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

MEMORANDUM

DATE: October 23, 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 Northern and Southern windowpane flounder and witch flounder for fishing years 2027-2031

The Scientific and Statistical Committee (SSC) met in person and via webinar on October 7, 2026, to address Terms of Reference (TOR) for Northern and Southern windowpane flounder and witch flounder.

SSC members in attendance: Dr. Conor McManus (Chair), Dr. Edward Camp (Vice-Chair), Dr. Lauran Brewster, Dr. Alex Hansell, Dr. Lisa Kerr, Dr. Gareth Lawson, Dr. Kai Lorenzen, Dr. Jason McNamee, Dr. Richard Merrick, Dr. Mateja Nenadovic, Dr. Fred Serchuk, 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) 2025 data updates for Northern and Southern windowpane flounder, the 2026 data update for witch flounder, and information provided by the Council's Groundfish Plan Development Team.

B. Recommend overfishing limits (OFL) and acceptable biological catches (ABC) for these three 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.

NORTHERN WINDOWPANE FLOUNDER

The SSC received a presentation from Council staff on the 2025 data update by the NEFSC for Northern windowpane flounder and the Groundfish PDT's development of possible OFLs and ABCs for FY 2027-2031. The 2025 data update brings up to date the commercial fishery catch data and the research survey indices of abundance through 2024. The PDT also obtained updated survey indices through 2025. Based on the last management track assessment (2023), that used

an empirical survey area-swept assessment, the Northern windowpane flounder overfished and overfishing statuses were unknown. The SSC notes that this differs from NOAA's official status for this stock, that it is overfished but overfishing is not occurring, a determination that was based on the 2019 stock assessment. Assessed status has been unknown since the 2020 assessment. The stock is in a rebuilding plan with an end date of 2029, though there is no longer a biomass target as rebuilding plan is based on a now rejected assessment.

TOR Findings

The SSC recommends an unknown OFL and an ABC of 202 mt for FY 2027-2031 for Northern windowpane flounder. The recommended ABCs aim to prevent overfishing, are consistent with the Council's ABC control rules, and consider the Council's Risk Policy. This catch advice recommendation was informed by Option D of the groundfish ABC control rule. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

Northern windowpane has been managed using an empirical swept-area biomass approach since 2020 when the previous AIM model was rejected during peer-review. The empirical approach uses the most recent three-year average swept area biomass estimated from the fall survey, and applies a fixed exploitation rate to estimate the ABC. The exploitation rate used has been the mean catch / biomass in the non-possession years (since 2010). The exploitation rate applied in the most recent ABC setting in 2023 was 1.9% of the three-year average biomass

The PDT developed two options for setting the ABC. Option one retained the status quo FY 2026 ABC of 132 mt and proposed holding the ABC constant for FY 2027-2031. The alternative approach mimicked the previous empirical approach, which adjusted the ABC based on the most recent three-year (2023-2025) fall survey average index (not swept-area biomass) relative to the previous three-year (2020-2022) survey average index (i.e., percent change in the stock biomass index translated to a percent change in ABC). Under the alternative, the ABC would be fixed for FY 2027-2031 at 202 mt. The PDT did not recommend one approach over the other.

There was discussion amongst the SSC about whether the data updates should be used to update ABCs more broadly, and if an update should be used for Northern windowpane specifically. In the case of Northern windowpane, only the fall survey is used in the empirical approach, and the alternative ABC approach the PDT used approximates what would have been done under the previous ABC setting (2021-2026), albeit using the three-year average survey index instead of the average swept-area biomass estimates. Some concerns were raised about increasing the ABC by 49% for a stock that is in a rebuilding plan and likely at low abundance based on a prior assessment that determined the stock to be overfished. However, the SSC leaned on the fact that the current biomass status is unknown, based on the most recent peer reviewed assessment. It was also noted that the ABC had previously been increased by 171% following the adoption of the empirical approach in 2020 (from 59 to 160 mt) while the stock was still in a rebuilding plan, which provides some precedent for the current SSC advice.

