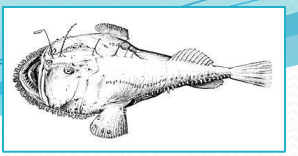
Monkfish Advisory Panel Meeting

November 28, 2022
via webinar

New England
Fishery Management Council

Webinar technical assistance: helpdesk@nefmc.org

Introductions



Monkfish Advisory Panel
Greg DiDomenico, NJ (Chair)
James Dopkin, NJ
Timothy Froelich, NY
Michael Karch, NJ
Gregory Mataronas, RI
William McCann, MA
Randall Hayes Morgan, MD
Nicholas Muto, MA
John Our, MA
Ted Platz, RI
Christopher Rainone, NJ

Monkfish Committee
Elizabeth "Libby" Etrie, MA (Chair)

Council Staff
Rachel Feeney (PDT Chair)
Jenny Couture

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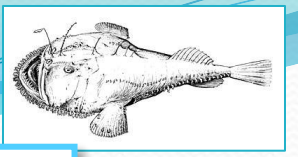
Agenda



10:00	**Introductions, approve agenda, and review timeline**
10:15	**Framework Adjustment 13** (2023-2025 specifications, other measures)

- Receive an update on and discuss recent work
  - 2022 monkfish management track assessment and peer review
  - Recommendations of the Scientific and Statistical Committee on setting the overfishing limits, acceptable biological catches, and discard deductions
  - Range of alternatives in this action
  - Impacts analysis
- Recommend final preferred alternatives to the Committee

12:00 PM	**Lunch break**
12:45	**Framework Adjustment 13** (continued if needed)
1:45	**Council priorities regarding monkfish**

- Finalize recommendations to the Committee for 2023 Council management priorities regarding monkfish

2:30	**Other business**
3:00	**Adjourn**

Any revisions?

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Monkfish Timeline – near term

Month	Day	Meetings and Milestones
Nov.	28	AP mtg: final recommendations on FW13 and 2023 priorities
	28	Documents due for NEFMC meeting
	29	Cte mtg: final recommendations on FW13 and 2023 priorities
Dec.	6	NEFMC mtg: monkfish assessment summary and SSC report
	7	NEFMC mtg: FW13 final action
	8	NEFMC mtg: 2023 priorities
	14	MAFMC mtg: FW13 final action
	remainder	Staff prepares FW13 for preliminary submission

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FY 2022 landings (as of October, 50% of year complete)

	MAY - 2022	JUN - 2022	JUL - 2022	AUG - 2022	SEP - 2022	OCT - 2022	Oct FY2022		FY 2022*		FY 2021*	
							Metric Tons	Percent of Area	Oct, 22 as a % of Target TAL	Target TAL Metric Tons	Oct, 21 as a % of Target TAL	Target TAL Metric Tons
NORTHERN	**221**	**358**	**364**	**480**	**336**	**413**	**2,172**	**67%**	**33%**	**6,624**	**11%**	**6,624**
OTTER TRAWL	199	198	183	236	168	312	1,296	40%	20%		**9%**	
GILLNET	10	125	158	240	167	96	796	25%	12%		**2%**	
DREDGE	0	1	4	3	0	4	12	0%	0%		**0%**	
OTHER GEARS	12	34	19	1	1	1	68	2%	1%		**0%**	
SOUTHERN	**549**	**475**	**36**	**5**	**4**	**4**	**1,073**	**33%**	**18%**	**5,882**	**15%**	**5,882**
OTTER TRAWL	12	12	4	2	1	2	33	1%	1%		**1%**	
GILLNET	483	426	13	0	0	0	922	28%	16%		**12%**	
DREDGE	18	18	15	3	3	2	59	2%	1%		**1%**	
OTHER GEARS	36	19	4	0	0	0	59	2%	1%		**1%**	
ALL AREAS	**770**	**833**	**400**	**485**	**340**	**417**	**3,245**	**100%**				
OTTER TRAWL	211	210	187	238	169	314	1,329	41%				
GILLNET	493	551	171	240	167	96	1,718	53%				
DREDGE	18	19	19	6	3	6	71	2%				
OTHER GEARS	48	53	23	1	1	1	127	4%				

More landings in North than South; little activity in South since June

Totals so far:
33% of Northern TAL
18% of Southern TAL

Compared to FY 2021, landing rate higher in North, similar in South

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Table from GARFO Monthly Quota Monitoring Reports

10:15 - Framework Adjustment 13

Purpose

Receive update on progress.

- -assessment
- -SSC recommendations
- -alternatives and impacts

Recommend preferred alternatives.

Relevant documents

2a: Assessment report
2b: Peer review report
3: SSC recommendations
4a: Framework 13
4b: Decision document

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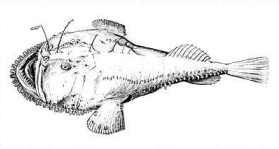
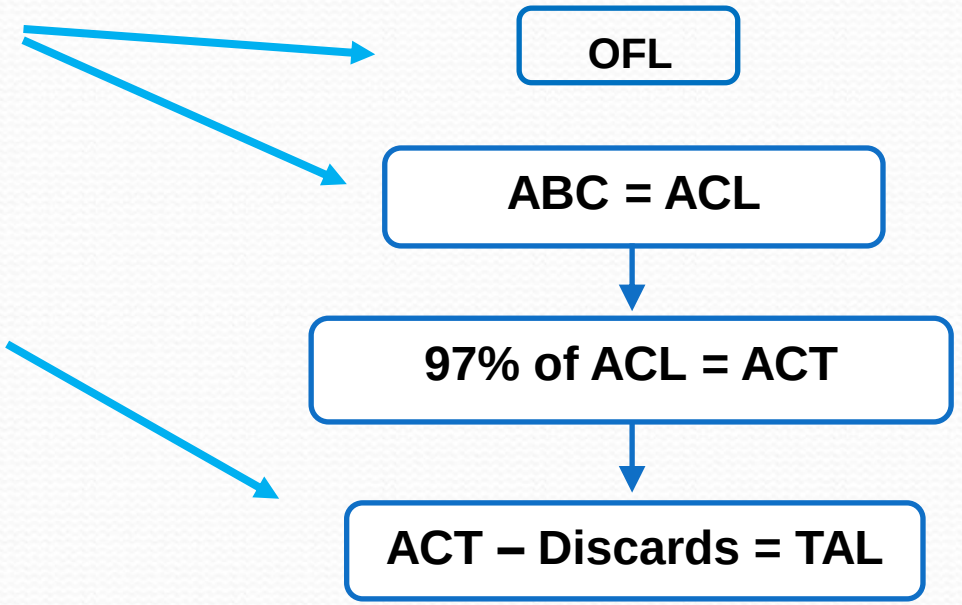
Framework Adjustment 13

Actions:

1. Overfishing limit and acceptable biological catch for North and South for FY 2023-2025 and other specifications (e.g., discard deduction, total allowable landings)
2. Effort controls (Days-At-Sea, possession limits)
3. Gillnet mesh size





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2022 Monkfish Management Track Assessment

Doc #2a

Prior public meetings		
Aug 30	AP & Cte	Council staff gave a heads up that survey was trending downward, ABCs may be lowering
Sept 20-23	Peer review meeting	
Sept 27	PDT	Preliminary outcomes presented
Sept 29	NEFMC	
Oct 6	MAFMC	
Oct 18	PDT	Peer review report available
Oct 25	SSC	Assessment and peer review presented

The following slides are a Council staff SIMPLE summary, highlighting points most relevant to specifications. NEFSC will present the full assessment report two more times at NEFMC and MAFMC meetings.

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Assessment: TOR 1: Estimate catch from all sources including landings and discards

- Changes to discard estimation methods
  - Made consistent with the regional norm (Standardized Bycatch Reporting Methodology)
  - Previously excluded data were added back to dataset
  - Corrected statistical areas used to define North and South areas to be consistent with landings.
  - Changed assumed discard mortality for scallop dredge gear, from 100% to 64% based on recent research. All other gear still at 100%.
- Updated time series from 2019 (1989-2018) assessment to 1989-2021.

