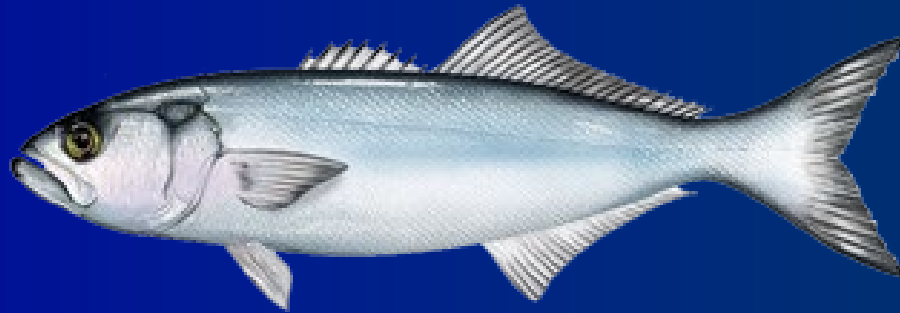


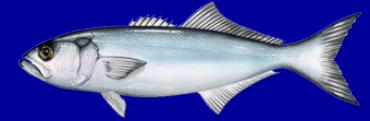


Atlantic Bluefish Specifications



Council and Board Meeting
August 9, 2023

Outline and Objectives

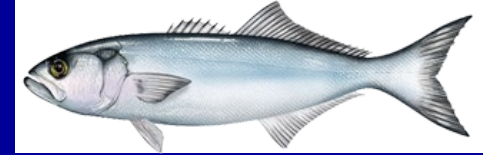


- Review recent catch and landings
- AP Fishery Performance Report
- Stock Status
- SSC ABC Recommendations
- 2024-2025 Specifications: MC and AP recommendations

Meeting Objectives:

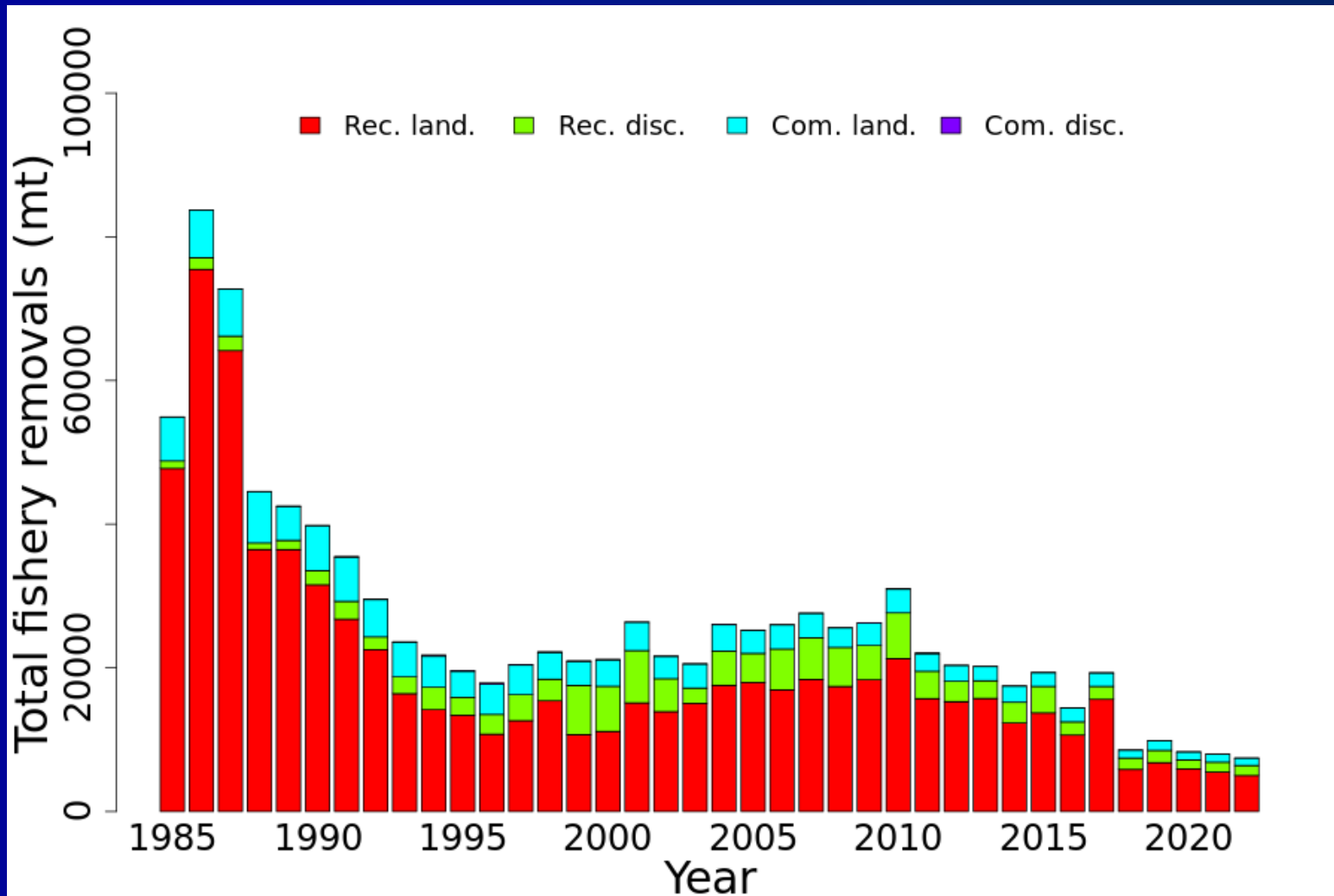
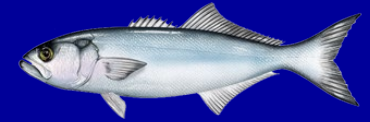
- Set Commercial and Recreational catch and landings limits for 2024-2025
- Set 2024 recreational management measures

