cap
 - Projection methodology
 - Criteria prohibiting a transfer

Scenario	Commercial Sector	Recreational Sector	Outcome
1	projected to achieve quota	projected to achieve RHL	no transfer
2	projected to achieve quota	projected to not achieve RHL	transfer to comm
3	projected to not achieve quota	projected to achieve RHL	transfer to rec
4	projected to not achieve quota	projected to not achieve RHL	no transfer

9. Allocation transfers

FMAT discussion:

- **Keep for further development**
- Need consistency in calculating projections for transfers and for recreational specifications
- Concerns about projecting recreational harvest to determine transfers

10. Averaging approach

- FMAT discussion:
 - Similar allocation percentages resulting from various approaches
 - **Recommend addition of alternatives based on average of multiple approaches**

10. Averaging approach

Summer flounder: catch-based

Com. allocation	Rec. allocation	Basis
N/A	N/A	No action (see section 1)
N/A	N/A	Same base years, new data (see section 2.1)
40%	60%	2014-2018 base years (see section 2.2)
43%	57%	2009-2018 base years (see section 2.2)
44%	56%	2004-2018 base years (see section 2.2)
43%	57%	Attempt to maintain close to status quo harvest in each sector (see section 3)
46%	54%	2018 base year (see section 3)
43%	57%	Average of all (see section 3)
43%	57%	Average of all but no action alternative (see section 3)

10. Averaging approach

Scup: catch-based

Com. allocation	Rec. allocation	Basis
78%	22%	No action (see section 1)
65%	35%	Same base years, new data (see section 2.1)
62%	38%	2014-2018 base years (see section 2.2)
61%	39%	2009-2018 base years (see section 2.2)
60%	40%	2004-2018 base years (see section 2.2)
59%	41%	Attempt to maintain close to status quo harvest in each sector (see section 3)
58%	42%	2018 base year (see section 3)
63%	37%	Average of all (see section 3)
61%	39%	Average of all but no action alternative (see section 3)

10. Averaging approach

Black sea bass: catch-based

Com. allocation	Rec. allocation	Basis
N/A	N/A	No action (see section 1)
N/A	N/A	Same base years, new data (see section 2.1)
25%	75%	2014-2018 base years (see section 2.2)
24%	76%	2009-2018 base years (see section 2.2)
28%	72%	2004-2018 base years (see section 2.2)
32%	68%	Attempt to maintain close to status quo harvest in each sector (see section 3)
32%	68%	2018 base year (see section 3)
28%	72%	Average of all (see section 3)
28%	72%	Average of all but no action alternative (see section 3)

Timeline Considerations

- Tradeoff between quantity/complexity of alternatives and the action timeline
- Current number and complexity of approaches poses challenges for meeting timeline outlined in Action Plan:
 - Approve range of alternatives in August
 - Approve public hearing doc in December
 - Public hearings, final action, rulemaking in 2021
 - Any changes effective January 1, 2022

Discussion Questions

- Which approaches should be used to develop a concrete range of draft alternatives for consideration in August?
 - Agree with the FMAT's recommendations?
- How should the FMAT narrow the range of sub-alternatives to reduce redundant options and simplify decision making and analysis?
 - E.g., combining options with similar resulting allocation %s and/or averaging across multiple options.

Discussion Questions

Do the Council and Board:

- Support adding an approach based on the average outcomes from other approaches?
- Think the FMAT should restructure the alternatives into species-specific groups of alternatives?
 - Are there options that should be further pursued only for one or two species?
- Have concerns with the data or methods used for draft options? Are there suggested modifications to the approaches used in this document?

