MID-ATLANTIC
FISHERY MANAGEMENT COUNCIL

RH/S Update

2024-2025 RH/S Cap

August 2023 Council Meeting

Jason Didden

Agenda

- Review River Herring/Shad (RH/S) Update
- Consider AP input and Committee Motions
  - Cap
  - Other efforts

Update Overview

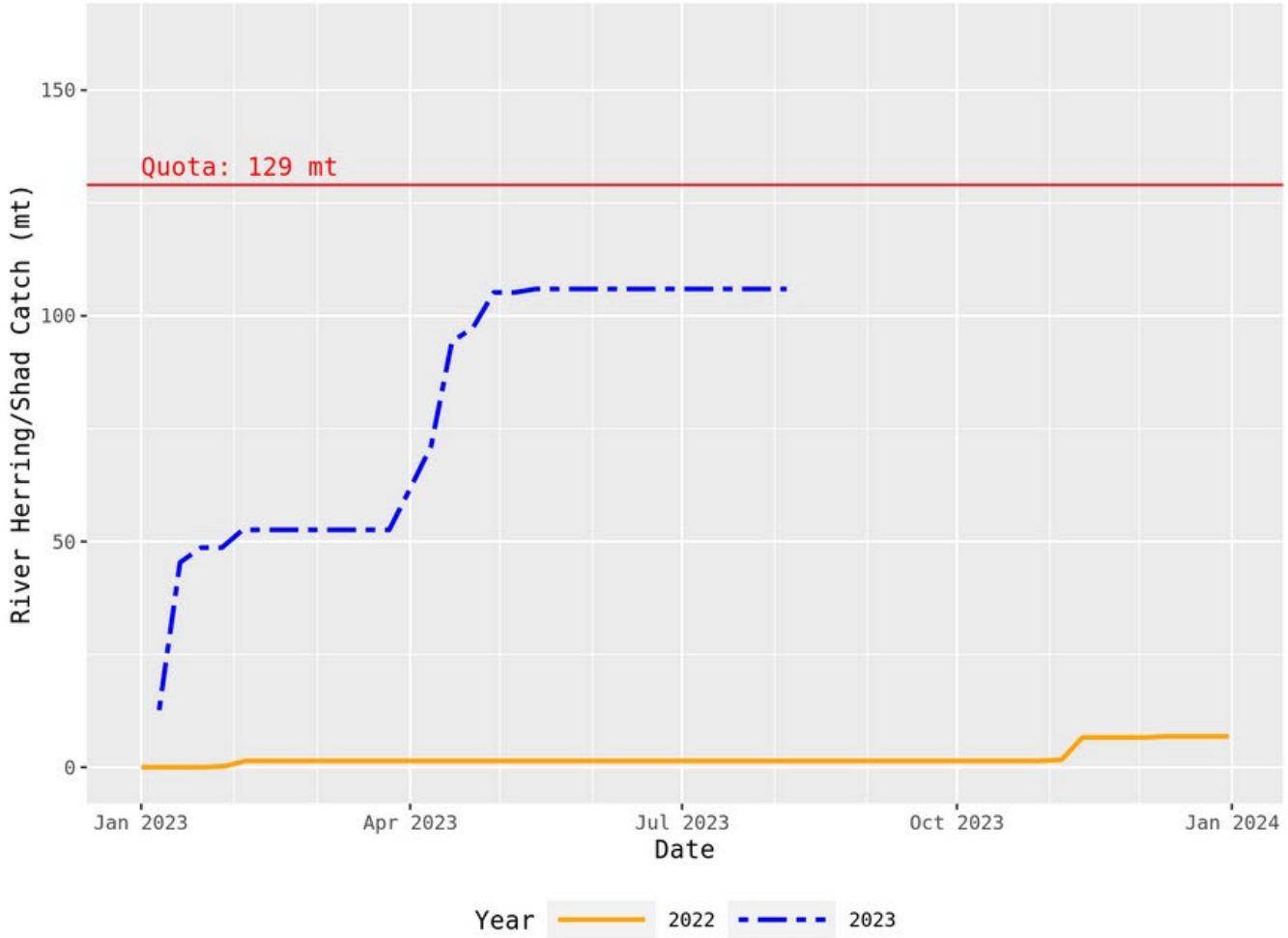
1. Cap performance
2. Cap basis
3. Recent catch
4. Observer coverage