The SSC deemed revising the ABC was warranted, and recommends an ABC of 202 mt for FY 2027-2031, while the OFL remains unknown for Northern windowpane flounder. The SSC believes this ABC will not result in overfishing for the stock. The previous ABC was set using a target exploitation rate of 1.9% of the estimated biomass. Although the exploitation rate associated with the proposed ABC could not be calculated with the data update, it is unlikely to differ substantially from the previous target of 1.9% based on the method used. This is a zero-

possession stock and catch (primarily scallop fishery bycatch) has been below the recent, lower annual catch limit than would be set with the SSC's recommended ABC.

Application of the risk policy, indicates that an intermediate risk tolerance was appropriate for this stock, although the classification was toward the higher end of the intermediate category (i.e., closer to low-risk tolerance).

Additional Comments and Research Recommendations

The SSC provided several recommendations for Northern windowpane. This stock is at low biomass relative to historical levels and does not appear to be responding to low exploitation rates. The SSC recommends exploring possible mechanisms for the lack of response in population size to low exploitation rates. This issue occurs with several New England stocks, so multiple stocks should be included in such an analysis. The SSC also discussed the issue of whether changes in the survey represented changes in the population ("signal") or were just "noise" in the data. The SSC recommends using management strategy evaluation to test the performance of the empirical approach applied to northern windowpane and its applicability to other stocks Another research recommendation is to explore the development of a control rule like the limiter approach previously used for Georges Bank yellowtail that set a fixed ABC unless the swept area biomass fell below a specified threshold. Finally, the SSC recommends exploring the spatio-temporal overlap between Northern windowpane stock and the fisheries that catch it as bycatch, particularly the scallop fishery, to help determine expected catch.

Summary of Recommendations

1. **The SSC recommends Unknown OFLs for FY 2027-2031 for Northern windowpane flounder.**
2. **The SSC recommends ABCs of 202 mt for FY 2027-2031 for Northern windowpane flounder.**
3. **The SSC recommends further research to understand why this stock may not be responding to low exploitation rates, and the development of harvest control rules to deal with stocks where biomass is fluctuating without trend under low exploitation rates.**

Fishing Year	OFL (mt)	ABC (mt)
2027-2031	Unknown	202 mt

SOUTHERN WINDOWPANE FLOUNDER

The SSC received a presentation from Council staff on the 2025 data update by the NEFSC for Southern windowpane flounder and the Groundfish PDT's development of possible OFLs and ABCs for FY 2027-2031. The 2025 data update brings up to date the commercial fishery catch data and the research survey indices of abundance through 2024. The PDT also obtained updated survey indices through 2025. Based on the information from the last management track assessment (2023), that used the An-Index-Method (AIM) model, Southern windowpane

flounder was not overfished and overfishing was not occurring. The stock has been rebuilt since 2012.

TOR Findings

The SSC recommends an OFL of 481 mt and an ABC of 361 mt for FY 2027-2031 for Southern windowpane flounder. The recommended OFLs and ABCs aim to prevent overfishing, are consistent with the Council's ABC control rules, and consider the Council's Risk Policy. This catch advice was informed by Option D of the groundfish ABC control rule. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The SSC's rationale for Southern windowpane catch advice was based on the assessed status of the stock, recent trends in scientific surveys and catch, and information from the fishery regarding the targeting and utilization of the stock. Southern windowpane has been managed as a zero-possession stock since 2010 and was most recently assessed as not overfished and not subject to overfishing as of a 2023 stock assessment using the AIM methodology. The SSC reviewed the data updates that included updates to the survey-based index of abundance, which indicated recent increases (3-year average fall survey index of 0.213 kg/tow for 2020-2022, compared to 3-year average of 0.361 kg/tow for 2023-2025). Total catch also increased substantially in 2024 (the most recent year of complete catch data) and exceeded the total ACL (2024 catch of 425.4 mt vs. ACL of 205 mt). The SSC understood from the PDT's report and subsequent questions that Southern windowpane is not targeted, but that it is encountered as bycatch in other fisheries (scallop, small-mesh non-groundfish, and commercial groundfish) and there is concern that accountability measures (AMs) can be triggered. In concert, this information is descriptive of a non-overfished, recovered stock that is increasing in abundance and accordingly being encountered more frequently as bycatch in fisheries, but that such bycatch may induce some socioeconomic hardship to fishers via AMs based on now outdated survey information.

