

Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901 Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org Joseph Cimino, Chair | Skip Feller, Vice Chair Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: September 24, 2025

To: Council

From: Jason Didden, Council Staff

Subject: Spiny Dogfish Framework Final Action

The Council will take final action on a framework adjustment that would set 2026-2027 spiny dogfish specifications and could modify several accountability measures in the fishery management plan.

Staff slightly modified the specifications alternatives seen in previous framework working drafts so that there are now three action alternatives, each with constant Acceptable Biological Catches (ABCs) for 2026-2027. This approach maintains the intent of the previous alternatives, but having three alternatives with constant ABCs facilitates comparison and simplifies the document. See discussion in Section 5.6 of the Framework Document, and associated alternatives.

One alternative, the previous 6A, would be "considered but rejected." This alternative would have implemented the Councils P* risk policy with <u>yearly varying ABCs</u>. Another alternative (was 6B, now 6A) had <u>constant</u>, averaged P* ABCs and is nearly identical, but provides year-to-year stability and simplifies comparing alternatives. Staff could re-insert the yearly varying alternative if the Council prefers.

A new alternative has been added since the full Councils reviewed the action - 6C, which is the Committee's recommended specifications, and is within the previous range.

Materials included to support final action:

September 2025 Committee Summary with Recommendations to Councils

September 2025 Staff Memo with Recommendations to Committee

September 2025 Monitoring Committee Summary (technical recommendations)

Link to Seatrade follow-up

September 2025 Scientific and Statistical Committee (SSC) Report – see Committee Reports Tab September 2025 Staff ABC Memo

2025 Spiny Dogfish Advisory Panel Fishery Performance Report (includes framework recommendations)

2025 NEFSC Data Update for Spiny Dogfish

-Link to 2019-2024 ACL Accounting

2025 Spiny Dogfish Fishery Information Document

-Link to Spiny Dogfish Commercial Landings Maps

August 2025 Monitoring Committee Summary (technical clarifications)

October 2025 Framework Working Document



Joint Spiny Dogfish Committee - Meeting Summary September 16, 2025

Webinar

The Joint Spiny Dogfish Committee met on September 16, 2025 at 2 p.m. The Mid-Atlantic Fishery Management Council (MAFMC) and New England Fishery Management Council (NEFMC) manage this fishery management plan (FMP) jointly. The purposes of this meeting were to provide recommendations for 1) 2026-2027 specifications and 2) other components of the pending framework that could modify spiny dogfish accountability measures – this summary is organized accordingly.

Spiny Dogfish Committee Attendees: Sonny Gwin (Chair), Nichola Meserve (Vice-chair), Anna Beckwith, Bill Lucey, Chris Batsavage, Jay Hermsen, Joe Grist, Lisa Wooleyhan, Michael Luisi, Ted Platz, Todd Janeski, Toni Kerns, and Skip Feller (ex-officio).

Other Attendees: Jason Didden, Angel Willey, Caroline Williams, Corrin Flora, Dan McKiernan, Jamie Cournane, John Whiteside, Laura Deighan, Mark Sanford, Rich Wong, and Sefatia Romeo Theken.

1) 2026-2027 Specifications

Staff first presented background information on previous actions, stock status, biological data updates, fishery performance, Scientific and Statistical Committee (SSC) recommendations, Monitoring Committee recommendations, staff recommendations, and Advisory Panel recommendations (in Fishery Performance Report). These materials will be included in the October 2025 Council Meeting Materials and/or reviewed with the Council at the meeting. Following the background presentation the Committee passed the following motion after considering the available information and public comment:

I move that the Committee recommend that the Councils adopt the staff recommendation per the following table:

Specifications	2026-27 (pounds)	2026-27 (mt)	Basis
OFL (from SSC)	17,822,148	8,084	SSC
ABC (from SSC)	16,812,432	7,626	SSC
Canadian Landings	8,818	4	= 2020-2023 average
Domestic ABC	16,803,614	7,622	= ABC – Canadian Landings
ACL	16,803,614	7,622	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes immediate disruption to industry
Amount of buffer	0	0	= ACL - mgmt uncert buffer
ACT	16,803,614	7,622	- ACE - Ingine uncert burier
U.S. Discards	7,771,286	3,525	Midpoint Approach
TAL	9,032,328	4,097	ACT – Discards
U.S. Rec Landings	246,917	112	= 2020-2024 average
Comm Quota	8,785,411	3,985	TAL – Rec Landings

This is currently Alternative 6C in the Framework Document posted for the October 2026 MAFMC Council Meeting

Grist/ Meserve 10/0/1 (for/against/abstain)

Rationale expressed during discussion:

Acceptable Biological Catch (ABC): Balances a) the SSC's concern about projecting so far beyond the last assessment (and especially with setting the ABC right up to the projected overfishing level [OFL]), with b) impacts on the quota/industry in the short term.

Maintain zero uncertainty buffer: reasonable given immediate disruptive impacts on industry of setting aside catch now to avoid potential future overages and paybacks.

Discards: The Mid-Point approach maintains continuity with the 2025 method and doesn't appear unreasonably low versus recent observed discards. The Mid-Point approach does add some risk of future overages and paybacks versus a higher set-aside like the 5-year average. However, higher discard set-asides directly lower the quota. The updated Mid-Point approach is slightly higher than the current set-aside, and we might expect higher spiny dogfish discards with an increasing summer flounder quota in coming years.

Public comments:

Supported setting aside status-quo discards like the status-quo ABC approach, which would result in a very similar commercial quota in 2026-2027 compared to 2025.

Expressed frustration that the large female fish the fishery is seeing in landings since 2023 are not being sampled well, and won't even be integrated into a new assessment until at best 2027 when 2028 specifications are considered.

Expressed frustration that forced smaller net sizes for sturgeon have not been accounted for, that data entry biases are not checked for, and that we are harvesting less than 1% of total biomass.

2) Other Framework Alternatives

For each alternative set, staff summarized the alternatives, the Advisory Panel recommendations (in Fishery Performance Report), and staff recommendations (which were jointly endorsed by both MAFMC and NEFMC staffs). Then the Committee discussed each alternative and developed a Committee recommendation via a motion, after considering the available information and public comment.

Alternative Set 1: Paybacks and Biomass

I move that the Committee recommend that the Councils adopt the staff recommendation 1B. Beckwith/Grist - Motion passed by unanimous consent. (NMFS noted later they had intended to abstain.)

With 1B, if biomass was projected to be at or below 75% of the target biomass, then strict pound-for-pound paybacks would be deducted. If biomass was projected to be at or above the biomass target reference point, then no payback for ACL overages would be required. As the

stock trends from 100% to 75% of the target there would be a linear ramping of higher and higher proportion of paybacks repaid.

Rationale expressed during discussion:

We only catch 1% of total biomass. I support precaution but this would avoid unnecessary paybacks, achieving a happy medium.

Shifting to 100% paybacks once the stock is only 75% of the target (1B's approach) should ensure negligible stock impacts.

Atlantic States Marine Fisheries Commission (ASMFC) staff noted that there could be a disconnect between the Councils approach and the ASMFC's approach that would still require paybacks at the state/regional level unless modified at the ASFMC. The Committee later revisited that additional general coordination with the ASMFC may be needed to avoid double penalties for states due to ASMFC payback provisions that are separate from federal measures.

Alternative Set 2: Paybacks and Overage Sources

I move that the Committee recommend that the Councils adopt status quo/no action for Alternative Set 2. Beckwith/Meserve - 9/1/1 Motion passed

In combination with 1B, this would mean that all catch (e.g. commercial landings, recreational landings, and all discards) would be treated the same for scaling paybacks with biomass.

Rationale expressed during discussion:

The makers of the motion referenced the general preceding discussion for their rationale, which had noted there didn't seem to be a reason to treat more precise catches (landings) more harshly.

The ASMFC-Federal alignment issue was raised again, but no motions were brought forward in order to avoid delaying the action. This issue could be monitored and revisited if needed.

Public comment:

Supported no action and noted that states can trade quota to mitigate overages.

Alternative Set 3: Paybacks and Rebuilding

I move that the Committee recommend that the Councils adopt alternative 3A. Luisi/Hermsen - Motion passed by unanimous consent.

This would mean that if a stock was in a rebuilding plan, catch overages would always be repaid even if a scaling approach (1B) is adopted.

Rationale expressed during discussion:

National Standard 1 advises that full paybacks would be expected outside of unusual circumstances.

The makers of the motion also referenced the general preceding discussion for their rationale, which noted this issue could be revisited if spiny dogfish was ever in need of rebuilding; because this is not currently a pertinent situation, it would be simplest to align with the basic National Standards guidance.

Alternative Set 4: Payback Averaging

I move that the Committee recommend that the Councils adopt 4B for the averaging alternative. Meserve/Grist – Motion passed by unanimous consent.

This would mean that 3-year averages of catch limits and catches would be used for determining overages, and if biomass-based scaling of paybacks is implemented, then the most recent projected biomass would determine the scaling ratio.

Rationale expressed during discussion:

The makers of the motion referenced the general preceding discussion for their rationale. This discussion highlighted that one could make a case for either 4A or 4B, and there are trade-offs in terms of uncertainty using the most recent and potentially more uncertain terminal estimate versus a recent average. However, for a stock like spiny dogfish (long lived), it shouldn't matter too much either way, and 4B would be simplest and could be more responsive to the most recent trends.

Alternative Set 5: 105% Quota closure

I move that the Committee recommend that the Councils adopt 5A and set a 5% buffer for the 2026-2027 specifications. Meserve/Beckwith - 10/1/0 motion passed

This would mean that if biomass was above 50%, the Council could set a 5% "plus" buffer so that federal waters would close at 105% of the federal quota.

Rationale expressed during discussion:

This would help avoid a situation where one state's overage disadvantages other states within a year.

There was discussion if the biomass trigger could be removed, but given it has been part of the discussion to date, staff recommended and NMFS supported not making such a change at this time.



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MEMORANDUM

Date: September 15, 2025

To: Chris Moore

From: Jason Didden, staff

Subject: Committee Meeting - Spiny Dogfish Framework

The Joint Spiny Dogfish Committee meets September 16, 2025. Materials are posted at https://www.mafmc.org/council-events/2025/sept-16/dogfish-committee, including:

- -Framework Working Document
- -September Monitoring Committee Summary
- -Staff Memo: 2026-2027 Spiny Dogfish ABC Recommendations for SSC
- -2025 NEFSC Data Update for Spiny Dogfish
- -2025 Spiny Dogfish Advisory Panel Fishery Performance Report
- -August Monitoring Committee Summary (for clarifying Framework text and already incorporated into above "Framework Working Document")
- -2025 Spiny Dogfish Fishery Information Document

The goal of the Joint Committee meeting is to develop recommendations for the Councils on the framework, including 2026-2027 Specifications and other measures that relate to accountability measure modifications.

The staff recommendations (from both the Mid-Atlantic and New England staffs) are:

<u>Alternative Set 1</u>: Considers whether Annual Catch Limit (ACL) paybacks should depend on biomass level.

Staff recommend Action Alternative 1B: Middle cautionary modified payback scaling. By scaling to full paybacks as population status declines to 75% of the target, there should be negligible impacts on the spiny dogfish stock (full paybacks would still occur at anything less than 75% of the target), but industry would have more stability by attenuating paybacks at higher stock sizes. Overages are not expected to be anywhere near the scale of the spiny dogfish total stock biomass – which was estimated to be at 1.6 billion pounds in 2022 (and projected to increase for some time as a period of better recruitment matures). Corrective measures can address preventing ongoing overages without needing pound-for-pound paybacks at high stock sizes. Maintaining full paybacks at 75% or less of the target ensures that attenuating paybacks does not affect the sustainability of the resource.

<u>Alternative Set 2</u>: Considers whether ACL paybacks would be dependent on the source (catch type) of the overage.

Staff recommend "No Action." Staff sees no biological (or other) benefit to treating more certain landings data more precautionarily (i.e. always paying back landings overages) versus less certain catch estimates like discards.

<u>Alternative Set 3</u>: Considers whether relaxation of ACL paybacks should depend on if stock is in a rebuilding plan or not.

Staff recommend Action Alternative 3A: Always pay back ACL overages fully if stock is in a rebuilding plan. Based on National Standard 1 guidelines, not fully paying back catch overages during rebuilding would likely involve developing complicated analyses that could delay this action. These analyses would evaluate how not repaying ACL overages would not affect a rebuilding timeline. This issue could be reconsidered if spiny dogfish is ever in need of a rebuilding plan, but is not relevant enough now to delay this action.

<u>Alternative Set 4</u>: Considers whether ACL paybacks should depend on one year or an average of years.

Staff recommend Action Alternative 4B: Calculate paybacks based on average ACLs and average catches, and if paybacks are scaled based on biomass, use the most recent projected biomass. Not using the most recent projected biomass (e.g. 4A) would raise complicated National Standard 2 (best available science) issues. For a stock like spiny dogfish that has a large overall biomass and long lifespan, smoothing ACL-to-catch comparisons over three years should add stability for industry without compromising the stock (for a shorter-lived species, year-to-year considerations might be more relevant).

<u>Alternative Set 5</u>: Considers whether specifications should be modified to allow for a closure buffer of federal waters (the EEZ) at up to 105% of the landings quota.

Staff recommend Action Alternative 5B: Clarify that specifications can set closures of federal waters (the EEZ) at up to 105% of the landings quota when biomass is projected to be at least 75% of the biomass target in the relevant fishing year. This action could lead to minor quota overages in any given year. Minor quota overages could contribute to ACL overages, and like Alternative Set 1, these kinds of measures seem more appropriate only when a stock is at a good stock status.

Alternative Set 6: 2026-2027 Specifications.

Staff recommend a modification of the previous alternatives, proposed to now be Action Alternative 6D: Re-suspend the Council's risk policy and set 2026-2027 ABCs = 2025 OFL of 7,626 MT. The SSC expressed extreme concern about setting the ABC to the full calculated OFL (i.e. 6C), and suggested this as a compromise approach if the Council is going to diverge from its risk policy. Based on the Monitoring Committee input (see summary report posted for Committee meeting), staff also recommend the following measures (see table next page):

Table 1. Spiny Dogfish Specifications for FY2026-2027

Specifications	2026-27 (pounds)	2026-27 (mt)	Basis	
OFL (from SSC)	17,822,148	8,084	SSC	
ABC (from SSC)	16,812,432	7,626	SSC	
Canadian Landings	8,818	4	= 2020-2023 average	
Domestic ABC	16,803,614	7,622	= ABC – Canadian Landings	
ACL	16,803,614	7,622	= Domestic ABC	
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes immediate disruption to industry	
Amount of buffer	0	0		
ACT	16,803,614	7,622	= ACL - mgmt uncert buffer	
U.S. Discards	7,771,286	3,525	Midpoint Approach	
TAL	9,032,328	4,097	ACT – Discards	
U.S. Rec Landings	246,917	112	= 2020-2024 average	
Comm Quota	8,785,411	3,985	TAL – Rec Landings	

<u>Canadian Landings:</u> 4 MT - This was based on a recent 4-year average recommended by the Monitoring Committee considering recent data.

Domestic ABC: Total ABC minus expected Canadian landings.

<u>Annual Catch Limit:</u> Equals the Domestic ABC per the FMP. Exceeding this specification can trigger payback accountability measures, affecting future years.

Management Uncertainty Buffer: Risk trade-off – see Monitoring Committee summary.

<u>Annual Catch Target (ACT)</u>: The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards</u>: 3,525 MT - This amount of discard set-aside uses the mid-point of a 5-year average and the accepted model-utilized proportion of discards. Discard estimates vary year to year, and using the midpoint of multiple reasonable approaches is a common method to deal with uncertainty. This was the most reasonable approach as determined by the MAFMC and NEFMC last year. The Monitoring Committee noted that either a 5-year average approach or the model-utilized proportion approach were potentially justifiable, though both could mis-predict future discards.

Total Allowable Landings (TAL): 4,097 MT – this is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> 112 MT - This was based on a recent 5-year average recommended by the Monitoring Committee considering recent data.

Commercial Quota: 3,985 MT – This is the TAL minus expected recreational landings.



Spiny Dogfish Monitoring Committee Meeting Summary

September 12, 2025

Webinar

The Mid-Atlantic Fishery Management Council's (Council) Spiny Dogfish Monitoring Committee met on September 12, 2025 from 11am to 12:35pm. The purpose of this meeting was to provide technical recommendations for 2026-2027 specifications and/or other components of the Council's framework that could modify spiny dogfish accountability measures.

Spiny Dogfish Monitoring Committee Attendees: Jason Didden, Angel Willey, Chris Rainone, Jamie Cournane, Jason Boucher, John Whiteside, Laura Deighan, and Nichola Meserve.

Other Attendees: Anna Beckwith, Adam Tomlin, Bill Lucey, Lisa Wooleyhan, Mike Waine, Sara Turner, Sefatia Romeo Theken, and Ted Platz.

Most of the meeting was spent on the specifications. Regarding the accountability measures, the Monitoring Committee discussed highlighting that not paying back overages fully during a rebuilding period could contradict the National Standard 1 guidelines for full paybacks during rebuilding periods unless there was scientific information that such a payback was unneeded. Staff will add relevant language to the framework document.

Regarding specifications, the charge of the Spiny Dogfish Monitoring Committee is to recommend an annual coastwide commercial quota and/or any other measures needed to ensure that the specifications will not be exceeded. The Spiny Dogfish Specifications begin with an Acceptable Biological Catch (ABC) that is recommended by the Scientific and Statistical Committee (SSC) and then the Monitoring Committee provides recommendations on the other components of specifications, each addressed below. Staff will build out the recommendations below into tables for the Spiny Dogfish Committee to consider.

SSC Recommendation – Getting to the ABC

The ABC is typically based on a stock assessment, the assessment's estimated overfishing limit (OFL), and a buffer to account for scientific uncertainty to improve the chance of not overfishing beyond the 50-50 chance of overfishing that is inherent in the calculation of OFL. The buffer depends on the Council's risk policy, which requires more certainty about avoiding overfishing (i.e. less catch) as stock size declines, as well as on the SSC's assessment of the likely degree of uncertainty in the OFL.