5/6/7. Coordination

8. Other actions by Council
9. Other RH/S abundance information
10. Other information – two recent studies
11. Staff Recommendation

1. Cap performance 2023/2022

Catch Cap	Quota (mt)	Cumulative Catch (mt)	Percent Quota Caught
Atlantic Mackerel River Herring/Shad	129	105.9	82%



1. Cap performance

Year	Cap	Permit Count	Trip Count	Rounded RH/S Catch Rate[2]	RH/S Catch (mt)	Herring (mt)	Mackerel (mt)	KALL (mt)	Rounded Inseason RH/S Catch Rate[3]	Observed Trips
2014	236				6					
2015	89	13	55	0.0014	12	3,564	4,591	8,739	0.0016	4
2016	82	13	55	0.0015	13	5,682	4,336	10,172	0.0015	13
2017	82	17	71	0.0033	39	6,477	5,780	12,472	0.0033	17
2018	82	12	57	0.0089	**109**	4,067	7,927	12,143	0.0101	4
2019	82	10	31	0.0135	**92**	2,780	3,724	6,506	C	2
2020	129	15	93	0.0022	23	2,615	7,404	10,177	0.0022	6
2021	129	11	42	0.0006	3	1,335	4,816	6,299	0.0000	3
2022	129	10	17	0.0020	7	1,963	1,177	3,144	0.0020	8
2023[1]	129	11	29	0.0202	106	2,543	2,432	5,093	0.0202	5

1. Cap performance

Table 2. RH/S Species Proportions Used in Mackerel RH/S Cap Estimates

Common Name	2015	2016	2017	2018	2019	2020	2021	2022	2023[1]
Alewife	5%	39%	38%	18%	C	2%	100%	51%	83%
Blueback herring	1%	61%	60%	82%	C	98%	0%	39%	12%
American shad	94%	0%	2%	0%	C	0%	0%	10%	5%

2. Cap basis

- Previously based on 2005-2012 median RH/S catch rates and quota
- Has been 129 MT for several years – rate applied to 17,371 MT mackerel quota
- Lower cap amounts increase monitoring issues
  - Fluctuating rates early

