New England Fishery Management Council
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Daniel Salerno, Chair • Cate O'Keefe, PhD, Executive Director

MEMORANDUM

DATE: November 10, 2026

TO: Cate O'Keefe, Ph.D., Executive Director

FROM: Scientific and Statistical Committee

SUBJECT: Response to Terms of Reference - Overfishing Limits and Acceptable Biological Catches for Gulf of Maine haddock, American plaice, pollock, and Atlantic halibut for fishing years 2027-2031

The Scientific and Statistical Committee (SSC) met in person and via webinar on October 27, 2026, to address Terms of Reference (TOR) for Gulf of Maine haddock, American plaice, pollock, and Atlantic halibut.

SSC members in attendance: Dr. Conor McManus (Chair), Dr. Edward Camp (Vice-Chair), Dr. Anna Birkenbach, Dr. Lauran Brewster, Dr. Adam Delargy, Dr. Alex Hansell, Dr. Lisa Kerr, Dr. Gareth Lawson, Dr. Kai Lorenzen, Dr. Jason McNamee, Dr. Richard Merrick, Dr. Mateja Nenadovic, Dr. Kevin St. Martin, Dr. Michelle Staudinger, Dr. Sam Truesdell, Dr. Hiro Uchida, and Dr. John Wiedenman.

TERMS OF REFERENCE

A. Consider the results of the Northeast Fisheries Science Center's (NEFSC) 2026 management track assessments for Gulf of Maine haddock and American plaice, the 2026 data update for pollock, and information provided by the Council's Groundfish PDT.

B. Consider the NEFSC 2026 data update for Atlantic halibut, and information provided by the Council's Groundfish PDT including additional information from the Canadian stock assessment, research on tagging and genetics, and information on connectivity between Atlantic halibut in U.S. and Canadian waters. Comment on the suitability of this additional information to be considered best available science and appropriate for setting catch advice.

C. Recommend overfishing limits (OFL) and acceptable biological catches (ABC) for these four stocks for fishing years (FY) 2027 – 2031 that will prevent overfishing, be consistent with the Council's groundfish ABC control rule and rebuilding plans, and consider the Council's Risk Policy.

GULF OF MAINE HADDOCK

The SSC received a presentation from NEFSC staff and the Management Track Peer Review Panel Chair on the 2026 management track stock assessment for Gulf of Maine haddock, and from the Council's Groundfish Plan Development Team (PDT) on development of possible OFLs and ABCs for FY 2027-2031.

The 2026 assessment builds upon the 2022 research track and MT assessments, and the subsequent 2024 MT assessment. In 2024, the stock was not overfished and overfishing was not occurring. The 2026 assessment updated commercial fishery catch data, indices of abundance, the analytical Woods Hole Assessment Model (WHAM) assessment model, and biological reference points (BRP) through 2025. Projections were updated through 2031. Retrospective adjustments were unnecessary, because the retrospective pattern was minor. Spawning stock biomass (SSB) in 2025 was estimated to be 11,339 mt which is 145% of the biomass target (SSB_{MSY} proxy = 7,809 mt). The 2025 fully selected fishing mortality was estimated to be 0.223, which is 63% of the overfishing threshold proxy (F_{MSY} = 0.352). Thus, Gulf of Maine haddock remains not overfished and overfishing is not occurring. Projections of biomass and catch were conducted in WHAM using the standard projection approach. The terminal selectivity estimate, time-invariant maturity ogive, and projected weights-at-age were used in the projections. The PDT provided an interim catch estimate for 2026, and fishing was projected at F_{MSY} proxy for FY 2027-2031.

The assessment evaluated projection performance using retrospective forecasting, which built upon previous research and addressed research recommendations provided by the 2024 MT Peer Review Panel and the SSC, to develop retrospective forecasting as a diagnostic tool for characterizing projection error. For the retrospective forecasting, SSB forecasts were compared to the final SSB estimates and the bias was calculated as median percent error. The results demonstrate that projections have historically been overly pessimistic, while in recent years, overly optimistic; projection bias was relatively low in the last two years; and longer-term forecasts have higher error than short-term forecasts. An evaluation of past projection performance also shows good correspondence between past projections and the updated model results. This work is important in understanding projection uncertainty, especially when considering setting longer specifications.

