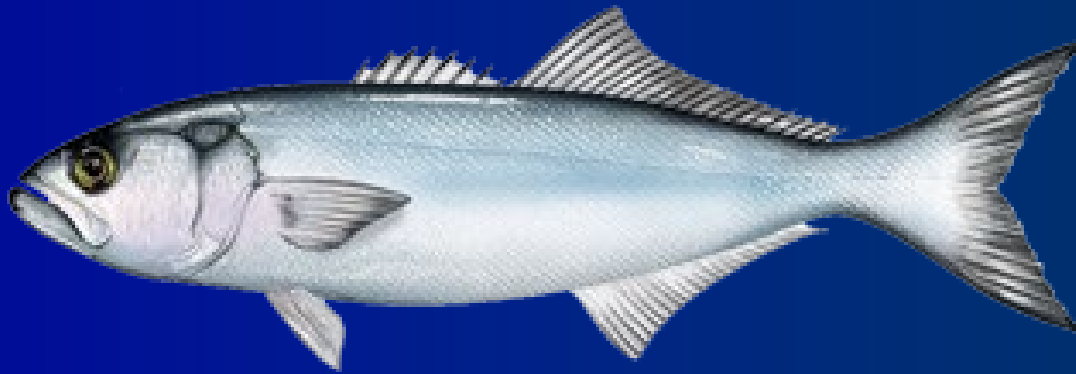




# Atlantic Bluefish



Scientific and Statistical  
Committee Meeting

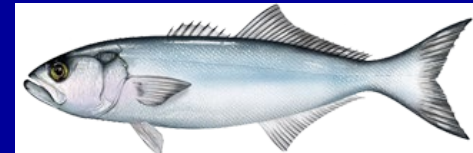
July 24, 2023

# Outline and Objective



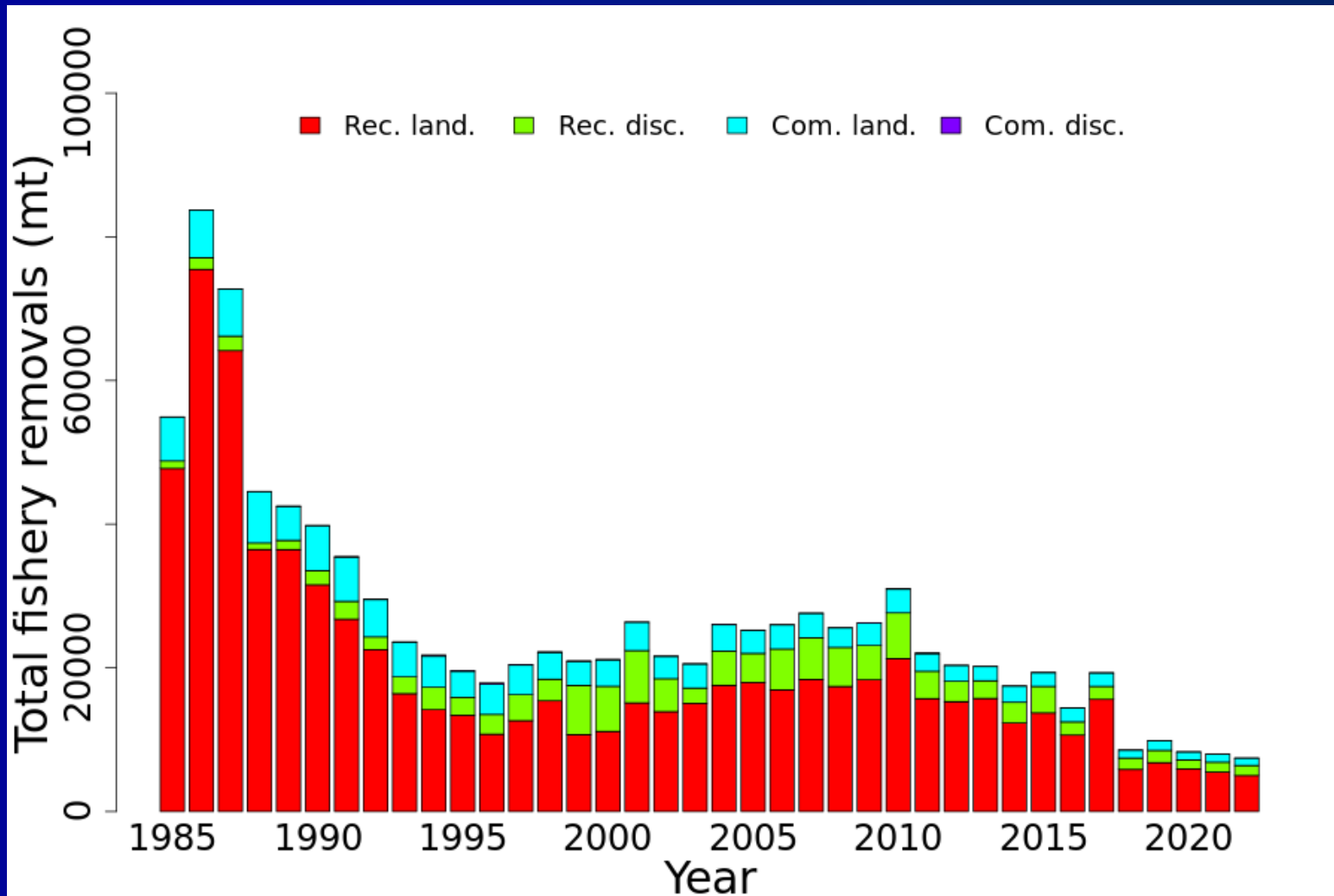
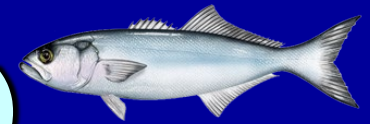
- Review recent catch and landings
  - AP Fishery Performance Report
  - Projections
  - Staff Recommendation
- 
- SSC Meeting Objective: Recommend ABCs for 2024-2025

