

CORRESPONDENCE

From: Eugenio PineiroSoler - NOAA Federal <eugenio.e.pineirosoler@noaa.gov>

Sent: Thursday, May 28, 2026 10:33 AM

To: Eugenio PineiroSoler - NOAA Federal <eugenio.e.pineirosoler@noaa.gov>

Subject: NOAA Fisheries Announces \$2.3 million for Atlantic Mackerel Cooperative Research Initiative with Fishing Industry

Good morning,

NOAA Fisheries is beginning a cooperative research initiative, funded at \$2.3 million for fiscal year 2026. We are partnering with the Northeast fishing industry to study Atlantic mackerel and learn more about their population dynamics using advanced technology.

NOAA Fisheries will work with more than 50 fishing vessels to collect management-relevant data on mackerel in New England and the mid-Atlantic. This study will investigate industry observations of increasing abundance after a previous decline in spawning stock biomass. Collaboration opportunities include:

- developing acoustic technologies to detect and quantify mackerel, including active acoustics
- collecting mackerel samples for biological analysis
- assisting with mackerel tagging
- participating in egg surveys
- developing and testing hypotheses about the ecosystem drivers of mackerel

We will apply our findings to future Atlantic mackerel stock assessment, and other scientific products supporting management. Throughout the project, NOAA Fisheries will hold annual meetings with the fishing industry to provide data updates.

The Atlantic mackerel fishery is worth up to \$23 million and mackerel are an ecologically important fish, yet there has been limited research on the population dynamics of this valuable species. The Atlantic Mackerel Cooperative Research Initiative serves as an important opportunity for the fishing and science communities to work together to advance the tools available to monitor, understand, and manage this resource.

If you know a fisherman interested in being involved, please contact Dr. Anna Mercer, Cooperative Research Branch Chief, at anna.mercer@noaa.gov.

Genio



Conservation
Law Foundation

June 3, 2026

Cate O'Keefe, PhD.
Executive Director
New England Fishery Management Council
50 Water St. Mill 2
Newburyport, MA 01950

Daniel Salerno,
Chairman
New England Fishery Management Council
50 Water St. Mill 2
Newburyport, MA 01950

Re: Request for analysis of a time-area closure that protects the Herring Creek run

Dear Dr. O'Keefe and Mr. Salerno,

On behalf of the Wampanoag Tribe of Gay Head (Aquinnah) (WTGHA), a federally recognized Tribal Nation and sovereign government, and Conservation Law Foundation (CLF), we submit this comment letter and its attachment. The attachment (submitted to the Council on April 9, 2026) explains the WTGHA's long-standing concerns about the impact of small mesh fisheries, including the Atlantic herring fishery, on its Herring Creek alewife run and supports adoption of a time-area closure to protect that run. That information is also directly relevant to the Council's obligation to evaluate the effects of its management decisions on the WTGHA's fishing community.

Along with generations of Tribal Ecological Knowledge, the Tribe has developed and maintained a research program for many years. This research program has contributed to understanding the effects of the Atlantic herring fishery on Tribal Trust resources and on the social and economic well-being of the Tribe. We appreciate that the Atlantic Herring Plan Development Team (PDT) provided an opportunity for the WTGHA to share their work at its meeting on May 26.

Appropriate time-area closures may require consideration of multiple models, scientific studies, and data streams, and thus we urge the Council to consider all relevant scientific information available to it and not to treat any single study or modeling exercise as dispositive when it develops alternatives and analyzes the impacts of those alternatives. Specifically, we request that the Council, through its Herring Committee, task the PDT with developing alternatives that meaningfully reduce river herring catch in Southern New England and, in particular, to develop and analyze an alternative that protects the WTGHA Herring Creek alewife run.

We appreciate that the approach under development by the PDT sub-group may not be able to quantitatively incorporate new WTGHA genetic information and data on the distribution and magnitude of Herring Creek genetic alewife type catch (described in the attached) into the model itself. However, if model results are used to develop spatial and temporal time-area closures (decisions determining threshold probabilities of occurrence and identifying appropriate spatial polygons among other considerations), we request that at least one alternative include time-area closures in statistical areas 537, 539, 611, and 613 (or with sub-portions of 537 and 613 if data and modeling strongly support) from November – May. This request is based on the latest PDT findings presented to the public, the WTGHA’s Herring Creek fish passage data since 2016, and its stock genetics findings.¹ At this juncture, any other datasets and models that are relevant to encounter probability and other runs of particular concern should also be considered.

While developing alternatives in the upcoming action, we strong urge the Council to work with the WTGHA to analyze how the alternatives may affect the WTGHA and its river herring run using the Tribe’s data.² As with any action the Council develops, the measures must comply with the MSA’s National Standards which require a fishery management plan, among other things, to prevent overfishing, rely on the best scientific information available, take into account the importance of the fishery (in this case the Atlantic herring fishery) to the WTGHA’s fishing community to ensure sustained participation of the community, and minimize bycatch to the extent practicable. These obligations warrant meaningful consideration of the impacts of this action and future actions on the WTGHA as a sovereign government representing its Tribal fishing communities.

Throughout the development of Amendment 10, and during consideration of the current Atlantic herring priority, concerns were raised about combining Atlantic herring specifications with the development of measures, including time-area closures, that would minimize interactions with river herring and shad and reduce incidental catch in the herring fishery. Council staff have stated several times that their timeline affords sufficient time to both update specifications and develop additional river herring measures. Recently it appears, however, that the path forward may require an Amendment to develop an action that actually implements time-area closures that reduce incidental catch of river herring and shad. Although the specific regulatory vehicle for the river herring and shad measures may still be under discussion,³ additional delay in minimizing

¹ *Manuscript in prep*; WTGHA PDT Presentation (May 5, 2026); Kerry Reid et al., Spatial and Temporal Genetic Stock Composition of River Herring Bycatch in Southern New England Atlantic Herring and Mackerel Fisheries, 80 Can. J. Fisheries & Aquatic Scis. (Feb. 23, 2023) (available at <https://doi.org/10.1139/cjfas-2022-0144>).