Recommended for Inclusion

- 1. No Action/ Status Quo
- 2.1 Existing base years with revised data
- 2.2 Revised base years based on recent landings/catch
- 2.4 Based on socioeconomic analyses for summer flounder
- 3. Allocations to maintain status quo harvest by sector
- 4.1 Separate allocations to for-hire vs. private sectors
- 8.2 Allocation changes through frameworks/addenda
- 8.3 Trigger approach
- 9. Transfer of quota between sectors
- 10. Averaging allocation percentages across approaches

Recommended for Removal

- 2.3 Revised base years based on post-rebuilding years
- 2.4 Based on socioeconomic analyses for scup and black sea bass
- 2.5 Allocate in numbers instead of pounds
- 4.2 Separate management measures for for-hire vs. private sectors
- 5. Harvest control rule based approaches
- 6. Recreational accountability alternatives
- 7. Recreational catch accounting alternatives
- 8.1 Moving average approach
- Note that some could be considered through separate actions

Category	Approach	Summary of FMAT Recommendation
1. No Action/ Status Quo	Maintain current allocations	Must include in amendment.
2. Revised percentages based on different data or time series	2.1 Existing base years with revised data	Keep for further development. May not be viable for catch-based options for summer flounder and black sea bass.
	2.2 Revised base years based on recent landings/catch	Keep for further development; however, should be evaluated for bias toward rec. sector for some species given recent sector performance.
	2.3 Revised base years based on post-rebuilding years	Recommend removal. No strong justification for using these years and similar in outcome to recent base years.
	2.4 Based on socioeconomic analyses	Recommend removal for scup and black sea bass. Conditionally support for summer flounder based on economic model results if appropriate.
	2.5 Allocate in numbers instead of pounds	Recommend removing from consideration in this action.

Category	Approach	Summary of FMAT Recommendation
3. Allocations to maintain status quo harvest by sector		Keep for further development; additional analysis needed before FMAT can determine whether this is a fair & equitable approach.
4. Recreational sector separation	4.1 Separate allocations to for-hire vs. private sectors	Keep for further development.
	4.2 Separate management measures for for-hire vs. private sectors	Recommend removal. Separate measures without separate allocations can be developed outside of this amendment process.
5. Harvest control rule based approaches		Recommend removal from this amendment and consider similar concepts through a separate action (e.g., the recreational reform initiative).
6. Recreational accountability alternatives	E.g., more frequent overage paybacks or in-season closure	Recommend removal as an alternative; recommend AM modifications be considered as they relate to other alternatives.

Category	Approach	Summary of FMAT Recommendation
7. Recreational catch accounting alternatives	Mandatory private angler reporting, issuing tags, mandatory tournament reporting, requiring VTRs for state for-hire vessels, reinstating did not fish reports.	Recommend removal from this action but continued exploration through other avenues.
8. Dynamic allocation approaches and options for future revisions	Moving average approach	Recommend removal. Concerns about rewarding overages. Potentially consider in the future as a tool to evaluate allocation changes.
	Allocation changes through frameworks/addenda	Keep for further development.
	Trigger approach	Keep for further development.
9. Allocation transfers	Transfer of quota between sectors	Keep for further development.
10. Averaging approach	Averaging allocation percentages across approaches	Recommend adding for consideration.

QUESTIONS?

BACKUP SLIDES

Recreational Reform Initiative

■ Goal/Vision

- Stability in rec. measures (bag/size/season)
- Flexibility in the mgmt. process
- Accessibility aligned with availability/stock status

■ Still in planning stages

■ Major themes:

- Better incorporation of MRIP uncertainty into mgmt. process
- Develop guidelines for maintaining status quo measures
- Develop process for setting multi-year rec. measures
- Improvements to process used to make changes to measures
- Possibility of recommending measures earlier in the year



Implications of No Action

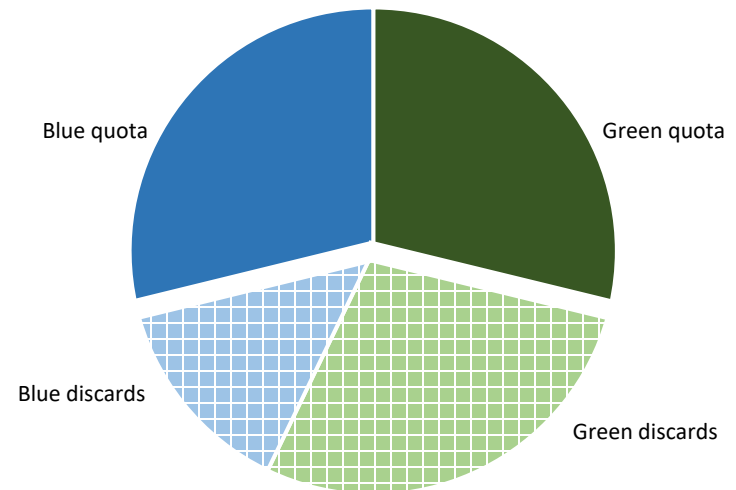
- Summer flounder
 - Projected 2019 harvest was very close to 2020 RHL (7.69 mil lb); rec fishery was able to stay *status quo*
- Scup
 - Final 2019 MRIP harvest estimate = 14.12 mil lb, 54% higher than the 2020 RHL of 6.51 mil lb.
- Black sea bass
 - Final 2019 MRIP harvest estimate = 8.61 mil lb, 48% higher than the 2020-2021 RHL of 5.82 mil lb.
- Maintaining status quo rec measures for BSB and scup in 2020 despite anticipated overage justified as a temporary solution – just for 2020.