# 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 (landings and discards)



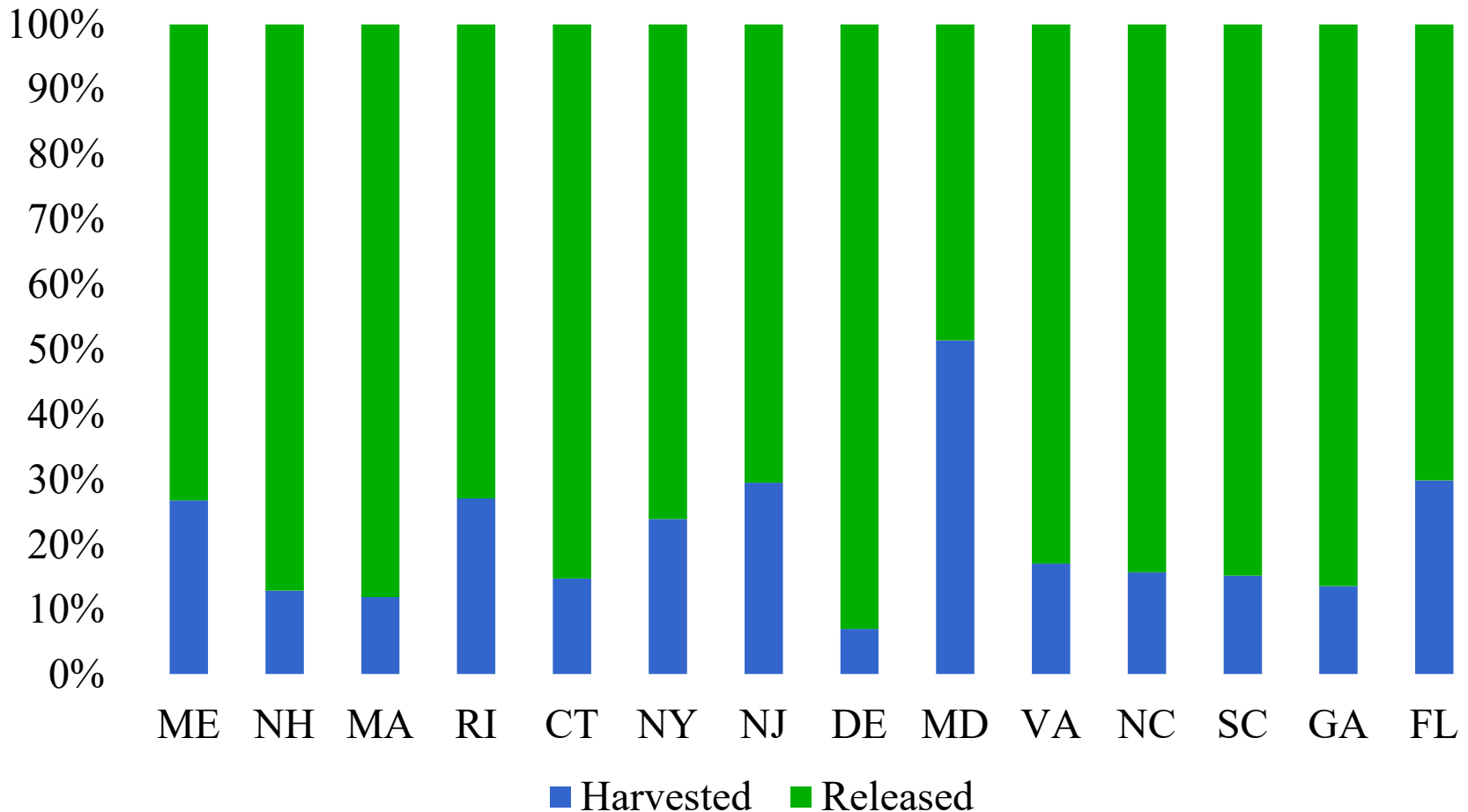
# 2022 Rec. Landings by State

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
<b>Total</b>	11,354,535	6,353,078	1.8