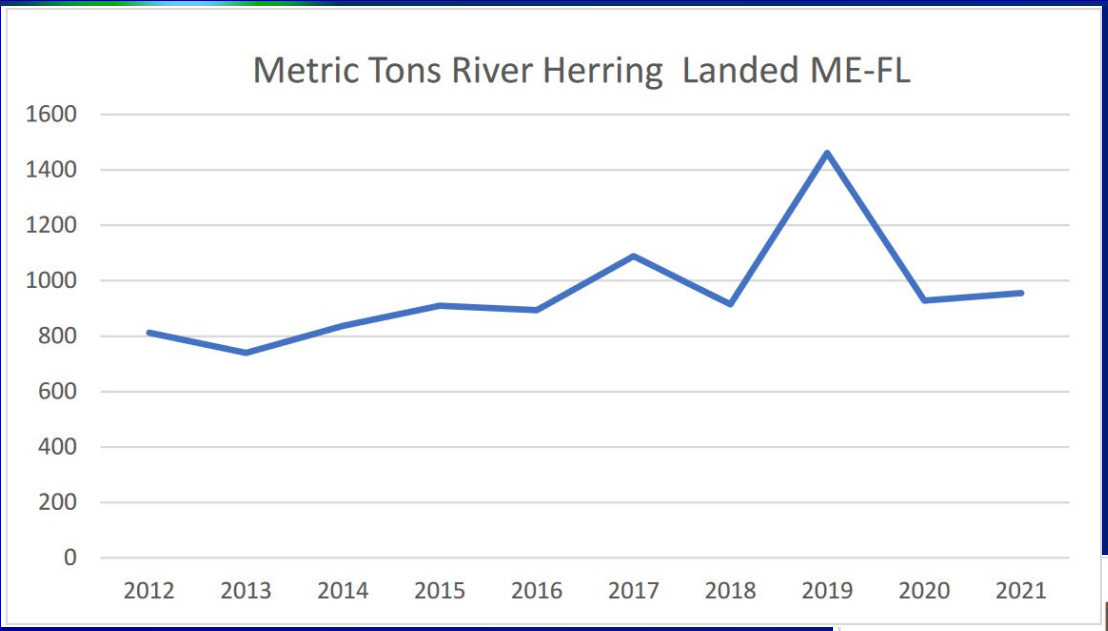
3. Recent catch – MAFMC Fisheries

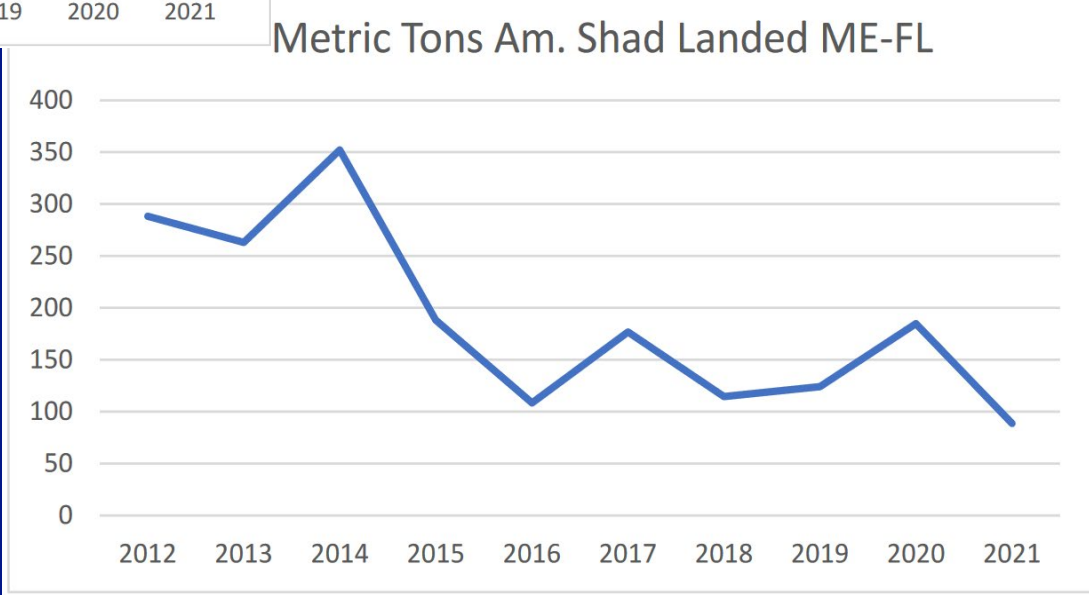
- NEFSC couldn't update typical tables
  - New catch accounting system (CAMS)
- Staff analyses:

Atlantic Mackerel: 3.5 observed mackerel trips (mackerel accounted for at least 50% of retained catch) per year on average 2019-2022 versus the 7 average observed trips over 2017-2019. 2019 and 2020 were included due to the low numbers of observed trips. The mackerel fishery, considering an average of 5,267 MT of landings, annually (2019-2022) caught about 73,124 pounds of blueback herring, 31,608 pounds of alewife, and 1,418 pounds of American shad.

Longfin Squid: 153 observed longfin squid trips (longfin accounted for at least 40% of retained catch) per year on average 2021-2022 versus the 394 average observed trips over 2017-2019. The longfin squid fishery, considering an average of 14,624 MT of landings, annually (2021-2022) caught about 16,559 pounds of American shad, 11,709 pounds of alewife, 2,427 pounds of hickory shad, 2,022 pounds of blueback herring.

