



Black Sea Bass

2020-2021 Specifications



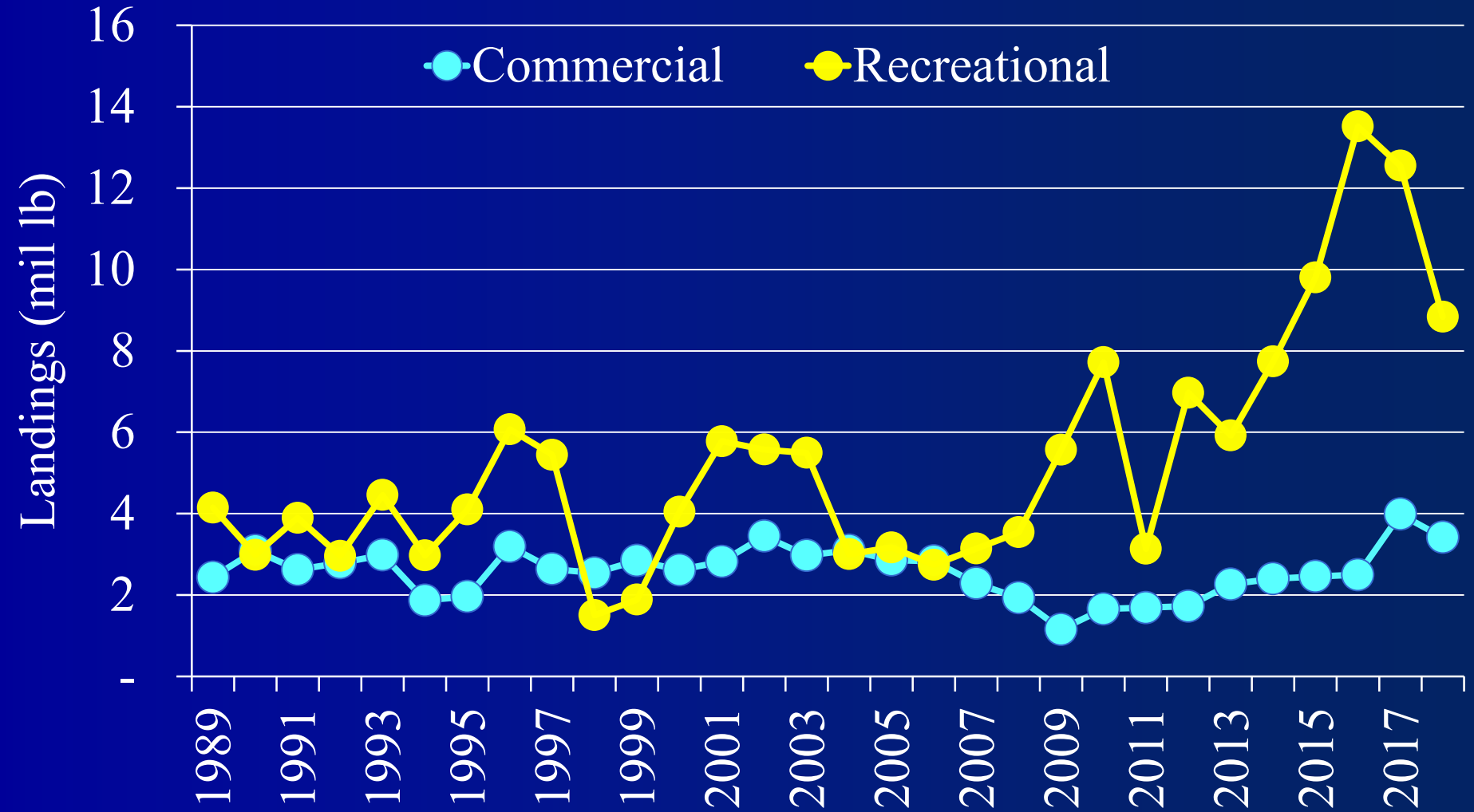
Joint MAFMC and ASMFC Board Meeting
October 9, 2019