In this case, the Council has indicated it may suspend its risk policy and accept a 50-50 chance of overfishing (or the Council may still use its risk policy). That choice is generally outside the scope of the Monitoring Committee's task. The SSC has provided four relevant ABCs based in its September 9th meeting, and they are included below to inform the other recommendations of the Monitoring Committee:

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2026 ABC= 7,254 metric tons (MT)

2027 ABC = 7,410 MT

2: Constant P*, 150% CV (46% chance of overfishing)

2026 ABC= 7,332 MT

2027 ABC = 7,332 MT

3: ABC = OFL (calculated 50% chance of overfishing)*

2026 ABC= 8,084 MT

2027 ABC = 8,202 MT
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1: Year Varying P*, 150% CV (46% chance of overfishing)

4: Set 2026/2027 OFL equal to 2025 OFL (risk greater than #s 1/2, but less than #3) 2026 ABC= 7,626 MT 2027 ABC = 7,626 MT

*Staff relayed that the SSC expressed strong reservations about setting the ABC equal to the calculated OFL due to the elapsed time since the last assessment and concerning trends in the NMFS trawl survey,

<u>Canadian Deduction – Getting to the U.S. ABC = Annual Catch Limit (ACL)</u>

The standard specifications next step is to deduct expected Canadian landings. Canadian landings dwindled from a few thousand metric tons (MT) in the early 2000s to just a few MT in the early 2020s, averaging just 4 MT over 2020-2024 (36 MT in 2019). Given the time series of landings, 4 MT appears to be a reasonable deduction for Canadian landings. Canadian discards are not in the assessment and have not been incorporated into the specifications process (but are not believed to be at the same scale as U.S. discards). In this fishery management plan, the ACL = the U.S. ABC.

Management Uncertainty Buffer – Getting to the Annual Catch Target (ACT)

The Council can set aside a management uncertainty buffer to minimize the chance of exceeding the ACL and triggering paybacks. A larger buffer and smaller ACT will reduce the chance of ACL overages, but given the recent history of the fishery, substantial overages are not necessarily expected, so there is no particular buffer recommended by the Monitoring Committee. If there is no buffer, then ACT = ACL (this is the approach in the current specifications).

<u>Dead Discard Set-Aside – Getting to Landings</u>

To avoid an ACL overage, dead discards must be sufficiently accounted for, i.e. set-aside. There are three approaches to discard set asides that currently seem reasonable:

- 1. Use 2020-2024 average: 3,712 MT.
- 2. Use percent utilized in the projections: 43.8% (the average of the percents observed in the 2022-2024 calendar years) applied to any given ABC.
- 3. Use the Midpoint (average) of the preceding two approaches.

For the various ABCs across 2026-2027 provided by the SSC, minus 4 MT for Canada, these are the resulting potential discard set-aside values from the above three approaches, with the current set aside included for context:

US ABCs	ABC*0.438	5-yr AVG	Midpoint	Current
7,250	3,176	3,712	3,444	3,275
7,328	3,210	3,712	3,461	3,275
7,406	3,244	3,712	3,478	3,275
<mark>7,622</mark>	<mark>3,338</mark>	<mark>3,712</mark>	<mark>3,525</mark>	<mark>3,275</mark>
8,080	3,539	3,712	3,626	3,275
8,198	3,591	3,712	3,652	3,275

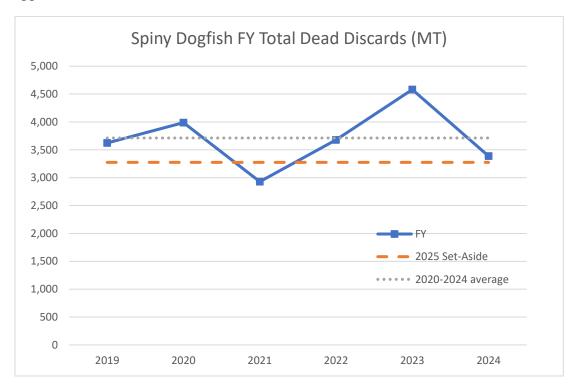
The current U.S. ABC was included as an option by the SSC, and is highlighted above. All of the above approaches would increase the discard set-aside compared to the current 2025 specifications by minor to moderate amounts if applied to the current U.S. ABC. Increasing the discard set-aside directly reduces the commercial quota.

While all the approaches seem reasonable for their respective U.S. ABCs (mixing across ABCs would not make sense), the Monitoring Committee noted smaller set-asides will increase the chance of an ACL overage, and there was an ACL overage in 2023 (the 2024 ACL was nearly 100% caught). Given the year-to-year variability observed in discards, the choice comes down to risk tolerance (i.e. the risk of overages and future paybacks, and also the risk of immediate impacts on industry). Monitoring Committee members discussed the pros and cons of the various approaches, noting that the percentage approach still would set aside a smaller amount than a number of recent years, but the percentage approach would avoid the peak Covid years' impacts on observer data that may make the 2020-2021 data more uncertain. The percentage approach also does not reflect what would happen at very low ABCs (discards would persist and not scale down toward zero as suggested by the percentage approach).

The voting members of the Monitoring Committee generally preferred the Midpoint approach to account for both the historical trends and recent fishery performance, to dampen the effect of a single year estimate, and to mitigate the chances of substantially exceeding an ACL.

The non-voting industry members of the Monitoring Committee preferred status quo as most reasonable given the recent performance of the fishery, implausibility of the discard numbers, and the potential impacts on industry.

The Monitoring Committee also discussed that in the era (2019+) of NMFS' new Catch Accounting and Monitoring System (CAMS), total discards have varied moderately without apparent trend:



Recreational Landings Set-Aside – Getting to the Commercial Quota

Setting aside the 2020-2024 average (updating for one year versus current) appears reasonable – this would be 112 MT. Recreational landings estimates decreased each year from 169 MT in 2020 to 45 MT in 2024. The higher amount in 2020 was not an extreme outlier when examining the 2000-2024 time series for numbers of landed spiny dogfish.

Other

The public and Monitoring Committee discussed concerns regarding discard mortality rates and potential research to re-evaluate the currently-utilized discard mortality rates. Language in the framework adjustment action working document notes that the discard mortality rates are based on limited research and/or ad-hoc expert judgement assumptions (but were peer reviewed in assessments).

See Committee Reports Tab for:

Report of September 2025
Scientific and Statistical Committee (SSC)
meeting



Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: September 2, 2025

To: Chris Moore, Executive Director

From: Jason Didden, staff

Subject: 2026-2027 Spiny Dogfish Acceptable Biological Catches (ABCs)

Summary

- The Council will adopt 2026-2027 spiny dogfish catch/landings limits and potentially other management measures at its October 2025 Meeting after reviewing the recommendations of the Advisory Panel, the Scientific and Statistical Committee (SSC), the Monitoring Committee, the staff, and the public.
- The 2024 fishing year landings were about 8.4 million pounds (M lbs), 6% lower than the previous fishing year. The 2024 landings were the lowest since 2007, with a general declining trend since 2012. Landings have been below the quota in most years since 2012.
- Based on the most recent spiny dogfish assessment, the 2022 biomass was estimated to be at 101% of the reference point (target) and fishing mortality was 81% of the overfishing threshold.
- Projections are available for 2026-2027 for three ABC approaches that the Council will consider in a framework adjustment action that may modify some accountability measures in addition to setting 2026-2027 specifications: 1) year-varying risk-buffered (P*) ABCs, 2) constant/averaged risk-buffered (P*) ABCs, and 3) ABCs equal to the annual overfishing levels (OFLs).
- Depending on the ABC approach, year, and/or uncertainty level assignment, the potential ABCs in the projections range from 7,254 metric tons (MT) (16.0 M lbs) to 8,202 MT (18.1 M lbs). These are total catches not quotas. The projected chances of overfishing range from 46% to 50% with all the resulting projected stock sizes being between 113%-115% of the biomass target.
- Staff's recommendations to the Council regarding final action for the framework adjustment action, including 2026-2027 specifications, will be made after reviewing the results of the SSC meeting and an upcoming Monitoring Committee meeting.

Current Measures and Review of Prior SSC Recommendations

The 2025 spiny dogfish ABC is 7,626 MT (16.8 M lbs), based on setting the ABC equal to the OFL. The Council suspended its risk-buffered ("P*" i.e. acceptable probability of overfishing) ABC policy, which normally would reduce catch below the calculated OFL to account for the uncertainty in the OFL determination, even for a stock above its target biomass. Without this

buffer, there would be a 50% chance of overfishing (and a 50% chance of not overfishing). The Council suspended the risk policy for 2025 due to concerns about impacts on fishing communities given the input from industry that a lower quota (resulting from a lower starting ABC) could jeopardize the viability of the last remaining spiny dogfish processor.

The SSC expressed strong reservations about the absence of a scientific buffer between the OFL and ABC noting: the potential precedent and implications for other stocks; potential effects on sustainability certifications; impairment of the Council's reputation as a leader in use of a defined risk policy; and, simulation experiments that have consistently shown that catching the full calculated OFL leads to lower long-term yields and greater interannual variability. (See https://www.mafmc.org/s/Nov-20 2024 SSC-Meeting-Report final.pdf for their full report.)

After deductions for Canadian landings, discards, and recreational landings, the 2025 commercial quota is 4,236 MT (9.3 M lbs) per Table 1 below. The notes below the table explain the specifications established by the fishery management plan.

Table 1. Spiny Dogfish Specifications for 2025 Fishing Year

2025 Specification	Pounds	Metric Tons
Overfishing Limit (OFL)	16,812,432	7,626
Acceptable Biological Catch (ABC)	16,812,432	7,626
Canadian Landings	8,818	4
Domestic ABC	16,803,614	7,622
Annual Catch Limit (ACL)	16,803,614	7,622
Management Uncertainty Buffer	0%	0%
Amount of buffer	0	0
Annual Catch Target (ACT)	16,803,614	7,622
U.S. Discards (commercial + recreational)	7,220,131	3,275
Total Allowable Landings (TAL)	9,583,483	4,347
U.S. Recreational Landings	244,713	111
Commercial Quota	9,338,770	4,236

<u>Canadian Landings</u>: This was based on a recent 3-year average as recommended by the Monitoring Committee considering recent data.

<u>Domestic ABC</u>: Total ABC minus expected Canadian landings.

<u>Annual Catch Limit (ACL):</u> Equals the Domestic ABC per the fishery management plan. Exceeding this specification can trigger payback accountability measures, affecting future years.

<u>Management Uncertainty Buffer:</u> The Council decided that the other specifications, including a higher discard set-aside, sufficiently address management uncertainty so there is no proposed management uncertainty buffer.

<u>Annual Catch Target (ACT)</u>: The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards</u>: The discard set-aside uses the mid-point between 1) a 5-year average, and 2) the accepted model-utilized proportion of discards. Discard estimates vary year to year, and the Council determined using the midpoint of multiple reasonable approaches was appropriate.

<u>Total Allowable Landings (TAL):</u> This is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> This was based on a recent 5-year average as recommended by the Monitoring Committee considering recent data.

Commercial Quota: This is the TAL minus expected recreational landings.

Recent Landings

The 2024 fishing year (May 1-April 30) landings were about 8.4 M lbs, 6% lower than the previous fishing year. The 2024 landings were the lowest since 2007, with a general declining trend since 2012. Landings have been below the quota in most years since 2012. The current/ongoing 2025 annual landings, as of August 28, have been similar to the pattern observed in 2024 (https://apps-garfo.fisheries.noaa.gov/quota-monitoring/spiny-dogfish/dog_coast_qm.html). The August 2025 Spiny Dogfish Fishery Performance Report (posted at the SSC meeting page) documents the Advisory Panel's perspectives on why recent landings have been lower, noting the tenuous viability of this fishery given the relatively low demand/price, limited processing options, and other challenges.

Stock Status and Biological Reference Points

Based on the 2023 Spiny Dogfish Management Track Assessment (posted at the SSC meeting page), the spiny dogfish stock was neither overfished nor experiencing overfishing in 2022. The fishing mortality (F) proxy reference point is based on Spawning Per Recruit (SPR) of 60% and equals 0.0246 (maintains 60% of the population's reproductive output versus a fishery with no harvest). The research track assessment noted that during the post-2000 period when F was below this level the stock increased, but then the stock decreased after 2012 when F increased above 0.025. The resulting biomass reference point target is spawning output of 188 million pups per year.

Biomass in 2022 was estimated to be at 101% of the reference point/target, despite being relatively near its all-time low. Fishing mortality in 2022 was 81% of the overfishing threshold. This was the first time in the last decade without overfishing. Short term projections have the biomass increasing to about 113% of target in 2026 as recruits from a period of improved recruitment in the late 2000s to early 2010s mature. In the long-run, fishing near the OFL should push the biomass lower, back toward the target.

The peer review for the 2023 assessment deemed the assessment technically sufficient to evaluate stock status and provide scientific advice, but noted concerns including: the uncertainty of the stock dynamics; the decline in female length affecting offspring fitness (and estimation of the fishing mortality reference point); the uncertainty in discards especially pre-1980s; the sparse observations in the highest and lowest size composition bins; the "not that great" fit to the spring survey even with increased likelihood weighting factor (lambda); and that the stock could soon return to overfishing.

Council Action Context

The Council has added three 2026-2027 ABC/specifications approaches into a previously-initiated framework adjustment action (originally just considering accountability measure modifications): 1) year-varying risk-buffered (P*) ABCs, 2) constant/averaged risk-buffered (P*)

ABCs, and 3) ABCs again equal to the OFL, which would be re-suspending the risk policy as was done for 2025. The SSC's terms of reference reflect these approaches.

Potential ABCs were calculated by the NMFS Northeast Fisheries Science Center and are included below in Tables 2-4. Depending on the ABC approach, year, and/or uncertainty level assignment (coefficient of variation [CV] of 100% or 150% - higher uncertainty creates a larger buffer), the potential ABCs in the projections range from 7,254 metric tons (MT) (16.0 million pounds (M lbs)) to 8,202 MT (18.1 M lbs). The projected chances of overfishing range from 46% to 50% with all the resulting projected stock sizes being between 113%-115% of the biomass target. The Council will consider a similar approach to what they did in 2025 (see Table 1 above) to determine the commercial quota once the ABC options have been finalized.

Staff Recommendation

Staff's recommendations to the Council regarding final action for the framework adjustment action, including 2026-2027 specifications, will be made after reviewing the results of the SSC meeting and an upcoming Monitoring Committee meeting. Preliminarily, staff concludes that retaining some precaution against overfishing may be warranted given:

- A) spiny dogfish's slow maturation;
- B) apparent substantial annual variability in realized recruitments;
- C) the potential for generally lower recruitment if the mean size of mature females declines; and
- D) the new assessment model's predictive skills are uncertain as we are still in the first round of projections after a research track assessment was operationalized in the 2023 Management Track Assessment.

Table 2. Year-varying P* Results for 100% CV and 150% CV

		P* Approach	1				P* Approach	1	
Year	OFL	ABC	SSB	SSB/B _{MSY}	Year	OFL	ABC	SSB	SSB/B _{MSY}
Tear	metric tons	metric tons	millions pups	(188 target)	icai	metric tons	metric tons	millions pups	(188 target)
2026	8,084	7,440	212.2	1.13	2026	8,084	7,254	212.2	1.13
2027	8,218	7,587	215.7	1.15	2027	8,222	7,410	215.8	1.15

Table 3. Constant/averaged P* Results for 100% CV and 150% CV

Averaged P* Approach 100% CV						Aver	aged P* App 150% CV	roach	
Year	OFL	ABC	SSB	SSB/B _{MSY}	Year	OFL	ABC	SSB	SSB/B _{MSY}
icai	metric tons	metric tons	millions pups	(188 target)	icai	metric tons	metric tons	millions pups	(188 target)
2026	8,084	7,514	212.2	1.13	2026	8,084	7,332	212.2	1.13
2027	8,216	7,514	215.6	1.15	2027	8,221	7,332	215.8	1.15

Table 4. ABC = OFL Results

			ABC = OFL		
	Year	OFL	ABC	SSB	SSB/B _{MSY}
	Teal	metric tons	metric tons	millions pups	(188 target)
	2026	8,084	8,084	212.2	1.13
L	2027	8,202	8,202	215.2	1.14

(This is the end of this document.)



Spiny Dogfish Draft Advisory Panel (AP) Fishery Performance Report August 20, 2025

The Mid-Atlantic Fishery Management Council's Spiny Dogfish Advisory Panel (AP) met via webinar on August 20, 2025 to review the Spiny Dogfish Fishery Information Document and develop this Fishery Performance Report. Due to scheduling issues, two meeting sessions were held on the same day; this report combines input from both sessions.

This report primarily serves to contextualize catch histories for the Scientific and Statistical Committee (SSC) by providing information about fishing effort, market trends, environmental changes, and other relevant factors. Some advisors also provided specific input on upcoming specifications and on potential changes to accountability measures contained in the Framework Action being used to set the specifications. See the separate section "Advisor Input on Specific Framework Alternatives," on the final page of this report.

Advisor comments presented in this report do not represent consensus or majority opinions unless specifically noted.

Advisory Panel members attending: N. Adam Spivey, Chris Rainone, James Dopkin, James Fletcher, Jameson Gregg, Jerry Leeman, Sonja Fordham, William Mullis, John Whiteside, and Kevin Wark.

Others attending: Jason Didden, Jamie Cournane, Skip Feller, Todd Janeski, Bill Lucey, Corrin Flora, Geret DePiper, James Boyle, Ted Platz, Yan Jiao, Sonny Gwin, Laura Deighan, Lisa Wooleyhan, Nichola Meserve, and Sefatia Romeo Theken.

Trigger questions to generate discussion:

- 1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
- 2. Are the current fishery regulations appropriate? How could they be improved?
- 3. What would you recommend as research priorities?
- 4. What else is important for the Council to know?

Market/Economic Conditions Affecting Landings

Similar market issues persist as with previous years – demand has been low but stable recently – the market could support more landings/production than in the most recent year if participation/ production at the vessel level increases. The processor has not been substantially constrained by production capacity.

Southern fishermen have to ship to Massachusetts. There are no Southern processors – they

were "burnt" by previous management and won't re-enter without quota stability on a decadal timeframe. Previous reports have noted not having a processor also depresses New York landings.

High fuel costs and typical dogfish prices combine to keep landings low. High fuel costs add to vessel costs AND trucking cost, which is a substantial issue given the processing situation.

Better opportunities in other fisheries can reduce spiny dogfish effort. It's hard to attract/pay/retain a crew, often you must fish solo. Any disruption to this fishery will exacerbate these issues and make it impossible to sustain participation.

Changing the name to Chip Fish would help with marketing/exports. We could sell these in the U.S. if we could change the name (like snakehead). Staff note: name changes have been investigated in the past, unsuccessfully.

Cornell has tried to expand domestic consumption of spiny dogfish and other undervalued/underutilized/lesser-known species through chefs' sampler events, underserved communities/food-banks, etc. See https://www.localfish.org/. An advisor approached Cornell unsuccessfully about helping with the name change issue.

Industrial uses could help develop a market for male dogfish. Developing industrial markets (e.g. fertilizer, processed export, or pharmaceutical/livers) requires a higher trip limit for trawlers. Expanding use of liver components could increase overall value – several outreach efforts by fishing interests have occurred to pharmaceutical companies with no interest expressed back.

Regarding the fin market – there are self-imposed bans by cargo lines that prohibit shark fin transport even from sustainable sources (i.e. this is beyond our control).

Environmental Conditions Affecting Landings

We see availability fluctuations in the spring and different behavior seasonally but no major overall abundance swings in recent years.