The SSC considered two catch advice options presented by the PDT. Option one retained the status quo FY 2026 OFL (284 mt) and ABC (213 mt) and proposed holding them constant over FY 2027-2031. These values were calculated in the 2023 application of the empirical approach for this stock whereby the F_{MSY} proxy (1.333) and the 75% F_{MSY} proxy (respectively) are multiplied by the 3-year average of the fall biomass index (0.213 kg/tow) from 2020-2022. The alternative, survey-adjusted option used the same 2023 F_{MSY} proxy and 75% F_{MSY} proxy but applied to the updated 3-year average of 0.361 kg/tow for 2023-2025 to produce an OFL (481 mt) and ABC (361 mt). The F_{MSY} proxy (Relative F: ratio of catch to average recent index values) could not be updated via the data update alone, because it was based on the AIM method, which was not re-run. The PDT recommended the alternative, survey-adjusted catch advice.

The SSC discussed uncertainty in the survey index, some concern over a 3-year declining trend in this index (the average of which was still greater than the previous 3-year average, 0.361 vs. 0.213), and what the 2024 overage (catch exceeding ACL) represented. There was some discussion about the meaningful proportional increase in the catch advice based on the survey-adjusted ABC (69%), including how the index-based update approach could produce potential volatile changes in catch advice. Application of the risk policy indicates that an intermediate risk tolerance was appropriate for this stock, although the classification was toward the lower end of the intermediate category (i.e., closer to high-risk tolerance). Numbers-at-length data appeared to

show repeated recruitment events over the last eight years. The SSC ultimately determined that the alternative, survey-adjusted catch advice was justified, noting the not overfished and rebuilt status of the stock, the non-target characterization, the recent increase in 3 yr average of the survey index, and the potential concern for socioeconomic harm via AMs. Therefore, the SSC recommends the Southern windowpane OFLs of 481 mt and ABCs of 361 mt for 2027-2031. The SSC's recommended ABCs are not likely to result in overfishing for this stock given its current stock status, recent survey trends, and that it is a non-target stock.

Additional Comments and Research Recommendations

The SSC discussed that it would be useful to receive the 2026 fall survey index as soon as possible to understand if the current decreasing trend in abundance continued. There was also some consensus in the SSC that the index-based updates could produce potentially volatile changes in catch advice–in this case the advice for a 69% increase in catch, but future changes in the index could potentially translate to similar or greater decreases in catch that could prove more challenging for the fleet. The SSC discussed that other approaches could be assessed (e.g., via Management Strategy Evaluations, MSEs), such as coupling index-driven updates with moving averages and/or maximum inter-annual changes. These have been considered and sometimes used for other stocks/approaches and might diminish challenges associated with abrupt index-based updates in catch advice–which seems especially relevant for a species like Southern Windowpane that is rebuilt, a non-target bycatch, and yet could potentially trigger AMs. Relatedly, the SSC also recommended that Southern windowpane be considered as a candidate for classification as an ecosystem component, based on its rebuilt status and that it is a non-target stock.

Summary of Recommendations

4. **The SSC recommends OFLs of 481 mt for FY 2027-2031 for Southern windowpane flounder.**
5. **The SSC recommends ABCs of 361 mt for FY 2027-2031 for Southern windowpane flounder.**
6. **The SSC recommends continued updating of survey information along with potential consideration of classifying the stock as an ecosystem component.**

Fishing Year	OFL (mt)	ABC (mt)
2027-2031	481 mt	361 mt

WITCH FLOUNDER

The SSC received a presentation from Council staff on the 2026 data update by the NEFSC for witch flounder and the Groundfish PDT's development of possible OFLs and ABCs for FY 2027-2031. The 2026 data update brings up to date the commercial fishery catch data and the research survey indices of abundance through 2025. Based on the information from the last management track assessment (2024), that used an empirical swept-area assessment, witch

flounder was overfished and overfishing was unknown. The stock is in a rebuilding plan with an end date of 2043.

TOR Findings

The SSC recommends an unknown OFL and an ABC of 1,526 mt for FY 2027-2031 for witch flounder. The recommended ABCs aim to prevent overfishing, are consistent with the Council's ABC control rules and the stock's rebuilding plan, and consider the Council's Risk Policy. This catch advice recommendation was informed by Option D of the groundfish ABC control rule. The SSC considers these recommendations to be based on the best scientific information available.