TOR Findings

The SSC recommends that the PDT's "Projection Uncertainty Option" for Gulf of Maine haddock be used to set the OFLs and ABCs for FY 2027-2031. This results in OFLs of 2,099; 1,730; 1,640; 1,711; and 1,815 mt, respectively. The ABCs are 1,634; 1,342; 1,268; 1268; and 1268, respectively. The SSC determined that these OFLs and ABCs will likely prevent overfishing and are consistent with the Council's ABC control rules (Option A) and Risk Policy. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The SSC applied Option A of the Groundfish ABC Control Rule, which states that the ABC should be determined as the catch associated with 75% of F_{MSY}. However, the SSC determined that

holding ABC constant in FY 2029-2031 was appropriate. The PDT provided two OFL and ABC options: 1) straight application of the ABC control rule Option A (75% F_{MSY} projections through FY 2031), and 2) 75% F_{MSY} projections through FY 2029, after which the ABC is held constant at the FY 2029 value. This option was proposed to address projection uncertainty. Weak recruitment (2023-2025) and slowing growth of the 2020 and 2021 year classes led to decreases in projected SSB and catch. The projections then increased SSB through 2030; however, the assessment suggests that after 2029, projections assume >25% of catch comes from future/unmeasured year classes (aka "paper fish"). The PDT's "Projection Uncertainty Option" recognizes the increasing influence of assumed recruitment in outyear projections and decided that 2029 was the last year 75% F_{MSY} projections were appropriate, consistent with peer review panel comments.

The SSC felt that its recommendations are consistent with the Risk Policy analysis for Gulf of Maine haddock that placed this stock in the High Risk Tolerance zone. The SSC agreed the PDT's recommendation is appropriate, as there is far too much uncertainty in recruitment for FY 2030-2031 to recommend ABCs different from those of FY 2029.

Future recruitment is the primary source of assessment uncertainty. Currently, the fishery is heavily reliant on the 2020 and 2021 cohorts, given the below-average recruitment since 2021. Somatic growth in both cohorts has slowed recently, and without improved recruitment, the population will continue to decline. The recruitment-dependent, "boom and bust" nature of the stock warrants monitoring, especially as this may exacerbate challenges in identifying potential shifts in productivity that could be considered with approaches such as Dynamic Reference Points.

An additional source of uncertainty is the recreational fishery catch. The SSC recommends reaffirming that the private angler recreational catch developed from intercept surveys is statistically robust. There was additional concern about the impact of the upcoming revision to the Marine Recreational Information Program (MRIP) catch data, and the effect that changes in recreational catch estimates would have on the assessment (e.g., if the revised estimates are significantly lower, they could have a significant scaling effect on biomass). These data are expected to be incorporated into the next MT assessment.

Additional Comments and Research Recommendations

The recommendation to hold the FY 2029 ABC constant through FY 2031 is a way to address concerns about increased uncertainty in projection outyears. This highlights the importance of assessment frequency and timing for a stock like haddock, which has an episodic recruitment life history. An updated assessment within 2-3 years is necessary to verify incoming recruitment, because catch advice for later years should not be based on assumed recruitment.

The SSC continues to support previously recommended research that has yet to be addressed: 1) exploring spatio-temporal models to integrate data across multiple surveys (e.g., NEFSC's bottom trawl and bottom longline surveys), 2) evaluating geospatial models such as a vector autoregressive spatio-temporal (VAST) or a bespoke model to combine these survey streams,

and 3) understand environmental impacts on the recruitment and growth dynamics of Gulf of Maine haddock. The SSC also endorses two recommendations from the MT Peer Review Panel: 1) explore a two-fleet model structure that separates commercial and recreational fleets, and 2) do a sensitivity analysis of the most recent maturity-at-age data in BRP projection calculations.