Management Measures



Management Measures	2019	2020	2021	2022	2023
ABC	21.81	16.28	16.28	25.26	30.62
TAL	19.33	12.25	12.25	17.43	18.40
Comm. Quota	7.71	2.77	2.77	3.54	4.29
Comm. Landings	2.78	2.16	2.07	2.14	--
Rec. Harvest Limit	11.62	9.48	8.34	13.89	14.11
Rec. Harvest	15.56	13.58	12.46	11.03	--
Rec. Possession Limit (# fish)	15	3: Private 5: For-Hire	3: Private 5: For-Hire	3: Private 5: For-Hire	3: Private 5: For-Hire
Total Landings	18.34	15.74	14.53	13.17	--
Overage/Underage	N/A*	+3.49	+2.28	-4.26	--
Total Catch	23.50	19.93	21.25	17.85 (prelim)	--
Overage/Underage	N/A*	+3.65	+4.97	-7.41 (prelim)	--

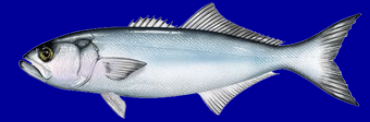
Catch: 2023 MTA



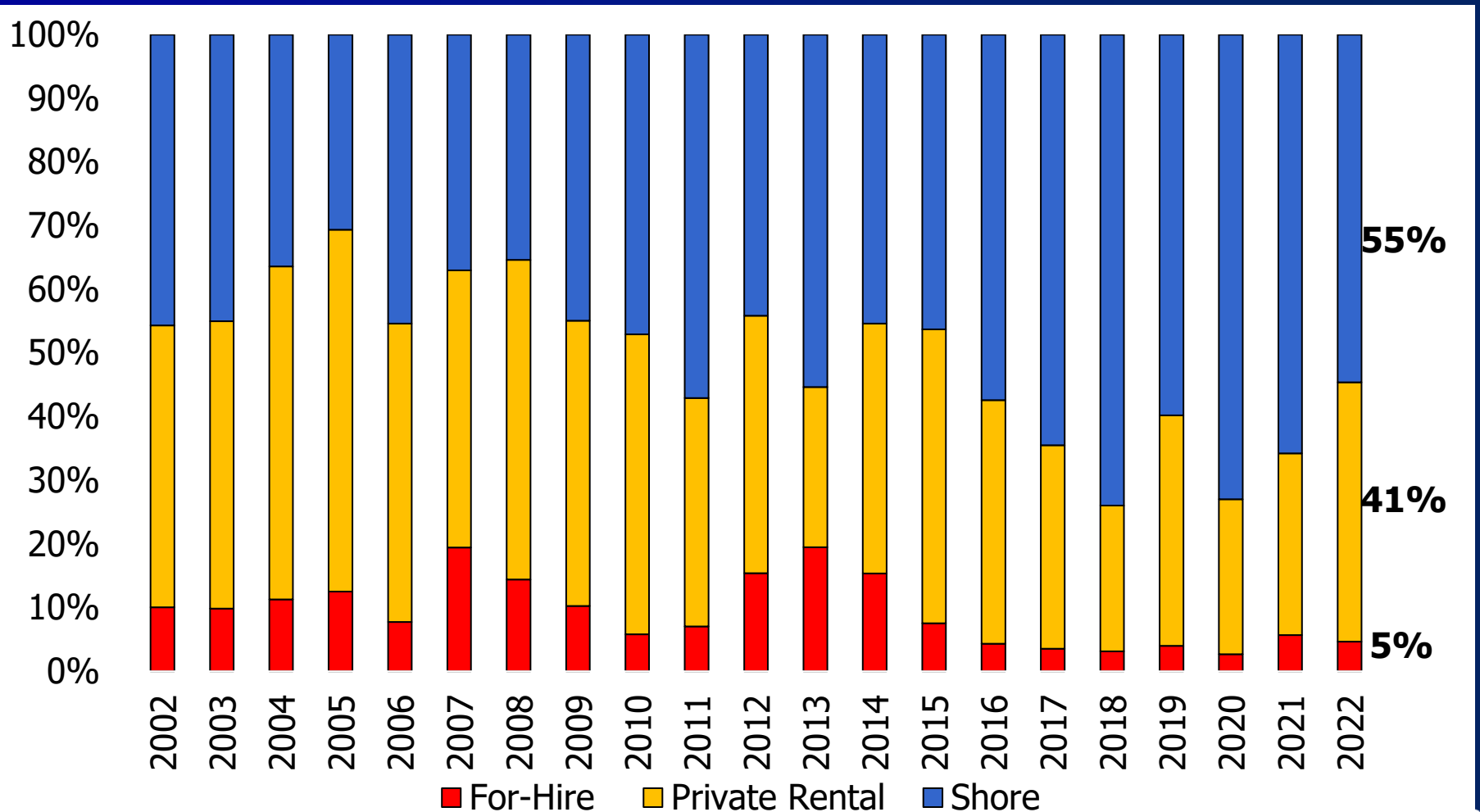
2022 Rec. Landings by State