Catch vs. landings-based allocations

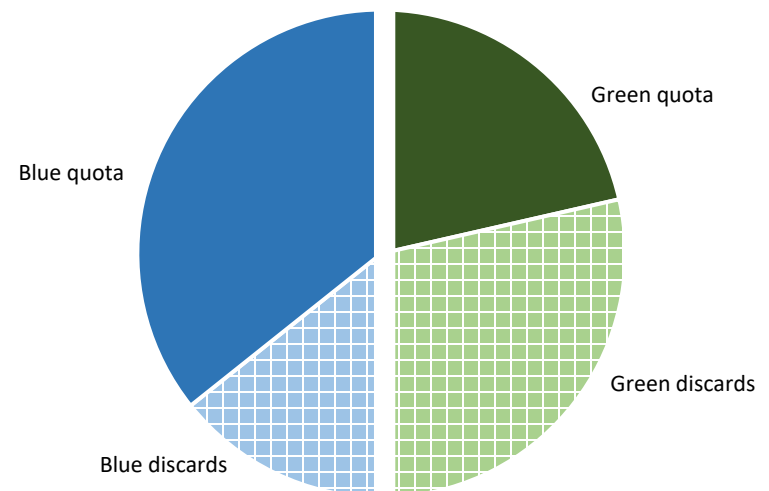
- Blue and green sectors.
- 50/50 allocation.
- In recent years, both sectors have equal landings, but dead discards in the green sector are double those in the blue sector.
- If the allocation is landings-based, both sectors will have the same quota, but the green sector will have a higher ACL due to its greater expected discards.
- If the allocation is catch-based, both sectors will have equal ACLs, but the blue sector will have a higher quota due to lower expected discards.

How do you make the first cut to the pie?