Outline

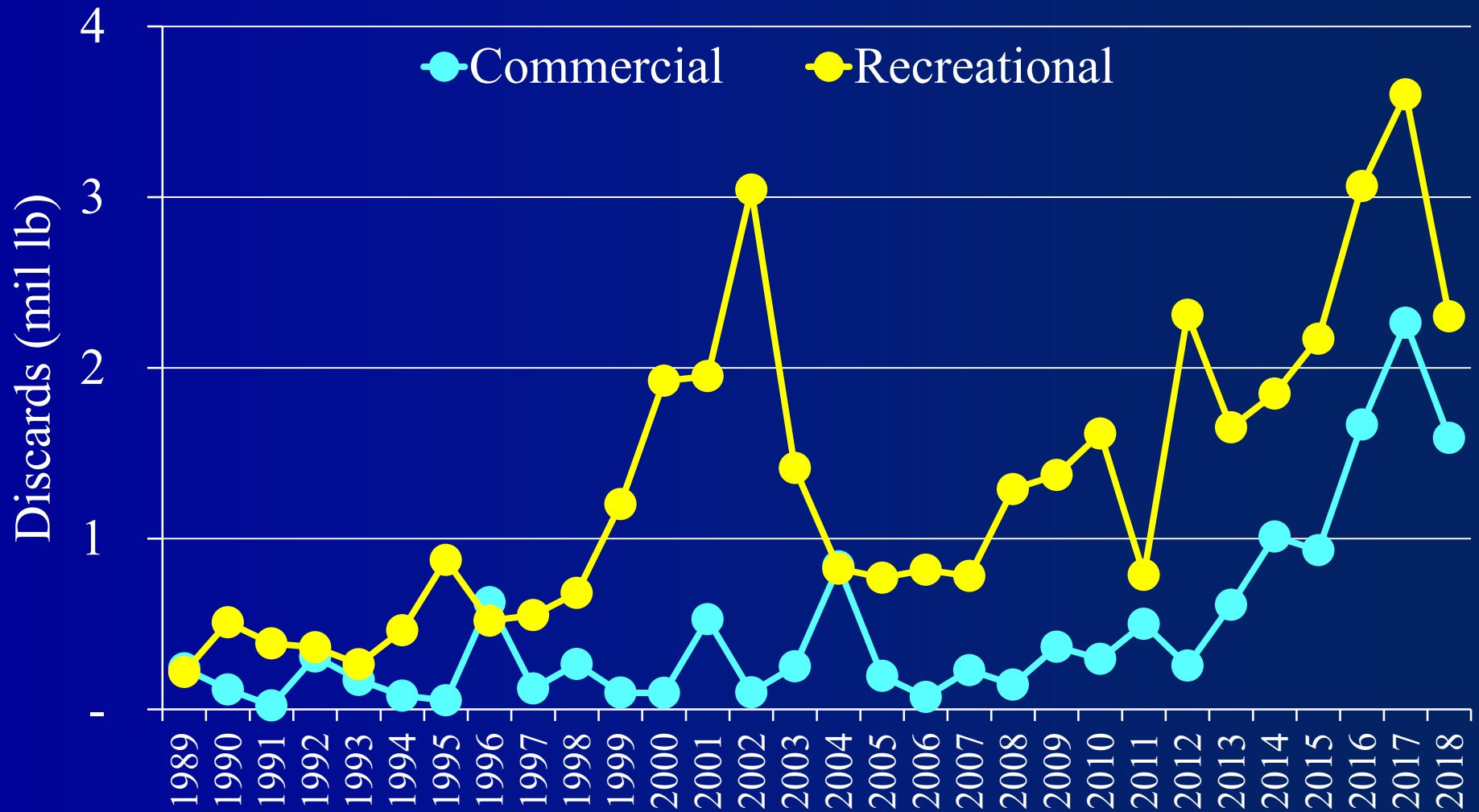


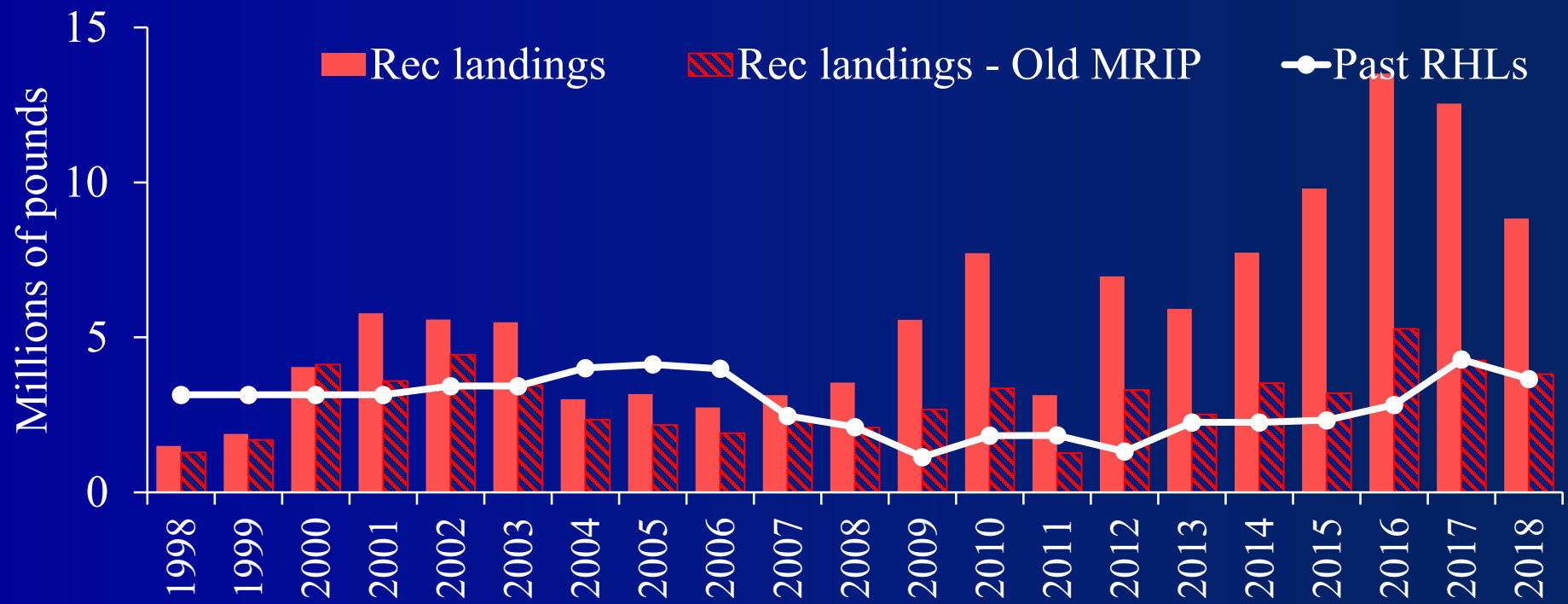
- Recent fishery performance
- SSC OFL and ABC recommendations
- MC recommendations
- AP comments
- Discussion:
 - 2020-2021 ACLs, ACTs, quotas, and RHLs
 - 2020 commercial measures