Per NEFMC request! →

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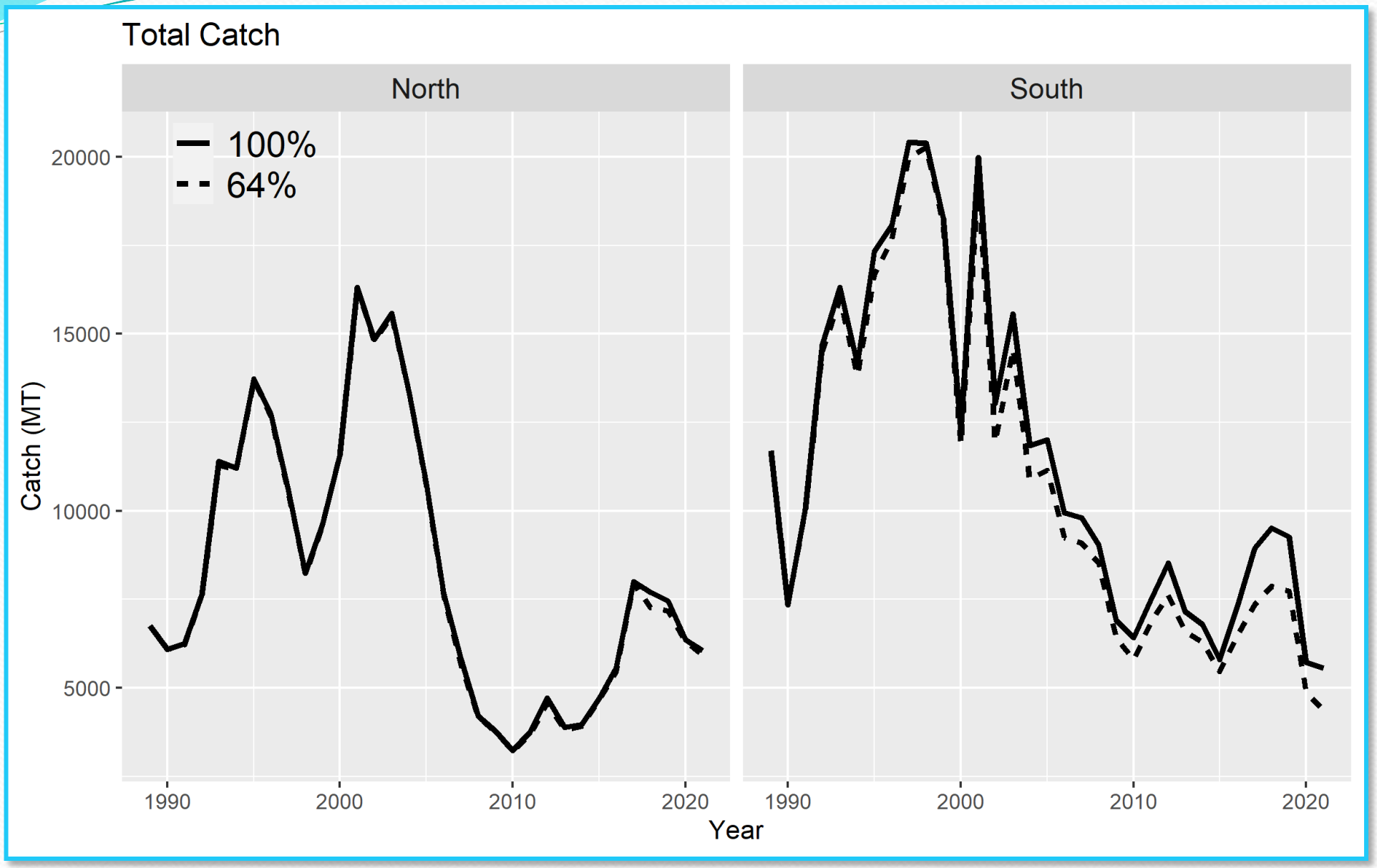
Assessment: Figure 6 – catch time series



Updated time series with **all** discard data corrections

Updated time series except dredge mortality rate

Assessment: **TOR 2: Evaluate indices used in the assessment**

- NMFS spring and fall bottom trawl survey indices used updating catch advice.
- Other updates provided:
  - Indices and length frequencies: ASMFC (North only), NMFS scallop (South only)
  - Recruitment from NMFS trawl surveys
  - Biomass estimated from paired tows of chainsweep and rockhopper sweep of fall NMFS trawl surveys

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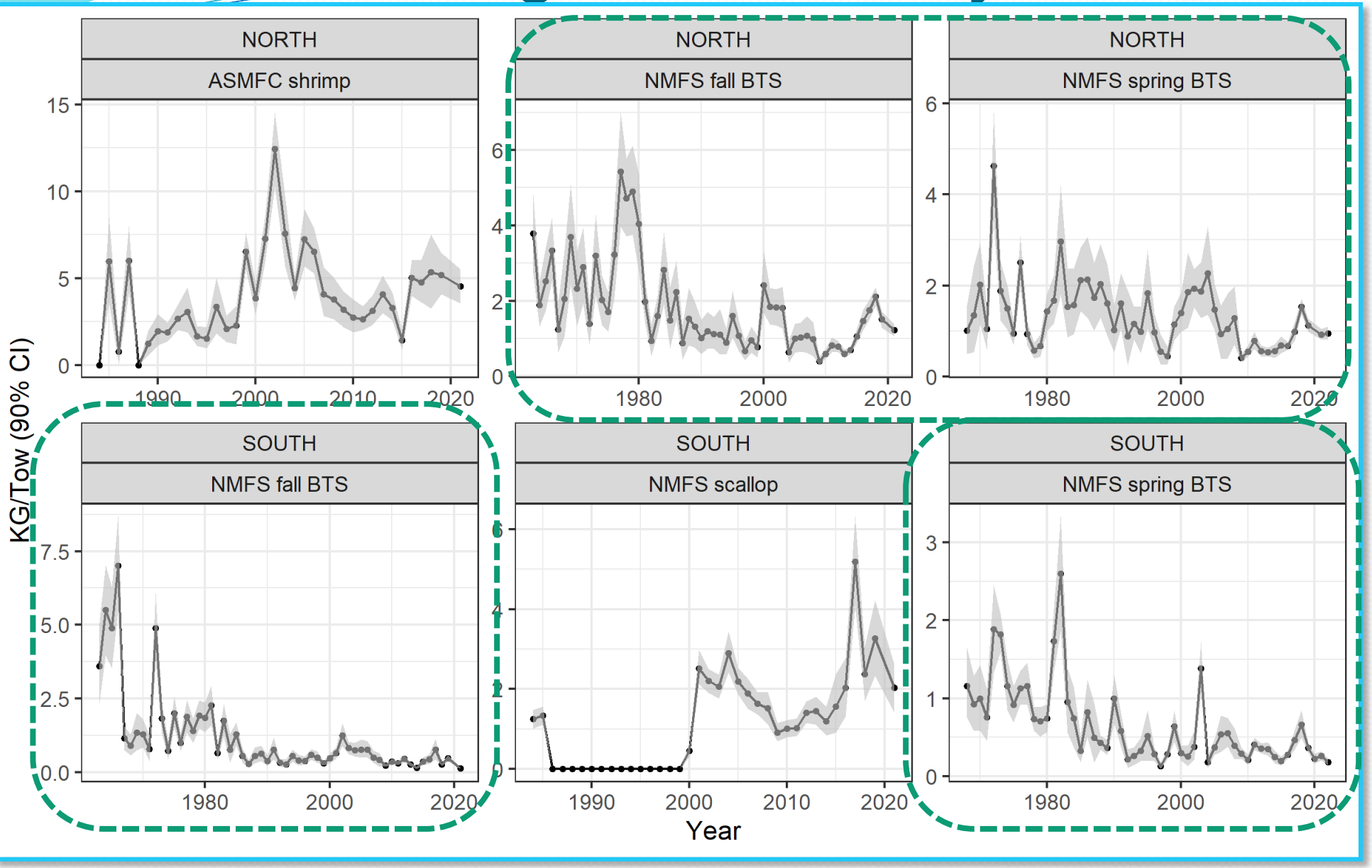
Assessment: Figure 7. Survey indices of abundance



Used in updating catch advice

Assessment: TOR 3. Estimate annual fishing mortality, recruitment and stock biomass …using approved assessment method…or prepare backup approach for providing scientific advice to management

- Analytical assessment failed in 2016, not available for 2016, 2019, and 2022 assessments.
- “Ismooth” backup approach used in 2016, 2019, 2022: spring and trawl survey indices combined and smoothed. Indices from latest 3 years provide direction and rate of change (i.e., survey multiplier).
- Catch advice: future catch should change based on recent trawl survey performance (e.g., if survey has decreased, catch should decrease).