Environmental conditions are always a factor in terms of dogfish distribution and availability to fishermen. Weather is particularly critical for the winter fishery off Virginia. The fishery would have easily had another million pounds into Virginia in winter of 2024/2025 with better weather.

Condition of North Carolina and Massachusetts inlets makes it very difficult to get product into some ports.

Management Issues Affecting Landings

You're going to eliminate this fishery totally with further restrictions given the likely impacts on the last remaining processor. We need a holistic approach to keep the fishery functioning given the financial impacts of low trip limits (and low product value), and/or fishery closures. We are at a threshold where interest, and fishermen, will evaporate - don't say we didn't tell you what the results of further reductions would be.

Artificially low quota (flawed assessment and previous SSC decisions) and low expectations

dampen interest: If you don't think you can maintain production you're not going to try.

Industry needs managers to improve their awareness of the impacts of decisions. Loss of fish houses is a coast-wide issue – and the loss of infrastructure needs to be addressed to maintain a healthy fishery. The AP has been warning about the impacts on infrastructure of management decisions that are destroying this fishery with rollercoaster-style management and resulting shoreside gentrification

States and NMFS have enacted restrictions that have eliminated North Carolina landings. North Carolina trawl fishermen can't land spiny dogfish in Virginia due to state regulations. These issues exacerbate gentrification issues. You broke the supply chain from the south, eliminating the primary southern fish house/buyer/packer in recent history. The new Virginia dealer was still spinning up during the 2023 fishing year.

Regulations (especially the trip limit) do not allow a male fishery. State regulations do not allow new fishermen to participate. The current regulations are geared to keep price up and production limited and do not allow industrial production.

In recent years New Jersey had lowered to a 4,000-pound trip limit to control landings given the low quota (to extend the season) – this lowered landings versus if New Jersey had maintained a higher trip limit. New Jersey just increased to 6,000 pounds in August 2025.

Public comment: The New England Fishery Management Council will be looking at possibly opening up several relevant statistical areas that are not currently open until June 1 (via their deregulatory action).

Other Issues

Many advisors think the surveys are not representative of the biomass and the fishery has repeatedly been impacted by "best available" science that isn't accurate. We'd like to be heard for once.

Bigelow performance issues do a disservice to all the fisheries and fishermen. The repeated failure of the Bigelow since 2014 to fully complete its mission in terms of planned stations and/or timing eliminates our ability to have good information about spiny dogfish, given the dependence on the survey. This compounds uncertainty concerns and the Bigelow performance degrades the credibility of the resulting information (both regarding individual years and interpreting the time series). We had 2/10 years of full surveys in a recent period. This affects all species' management. The timing of the survey is critical for spiny dogfish due to the observed migration patterns, and not consistently sampling the same areas at the same times reduces the meaningfulness of the resulting data. The Council should call in NEFSC's maritime operations manager to account for Bigelow performance issues.

Given the lack of an off-shelf survey and vertical water column usage by dogfish, we don't really know the population size. 1/10 of the needed area is surveyed. See Carlson AE, Hoffmayer ER, Tribuzio CA, Sulikowski JA (2014) The Use of Satellite Tags to Redefine Movement Patterns of Spiny Dogfish (Squalus acanthias) along the U.S. East Coast: Implications for Fisheries Management. PLoS ONE 9(7): e103384. https://doi.org/10.1371/journal.pone.0103384. Also see Garry Wright's thesis that concluded

that the Northeast Fisheries Science Center (NEFSC) trawl survey is not accurately representing spiny dogfish biomass.

In 2025, the multispecies trawl fleet saw very high spiny dogfish catches around Stat Area 515 - East of Cashes, but the Bigelow survey vessel doesn't go into that area much due to their procedures for bottom contours in that area.

The MAFMC suspended its risk policy to increase quota based on economic factors, which is especially concerning given the inherent biological vulnerability of spiny dogfish. The Council should revert to its standard risk policy.

In 2023 concern was voiced whether the NEFSC is continuing wire/net measurements to ensure survey consistency. NEFSC staff provided the following: The NEFSC bottom trawl survey monitors and validates survey tows for consistent gear and vessel performance against a detailed set of performance criteria. If gear or vessel performance is outside of these standard criteria, abundance data would not be used in the calculation of survey indices. Some biological data, such as age samples, may still be used. Please refer to the NEFSC Bottom Trawl Protocols for more information.

Wind farm impacts will squeeze the fishery from the ocean-side, and shoreside gentrification squeezes from the land-side – both are critical stressors in terms of fishery survival.

Allowing dogfish populations to increase has hurt all other fish populations. We need better calculations regarding consumption by dogfish of other fish.

You should account for the continual nature of embryo development/pupping in the assessment.

The fishery is not seeing a dearth of large females in landings – we are seeing plenty of good-sized fish, including through last winter in Virginia. We don't see samplers – yet we keep getting cut because of poor data. The processing plant has offered and had samplers visit the processing plant, but few and then visits stopped. They are happy to have more.

<u>Advisor Input on Discards</u> Given that the set-aside for discards is always a critical issue, staff described information on recent discards and asked the AP for input on their perspectives on trends in discards. Multiple advisors were very concerned that:

Discard numbers must be grossly wrong, and bad guesswork is driving mismanagement in this fishery with incidental fisheries shutting down the directed fishery. The discard numbers do not appear credible (too high) and we need a hard breakdown of discards by gear type and re-examination generally given reduced activity across relevant fisheries.

Discard mortality assumptions also seem high – spiny dogfish are pretty hardy.

Staff notes re: discards: staff emailed recent discards by area and gear-mesh to advisors after the meeting. A question asked why fish are discarded in the trawl fishery – staff has requested a summary of spiny dogfish trawl discard reasons from the observer program.

Research Priorities

We need to utilize commercial fishermen more in developing indices of abundance (not just the Bigelow). Fishermen are losing trust in the process with constant changes and new models. The Catch per unit of effort (CPUE) type of indices being developed for monkfish should be considered for dogfish.

Either cooperative or not, gillnet-based surveys would make more sense for spiny dogfish. Examine west-coast published research on abundance.

We should reconsider using other survey data sources like NEAMAP and/or VAST modeling for integrating multiple surveys. NEAMAP has also been adding spine collecting for ageing work. Staff note: VAST multi-survey modeling was investigated by the assessment, but the models with VAST had poorer diagnostics and "...comparison of NEFSC spring bottom trawl relative abundances indices and the VAST model spring indices indicated similar patterns over time."

Consider vertical distribution research and corral-based depletion study – gillnet based work – Gary Wright thesis – East Carolina University.

East Carolina Univ has tagged 43,000+ spiny dogfish – trying to get graduate student to publish. Appears to be an availability gap from year 2 to around 8-10 where if not caught in first few years, fish are not seen but then eventually show back up in commercial catches.

Why are people opting out of this fishery? Graying of the fleet? Costs? Other fisheries? We need to understand the vast drop in participation and what is projected for future trends.

eDNA and Baited Remote Underwater Vehicles (BRUVs) should be explored for fisheries including spiny dogfish – especially since gillnets appear to have reduced CPUE in cold water – but you see them on camera...

Some in industry have been trying to engage MIT with a project to automatically process small dogfish – have not been able to get funding.

Off the shelf sampling needs to occur to understand biomass, especially male biomass. Why can't Bigelow or some other method do some deeper sampling? Could we send a drone to prospect/monitor?

Increased cooperation with Canada for the next assessment would be productive given potential for population shifts with climate change.

Updated bycatch mortality information could help us understand biomass trends.

From previous years for future review:

Could there be electromagnetic energy being transferred to the trawl affecting survey catches?

Spiny dogfish fishing could have an environmental justice aspect as a low-priced seafood.

Explore using 3-D printing technology to improve "fillet" production from spiny dogfish.

Consider whether/how electrofishing surveys could be used.

Research on squalamine from spiny dogfish livers for medical use could increase fishery value.

We should research the purposes of the spine – is it offensive (weakening prey), or defensive?

Follow-Ups

Advisor Eric Burnley had connection issues and sent the following:

I tried to attend the meeting, but every time I was sent to a waiting list that said the meeting would begin when the host arrived. I was told there were one or two people in the line. That went on for about 15 minutes until I gave up and went back to work.

As a recreational fisherman I don't have much to add to the discussion on dogfish except the more the commercial fishermen catch the better. These fish are a pain on the surf and on structure when you are trying to catch anything else. It seems once they show up when you are fishing ocean structure for sea bass or flounder, you have to pack up and move because they will take over and that is pretty much all you are going to catch. On the beach they come and go mixed in with the target fish, spot, croaker, kings, blues and trout. The ones from the beach are generally smaller than the ones from ocean structure further out.

I do eat the larger ones if I can clean out the blood line that runs down the back of the fish while it is still alive. Not exactly sure how the commercial boys handle this operation, but if the fish dies while that bloodline is still intact the meat will be ruined. Eric B Burnley, Sr.

Advisor James Fletcher had this exchange with Jon Hare after the meeting:

Reply from Jon Hare Thursday, August 21, 2025 10:39 AM:

Dear Mr. Fletcher,

You raise many good points regarding the difficulty separating availability vs abundance for species that use both continental shelf and continental slope habitats. As you know, NEFSC surveys are conducted on the continental shelf, not on continental slope habitats. I disagree, however, with your statement "INCORRECT SCIENCE IS AN INTENTIONAL ACTION BY NMFS & NOAA". Two points here. First, I would argue that our science is not incorrect; it is incomplete. I agree we do not have much information regarding dogfish's use of continental slope habitats and how this use would impact a stock assessment. Second, this gap in scientific information is not intentional; it is driven by the resources that we have available to do our work.

We have been investing more in active acoustics over the past year and I will check and see if there is additional information that could be brought to bear on the issue. Also, if you have a contact at the Navy, please share. I contacted Office of Naval Research on this issue previously and did not get any useful information.

Thank you for your ideas and continued engagement. Regards. Jon

Email from James Fletcher to Jason Didden (MAFMC) and Jon Hare (NEFSC) Aug 21, 2025 at 8:40 AM:

THANK YOU JASON! I know you do your best for a male fishery & Name change: though NMFS is utilizing Dogfish to restrain recovery of East Coast Stocks.

NMFS & Science center intentionally will not ALLOW HONEST NUMBERS: !976 was last male harvest. 49 years of male fish.NMFS built a 90 million dollar [big & slow} vessel & will not even do an acoustic survey off shore of MALE DOGFISH!.

NMFS & science center refuse to request NAVAL acoustic survey information THE NAVY SEES THESE LARGE GROUPS OF DOGFISH ACCORDING TO SEAMEN WHO ARE IN COUNTER WAR CRUISES.

For this report please show no male information from area tags show fish are. REFUSAL TO SURVEY OUTER EEZ! Could WOULD MAFMC buy more tags and have NEMAP put tags on male fish only? MONEY FROM ADVISORS NOT TRAVELING!

EXPLAIN WHY science center is not tagging male dogfish; seems NMFS or NOAA can fallow WHITE SHARKS OF NO COMMERCIAL VALUE. BEST I UNDERSTAND!! it is "SCIENCE CENTER" MISS INFORMATION that results in low quota!

PLEASE NOTE ONE ADVISOR THINKS THE INCORRECT SCIENCE IS AN INTENTIONAL ACTION BY NMFS & NOAA. INCLUDING JOHN HARE IN THIS EMAIL.

MALES NOT HARVESTED IN 49 YEARS and center does not see a problem?

A electric mid water trawl at edge of EEZ could show total male population miss calculation! THANKS JASON FOR ALL YOUR HARD WORK!

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Advisor Input on Specific Framework Alternatives

John Whiteside recommended (also supported by Bill Mullis, Chris Rainone, and Kevin Wark) the following alternatives:

1A: Don't pay back if we're at/over 100% biomass - We've only exceeded the quota twice in last 15 years and then just by 1%.

2: no action – why punish the directed commercial fishery for having good landings data? Instead we need better recreational data and better discard data – those are artificially lowering the directed quota.

3: no action – just go with stock size and don't have a special case where you don't use scaling provisions to mitigate paybacks just because you are in a rebuilding plan.

4B: Use 3-year average for paybacks but just use most recent year to determine how you scale paybacks based on biomass.

5A: Allow up to 105% closure as long as over 50% of biomass target

6C: Re-suspend the risk policy i.e. go with a 50% chance of overfishing.

Sonja Fordham recommended:

Support minimal change and no relaxation if stock is not fully rebuilt. Generally be cautionary. Retain the paybacks as a foundational fishery management measure used in many FMPs. Appreciate the interest in flexibility but this is the most vulnerable population managed by the MAFMC. Maybe stock is near target, but reproductive capacity seems low and there's substantial uncertainty – these factors continue to argue for a precautionary approach to management.

Overall concern: this is a relative success story for shark management but that comes from following science and having mechanisms built into the process that inject buffers and precaution as is warranted. Otherwise sustainability and stability (of the fishery and ecosystem) is at risk. The Council should return to its standard risk policy.

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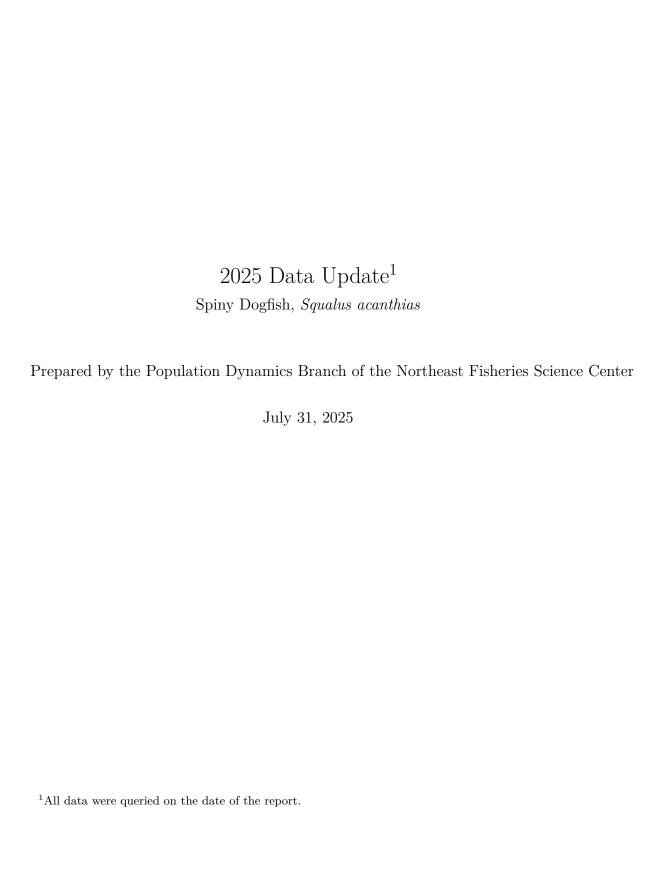


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Survey Indices

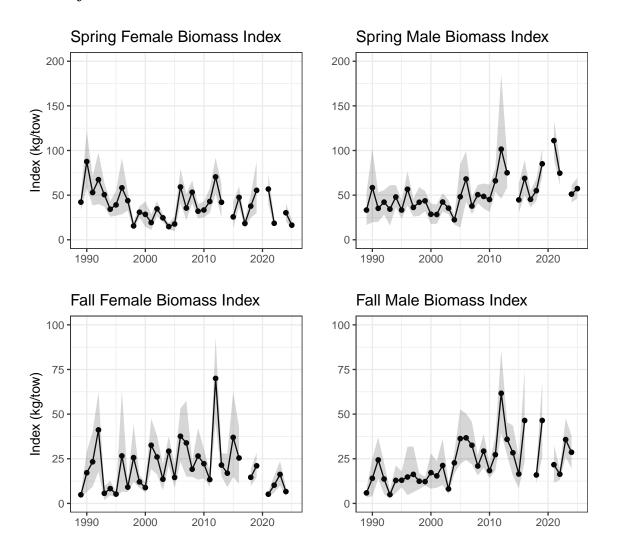


Figure 1: Annual NEFSC Bottom Trawl Survey Biomass Index (kg per tow). The Spring Index is estimated for 1989 through 2025. The Spring survey was incomplete in 2014, 2020, and 2023; no estimates available. The Fall Index is estimated for 1989 through 2025. The Fall survey was incomplete in 2017 and 2020; no estimates available.

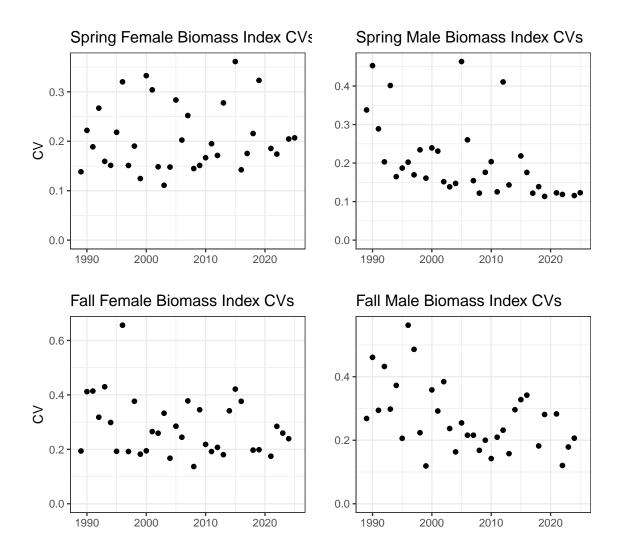


Figure 2: Annual NEFSC Bottom Trawl Survey Biomass Index coefficients of variation (CV).

Female Spawning Stock Biomass

Spiny Dogfish Female Spawning Stock Biomass Estimates

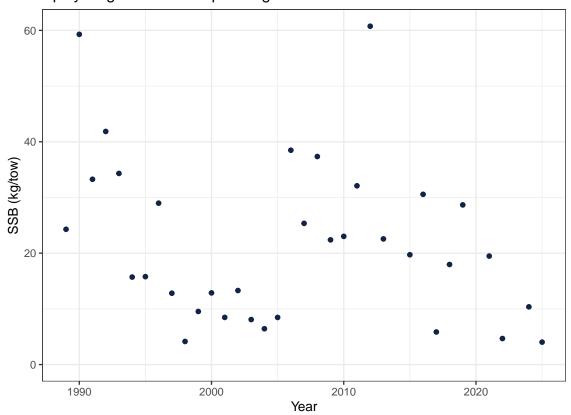


Figure 3: Spiny Dogfish Female Spawning Stock Biomass (kg/tow) from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025. Survey was incomplete in 2014, 2020, and 2023; no estimates available.