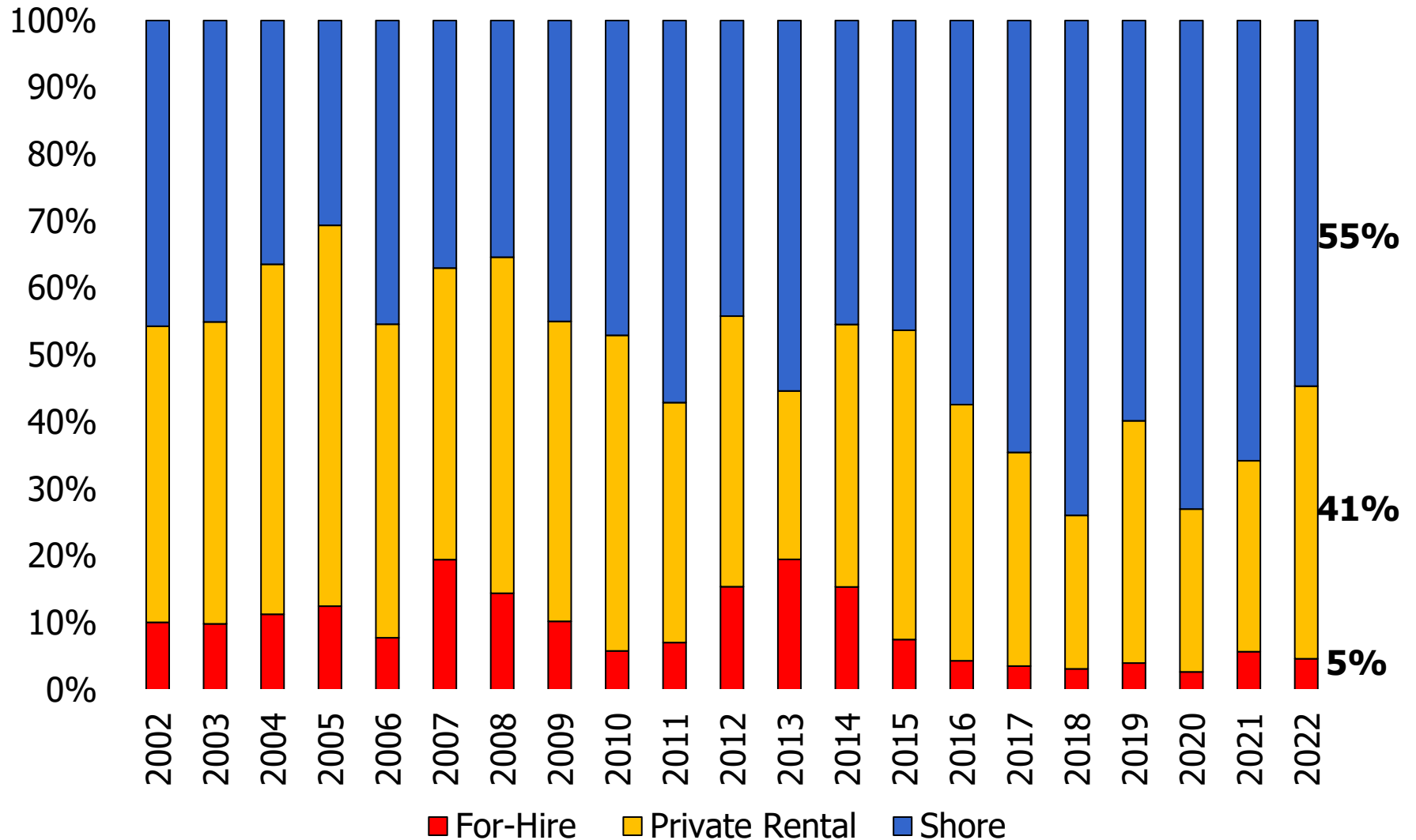
# 2022 Harvested vs. Released



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



# 2022 Harvest by Mode



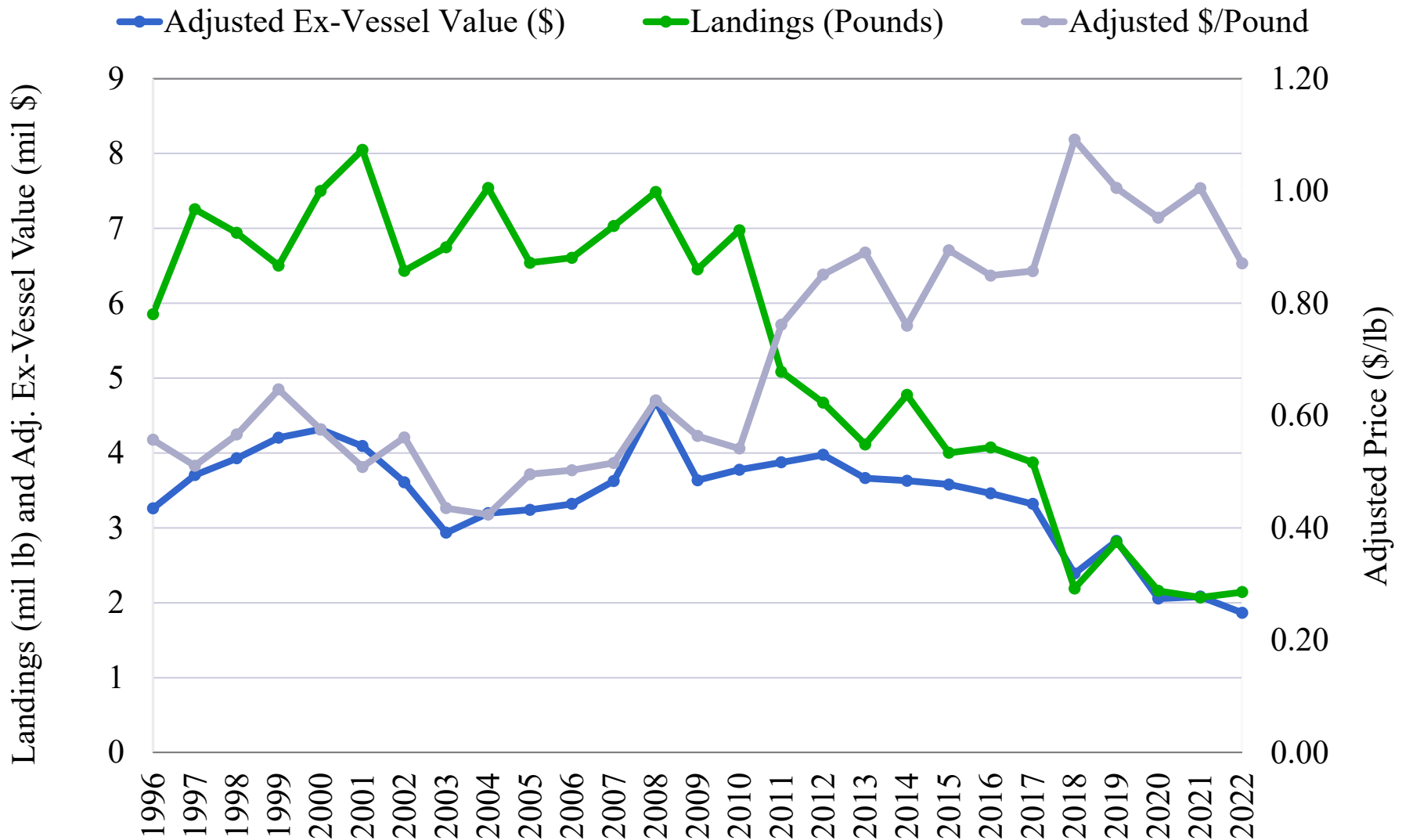
# Commercial Fishery



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



# Commercial Fishery



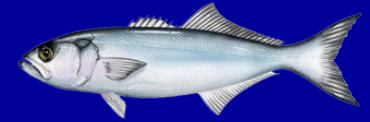