*Ismooth: Trawl survey multiplier * latest 3-year average catch = catch advice*

Multipliers: North = 0.829 South = 0.646

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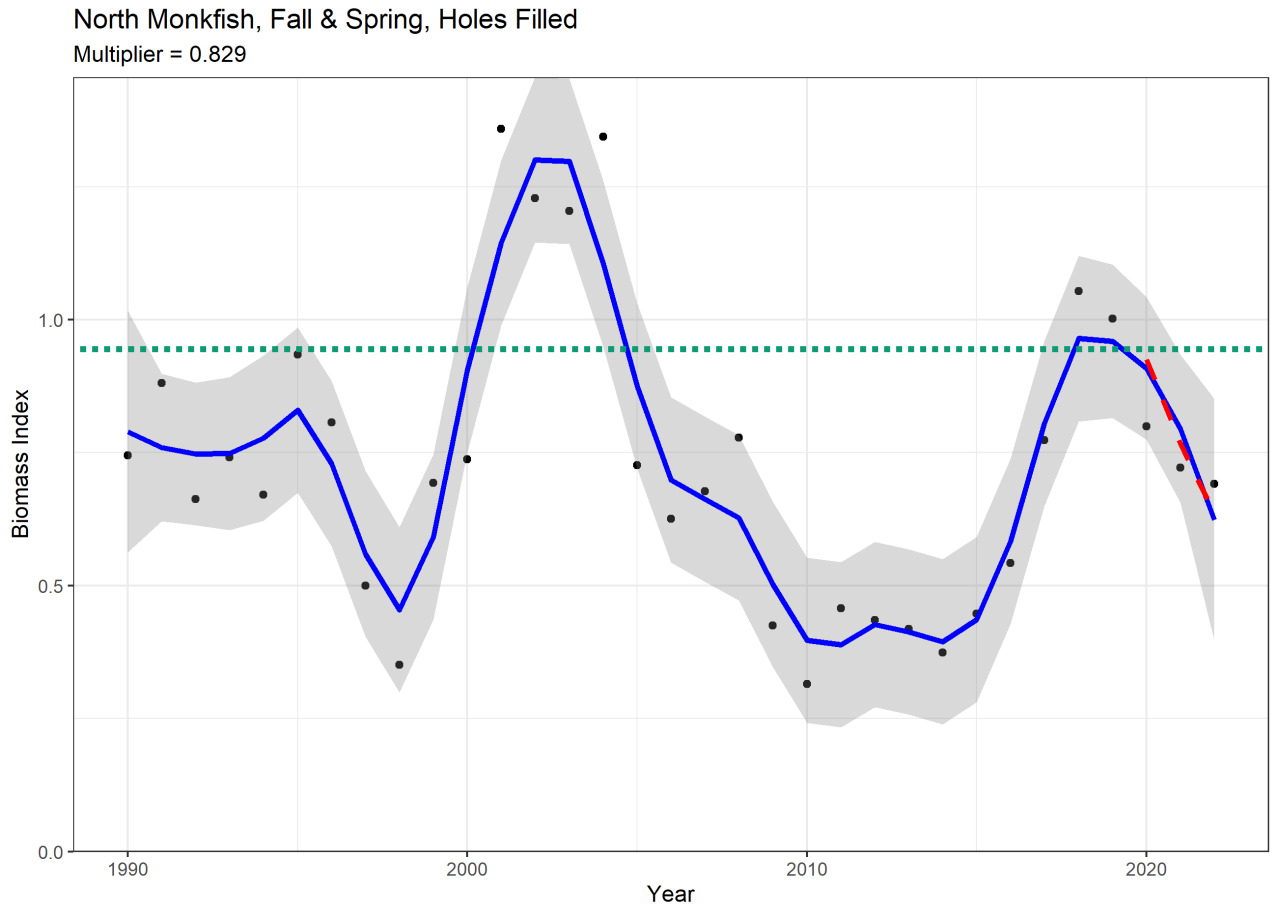
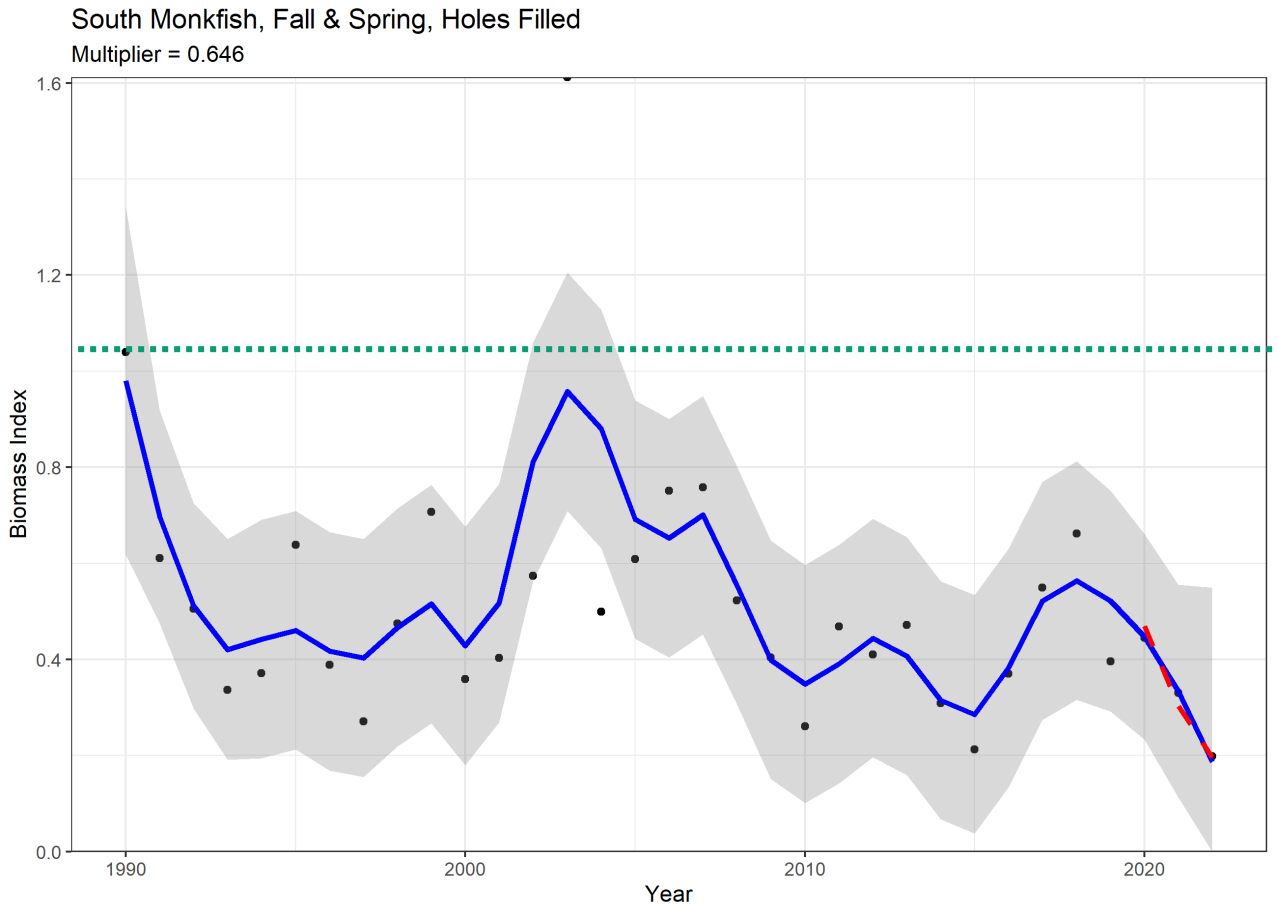
Assessment: Figures 25 and 26. Ismooth results

NORTH



SOUTH



Indices scaled to timeseries mean = 1 (fall since 1963, spring since 1968)

Assessment: Peer Review

Doc #2b

- Agreed that stock status should be considered unknown.
- Ismooth approach and resultant multipliers accepted as basis for providing catch advice
- Lack of consensus on whether the multipliers should be applied to recent catch or existing ABC (method used for FY 2020-2022)
- Suggested improvements
  - Continued analysis related to growth as it may allow cohort tracking, acknowledging that an ageing method is unlikely
  - Consider a two-stage (e.g., delay difference) assessment at a future research track

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Questions?