Mean Length of Mature Females

Mean Length (cm) of Mature Female Spiny Dogfish

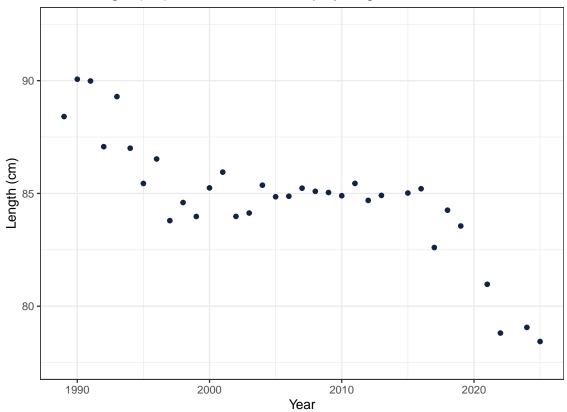


Figure 4: Mean length (cm) of mature female spiny dogfish from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025. Survey was incomplete in 2014, 2020, and 2023; no estimates available.

Sex Ratio

Male:Female Sex Ratio of Spiny Dogfish

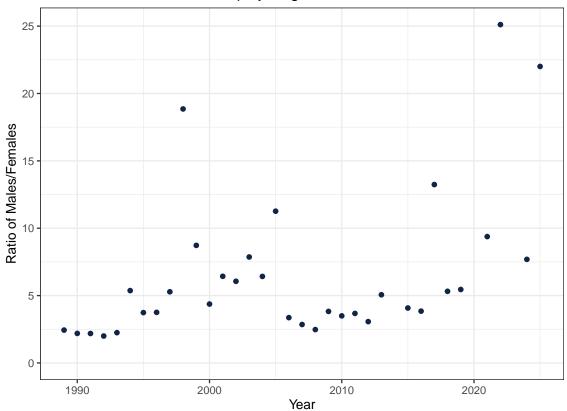


Figure 5: Male:Female Sex Ratio of Spiny Dogfish from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025. Survey was incomplete in 2014, 2020, and 2023; no estimates available.

Mean Length of Pups

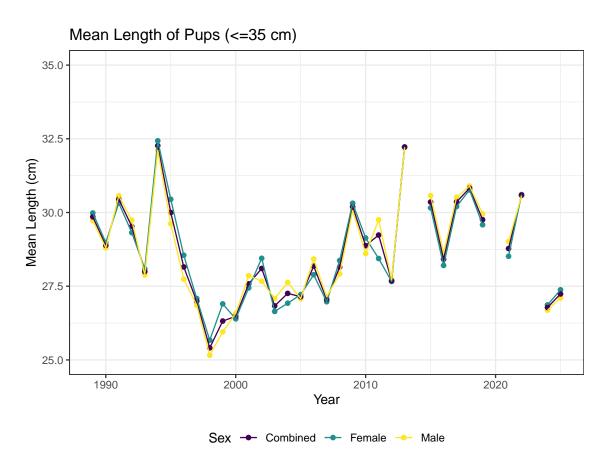


Figure 6: Mean length (cm) of spiny dogfish pups (<=35 cm) from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025.

Pup Index

Spiny Dogfish Pup Index

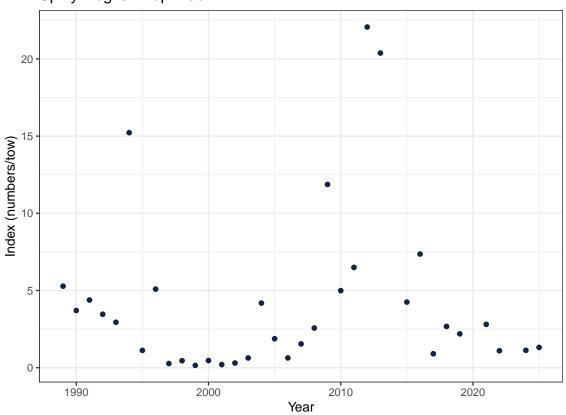


Figure 7: Spiny Dogfish Pup (<=35 cm) Index from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025. Survey was incomplete in 2014, 2020, and 2023; no estimates available.

Table 1: Annual NEFSC Bottom Trawl Survey Biomass Index (kg per tow). The Spring Index is estimated for 1989 through 2025. The Spring survey was incomplete in 2014, 2020, and 2023; no estimates available. The Fall Index is estimated for 1989 through 2025. The Fall survey was incomplete in 2017 and 2020; no estimates available.

Year	Spring Females	Spring Females CV	Spring Males	Spring Males CV	Fall Females	Fall Females CV	Fall Males	Fall Males CV
1989	42.18	0.1383	33.31	0.3379	4.85	0.1939	5.89	0.2685
1990	87.64	0.2220	58.40	0.4529	17.15	0.4119	14.07	0.4611
1991	52.93	0.1888	35.19	0.2889	23.29	0.4141	24.37	0.2943
1992	67.39	0.2670	42.17	0.2032	41.17	0.3179	13.68	0.4323
1993	50.56	0.1593	34.34	0.4014	5.66	0.4297	4.97	0.2980
1994	34.27	0.1513	47.92	0.1648	8.31	0.2986	12.88	0.3727
1995	39.09	0.2182	33.31	0.1871	5.22	0.1926	12.98	0.2061
1996	58.22	0.3202	56.61	0.2024	26.62	0.6560	14.78	0.5623
1997	43.81	0.1510	36.25	0.1695	9.10	0.1920	16.27	0.4863
1998	15.57	0.1902	42.05	0.2344	25.64	0.3766	12.41	0.2238
1999	30.89	0.1246	43.60	0.1609	12.06	0.1822	12.21	0.1191
2000	28.49	0.3327	28.63	0.2394	8.85	0.1946	17.21	0.3585
2001	19.30	0.3040	28.37	0.2311	32.57	0.2652	15.43	0.2921
2002	34.57	0.1484	42.29	0.1517	26.00	0.2592	21.22	0.3845
2003	24.58	0.1110	35.44	0.1384	13.56	0.3327	8.09	0.2369
2004	14.78	0.1478	22.40	0.1472	29.25	0.1673	22.71	0.1634
2005	17.68	0.2835	48.17	0.4635	14.53	0.2850	36.29	0.2547
2006	59.14	0.2024	68.10	0.2603	37.61	0.2444	36.72	0.2159
2007	35.51	0.2520	37.78	0.1544	33.87	0.3779	32.55	0.2159
2008	53.26	0.1448	50.52	0.1220	19.16	0.1367	20.95	0.1681
2009	32.01	0.1511	48.55	0.1760	26.54	0.3454	29.28	0.2001
2010	33.34	0.1667	45.09	0.2037	22.25	0.2181	18.34	0.1423
2011	42.89	0.1950	66.03	0.1254	13.38	0.1919	27.31	0.2096
2012	70.45	0.1713	101.49	0.4107	70.00	0.2072	61.67	0.2317
2013	42.04	0.2776	75.04	0.1433	21.47	0.1804	35.89	0.1579
2014					16.94	0.3416	28.36	0.2961
2015	25.65	0.3612	44.70	0.2186	36.96	0.4213	16.46	0.3279
2016	47.51	0.1423	68.76	0.1758	25.43	0.3764	46.43	0.3419

Year	Spring Females	Spring Females CV	Spring Males	Spring Males CV	Fall Females	Fall Females CV	Fall Males	Fall Males CV
2017	18.30	0.1753	45.27	0.1219				
2018	37.65	0.2157	54.99	0.1387	14.62	0.1971	15.94	0.1821
2019	55.38	0.3231	85.06	0.1135	21.06	0.1985	46.47	0.2811
2020								
2021	56.81	0.1855	111.10	0.1227	5.16	0.1747	21.68	0.2830
2022	18.51	0.1741	74.63	0.1186	10.22	0.2844	16.35	0.1206
2023					16.24	0.2596	35.74	0.1787
2024	30.27	0.2046	51.13	0.1157	6.64	0.2391	28.65	0.2065
2025	16.39	0.2069	57.30	0.1230				

Table 2: Spiny Dogfish female spawning stock biomass (kg/tow), mean length (cm) of mature females, male:female sex ratio, mean length (cm) of pups (<=35 cm), and pup index (<=35 cm) from the NEFSC Spring Bottom Trawl Survey from 1989 through 2025. The Spring survey was incomplete in 2014, 2020, and 2023; no estimates available.

Year	Female SSB	Mean Mature Female Length (cm)	Sex Ratio	Mean Female Pup Length (cm)	Mean Male Pup Length (cm)	Mean Combined Pup Length (cm)	Pup Index (number per tow)
1989	24.29	88.41	2.44	29.99	29.73	29.85	5.28
1990	59.29	90.06	2.19	28.98	28.80	28.88	3.70
1991	33.27	89.99	2.19	30.32	30.56	30.45	4.38
1992	41.85	87.07	2.00	29.32	29.74	29.53	3.46
1993	34.32	89.29	2.25	28.09	27.89	27.99	2.94
1994	15.71	87.01	5.37	32.43	32.11	32.27	15.22
1995	15.79	85.44	3.74	30.45	29.62	30.00	1.12
1996	28.98	86.53	3.75	28.55	27.74	28.15	5.09
1997	12.81	83.79	5.28	27.08	26.86	26.99	0.27
1998	4.15	84.60	18.85	25.67	25.16	25.41	0.45
1999	9.53	83.98	8.73	26.90	25.95	26.32	0.15
2000	12.87	85.25	4.37	26.39	26.58	26.48	0.46
2001	8.47	85.94	6.43	27.44	27.86	27.58	0.20
2002	13.29	83.98	6.06	28.45	27.67	28.10	0.31
2003	8.08	84.13	7.86	26.64	27.08	26.83	0.63
2004	6.43	85.37	6.42	26.92	27.63	27.26	4.18
2005	8.46	84.85	11.26	27.21	27.08	27.14	1.88
2006	38.48	84.88	3.36	27.89	28.42	28.18	0.63
2007	25.35	85.23	2.85	26.97	27.14	27.06	1.54
2008	37.36	85.09	2.48	28.37	27.92	28.15	2.57
2009	22.39	85.04	3.83	30.31	30.07	30.19	11.87
2010	23.02	84.90	3.49	29.14	28.61	28.88	4.99
2011	32.10	85.44	3.68	28.44	29.75	29.24	6.50
2012	60.75	84.69	3.07	27.66	27.71	27.69	22.06
2013	22.56	84.91	5.06	32.23	32.21	32.22	20.38
2014							
2015	19.72	85.02	4.08	30.16	30.57	30.35	4.25

Year	Female SSB	Mean Mature Female Length (cm)	Sex Ratio	Mean Female Pup Length (cm)	Mean Male Pup Length (cm)	Mean Combined Pup Length (cm)	Pup Index (number per tow)
2016	30.56	85.21	3.84	28.21	28.64	28.42	7.36
2017	5.85	82.60	13.24	30.21	30.51	30.36	0.90
2018	17.97	84.26	5.32	30.76	30.90	30.82	2.67
2019	28.67	83.56	5.45	29.58	29.96	29.76	2.19
2020							
2021	19.48	80.97	9.38	28.52	29.02	28.78	2.81
2022	4.67	78.81	25.11	30.61	30.57	30.59	1.10
2023							
2024	10.36	79.06	7.69	26.87	26.69	26.78	1.13
2025	4.03	78.44	22.01	27.38	27.10	27.24	1.32



2025 Spiny Dogfish Fishery Information Document Aug 15, 2025

This Fishery Information Document provides an overview of the biology, stock condition, management system, and fishery performance for spiny dogfish (*Squalus acanthias*) with an emphasis on recent data. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, Marine Recreational Information Program (MRIP), and Catch Accounting and Monitoring System (CAMS) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit http://www.mafmc.org/dogfish.

Key Facts

- 2024 fishing year landings were about 8.4 million pounds, 6% lower than the previous year, and the lowest since 2007.
- Nominal prices have been about \$0.22 the last 3 years and without much trend since 1996, but inflation erodes the value of a stable nominal price, resulting in short- and long-term declining real prices.
- The 2024 fishing year quota was about 10.2 million pounds (15% lower than 2023's quota). About 82% of the 2024 quota was landed.
- The current 2025 quota is about 9.3 million pounds (9% lower than 2024's quota). The 2025 quota is about 11% higher than 2024's landings.

Basic Biology

Spiny dogfish is the most abundant shark in the western north Atlantic and ranges from Labrador to Florida, being most abundant from Nova Scotia to Cape Hatteras, North Carolina. Migrations are believed to primarily occur in response to changes in water temperature. Spiny dogfish have a long life, late maturation, a long gestation period, and relatively low fecundity, making them generally vulnerable to depletion. Fish, squid, and ctenophores dominate the stomach contents of spiny dogfish collected during the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys, but spiny dogfish are opportunistic and have been found to consume a wide variety of prey. More detailed life history information can be found in the essential fish habitat (EFH) source document for spiny dogfish at: https://www.fisheries.noaa.gov/region/new-england-mid-atlantic#science.

Status of the Stock

Based on the 2023 Management Track Assessment², the spiny dogfish stock was neither overfished nor experiencing overfishing in 2022. Despite being at relatively low historical abundance, the stock was slightly above its biomass target in 2022. However, the reduced productivity has lowered sustainable catches. Projections suggest that in the 2026 calendar year, the stock could be around 113% of its target biomass, with an earlier period of better recruitment maturing.

Management System and Fishery Performance

Management

The Council established management of spiny dogfish in 2000 and the management unit includes all federal East Coast waters. Quotas are set based on the current science and Council's risk policy to avoid overfishing and rebuild stocks if necessary.

Access to the fishery is not limited, but a federal permit must be obtained to fish in federal waters and there are various permit conditions (e.g. trip limit and reporting). There is a federal trip limit of 7,500 pounds (increased from 6,000 for the 2022 fishing year). Some states mirror the federal trip limit, but states can set their own trip limits. The annual quota has been allocated to states through the Atlantic States Marine Fisheries Commission (http://www.asmfc.org/species/spiny-dogfish).

In April 2024 the Council took final action on a joint framework action with the New England Fishery Management Council (NEFMC) to reduce the bycatch of Atlantic sturgeon in the monkfish and spiny dogfish gillnet fisheries. For federal vessels targeting spiny dogfish, the Council approved overnight soak prohibitions during months of high sturgeon interactions within bycatch hotspot polygons in the New Jersey and Delaware, Maryland, and Virginia regions. In addition, they approved an exemption from the overnight soak prohibition for vessels using a mesh size less than 5.25 inches in the Delaware, Maryland, and Virginia hotspot polygons. Implementation and timing details can be found at https://www.mafmc.org/newsfeed/2024/noaa-fisheries-announces-final-rule-to-implement-joint-monkfish-and-spiny-dogfish-framework.

$Commercial\ Fishery^I$

Figure 1 and Table 1 illustrate spiny dogfish landings for the 2000-2024 fishing years relative to the quotas in those years. The Advisory Panel has previously noted that the fishery is subject to strong market constraints. 2024 fishing year landings were about 8.4 million pounds, 6% lower than the previous year, and the lowest since 2007. Figure 2 provides inflation-adjusted spiny dogfish ex-vessel prices in "2024 dollars" and Figure 3 provides ex-vessel values, also in 2024

¹ Recreational catch comprises a relatively low portion of fishing mortality – see Figure 5 for a time series of recreational catch in numbers of fish, most of which are discarded.

inflation adjusted dollars. Figure 4 illustrates preliminary landings from the 2025 and 2024 fishing years relative to the 2025 quota. The last data point is typically the most incomplete.

Tables 2-4 provide information on landings in the 2022-2024 fishing years by state, season, and gear type. Table 5 provides information on the numbers of participating vessels that have at least one federal permit. State-only vessels are not included, but the table should still illustrate overall trends in participation.

Non-Target Species (From Recent Sturgeon Action)

A) Other Species Caught in Directed Spiny Dogfish Fishing

Due to reduced observer coverage after 2019² (primarily related to Covid-19), observer data from 2017-2019 still best describe incidental catch in the spiny dogfish fishery. The primary database used to assess discarding is the NMFS Observer Program database, which includes data from trips that had trained observers onboard to document discards. One critical aspect of using this database to describe discards is to correctly define the trips that constitute a given directed fishery. A flexible criteria of what captains initially intend to target, how they may adjust targeting over the course of a trip, and what they actually catch would be ideal but is impracticable.

From 2017-2019, gill net gear accounted for 66%-74% of annual landings. Bottom long line gear accounted for 18-27% of annual landings. All other gears, including bottom trawl, accounted for only 7-8% of annual landings and are not expected to have involved substantial targeting of spiny dogfish given current trip limits (substantial trawling for spiny dogfish would only be expected at higher trip limits given the price of spiny dogfish) and very similar intensity of bottom trawling in the region would be expected to occur even with a complete prohibition on spiny dogfish retention.

From 2017-2019 there were on average 235 observed sink gill net trips (gear # = 100) annually where spiny dogfish accounted for at least 40% of retained catch, and those trips form the basis of the following analysis to determine which other species the directed spiny dogfish fishery interacts with. These trips made 2,540 hauls of which 86% were observed. Hauls may be unobserved for a variety of reasons, for example transfer to another vessel without an observer, observer not on station, haul slipped (dumped) in the water before observing, etc. These observed hauls had a 5% discard rate, most of which was spiny dogfish.

The other species to exceed 1,000 pounds of observed catch per year (used as an ad-hoc minimum indication threshold of potentially more than negligible catch) included (annual observed catch rounded to nearest 1,000 pounds): winter/big skate (83,000 pounds), little skate (8,000 pounds), unknown skates (7,000 pounds), monkfish (6,000 pounds), smooth dogfish (4,000 pounds), cod (3,000 pounds), lobster (3,000 pounds), pollock (3,000 pounds), menhaden (2,000 pounds), haddock (1,000 pounds), and striped bass (1,000 pounds). Of these, only cod is overfished while the Southern New England lobster stock is "depleted with poor prospects of

3

² For example for July 2018-June 2019 there were 381 observed large or extra-large mesh Mid-Atlantic gillnet trips but only 147 for July 2021-June 2022 (https://www.fisheries.noaa.gov/resource/data/annual-discard-reports-northeast)

recovery" (https://media.fisheries.noaa.gov/2022-05/2021_SOS_FSSI_and_nonFSSI_Stock_Status_Tables.pdf, http://www.asmfc.org/species/american-lobster). Information on skates, the most frequent bycatch species, can be found above in the section that focuses on bycatch in the monkfish fishery.

From 2017-2019 there were on average 36 observed bottom longline trips (gear #=010) annually where spiny dogfish accounted for at least 40% of retained catch, and those trips form the basis of the following analysis to determine which other species the directed spiny dogfish fishery interacts with. These trips made 438 hauls of which 99% were observed. Hauls may be unobserved for a variety of reasons, for example transfer to another vessel without an observer, observer not on station, haul slipped (dumped) in the water before observing, etc. These observed hauls had a 10% discard rate, most of which was spiny dogfish.

The other species to exceed 1,000 pounds of observed catch per year (used as an ad-hoc minimum indication threshold of potentially more than negligible catch) included (annual observed catch rounded to nearest 1,000 pounds): golden tilefish (7,000 pounds), barndoor skate (4,000 pounds), smooth dogfish (3,000 pounds), and winter/big skate (2,000 pounds). Of these, none is overfished (https://media.fisheries.noaa.gov/2022-05/2021 SOS FSSI and nonFSSI Stock Status Tables.pdf).