Landings



Dead Discards





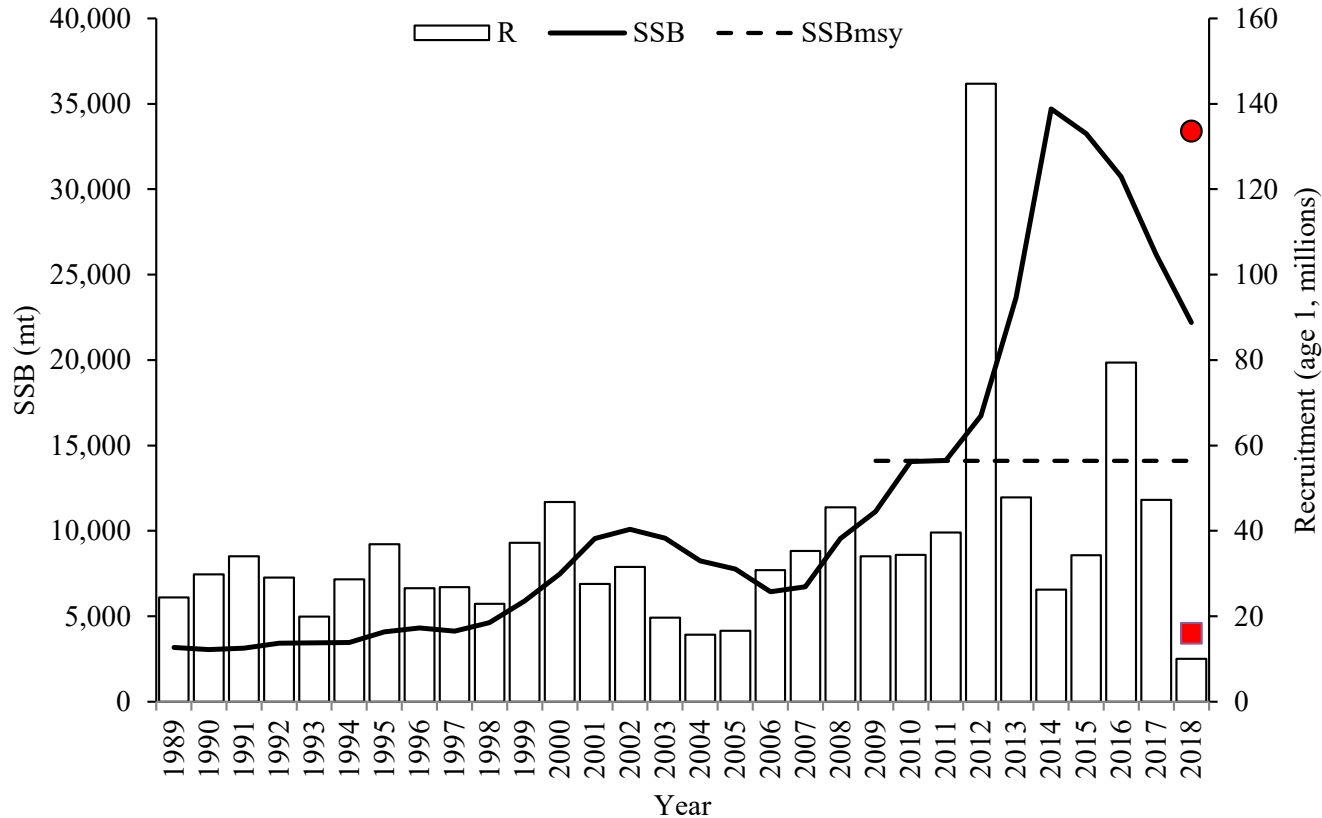
AP Comments

AP Comments - FPR

Biological Issues and Biomass Projections

- Below avg 2018 recruitment could be due to cannibalism and high abundance of large BSB.
- BSB have been caught as far as 150 miles from shore. Surveys may be missing that biomass. SSB may be under-estimated.
- Biomass very high, but SSB graph shows steep decline. ABC projections also declining. Is the stock in crisis? (No)

Black Sea Bass Spawning Stock Biomass and Recruitment



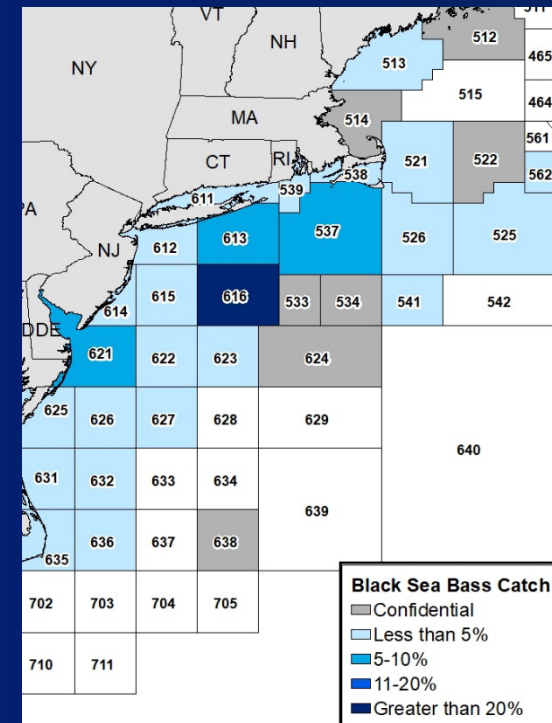
Retrospective adjusted point indicated in terminal year

AP Comments



Abundance vs. Effort Distribution

- High prevalence of 2011 year class in N does not mean abundance decreased in S.
- Map reflects effort, not distribution.
 - Stat area 616 – vessels travel there to target summer flounder. Target BSB on same trip.
 - Pot/trap catch locations impacted by lobster area 4 & 5 closures in spring (NY-Hatteras).



AP Comments



Recreational Fishery

- MRIP estimates showing higher catch from anglers on private/rental boats than for-hire boats are unbelievable.
- Despite high biomass, loosening of restrictions never seems possible.
- For-hire fishermen depend on BSB for their livelihoods.

AP Comments



Allocation Issues

- Recreational fishery “will be thrown under the bus again” due to MRIP changes.
- Commercial fishery has also been constrained for a long time.
- If reallocated, don’t reward those who caused the greatest problems.
- Rec. reporting and accountability should be improved.

AP Research Recommendations

- Greater inshore sampling.
- Genetics, stock structure, mixing, migration.
- Dedicated black sea bass survey.

AP Written Comments

- Recreational size limit has lowered spawning production – fewer small mature fish, fish are maturing later and at larger sizes
- Need regional winter catch limits to address site fidelity



MAFMC SSC
ABC Recommendations

Black Sea Bass
2020-21 Fishing Years

Assessment Information Content Category

SSC-modified OFL probability distribution

- Operational assessment OFL approved by peer review panel
- Based on the acceptance of the operational assessment by the peer review panel, there is adequate basis to specify an OFL
- Important uncertainties in OFL not captured in assessment model.