Summary of Recommendations

1. **The SSC recommends OFLs for FY 2027-2031 of 2,099; 1,730; 1,640; 1,711; and 1,815 mt, respectively.**
2. **The SSC recommends ABCs for FY 2027-2031 of 1,634; 1,342; 1,268; 1,268; 1,268; respectively.**
3. **The SSC recommends Gulf of Maine haddock be reassessed every 3 years.**
4. **The SSC recommends several research topics, most importantly to understand environmental effects on recruitment and growth of Gulf of Maine haddock because of the recruitment uncertainty in the assessment.**

Fishing Year	OFL (mt)	ABC (mt)
2027	**2,099**	**1,634**
2028	**1,730**	**1,342**
2029	**1,640**	**1,268**
2030	**1,711**	**1,268**
2031	**1,815**	**1,268**

AMERICAN PLAICE

The SSC received a presentation from NEFSC staff and the Management Track Peer Review Panel Chair on the 2026 management track stock assessment for American plaice, and from the Council's Groundfish PDT on the development of possible OFLs and ABCs for FY 2027-2031. This assessment for American plaice used a WHAM model and determined that the stock is not overfished and overfishing is not occurring.

The 2026 assessment built upon the 2024 MT assessment, which applied methods established in the 2022 research track assessment. The 2026 assessment incorporated major research recommendations, including integrating data that have become available: updated biological data and historical commercial age composition data. Projection performance was evaluated by comparing 2026 model results against the previous management track. The peer review panel concluded that the assessment successfully met all Terms of Reference and represented the best scientific information available to inform OFLs and ABCs. In addition, a snapshot Ecosystem and Socioeconomic Profile (ESP) was presented to document environmental conditions affecting American plaice.

TOR Findings

The SSC recommends OFLs for FY 2027-2031 of 4,219; 3,880; 4,053; 4,311; and 4,533 mt, respectively. The SSC recommends ABCs for FY 2027 of 3,298 mt and of 3,020 mt held constant for FY 2028-2031. The SSC determined that these OFLs and ABCs will likely prevent overfishing and are consistent with the Council's ABC control rules and Risk Policy. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The SSC applied Option A of the Groundfish ABC Control Rule, which states that the ABC should be determined as the catch associated with 75% of F_{MSY}. However, the SSC determined that holding ABC constant in FY 2028-2031 was appropriate. The PDT provided two OFL and ABC options for FY 2027–2031: 1) 75% F_{MSY} projections across the entire period, and 2) 75% F_{MSY} projections through FY 2028, after which the ABC is held constant at the FY 2028 value. The second approach was proposed because unobserved, model-estimated fish ("paper fish") account for >25% of the projected stock after FY 2028.

The SSC recommendations are consistent with the Risk Policy analysis for American plaice that placed this stock in the Intermediate Risk Tolerance zone. The SSC determined that both options were scientifically justifiable and aligned with the Risk Policy analysis. Ultimately, the SSC recommended the second option (holding the ABC constant after FY 2028). This approach mitigates the risk associated with unobserved fish and accounts for the sharp decline in projection reliability beyond two to three years. Furthermore, recommended ABCs are unlikely to result in overfishing for this stock. Having constant ABCs during FY 2028-2031 is a precautionary buffer against recent downward trends in recruitment and biomass and lowers the probability of overfishing to below 25% across all projected years. While strict application of the control rule would have set higher ABCs for those three years, low quota utilization rate (averaging roughly 25%) and zero to very low inter-sector ACE lease prices in recent years suggest that the lower ABCs that are recommended are unlikely to restrict the fishery.

Additional Comments and Research Recommendations

Holding the ABC constant for FY 2028-2031 underscores the need for subsequent assessments to evaluate whether these fixed catch levels remain appropriate as new data emerge. The SSC also reaffirmed its support for outstanding research priorities, specifically:

1. Determining optimal temporal averaging windows for projection inputs (e.g., 5-year vs. 2-year averages);
2. Investigating drivers of survey selectivity for older age classes; and
3. Continually updating the snapshot ESP to clarify environmental influences on recruitment.