While not extrapolations, the above amounts appear very small relative to annual catch limits for these species, and management of these species already accounts for both landings and discards. Given the apparent low level of interactions with non-target species and ongoing management of those species, their conditions are affected predominantly by other fisheries/issues and should not be affected by this action or the operation of the spiny dogfish fishery more generally.

B. Other Managed Fisheries with Non-directed Spiny Dogfish Catch

Per NMFS' 2020 report on Discard Estimation, Precision, and Sample Size Analyses for 14 Federally Managed Species Groups in the Waters off the Northeastern United States (NMFS 2020), a wide variety of gear types discard spiny dogfish beyond the gear types mentioned above that are responsible for most landings. These other gear types catch most of the species that exist in the region, some of which are in good condition and some of which are in an overfished condition. While this indicates that incidental spiny dogfish catch occurs across a wide variety of other managed fisheries, outside of the directed spiny dogfish fishery, spiny dogfish is often seen as a pest species (e.g. see MAFMC 2017 MSB Fishery Performance Report at http://www.mafmc.org/s/2017-MSB-Fishery-Performance-Report.pdf) and is often entirely discarded (e.g. longfin squid fishery – see MAFMC 2020). As such, changes in spiny dogfish regulations are not expected to change fishing patterns for other fisheries that catch (and mostly discard) spiny dogfish or affect any of those managed species in a meaningful way. Further details about the many other managed species in the region and their current stock statuses can be found in their relevant FMPs.

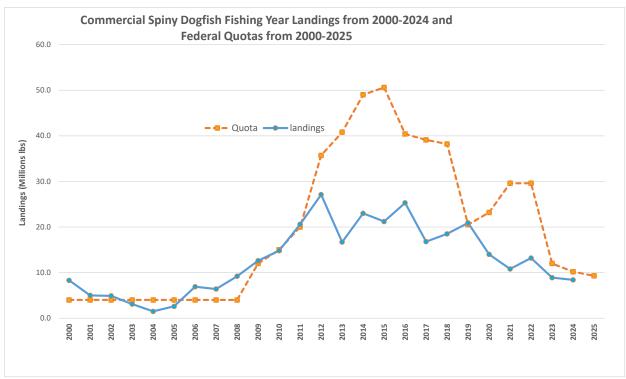


Figure 1. Annual spiny dogfish landings and federal quotas since 2000

Source: NMFS CAMS queried 8/14/2025

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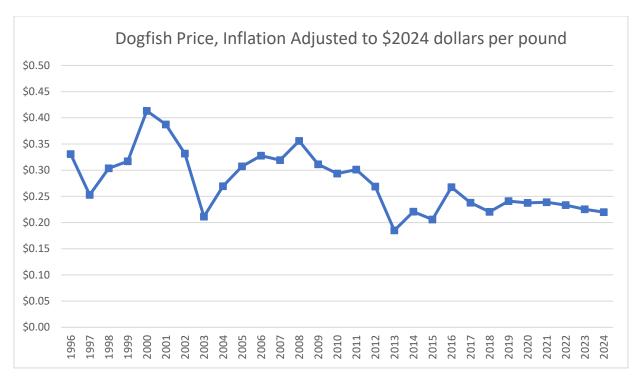


Figure 2. 1996-2024 fishing years' average ex-vessel prices of spiny dogfish in 2024 dollars per landed pound (adjusted to "2024 dollars" using the GDP deflator).

Source: NMFS CAMS queried 8/14/2025

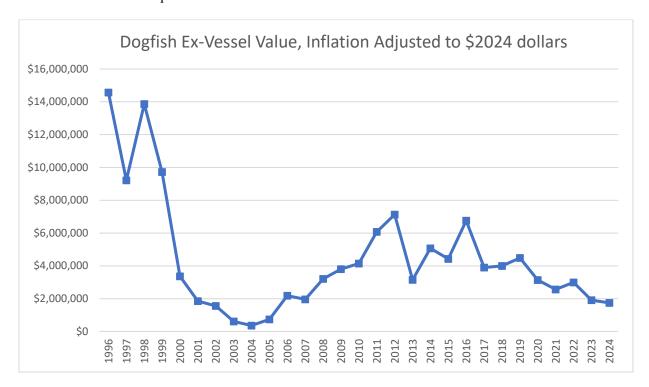


Figure 3. 1996-2024 fishing years' ex-vessel values of spiny dogfish in 2024 dollars (adjusted to "2024 dollars" using the GDP deflator).

Source: NMFS CAMS queried 8/14/2025

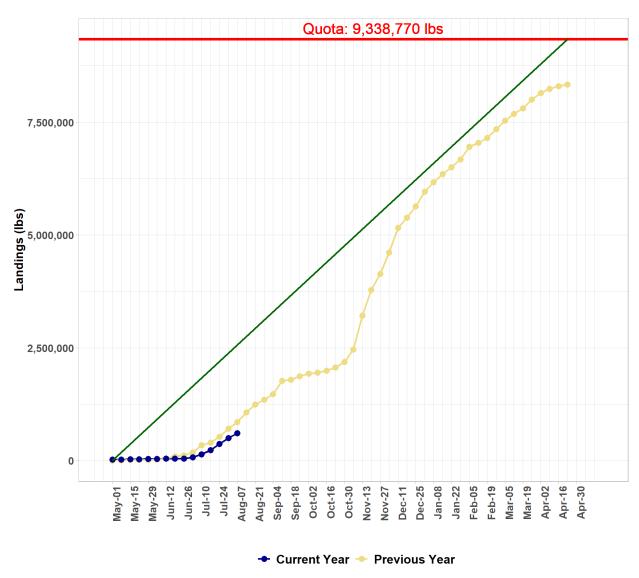


Figure 4. Preliminary spiny dogfish landings; the 2025 fishing year (Starts May 1) is in blue (through August 14, 2025), and the 2024 fishing year is in yellow-orange.

 $Source: \underline{https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region}.$

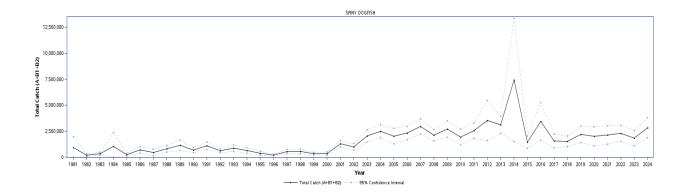


Figure 5. MRIP fishing year (Starts May 1) spiny dogfish catches, numbers of fish, 1981-2024.

Source: https://www.fisheries.noaa.gov/data-tools/recreational-fisheries-statistics-queries.

Query Parameters: Year: 1981 - 2025

Summarize By: ANNUAL

Fishing Year: MAY FISHING YEAR (MAY 1 - APRIL 30)

Species: SPINY DOGFISH

Geographic Area: ATLANTIC COAST
Fishing Mode: ALL MODES COMBINED
Fishing Area: ALL AREAS COMBINED

Type of Catch: TOTAL CATCH (TYPE A + B1 + B2)

Information: NUMBERS OF FISH

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Table 1. Annual spiny dogfish landings and federal quotas 2000-2024

Source: NMFS CAMS queried 8/14/2025

Fishing year	Fed Quota (M lb)	Landings (M lb)
2000	4.0	8.3
2001	4.0	5
2002	4.0	4.9
2003	4.0	3.1
2004	4.0	1.5
2005	4.0	2.6
2006	4.0	6.9
2007	4.0	6.4
2008	4.0	9.2
2009	12.0	12.6
2010	15.0	14.8
2011	20.0	20.6
2012	35.7	27.1
2013	40.8	16.7
2014	49.0	23
2015	50.6	21.2
2016	40.4	25.3
2017	39.1	16.8
2018	38.2	18.5
2019	20.5	20.9
2020	23.2	14
2021	29.6	10.8
2022	29.6	13.2
2023	12.0	8.9
2024	10.2	8.4
2025	9.3	

Table 2. Commercial Spiny Dogfish landings (landed weight – millions of pounds) by state for 2022-2024 fishing years. Source: NMFS CAMS queried 8/14/2025

0 1			1	
Year	MA	NJ	Other/CI (including MD-VA)	Total
2022	3.9	1.7	7.6	13.2
2023	2.8	0.8	5.2	8.8
2024	2.0	0.7	5.7	8.3

Table 3. Seasonal Commercial Spiny Dogfish landings (landed weight – millions of pounds) for 2022-2024 fishing years. Source: NMFS CAMS queried 8/14/2025

	May-Oct	Nov-April	Total
2022	4.2	8.9	13.2
2023	3.0	5.8	8.8
2024	2.1	6.2	8.3

Table 4. Commercial Spiny Dogfish landings (landed weight – millions of pounds) by gear for 2022-2024 fishing years. Source: NMFS CAMS queried 8/14/2025

Year	GILL NET, SINK	LONGLINE, BOTTOM	BOTTOM TRAWL	Other	Total
2022	10.9	1.3	0.2	0.7	13.2
2023	6.9	1.2	0.2	0.5	8.8
2024	7.2	0.6	0.2	0.3	8.3

Table 5. Participation in fishing years 2000-2024 by federally-permitted vessels. State-only vessels are not included. Source: NMFS unpublished dealer data pre-2021, CAMS data for 2021-2024 accessed 8/14/2025

YEAR	Vessels 200,000+	Vessels 100,000 - 199,999	Vessels 50,000 - 99,999	Vessels 10,000 - 49,999	Total with at least 10,000 pounds landings
2000	16	10	8	43	77
2001	4	12	10	33	59
2002	2	14	8	31	55
2003	4	5	3	17	29
2004	0	0	0	42	42
2005	0	0	1	67	68
2006	0	4	11	114	129
2007	1	2	21	72	96
2008	0	5	20	119	144
2009	0	11	42	166	219
2010	0	26	54	124	204
2011	1	48	73	135	257
2012	25	55	56	146	282
2013	10	27	45	87	169
2014	27	38	38	81	184
2015	31	33	36	59	159
2016	52	26	14	45	137
2017	28	27	24	32	111
2018	28	26	20	35	109
2019	29	25	21	29	104
2020	23	27	15	22	87
2021	16	27	12	28	83
2022	28	10	15	27	80
2023	15	15	13	22	65
2024	13	12	15	19	59

References

END OF DOCUMENT

¹ Stehlik, Linda. 2007. Essential Fish Habitat source document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-203; 52 p.

² Available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi.php



Spiny Dogfish Monitoring Committee Meeting Summary

August 4, 2025

Webinar

The Spiny Dogfish Monitoring Committee met on August 4, 2025 from 3pm-3:39pm to support development of the framework adjustment action to modify spiny dogfish fishery accountability measures, including catch overage paybacks.

Monitoring Committee Attendees: Jason Didden, Jamie Cournane, Jason Boucher, Angel Willey, John Whiteside, Chris Rainone, Laura Deighan, Melinda Lambert, Nichola Meserve, and Julia Livermore.

Other Attendees: Bill Lucey, Corrin Flora, James Boyle, James Fletcher, and Ted Platz.

Framework Discussion

J. Didden began the meeting with a summary of the framework and its purpose. Discussion centered on clarifying several alternatives.

It was noted that the 5% landings closure buffer, which could lead to closing federal waters at 105% of the quota, could lead to overages that would not be repaid if the stock is in good condition (per Alternative Set 1).

It was noted that there is a tension in 4A and 4B between what would constitute best available science for determining paybacks – the terminal year (which is inherently the most uncertain) and a three-year average (which would not use only the most recent estimate of biomass). Clarifying text will be added to the document.

The potential for misalignment between when federal waters would close and when state waters would close was noted, but an easy fix in this action is not apparent, and ongoing monitoring and engagement with Atlantic States Marine Fisheries Commission (ASMFC) will be warranted.

The potential to not include ASMFC carry-over in data that triggered a payback was discussed, but the averaging measure might achieve this by default (previous underages would lower an average catch). If this idea seemed independently feasible to NMFS staff, they will follow-up.

Spiny Dogfish Accountability Measures (AMs) and 2026-2027 Specifications Framework

Framework Adjustment __ to the Spiny Dogfish Fishery Management Plan

October 2025 Working Draft

Prepared by the Mid-Atlantic Fishery Management Council (MAFMC) in cooperation with the New England Fishery Management Council (NEFMC) and the National Marine Fisheries Service (NMFS or NOAA Fisheries)

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Framework Meeting 1 MAFMC: June 2025 Framework Meeting 1 NEFMC: June 2025

Framework Meeting 2/final action MAFMC: (planned October 2025) Framework Meeting 2/final action NEFMC: (planned December 2025)

Initial submission to NMFS: Final submission to NMFS:

1.0 EXECUTIVE SUMMARY AND TABLE OF CONTENTS

The Spiny Dogfish Fishery Management Plan (FMP) currently requires pound for pound payback of any Annual Catch Limit (ACL) overages as an accountability measure (AM). This action considers if there are some circumstances, such as when biomass is relatively high, when the current strict paybacks may be excessive, and if modified payback AMs may be appropriate. This action also considers 2026-2027 fishing year specifications.

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4.0 INTRODUCTION, BACKGROUND, AND PROCESS

Since 2000, the spiny dogfish fishery in U.S. waters has been jointly managed under the Spiny Dogfish Fishery Management Plan (FMP) by the Mid-Atlantic Fishery Management Council (MAFMC) and the New England Fishery Management Council (NEFMC), with the MAFMC having the administrative lead. The management unit area includes all U.S. east coast waters. Canadian landings are also accounted for as part of setting annual specifications.

In response to the 2007 reauthorization of the Magnuson Stevens Fishery Conservation and Management Act (MSA), Amendment 2 (2011) to this FMP added Acceptable Biological Catches (ABCs) and Annual Catch Limits (ACLs) to avoid overfishing, along with accountability measures (AMs) of pound-for-pound payback of any ACL overages.

The current spiny dogfish AM regulations can be found at 50 CFR 648.233 and read:

§ 648.233 Spiny dogfish Accountability Measures (AMs).

- (a) **Commercial EEZ closure.** The Regional Administrator shall determine the date by which the annual coastwide quota described in § 648.232 will be harvested and shall close the EEZ to fishing for spiny dogfish on that date for the remainder of the fishing year by publishing notification in the Federal Register. Upon the closure date, and for the remainder of the fishing year, no vessel may fish for or possess spiny dogfish in the EEZ, nor may vessels issued a spiny dogfish permit under this part land spiny dogfish, nor may dealers issued a Federal permit purchase spiny dogfish from vessels issued a spiny dogfish permit under this part.
- (b) **ACL overage evaluation.** The ACL will be evaluated based on a single-year examination of total catch (including both landings and dead discards) to determine if the ACL has been exceeded.
- (c) **Overage repayment.** In the event that the ACL has been exceeded in a given fishing year, the exact amount in pounds by which the ACL was exceeded shall be deducted, as soon as possible from a subsequent single fishing year ACL.

An ACL overage occurred in the 2023 fishing year, and on November 18, 2024, the 2024 fishing year ACL and commercial quota was reduced by 491 metric tons (MT) (1,082,470 lbs). The final adjusted 2024 commercial quota was 4,649 MT (10,249,260 lbs).

Some other MAFMC-managed fisheries, such as summer flounder, have implemented approaches where paybacks for non-landings commercial overages or for recreational catch overages occur only when the stock is low relative to the target biomass, which minimizes ACL disruptions. Multi-year averages are also considered for some payback calculations. This framework action considers implementing a range of modified AMs to minimize year-to-year fishery disruptions from AMs while still maintaining the sustainability of the spiny dogfish resource.

This action may also consider setting specifications for the 2026-2027 fishing years.

4.1 NEED, OBJECTIVES, and PURPOSE

This action is <u>needed</u> because the current ACL overage payback provisions may cause unnecessary socioeconomic disruptions for commercial fishing. The <u>objective</u> of this action is to modify the AM provisions in the spiny dogfish FMP, with a purpose to minimize negative socioeconomic

disruptions while continuing to maintain the sustainability of the spiny dogfish resource. The Councils also need to set specifications for the 2026-2027 fishing years.

4.2 PROCESS and REGULATORY AUTHORITY

4.2.1 Framework Process

The Councils use "framework adjustments" to amend measures previously used or considered. Regulations at 50 CFR 648.239 specify the details of spiny dogfish framework adjustments:

"After the Councils initiate a management action, they shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Councils shall provide the public with advance notice of the availability of both the proposals and the analysis for comment prior to, and at, the second Council meeting."

The regulations list measures that can be adjusted or added via framework adjustments, including "introduction of new AMs" and "any other management measures currently included in the Spiny Dogfish FMP..."

"After developing management actions and receiving public testimony, the Councils shall make a recommendation approved by a majority of each Council's members, present and voting, to the Regional Administrator. The Councils' recommendation must include supporting rationale, an analysis of impacts and, if management measures are recommended, a recommendation to the Regional Administrator on whether to issue the management measures as a final rule." (Time-sensitive issues may skip a proposed rule phase, but this action will likely proceed with a standard rulemaking sequence – proposed then final.)

"If NMFS does not concur, the Councils will be notified in writing of the reasons..."

"Framework actions can be taken only in the case where both Councils approve..."

4.2.2 Statutory and Regulatory Authority

Section 302 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires that Councils "develop annual catch limits for each of its managed fisheries..." Section 303 of the MSA requires that FMPs shall "establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability."

These above two parts of the MSA are the primary statutory authority for the ACLs and payback (or other) accountability measures (AMs) in the spiny dogfish FMP. Section 301 of the MSA also requires that FMPs contain conservation and management measures that are consistent with the ten National Standards (NS). These provide a range of guidance, summarized below both in terms of their requirements and relevance to this action:

NS (1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

The measures in this action should better align both avoiding overfishing and achieving optimum yield by avoiding unnecessary or unnecessarily large paybacks that can disrupt the fishery.