² NOAA directs that “Councils should discuss and work with tribes as appropriate depending on applicable Tribal Trust Resources and interests at an early stage in order to address their concerns while developing fishery conservation and management measures under the [MSA].” NOAA, *NOAA Procedure for Government-to-Government Consultation with Federally Recognized Indian Tribal Governments*, 24 (June 2023), <https://www.noaa.gov/sites/default/files/2023-06/NOAATribalConsultationHandbook%202023FINAL.pdf>. Councils should also “work with NOAA to ensure that there are constructive and effective avenues for tribal participation in the Council process.” *Id.*

³ In the past, the Herring PDT identified time/area closures as among the “measures that can be implemented via a framework adjustment.” Memorandum from Herring PDT to Herring Committee (Aug. 25, 2023) <https://d23h0vshm26o6d.cloudfront.net/4230825-Herring-PDT-Memo-to-CMTE-Addressing-user-conflicts-Atlantic-herring-2024-priorities-incl-Attach-REV912.pdf>; The scoping document for Amendment 10 also considered time/area closures to minimize incidental catch of river

the incidental catch of river herring and shad in council-managed fisheries would be unacceptable to the Tribe. Further, it would be contrary to the assurances made by Council leadership when advocating for this combined priority in its 2026 work plan.

We respectfully ask the Council, through its Herring Committee, to task the PDT with developing a reasonable range of time-area closure alternatives that reduce river herring and shad catch in the herring fishery, including the development of at least one alternative that protects the WTGHA's Herring Creek run.

We appreciate your consideration. Please contact us if you need any clarification.

Sincerely,

Andrew Jacobs
Laboratory Manager
Wampanoag Tribe of Gay Head (Aquinnah)

Erica Fuller
Senior Counsel
Conservation Law Foundation

Maria E. Abate, PhD
Research Marine Biologist
Wampanoag Tribe of Gay Head (Aquinnah)

Elizabeth "Libby" Etrie
Director Ocean Policy
Conservation Law Policy

cc: Michael Pentony, Regional Administrator Greater Atlantic Regional Fisheries Office
Christopher Moore, Executive Director Mid-Atlantic Fishery Management Council

Attachments: Wampanoag Tribe of Gay Head (Aquinnah) & Conservation Law Foundation
April 9, 2026, Correspondence on Atlantic Herring Management

herring and shad, and then "the Council shifted the river herring and shad aspects of A10 into a new action which is currently under development in 2026. The new action would set specifications for Atlantic herring fishing years 2027-2031, modify other management measures (i.e., specifications process and carryover), and enhance river herring (alewife and blueback herring) and shad (American shad and hickory shad) avoidance and other catch reduction measures..." NEFMC, *Scoping Document for Amendment 10*, (Feb. 16, 2024), https://d23h0vhs26o6d.cloudfront.net/240216-Herring-Amendment-10-Scoping-Doc_FINAL.pdf; NEFMC, *Herring Amendment 10*, (last updated Dec. 2025), <https://www.nefmc.org/library/herring-amendment-10-2>.



Conservation
Law Foundation

April 9, 2026

Cate O'Keefe, PhD.
Executive Director
New England Fishery Management Council
50 Water St. Mill 2
Newburyport, MA 01950

Daniel Salerno,
Chairman
New England Fishery Management Council
50 Water St. Mill 2
Newburyport, MA 01950

Re: Request for Herring PDT analysis of targeted time area closures

Dear Dr. O'Keefe and Mr. Salerno,

On behalf of the Wampanoag Tribe of Gay Head (Aquinnah) (WTGHA), a federally recognized Tribal Nation and sovereign government, and Conservation Law Foundation (CLF), we respectfully request that the New England Fishery Management Council (Council) task the Herring Plan Development Team (PDT) with including an alternative in its upcoming Atlantic herring action that analyzes a time area closure during November – March in areas 537, 539 and 611 that meaningfully reduces incidental catch of river herring in southern New England and protects the Herring Creek alewife run in Menemsha Pond Complex.

The Aquinnah Wampanoag submit these comments because federal management of the Atlantic herring fishery causes real and lasting negative impacts on their trust resources. High levels of incidental river herring catch¹ have contributed to the decline of a species that once supported the community culturally, nutritionally, and economically.² As a federally recognized Tribe, the Aquinnah Wampanoag maintain a government-to-government relationship with the United States. Federal agencies such as NOAA are required to consult with the Tribe whenever their actions have substantial direct effects on tribal community, resources, or rights. In addition,

¹ “Bycatch” is defined in the MSA as fish harvested in a fishery that are not retained and sold (discards). *Id.* § 16 U.S.C. § 1802(3). Due to the high-volume nature of the herring fishery, river herring are usually landed and sold (thus not technically bycatch) with Atlantic herring, but not always. Therefore, for the purpose of this comment letter, the terms “bycatch” and “incidental catch” are sometimes used interchangeably.

² Kerry Reid et al., *Spatial and Temporal Genetic Stock Composition of River Herring Bycatch in Southern New England Atlantic Herring and Mackerel Fisheries*, 80 Can. J. Fisheries & Aquatic Scis. (Feb. 23, 2023) (available at <https://doi.org/10.1139/cjfas-2022-0144>); WTGHA Letter Attach. at 1.

NOAA's consultation handbook urges regional fisheries management councils to engage and involve Tribes early and often on matters that involve tribal trust resources.³

The Tribe's long-term monitoring data show that the Herring Creek alewife run has declined to less than one percent of its historic size, and recent genetic analyses confirm that alewives from the Aquinnah Wampanoag herring run and nearby rivers are substantially affected by at-sea incidental catch in Southern New England. These impacts arise directly from federal fishery management decisions and therefore constitute substantial direct effects on the Aquinnah Wampanoag people, whose cultural, subsistence, and economic well-being depend on the survival of the Tribe's river herring run. While the Council's efforts are not a substitute for NOAA's obligation to consult, the Council is uniquely positioned through this herring action to finally take meaningful and durable action to address these documented negative impacts to tribal resources.

CLF submits these comments in partnership with the Wampanoag Tribe of Gay Head (Aquinnah) and in furtherance of CLF's long-standing commitment to the restoration of river herring and shad populations. For decades, CLF has advocated for strong conservation measures for these species because of their vital role in sustaining the ecological productivity of New England and Mid-Atlantic waters. CLF's interest in this action is grounded in ensuring that federal fishery management decisions reflect the best available science regarding river herring populations, ecosystem function, and ongoing sources of fishing mortality.