# Commercial Fishery



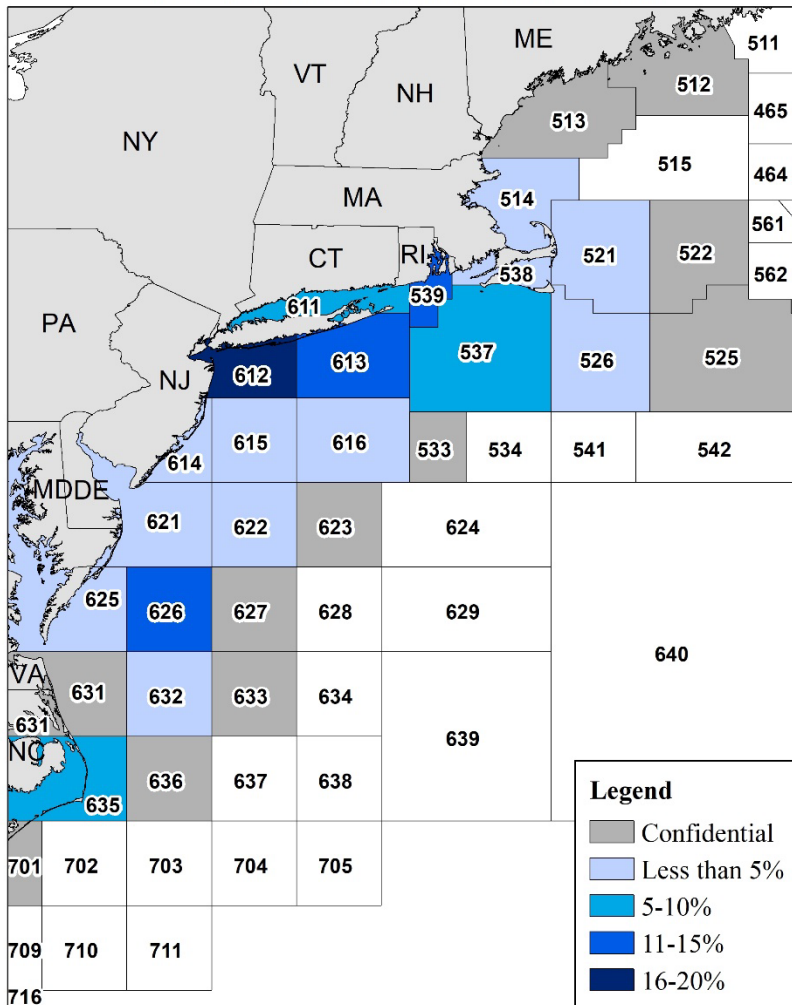
## Top Commercial Bluefish Ports in 2022

Port	Pounds	% of total commercial landings	# vessels
Hatteras, NC	273,871	13%	<10
Wanchese, NC	264,359	12%	12
Point Judith, RI	175,841	8%	93
Montauk, NY	160,317	7%	71
Provincetown, MA	100,299	5%	<10

# 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 and snappers should be considered as a completely different category. Otherwise, it is misrepresenting the fishery. These values are not reasonable.
- Fish are now 9-12 lbs off of Montauk and are up to 7 lbs in MA
- Where were these large fish hiding in past years, were these the fish from a strong year class several years ago? 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