The NS1 Guidelines provide additional direction on accountability measures (50 CFR 600.310(g)):

(g) Accountability measures (AMs) —

- (1) *Introduction*. AMs are management controls to prevent ACLs, including sector-ACLs, from being exceeded, and to correct or mitigate overages of the ACL if they occur. AMs should address and minimize both the frequency and magnitude of overages and correct the problems that caused the overage in as short a time as possible. NMFS identifies two categories of AMs, inseason AMs and AMs for when the ACL is exceeded. The FMP should identify what sources of data will be used to implement AMs (*e.g.*, inseason data, annual catch compared to the ACL, or multi-year averaging approach).
- (2) *Inseason AMs.* Whenever possible, FMPs should include inseason monitoring and management measures to prevent catch from exceeding ACLs. Inseason AMs could include, but are not limited to: An annual catch target (*see* paragraph (g)(4) of this section); closure of a fishery; closure of specific areas; changes in gear; changes in trip size or bag limits; reductions in effort; or other appropriate management controls for the fishery. If final data or data components of catch are delayed, Councils should make appropriate use of preliminary data, such as landed catch, in implementing inseason AMs. FMPs should contain inseason closure authority giving NMFS the ability to close fisheries if it determines, based on data that it deems sufficiently reliable, that an ACL has been exceeded or is projected to be reached, and that closure of the fishery is necessary to prevent overfishing. For fisheries without inseason management control to prevent the ACL from being exceeded, AMs should utilize ACTs that are set below ACLs so that catches do not exceed the ACL.
- (3) AMs for when the ACL is exceeded. On an annual basis, the Council must determine as soon as possible after the fishing year if an ACL was exceeded. If an ACL was exceeded, AMs must be implemented as soon as possible to correct the operational issue that caused the ACL overage, as well as any biological consequences to the stock or stock complex resulting from the overage when it is known. These AMs could include, among other things, modifications of inseason AMs, the use or modification of ACTs, or overage adjustments. The type of AM chosen by a Council will likely vary depending on the sector of the fishery, status of the stock, the degree of the overage, recruitment patterns of the stock, or other pertinent information. If an ACL is set equal to zero and the AM for the fishery is a closure that prohibits fishing for a stock, additional AMs are not required if only small amounts of catch (including bycatch) occur, and the catch is unlikely to result in overfishing. For stocks and stock complexes in rebuilding plans, the AMs should include overage adjustments that reduce the ACLs in the next fishing year by the full amount of the overage, unless the best scientific information available shows that a reduced overage adjustment, or no adjustment, is needed to mitigate the effects of the overage.
- (4) Annual Catch Target (ACT) and ACT control rule. ACTs, or the functional equivalent, are recommended in the system of AMs so that ACL is not exceeded. An ACT is an amount of annual catch of a stock or stock complex that is the management target of the fishery, and accounts for management uncertainty in controlling the catch at or below the ACL. ACT control rules can be used to articulate how management uncertainty is accounted for in setting the ACT. ACT control rules can be developed by the Council, in coordination with the SSC, to help the Council account for management uncertainty.

- (5) AMs based on multi-year average data. Some fisheries have highly variable annual catches and lack reliable inseason or annual data on which to base AMs. If there are insufficient data upon which to compare catch to ACL, AMs could be based on comparisons of average catch to average ACL over a three-year moving average period or, if supported by analysis, some other appropriate multi-year period. Councils should explain why basing AMs on a multi-year period is appropriate. Evaluation of the moving average catch to the average ACL must be conducted annually, and if the average catch exceeds the average ACL, appropriate AMs should be implemented consistent with paragraph (g)(3) of this section.
- (6) *AMs for State-Federal Fisheries*. For stocks or stock complexes that have harvest in state or territorial waters, FMPs and FMP amendments must, at a minimum, have AMs for the portion of the fishery under Federal authority. Such AMs could include closing the EEZ when the Federal portion of the ACL is reached, or the overall stock's ACL is reached, or other measures.
- (7) **Performance Standard.** If catch exceeds the ACL for a given stock or stock complex more than once in the last four years, the system of ACLs and AMs should be reevaluated, and modified if necessary, to improve its performance and effectiveness. If AMs are based on multi-year average data, the performance standard is based on a comparison of the average catch to the average ACL. A Council could choose a higher performance standard (*e.g.*, a stock's catch should not exceed its ACL more often than once every five or six years) for a stock that is particularly vulnerable to the effects of overfishing, if the vulnerability of the stock has not already been accounted for in the ABC control rule.

NS (2) Conservation and management measures shall be based upon the best scientific information available.

Whether analyzing the impacts of this action, evaluating ACL overages occur in the future, and/or evaluating whether paybacks are warranted, the best scientific information available will be utilized.

NS (3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

This FMP manages spiny dogfish throughout the range of the species in U.S. waters and accounts for Canadian catches.

NS (4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

None of the proposed measures would discriminate between residents of different States or assign/allocate fishing privileges among U.S. fishermen.

NS (5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

The changes to AMs under consideration could help ensure that optimum yield is achieved.

NS (6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

The FMP includes a framework adjustment mechanism with an extensive list of possible framework adjustment measures that can be used to adjust the plan as conditions in the fishery change (for example this action).

NS (7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

This action should not create any duplications related to managing or harvesting spiny dogfish.

NS (8) Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

This action should help avoid unnecessary disruptions to the fishery, thus minimizing adverse economic impacts on fishing communities.

NS (9) Conservation and management measures shall, to the extent practicable, (A) minimize by catch and (B) to the extent by catch cannot be avoided, minimize the mortality of such by catch.

This action should not have an appreciable impact on how the fishery operates, so this action should not affect bycatch.

NS (10) Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

Fishermen constantly balance the risks imposed by nature and fishing operations against the economic benefits. This action should not have an appreciable impact on safety.

5.0 WHAT ACTIONS ARE BEING CONSIDERED?

The alternatives have been grouped into several "alternative sets." If "no action" is selected for all alternative sets, then the current accountability measures in the regulations would persist as noted in § 648.233 "Spiny dogfish Accountability Measures (AMs)" (see above for full text). The AMs include that "the exact amount in pounds by which the ACL was exceeded shall be deducted, as soon as possible from a subsequent single fishing year ACL."

There is another de facto accountability measure not being considered for changes, in that the Councils set or review the specifications every year, and must recommend "measures necessary to ensure that the ACL...will not be exceeded..." [50 CFR 648.232(c)(1)] If ACL overages occur then the Councils would consider modifications to the existing measures.

Alternative Sets Summary

Only one alternative can be chosen from each alternative set. It is possible the "No Action" may be chosen for some alternative sets and "action alternatives" may be chosen from other alternative sets. Potential combinations of alternatives are noted within each alternative set section further below. Two options, linking paybacks to the timing of data being incorporated into projections, and

automatic triggering of commercial closure buffers, were considered but rejected during alternative development as they were deemed too complex and/or too inflexible.

- Set 1: Considers whether ACL paybacks should depend on biomass level.
- Set 2: Considers whether ACL paybacks should depend on the source (catch type) of the overage.
- Set 3: Considers whether ACL paybacks should depend on whether stock is in a rebuilding plan.
- Set 4: Considers whether ACL paybacks should be based on one year or an average of years.
- Set 5: Considers whether specifications can set closures of federal waters up to 105% of the quota.
- Set 6: Considers 2026-2027 Specifications.

5.1 Alternative Set 1: Considers whether ACL paybacks should depend on biomass level

First the no action alternative, which represents the status quo is described, then the action alternatives for Alternative Set 1 are described.

No action/status quo:

The current measures would persist: "In the event that the ACL has been exceeded in a given fishing year, the exact amount in pounds by which the ACL was exceeded shall be deducted, as soon as possible from a subsequent single fishing year ACL." (50 CFR 648.233)

While perhaps self-evident, Figure 1 below illustrates that 100% of any overage is currently paid back regardless of stock size, and facilitates comparison with other alternatives.

Under the current measures, there are no automatic measures to correct operational issues that caused the ACL overage, but the Councils review the management of the fishery annually and considers if fishery performance warrants adjustment of management measures. This annual review procedure is not being considered to be changed in this action under any alternative and would persist.



Figure 1. Alternative Set 1 No Action Payback

5.1.A Action Alternative 1A: Least cautionary modified payback scaling

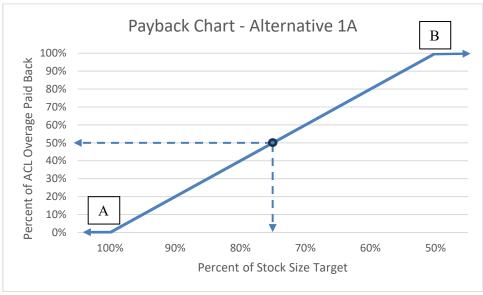


Figure 2. Alternative 1A Biomass-Based Paybacks

When stock is at or above target biomass:

If biomass was projected to be at or above the biomass target reference point (i.e., the biomass associated with producing maximum sustainable yield (Bmsy)) in the relevant year (i.e., the same year the overage occurred for comparing catch to the ACL), then no payback for ACL overages would be required. This is point "A" in the above Figure 2. The Councils would still need to consider modifications to management measures in the next available specifications-setting process to correct operational issues and better avoid future ACL overages. The nature of those modifications would not be prescribed, but would likely include changes to discard set-asides or changes to how the commercial fishery is closed, depending on what caused the ACL overage.

When stock is at or below overfished threshold:

If biomass was projected to be at or below the biomass overfished reference point (which is 50% of the target) in the relevant year for comparing catch to the ACL, then strict pound-for-pound paybacks would be deducted, as soon as possible from a subsequent single fishing year ACL. This is point "B" in the above Figure 2.

<u>In between A and B (Below the target biomass but above 50% of the target biomass):</u>

If the stock was projected to be between 100% of its target biomass and its overfished threshold (50% of the target) in the relevant year for comparing catch to the ACL, then only a portion of the overage would be deducted, according to Figure 2, based on a linear ramping with less paid back close to A (higher stock size) and more paid back close to B (lower stock size). The example point connected by the dashed lines notes that for this alternative, at 75% of the target biomass, half of any relevant ACL overage would be paid back.

5.1.B Action Alternative 1B: Middle cautionary modified payback scaling (COMMITTEE RECOMMENDED)

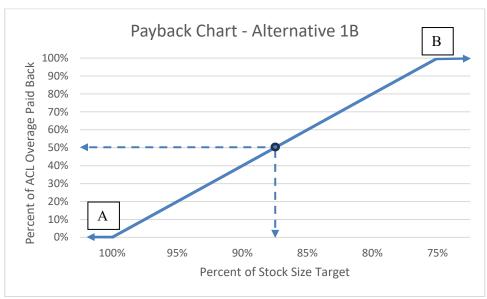


Figure 3. Alternative 1B Biomass-Based Paybacks

When stock is at or above target biomass:

If biomass was projected to be at or above the biomass target reference point (i.e., the biomass associated with producing maximum sustainable yield (Bmsy)) in the relevant year (i.e., the same year the overage occurred for comparing catch to the ACL), then no payback for ACL overages would be required. This is point "A" in the above Figure 3. The Councils would still need to consider modifications to management measures in the next available specifications-setting process to correct operational issues and better avoid future ACL overages. The nature of those modifications would not be prescribed, but would likely include changes to discard set-asides or changes to how the commercial fishery is closed, depending on what caused the ACL overage.

When stock is at or below 75% of the target biomass (so midway between the target and overfished):

If biomass was projected to be at or below 75% of the target biomass, then strict pound-for-pound paybacks would be deducted, as soon as possible from a subsequent single fishing year ACL. This is point "B" in the above Figure 3.

In between A and B (Below the target biomass but above 75% of the target biomass):

If the stock was projected to be between 100% of the target biomass and 75% of the target biomass in the relevant year for comparing catch to the ACL, then only a portion of the overage would be deducted, according to Figure 3, based on a linear ramping with less paid back close to A (higher stock size) and more paid back close to B (lower stock size). The example point connected by the dashed lines notes that for this alternative, at 87.5% of the target biomass, half of any relevant ACL overage would be paid back.

5.1.C Action Alternative 1C: More cautionary modified payback scaling

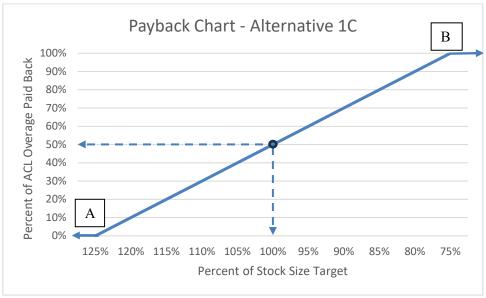


Figure 4. Alternative 1C Biomass-Based Paybacks

When stock is at or above 125% of the target biomass:

If biomass was projected to be at or above 125% of the biomass target reference point (i.e., the biomass associated with producing maximum sustainable yield (Bmsy)) in the relevant year (i.e., the same year the overage occurred for comparing catch to the ACL), then no payback for ACL overages would be required. This is point "A" in the above Figure 4. The Councils would still need to consider modifications to management measures in the next available specifications-setting process to correct operational issues and better avoid future ACL overages. The nature of those modifications would not be prescribed, but would likely include changes to discard set-asides or changes to how the commercial fishery is closed, depending on what caused the ACL overage.

When stock is at or below 75% of the target biomass (so midway between the target and overfished):

If biomass was projected to be at or below 75% of the target biomass, then strict pound-for-pound paybacks would be deducted, as soon as possible from a subsequent single fishing year ACL. This is point "B" in the above Figure 4.

In between A and B (Below 125% of the target biomass but above 75% of the target biomass):

If the stock was projected to be between 125% of the target biomass and 75% of the target biomass in the relevant year for comparing catch to the ACL, then only a portion of the overage would be deducted, according to Figure 4, based on a linear ramping with less paid back close to A (higher stock size) and more paid back close to B (lower stock size). The example point connected by the dashed lines notes that for this alternative, at 100% of the target biomass, half of any relevant ACL overage would be paid back.

5.2 Alternative Set 2: Considers whether ACL paybacks would be dependent on the source (catch type) of the overage

First the no action alternative, which represents the status quo is described, then the action alternative for Alternative Set 2 is described. Action Alternative 2A would only be possibly selected if an Action Alternative from Alternative Set 1 was also selected because presumably one would not want a situation where ACL overages due to non-landings measures are never paid back even when stock size is low.

2A could also be chosen in combination with: 3A, 4A or 4B, 5A or 5B or 5C, and one alternative from Set 6.

No action/status quo:

(COMMITTEE RECOMMENDED)

No payback differentiation is made between catch sources currently, and no such differentiation would be made for scaling of paybacks.

5.2.A Action Alternative 2A: Always pay back ACL overages due to landings quota overages

If the Councils select an Action Alternative from Alternative Set 1 and this Action Alternative 2A, the relaxation of paybacks when stock size is relatively good that occurs under Alternative Set 1 would only apply to ACL overages caused by commercial discards, recreational landings, and/or recreational discards. Thus the relaxation of paybacks when stock size is relatively good would not apply to any ACL overages caused by commercial landings. Therefore, any commercial landings-caused overages of the ACL would still always result in a pound-for-pound payback as soon as possible from a subsequent single fishing year ACL. ACL overages caused by commercial discard estimates or recreational catch estimates would have overages paid back depending on the stock status. Only the amount that the landings contributed to an overage would be deducted.

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5.3 Alternative Set 3: Considers whether relaxation of ACL paybacks should depend on if stock is in a rebuilding plan or not

First the no action alternative, which represents the status quo is described, then the action alternative for Alternative Set 3 is described. Action Alternative 3A would only be possibly selected if an Action Alternative from Alternative Set 1 was also selected because presumably one would not want paybacks to only ever occur if the stock is in a rebuilding plan.

3A could also be chosen in combination with: 2A, 4A or 4B, 5A or 5B or 5C, and one alternative from Set 6.

No action/status quo:

No payback differentiation is made if the stock is in a rebuilding plan or not currently, and no such differentiation would be made for scaling of paybacks. Currently however, all ACL overages are paid pack.

The NS1 guidelines state:

"For stocks and stock complexes in rebuilding plans, the AMs should include overage adjustments that reduce the ACLs in the next fishing year by the full amount of the overage, unless the best scientific information available shows that a reduced overage adjustment, or no adjustment, is needed to mitigate the effects of the overage."

This guidance may mean that non-repayments during rebuilding are infeasible unless an assessment indicated that the overage was not compromising a rebuilding trajectory.

5.3.A Action Alternative 3A: Always pay back ACL overages fully if stock is in a rebuilding plan

(COMMITTEE RECOMMENDED)

If the Councils select an Action Alternative from Alternative Set 1 and this Action Alternative 3A, the relaxation of paybacks when stock size is relatively good that occurs under Alternative Set 1 would only apply when the stock is not in a rebuilding plan. If a rebuilding plan is in place, it will supersede any selected payback flexibilities and require a pound-for-pound payback. Thus the relaxation of paybacks when stock size is relatively good would not apply to any ACL overages while a rebuilding plan is active.

5.4 Alternative Set 4: Considers whether ACL paybacks should depend on one year or an average of years

First the no action alternative, which represents the status quo is described, then the action alternatives for Alternative Set 4 are described.

This alternative could be selected without any action alternative from Alternative Set 1, because in that case full paybacks would still occur, they would just be calculated based on averages. 4A or 4B could be chosen in combination with any other alternative(s) in this document.

No action/status quo:

The current measures would persist: "In the event that the ACL has been exceeded in a given fishing year, the exact amount in pounds by which the ACL was exceeded shall be deducted, as soon as possible from a subsequent single fishing year ACL." (50 CFR 648.233)

5.4.A Action Alternative 4A: Calculate paybacks based on average ACLs and average catches, and if paybacks are scaled based on biomass, also use biomass averages.

This alternative would calculate ACL overages based on a rolling most recent 3-year average (comparing the average catch to the average ACL). While commercial landings data are believed to be precise and landings are well controlled, commercial discard estimates and recreational catch are less precise and less controlled - using 3-year averages could mitigate the effect of high estimates (whether it was high due to actual variability in fleet behavior or due to statistical imprecision in estimates). If a scaled payback option was chosen in Alternative Set 1, <u>under 4A the average projected biomass</u> in the 3-year period relative to the target would be used to determine the payback ratio. Averaging would incorporate the newest data point that also tends to be the most uncertain, as well as the two preceding data points, which should damper terminal year swings for a stock that should be fairly stable given its life history.

5.4.B Action Alternative 4B: Calculate paybacks based on average ACLs and average catches, and if paybacks are scaled based on biomass, use the most recent projected biomass.

(COMMITTEE RECOMMENDED)

This alternative would calculate ACL overages based on a rolling most recent 3-year average (comparing the average catch to the average ACL). While commercial landings data are believed to be precise and landings are well controlled, commercial discard estimates and recreational catch are less precise and less controlled - using 3-year averages could mitigate the effect of high estimates (whether it was high due to actual variability in fleet behavior or due to statistical imprecision in estimates). If a scaled payback option was chosen in Alternative Set 1, <u>under 4B the projected biomass in the most recent year</u> of the 3-year average relative to the target would be used to determine the payback ratio.

5.5 Alternative Set 5: Considers whether specifications should be modified to allow for a closure buffer of federal waters (the EEZ) at up to 105% of the landings quota

First the no action alternative, which represents the status quo is described, then the action alternatives for Alternative Set 5 are described. The following alternatives specify when a closure buffer may be applied for the commercial fishery in-season closure based on biomass for all federal vessel and dealer permit holders, regardless of state.

5A, 5B, or 5C (only one) could be chosen in combination with any other alternative(s) in this document.

No action/status quo:

The current measures would persist regarding setting specifications:

"The Councils shall review these recommendations and, based on the recommendations and any public comments, recommend to the Regional Administrator a TAL and other measures necessary to ensure that the ACL specified in § 648.230 will not be exceeded in any fishing year, for a period of 1-5 fishing years."