**THE COUNCIL SHOULD ANALYZE A TIME AREA CLOSURE THAT
MEANINGFULLY REDUCES RIVER HERRING CATCH IN SOUTHERN NEW
ENGLAND AND PROTECTS THE HERRING CREEK ALEWIFE RUN**

Herring Creek Description

Within the Menemsha Pond Complex in Aquinnah, Massachusetts lies the brackish Herring Creek. This water passage stretches one-third of a mile and connects Menemsha Pond to the brackish Squibnocket Pond where river herring spawn. The Creek is semi-tidal and remains naturally free-flowing and unobstructed. As an anadromous fish passage, the Creek is critical to the seasonal spawning of river herring (alewife). Although river herring transit in and out of the Creek to the Menemsha Pond embayment into Vineyard Sound and the Atlantic Ocean, it is their management specifically in Herring Creek that falls under Tribal stewardship and decision making. The Tribe's knowledge of historic annual and seasonal fluctuations in population densities is essential to not only addressing the local management of the river herring and the ecosystem, but also is directly relevant to how the detrimental Atlantic herring and mackerel commercial fisheries are managed outside of Tribal authority. Fact finding for the Tribal management decision making is based on the merging of Tribal Ecological Knowledge (TEK) of Aquinnah Tribal Elders and the best science available to the fishery biologists in the WTGHA's Natural Resources Department (NRD), including its own ecosystem monitoring programs,

³ NOAA, *Procedures for Government-to-Government Consultation with Federally Recognized Tribal Governments*, 24 (June 28, 2023) https://www.noaa.gov/sites/default/files/2021-11/NOAA_Tribal_Consultation_Handbook_2021_1.pdf.

research conducted by the NRD in collaboration with multiple other entities (e.g., EPA, DMF, Army Corps, universities, etc.), peer reviewed literature, and historical records.

Research

The Tribe's monitoring in Herring Creek shows an alarming decline in numbers, making this alewife run vulnerable to extirpation. Over the past 10 years the highest run was <2.5% (37K) of historic population and for the past two years, it has been <1% (13K). Alewife age class estimates based on size measurements taken over 5 consecutive years ($n = 1200$), show that most are first time spawners, with few even reaching 275 mm in fork length. While other Massachusetts runs documented individuals having spawned up to 3 and 4 years in a row, very few individuals tagged in the Tribe's passive integrated tagging (PIT) effort between 2022 to 2024 came back to spawn a second time. Taken together, these results indicate that fish born in Squibnocket Pond are capable of returning to the natal site, but very few succeed. Daily numbers of alewife passbys indicate reduced group size in Herring Creek. Schooling fish rely on safety in numbers as an anti-predator mechanism and smaller group size increases predator risk.⁴ Smaller daily runs created by commercial incidental catch may also contribute to the absence of repeat spawners by exacerbating individual vulnerability to natural predator species that according to Aquinnah TEK have always relied on the run.

As summarized in prior correspondence to the NEMFC, the NRD developed a partnership with Drs. Kerry Reid, John Carlos Garza, and Eric Palkovacs, to obtain a reference genetic data set of Herring Creek alewife and test for the occurrence of this stock in Southern New England bycatch by repeating the analysis of the same bycatch dataset from 2012-2015 used in Reid et al (2023)⁵. The results (from a *manuscript in prep*) show that alewife from Herring Creek are part of the Block Island Sound genetic reporting group described in Reid et al. (2023), which is the single reporting group most heavily impacted by bycatch.⁶ The Herring Creek alewife were also genetically distinguishable from other Block Island Sound alewife runs, allowing the Reid et al. (2023) method for estimating bycatch mortality to be applied specifically to the Herring Creek genetic type. On average, the total Herring Creek bycatch was estimated to be 364,277 alewives (95 % Confidence Interval: 142,024 to 806,537) in 2012-2015. Genetically similar alewife in nearby unsampled rivers could be contributing to this estimated bycatch. Nevertheless, based on this 95 % confidence interval, this estimated bycatch is at least 28 times the current Herring Creek population.

The incidental catch of alewife from the Block Island Sound reporting group dramatically decreases the chance any population would be large enough to provide donors (naturally or by intervention) to rebuild the Tribe's river herring fishery. Herring Creek and nearby source populations of alewife that could help sustain the Tribal run were heavily represented in the

⁴ Anne Polyakov et al., *Group Size Affects Predation Risk and Foraging Success in Pacific Salmon at Sea*, 8 Sci. Advances (June 29, 2022) (available at https://www.researchgate.net/publication/361649347_Group_size_affects_predation_risk_and_foraging_success_in_Pacific_salmon_at_sea).

⁵ WTGHA Letter Attach. at 1; Kerry Reid et al., *Spatial and Temporal Genetic Stock Composition of River Herring Bycatch in Southern New England Atlantic Herring and Mackerel Fisheries*, 80 Can. J. Fisheries & Aquatic Scis. (Feb. 23, 2023) (available at <https://doi.org/10.1139/cjfas-2022-0144>).

⁶ Reid et al. *Manuscript in prep*.

2012-2015 bycatch, especially in 2013.⁷ These results show that bycatch impacts to the entire Block Island Sound region are negatively affecting Herring Creek. 1.5 million alewives in the bycatch were from Herring Creek and other Block Island stocks. Of the three other Block Island stocks, Herring Creek is least differentiated from the Gilbert Stuart Pond (Rhode Island) run which was diminished to 5000 fish in 2022 and 2023 illustrating the vulnerable state of potential donor populations for the Tribal run.⁸

Time Area Closure Alternative

A collaboratively designed, science based seasonal closure in this high-impact region would complement the Aquinnah Wampanoag's extensive river herring and ecosystem monitoring studies, reduce incidental catch of overfished stocks, and support the critical rebuilding of our Tribal fishery.

The best available science regarding bycatch in Southern New England suggests that time area closures for meaningful protection of the Herring Creek run and potential donor Block Island Sound reporting group populations would be **November – March in areas 537, 539 and 611** within Atlantic herring management plan area 2 for midwater and small-mesh bottom trawling.⁹

- Area 537: The analysis of bycatch from 2012-2015 showed that during November to March alewives were caught in 60% of the fishing trips within a highly fished area in the northwestern part of 537, the statistical area immediately southwest of Martha's Vineyard.¹⁰ Multiple years show 5 -10% of the fish caught in 537 and bordering 613 were identified as Herring Creek genetic stock. The other Block Island group stocks were as high as 65%.
- Areas 539 and 611: High river herring bycatch occurs in Areas 539 and 611, including substantial catch of the Herring Creek genetic alewife type. The relatively small area of 539 in Block Island Sound and adjacent inshore Rhode Island waters is under high fishing pressure during the winter months in 2005-2009 as well as in 2012-2015.¹¹ During 2012-2015, over one hundred monitored trawls took place in area 539 with a high majority capturing alewives, and approximately one half as many were over the western

⁷ *Id.*

⁸ RI Dep't of Env't Mgmt., *River Herring*, <https://narrowriver.org/river-herring/> (last visited Apr. 9, 2026).