State	Harvest		
	Pounds	Number	Average Weight (pounds)
ME	73,697	8,326	8.9
NH	1,598	181	8.8
MA	1,277,203	183,470	7.0
RI	593,444	92,704	6.4
CT	541,930	105,910	5.1
NY	3,446,600	1,710,502	2.0
NJ	1,077,834	510,820	2.1
DE	51,550	38,676	1.3
MD	213,345	249,382	0.9
VA	215,999	262,360	0.8
NC	1,336,592	1,533,911	0.9
SC	259,372	487,654	0.5
GA	35,911	43,335	0.8
FL	1,957,211	1,125,847	1.7
Total	11,354,535	6,353,078	1.8

Harvest by Mode



- 96% of bluefish harvest by weight occurred in state waters in 2022

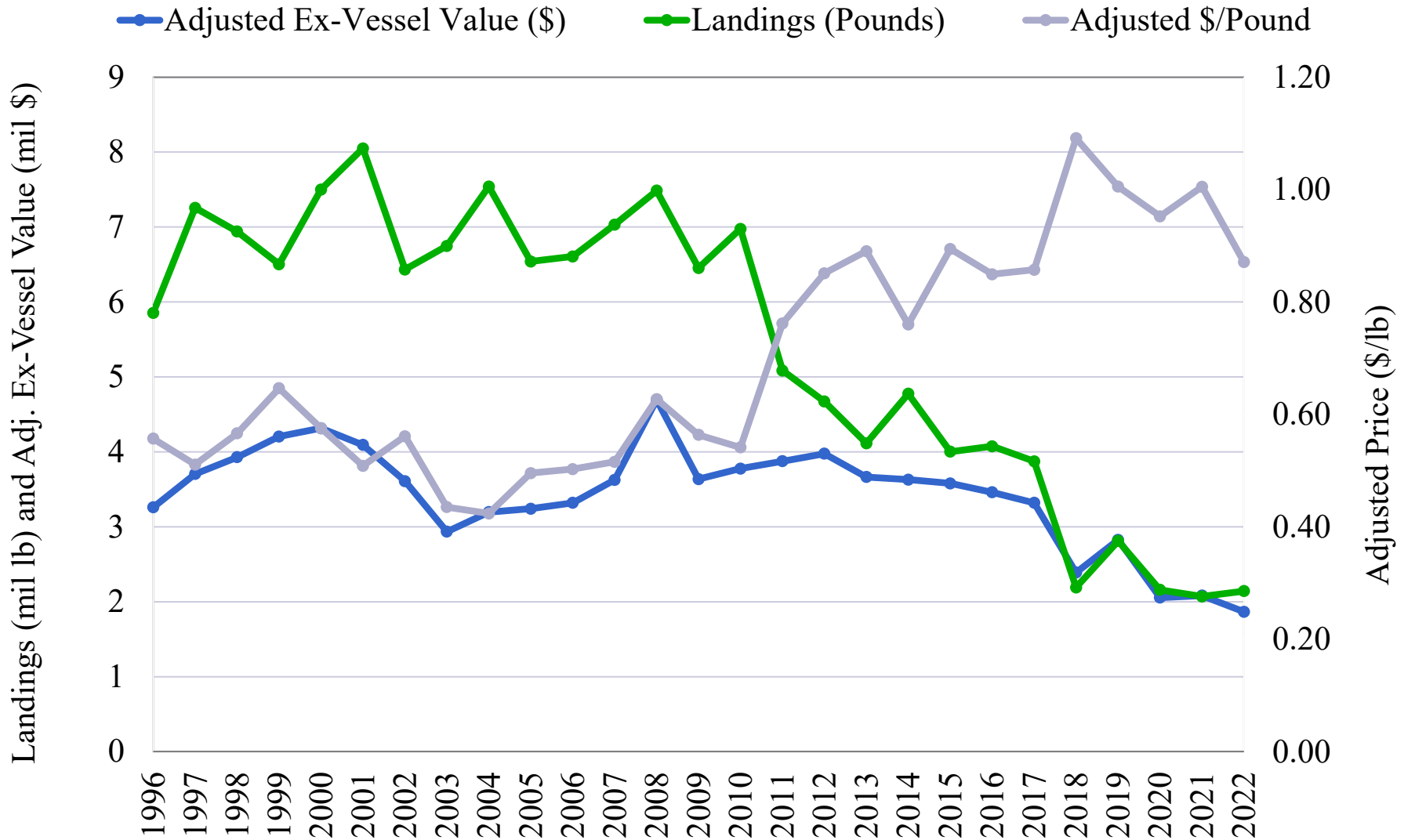


Commercial Fishery



- 2022 Commercial Federal Permits and activity
 - 2,324 commercial vessels
 - 380 commercial vessels landed bluefish
 - 165 permitted dealers
 - 137 dealers purchased bluefish