5.5.A Action Alternative 5A: Clarify that specifications can set closures of federal waters (the EEZ) at up to 105% of the landings quota when biomass is projected to be greater than 50% of the biomass target in the relevant fishing year AND SET to 105% for 2026-2027 specifications.

(COMMITTEE RECOMMENDED)

The only difference among the action alternatives are the varying biomass thresholds when they could be used (here 50%+ of biomass target).

Under this alternative, the commercial fishery would close in-season for all federally permitted vessels and dealers, regardless of state, once landings are projected to exceed the coastwide quota plus an additional buffer of up to 5%. The Monitoring Committee would provide advice to the Councils on the appropriate buffer based on considerations such as stock status, the quota level, and recent fishery trends. The Councils would recommend the appropriate buffer for the upcoming year through the specifications process. This would only be allowed when the biomass is projected to be greater than 50% of the biomass target in the relevant fishing year.

The intent behind allowing an additional "plus" buffer is to reduce negative economic impacts of coastwide closures on states that have not fully harvested their quotas. This is not expected to create an incentive for quota overages as states would still be required to pay back any quota overages.

This alternative could also partially account for carry-over (up to 5% of the original quota if unused) provisions contained in the ASMFC FMP, but not fully, and fishery performance will need to be monitored on a continuing basis. The Spiny Dogfish Monitoring Committee discussed if additional alternatives should be considered related to this issue but concluded that it was better not to further complicate the action at this time.

5.5.B Action Alternative 5B: Clarify that specifications can set closures of federal waters (the EEZ) at up to 105% of the landings quota when biomass is projected to be greater than 75% of the biomass target in the relevant fishing year AND SET to 105% for 2026-2027 specifications.

The only difference among the action alternatives are the varying biomass thresholds when they could be used (here 75%+ of biomass target).

Under this alternative, the commercial fishery would close in-season for all federally permitted vessels and dealers, regardless of state, once landings are projected to exceed the coastwide quota plus an additional buffer of up to 5%. The Monitoring Committee would provide advice to the Councils on the appropriate buffer based on considerations such as stock status, the quota level, and recent fishery trends. The Councils would recommend the appropriate buffer for the upcoming year through the specifications process. This would only be allowed when the biomass is projected to be greater than 75% of the biomass target in the relevant fishing year.

The intent behind allowing an additional "plus" buffer is to reduce negative economic impacts of coastwide closures on states that have not fully harvested their quotas. This is not expected to create an incentive for quota overages as states would still be required to pay back any quota overages.

This alternative could also partially account for carry-over (up to 5% of the original quota if unused) provisions contained in the ASMFC FMP, but not fully, and fishery performance will need to be monitored on a continuing basis. The Spiny Dogfish Monitoring Committee discussed if additional alternatives should be considered related to this issue but concluded that it was better not to further complicate the action at this time.

5.5.C Action Alternative 5C: Clarify that specifications can set closures of federal waters (the EEZ) at up to 105% of the landings quota when biomass is projected to be at least 100% of the biomass target in the relevant fishing year AND SET to 105% for 2026-2027 specifications.

The only difference among the action alternatives are the varying biomass thresholds when they could be used (here at least 100% of biomass target).

Under this alternative, the commercial fishery would close in-season for all federally permitted vessels and dealers, regardless of state, once landings are projected to exceed the coastwide quota plus an additional buffer of up to 5%. The Monitoring Committee would provide advice to the Councils on the appropriate buffer based on considerations such as stock status, the quota level, and recent fishery trends. The Councils would recommend the appropriate buffer for the upcoming year through the specifications process. This would only be allowed when the biomass is projected to be greater than 100% of the biomass target in the relevant fishing year.

The intent behind allowing an additional "plus" buffer is to reduce negative economic impacts of coastwide closures on states that have not fully harvested their quotas. This is not expected to create an incentive for quota overages as states would still be required to pay back any quota overages.

This alternative could also partially account for carry-over (up to 5% of the original quota if unused) provisions contained in the ASMFC FMP, but not fully, and fishery performance will need to be monitored on a continuing basis. The Spiny Dogfish Monitoring Committee discussed if additional alternatives should be considered related to this issue but concluded that it was better not to further complicate the action at this time.

5.6 Alternative Set 6: 2026-2027 Specifications

First the no action alternative, which represents the status quo is described, then the action alternatives for Alternative Set 6 are described. One alternative would be chosen in combination with any other alternative(s) in this document.

Staff has slightly modified the alternatives seen in previous working drafts so that there are three action alternatives with constant ABCs for each year. The range of alternatives is nearly the same, but having three alternatives with constant ABCs facilitates comparison of impacts and simplifies the eventual NEPA analysis. The only trimming of the range would be that for when ABC equals the projected OFL in the current alternative 6B, the 2027 ABC is proposed to stay constant at the 2026 projected OFL rather than continuing to increase even further. One alternative, the previous 6A, is now recommended for considered but rejected. This alternative would have implemented the Councils P* risk policy with yearly varying ABCs. The alternative with constant, averaged P* ABCs is nearly identical, but provides more year-to-year stability and simplifies comparisons between alternatives. Staff could re-insert the yearly varying alternative if the Council prefers – it is partially retained in a grey highlight below.

No action/status quo:

The Spiny Dogfish FMP contains roll-over provisions, so if the new specifications are not implemented by May 1, 2026 then the status quo FY 2025 specifications (detailed below) would remain in effect until replaced by new specifications (50 CFR 648.232(c)(3)).

2025 Specifications

The MAFMC requested that its SSC use updated catch data and recommend an ABC that had a 50% chance of overfishing for the 2025 fishing year. The MAFMC's risk policy would ordinarily indicate a lower (46%) chance of overfishing for a stock slightly above its target like spiny dogfish is estimated to be (a lower chance of overfishing requires lower catches). The ABC implemented by NMFS for 2024, through an emergency action, also had a 50% chance of overfishing.

Even with the higher resulting catches from theoretically fishing at the overfishing threshold for 2023 through 2026 (i.e., a 50% chance of overfishing), the 2023 stock assessment (NEFSC 2023) projected that the spiny dogfish stock would increase from 101% of its target in 2022 to 113% of its target in 2026. This is the same result (at least when rounded to the nearest percent) as was predicted for the slightly lower catches under the MAFMC's risk policy (i.e., a 46% chance of overfishing). Normally one would see a bigger difference in stock size outcome fishing at the OFL versus a lower ABC, but the differences in catch are very small compared to the total biomass of spiny dogfish, and the effect of recent (better) recruitment is outweighing the effects of small changes in catches, resulting in a biomass uptrend even fishing at the OFL.

Considering the updated information noted above, the 2025 spiny dogfish specifications are detailed in Table 1 below on the next page, which has the various 2025 specifications in the first column, the corresponding pounds in the second column, and the equivalent metric tons in the third column. Notes on each specification follow below the table.

Table 1. Spiny Dogfish Specifications for FY2025

2025 Specification	Pounds	Metric Tons
Overfishing Limit (OFL)	16,812,432	7,626
Acceptable Biological Catch (ABC)	16,812,432	7,626
Canadian Landings	8,818	4
Domestic ABC	16,803,614	7,622
Annual Catch Limit (ACL)	16,803,614	7,622
Management Uncertainty Buffer	0%	0%
Amount of buffer	0	0
Annual Catch Target (ACT)	16,803,614	7,622
U.S. Discards	7,220,131	3,275
Total Allowable Landings (TAL)	9,583,483	4,347
U.S. Recreational Landings	244,713	111
Commercial Quota	9,338,770	4,236

<u>Canadian Landings:</u> 4 MT - This was based on a recent 3-year average recommended by the Monitoring Committee considering recent data.

Domestic ABC: Total ABC minus expected Canadian landings.

<u>Annual Catch Limit:</u> Equals the Domestic ABC per the FMP. Exceeding this specification can trigger payback accountability measures, affecting future years.

<u>Management Uncertainty Buffer:</u> The Council decided that the other specifications, including a higher discard set-aside, sufficiently address management uncertainty so there is no proposed management uncertainty buffer.

Annual Catch Target (ACT): The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards:</u> 3,275 MT - This amount of discard set-aside uses the mid-point of a 5-year average and the accepted model-utilized proportion of discards. Discard estimates vary year to year, and using the midpoint of multiple reasonable approaches is a common method to deal with uncertainty. Given all the available information, this was the most reasonable approach as determined by the MAFMC and NEFMC. The Monitoring Committee noted that either a 5-year average approach or the model-utilized proportion approach were potentially justifiable, though both could mis-predict future discards (see briefing materials for the December 2024 MAFMC meeting at this website: https://www.mafmc.org/briefing/december-2024 for additional discussion).

<u>Total Allowable Landings (TAL):</u> 4,347 MT – this is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> 111 MT - This was based on a recent 5-year average recommended by the Monitoring Committee considering recent data.

Commercial Quota: 4,236 MT – This is the TAL minus expected recreational landings.

Suggest moving this to considered but rejected: (Previous 6A) Set ABCs based on the Council's risk policy with annual, separate ABCs for the 2026 and 2027 fishing years

The annual averaged approach (see alternative below) is nearly identical and provides more year to year continuity. Also, having all constant ABCs simplifies comparison.

Projections provided by the NEFSC, and approved by the SSC, indicate the following (CV determined by SSC based on uncertainty level):

Table 2. SSC-Recommended P* Year-Varying ABCs

	OFL	ABC	SSB/B _{MSY}
Year			(above 1 means
	metric tons	metric tons	above 188 target)
2026	8,084	7,254	1.13
2027	8,222	7,410	1.15

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5.6.A Action Alternative 6A: Set ABCs based on the Council's risk policy with constant/averaged ABCs for the 2026 and 2027 fishing years

Projections provided by the NEFSC, and reviewed/approved by the SSC, indicate the following (150% C.V. used by SSC, based on uncertainty level):

Table 3. SSC-Recommended P* Constant ABCs (6A)

	OFL	ABC	SSB/B _{MSY}
Year			(above 1 means
	metric tons	metric tons	above 188 target)
2026	8,084	7,332	1.13
2027	8,221	7,332	1.15

The spiny dogfish biomass target is based on annual spawning output of approximately 188 million pups.

Table 4. 6A Specifications Details

Specifications	2026-27 (pounds)	2026-27 (mt)	Basis
OFL (from SSC)	17,822,148	8,084	SSC
ABC (from SSC)	16,164,274	7,332	SSC, P*, Averaged/Constant
Canadian Landings	8,818	4	= 2020-2023 average
Domestic ABC	16,155,455	7,328	= ABC – Canadian Landings
ACL	16,155,455	7,328	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes immediate disruption to industry
Amount of buffer	0	0	distribution to made y
ACT	16,155,455	7,328	= ACL - mgmt uncert buffer
U.S. Discards	7,630,190	3,461	Midpoint Approach
TAL	8,525,266	3,867	ACT – Discards
U.S. Rec Landings	246,917	112	= 2020-2024 average
Comm Quota	8,278,348	3,755	TAL – Rec Landings

<u>Canadian Landings:</u> 4 MT - This was based on a recent 4-year average 2020-2023 recommended by the Monitoring Committee considering recent data.

Domestic ABC: Total ABC minus expected Canadian landings.

Annual Catch Limit: Equals the Domestic ABC per the FMP. Exceeding this specification can

trigger payback accountability measures, affecting future years.

<u>Management Uncertainty Buffer:</u> The Council has previously decided that the other specifications, including a higher discard set-aside, sufficiently address management uncertainty so there is no proposed management uncertainty buffer.

Annual Catch Target (ACT): The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards</u>: 3,461 MT - This amount of discard set-aside uses the mid-point of a 5-year average and the accepted model-utilized proportion of discards (applied to the ABC). Discard estimates vary year to year, and using the midpoint of multiple reasonable approaches is a common method to deal with uncertainty. Given all the available information, this was previously the most reasonable approach as determined by the MAFMC and NEFMC. The number is higher than 2025 mostly because the assessment proportion increased versus the previous calculation.

Total Allowable Landings (TAL): 3,867 MT – this is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> 112 MT - This was based on a recent 5-year average recommended by the Monitoring Committee considering recent data.

Commercial Quota: 3,755 MT – This is the TAL minus expected recreational landings.

5.6.B Action Alternative 6B: Re-suspend the Council's risk policy and set 2026 and 2027 ABCs = to projected 2026 OFL

Projections provided by the NEFSC, and reviewed/confirmed by the SSC, indicate the following:

Table 5. SSC-Confirmed ABCs = OFLs (6B)

	OFL	ABC	SSB/B _{MSY}
Year			(above 1 means
	metric tons	metric tons	above 188 target)
2026	<mark>8,084</mark>	<mark>8,084</mark>	1.13
2027	8,202	8,202	1.14

The spiny dogfish biomass target is based on annual spawning output of approximately 188 million pups.

Previously this approach contemplated setting the ABC equal to the OFL in each year, but staff suggests this alternative now only include going as high as the projected 2026 OFL of 8,084 for both 2026 and 2027. There is a minimal difference, and having a constant ABC facilitates comparison and simplifies final NEPA documentation of considering a reasonable range of alternatives.

Table 6. 6B Specifications Details

Specifications	2026-27 (pounds)	2026-27 (mt)	Basis
OFL (from SSC)	17,822,148	8,084	SSC
ABC (from SSC)	17,822,148	8,084	SSC, but strong caveats
Canadian Landings	8,818	4	= 2020-2023 average
Domestic ABC	17,813,330	8,080	= ABC – Canadian Landings
ACL	17,813,330	8,080	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes immediate disruption to industry
Amount of buffer	0	0	distribution to industry
ACT	17,813,330	8,080	= ACL - mgmt uncert buffer
U.S. Discards	7,220,131	3,275	2025 Set-Aside
TAL	10,593,199	4,805	ACT – Discards
U.S. Rec Landings	246,917	112	= 2020-2024 average
Comm Quota	10,346,282	4,693	TAL – Rec Landings

<u>Canadian Landings:</u> 4 MT - This was based on a recent 4-year average 2020-2023 recommended by the Monitoring Committee considering recent data.

Domestic ABC: Total ABC minus expected Canadian landings.

<u>Annual Catch Limit:</u> Equals the Domestic ABC per the FMP. Exceeding this specification can trigger payback accountability measures, affecting future years.

<u>Management Uncertainty Buffer:</u> The Council has previously decided that the other specifications, including a higher discard set-aside, sufficiently address management uncertainty so there is no proposed management uncertainty buffer.

<u>Annual Catch Target (ACT)</u>: The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards:</u> 3,275 was the amount set aside in 2025 (see no action description above). Inclusion of this option facilitates consideration of the effect of different/lower discard set asides for the 2026-2027 quotas.

<u>Total Allowable Landings (TAL):</u> 4,805 MT – this is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> 112 MT - This was based on a recent 5-year average recommended by the Monitoring Committee considering recent data.

Commercial Quota: 4,693 MT – This is the TAL minus expected recreational landings.

5.6.C Action Alternative 6C: Re-suspend the Council's risk policy and set 2026 and 2027 ABCs = 2025 OFL (COMMITTEE RECOMMENDED)

Projections provided by the NEFSC, and reviewed/approved by the SSC, indicate the following: *Table 7. SSC-Suggested ABCs* = 2025 OFL (6C)

ABC = 2025 OFL						
	OFL	ABC	SSB/B _{MSY}			
Year			(above 1 means			
	metric tons	metric tons	above 188 target)			
2026	8,084	7,626 MT	1.13			
2027	Est 8,212	7,626 MT	1.13-1.14			

The spiny dogfish biomass target is based on annual spawning output of approximately 188 million pups. The 2027 values in the above table were not directly calculated but can be closely approximated because the catches are in between other calculated values in other alternatives (i.e. the $ABC = P^*$ (6A) and ABC = OFL (6B) alternatives).

Table 8. 6C Specifications Details

Specifications	2026-27 (pounds)	2026-27 (mt)	Basis
OFL (from SSC)	17,822,148	8,084	SSC
ABC (from SSC)	16,812,432	7,626	SSC suggestion
Canadian Landings	8,818	4	= 2020-2023 average
Domestic ABC	16,803,614	7,622	= ABC – Canadian Landings
ACL	16,803,614	7,622	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes immediate disruption to industry
Amount of buffer	0	0	distribution to industry
ACT	16,803,614	7,622	= ACL - mgmt uncert buffer
U.S. Discards	7,771,286	3,525	Midpoint Approach
TAL	9,032,328	4,097	ACT – Discards
U.S. Rec Landings	246,917	112	= 2020-2024 average
Comm Quota	8,785,411	3,985	TAL – Rec Landings

<u>Canadian Landings:</u> 4 MT - This was based on a recent 4-year average 2020-2023 recommended by the Monitoring Committee considering recent data.

<u>Domestic ABC</u>: Total ABC minus expected Canadian landings.

<u>Annual Catch Limit:</u> Equals the Domestic ABC per the FMP. Exceeding this specification can trigger payback accountability measures, affecting future years.

<u>Management Uncertainty Buffer:</u> The Council has previously decided that the other specifications, including a higher discard set-aside, sufficiently address management uncertainty so there is no proposed management uncertainty buffer.

Annual Catch Target (ACT): The ACT equals the ACL given there is no management uncertainty buffer.

<u>U.S. Discards</u>: 3,525 MT - This amount of discard set-aside uses the mid-point of a 5-year average and the accepted model-utilized proportion of discards (applied to the ABC). Discard estimates vary year to year, and using the midpoint of multiple reasonable approaches is a common method to deal with uncertainty. Given all the available information, this was previously the most reasonable approach as determined by the MAFMC and NEFMC. The number is higher than 2025 mostly because the assessment proportion increased versus the previous calculation.

<u>Total Allowable Landings (TAL):</u> 4,097 MT – this is the ACT minus the U.S. discard set-aside.

<u>U.S. Recreational Landings:</u> 112 MT - This was based on a recent 5-year average recommended by the Monitoring Committee considering recent data.

Commercial Quota: 3,985 MT – This is the TAL minus expected recreational landings.

6.0 FISHERY BACKGROUND

Basic Biology

Spiny dogfish is the most abundant shark in the western north Atlantic and ranges from Labrador to Florida, being most abundant from Nova Scotia to Cape Hatteras, North Carolina. Migrations are believed to primarily occur in response to changes in water temperature. Spiny dogfish have a long life, late maturation, a long gestation period, and relatively low fecundity, making them generally vulnerable to depletion. Fish, squid, and etenophores dominate the stomach contents of spiny dogfish collected during the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys, but spiny dogfish are opportunistic and have been found to consume a wide variety of prey. More detailed life history information can be found in the essential fish habitat (EFH) source document for spiny dogfish at: https://www.fisheries.noaa.gov/region/newengland-mid-atlantic#science. ¹

Status of the Stock

Based on the 2023 Spiny Dogfish Management Track Assessment (NEFSC 2023), which used the Stock Synthesis 3 (SS3) assessment model and passed peer review in 2023, the spiny dogfish stock was neither overfished nor experiencing overfishing in 2022¹. Biomass (spawning output) in 2022 was estimated to be at 101% of the reference point/target, despite being relatively near its all-time low (Figure 5). Fishing mortality in 2022 was 81% of the overfishing threshold, the first time in the last decade without overfishing (Figure 6). Due to the stock's reduced productivity, the SS3 model projections predict that relatively low future catches are needed to stay at the biomass target. It has been noted that maturation of large year classes has previously led to biomass increases at catches above those proposed in recent specifications. Projections conducted for the assessment predicted that biomass would increase to 113% of the biomass target by 2026 even fishing at the overfishing rate, as good recruitment from the early 2010s period matures.