Rationale Including Significant Sources of Uncertainty

The most recent assessment for witch flounder was the management track assessment in 2024, an empirical swept-area assessment. Under this empirical approach, ABCs are set as the mean exploitation rate calculated for 2007-2015 multiplied by the most recent three-year swept-area exploitable biomass estimates averaged from the fall and spring surveys, after applying season- and year-specific catchability coefficients and accounting for survey and fishery selectivity patterns.

The PDT proposed two options for setting ABCs. Under option one, the status quo ABC for FY 2025-2027 (1,526 mt) would be retained and held constant for FY 2027-2031. The alternative "survey-adjusted" approach sought to mimic the previous empirical approach by adjusting the current ABC based on the change in the spring and fall survey indices. This involved calculating the change in the average index in the most recent two years (2025-2026 for spring; 2024-2025 for fall) relative to the previous three years (2022 & 2024 for spring; 2021-2023 for fall) for each survey, then averaging across the two surveys. The two surveys provided conflicting views of biomass trends with the spring survey showing a 28% decrease and the fall survey a 30% increase resulting in an average of a 1% increase. and under the alternative survey-adjusted approach, the ABC would be fixed through FY 2027-2031 at 1,547 mt. The PDT did not provide a recommendation between these options.

The SSC was concerned about applying the 1% increase as the updated survey data did not provide a clear indication of a change in stock biomass. The signals between the two surveys conflicted and resulted in a small potential adjustment that falls within the error of the surveys. Furthermore, the PDT's survey-adjusted approach differs from the empirical assessment in that the latter applies seasonal catchability coefficients. Catchability is generally higher in the fall survey than in spring; were this accounted for in combining the information from the two surveys, it would tend to down-weight the increasing trend from the fall survey relative to the decreasing contribution from the spring survey, potentially resulting in there being no change overall or a decrease. The SSC was also concerned that witch flounder is an overfished stock in a rebuilding plan and that the latest length distribution data show a lack of incoming recruitment. Although the 2024 empirical assessment did not provide reference points or allow a stock status determination, the more recent survey indices remain low relative to historical levels, the length distribution remains strongly truncated, and the NOAA formal determination is that the stock is overfished. Relative to other flatfish, witch flounder is long-lived, slow-growing, and late to mature. Since the inception of its first rebuilding plan in 2010, the survey indices have slowly inched upwards overall, and the SSC is mindful of making continued progress on this rebuilding trajectory.

The SSC also recognizes that catch has been increasing, and this stock has constrained the groundfish industry in the recent past. Following the 270 mt (21%) increase set by the SSC in 2024, the most recent estimate of utilization for 2025 has decreased, although as noted by the PDT and public comment multiple other factors contributed to that decrease. Some SSC members supported the survey-adjusted increase in ABC to alleviate potential socioeconomic impacts if the stock becomes constraining again. Ultimately, however, the consensus of the SSC was that given the uncertainty and conflicting signals in the survey indices, coupled with the stock's being in a rebuilding plan and the long-term socioeconomic benefits of rebuilding, it was more appropriate to retain the status quo (FY 2026) ABCs for this stock.

The SSC therefore recommends for witch flounder an ABC of 1,526 mt held constant for 2027-2031, and that the OFL remains unknown. The SSC anticipates that this recommended ABC is not likely to result in overfishing for this stock as the current ABC maintained here as the status quo was set based on an exploitation rate of 5.4% (calculated as the catch relative to exploitable biomass averaged over 2007-2015), which is relatively low for the history of this stock. The SSC also notes that this recommendation is consistent with the Council's Risk Policy as the stock falls within the intermediate risk tolerance zone, with a recommended target probability of management success of 78.2%.

Additional Comments and Research Recommendations

The SSC made multiple research recommendations. A management track assessment is scheduled for 2027 which is planned to be an update of the empirical swept-area approach. In anticipation of the results of that assessment, as was the case the last time the SSC considered witch flounder, the SSC recommends further consideration of the use of empirical reference points for stock status determination. Furthermore, the SSC appreciated the "informational" ASAP model that accompanied the 2024 empirical management track assessment and continues to recommend transitioning to an analytical assessment and consideration of a transition from ASAP to WHAM.

The SSC noted that previously the shrimp trawl was used in the assessment to provide information on early age classes. Having a recruitment index for this stock would be beneficial both for the assessment and for scoring the risk policy recruitment factor, and the SSC recommended exploring other data sources and also reinstating the shrimp survey.