This stock deliberation is the first time the SSC has received a snapshot ESP. The SSC appreciates the report and encourages NEFSC to continue producing these profiles for other

stocks. Multiple other stocks have recently undergone Research Track Assessments where the RT Term of Reference 1 identified ecosystem indicators that can be updated via the snapshot ESP to help provide context for projections (e.g., Atlantic herring, yellowtail flounder).

Summary of Recommendations

1. **The SSC recommends OFLs for FY 2027-2031 of 4,219; 3,880; 4,053; 4,311; and 4,533 mt, respectively.**
2. **The SSC recommends ABCs for FY 2027 of 3,298 and of 3,020 mt held constant for FY 2028-2031.**
3. **The SSC recommends numerous research recommendations with a primary focus on recent drivers of recruitment.**

Fishing Year	OFL (mt)	ABC (mt)
2027	**4,219**	**3,298**
2028	**3,880**	**3,020**
2029	**4,053**	**3,020**
2030	**4,311**	**3,020**
2031	**4,533**	**3,020**

POLLOCK

The SSC received a presentation from Council staff on the 2026 data update by the NEFSC for pollock and the Groundfish PDT's development of possible OFLs and ABCs for FY 2027-2031. The 2026 data update contained the typical updates to survey indices, landings and discards since the last (2024) MT assessment, though this data update included projections based on the 2024 MT assessment and three bridge years (2024-2026). The assessment for pollock uses an ASAP model, and based on the 2024 MT assessment, pollock is not overfished and overfishing is not occurring.

TOR Findings

The SSC recommends an OFL for FY 2027-2031 of 15,903; 14,428; 14,031; 13,361; and 13,016 mt, respectively. The SSC recommends an ABC of 9,005 mt held constant for FY 2027-2031. The SSC determined that these OFLs and ABCs will likely prevent overfishing and are consistent with the Council's ABC control rules and Risk Policy. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The SSC applied Option A of the Groundfish ABC Control Rule, which states that the ABC should be determined as the catch associated with 75% of F_{MSY}. However, the SSC determined that holding ABC constant in FY 2027-2031 was appropriate. The ABC was set equal to the equilibrium catch at 75% of the F_{MSY} proxy (F40%), which represents the long-term sustainable yield at this fishing mortality rate. While the standard approach for determining ABCs derives

year-specific catch projections at 75% F_{MSY} that vary annually, the equilibrium catch represents the value these projections converge toward over time. The SSC's decision to use the equilibrium catch, rather than year-specific projections, was driven by several compounding sources of uncertainty in the data update and underlying assessment. The SSC felt that its recommendations are consistent with the Risk Policy analysis for pollock that placed this stock marginally within the High Risk Tolerance zone, which the SSC considered when evaluating the appropriate level of precaution.

The projections presented in the data update were for eight years beyond the latest assessment terminal year of 2023 and resulted in catch projections for 2028 onwards containing a substantial amount of unobserved pollock (commonly referred to as “paper fish”). The last time the SSC reviewed this stock, in 2024, the SSC applied Option A using standard projections for a three-year specification period (FY 2025-2027). The current five-year specification period, based on projections extending eight years from the assessment terminal year, introduces substantially greater uncertainty that warranted the alternative approach to expressing the catch at 75% F_{MSY}. Another source of uncertainty was the omission of 2022 and 2023 recruitment estimates from the recruitment cumulative distribution function used to project recruitment in the projections. This may mean that the recruitment distribution does not reflect the most recent conditions. Importantly, the status quo dome-shaped selectivity assumption resulted in an SSB estimated in 2026 to be 44,353 mt higher than an alternative flat-topped selectivity sensitivity run. The additional 44,353 mt in the dome-shaped selectivity scenario resulted in an SSB considerably higher than B_{MSY} and led to the standard year-specific projections following a “fishing-down” process to return the SSB close to B_{MSY}.

The SSC noted that, unlike GOM haddock and American plaice where projections showed ABC declining then increasing due to assumed recruitment, the standard pollock projections showed only declining ABCs as the stock was projected to be fished down toward B_{MSY}. The 'hold constant' approach recommended for those other stocks addresses a different problem (capping recruitment-driven increases) and was not as useful for the pattern observed for pollock.