# Projections: Rebuilding Plan

- Constant F strategy such that biomass in 2028 has a 50% chance of exceeding the  $B_{msy}$  proxy rebuilding target
- 2023 MTA,  $F_{rebuild}$  was re-calculated to be 0.183
- Risk policy (assuming an OFL CV = 100%) was applied to OFL proxies at  $F_{rebuild}$  in short term projections to generate ABC values

# 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

# 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

# Staff Recommended ABCs

- ABCs for 2024-2025 which use the catch associated with Frebuild as 2023 total removals

Year	ABC (mt)	ABC (mil lb)
2024	8,517	18.78
2025	10,450	23.04

# SSC Objective



- Recommend ABCs for 2024-2025



# Extra slides

# OFL CV=60%

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	9,039	66,221 (40,995 - 106,970)	0.139
2025	10,627	74,371 (42,119 - 131,322)	0.150

Removals = 2023 Catch at 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)	SSB (MT)	ABC Ffull
2023	10,827	59,135 (39,120 - 89,391)	0.183
2024	9,594	68,861 (45,309 - 104,658)	0.142
2025	11,118	76,650 (45,608 - 128,820)	0.153

# Specs: removals = 2023 ABC

Management Measure	Year				Basis
	2024		2025		
	mil lb.	mt	mil lb.	mt	
OFL	25.90	11,734	27.49	12,467	Stock assessment projections
ABC	17.48	7,929	21.83	9,903	Derived by SSC
Commercial ACL	2.45	1,110	3.06	1,386	ABC x 14% (per FMP)
Commercial Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Commercial ACT	2.45	1,110	3.06	1,386	Comm. ACL - Comm. Management Uncertainty
Recreational ACL	15.03	6,819	18.78	8,517	ABC x 86% (per FMP)
Recreational Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Recreational ACT	15.03	6,819	18.78	8,517	Rec. ACL - Rec. Management Uncertainty
Commercial Discards	0.02	11	0.02	11	2021-2022 ave. discards (2023 MTA)
Recreational Discards	3.08	1,396	3.08	1,396	2021-2022 ave. discards (2023 MTA)
Commercial TAL	2.42	1,100	3.03	1,376	Commercial ACT - commercial discards
Recreational TAL	11.96	5,423	15.70	7,121	Recreational ACT - recreational discards
Combined TAL	14.38	6,523	18.73	8,497	Commercial TAL + Recreational TAL
Commercial Quota	2.42	1,100	3.03	1,376	Commercial TAL +/- transfer
RHL	11.96	5,423	15.70	7,121	Recreational TAL +/- transfer

# Specs: removals = Frebuild catch

Management Measure	Year				Basis
	2024		2025		
	mil lb.	mt	mil lb.	mt	
OFL	26.82	12,166	28.26	12,818	Stock assessment projections
ABC	18.78	8,517	23.04	10,450	Derived by SSC
Commercial ACL	2.63	1,192	3.23	1,463	ABC x 14% (per FMP)
Commercial Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Commercial ACT	2.63	1,192	3.23	1,463	Comm. ACL - Comm. Management Uncertainty
Recreational ACL	16.15	7,325	19.81	8,987	ABC x 86% (per FMP)
Recreational Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Recreational ACT	16.15	7,325	19.81	8,987	Rec. ACL - Rec. Management Uncertainty
Commercial Discards	0.02	11	0.02	11	2021-2022 ave. discards (2023 MTA)
Recreational Discards	3.08	1,396	3.08	1,396	2021-2022 ave. discards (2023 MTA)
Commercial TAL	2.61	1,182	3.20	1,453	Commercial ACT - commercial discards
Recreational TAL	13.07	5,929	16.74	7,592	Recreational ACT - recreational discards
Combined TAL	15.68	7,111	19.94	9,044	Commercial TAL + Recreational TAL
Commercial Quota	2.61	1,182	3.20	1,453	Commercial TAL +/- transfer
RHL	13.07	5,929	16.74	7,592	Recreational TAL +/- transfer

# Stock Status and BRP Comparison

	2015 SAW/SARC 60	2021 Management Track Assessment	2022 Research Track Assessment	2023 Management Track Assessment
<b>Stock Status</b>	Not Overfished, Not Overfishing	Overfished, Not Overfishing	Not Overfished, Not Overfishing	Not Overfished, Not Overfishing
<b>SSB<sub>MSY</sub></b>	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)
<b>1/2 SSB<sub>MSY</sub></b>	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)
<b>F<sub>MSY</sub></b>	0.190	0.181	0.249	0.239
<b>Terminal Year of data</b>	2014	2019	2021	2022