⁹ Jamie Cournane, Jacob Kritzer & Steven Correia, *Spatial and Temporal Patterns of Anadromous Alosine Bycatch in the US Atlantic Herring Fishery*, 141 Fisheries Rsch., 88 (2013) (available at <https://fisherysolutionscenter.edf.org/sites/default/files/Spatial%20and%20temporal%20patterns%20of%20anadromous%20alosome%20bycatch%20in%20the%20US%20Atlantic%20herring%20fishery.pdf>); Kerry Reid et al., *Spatial and Temporal Genetic Stock Composition of River Herring Bycatch in Southern New England Atlantic Herring and Mackerel Fisheries*, 80 Can. J. Fisheries & Aquatic Scis. (Feb. 23, 2023) (available at <https://doi.org/10.1139/cjfas-2022-0144>); E-mail from MA DMF to WTGHA NRD (on file with author); Reid et al. *Manuscript in prep.*

¹⁰ NOAA Fisheries, *Greater Atlantic Region Statistical Areas*, <https://www.fisheries.noaa.gov/resource/map/greater-atlantic-region-statistical-areas> (last updated June 7, 2023).

¹¹ E-mail from MA DMF to WTGHA NRD (on file with author); Reid et al. *Manuscript in prep.*; NOAA Fisheries, *Greater Atlantic Region Statistical Areas*, <https://www.fisheries.noaa.gov/resource/map/greater-atlantic-region-statistical-areas> (last updated June 7, 2023).

border into the sliver-shaped Long Island Sound (area 611).¹² In the combined region of 539 and 611, up to 10% of the bycatch were Herring Creek stock and 5-30% were other Block Island group stocks.¹³

The areas of 537, 539 and 611 are of greatest concern. We propose closing these areas for November-March as the time period where the genetics studies and previous analyses of observer and other data suggest bycatch is highest.¹⁴ Overlap near the border (537/613) could also warrant setting a buffer zone in the northeastern area of a portion of 613. This buffer would be especially important if the heavy fishing effort shifted into 613 from a time area closure in 537.

These time area closures are proposed to reverse the decline of the Herring Creek alewife run already vulnerable to extirpation by incidental catch and its negative impact on group size that increases risk of predation in schooling fish. Other Block Island Group stocks that could possibly serve as donor populations (based on their genetic similarity) to Herring Creek should also experience less exposure to incidental catch under the proposed closure. If other stocks outside of the Block Island group experience less mortality, the benefits to river herring can furthermore expand to marine and river ecosystems in the region.

CONCLUSION

Incidental catch of river herring and shad in the Atlantic herring fishery has been documented for more than two decades, and the Council has acknowledged that existing measures are no longer effective.¹⁵ The continued lack of meaningful protection has had a substantial direct impact on the Aquinnah Wampanoag whose cultural, subsistence, and economic well-being is deeply tied to the survival of its river herring runs. Persistent challenges in estimating catch and the absence of biologically based limits that account for all small-mesh fisheries leave these trust resources vulnerable to ongoing harm. Considering these impacts the Council should definitively task the Herring PDT with analyzing a time-area closure alternative of November – March in areas 537, 539 and 611, that would meaningfully reduce incidental catch. The Aquinnah Wampanoag are committed to working with the PDT throughout the analysis and development of alternatives and are willing to share Tribal Ecological Knowledge and monitoring data to help ensure effective protection of the Herring Creek run.

¹² Reid et al. *Manuscript in prep.*

¹³ *Id.*

¹⁴ Kerry Reid et al., *Spatial and Temporal Genetic Stock Composition of River Herring Bycatch in Southern New England Atlantic Herring and Mackerel Fisheries*, 80 Can. J. Fisheries & Aquatic Scis. (Feb. 23, 2023) (available at <https://doi.org/10.1139/cjfas-2022-0144>); Jamie Cournane, Jacob Kritzer & Steven Correia, *Spatial and Temporal Patterns of Anadromous Alosine Bycatch in the US Atlantic Herring Fishery*, 141 Fisheries Resch., 88 (2013) (available at <https://fisherysolutionscenter.edf.org/sites/default/files/Spatial%20and%20temporal%20patterns%20of%20anadromous%20allosine%20bycatch%20in%20the%20US%20Atlantic%20herring%20fishery.pdf>).

¹⁵ See NEFMC, Amendment 1 FSEIS, 667-668, (May 3, 2006) <https://d23h0vhsm26o6d.cloudfront.net/FINAL.A1.FSEIS.MAY.3.06.with.index.FINAL.pdf> (response to DEIS comments) (“The Council intends to monitor this issue and collect better bycatch information through all management measures”); NEFMC, Atlantic Herring Advisory Panel Meeting by Webinar, Slide 29 (Mar. 23, 2026) https://d23h0vhsm26o6d.cloudfront.net/3_260323-Council-Staff-Presentation.pdf.

Sincerely,

Andrew Jacobs
Laboratory Manager
Wampanoag Tribe of Gay Head (Aquinnah)

Erica Fuller
Senior Counsel
Conservation Law Foundation

Maria E. Abate, PhD
Research Marine Biologist
Wampanoag Tribe of Gay Head (Aquinnah)

Elizabeth “Libby” Etrie
Director Ocean Policy
Conservation Law Policy

cc: Michael Pentony, Regional Administrator Greater Atlantic Regional Fisheries Office
Christopher Moore, Executive Director Mid-Atlantic Fishery Management Council

Attachments: Wampanoag Tribe of Gay Head (Aquinnah) Atlantic Herring Amendment 10
Comments, December 3, 2025.



12/3/2025

Daniel Salerno, Council Chair
Dr. Cate O'Keefe, Executive Director
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

December 2025 NEFMC Meeting: Public Comment

Dear Council Members,

The large decline of alewife and blueback river herring runs began 50 years ago, and despite dam removal, spawning habitat improvement measures, and harvest moratoria, river herring in Southern New England have not recovered. The Wampanoag Tribe of Gay Head (Aquinnah) has invested well over half million dollars into management and research, yet the Tribe's river herring monitoring program since 2016 shows that its Herring Creek alewife run in Menemsha Pond Complex has declined, especially over the last decade, and is now less than 1% (approximately 10K) of its historic size. The Tribe has suffered a negative socio-economic impact from the loss of its commercial river herring fishery for canned herring and bait sales as well as cultural erosion with respect to the traditions centered around the use of river herring for sustenance and cultural practices.

Ironically, the river herring and shad bycatch quota for the non-Indigenous commercial Atlantic herring fishing boats was increased in all New England management areas from 312 mt in 2015 to 361 mt, with 77.5% (38 mt) of the increase from combined bottom and midwater trawl in Southern New England. Prioritizing Amendment 10 is urgently needed to rebuild both Atlantic Herring and river herring stocks with provisions that 1) recognize user group conflicts afflicting Native Americans including those from untargeted river herring and shad; and 2) develop management measures that limit river herring and shad bycatch, so protections at sea complement spawning site management and protection for rebuilding stocks.