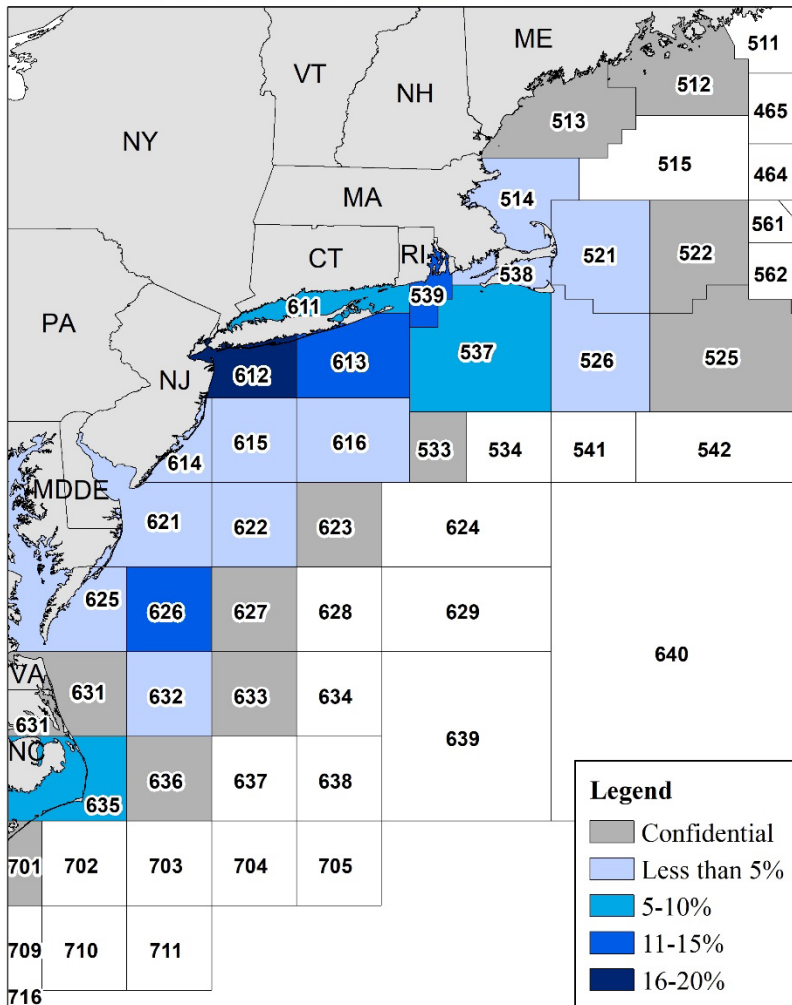
Commercial Fishery



Commercial Fishery



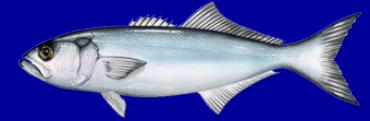
2022 Commercial Bluefish Catch - VTRs



Non-target species caught on bluefish trips (observer data 2018-2022)

Species	% by weight
Smooth dogfish	10%
Scup	4%
Striped bass	3%
Spiny dogfish	2%
Atlantic bonito	2%
Black sea bass	1%

AP Fishery Performance Report



Environmental factors

- Variability in the average weight of fish landed by state
 - Jump from 5 lbs in CT to 2 lbs in NY
 - Does not seem realistic
 - Varies from year to year
 - Snapper fishery (small bluefish, often from dock, very low weight per fish)
- More bluefish this year than last year, last year bf were absent 10-15 miles offshore
- Montauk: fishing is phenomenal this year– many and large fish, RI, MA and NC fishermen agreed, a lot of fish this spring/summer

AP Fishery Performance Report



Environmental factors

- MA – a lot of big fish in the area, more so in past few years
 - In general big fish come in first to spawn and then move away but size and number of fish are both impressive this year
 - Filling a need due to striped bass slot limit regs, clients have wanted to keep bluefish in recent years
- NJ – 2021 and 2022 were great bluefish years from Pt. Pleasant north into Southern NY, size 5-8 lbs. Not seeing the little fish being accounted for by MRIP

AP Fishery Performance Report



Market/Economic and Management Issues

- Bag limit change in 2020 corresponds with a decrease in the proportion of overall catch by the shore mode and an increase in private rental mode, while the for-hire mode stayed the same
 - Because of more anglers in the private rental mode?
 - Availability?
- Boats will switch over to black sea bass until it is closed and then switch back to bluefish

AP Fishery Performance Report



Market/Economic and Management Issues

- People tend to hire charter captains for summer flounder, striped bass, and black sea bass
- Bluefish for fun but not to take them home to eat
 - Didn't understand why changing the bag limit from 15 fish to 3 fish would have an impact
- NC - last 5-6 years, increased interest in harvesting/eating bluefish.
 - Filling the need for customers when other species' regulations don't allow it
 - People only want 2-3, don't think bag limit is limiting

AP Fishery Performance Report



Market/Economic and Management Issues

- For NY and NJ party boats, very important fishery, brings in a lot of money. Headboats want to see an increase in bag limit, brings passengers, seeing a lot of fish
- Differing bag limits between for-hire and private angler: not thoroughly analyzed, should be pursued through sector separation action
- A lot of target and interest in bluefish without it being classified as a bluefish directed trip, good to keep that in mind/analyze secondary targets
 - MA - if you interviewed customers, not say they were targeting bluefish, but catch bluefish on at least 50% of the trips and on some trips, a lot of bluefish are caught

AP Fishery Performance Report



Market/Economic and Management Issues

- Three advisors: continued support for the conservation of bluefish
 - No need to increase the bag limit too soon
 - As a guide, bluefish are very valuable/reliable. Ensuring that there are still fish in 10-15 years is more important to them than taking home more fish