Overfishing Limit = 9,859 mt for 2019

New Process for OFL CV Category Determination

- Based on nine decision criteria with non-binding guidelines for three CV levels (60%, 100%, or 150%)
- SSC species lead proposes justification to OFL CV working group, working with NEFSC and MAFMC staff
- WG agrees on draft matrix to be posted prior to SSC meeting
- Full SSC reviews WG recommendation at meeting and modifies, if necessary



CV for Overfishing Limit = 100%

Justification

- Strong retrospective bias present in the assessment results and this pattern differs between the two spatial sub-areas used in the assessment
- The fishery has a large recreational component, and thus a substantial reliance on MRIP
- Spatially explicit models were implemented in the 2016 benchmark assessment
- Broadly consistent patterns in the fishery independent indices



Recommended ABCs

Variable ABCs

Year	ABC	B/B_{MSY}	p^*
2020	7,123 mt	1.71	0.40
2021	6,546 mt	1.61	0.40

Constant ABCs

Year	ABC	B/B_{MSY}	p^*
2020	6,835 mt	1.68	0.38
2021	6,835 mt	1.58	0.42



Recommended ABCs

Interim Metrics

- Estimated actual recreational and commercial catch levels
- Survey indices by subareas looking for continued evidence of divergence
- Evaluate patterns in MRIP in each sub-area for further departures from expectation



Most Significant Sources of Scientific Uncertainty

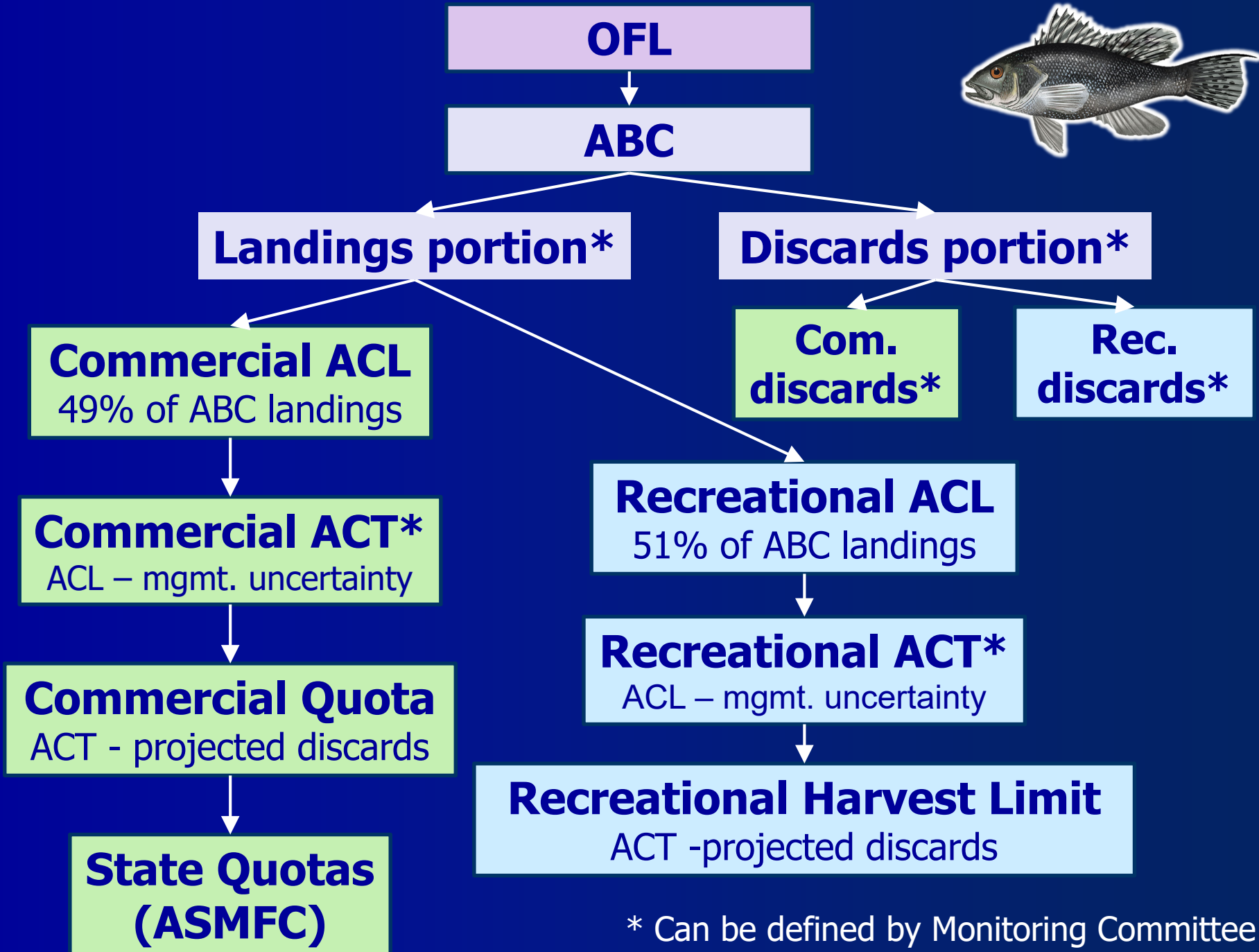
- The retrospective pattern was large enough to need corrections in the assessment results
- The natural mortality rate (M) used in the assessment may not adequately capture the dynamics in M
- The spatial distribution of productivity within the stock range
- The level, temporal pattern, and spatial distribution of recreational catches