Due to uncertainty in the appropriate selectivity for this stock, the SSC considered the standard year-specific projections to be risky if selectivity was instead flat-topped and SSB was lower than estimated by the dome-shaped projections. Subsequently, 100-year projections were implemented in the AgePro software to understand the catch at stock equilibrium, and the SSC preferred using the equilibrium catch as a constant ABC for the next five years. The convergence of the standard projection catches toward the equilibrium value by 2031 (9,390 mt vs. 9,005 mt) provides supporting evidence that the equilibrium catch appropriately represents the long-term sustainable yield at 75% of F_{MSY}. The corresponding OFLs were derived from projections at F_{MSY} with SSB evolving under the constant ABC catch trajectory, resulting in year-specific OFL values that decline as SSB adjusts.

Both the dome-shaped and flat-topped selectivity model runs indicated that the stock is above B_{MSY}, and recent annual catches continue to remain well below previous ABCs. Therefore, it is

expected that the SSC-recommended ABCs will not constrain this fishery and catches will continue to remain well below the ABCs. Even if greater utilization occurs, the SSC's recommended ABCs are not likely to result in overfishing as both the base and sensitivity models result in similar status determination for the stock.

As the projections from neither method for setting the ABC (standard year-specific projections or constant equilibrium catch) were expected to constrain the fishery (e.g., low utilization rate and near-zero ACE lease prices), the SSC opinion was to be conservative to reflect the considerable sources of uncertainty associated with eight-year projections, unobserved fish in catch projections, and the influence of selectivity assumptions on the scale of the SSB. A few SSC members supported recommending the standard year-specific projections, particularly because both selectivity runs estimated SSB to be above B_{MSY}, the Risk Policy placed the stock in the high-risk tolerance zone, and because this approach follows the precedent used in the past by the SSC. However, these members opted to not submit a minority report.

Additional Comments and Research Recommendations

The SSC recommends further research into survey selectivity for pollock and continued runs of both domed and flat-topped selectivity until there is greater certainty in the selectivity. Length frequency studies of different gears are recommended in both fishery-independent and fishery-dependent settings. Tagging or jigging studies could be combined with the bottom trawl survey, and comparing length distributions from the recreational fleet to survey catches would also be beneficial.

The SSC also recommends research into changing fish distributions, depth preferences, or seasonal timing shifts relative to the bottom trawl survey, as changes in these may affect catchability. The potential for climate-driven distribution shifts should be evaluated, including the possibility that pollock are moving to areas or depths not well sampled by the current survey design. Similarly, natural mortality is assumed to be constant across time and ages in the current assessment model. Given evidence of changing ecosystem conditions in the Northeast U.S. shelf, the SSC recommends evaluation of whether time-varying or age-varying natural mortality could improve model fit and projection accuracy. Research shou

The SSC recommended evaluating how changing temperature, prey fields, and predator-prey dynamics may affect pollock productivity, distribution, and reference points. Consideration should be given to whether the current F_{MSY} proxy (F40%) remains appropriate under changing environmental conditions.

The SSC acknowledged that while catch utilization of this stock was low relative to past and recommended ABCs, further research on community impacts would be beneficial because, as noted by the SSC, vessels landing pollock have increased by 25% and pollock continues to be landed at major ports in the Northeast. Therefore, the SSC continues to recommend that developing fishery-dependent catch-per-unit effort metrics (e.g. average catch per vessel for each vessel size class) or other industry metrics (e.g. number of participating vessels per year by

vessel size class) over time could also provide insight into how the fleet has changed in response to management actions for other stocks.

The SSC recommends that a benchmark assessment is prioritized for this stock to help address the substantial uncertainties outlined in this report. The SSC continues to recommend that a transition from ASAP to WHAM would likely be helpful for addressing uncertainties and building flexibility in life history and should be considered under such a benchmark assessment.