AP Fishery Performance Report



Research Priorities and Data Issues

- Some agreed with recommendation for an updated bluefish post release mortality study
 - analyzing mortality on the early fish that are larger and later fish that are smaller would be helpful
 - High mortality witnessed in NC aquarium system when fish are handled
- RTA evaluated the discard mortality rate, should be a lower research priority compared with the need to get better data on the larger older bluefish that tend to be offshore
- They are inshore now but we don't know where they came from or where they were in past years, why coming in now
- There are a lot of bunker right now, and bf run with striped bass

AP Fishery Performance Report



Research Priorities and Data Issues

- If the stock assessment isn't taking into account commercial bluefish discards in the NC shrimp trawl fishery (state fishery), should be another research rec.
 - A member of the public disagreed and stated that there is no bycatch of bluefish in the shrimp trawl fishery
- Asked about the updated bluefish reference points from the recent research track assessment, scaling down of the biomass, interested in SSC's comments on this
- Bioeconomic models for bluefish similar to Summer Flounder, Scup, Black Sea Bass

Email Comments from Advisors

- Bluefish are thriving this year. Although the general public/charter customers typically don't keep them for the table, the amount of fish around is old school and the fishing is as good as it gets.
- The fish range is sizes from little harbor size all the way up to true "alligators," many year classes have succeeded
- NC: bf haven't been around in the Outer Banks area, patchy, we do hear reports but this May and last May even the small ones weren't there
- MRIP landings from MRIP in NC were substantial last year which is surprising based on what we are seeing

Email Comments from Advisors

- The 2 lb average weight for NY is because snappers are diluting the average weights, should be considered as a completely different category. Misrepresenting the fishery.
- Fish are now 9-12 lbs off of Montauk, up to 7 lbs in MA
- Where were these large fish hiding in past years, we are inundated with bluefish.
- CT and the north shore of Long Island should be its own region where the bag/size/season regulations need to stay the same for all rec species
- Next year we should see a good snapper year with all of these larger fish spawning
- Bluefish school together by size, you don't see small fish in a school with the larger fish
- Bluefish are feeding like crazy on the sand eels

MC Meeting: Uncertainty Tool

- Annually: MC considers whether to apply a buffer for management uncertainty between the ACL and the ACT
- If buffer is warranted, desire for a quantitative approach, met in March 2023 to discuss
- Subgroup developed a tool:
 - Combination of quantitative and qualitative categories, assign scores
 - Contribute to uncertainty into a quantitative metric, can weight the different categories
 - Can serve as a starting point for discussion

MC Recommendation: ACTs

- Compliance information
- Improvements to estimating discards through RTA, better understanding of catch
- Rec. discards less variable than previous differing estimates
- Recommended no buffer for mgmt. uncertainty

Management Measure	Year		Basis
	2024	2025	
	mil lb.	mil lb.	
ABC	17.48	21.83	Derived by SSC
Commercial ACL=ACT	2.45	3.06	ABC x 14% (per FMP)
Recreational ACL=ACT	15.03	18.78	ABC x 86% (per FMP)

MC: Quota and RHL

Management Measure	Year		Basis
	2024	2025	
	mil lb.	mil lb.	
ABC	17.48	21.83	Derived by SSC
Commercial ACL=ACT	2.45	3.06	ABC x 14% (per FMP)
Recreational ACL=ACT	15.03	18.78	ABC x 86% (per FMP)
Commercial Discards	0.02	0.02	2021-2022 ave. discards (2023 MTA)
Recreational Discards	3.08	3.08	2021-2022 ave. discards (2023 MTA)
Commercial Quota	2.42	3.03	Commercial ACT - discards
RHL	11.96	15.70	Recreational ACT - discards

No transfer recommended while still rebuilding

MC: Status Quo Rec. Measures

- 2024 RHL: 11.96 mil lb
- 2021-2022 average rec. harvest: 11.54 mil lb
- Status quo measures for 2024, to be reviewed in 2024 for 2025
 - 5 fish (for-hire) and 3 fish (private angler) bag limits
 - Allows for continued stability for the sector without a predicted overage
 - Liberalization may result in RHL overage

AP: Status Quo Rec. Measures

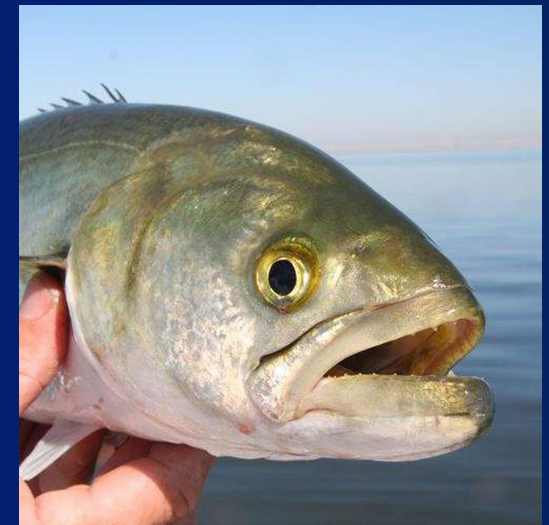
- All advisors in attendance spoke in favor of SQ rec. measures
- Need to understand implications of warming water temperatures and available forage
- SQ for 2025 as well – wait for new assessment for changes
- Harvest is more related to availability, may see increase in 2023 under same measures
- Anglers are also potentially switching to bluefish due to other species' regs