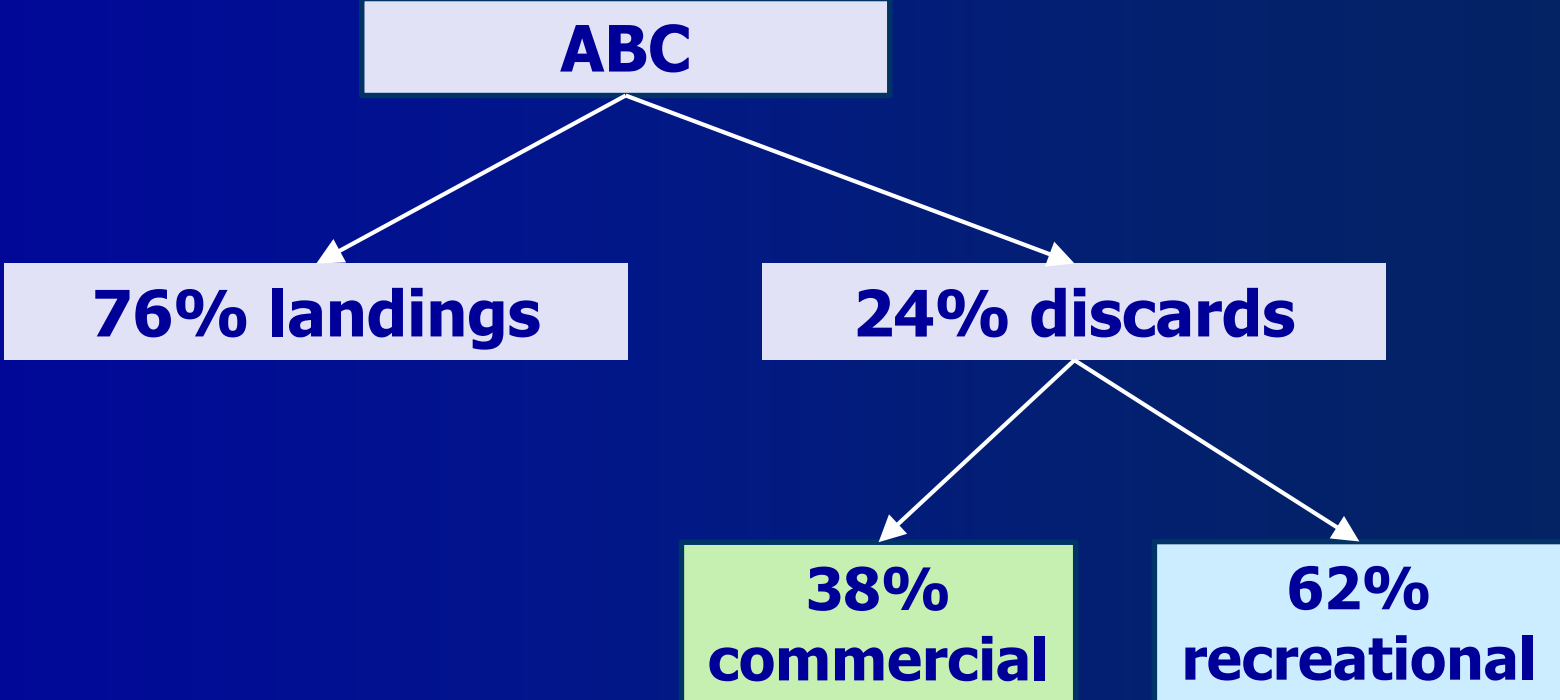
Most Significant Sources of Scientific Uncertainty (cont'd)

- The nature of exchanges between the spatial regions defined in the assessment model
- The extent to which the spatial structure imposed in the assessment model reflects the dynamics within the stock
- Future effects of temperature on stock productivity and range





Past MC Method for Calculating Expected Discards

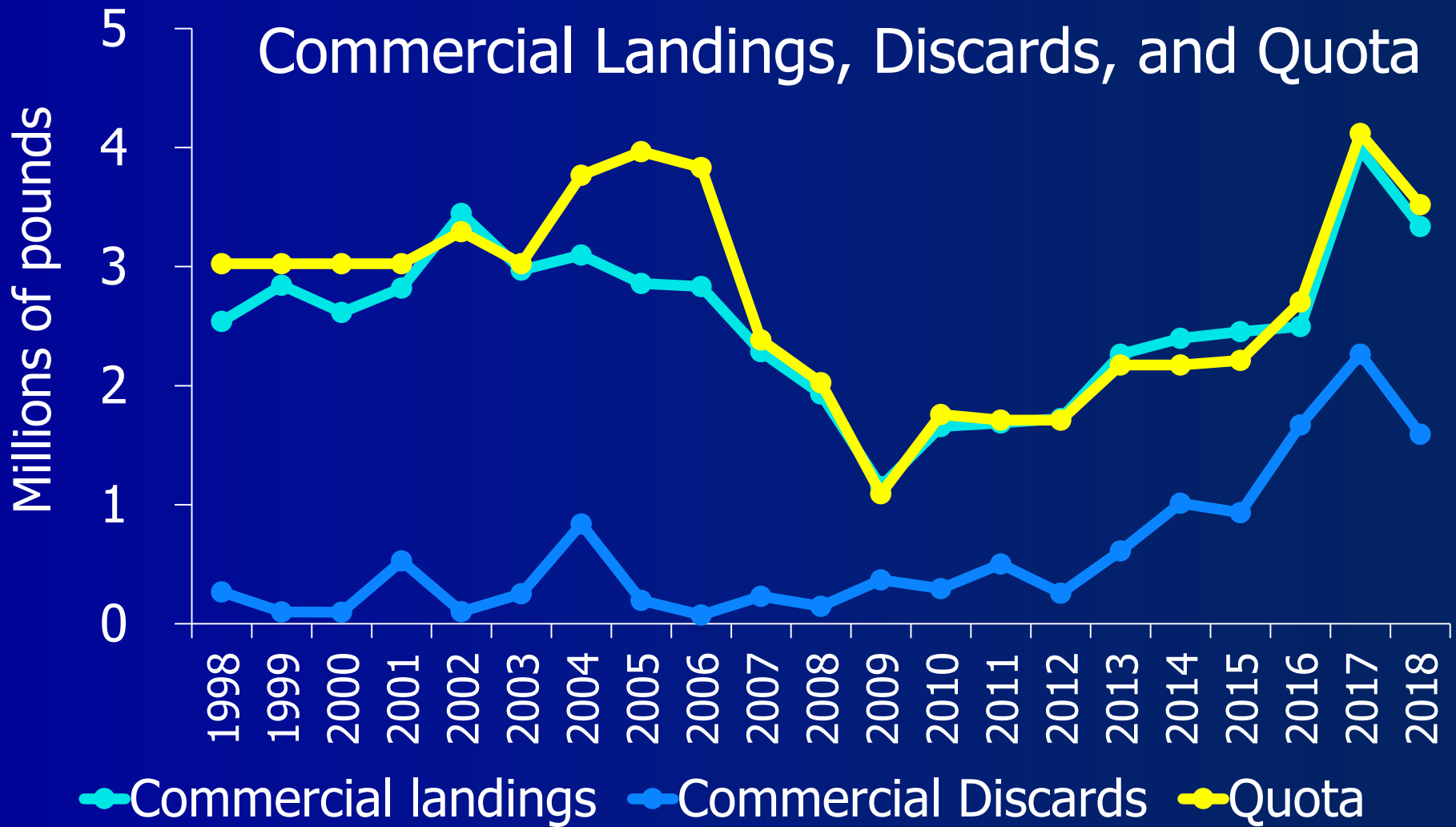


All based on 2016-2018 proportions, NEFSC data

Discard Under-Estimation

	2015	2016	2017	2018
Com. discards overage	+215%	+190%	+167%	+210%
Com. ACL overage	+39% (discards + landings)	+20% (all discards)	+28% (all discards)	+36% (all discards)
Rec. discards overage	+61%	+394%	+17%	+18%
Rec. ACL overage	+62% (discards + landings)	+246% (discards + landings)	+2% (all discards)	+9% (discards + landings)
ABC overage	+51%	+87%	+14%	+22%