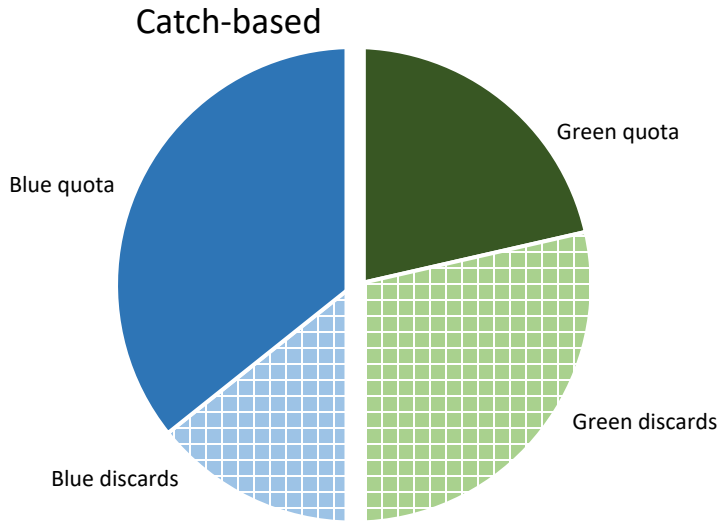
Landings-based 50/50 allocation



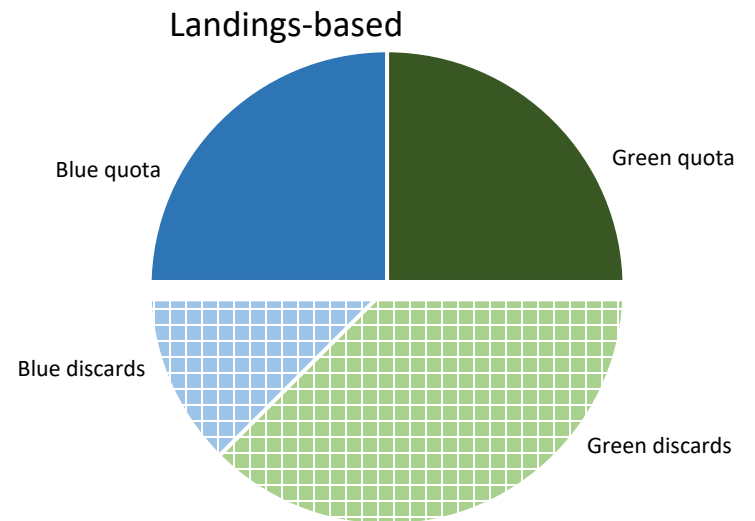
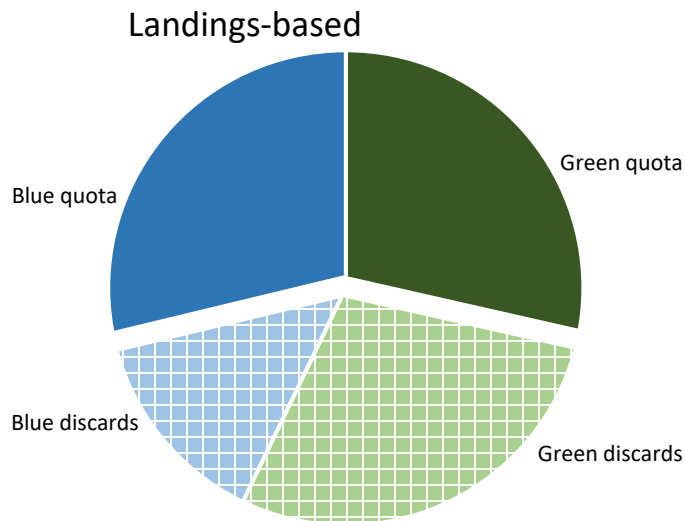
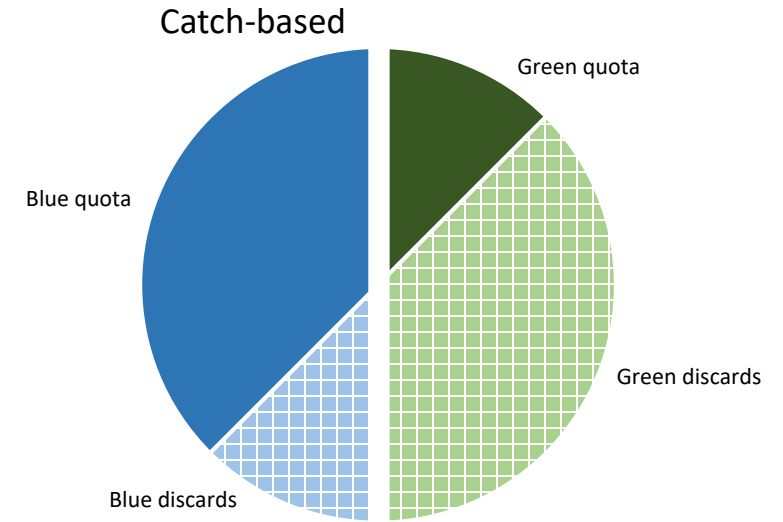
Catch-based 50/50 allocation



Equal landings by sector, expected green discards 2x blue discards



Equal landings by sector, expected green discards 3x blue discards



Action Timeline

May 2020	Council/Commission review scoping comments and identify potential categories of alternatives to consider
June 2020	Council/Commission further refine and provide guidance on draft alternatives
May-July 2020	Development of range of specific draft management alternatives
August 2020	Council/Commission approve a range of alternatives for inclusion in public hearing document
Winter 2020-2021	Council/Commission approve public hearing document; public hearings
Spring 2021	Advisory Panel meets to discuss comments received from public hearings
Spring/Summer 2021	Council/Commission consider public comments; final action; rulemaking
January 2022	Expected effective date