Decision Points



- Set Commercial and Recreational ACTs, RHL, and commercial quota for 2024-2025
- Set 2024 recreational management measures

Management Measure (mil lb)	Year	
	2024	2025
Commercial ACL=ACT	2.45	3.06
Recreational ACL=ACT	15.03	18.78
Commercial Quota	2.42	3.03
RHL	11.96	15.70
Rec. Measures	3 fish (private) 5 fish (for hire)	TBD



Extra slides

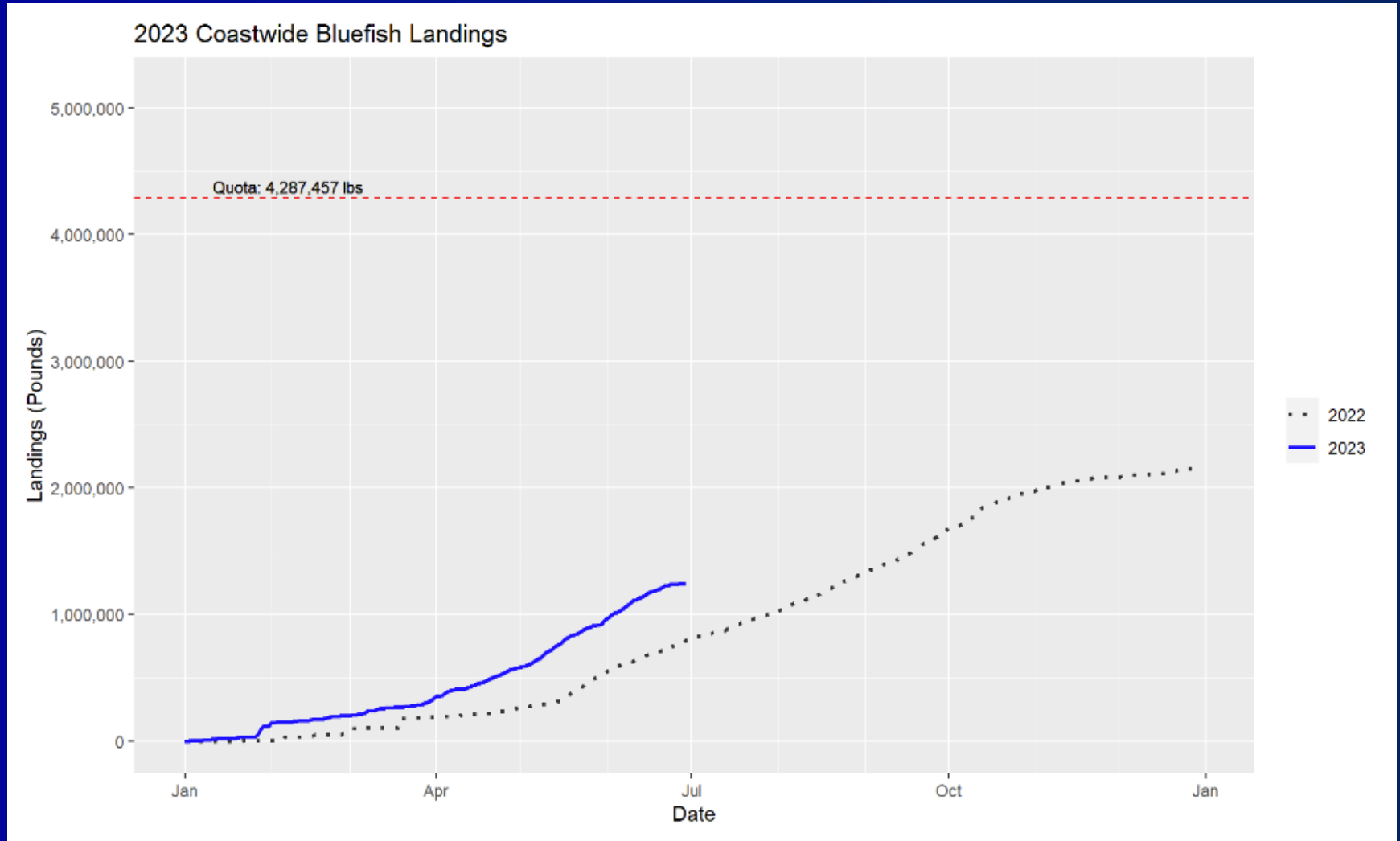
Table 5

Percent liberalization or reduction: liberalization = inverse reduction					
Bag Limit	3	4	5	6	7
Private Angler	SQ	7.32%	24.69%	62.77%	*
For Hire	-0.21%	-0.07%	SQ	0.07%	0.21%
Total	-0.21%	7.25%	24.69%	62.84%	0.21%
Percent liberalization or reduction: regression analysis					
Bag Limit	3	4	5	6	7
Private Angler	SQ	7.28%	12.36%	16.51%	20.01%
For Hire	-0.29%	-0.08%	SQ	0.22%	0.34%
Total	-0.29%	7.20%	12.36%	16.73%	20.35%