3. Recent catch - Landings





3. Recent catch – Landings 2021

	River Herring	American Shad	Hickory Shad
Maine^	1,825,855	C	C
New Hampshire	0	0	0
Massachusetts	0	0	0
Rhode Island	0	0	^
Connecticut	0	27,233	0
New York^	2,458	1,129	C
New Jersey	0	C	0
Pennsylvania	0	0	0
Delaware	0	C	0
Maryland^	0	0	0
D.C.	0	0	0
PRFC	0	11,331	0
Virginia	0	4,246	1,955
North Carolina	0	58,885	95,372
South Carolina	278,801	59,964	C
Georgia	0	15,764	C
Florida	0	0	0
Total Directed	2,106,663	162,822	97,435
Total Bycatch	451	32,820	1,984
Total	**2,107,114**	**195,642**	**99,419**

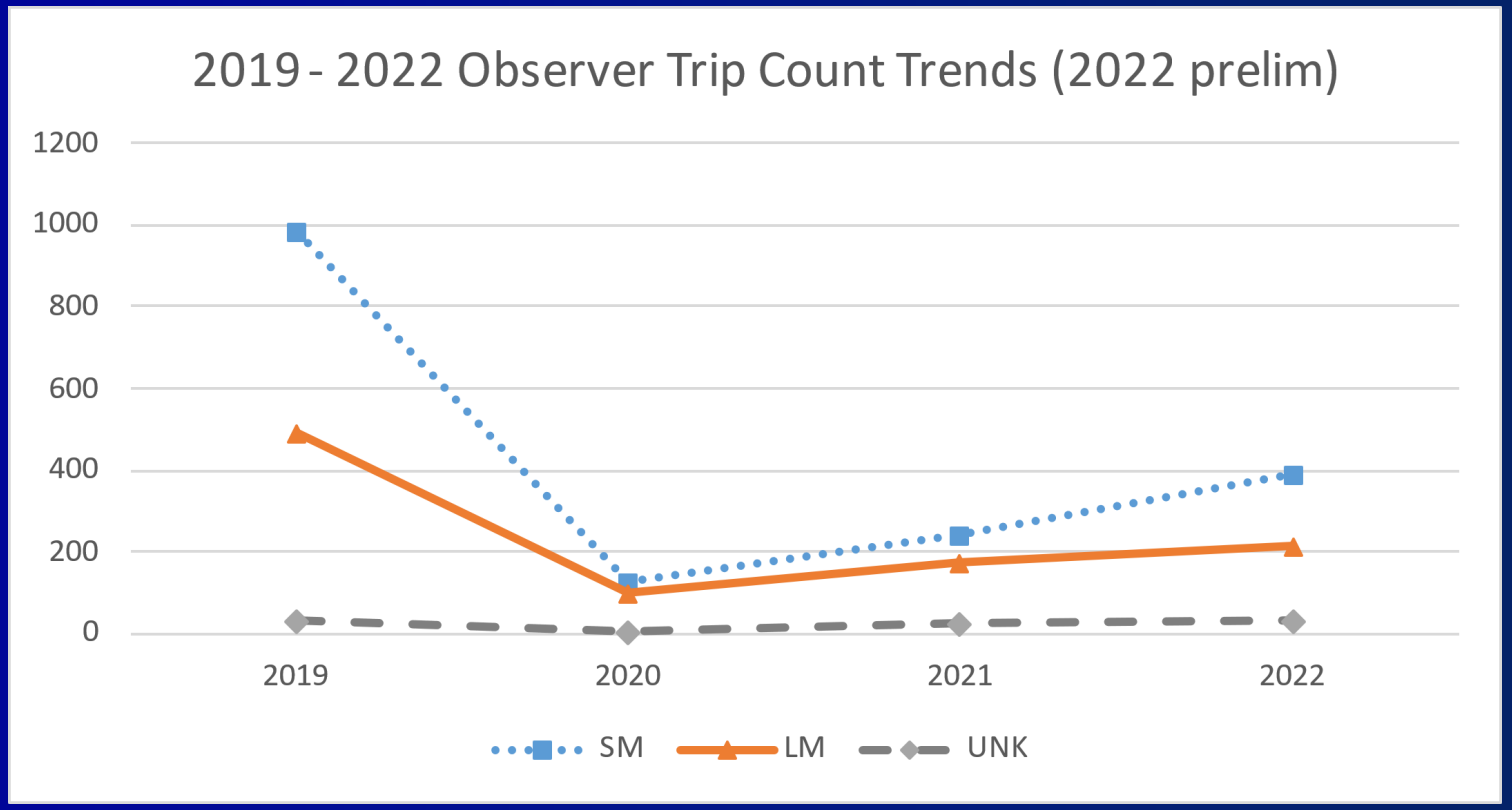
4. Observer coverage

- NEFSC couldn't update typical tables (CAMS)
- SBRM:

Mid-Atlantic	Small Mesh (< 5.5 inch)		Large Mesh		Mid Water Trawl	
	VTR	Observed	VTR	Observed	VTR	Observed
July 2018 to June 2019	3833	631	2763	210	18	0
July 2019 to June 2020	NA - Covid					
July 2020 to June 2021	2530	58	3587	46	20	0
July 2021 to June 2022	2308	160	3001	138	0	0
New England	Small Mesh		Large Mesh		MWT	
	VTR	Observed	VTR	Observed	VTR	Observed
July 2018 to June 2019	3943	392	4866	440	153	7
July 2019 to June 2020	NA - Covid					
July 2020 to June 2021	3109	83	5082	130	71	3
July 2021 to June 2022	2540	194	4608	195	19	5

4. Observer coverage

- Custom request to NEFSC
- Bottom trawl Mid Atl and SNE 5.5” +/-



4. Observer coverage

- SBRM "What if analysis"
- What if river herrings were an SBRM species group for purposes of coverage?