SSC Recommendations – Overfishing Limit (OFL)

Doc #3

Table 1. Potential monkfish FY 2023-2025 OFLs for SSC consideration.

Management Area	Status Quo OFL	PDT recommended OFL
Northern	17,805 mt	undetermined
Southern	23,204 mt	undetermined

SSC recommends OFLs be undetermined

- OFL cannot be calculated without absolute biomass and a fishing mortality rate.
- Consistent with the unknown stock status conclusion of last three assessments.
- Status quo OFLs based on an assessment that was invalidated in 2016.

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SSC Recommendations – Acceptable Biological Catch (ABC)

- PDT presented two approaches

Ismooth approach (from 2016, 2019, 2022 assessments)

*Trawl survey multiplier * latest 3-year average catch = catch advice = ABC*

North: 0.829 * 6,265 mt = 5,360 mt
South: 0.646 * 5,655 mt = 3,653 mt

Recent ABC approach (discussed at 2022 peer review, used in FY 2020-22)

*Trawl survey multiplier * latest ABC = catch advice = ABC*

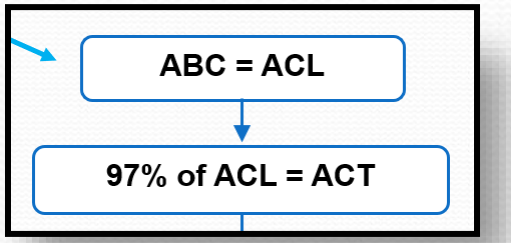
North: 0.829 * 8,098 mt = 6,713 mt
South: 0.646 * 12,316 mt = 7,956 mt

- SSC recommendation

Ismooth approach

*Trawl survey multiplier * latest 3-year average catch = catch advice = ACT*

North: 0.829 * 6,265 mt = 5,360 mt = ACT
South: 0.646 * 5,655 mt = 3,653 mt = ACT



North ABC = 5,526 mt
South ABC = 3,766 mt

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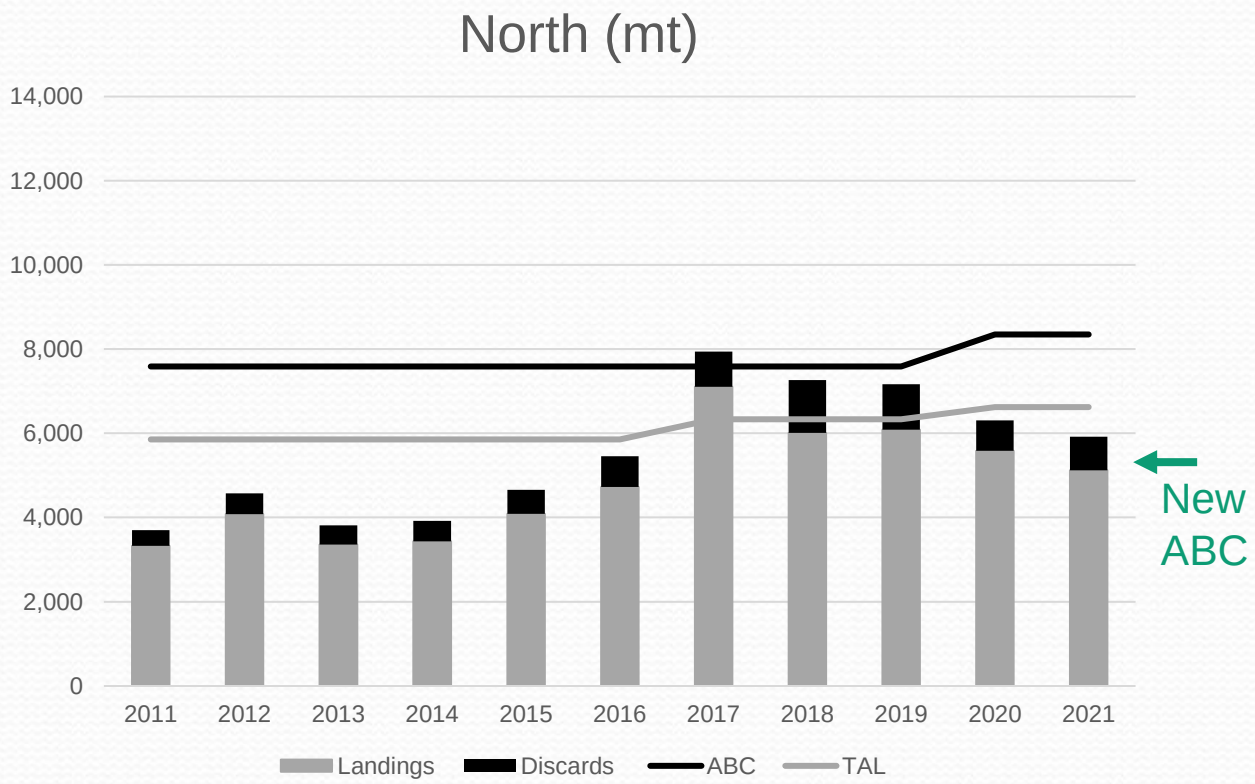
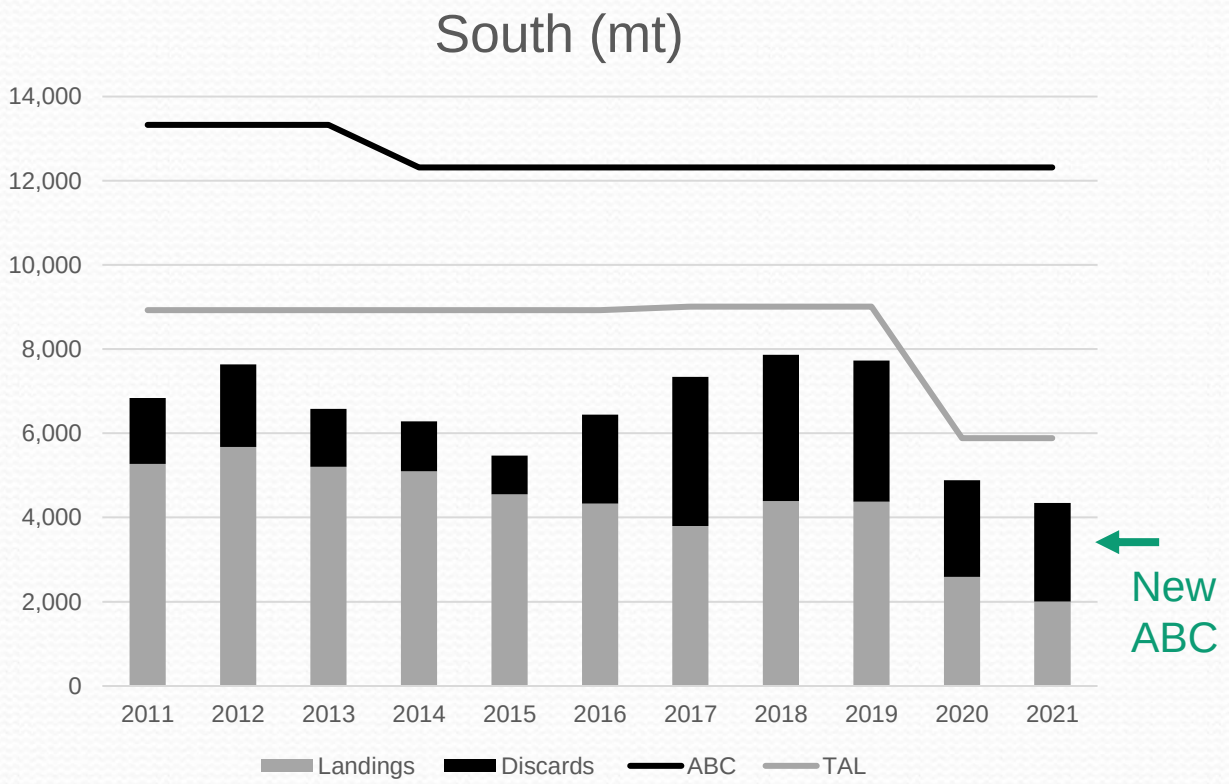
Fishery Performance





North ABC = 5,526 mt
South ABC = 3,766 mt

NOTE: Calendar year landings and discards based on 2022 assessment data, not the FY year-end ACL accounting data.