Stock Status and BRP Comparison

	2015 SAW/SARC 60	2021 Management Track Assessment	2022 Research Track Assessment	2023 Management Track Assessment
Stock Status	Not Overfished, Not Overfishing	Overfished, Not Overfishing	Not Overfished, Not Overfishing	Not Overfished, Not Overfishing
SSB_{MSY}	223.42 mil lb (101,343 mt)	444.74 mil lb (201,729 mt)	202.60 mil lb (91,897 mt)	194.30 mil lb (88,131 mt)
1/2 SSB_{MSY}	111.71 mil lb (50,672 mt)	222.37 mil lb (100,865 mt)	101.30 mil lb (45,949 mt)	97.15 mil lb (44,066 mt)
F_{MSY}	0.190	0.181	0.249	0.239
Terminal Year of data	2014	2019	2021	2022

2023 quota monitoring

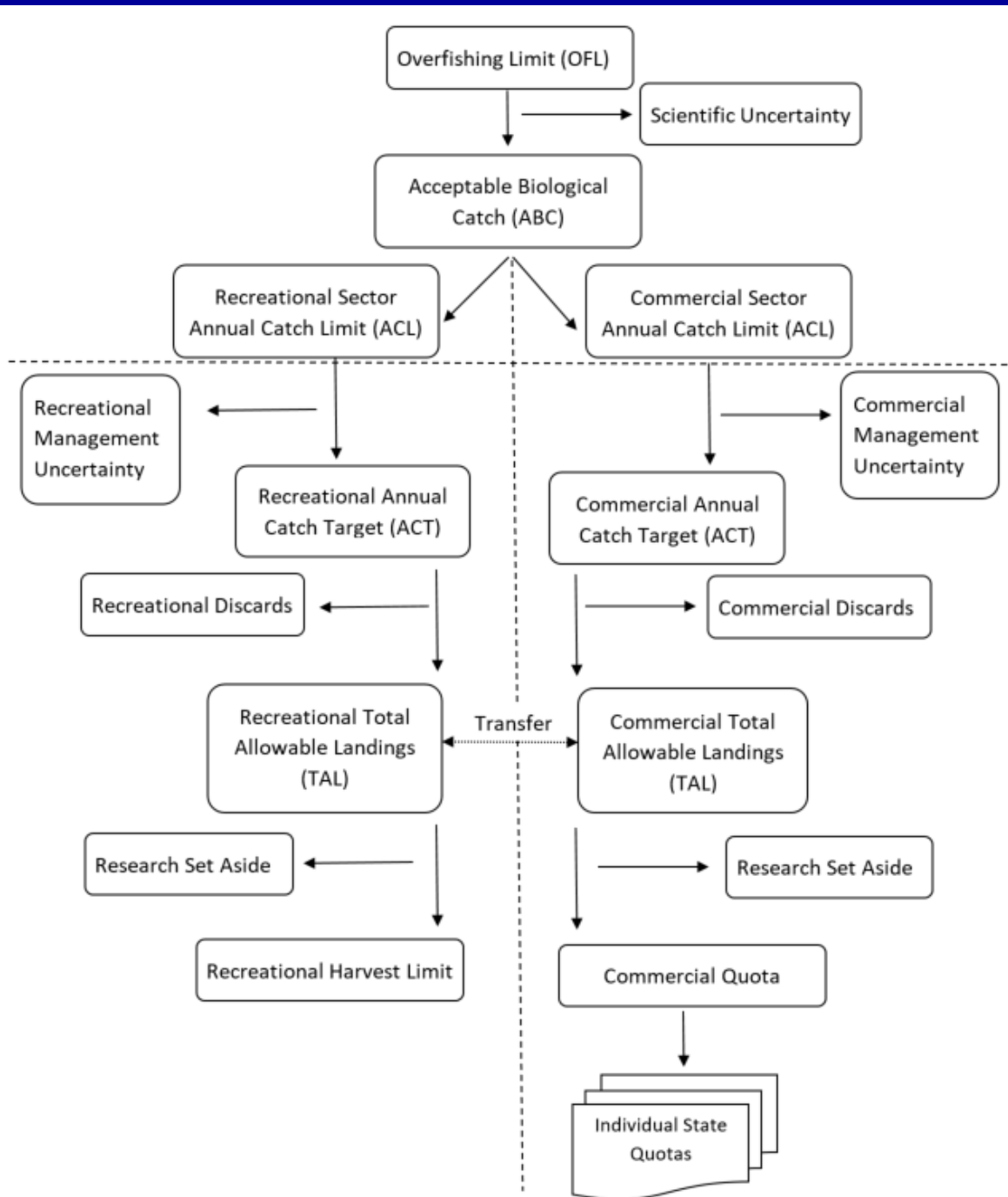


Management Uncertainty Considerations

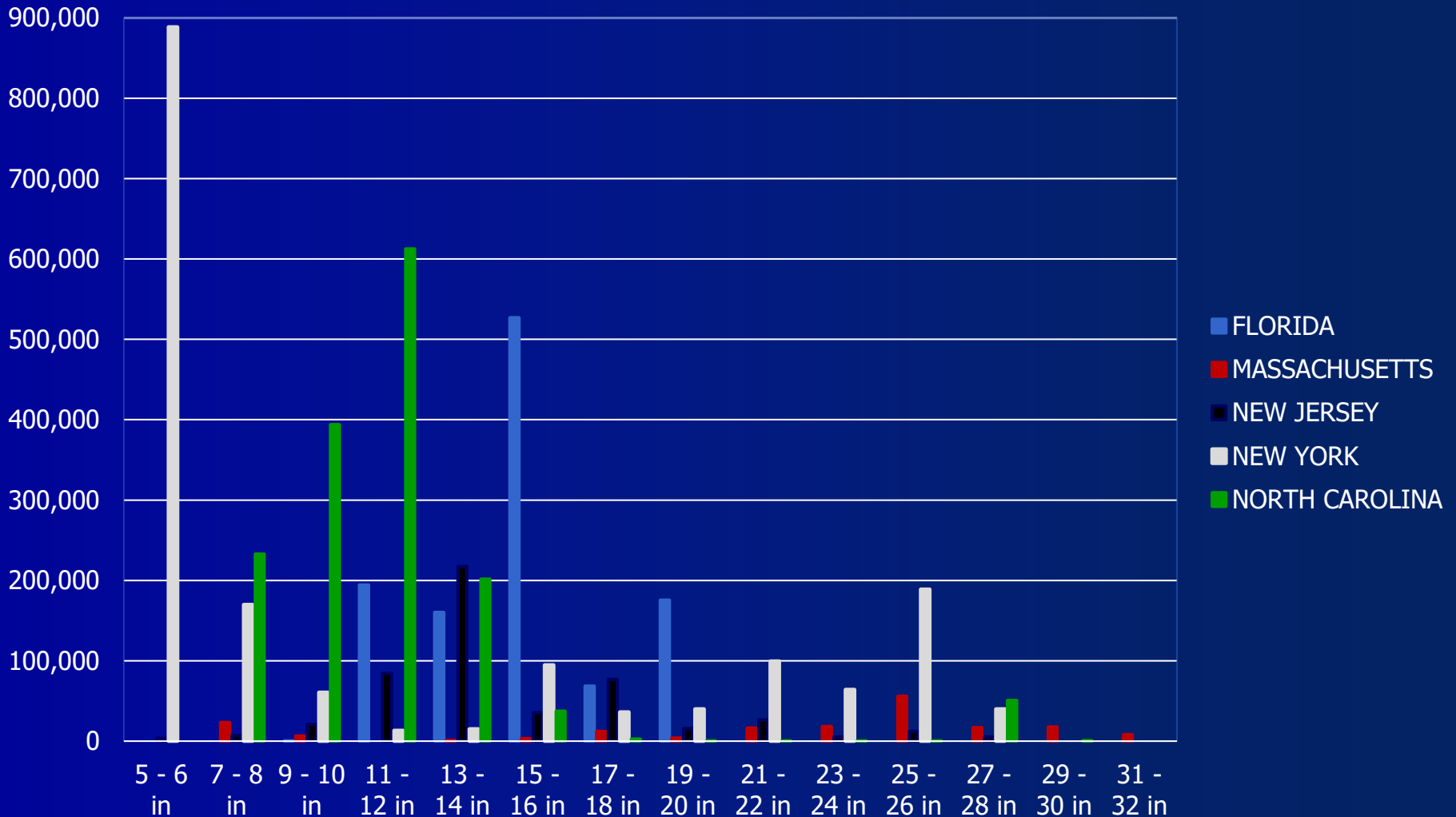
- Improvements to estimating discards through RTA, better understanding of catch
- Rec discards less variable than previous disparate estimates

Rec Fishery	Discards (GARFO estimate)	Discards (NEFSC Estimates)	Discards (2023 MTA*)
2018	4.03	9.9	3.48
2019	4.88	15.41	3.75
2020	4.19	8.3	2.76
2021	6.64	12.6	3.07

*discard mortality rate also changed from 15% to 9.4%



Rec lengths in top states 2022



Projections: 2023 Removals = 2023 ABC

Year	OFL Catch (mt)	OFL SSB (mt)	OFL Ffull
2023	13,890	59,135 (39,120 - 89,391)	0.239