Identifying the extent that the user's herring run is impacted by bycatch has been a challenge because of the migratory and mixed schooling behaviors of river herring stocks at sea. However, with recent advances in genetic analyses, Reid et al. (2023; Can. J. Fish. Aquat. Sci 80:360-373) were able to identify the stocks in bycatch caught in Southern New England during 2012-2015. They estimated bycatch mortality at a staggering 4.6 million alewife and 1.2 million blueback in a 3500 km² focal area of high trawling effort in Southern New England and adjacent Mid Atlantic area. Recognizing the significance of the Reid et al. 2023 finding of bycatch impact on alewife, we developed a partnership with three of the previous study's experts, Drs. Kerry Reid,

John Carlos Garza, and Eric Palkovacs, to obtain a reference genetic data set of the Wampanoag Tribe of Gay Head Aquinnah's Herring Creek alewife and repeat the analysis with the same bycatch dataset used in Reid et al (2023). The results (from a *manuscript in prep*) show that alewife from Herring Creek are part of the Block Island Sound reporting group described in the previous manuscript, which is the single reporting group most heavily impacted by bycatch. Herring Creek alewife were also genetically distinguishable from other Block Island Sound alewife runs which allowed for Herring Creek run specific estimates. On average, the total Herring Creek bycatch was estimated to be 364,277 alewives (CI: 142,024 to 806,537) for the years bycatch was examined (2012-2015). Genetically similar alewife in nearby unsampled rivers could be contributing to this estimated bycatch. Nonetheless, the removal of alewife from nearby rivers, as well as the overall Block Island Sound reporting group (approximately 1.22 million fish over the four years studied), dramatically decreases the chance a population would be large enough to provide donors (naturally or by intervention) to rebuild the Tribe's river herring fishery. Herring Creek and nearby source populations of alewife that could help sustain the Tribal run were heavily represented in the bycatch, especially in 2013. These results show that bycatch impacts to the entire Block Island Sound region are negatively impacting Herring Creek. Corresponding temporal/spatial closures are clearly warranted in Block Island Sound and other areas of impact to begin to uphold the federal trust responsibilities to the Wampanoag Tribe of Gay Head (Aquinnah).

Seasonal buffer zones in Area 1A have improved some of Maine's herring runs enough to create a commercial fishery with its socio-economic benefits. This demonstrates that temporal/spatial closures are an effective measure to reverse localized depletion and decrease user conflicts. The annual value of Maine's alewife catch was over \$1.1 million to 1.5 million during 2022-2024. The depletion of the Tribal Herring Creek run has resulted in a huge economic loss to our Native American community. Prioritizing Amendment 10 actions is the most effective way to begin to ensure sustainable fisheries, restore American seafood competitiveness, and fulfill federal trust responsibilities to Indigenous Peoples. Council members, you can take the first step toward honoring the federal trust responsibilities by voting to prioritize Amendment 10!

Respectfully,

Maria E. Abate, PhD
Research Marine Biologist
Wampanoag Tribe of Gay Head (Aquinnah)

Andrew Jacobs
Laboratory Manager
Wampanoag Tribe of Gay Head (Aquinnah)



June 3, 2026

Mr. Dan Salerno, Chair
Cate O'Keefe, Executive Director
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

Re: Atlantic Herring Committee Report – River Herring and Shad Measures

Dear Chairman Salerno and Executive Director O'Keefe:

Wild Oceans represents conservation-minded sport fishermen dedicated to the conservation of forage fish for the future of fishing. Our programs focus on linking ocean prey to their pelagic predators to advance ecosystem-based fishery management. Next week, the Atlantic Herring Committee will meet and discuss the development of river herring and shad protection measures. Despite their ecological and socioeconomic importance, Atlantic herring, river herring, and other key forage fish populations are in crisis due to industrial-scale fishing, including midwater trawling in the Atlantic herring and mackerel fisheries. A framework action in 2026 is necessary to address part of the damage caused by this fishery by developing and implementing measures to avoid and minimize catch of depleted river herring and shad populations. Although no longer the direct purpose and need for the action, measures to protect river and shad can also help to address additional Atlantic herring fishery issues previously identified by the Council for action by helping the fishery to attain optimum yield (OY), rebuild Atlantic herring, and reduce user conflicts.

After many delays, this is the first opportunity in several months for Atlantic Herring Committee to provide significant guidance to the plan development team (PDT) on the alternative development process for this action. Time is short for the Council to complete river herring and shad measures in 2026, as promised. For this reason, we request that you:

- 1) Initiate a framework for implementation by January 1, 2027 that prioritizes Time/Area closures to avoid or minimize the catch of river herring and sets Atlantic herring specifications for fishing years 2027-2031;

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- 2) Task the PDT to conduct a policy impact analysis of the Area 1A Purse Seine/Fixed Gear Only Area as part of its analysis of Time/Area closure alternatives; and
- 3) Include a Time/Area Closure Alternative to avoid or minimize the catch of river herring and shad based on known hotspots for river herring and shad bycatch identified in data and analysis from UMass Dartmouth (see below).

Framework Action

We request that the Council initiate a framework for implementation by January 1, 2027 that, 1) prioritizes Time/Area closures to avoid or minimize the catch of river herring and 2) sets Atlantic herring specifications for fishing years 2027-2031.

As discussed further below, there is data and analysis currently available to complete Time/Area closure measures based on species distribution modeling or bycatch hotspot data and mapping. Although we support the need to revise catch caps to make them more meaningful, we recommend that they be deprioritized until 2027 to allow additional analysis and to avoid slowing down development and implementation of Time/Area closures in January of 2027. Catch caps should continue to be a part of river herring and shad avoidance measures regardless of the passage of mandatory Time/Area closures as incentive to avoid river herring and shad at all times and in all areas.

Given recent upward trends in river herring runs against the backdrop of almost no fishing by the midwater trawl vessels that crashed the Atlantic herring and mackerel fisheries, enhancing Atlantic herring management to avoid and minimize the catch of river herring and shad is more critical now than ever as we seek to rebuild the fishery. No increases in Atlantic herring catch should be allowed until river herring and shad Time/Area closures are fully implemented. Updates to the Atlantic herring specifications process and modifications to carryover provisions for unharvested catch should only be addressed if they will not cause a delay in completing the framework action.