SSC Discussion about ABC

- Recommended continued use of Ismooth index-based assessments for setting monkfish catch advice.
- Noted simulations of the Index-Based Methods Working Group indicated that the Ismooth approach is expected to prevent overfishing.
- Concern that ABCs since 2014 were based on an assessment rejected in 2016.
- Noted recent catches < recent ABCs for several reasons (discard deduction, scallop fishery shifts, low prices) “causing uncertainty about relative stock status.”
- Setting ABC based on multipliers applied to catch can lower catch in future years if catch < ABC.
- Since discards are deducted from ACT, Ismooth catch advice corresponds more closely to ACT than ABC.

Questions?

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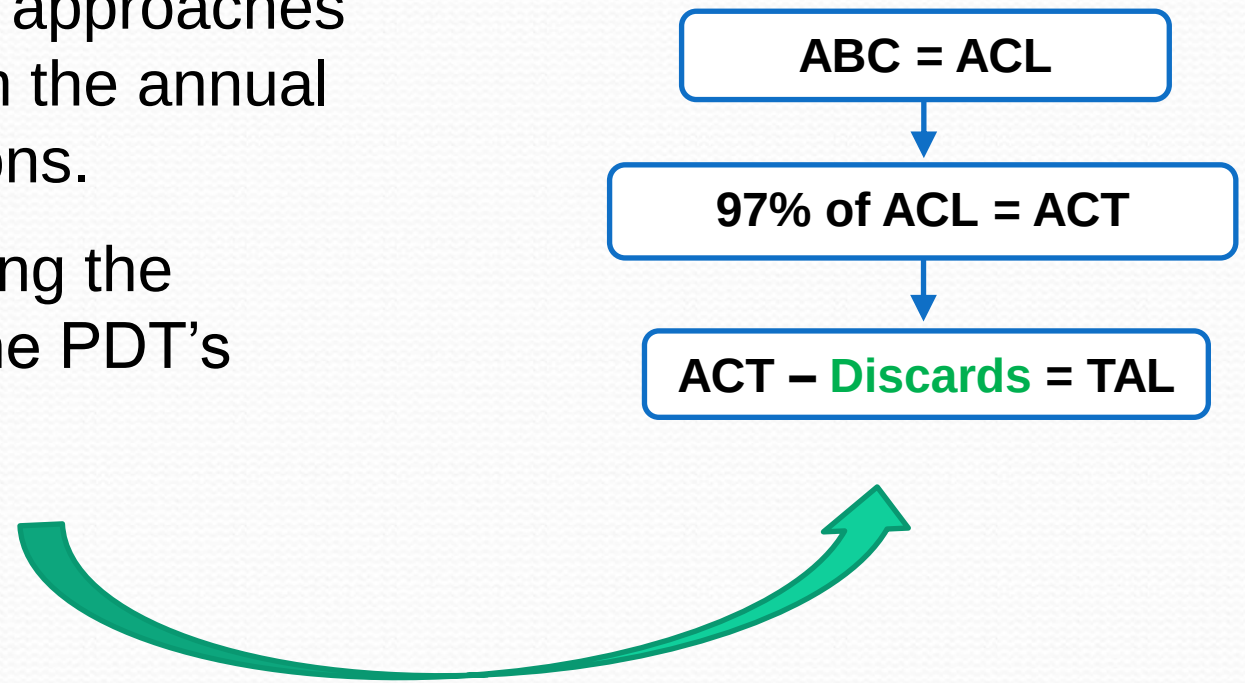
SSC Discussion: Discard Deduction

1. Reviewed PDT analyses of alternate approaches for setting the discard deduction from the annual catch target when setting specifications.
2. Recommended an approach for setting the discard deduction, commenting on the PDT's recommendations.



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Project Origins

Current method for setting the discard deduction

Equation 1:	discard rate = latest 3-year mean discards / catch
Equation 2:	expected discards = (ACT * discard rate)
Equation 3:	TAL = ACT – expected discards

- For FY 2020-22, discard rate and expected discards increased due to 2015-year class discards in FY 2017-19, mostly in dredge gear, mostly in South.
  - North: discard rate 14% to 18%; discards 1,026 to 1,477 mt
  - South: discard rate 25% to 51%; discards 2,936 to 6,065 mt

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Project Origins

- In 2020-2021, Council contracted Fishery Applications Consulting Team, LLC (Dr. O'Keefe) to analyze discard deduction performance and alternate methods. Explored 2, 5, 10-year time series; highest recent discards; recruitment; etc.

- In September 2021, Committee reviewed and preferred to not change methods for the FY 2022 discard deduction, mid-specification cycle.

- In 2022
  - PDT tasked with exploring alternative approaches to consider for Framework 13 FY 2023-25 specifications (and beyond?).
  - Monkfish Committee's goal of the deduction: "*…provide as much stability to the directed fishery as possible (minimizing change between specification cycles).*"
  - Council approved not considering recruitment data in the current analyses.
  - PDT feels that the accuracy of the discard prediction is very important to consider.

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Alternatives Analyzed

	Time series?	Mean or median?	Discard data?
Alt. 1	3-year	Mean	Discard:catch
Alt. 2	10-year	Mean	Discard:catch
Alt. 3	10-year	Median	Discard:catch
Alt. 4	10-year	Mean	Discards
Alt. 5	10-year	Median	Discards

Rationale for range of alternatives

- Discard:catch may be more appropriate when discards are in the directed fishery (more so in North?).
- Median can reduce weight of outliers. FishApps found similar results between median and mean.
- 10-year time period may decrease effect of anomalies, help with the Committee's stability goal.
- FishApps had explored use of 2- and 5-year approaches, with similar results as 3-year.

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Methods

- Under each alternative
  - What would the FY 2023-2025 specifications be:
    - Keeping FY 2020-22 ACT constant?
    - ACT updated using Ismooth approach (pending SSC recommendations)?
  - Hindcast performance: How would projected discards and TAL have compared to realized discards and TAL back in time (since FY 2002)?
    - Accuracy of discards
    - Stability of discards
    - Stability of TAL

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SSC Recommendations: Discard Deduction

The SSC recommends the following approach for setting the discard deduction, which supports the PDT's recommendations:

- **Use of 10-year moving time series**
- **Use of median discards**
- **Use of direct discard amount**
- **Updates to occur every 3 years**

SUMMARY OF RECOMMENDATIONS

1. **The SSC recommends that Alternative 5 from the Monkfish PDT Memo be used for setting the discard deduction for both the Northern and Southern Management Areas:**
    a. **Latest 10-year median of discards**
2. **The SSC recommends analysis of a recruitment index as a predictor for future discards.**
3. **The SSC recommends further evaluation of the accuracy of discard information from fisheries that catch monkfish, including both targeted and bycatch fisheries.**

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Questions?

Framework Adjustment 13: purpose and need

Need for Framework 13	Corresponding Purpose for Framework 13
To prevent overfishing while promoting the full utilization of optimum yield and to ensure that monkfish is managed consistent with its stock status and the requirements of the MSA.	Specify OFL and ABC, set specifications for the 2023-2025 fishing years, and adjust effort controls to help ensure that the fishery remains within specifications.
Continue to address and minimize the catch and bycatch mortality of juvenile monkfish and other species caught in gillnet gear.	Consider measures that would increase the mesh size of gillnets used in the monkfish fishery.

This action is intended to help meet the objectives of the Monkfish FMP, as developed in the Original FMP (NEFMC & MAFMC 1998):

1. To end and prevent overfishing; rebuilding and maintaining a healthy spawning stock;
2. To optimize yield and maximize economic benefits to the various fishing sectors;
3. To prevent increased fishing on immature fish;
4. To allow the traditional incidental catch of monkfish to occur.