Summary of Recommendations

1. **The SSC recommends an OFL for FY 2027-2031 of 15,903, 14,428, 14,031, 13,361, 13,016 mt, respectively.**
2. **The SSC recommends an ABC of 9,005 held constant for FY 2027-2031.**
3. **The SSC recommends further investigation of 1) survey selectivity and continued sensitivity runs of flat-topped selectivity until more is understood, 2) changes in pollock distribution, depth preferences, and natural mortality assumptions as the environment continues to change, and that 3) a benchmark assessment is prioritized, and the assessment method is transitioned from ASAP to WHAM.**

Fishing Year	OFL (mt)	ABC (mt)
2027	**15,903**	**9,005**
2028	**14,428**	**9,005**
2029	**14,031**	**9,005**
2030	**13,361**	**9,005**
2031	**13,016**	**9,005**

ATLANTIC HALIBUT

The SSC received a presentation from Council staff on the NEFSC 2026 data update for Atlantic halibut and the Groundfish PDT's development of possible OFLs and ABCs for FY 2027-2031. The 2026 data update brought up to date the commercial fishery catch data and the fall NEFSC bottom trawl survey biomass index through 2025. The PDT also included a review of the assessment history of halibut, stock structure and connectivity of Atlantic halibut in U.S. and Canadian waters, and history of management in Maine state waters. This review was initiated in response to concerns raised about the potential misalignment of the Canadian and U.S. assessments, management of Atlantic halibut, and specific concerns regarding how recent increases in the Canadian catch set-aside has resulted in declining quota for the U.S. fishery.

The status quo empirical assessment approach for this stock is the first second derivative approach (FSD). This model relies on three indices of abundance (NMFS fall survey index, a trawl discard to kept (d:k) index, and a gillnet d:k index) and commercial catch information. No BRPs or projections are calculated for this stock, and the data update did not update the catch indices.

Stock status is unknown based on the FSD approach as it cannot determine biological reference points. However, NOAA's official stock status is overfished (i.e., legacy "overfished" status based on the 2012 stock assessment), with overfishing unknown. This stock is in a rebuilding plan with an end date of 2055, but there is no rebuilding target so rebuilding progress cannot be determined.

TOR Findings

The SSC recommends that the OFL for Atlantic halibut be unknown for FY 2027-2031. The SSC recommends an ABC of 125 mt held constant for FY 2027-2031. The SSC determined that these OFLs and ABCs will likely prevent overfishing and are consistent with the Council's ABC control rules and Risk Policy. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The SSC applied Option D of the Groundfish ABC Control Rule, which states that interim ABCs should be determined for stocks with unknown status according to case-by-case recommendations by the SSC. New scientific information on Atlantic halibut stock structure, coupled with challenges associated with the existing approach to developing catch advice, prompted a reevaluation of the U.S. management strategy. This reassessment prompted the use of an interim approach to catch advice setting with a recommendation to advance a longer-term solution that recognizes the transboundary nature of the stock and addresses the current limitations of the U.S. management framework.

The PDT's review suggests there is one Atlantic halibut stock that extends across U.S. and Canadian continental shelf waters with its center of biomass in Canadian waters. A recent study developed a transboundary VAST model for Atlantic halibut (Shackell et al. 2026) which estimated about 94% of the biomass occurs within Canadian waters in recent years (94% is the average proportion over the study time series (1990-2023), with a range from 89% to 96%. The Canadian Department of Fisheries and Oceans (DFO) conducts a halibut longline survey on its resource and assesses its stock using an analytical model. In 2025, DFO performed an interim year update of the stock assessment which indicated that stock abundance remains higher than the long-term mean and there is a very high probability of being in the healthy zone.

The status quo approach for deriving Atlantic halibut catch advice is an empirical approach. However, this approach could not be used to either update catch advice or evaluate status quo catch advice using the information provided in the 2026 data update and there are some recognized challenges noted with this approach. The FSD approach does not allow for the calculation of BRPs or stock projections. Additional uncertainty exists regarding the representativeness of the indices that inform the FSD approach, including the NEFSC fall survey index given the species' low catchability and whether the spatial footprint of the fisheries used to derive d:k ratios overlaps a significant portion of halibut distribution. Finally, inconsistencies between U.S. and Canadian assessment and management approaches, along with the set-aside of a portion of the U.S. resource to accommodate increasing Canadian landings, is impacting U.S. quota availability and fishing opportunities for the U.S. fishery under the most recent

specifications period (for FY 2025-2027). As a result, the PDT recommended an alternative option for setting catch advice.