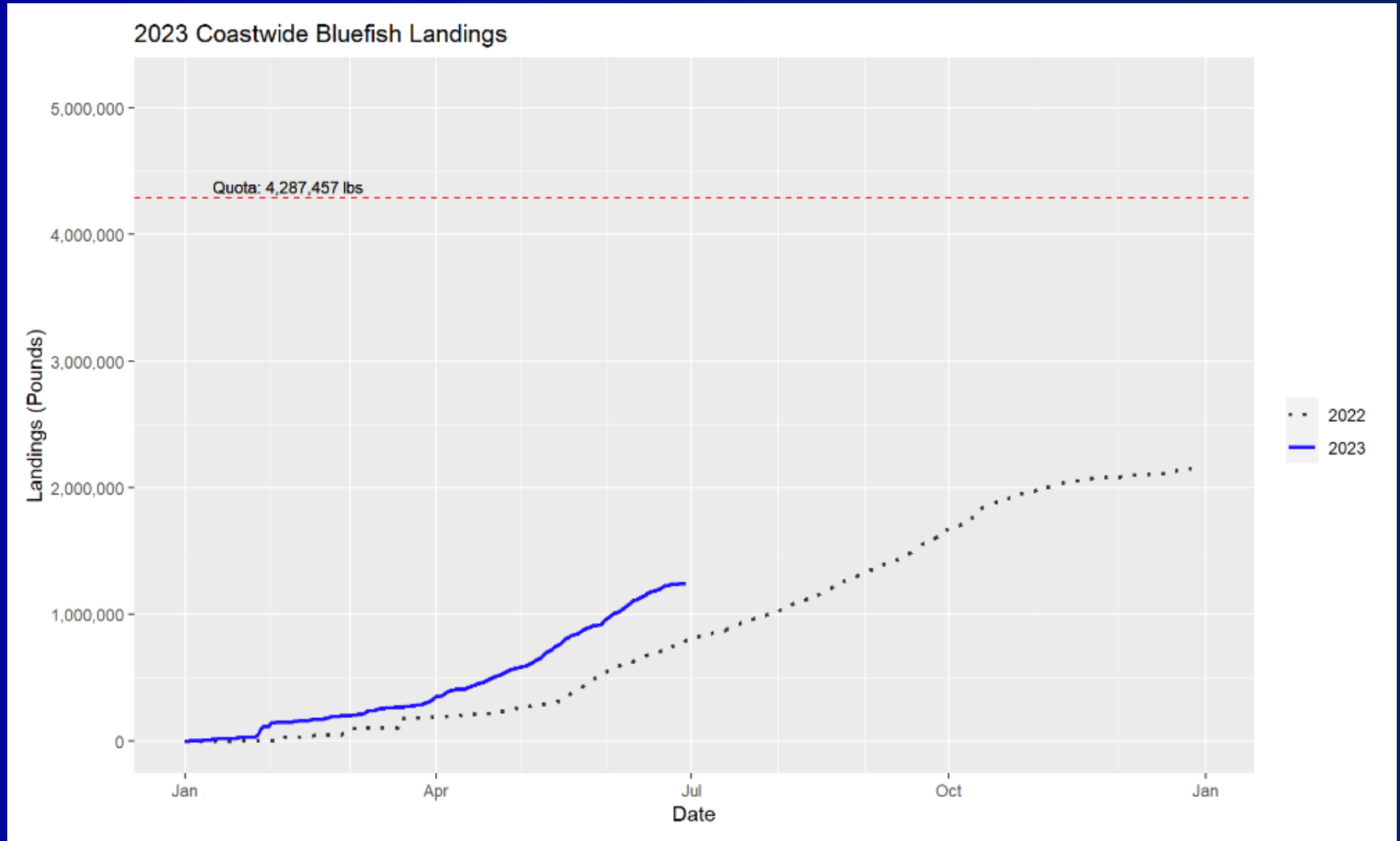


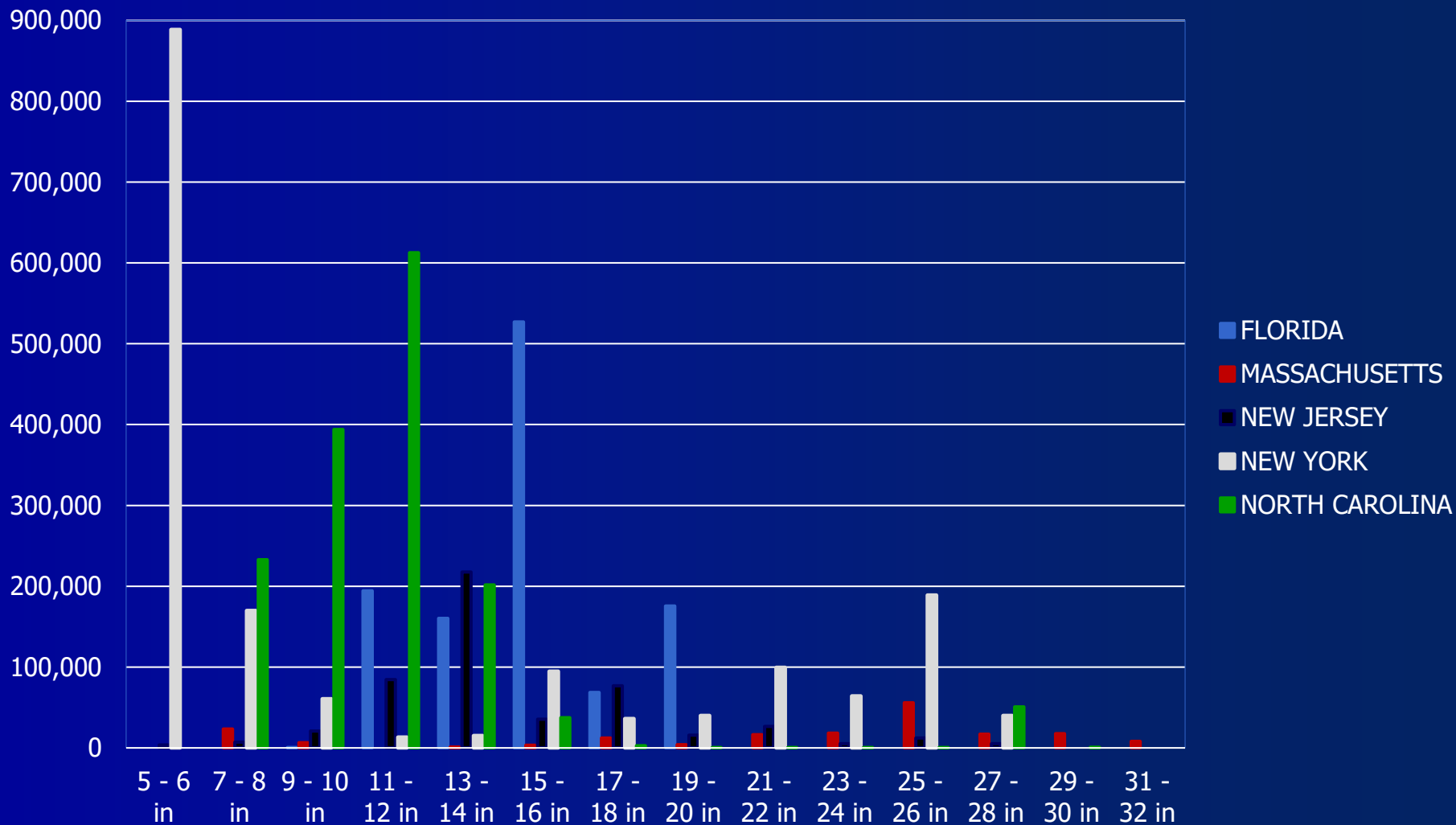
# AP FPR Questions



- What factors influenced recent catch and landings?
  - Markets/economy?
  - Environment?
  - Fishery regulations?
  - Other factors?
  
- What research recommendations do you have for bluefish?
  
- Feedback on 2019-2024 MAFMC bluefish research priorities:
  - Conduct a post-release mortality study to determine if the recreational discard mortality rate has changed over time
  
  - Develop a fishery independent index and/or fishery dependent sampling program of offshore populations of bluefish to capture larger, older fish

# 2023 quota monitoring





# Specifications Process



## Bluefish Specifications

2022

2023