Alternatives: Action 1 – 2023-2025 specifications

Alternative 1: No Specifications. OFL, ABC, ACL, TAL = 0 mt. This FMP does not have "default" specifications. Current specifications expire April 30. Accountability measure still in place (pound for pound payback of ACL overage).

Alternative 2: Status Quo. Keep current numbers. Discards are 2016-2018 average of monkfish discards: monkfish catch

Table 3. Status quo specifications from FY 2020-2022, carried forward for FY 2023-2025 (Alternative 2).

	Northern FMA (mt)	Southern FMA (mt)
OFL	17,805	23,204
ABC = ACL	8,351	12,316
ACT (97% of ACL)	8,101	11,947
Expected Discards	(18.2%) 1,477	(50.8%) 6,065
Federal TAL (ACT – discards)	6,624	5,882
Note: Discard rate shown in parentheses.		

Alternatives: Action 1 – 2023-2025 specifications

Alternative 3: Update based on 2022 assessment and SSC recommendations. Would continue to be in place until a subsequent action replaces them.

Table 4. Updated specifications for FY 2023-2025 (Alternative 3).

	Northern FMA		Southern FMA	
	(mt)	% change	(mt)	% change
OFL	undetermined	n/a	undetermined	n/a
ABC = ACL	5,526.0	-34%	3,766.0	-69%
ACT (97% of ACL)	5,360.2	-34%	3,653.0	-69%
Expected Discards (10-year median)	728.5	-51%	2,204.5	-64%
Federal TAL (ACT – discards)	4,631.7	-30%	1,448.5	-75%

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Alternatives: Action 2 – Effort controls

Committee input (Aug. 30): If No Action is unlikely to keep fishery within new ACL, PDT to make alternatives that lower DAS and/or possession limits.

PDT input:

- FY 2021 landings relative to new TALs (If Action 1, Alternative 3 adopted; Table 18).
  - North: FY 2021 was 584 mt (1.3M lb) higher (5,215 vs 4,631 mt).
  - South: FY 2021 was 520 mt (1.1M lb) higher (1,968 vs 1,448 mt).
- Lowering DAS has greater potential to reduce catch (fewer, shorter trips) than lowering possession limits (may increase discarding).
  - In North, most monkfish landings on trips NOT using monkfish DAS. PDT focused on reducing incidental possession limits.
  - In South, most monkfish landings on trips using monkfish DAS.

Affected Environment

Table 25. FY 2019 & 2021 average landings, vessels, trips by Plan code.

NO monkfish DAS

Declaration/ Plan Code	Program Code Description	DAS used	Whole weight, live lb (mt in parentheses)	# of Vessels	# of Trips
		NORTH			
Monkfish	*Monkfish Northern Management Area Common Pool Vessel Trip*	Monkfish and Northeast Multispecies	C	C	C
	Monkfish Northern Management Area Sector Vessel Trip	Monkfish and Northeast Multispecies	1,347,155 (611)	21	222
	Monkfish Northern Management Area Monkfish-Only Vessel Trip	Monkfish	26,851 (12)	6	20
Northeast Multispecies	*Multispecies Common Pool Vessel Trip*	Northeast Multispecies	55,255 (25)	5	100
	Multispecies Sector Vessel Trip	Northeast Multispecies	8,289,963 (3,760)	99	2,992
Scallop	*Special Access Area*	Scallop	43,979 (20)	20	28
	Limited Access General Category	Scallop	17,145 (8)	19	223
	Limited Access	Scallop	12,611 (6)	7	11
Other	*Herring; undeclared; surfclam, ocean quahog, mussel; squid, mackerel, butterfish*	-	61,447 (28)	22	469
Declared out of Fishery (DOF)		-	10,820 (5)	11	32
		NORTH Landings Total	> 9,865,226 (4,475)		

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Affected Environment

Table 25. FY 2019 & 2021 average landings, vessels, trips by Plan code.

NO monkfish DAS

SOUTH					
Monkfish	*Monkfish Southern Management Area Common Pool Vessel Trip*	Monkfish and Northeast Multispecies	62,203 (28)	5	25
	Monkfish Southern Management Area Sector Vessel Trip	Monkfish and Northeast Multispecies	493,536 (224)	15	178
	Monkfish Southern Management Area Monkfish-Only Vessel Trip	Monkfish	3,200,563 (1,452)	50	1,183
Northeast Multispecies	*Multispecies Common Pool Vessel Trip*	Northeast Multispecies	50,555 (23)	14	145
	Multispecies Sector Vessel Trip	Northeast Multispecies	100,963 (46)	27	482
Scallop	*Special Access Area*	Scallop	168,319 (76)	91	210
	Limited Access General Category	Scallop	87,994 (40)	56	986
	Limited Access	Scallop	145,156 (66)	69	106
Other	*Herring, undeclared, surfclam/ocean quahog/mussel and squid/mackerel/butterfish*	-	575,484 (261)	243	2,195
DOF		-	293,271 (133)	152	2,094
SOUTH Landings Total			**5,178,044 (2,349)**		

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Alternatives: Action 2 – Effort controls

Alternative 1: No Action

- DAS Allocation unchanged: 46 DAS per LA permit (45.2 after RSA deduction), 37 DAS may be used in the South.
- Possession limits unchanged. In North, monkfish C and D permits have incidental limit when on a groundfish DAS (900/750 lb), unlimited monkfish while on monkfish and groundfish DAS.

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Alternatives: Action 2 – Effort controls

Alternative 2: DAS Allocation

Make North and South DAS distinct. Vessels can use up to total in each area. Carryover of 4 DAS still allowed. RSA deduction to be subtracted.

NFMA DAS options

Option 2A – Set NFMA DAS at 20 DAS.

Option 2B – Set NFMA DAS at 10 DAS.

Option 2C – Set NFMA DAS at 0 DAS.

SFMA DAS options

Option 2A – Set SFMA DAS at 20 DAS.

Option 2B – Set SFMA DAS at 10 DAS.

Option 2C – Set SFMA DAS at 0 DAS.

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Alternatives: Action 2 – Effort controls

Alternative 3: North Incidental Possession Limits (while using a NE Mult DAS)

Option 3A – Reduce NFMA incidental possession limits by 20%.

Option 3B – Reduce NFMA incidental possession limits by 40%.

Table 5. Potential NFMA Category C and D permit incidental possession limits under consideration.

Permit Category	No Action	Alternative 3	
		Option A (-20%)	Option B (-40%)
C	900 lb tail weight (2,619 lb whole weight)	720 lb tail weight (2,095 lb whole weight)	540 lb tail weight (1,571 lb whole weight)
D	750 lb tail weight (2,183 lb whole weight)	600 lb tail weight (1,746 lb whole weight)	450 lb tail weight (1,310 lb whole weight)

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Alternatives: Action 3 – Gillnet mesh size

Alternative 1: No Action

- 10” mesh on a monkfish-only DAS or in GOM/GB Dogfish and Monkfish Gillnet Fishery Exemption Area.

Alternative 2: Increase mesh

- Option A = 11” minimum
- Option B = 12” minimum

Delay implementation until FY 2025.

GOM/GB Dogfish and Monkfish Gillnet Fishery Exemption Area

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Questions?

Impacts: Action 1 – Specifications

Target Species – Monkfish

- Uncertain impacts due to unknown stock status.
- Alt 1 (ACL = 0). Directed fishery precluded, minimum mortality (moderate +).
- Alt 2 (Status Quo). Fishery higher than SSC recommendations (slight -).
- Alt 3 (update). Fishery within SSC recommendation (less + than Alt 1).

Non-target Species – bycatch species

- Alt 1 (ACL = 0). Directed fishery precluded, no nontarget catch (moderate +).
- Alt 2 (Status Quo). Fishery unchanged from what was determined sustainable (less + than Alt 1).
- Alt 3 (update). Less effort on nontarget species than Alt 2 (+, between 1 & 2).

Protected Resources

- Alt 1 (ACL = 0). Directed fishery precluded, minimum interaction (slight-moderate +).
- Alt 2 (Status Quo). Current interaction risk maintained (slight – to slight +).
- Alt 3 (update). Less interaction risk than Alt 2 (slight – to slight +).