The SSC considered two catch advice options presented by the PDT. Option 1 sets ABC at the maximum U.S. catch from the 2018-2025 time period: 125 mt (PDT recommended). Option 2 sets ABC at the average U.S. catch from 2018-2025 time period: 74 mt.

The SSC selected Option 1, because it supports maintaining current U.S. fishery catch levels while providing flexibility if Atlantic halibut availability increases. U.S. catches under the FSD assessment approach since 2018 have not negatively affected the broader stock, which DFO assessed as healthy in 2025. Recent increases in biomass indices in U.S. waters and fishermen's reports of more halibut further support the use of the maximum observed U.S. catch from 2018–2025 (125 mt), rather than the historical average of 74 mt.

Atlantic halibut is managed in the U.S. as a non-directed fishery in federal waters (unallocated to sectors with a one fish per trip possession limit for all permit types), with coordinated management of a small directed state waters fishery in the state of Maine. Given that federal restrictions are expected to remain incidental, and substantial changes to Maine regulations are not anticipated, the higher ABC is unexpected to create undue biological risk. In contrast, Option 2 could unnecessarily constrain the U.S. fishery if halibut availability, incidental encounter rates, or Canadian catches increase. Option 1 therefore better aligns with the interim advice goal of maintaining current fishing opportunities without triggering management actions, while using the U.S. ABC to guide catch levels for the U.S. fishery, until there is an opportunity to more formally evaluate stock definition and consider potential alternative management for Atlantic halibut.

Additional Comments and Research Recommendations

The SSC also recommended revisiting the legacy overfished status determination for Atlantic halibut and recommended that NMFS revise the status from known to unknown, consistent with several criteria in the NMFS Procedural Guidance for Changing Assessed Stock Status from Known to Unknown:

- Criteria A: changes to management units based on the stock moving out of the old spatial range of the stock. Evidence suggests that halibut's center of gravity has shifted out of U.S. waters, although as described below a more thorough review of stock structure and connectivity is warranted.
- Criteria B: status is based on an aging stock assessment. Halibut's current overfished designation is based on the last accepted stock assessment from 2012, which is outdated.
- Criteria C: stock assessment does not provide sufficient information to support a stock status recommendation. The FSD approach does not allow for formal estimation of reference points.

Given that the assessment does not provide sufficient information to determine current stock status, and the time elapsed since the last accepted assessment and potential shifts in the

stock's center of gravity, the existing designation may no longer reflect the best scientific information available. This approach would be consistent with NMFS's 2022 determination to change the stock's overfishing status from known to unknown.

The major uncertainty regarding the SSC advice pertains to the Atlantic halibut stock structure. The PDT report suggests that the Atlantic halibut potentially available to the U.S. likely comprise a small "sink" portion of a single, larger, transboundary "source" population whose abundance is mostly dependent on Canadian recruitment and catch. This stock structure scenario implies U.S. catch should have little effect on future U.S. halibut abundance, availability, and catch, and is consistent with the SSC catch advice. However, there is uncertainty in this interpretation of the stock structure. The literature the PDT summarized also indicates that Atlantic halibut likely have a complex stock structure with potential sub-populations, finer-scale connectivity, more resident behavior, and more local recruitment than was previously thought. This interpretation of Atlantic halibut stock structures suggests the possibility of past or even persistent if small U.S. sub-populations, the remnants of which could potentially be sustained and recovered with conservative management.

This stock structure uncertainty could be addressed by an interdisciplinary review focused specifically on understanding Atlantic halibut stock structure for informing U.S. fisheries. Such an interdisciplinary review would ideally be subjected to peer-review prior to integration into management advice, and could also be augmented by additional research. Recommended priorities include developing an industry longline survey, similar to the Canadian DFO survey, to address key data gaps in U.S. waters. Although a survey limited to state waters would cover the fishery's footprint, expanding into federal waters could provide a more comprehensive understanding of Atlantic halibut stock dynamics and habitat use throughout the Gulf of Maine. Additional research should focus on refining catch advice approaches to better reflect current understanding of stock dynamics, including further evaluating the use of the VAST index to estimate the proportion of biomass distributed between U.S. and Canadian waters. Other priorities include assessing alternative catch per unit effort (CPUE) indices for use in stock assessment, including percent of trips with positive catch (where a one-fish per trip limit exists) and more detailed catch rate information of the Maine longline fishery.