Commercial Landings, Discards, and Quota



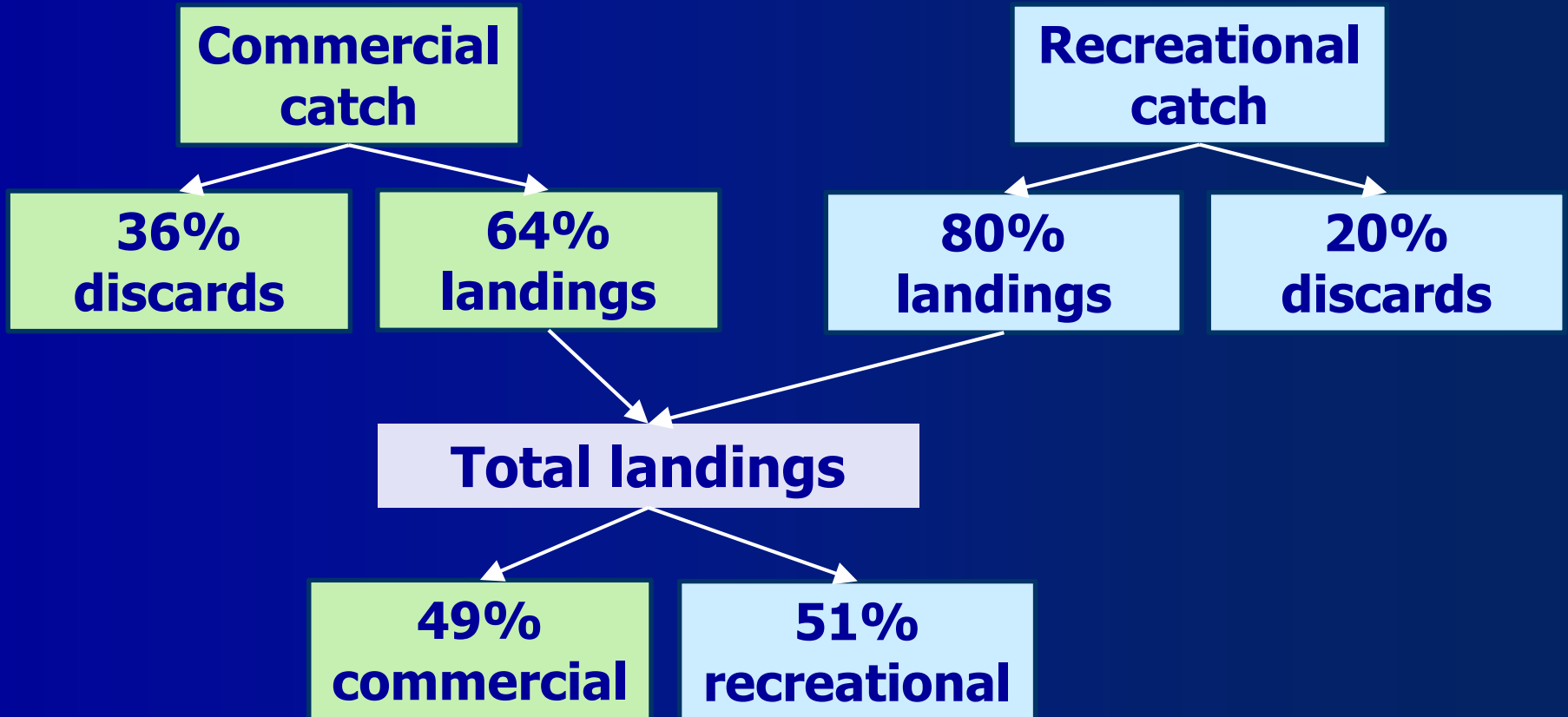
	2016	2017	2018	Avg
Rec disc as % of rec catch	18%	22%	20%	20%
Com disc as % of com catch	40%	36%	32%	36%