Summary of Recommendations

7. **The SSC recommends unknown OFLs for FY 2027-2031 for witch flounder.**
8. **The SSC recommends ABCs of 1,526 mt for FY 2027-2031 for witch flounder.**
9. **The SSC recommends further consideration of the use of empirical reference points for stock status determination, transitioning to an analytical assessment, investigating ways of developing a recruitment index including reinstating the shrimp survey, and further consideration of how to deal with data updates for stocks with empirical assessments when survey indices conflict.**

Fishing Year	OFL (mt)	ABC (mt)
2027-2031	unknown	1,526 mt

GENERAL COMMENTS ON DATA UPDATES

For all three stocks considered at this meeting, the SSC grappled with using data updates to apply the survey-based percent adjustment approach to current ABCs derived from previous empirical assessments. The SSC noted that the various empirical approaches were not all developed in a uniform way and there were different rationales used across them. This is something to be mindful of in the future in applying a percent increase approach. Further consideration of how to deal with data updates, particularly in cases where multiple surveys are used and they show conflicting trends, would also be beneficial.

GENERAL COMMENTS ON RISK POLICY APPLICATION

This meeting was the second time the SSC has received qualitative and quantitative indications of risk tolerance under the Council's new Risk Policy. The SSC appreciates this information and the contribution it makes to committee deliberations. The SSC noted that witch flounder scored a 0 (i.e., neutral) for the stock status/SSB factor, the same as southern windowpane flounder also discussed at this meeting. However, unlike southern windowpane flounder, which is rebuilt and not overfished, witch flounder is overfished and still in a rebuilding plan with biomass indices low relative to historical levels. Future refinements of the Risk Policy approach might consider separating out empirical stocks with unknown status from empirical stocks that are overfished and in a rebuilding plan for this stock status/SSB factor, as the risk tolerance arguably could be different for the two.

The SSC also commented that as the Risk Policy continues to evolve, it would be worth investigating further the inclusion or exclusion of factors and how this affects the outcome: for instance, unlike the recreational factor which is excluded when there is no recreational fishery, the recruitment factor is scored as a 0 (neutral) when there is no information available. Similarly, the consequences of including/excluding factors to Council member weightings should be investigated, particularly for the recreational factor weighting where members might conceivably weight factors differently when that factor is included vs. excluded (e.g., they might use the limited number of 4 weightings they are allotted on the 1-4 scale differently).

INFORMATION

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

Northeast Multispecies

1. NEFSC Data Update Reports
    1. *2025 Data Update: Georges Bank/Gulf of Maine Stock of Windowpane Flounder, Scophthalmus aquosus*, August 27, 2025
    2. *2025 Data Update: Southern New England/Mid-Atlantic Bight Stock of Windowpane Flounder, Scophthalmus aquosus*, August 27, 2025
    3. *2026 Data Update: Unit Stock of Witch Flounder, Glyptocephalus cynoglossus,* July 23, 2026
2. Groundfish Plan Development Team
    1. Presentation by Council staff
    2. Groundfish PDT memo to SSC re FY 2027 – 2031 OFLs and ABCs for Northeast multispecies stocks, September 30, 2026

    3. 2026 Risk Policy Report for northern windowpane flounder
    4. 2026 Risk Policy Report for southern windowpane flounder
    5. 2026 Risk Policy Report for witch flounder
3. Groundfish fishery information
    1. *FY 2024 Northeast Multispecies Fishery Year-end Catch Report*, March 20, 2026
    2. *Northeast Multispecies SAFE Report,* including the most recent descriptions of the social and economic status of the fishery Framework Adjustment 72, Affected Environment Human Communities (Section 4.4, p. 38-58)
4. Previous SSC recommendations for northern and southern windowpane flounder
    1. Meeting materials, October 27, 2023
    2. SSC report, November 13, 2023
5. Previous SSC recommendations for witch flounder
    1. Meeting materials, October 9, 2024
    2. SSC report, November 13, 2024

Other Documents

- Risk Policy Statement and Concept, August 11, 2026
- Risk Policy Application
- NOAA/NEFSC State of the Ecosystem Reports for the Northeast U.S. Shelf
- NEFSC Stock Assessment Support Information portal
- Correspondence (if any)