Impacts: Action 1 – Specifications

Physical Environment, Essential Fish Habitat

- Alt 1 (ACL = 0). Directed fishery precluded, few EFH impacts (slight +).
- Alt 2 (Status Quo). Impacts from trawl gear (slight –).
- Alt 3 (update). Less impacts than Alt 2 (slight –).

Economic and Social

- Alt 1 (ACL = 0). Directed fishery precluded, no landings, businesses may fail (high -).
- Alt 2 (Status Quo). Fishery would continue as is, for short term. Caution that this may lead to overfishing, needed future catch limit reductions (moderate +).
- Alt 3 (update). Reduced revenue, 16% lower than FY2021 (-$1.6M), $800K profit loss, reduced fishery participation, but less long-term risk (negative).

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Impacts: Action 2 – Effort Controls: **DAS**

Sect. 6.1.1 – How would effort and landings change under Action 2?

METHODS

Used FY 2019 & 2021 for average DAS use; FY21 primarily for landings

1. Identified vessels that used > 20, 10, and 0 DAS
2. For vessels over these DAS limits:
   - Landings/DAS calculated → * by 20, 10, or 0 DAS = total landings from fully utilizing new DAS, then
   - Calculated loss in landings by subtracting from actual total landings
3. For vessels using ≤ 20, 10, or 0 DAS, actual landings/vessel were used (no loss in landings)
4. Landings from Steps 2 & 3 added together = new total landings using a MNK DAS for each DAS option
5. Landings from vessels NOT using a MNK DAS summed from Table 25
6. Total landings (MNK + non-MNK DAS) added together; compared against FY23-25 TALs

Impacts: Action 2 – Effort Controls: **DAS**

Sect. 6.1.1 – How would effort and landings change under Action 2?

RESULTS – Table 35

NFMA:

- Most trips from vessels NOT using a MNK DAS (only 14% MNK landings from vessels using a MNK DAS)
- 12-33 vessels impacted (used > 20, 10, or 0 MNK DAS)
- All 3 DAS options estimated to keep landings within new TAL

SFMA:

- Trips using a MNK DAS account for most of landings (73% landed using a MNK DAS; 62% landed ONLY on a MNK DAS)
- 48-78 vessels impacted (used > 20, 10, or 0 MNK DAS)
- Option A (20 DAS) not likely to keep landings within new TAL; Options B and C (10, 0 DAS) keep landings within TAL (91% and 45% of TAL, respectively)

Discards not likely to change substantially; analysis doesn't quantify any changes in discards

Impacts: Action 2 – Effort Controls: **Incidental Limits**

Sect. 6.1.1 – How would effort and landings change under Action 2?

Approach 1 METHOD: Theoretical max reduction in landings (Table 36)

1. Used FY 2021 data to identify total NE Multispecies DAS used by permits C and D
2. Multiplied total DAS by C, D permit category by trip limits = total max landings under No Action
3. Multiplied total DAS by C, D permit category by reduced trip limits = new landings under lowered incidental limits
4. Difference in landings between Steps 2 & 3 = loss of landings

Approach 2 METHOD: Simulation of recent fishery performance (Table 37)

- Used FY 2021 landings and NMS DAS data to identify trips with landings > incidental limits
- Estimate landings, discards on these trips to determine if:
    1. Landings can be turned into discards if incidental limits are lowered OR
    2. Vessels may opt to use a MNK DAS to land unlimited trip limits (use both a MNK & NMS DAS)

Impacts: Action 2 – Effort Controls: **Incidental Limits**

Sect. 6.1.1 – How would effort and landings change under Action 2?

Approach 1 RESULTS: Theoretical max reduction in landings (Table 36)

- 7,018 NE Mult DAS used by permits C and D (not using a MNK DAS) in FY21
- No Action max landings = 16.9 M lb
- Option A (20% reduction) = 3-3.75 M lb reduction (D and C permits, resp.)
- Option B (40% reduction) = 1.5 – 1.87 M lb reduction (D and C permits, resp.)
- Assumes full trip limits are landed for every NE Mult DAS used
  - NOT realistic though – vessel capacity, market, other constraints
  - Monkfish isn't a target species on these groundfish trips

Impacts: Action 2 – Effort Controls: **Incidental Limits**

Sect. 6.1.1 – How would effort and landings change under Action 2?

Approach 2 RESULTS: Simulation of recent fishery performance (Table 37)

- No Action discards range from 41k – 135k lb
- Option A (20% reduction) = 1.5 M lb total reduction; discards for impacted trips range from 49k – 169k lb
- Option B (40% reduction) = 2.3 M lb total reduction; discards for impacted trips range from 82k – 222k lb (higher than Option A and No Action)
- Cannot model changes in fishing behavior → unable to calculate to what extent reduction in incidental landings would be turned into discards
- Monkfish is not target species in NE Mult. Fishery → turning landings into discards would help stay within the TAL but not change overall catch (landings+discards)
  - NE Mult fishing effort generally declining/time → if groundfish effort already constraining monk effort, then either No Action or 20% reduction in incidental limits may be enough
  - If NE Mult fishing effort expected to increase/time → 40% reduction in incidental limits may be needed

Impacts: Action 2 – Effort Controls

Target Species – Monkfish

- Alt 1 (46 DAS, 900/750lb) No change in fishing effort, may not prevent exceeding ACLs/ABCs (slight –).
- Alt 2 (DAS ↓) Likely to reduce #/length of trips in the S, minimal effect in N (slight to moderate +)
- Alt 3 (Incl PL ↓) Likely to reduce landings, could increase discards (negligible to slight +)

Non-target Species – bycatch species

- Alt 1. No change in fishing effort (negligible)
- Alt 2 (DAS ↓) Decrease in fishing effort esp. in S (slight to moderate +)
- Alt 3 (Incl PL ↓) Likely no change in effort because monkfish is not a target species (negligible to slight +)

Impacts: Action 2 – Effort Controls

Protected Resources

- Alt 1. No change in fishing effort (slight – to slight +).
- Alt 2 (DAS ↓) Likely to reduce #/length of trips in the S, minimal effect in N so interactions likely to continue (slight – to moderate +).
- Alt 3 (Incl PL ↓) No change in fishing effort because monkfish not target species so interactions continue as is (slight – to slight +).

Physical Environment, Essential Fish Habitat

- Alt 1. No change in effort – impacts from trawl gear esp. in N (slight –).
- Alt 2 (DAS ↓). No impacts in S from gillnet gear; minimal change in impact from trawl gear in N (slight –).
- Alt 3 (Incl PL ↓) Landings turned into discards so trawl gear impacts in N (slight –).

Impacts: Action 2 – Effort Controls

Economic and social (Table 39)

- Alt 1. Fishery continues as is; no reduction in revenue/costs/profitability; TALs likely to be exceeded (negligible to slight -)
- Alt 2 (DAS ↓) Losses in profit ($240k-690k in N, $531k-1.34M in S); mostly impacts directed fishery; some benefit keeping fishery within TAL, ABC (negative).
- Alt 3 (Incl PL ↓). ~$500-740k 1-yr loss in profit; 43-54 vessels impacted; loss in crew earnings; mostly impacts incidental landings; any increases in discards could be seen as wasteful (negative).

Impacts: Action 2 – Effort Controls

Selecting a combination of Alternative 2 and 3 options

- Impacts are largely distinct, so would be additive.
- There are options within each alternative that may achieve the necessary landings reduction.
- Selecting an option under both alternatives
  - May be seen as more fair, constraining directed and incidental fisheries.
  - May be more restrictive than necessary.
- Councils could identify a combination of options that are less restrictive than those included in the document.

Methods: Action 3 – Gillnet Mesh

Sect. 6.1.2 – Identifying trips, vessels, ports impacted by Action 3

- Used FY 2018-2021 VTR data by management area: trips and vessels using at least 10” mesh when fishing on only a monkfish DAS (Table 38).
- NFMA results:
  - NO trips used 10” mesh.
  - 22-42% of trips by 21-29% of vessels (3-5 vessels) used 11” mesh.
- SFMA results:
  - ~1% of trips by ~7% of vessels used 10” mesh. NO trips used 10” mesh in 2021.
  - 4-6% of trips by 9-16% of vessels (4-12 vessels) used 10” or 11” mesh.
- ~25 ports landing with monkfish-only DAS gillnet landings, landings by gillnet mesh size are mostly confidential. Vessels using under 12” mesh are mostly on Cape Cod, and in Rhode Island and New York (Table 41).