Current allocations for summer flounder, scup, and black sea bass

	Allocation	
Summer flounder: 1980-1989 (landings-based allocation)	Com	60%
	Rec	40%
Scup: 1988-1992 (catch-based allocation)	Com	78%
	Rec	22%
Black sea bass: 1983-1992 (landings-based allocation)	Com	49%
	Rec	51%

Example sector separation

a)	Dead catch (numbers of fish)			
	Approach	Years	Private %	For-Hire %
Summer flounder	Time Series	1981-2018	94%	6%
	Base years (no data for 1980)	1980-1989	91%	9%
	5 years post rebuilt declaration	2012-2016	96%	4%
	5 most recent years	2014-2018	95%	5%
	10 most recent years	2009-2018	96%	4%
	15 most recent years	2004-2018	96%	4%
Scup	Time Series	1981-2018	91%	9%
	Base years	1988-1992	92%	8%
	5 years post rebuilt declaration	2010-2014	88%	12%
	5 most recent years	2014-2018	91%	9%
	10 most recent years	2009-2018	89%	11%
	15 most recent years	2004-2018	90%	10%
Black sea bass	Time Series	1981-2018	72%	28%
	Base years	1983-1992	65%	35%
	5 years post rebuilt declaration	2010-2014	90%	10%
	5 most recent years	2014-2018	89%	11%
	10 most recent years	2009-2018	90%	10%
	15 most recent years	2004-2018	87%	13%

Example sector separation

b)	Harvest (numbers of fish)			
	Approach	Years	Private %	For-Hire %
Summer flounder	Time Series	1981-2018	93%	7%
	Base years (no data for 1980)	1980-1989	91%	9%
	5 years post rebuilt declaration	2012-2016	95%	5%
	5 most recent years	2014-2018	94%	6%
	10 most recent years	2009-2018	95%	5%
	15 most recent years	2004-2018	95%	5%
Scup	Time Series	1981-2018	90%	10%
	Base years	1988-1992	92%	8%
	5 years post rebuilt declaration	2010-2014	87%	13%
	5 most recent years	2014-2018	89%	11%
	10 most recent years	2009-2018	88%	12%
	15 most recent years	2004-2018	88%	12%
Black sea bass	Time Series	1981-2018	66%	34%
	Base years	1983-1992	61%	39%
	5 years post rebuilt declaration	2010-2014	85%	15%
	5 most recent years	2014-2018	86%	14%
	10 most recent years	2009-2018	87%	13%
	15 most recent years	2004-2018	82%	18%

Example allocations based on revised base years of catch or landings from the last 5 years, 10 years, and 15 years

		5 Years: 2014-2018		10 years: 2009-2018		15 years: 2004-2018	
		Catch-based	Landings-based	Catch-based	Landings-based	Catch-based	Landings-based
Summer flounder	Com	40%	41%	43%	45%	44%	45%
	Rec	60%	59%	57%	55%	56%	55%
Scup	Com	62%	57%	61%	57%	60%	56%
	Rec	38%	43%	39%	43%	40%	44%
Black sea bass	Com	25%	22%	24%	22%	28%	27%
	Rec	75%	78%	76%	78%	72%	73%

Data from most recent assessment updates with data through 2018 (final 2019 data are not yet available).

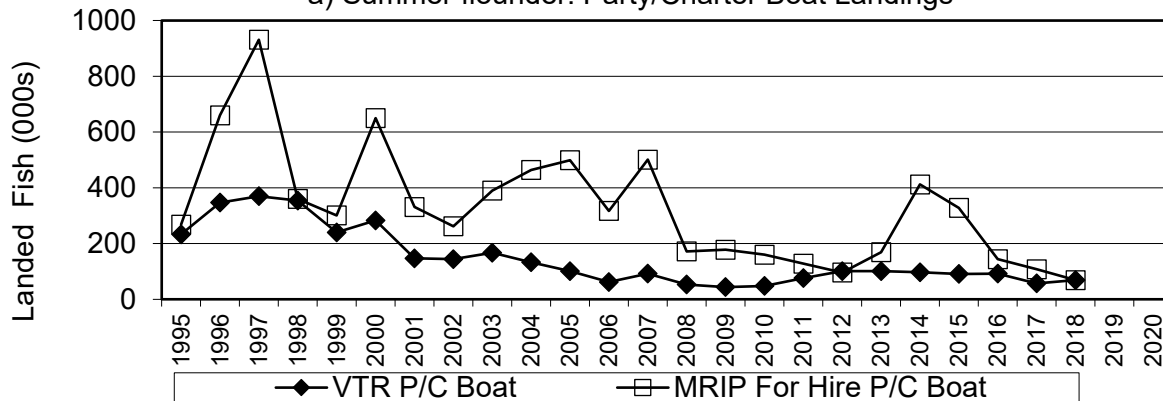
Example allocations based on the 5-year time period following rebuilding for each species