Impact Analysis

As previously recommended, the PDT should be tasked with conducting a policy impact analysis of the Area 1A Purse Seine/Fixed Gear Only Area as part of its analysis of Time/Area closure alternatives in this action. A difference-in-difference (DID) policy impact evaluation is a relatively simple method allowing for the comparison of the average outcomes for two groups—one affected by a policy and one not—over time. It has been used many times in the fishery management context. By looking at how river herring and shad trends change before and after

the policy for both groups, the policy's impact can be isolated. The results will help shed light onto the impacts of the inshore Gulf of Maine seasonal closures on river herring and shad runs, which is directly applicable to analyzing proposed Time/Area closures in that the occurrence probabilities of river herring and shad are known in area 1A based on species distribution modeling and river herring and shad runs connected to the inshore Gulf of Maine represent an ideal scenario for runs in Southern New England (i.e. having a sustainable fishery management plan for river herring harvest, sale, and use).

The analysis should compare the river herring and shad runs within the seasonal inshore Gulf of Maine (Area 1A) and river herring and shad runs in the management areas outside of the inshore Gulf of Maine (Areas 1B, 2, and 3). Area 1A would serve as a treatment group and areas 1B, 2, and 3 as a control group. The PDT should, at a minimum, utilize a difference-in-difference regression analysis that compares the river herring and shad runs within and outside of Area 1A over time, before and after the Herring Amendment 1 was implemented in 2007. The period of the study should include data from 1990-2024 and the PDT should consider using as variables: river herring and shad run count, dam removal, fish passageway construction, regional striped bass population, size of usable river herring habitat, midwater trawl Atlantic herring fishing CPUE, small mesh bottom trawl Atlantic herring fishing CPUE, percent river herring and shad catch per Atlantic herring trip or total river herring and shad catch per Atlantic herring trip (pounds or metric), and river water quality.

Bycatch Hotspot Time/Area Closures Alternatives

We look forward to the PDT's continued analysis and development of potential alternatives for Time/Area closures based on the species distribution modeling discussed at the May 26 PDT meeting. Mandatory Time/Area closures will be essential for avoiding and minimizing the catch of river herring and shad along the Atlantic Coast where river herring populations remain severely depleted. The Council must act now to protect the recent improvements in many Southern New England runs due to the Atlantic herring and mackerel fisheries effectively shutting down because of industrial midwater trawl overfishing. Bycatch hotspots include areas around Cape Cod/George's Bank, Block Island Sound/Martha's Vineyard, and the Hudson Canyons.

Proposed Closure Alternative for Analysis

We request that the Committee direct the Herring PDT to analyze an alternative that would prohibit vessels from fishing with certain gears for Atlantic herring based on areas identified as having medium and high river herring and shad bycatch using UMass Dartmouth Bycatch

Important Information and Key

The following map shows the cumulative high and moderate bycatch zones of river herring and shad in the Atlantic herring and Atlantic mackerel midwater trawl fleet from 2011-2020.

HIGH bycatch events, colored in red, reflect a rate at which river herring catch limits will be reached before mid-water trawl Atlantic herring or Atlantic mackerel catch limits.

Moderate bycatch events are in yellow.

Cell classifications are determined by most recent catch.

All catch information comes from portside state samplers or at-sea federal observers.

Numbers inside of a cell indicate the number of tows within the cell over all years.

A single tow may occur in several cells.

Vessel trips: 282

Hotspot zone corner coordinates

Rationale

Page 3 of 4

An approximate two-block zone is recommended around each boundary risk area to account for management and survey uncertainty as well as create regular and continuous closure area polygons for ease of monitoring, compliance, and enforcement. Amendment 5 stressed the need for regular, connected, and easily complied with and enforceable polygons. “The size and the shape of the spatial management alternatives should reflect the management goals. In general, the size of a river herring monitoring or avoidance area might be greater than a river herring protected area. In addition, contiguous areas might be preferred to several disconnected discrete areas to achieve monitoring or avoidance goals.”

Although the area protected would be smaller than the previous coastwide “buffer zone”, there is significant overlap between river herring and shad bycatch hotspots and Atlantic herring egg mats and spawning grounds, thus this alternative would also provide conservation benefits to Atlantic herring that will help the fishery achieve optimum yield.

We look forward to the continued development of a new framework implementing river herring and shad avoidance and catch minimization measures prior to the next fishing year. Thank you for considering of our comments and recommendations.

Sincerely,



Theresa Labriola
President



2025 Community Input on the June 2026 Management Track Assessments

In 2025 NOAA Fisheries Northeast Fisheries Science Center (NEFSC) began an initiative to increase opportunities for science-focused input in the Management Track (MT) Assessment process. The overall goal of this initiative is to improve the science products we deliver to our management partners. Objectives include soliciting community input and on-the-water observations from industry experts that may help during the assessment process, and doing so on a timeline that would allow sufficient time to investigate issues identified prior to modeling and assessment delivery. During planning, we collaborated with our [Northeast Region Coordinating Council](#) (NRCC) partners to ensure that the process would meet their needs.

This report summarizes how we solicited input during the spring of 2025 for the June 2026 MT Assessments and the input we received. Note that subsequent to soliciting input, the assessment schedule for 2026 was modified by the NRCC at its January 2026 meeting; the stocks now scheduled for peer review in June 2026 are Atlantic herring and Georges Bank haddock. The longfin inshore squid MT will be delivered to the Mid-Atlantic Fishery Management Council (MAFMC) in October 2026 following peer review of its Research Track Assessment in August. All stocks considered during the 2025 process are included in this report; input received will be considered during the next scheduled MT assessment.

We look forward to evolving and improving the community input process to make it accessible for all participants. Please reach out to NEFSC's Assessment Process Lead (brian.hooper@noaa.gov) with suggestions on how to improve the way we collect or present community input on MT Assessments.

Requesting Input from Community Partners

For the June 2026 MT stocks, we solicited community input via a virtual meeting (see Appendix 1 for agenda) on February 26, 2025 (see Appendix 2 for a list of attendees), as well as through a connected online form (open February 3 – April 30, 2025). Participants were welcome to attend the meeting, submit the form, or a combination of both. We also invited Council staff to provide summaries of feedback received via Council Advisory Panels, Plan Teams, and other Council groups. To help guide discussion and input for all stocks, we developed five general topic areas with sample questions (Appendix 3). The topic areas included:

1. Fishing Dynamics and Management: Changes in fishing techniques, discarding, market patterns, enforcement

2. Stock Distribution: Changes in timing, location, depth, size, movement patterns of fish
3. Stock Biology: Changes in fish condition, size, spawning timing or location, recruitment
4. Ecosystem Interactions: Changes in what fish are eating, predator/prey dynamics, prey availability
5. Other Topics

Additional stock/assessment specific questions were included during presentations by assessment leads at the virtual meeting on February 26, 2025.