- May or may not increase relevant coverage (mid-water trawl)
- Tradeoffs?

4. Observer coverage

- SBRM "What if analysis"
- For each fleet, a CV of 30% or less is to be attained for each species group within that fleet
- E.g. want a 30% CV for combined summer flounder/scup/BSB discards in each fleet, e.g. Mid-Atlantic small mesh
- Target limited sea days given not enough $ to meet everything (plus turtles) (in a standardized way)

4. Observer coverage

- If River Herrings added as new fleet, saw a general shift in allocated sea days from the MA to NE otter trawl fleets. The most pronounced shifts occurred in the MA small mesh otter trawl fleet that lost 374 sea days and the NE large mesh otter trawl fleet that gained 506 sea days

4. Observer coverage

- Mid Water Trawl (MWT) didn't get extra coverage because not discarding

- Possible follow-up: Treat all river herring observations on MWT as discarded and re-run…
  - Normally either see fish as landings or discarded – retained river herring can "disappear," so really are more like discards…

5/6/7. Coordination

- NEFMC Alignment – NA
  - NE potential future actions
  - Cap basis and time/area closures
- River herring forum – Conservation Plan
- Manomet project
- SSC – NA

8. Other actions by Council

- Low mackerel quotas – 2023 is 1/5 of average 1997-2022 commercial landings

- 2024/2025?