		Catch-based	Landings-based
Summer flounder: 2012-2016	Com	39%	42%
	Rec	61%	58%
Scup: 2010-2014	Com	60%	58%
	Rec	40%	42%
Black sea bass: 2010-2014	Com	24%	24%
	Rec	76%	76%

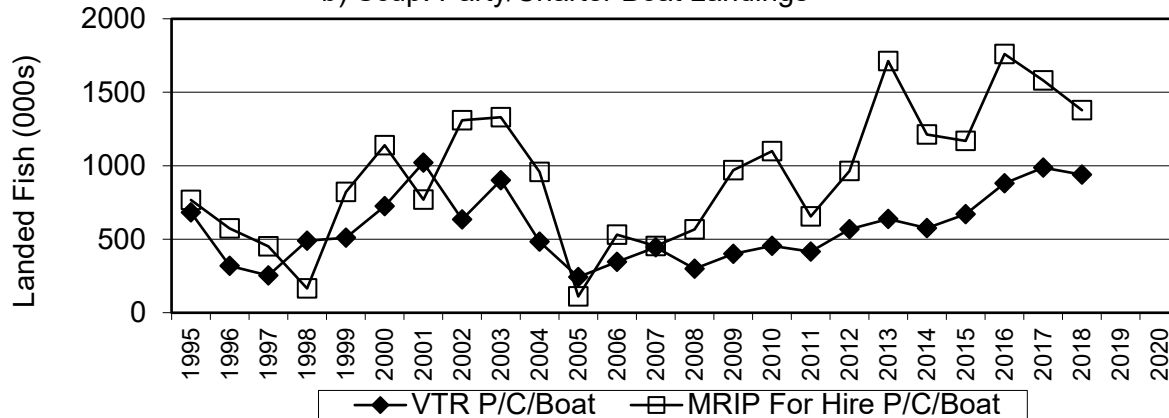
FMAT Members

Agency	FMAT Role	Person(s)
MAFMC	Council staff (summer flounder)	Kiley Dancy
MAFMC	Council staff (scup)	Karson Coutré
MAFMC	Council staff (black sea bass)	Julia Beaty
ASMFC	Commission staff (summer flounder and scup)	Dustin Colson Leaning
ASMFC	Commission staff (black sea bass)	Caitlin Starks
NMFS GARFO	Sustainable fisheries	Emily Keiley
NMFS GARFO	NEPA	Marianne Ferguson
NMFS NEFSC	Socioeconomics	Greg Ardini
NMFS NEFSC	Stock assessment/population dynamics (consult as needed)	Gary Shepherd
NMFS NEFSC	Stock assessment/population dynamics (consult as needed)	Mark Terceiro

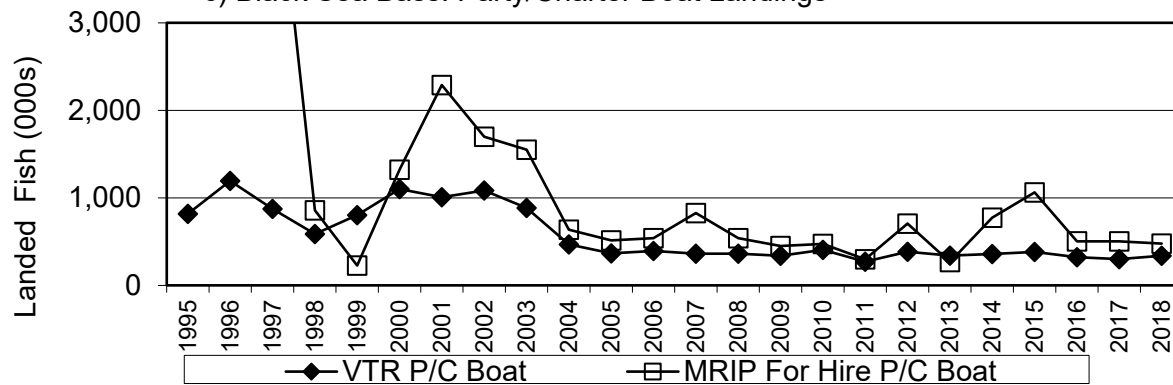
a) Summer flounder: Party/Charter Boat Landings