Impacts: Action 3 – Gillnet Mesh

Target Species – Monkfish

- Alt 1 (10”). Any discarding of small monkfish would continue at 100% assumed mortality rate (slight -).
- Alt 2 (11” or 12”). Catch of smaller monkfish could be reduced, more so with 12” (slight +).

Non-target Species – bycatch species

- Alt 1 (10”). Ditto, mortality rates vary (slight -).
- Alt 2 (11” or 12”). Ditto (slight +).

Protected Resources

- Alt 1 (10”). Interaction risks continue, varying by species (slight – to slight +).
- Alt 2 (11” or 12”). Risk not expected to change (slight – to slight +).

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Impacts: Action 3 – Gillnet Mesh

Physical Environment, Essential Fish Habitat

- Alt 1 (10”). Gillnets do not cause adverse EFH impacts (No impact).
- Alt 2 (11” or 12”). Ditto (No impact).

Economic and Social

- Alt 1 (10”). No additional costs, continue to have flexibility (negligible to slight +).
- Alt 2 (11” or 12”). No vessels used 10” gillnets in 2021. Cost to replace nets is up to ~$235K for fleet, but two year-delay allows time to adjust, mitigating impacts (slight – to slight +).

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Decision Process – from the monkfish regulations

"Management adjustments made to the Monkfish FMP require **majority approval of each Council** for submission to the Secretary"

"If either the NEFMC or MAFMC has rejected all options, then the Regional Administrator may select any measure that has not been rejected by both Councils and that meets the Monkfish FMP's goals and objectives."

"**If the Councils fail** to submit a recommendation to the Regional Administrator **by February 1** that meets the goals and objectives of the Monkfish FMP, the Regional Administrator may implement through rulemaking in accordance with the Administrative Procedure Act one of the options reviewed and not rejected by either Council, provided the option meets the goals and objectives of the Monkfish FMP, and is consistent with other applicable law."

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2023 Council Management Priorities

Purpose

Recommend what Council should work on in 2023 for monkfish.

Relevant documents

6b – Cte mtg summary

6c – PDT mtg summary

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Webinar technical assistance: helpdesk@nefmc.org

DRAFT 2023 priorities

Doc #6c
p. 3-4

Committee draft	PDT Comment
1. Review recommendations from the Research-Set-Aside (RSA) program review and develop improvements to the Monkfish RSA program. Consider use of RSA DAS and whether additional flexibility is warranted (e.g., flip to a directed RSA DAS while at sea)	Supports having a functional RSA program. Less of a near-term priority given pending catch reductions. Combine with #3 and have a meeting to brainstorm.
2. Address monkfish recommendations in the NOAA Fisheries *Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large Mesh Gillnet Fisheries*.	Required action. Better as an omnibus, collaborate with MAFMC.
3. Form a work group of fishermen, NOAA and Council staff, Monkfish Committee members, etc. to discuss the Monkfish RSA program and identify potential improvements.	Combine with #1.

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DRAFT 2023 priorities

Doc #6c
p. 3-4

Committee draft	PDT Comment
4. Address latent effort in the fishery; consider 1) developing a DAS leasing program that would allow markets to drive DAS availability and cost, or 2) moving to a quota management program to increase profitability, flexibility, and efficiency (eliminate the DAS program). Consider updating the control date that was established in May 2012 during development of Amendment 6.	Active permits have consistently declined. Supports considering other management approaches to increase the options for how management can respond to changes in catch limits.
5. Develop a model that would help predict how changing effort controls would impact the monkfish fishery.	FW13 analysis limited in accurately estimating how the fishery may respond to changing effort controls. Likely enough data to develop a model to better predict fishery responses to various management measures. Model could help evaluate whether the current management system (i.e., reliance on monkfish DAS and possession limits) provides sufficient flexibility to adjust the directed, incidental, and discard fisheries to changing quotas.

DRAFT 2023 priorities

Doc #6c
p. 3-4

Committee draft	PDT Comment
6. Develop an economic analysis of the monkfish fishery to help understand the fishery and the outcomes of potential management actions, include further defining the distinctions between the northern and southern fisheries.	Combine with #5.
7. Update AP-PDT monkfish fishery performance report.	An annual update of fishery data and a check-in with the AP on fishery performance would help fulfill the regulatory requirement of the NEFMC and MAFMC to annually monitor the status of the monkfish fishery and resource. Would take less time in future.

NEW PDT recommendation:

Evaluate whether the current management system (i.e., reliance on monkfish DAS and possession limits to control catch) provides sufficient flexibility to adjust the directed, incidental, and discard fisheries to changing quotas.

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Other Business

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NEFMC Operations Handbook

"**Council Remands to the SSC** The Council may remand back to its Scientific and Statistical Committee the SSC's recommendations based on the following criteria: (a) failure of the committee to follow the terms of reference provided to it by the Council; (b) an error, in fact or omission, in the materials provided to the committee; (c) an error in fact in the calculations, if any, undertaken by the Committee in developing an ABC recommendation; and (d) failure of the committee to follow its standard operating procedures."

DAS Effort Reduction Options (Table 35)

NORTH (ABC/ACL = 5,526 mt; TAL = 4,632 mt)			
# vessels that used Monkfish DAS over the limit	12	23	33
Landings from monkfish DAS over the DAS limit (i.e., potential reductions in landings)	468,642 lb (212.6 mt)	1,087, 050 lb (493.1 mt)	2,146,149 lb (973.5 mt)
Landings using a MNK DAS	1,677,507 lb (760.9 mt)	1,059,099 lb (480.4 mt)	0 lb (0 mt)
Landings not using a MNK DAS	8,491,220 lb (3,851.6 mt)	8,491,220 lb (3,851.6 mt)	8,491,220 lb (3,851.6 mt)
Total landings (MNK + non-MNK DAS)	10,168,727 lb (4,612.5 mt)	9,550,319 lb (4,332 mt)	8,491,220 lb (3,851.6 mt)
Total landings as % of FY23-25 TAL	100%	94%	83%

SOUTH (ABC/ACL = 3,766 mt; TAL = 1,449 mt)			
# of vessels that used Monkfish DAS over the limit	48	61	78
Landings from monkfish DAS over the DAS limit (i.e., potential reductions in landings	1,331,190 lb (603.8 mt)	2,559,949 lb (1,161.2 mt)	4,053,253 lb (1,838.5 mt)
Landings using a MNK DAS	2,722,063 lb (1,234.7 mt)	1,493,304 lb (677.4 mt)	0 lb (0 mt)
Landings not using a MNK DAS	1,421,742 lb (645 mt)	1,421,742 lb (645 mt)	1,421,742 lb (645 mt)
Total landings (MNK + non-MNK DAS)	4,143,805 lb (1,879.6 mt)	2,915,046 lb (1,322.2 mt)	1,421,742 lb (645 mt)
Total landings as % of FY23-25 TAL	130%	91%	45%

Table 37. Number of trips potentially impacted by reducing the monkfish incidental possession limit while on a Northeast Multispecies DAS, using FY 2021 data.

Alternatives	Description of Trips Impacted by Alternatives	Permit Category	Possession Limit per NE Mult. DAS (lb, whole weight)*	# of Trips > Landing Limits per NE Mult. DAS	Landings (lb, whole weight)	Loss of landings from Alternative 2	Discards (lb, whole weight)
No Action	Landings, discards at full trip limits (≥ 90% trip limits)	C	2,619	169 (676 trips in FY21)	5,439,572	N/A	135,199 (446,822 lb total in FY21)
		D	2,183	121 (1,746 trips in FY21)	2,414,880	N/A	41,256 (295,018 lb total in FY21)
Option A: 20% reduction	Landings, discards at ≥ 80% trip limits	C	2,095	207	4,239,674	-1,199,898	169,000
		D	1,746	150	2,124,839	-290,041	49,244
Option B: 40% reduction	Landings, discards at ≥ 60% trip limits	C	1,571	280	3,658,754	-1,780,818	222,228
		D	1,310	230	1,923,608	-491,272	82,295

* Monkfish possession limit per each NE Multispecies DAS used.