2019 MC Discard Recommendation



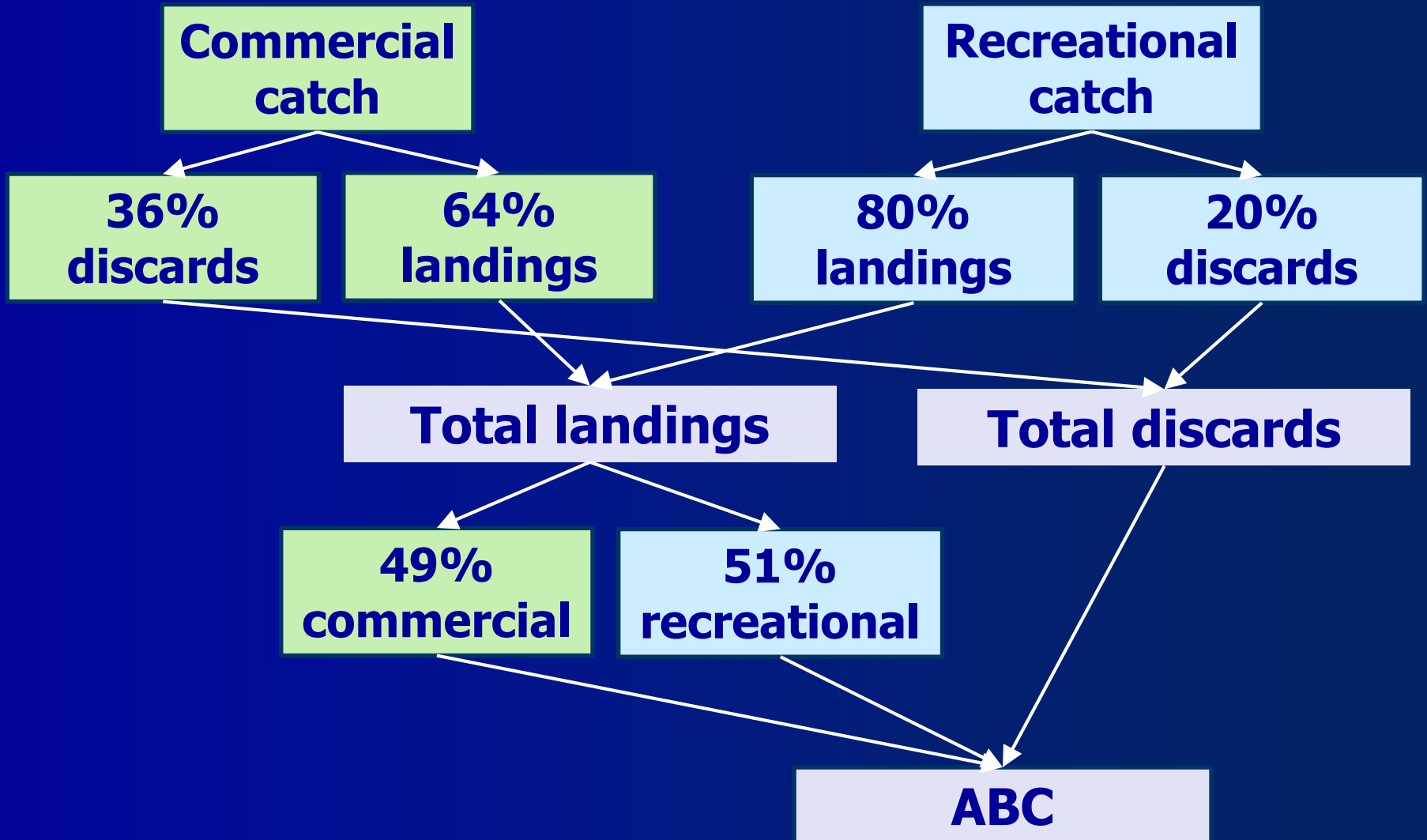
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2019 MC Discard Recommendation



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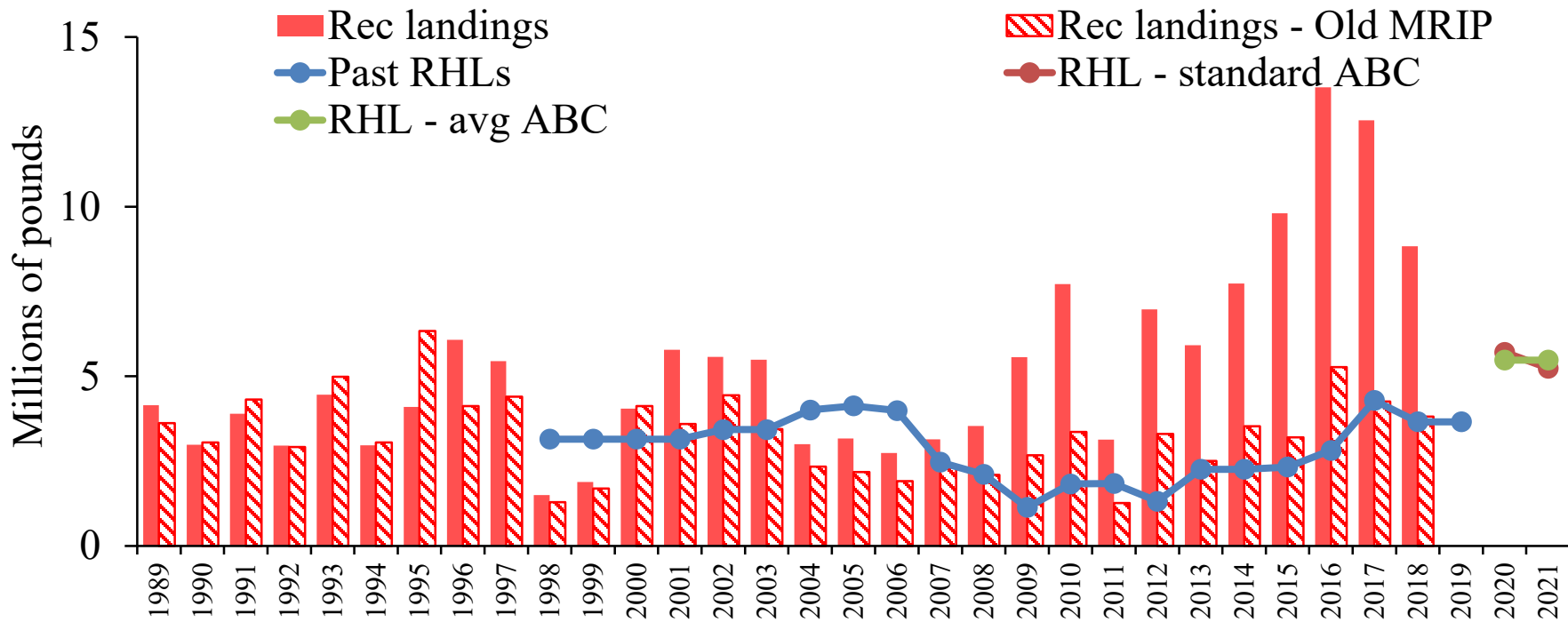
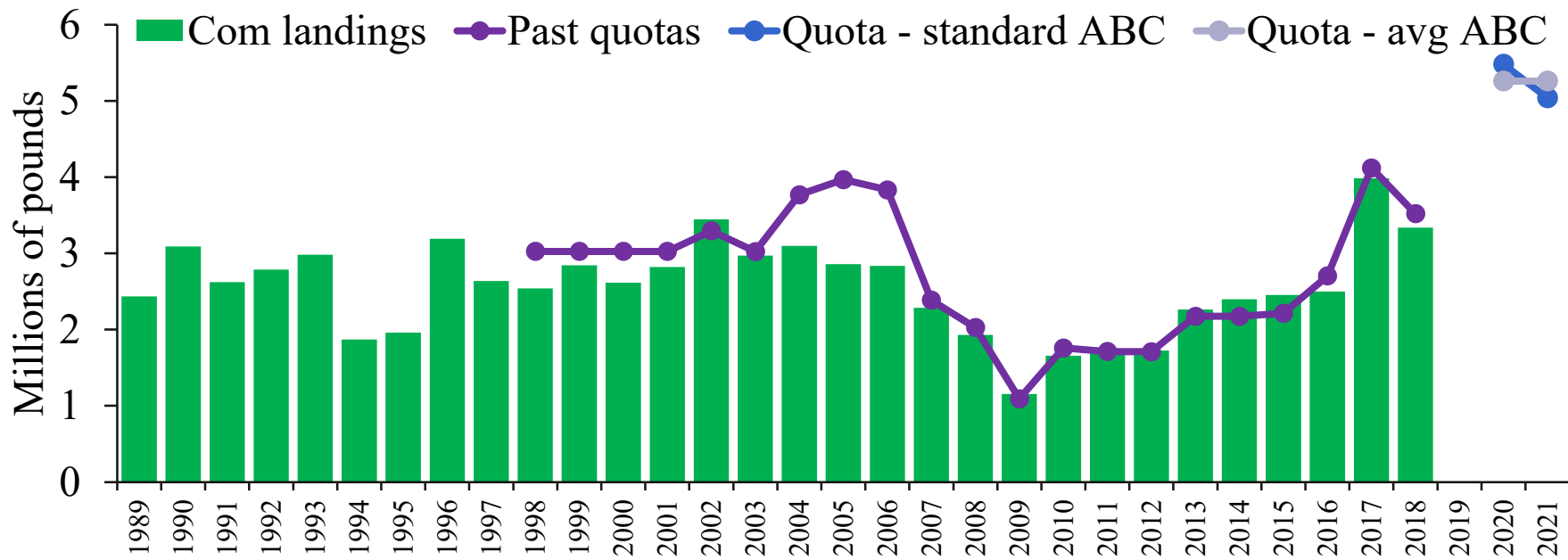
2019 MC Discard Recommendation