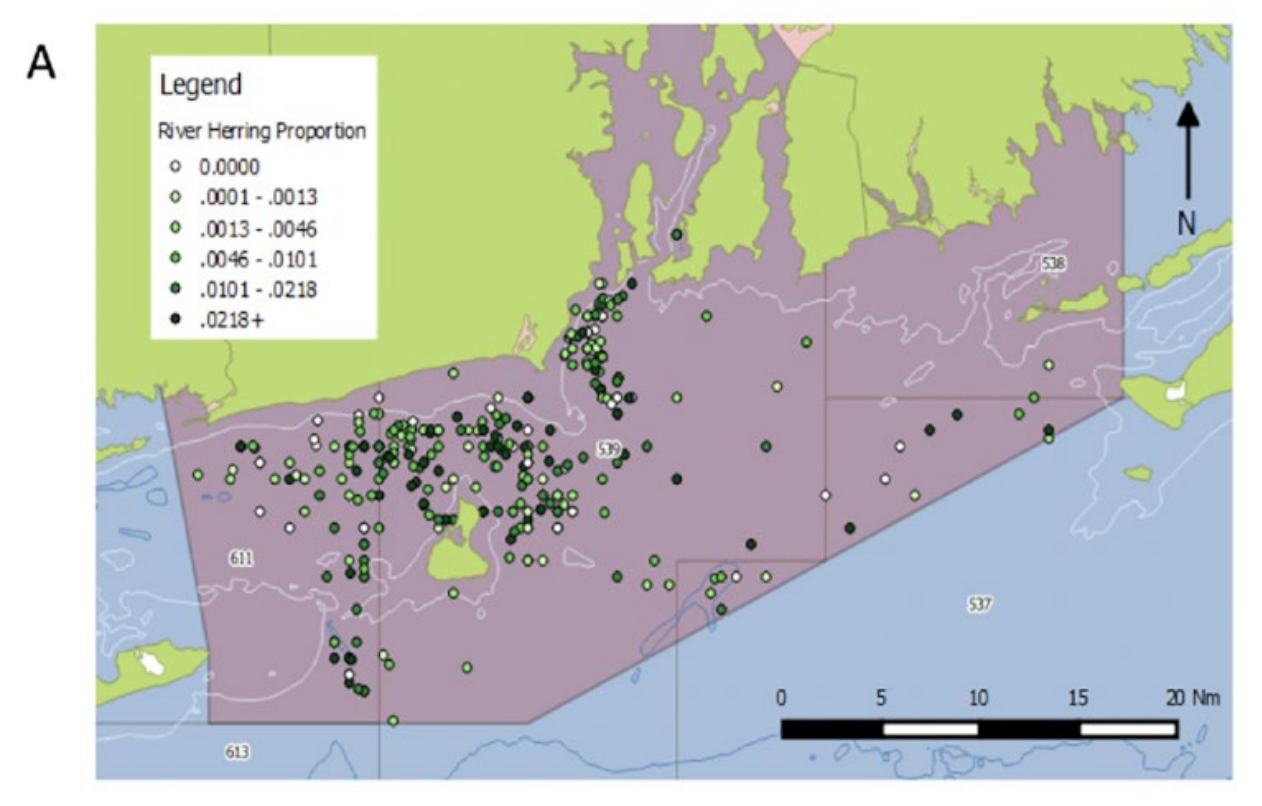
9. Other RH/S abundance information

- River herring assessment
  - Review end of this year or next year
  - Bycatch cap term of reference
- Shad 2020