¹ The assessment and its peer review summary are available at https://www.mafmc.org/ssc-meetings/october-30-2023.

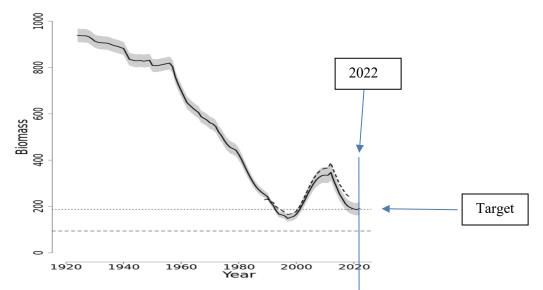


Figure 5. Time series of spawning output (millions of pups) 1924-2022 from the accepted SS3 model with reference points (top horizontal dotted line is the target, lower dashed horizontal line is the overfished threshold.

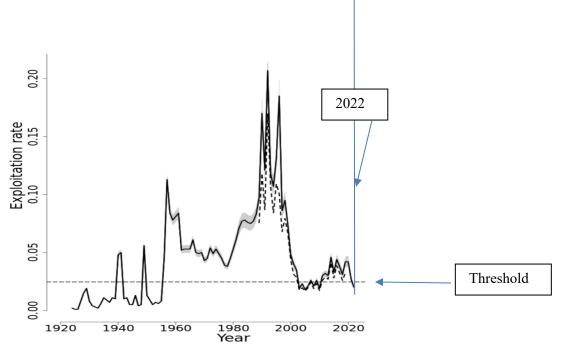


Figure 6. Time series of fishing mortality 1924-2022 from the accepted SS3 model - dashed horizontal line is the overfishing threshold.

Management System and Fishery Performance

Management

The Council established management of spiny dogfish in 2000 and the management unit includes all federal East Coast waters. Quotas are set based on the current stock assessment, the Council's risk policy to avoid overfishing, and data on recent catches.

Access to the fishery is not limited, but a federal permit must be obtained to fish in federal waters and there are various permit conditions (e.g., trip limit and reporting). There is a federal trip limit of 7,500 pounds (increased from 6,000 for the 2022 fishing year). Some states mirror the federal trip limit, but states can set their own trip limits. The annual quota has been allocated to states through the Atlantic States Marine Fisheries Commission (http://www.asmfc.org/species/spiny-dogfish). Once the total federal commercial quota is caught then the fishery is closed and spiny dogfish cannot be retained.

The FMP proceeds through several steps to calculate each year's commercial quota. First the SSC sets a stockwide acceptable biological catch (ABC)

Commercial Fishery

Figure 7 and Table 9 show spiny dogfish landings for the 2000-2023 fishing years relative to the quotas in those years. The Advisory Panel has previously noted that the fishery is subject to strong market constraints given weak demand. 2023 fishing year landings were about 36% lower than the previous year and 2023 landings were the lowest since 2007. Figure 8 provides inflation-adjusted spiny dogfish ex-vessel prices in "2023 dollars." Figure 9 illustrates preliminary landings from the 2024 and 2023 fishing years relative to the quota. The last data point in Figure 9 is often only a partial week of data. Figure 10 illustrates ex-vessel revenues from spiny dogfish landings.

Tables 10-12 provide information on landings in the 2021-2023 fishing years by state, season, and gear type. Table 13 provides information on the numbers of participating vessels that have at least one federal permit. State-only vessels are not included, but the table should still illustrate overall trends in participation.

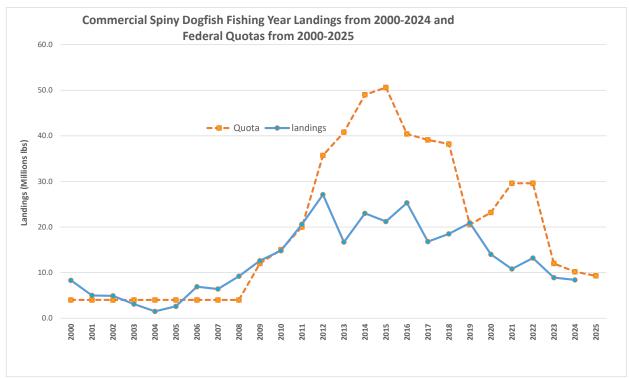


Figure 7. Annual spiny dogfish landings and federal quotas 2000-2025

Source: NMFS CAMS queried 8/14/2025

Table 9 Annual spiny dogfish landings and federal quotas 2000-2024

Source: NMFS CAMS queried 8/14/2025

Fishing year	Fed Quota (M lb)	Landings (M lb)
2000	4.0	8.3
2001	4.0	5
2002	4.0	4.9
2003	4.0	3.1
2004	4.0	1.5
2005	4.0	2.6
2006	4.0	6.9
2007	4.0	6.4
2008	4.0	9.2
2009	12.0	12.6
2010	15.0	14.8
2011	20.0	20.6
2012	35.7	27.1
2013	40.8	16.7
2014	49.0	23
2015	50.6	21.2
2016	40.4	25.3
2017	39.1	16.8
2018	38.2	18.5
2019	20.5	20.9
2020	23.2	14
2021	29.6	10.8
2022	29.6	13.2
2023	12.0	8.9
2024	10.2	8.4
2025	9.3	

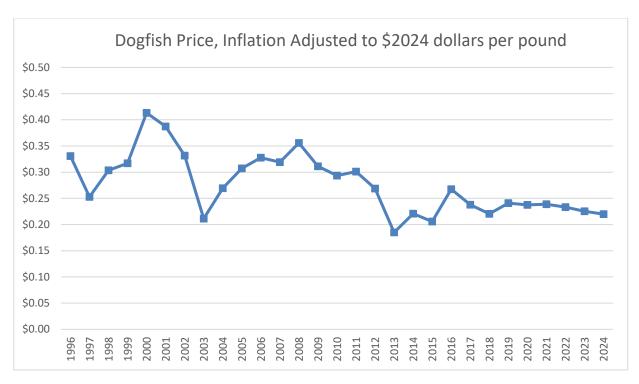


Figure 8. 1995-2024 fishing years' average prices of spiny dogfish in 2024 dollars per landed pound (adjusted to "2023 dollars" using the GDP deflator). *Source: NMFS CAMS queried 5/2/2024*

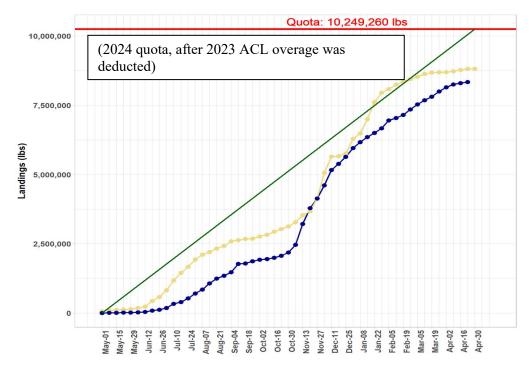


Figure 9. Preliminary Spiny dogfish landings; the 2024 fishing year (Started May 1, 2024) is in blue (through late April 2025), and the preceding 2023 fishing year is in yellow-orange.

 $Source: \underline{https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region} \ .$

Table 10. Commercial Spiny Dogfish landings (landed weight – millions of pounds) by state for 2022-2024 fishing years. Source: NMFS CAMS queried 8/14/2025

Year	MA	NJ	Other/CI (including MD-VA)	Total
2022	3.9	1.7	7.6	13.2
2023	2.8	0.8	5.2	8.8
2024	2.0	0.7	5.7	8.3

Table 11. Seasonal Commercial Spiny Dogfish landings (landed weight – millions of pounds) for 2022-2024 fishing years. Source: NMFS CAMS queried 8/14/2025

	May-Oct	Nov-April	Total
2022	4.2	8.9	13.2
2023	3.0	5.8	8.8
2024	2.1	6.2	8.3

Table 12. Commercial Spiny Dogfish landings (landed weight – millions of pounds) by gear for 2022-2024 fishing years. NMFS CAMS queried 8/14/2025

Year	GILL NET, SINK	LONGLINE, BOTTOM	BOTTOM TRAWL	Other	Total
2022	10.9	1.3	0.2	0.7	13.2
2023	6.9	1.2	0.2	0.5	8.8
2024	7.2	0.6	0.2	0.3	8.3

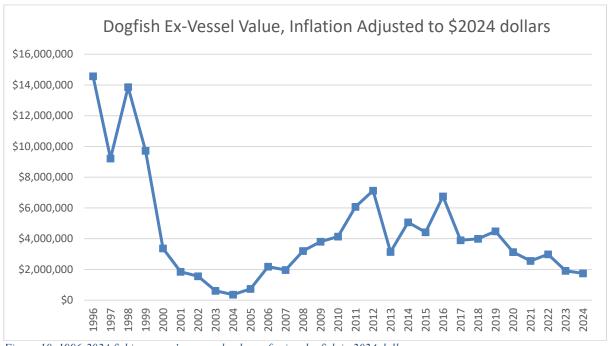


Figure 10. 1996-2024 fishing years' ex-vessel values of spiny dogfish in 2024 dollars (adjusted to "2024 dollars" using the GDP deflator). Source: NMFS CAMS queried 8/14/2025

Table 13. Participation in fishing years 2000-2024 by federally-permitted vessels. State-only vessels are not included. Source: NMFS unpublished dealer data pre-2021, CAMS data for 2021-2024 accessed 8/14/2025

YEAR	Vessels 200,000+	Vessels 100,000 - 199,999	Vessels 50,000 - 99,999	Vessels 10,000 - 49,999	Total with at least 10,000 pounds landings
2000	16	10	8	43	77
2001	4	12	10	33	59
2002	2	14	8	31	55
2003	4	5	3	17	29
2004	0	0	0	42	42
2005	0	0	1	67	68
2006	0	4	11	114	129
2007	1	2	21	72	96
2008	0	5	20	119	144
2009	0	11	42	166	219
2010	0	26	54	124	204
2011	1	48	73	135	257
2012	25	55	56	146	282
2013	10	27	45	87	169
2014	27	38	38	81	184
2015	31	33	36	59	159
2016	52	26	14	45	137
2017	28	27	24	32	111
2018	28	26	20	35	109
2019	29	25	21	29	104
2020	23	27	15	22	87
2021	16	27	12	28	83
2022	28	10	15	27	80
2023	15	15	13	22	65
2024	13	12	15	19	59

Discards

One issue related to the AM payback provision is that there is uncertainty when setting aside part of the ABC to account for discards. Table 7 lists the recent fishing year discards, what was set aside for discards, and the rationale for the set-aside.

Table 14. Recent fishing year discards, what was set aside for discards, and the rationale for the set-aside.

	Actual		
	Estimate		
Fishing Year	(MT)	Set-Aside (MT)	Rationale for set-aside
2019	3,623	3,475	2015-2017 average
2020	3,987	3,475	2015-2017 average
2021	2,929	3,475	2015-2017 average
2022	3,678	3,475	maintained 3475
			started with 2017-2019 average then
2023	4,581	2,088	scaled down with survey trend
			Assumes terminal year ratio of discards to
2024	3,387	2,530	catch maintained
			Assumes the mid-point of 1) 5-year recent
			average 2) and the discards
			from assuming the terminal year ration of
2025	Na	3,275	discards to catch is maintained

Commercial Discard Uncertainty

The Coefficients of Variation (CVs - a measure of precision) for the primary commercial discard estimates by gear type were not particularly high/uncertain in the three terminal years of last research track assessment (2017-2019, the most recent document with CVs provided). Trawl discard CVs were 6%-10% and gillnet CVs were 14%-18%. Longline CVs were 18%-25% and scallop dredge CVs were 12%-17% but these gear types (longline and scallop dredge) have contributed less to overall discards in recent years. The assumed discard mortalities by commercial gear type (50% for otter trawl, 30% for gill net, 75% for scallop dredge, 10% for longline) add additional uncertainty that is not quantitatively measured or incorporated into the estimated uncertainty. These discard mortalities are based on limited research and/or ad-hoc expert judgement assumptions. The SAW 43 Assessment Report (NEFSC 2006) further describes the process of identifying the currently used discard mortality assumptions.

A Spiny Dogfish Committee member asked if we could provide any more context on the discards scale, which have been a highlighted concern in recent meetings. GARFO APSD provided data to calculate per-trip average discards shown in the table below. The 2023 fishing year had 4,581 MT total dead discards (highest over 2019-2024), 3,763 commercial dead discards, and the trawl discards below accounted for 90% of those commercial dead discards.

Table 15. Spiny Dogfish per-trip discards on Trawl Trips in 2023

Fishing Year	REGION	GEAR CAT	MESH CAT	ALL Spiny Dogfish Discards (lbs)	Dead Spiny Dogfish Discards (lbs) (50%)	# Trips	Avg discarded per trip (ALL divided by # Trips)
2023	GOM	TRAWL	LM	5,576,395	2,788,198	2,756	2,023
2023	GOM	TRAWL	SM	237,416	118,708	226	1,051
2023	SNE	TRAWL	LM	2,533,266	1,266,633	2,758	919
2023	SNE	TRAWL	SM	743,089	371,545	2,162	344
2023	MA	TRAWL	LM	5,194,587	2,597,294	3,451	1,505
2023	MA	TRAWL	SM	664,038	332,019	2,393	277
		Primary Trawl Totals		14,948,790	7,474,395	13,746	

Recreational Fishery

Recreational landings estimates are relatively low, averaging 111 MT 2019-2024. Percent standard errors (PSEs - a measure of precision) are high for spiny dogfish landings given their infrequent occurrence, ranging from 33%-58% (for total numbers of fish) over 2019-2024. Recreational discard mortality is part of the general discard set aside, and averaged 904 MT from 2019-2024, with PSEs ranging from 17%-24% (for total numbers of fish). The assumed 20% mortality for recreationally-discarded spiny dogfish represents an ad-hoc expert judgement assumption that is not quantitatively measured or incorporated into the estimated uncertainty.

7.0 ENVIRONMENTAL IMPACTS

A standard environmental impacts section will be added but such impacts are not expected to be "significant" from a National Environmental Policy Act (NEPA) perspective. The package of alternatives selected by the Councils will still create sustainable management that drives spiny dogfish toward its biomass target, but will improve socioeconomic performance by avoiding disruptive ACL overage paybacks that are not needed as part of that sustainable management. Such paybacks have not limited the fishery to date, but a 1.1 million pound payback, as occurred in 2024, could potentially translate into \$242,000 in lost ex-vessel values at the 2024 average price of \$0.22 per pound, as well as lost revenues for processing and other support industries.

The Council has received testimony that the 2025 quota of 9.3 million pounds may barely create a sustainable situation for the last at-scale spiny dogfish processor. Landings in the 2022, 2023, and 2024 fishing years were respectively, 13.2, 8.9, and 8.4 million pounds.

The 2026-2027 specifications under any of the considered specifications alternatives are likely to be similar to the current 2025 fishing year specifications, resulting in similar levels of catch and effort. Similar catch will mean that impacts on spiny dogfish and fishing communities should be likewise similar as previous years (and still not significant). Similar effort will mean that impacts on habitat, non-target species, and protected resources should be likewise similar as previous years (and still not significant).

Besides impacts for fishermen, the most direct impacts would be for the spiny dogfish stock, but they are still not expected to be significant for each alternative set, as noted below:

Impacts for the spiny dogfish stock from Alternative Set 1: Paybacks and Biomass

All alternatives would require full paybacks as the stock approaches the overfished threshold or a higher level. In addition, the Council's risk policy triggers more and more precaution as stock size decreases, further ensuring that any partial payback at stock sizes below the target are unlikely to substantially affect the biomass of the stock.

Impacts for the spiny dogfish stock from Alternative Set 2: Paybacks and Overage Sources

The source of an overage should not affect the impact to the stock. While commercial landings are more precise, other catch sources may be lower than estimated <u>or higher</u> than estimated. The biomass scaling in Alternative Set 1 will mitigate any impact on a stock from an overage non-repayment, regardless of its source.

Impacts for the spiny dogfish stock from Alternative Set 3: Paybacks and Rebuilding

If a stock is at 75% of its target and in rebuilding, or at 75% of its target and not in rebuilding, there is no certain differential impact to the stock. If any difference exists, it might be that there is actually less risk at 75% during rebuilding since the stock has been trending up from less than 50% of its target (overfished threshold), while a stock at 75% of its target but not in rebuilding may be trending downward.

Impacts for the spiny dogfish stock from Alternative Set 4: Payback Averaging

For a stock like spiny dogfish that is relatively stable across any 3-year time period and composed of many long-lived animals, paying back overages based on a 3-year average of catches and catch limits should not have a substantial impact on the stock. Any overages requiring paybacks that are not offset by preceding or subsequent catch underages would still be repaid within 3 years.

Impacts for the spiny dogfish stock from Alternative Set 5: 105% Quota closure

A few percent overage of a quota is unlikely to affect the stock except if stock status is poor, and in that case any overage caused from this alternative set would have to be paid back per Alternative Set 1.

Impacts for the spiny dogfish stock from Alternative Set 6: Specifications

Due to a period of better recruitment from about 2009-2016, if catch occurs at the OFL, the stock is expected to increase slightly for 5-10 years, so even alternatives that catch right up to the OFL in 2026-2027 should not negatively impact the stock.

8.0 COMPLIANCE WITH OTHER APPLICABLE LAWS

TO BE ADDDED

9.0 PREPARER AND PERSONS/AGENCIES CONSULTED

TO BE ADDDED: contact Jason Didden for more information https://www.mafmc.org/staff

10.0 REFERENCES AND BACKGROUND DOCUMENTS

MAFMC 2024. Environmental Assessment (EA) for 2024-2026 Spiny Dogfish Specifications available at: https://www.mafmc.org/dogfish.

MAFMC-SSC 2024. Report of the September 2024 MAFMC Scientific and Statistical Committee. Available at https://www.mafmc.org/ssc-meetings/september-2024.

NEFSC 2023. Spiny Dogfish Management Track Stock Assessment. Available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi.php or https://www.mafmc.org/ssc-meetings/october-30-2023.

NEFSC 2006. 43rd SAW Stock Assessment Report. November 2006. Northeast Fisheries Science Center Reference Document 06-25.

Stehlik, Linda. 2007. Essential Fish Habitat source document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-203; 52 p.

OTHER REFERENCES TO BE ADDDED

THIS IS THE END OF THE DOCUMENT