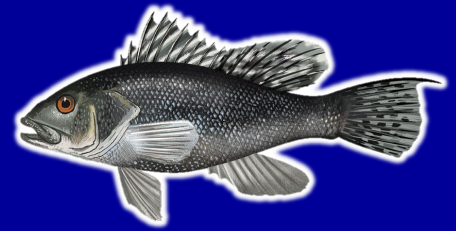
All based on 2016-2018 proportions, NEFSC data

Monitoring Committee Recommendation

	2019	Varying ABC		Constant ABC
		2020	2021	2020 & 2021
ABC	8.94	15.70	14.43	15.07
Com. discards	0.83	3.08	2.83	2.96
Rec. discards	0.93	1.43	1.31	1.37
Com. ACL = ACT	4.35	8.56	7.87	8.22
Com. quota	3.52	5.48	5.04	5.26
Rec. ACL = ACT	4.59	7.14	6.55	6.85
RHL	3.66	5.71	5.24	5.48



MC Comments



- Commercial quota increase of this magnitude in a single year could have unintended socio-economic consequences.
 - Mgmt. uncertainty deduction not appropriate.
- 30% reduction in recreational harvest hard to justify given biomass level, high availability, likely resulting increase in discards.
- Imperative that Council and Board take action to address com./rec. allocations.

Management Measures

MC recommended no changes to:

- 11" commercial minimum size
- Incidental possession limits
 - 500 lb January – March
 - 100 lb April – December
- 4.5" minimum mesh size (though continued consideration warranted)
- Pot/trap vent configurations

February Rec. Fishery

- Feb 1 – 28 open in 2018 and beyond under specific constraints.
- States must opt-in.
- State measures during rest of year must account for expected Feb harvest.
- 15 fish bag, 12.5" min. size.
- No changes can be made for 2020.

State	Expected Feb Harvest (lb)
RI	288
CT	57
NY	9,410
NJ	82,850
DE	1,297
MD	541
VA	5,496
NC	62
Total	100,000

AP Comments



- 60% vs 100% OFL CV results in 1 mil lb difference in the ABC.
- 30% reduction in rec. harvest “irrational”, “outrageous” given high biomass.
- Cannot take any more cuts.
- Greater non-compliance if rec. fishery further restricted.
- Need stability in com. and rec. fisheries.

AP Comments



- Negative economic impacts of a mid-year increase in com. quota by $\sim 50\%$.
- No trust in MRIP data.
 - New MRIP numbers could be revised again.
 - Fishermen will pay for past mgmt. mistakes.
 - SSC's concerns.
- Failure in managing a rebuilt fishery.

AP Comments



- Management drove the rec. fishery to a catch and release fishery (high discards).
- A great day of fishing could mean a lot of catch and release, but dead discards count against the RHL, penalizing fishermen.
- Providing more data (eVTRs), feels like it's being used against us.

Public Comments

- Incremental increase in quota would be better than +50% all at once.
- Increase will benefit trawl fishermen, force out pot/trap fishermen.
- Council/Board need to do an economic analysis before taking final action.

Decision Points



- 2020-2021 ABCs (varying or averaged)
- ACLs and ACTs
- RHLs and commercial quotas
- Changes to commercial measures for 2020 (if any)

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2019 MC discard recommendation

	Varying ABC		Constant ABC
	2020	2021	2020 & 2021
Com. discards	3.08	2.83	2.96
Rec. discards	1.43	1.31	1.37
Total	4.51	4.14	4.33

Previous MC discard estimation methodology

	Varying ABC		Constant ABC
	2020	2021	2020 & 2021
Com. discards	1.46	1.34	1.40
Rec. discards	2.38	2.18	2.28
Total	3.84	3.52	3.68

NEFSC discards, 2016-2018 avg proportions

	2019	Standard ABC		Average ABC	
		2020	2021	2020	2021
OFL	10.29	19.39	17.82	19.39	17.68
ABC	8.94	15.7	14.43	15.07	15.07
ABC discards	1.76	3.84	3.53	3.68	3.68
Com. discards	0.83	1.46	1.34	1.40	1.40
Rec. discards	0.93	2.38	2.18	2.28	2.28
Com. ACL	4.35	7.28	6.69	6.98	6.98
Com. ACT	4.35	7.28	6.69	6.98	6.98
Com. quota	3.52	5.81	5.34	5.58	5.58
Rec. ACL	4.59	8.43	7.74	8.09	8.09
Rec. ACT	4.59	8.43	7.74	8.09	8.09
RHL	3.66	6.05	5.56	5.81	5.81