Until uncertainty regarding stock structure of U.S. Atlantic halibut can be addressed, some caution seems warranted. The recent overfished status, current status as an Endangered Species Act species of concern, long-lived and late-maturing life history, exceptionally high per-unit market value, and intermediate risk tolerance rating emphasize the importance of treating the SSC's catch advice as an interim approach. It would be useful to carefully monitor the fishery response to this advice to evaluate the response of targeted effort and landings (in Maine) and total U.S. removals.

Summary of Recommendations

1. **The SSC recommends that the OFL for Atlantic halibut be unknown for FY 2027-2031.**
2. **The SSC recommends an ABC of 125 mt held constant for FY 2027-2031.**
3. **The SSC recommends 1) work to refine approach to set catch advice for halibut that recognizes transboundary resource and current constraints in process, 2) development**

of a U.S. industry longline survey, 3) application of VAST index to estimate the proportion of biomass distributed between U.S. and Canadian waters., 5) Assess alternative CPUE indices for potential use in stock assessments.

Fishing Year	OFL (mt)	ABC (mt)
2027 - 2031	**unknown**	**125**

REFERENCES

Shackell, N.L., K.J. Ferguson, A.J. Allyn, C.E. den Heyer, J.C. Tam, D.M. Keith, K.E. Mills, and J.T. Thorson. 2026. Shifts and expansion in a spatially structured fish stock spanning international borders in the Northwest Atlantic. *Ecological Applications* 36(6). 70311. https://doi.org/10.1002/eap.70311

DOCUMENTS

To address the TORs, the SSC considered the following information:

1. NEFSC Assessment/Data Update Reports
    a. Gulf of Maine haddock assessment presentation by Dr. C. Peretti, NEFSC
    b. Management Track Assessment of Gulf of Maine Haddock *(Melanogrammus aeglefinus)*, Fall 2026
    c. American plaice assessment presentation by Dr. A Hart, NEFSC
    d. Management Track Assessment of American Plaice *(Hippoglossoides platessoides)*, Fall 2026
    e. September 2026 Management Track Assessment Peer Review Report
    f. 2026 data updates for Atlantic pollock and Atlantic halibut
2. Groundfish Plan Development Team
    a. Presentation by Council staff
    b. Groundfish PDT memo to SSC re FY 2027 – 2031 OFLs and ABCs for Northeast multispecies stocks, October 20, 2026
    c. Groundfish PDT memo to SSC re Atlantic halibut catch setting methods for FY 2027 – 2031, October 20, 2026
    d. 2026 risk policy reports for Gulf of Maine haddock, American plaice, pollock, and Atlantic halibut
3. Groundfish fishery and other information
    a. American Plaice *(Hippoglossoides platessoides)* Snapshot Ecosystem and Socioeconomic Profile, Fall 2026
    b. FY 2024 Northeast Multispecies Fishery Year-end Catch Report, March 20, 2026
    c. Northeast Multispecies SAFE Report, including the most recent descriptions of the social and economic status of the fishery from Framework Adjustment 72, Affected Environment Human Communities (Section 4.4, p. 38-58)
4. Previous SSC recommendations
    a. Meeting materials, October 21, 2024
    b. SSC report, November 13, 2024

Other Documents

1. Risk Policy Statement and Concept, August 11, 2026
2. Risk Policy Application
3. Commercial Fishing Performance Measures portal
4. State of the Ecosystem Reports for the Northeast U.S. Shelf
5. Stock Assessment Support Information portal
6. NOAA 2024 Stock Status Table
7. Correspondence
8. NMFS Procedural Guidance for Changing Assessed Stock Status from Known to Unknown