- Indices vary…

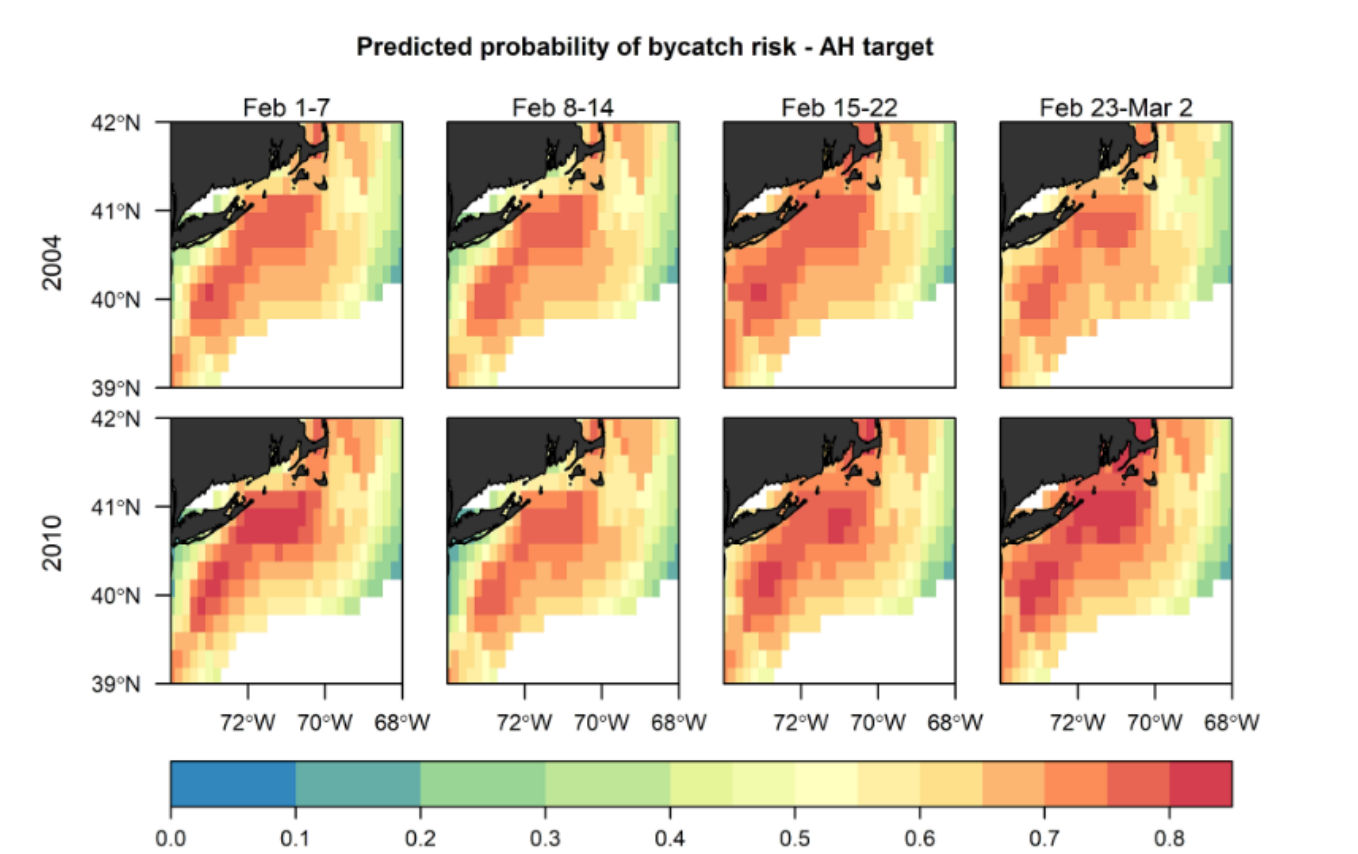
10. Other information – two recent studies

1. Reid et al 2022: Totals in line with previous analyses – detail on regions where RH/S bycatch in a "focal" area originated from 2006-2010



10. Other information – two recent studies

2. Roberts et al 2023: Potential for using environmental data to predict bycatch risk areas



g. 7. Spatial output of forecasted risk predictions generated with the SubX MME for vessels targeting Atlantic herring in the Southern New England region.

11. Staff Recommendation

- Given genetic data, knowing if bycatch amount in any given year is "OK" regionally is going to be very difficult (even if could get a coastwide cap)

- Instead: More promise in time/area risk work integrating environmental data

AP Input

- RH/S migration from Canada should be considered
- Opposing views on changing cap
- Opposing views on impacts from bycatch
- Time/area closure options have not been deemed viable in the past
- Windfarm impacts
- Low mackerel quotas limit potential RH/S impacts

RH/S Committee Motions

- "I move that the Committee support an 89 MT RH/S cap."

- "I move to recommend that the Council include in 2024 priorities discussion particular consideration of exploration of modeling for shad and river herring bycatch avoidance approaches."

Staff Recommendation

- RH/S cap unneeded if no mackerel fishery

- Staff supports Committee motion regarding exploring bycatch modeling – can be considered in Oct/Dec 2024 priorities discussions.