2024	11,734	65,030 (41,240 - 102,546)	0.183
2025	12,467	70,974 (43,350 - 116,201)	0.183
Year	ABC Catch (mt)	ABC SSB (mt)	ABC Ffull
2023	13,890	59,135 (39,120 - 89,391)	0.239
2024	7,929	66,706 (41,439 - 107,379)	0.121
2025	9,903	75,757 (43,303 - 132,534)	0.137

Management Uncertainty Considerations

Compliance:

- OLE and USCG reported no rec. bluefish violations from 2019-2022
- State compliance reports:

	Bag Limit Citations	Size Limit Citations	Bag Limit Warnings	Size Limit Warnings	# of States Reporting Violations
2020	13	4	8	5	3
2021	28	3	12	20	3
2022	19	4	9	8	3

Projections: 2023 Removals = Catch at current Frebuild

Year	OFL Catch (mt)	OFL SSB (mt)	OFL Ffull
2023	10,827	60,471 (41,382 - 88,364)	0.183
2024	12,166	67,719 (45,503 - 100,782)	0.183
2025	12,818	73,426 (46,758 - 115,304)	0.183
Year	ABC Catch (mt)	ABC SSB (mt)	ABC Ffull
2023	10,827	60,471 (41,382 - 88,364)	0.183
2024	8,517	69,335 (45,753 - 105,074)	0.125
2025	10,450	77,982 (46,763 - 130,043)	0.141

2023 Removals Assumption

Catch Assumption	Value (MT)
2023 ABC	13,890
Catch at Frebuild	10,827
Recent Catch	Value (MT)
3-year average	7,898
10-year average	13,285

Year	Total Catch
2013	20,194
2014	17,473
2015	19,345
2016	14,431
2017	19,297
2018	8,548
2019	9,871
2020	8,294
2021	7,963
2022	7,436