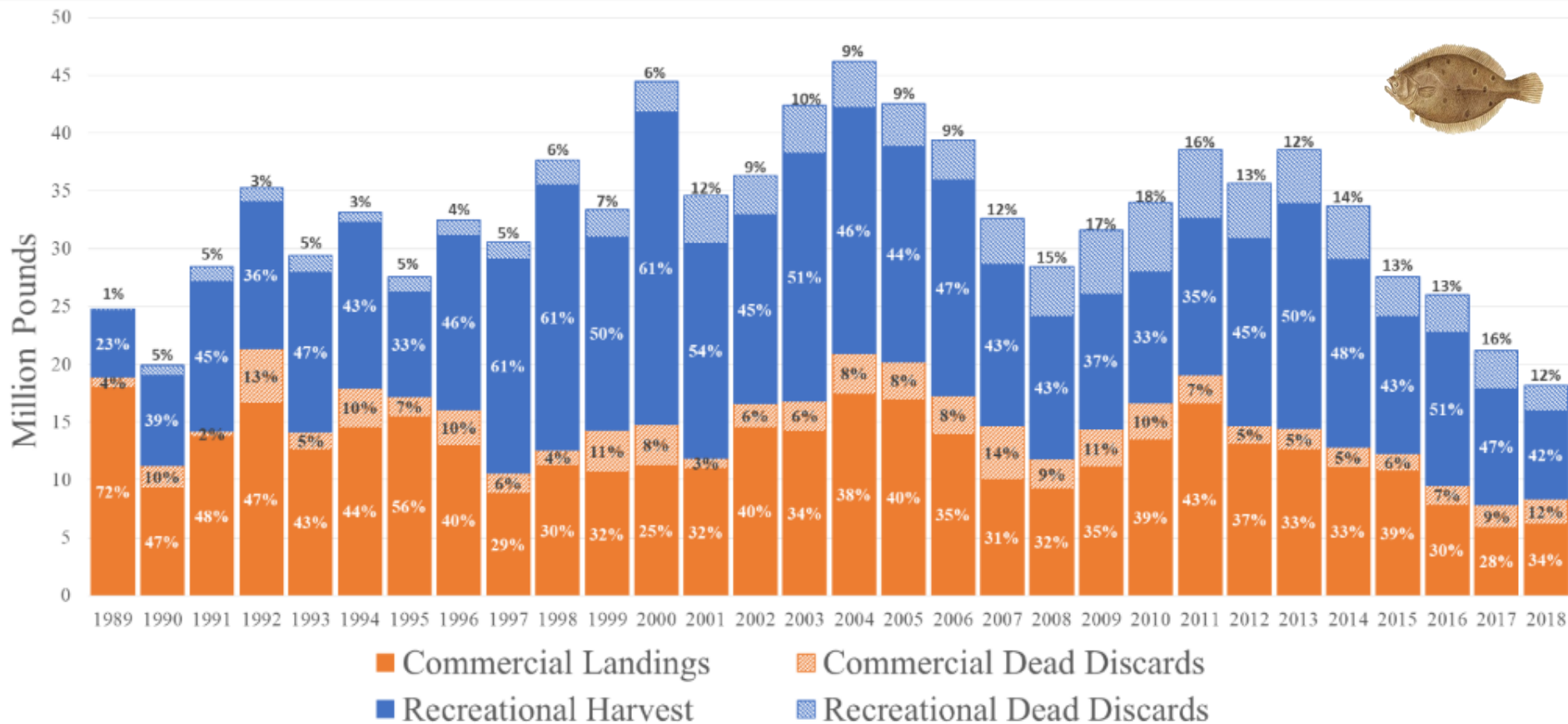
b) Scup: Party/Charter Boat Landings



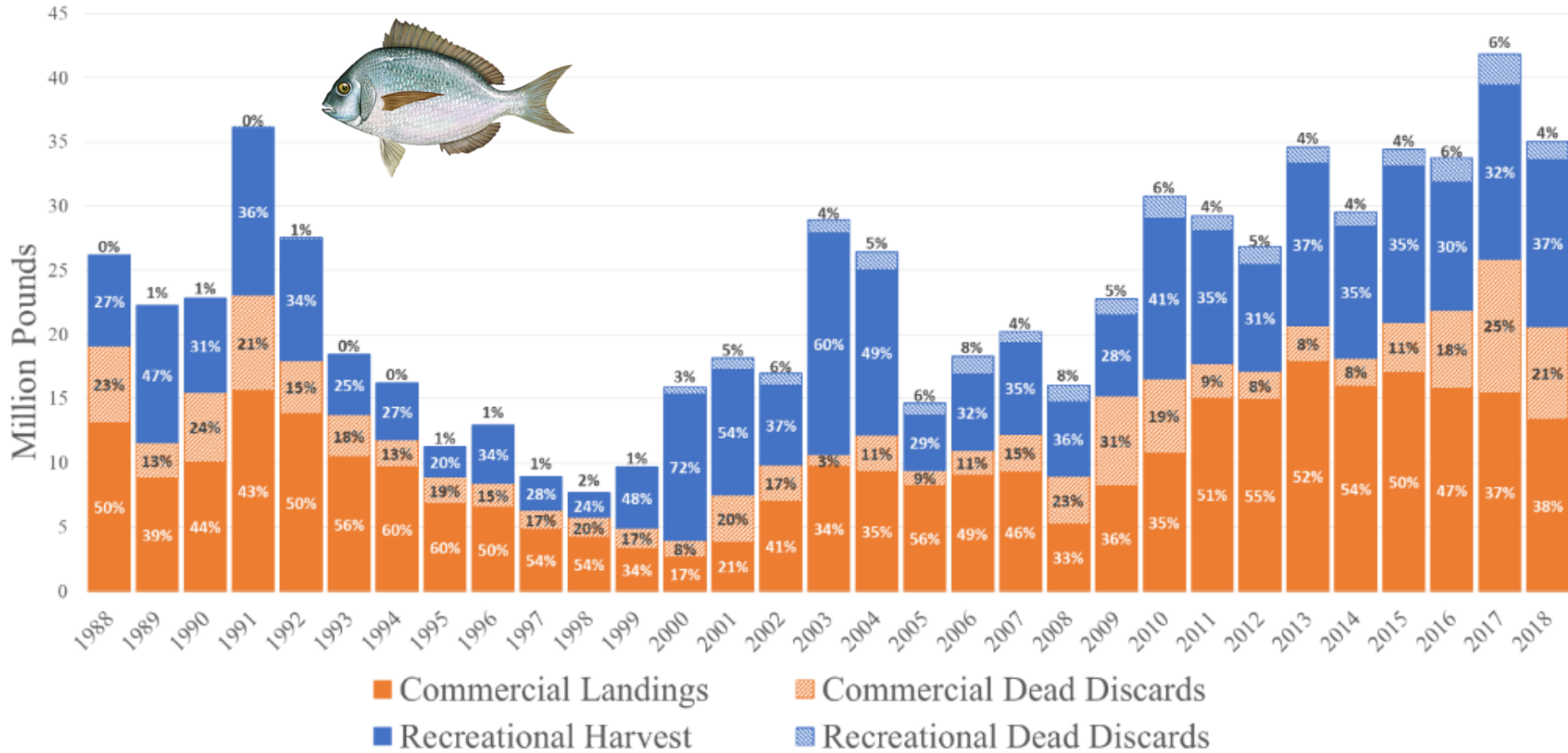
c) Black Sea Bass: Party/Charter Boat Landings



Commercial and recreational summer flounder landings and dead discards, 1982-2018



Commercial and recreational scup landings and dead discards, 1981-2018



Commercial and recreational black sea bass landings and discards, 1989-2018