Summary of Community Input

The NEFSC is grateful to everyone that contributed their time and knowledge to help inform development of the June 2026 MT assessments. The collaborative input will help our scientists better understand what is happening on the water and improve the science for the assessment. This section summarizes the input we received from the community input meeting, online form, and NEFMC staff.

Where applicable and feasible, we will use this input to help guide development of the MT assessments. While not all observations received can be incorporated directly into assessment modeling due to time and resource constraints, some may contribute to supporting future improvements in MT assessments. Others may be useful for providing context to assessment results, improving understanding of trends in assessment data, refining treatment of assessment data inputs, or identifying research priorities for future assessments.

To follow up from the input received, NEFSC will:

1. Identify in the [MT assessment plans](#) any components that were informed by community input
2. Provide a summary of how community input informed the assessment during the MT peer review

Atlantic Herring

Assessment Lead: Jonathan J. Deroba, NEFSC

Background

Atlantic Herring was last assessed in a 2024 MT assessment using the Age Structured Assessment Program (ASAP) model for the years 1965-2023. Results indicated that the stock has had below average recruitment for 11 years. At the time of the February 2025 community input meeting, a [Research Track Assessment was ongoing for the stock](#), which was subsequently completed and peer reviewed in March 2025. In addition to the general community input topics, the assessment lead posed the following discussion questions during the input meeting:

- What could be causing poor recruitment or reduced production in general?
- Have you observed changes in the timing or direction of migration patterns, especially outside of the EEZ?
- Do you have any possible data sources to indicate early cohort strength?

Input Summary

Fishing Dynamics and Management

- One commenter noted there was almost no midwater trawl landings prior to 1995.
- A Maine lobsterman commented they have had to change bait because the herring is quite expensive due the stock's decline.
- A fisherman said that they have not been fishing for herring due to its low quotas, therefore it was difficult for them to provide us up to date answers to our questions. They noted mackerel is showing back up but that its quota is so low that they have to avoid them while trying to get a herring.
- One commenter saw a large increase in herring seine fishery effort in the area from Seguin to Mohegan, Maine in 2023 and 2024. They noted some areas where herring had been previously, specifically south of Damariscove Island, were completely eliminated.
- Another commenter noted the shrimpers are catching a lot of herring.
- Several fishermen expressed concern via the online form about the lack of access to herring for small boats in Maine.

Stock Distribution

- Several commenters thought migratory patterns were changing. They noted Atlantic herring are coming in later in the year (March-May) and moving a lot shallower. They are not finding herring as much in deeper waters. They attributed the shifting times to increasing water temperatures as they are tracking temperatures more to find the fish. One commenter's hunch was that herring are coming in spring, leaving and then coming back late. Another commenter noted a large influx in November on Georges Bank and that the quota was quickly met.
- A commercial fishing representative commented that the stock has contracted into the GOM.
- A fisherman who fishes throughout the GOM commented there was not real abundance of herring anywhere throughout the 2024 season.
- Commenters observed seeing herring mix with other species. One noted menhaden are coming in thicker (most since the 1980's) between April and September and this is pushing the herring offshore.
- A Department of Fish and Ocean Canada (DFO) employee communicated that their assessment for Southwest Nova Scotia/Bay of Fundy herring is scheduled to be completed by the end of 2026. They are also planning a pilot program for the summer of 2025 to put acoustic tags in some juvenile herring in Passamaquoddy Bay and utilize a large existing array of acoustic receivers in the Bay of Fundy to get data on movement.

Stock Biology

- A commenter, who conducts sampling work in the Gulf of Maine (GOM), noted a very interesting mix of age and size classes compared to the past when mackerel schooled up based on similar sizes/ages.
- A commercial fishing representative thought something could be occurring between recruitment and the survey.

Ecosystem Interactions

- Several commenters noticed a mixing of mackerel and herring in the last couple of years. They said that years ago the two species would school separately but in the last few years they seem to school together inshore and offshore.
- Commenters have also seen a large increase in mackerel abundance over the past year. Some expressed concerns that an increase in mackerel could hurt herring stocks because mackerel will eat herring roe and juvenile fish.
- One commenter noticed the presence of more predators like black sea bass and false albacore in areas where they had not previously seen them. They also noted that bluefin tuna are coming in closer to shore, and that the gray seal population has gone up significantly.

Other Topics

NEFMC staff reviewed the record of Council-related meetings from December 1, 2023, to January 31, 2025, providing links to key meeting notes and reports as well as highlighting particular input (Table 1). A commercial fishing representative commented that missing from the NEFMC summary was, in the context of food availability and recruitment, the consideration and analysis of surface and bottom temperature trends.

Table 1. Key NEFMC related meeting notes, reports, and input for Atlantic herring

Summary of Input	Community Input Topics
Atlantic Herring Research Track Working Group Stakeholder Engagement Session , June 13, 2024 All fishermen and other members of the public with an interest in the Atlantic herring resource were encouraged to participate. There were 41 individuals in attendance in person and online. The Working Group prepared a series of questions for stakeholders to help guide discussion. See meeting summary on this page: https://www.nefmc.org/library/atlantic-herring-stock-assessments	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions
Scientific and Statistical Committee meeting , July 30-31, 2024 See meeting summary, "Additional Comments and Research Recommendations", pp. 3-4 https://www.nefmc.org/library/jul-30-31-2024-ssc-report-re-atlantic-herring	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions

Atlantic Herring Advisory Panel meeting, September 12, 2024 CONSENSUS STATEMENT <i>The Advisory Panel recommends evaluation of the Canadian catches in the projections and the management uncertainty buffer in the next specification cycle (2027-2029) and the movement of herring from Canadian waters to US waters (e.g., German Bank, Grand Manan, Scots Bay).</i> See meeting summary, “Other Business”, pp. 3-4: https://www.nefmc.org/library/sep-12-2024-herring-advisory-panel-meeting-summary	Fishing Dynamics and Management Stock Distribution
Atlantic Herring Plan Development Team meeting, November 25, 2024 Dr. Micah Dean provided an overview of an upcoming S-K project on Atlantic herring genomics to inform fishery management. See doc 5A, November 25, 2024, PDT meeting summary, section 2, pp. 3-4: https://www.nefmc.org/calendar/jan-23-2025-herring-joint-committee-and-advisory-panel-webinar	Stock Distribution Stock Biology
Updates to Essential Fish Habitat (EFH) The Council plans to update Atlantic herring EFH in 2025. Council motions on January 28, 2025 <i>That the Council endorses the EFH Technical Review approaches, findings, and recommended Council actions, with implementation of recommended actions in coming years subject to available resources.</i> <i>That the Council commence development of EFH designation alternatives for skates, monkfish, herring, and cod during 2025, within ongoing Council actions or via an EFH framework, as appropriate.</i> See relevant materials from the January 2025 Council meeting, under the Habitat Committee Report: https://www.nefmc.org/library/january-2025-habitat-committee	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions
Council's Research Priorities, 2024-2028 The Council approved its latest list of research priorities in June 2024. The list is available at: https://www.nefmc.org/library/research-priorities-for-2024-2028 Filter for “Atlantic herring” under the “FMP” or “Species” columns	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions

Butterfish

Assessment Lead: Charles Adams, NEFSC

Background

Butterfish was last assessed in a 2024 MT assessment using the Wood Hole Assessment Model (WHAM) model. The assessment included data from 1989 to 2023 and had one fleet with two time blocks (1989-2013 & 2014-2023). Results showed continued interannual variability in spawning stock biomass (SSB) and recruitment. In addition to the general community input topics, the assessment lead posed the following discussion questions during the input meeting:

- The spring 2022 and 2024 survey indices are the highest in the time series – does this fit with what you're seeing on the water?
- Are there any market patterns driving fishing patterns in recent years?
- Are you seeing changes in the condition or health of butterfish?

Input Summary

Fishing Dynamics and Management

- On the market patterns, a commenter noted that in the 1980's butterfish was a breakfast item in Asian markets and that this is no longer the case as demand has shifted to other foods.

We did not receive further input on other topics or questions for butterfish.

Georges Bank Atlantic Cod

Assessment Lead: Amanda Hart, NEFSC

Background

Georges Bank (GB) Atlantic Cod was last assessed in a 2024 MT assessment using the Wood Hole Assessment Model (WHAM) model. The assessment included data from 1978 to 2023 and one fleet that combined Canadian landings, Canadian discards, U.S. landings, and U.S. discards, as well as 3 survey indices (DFO Spring, NEFSC Spring, and NEFSC Fall). In addition to the general community input topics, the assessment lead posed the following discussion questions during the input meeting:

- Have you seen any changes in the size of cod caught?
 - We have had persistent port sampling gaps and will be exploring all data available to characterize US catch age composition.
- Are you seeing seasonal changes in the location or size of cod caught on GB?
- Are there concurrent ecosystem changes that you've seen that could be impacting cod?

- This information will help provide context for changes in age structure and seasonality.
- Have there been any changes to the recreational fishery on GB?
 - Following the recent change to the GB cod assessment footprint, we don't anticipate substantial recreational fishing activities but intend to keep an eye on this.

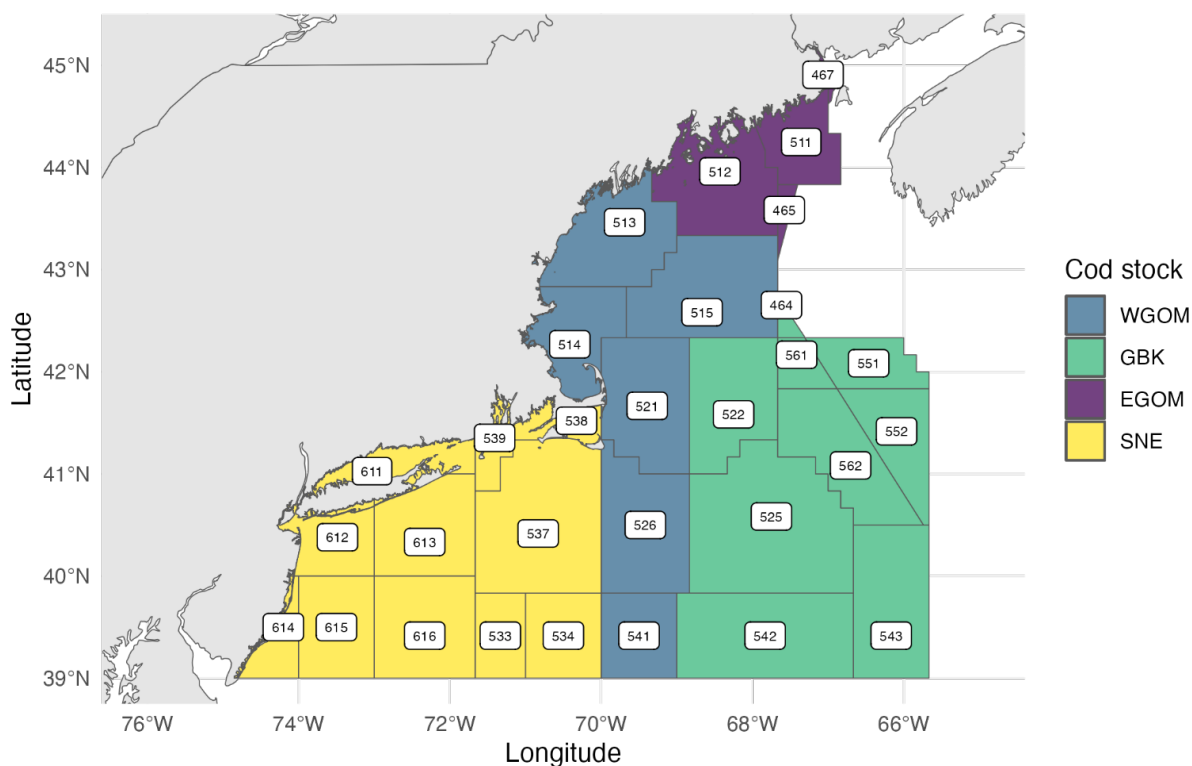


Figure 1. Map of the four Atlantic cod stock areas with statistical areas. Western Gulf of Maine (WGOM, blue), Georges Bank (GBK, green), Eastern Gulf of Maine (EGOM, purple), Southern New England (SNE, yellow). Please note that the footprint of the biological stock areas differ from the managed GBK and GOM footprints.

Input Summary

Fishing Dynamics and Management

- A fisherman noted they have observed catches of cod longer than 20 inches in lobster traps. They thought it a reasonable assumption that a significant amount of cod mortality is coming from pot/trap fisheries.
- One participant was concerned that net changes are allowing more large fecund females to be captured.
- A commenter had concerns with the apportionment of cod quota and wanted to know what commercial catch data was used in the assessment. Another commenter questioned if commercial biomass is a reliable source of data because of low quotas.

Stock Distribution

- One commenter expressed concerns about warming oceans and the potential for temperature sensitive species to migrate towards the poles faster than they normally would.
- A fishing industry representative was concerned with the implications of seasonal changes.

Stock Biology

- A commenter asked if we are expecting better ageing data for port sampling data. The assessment lead responded that we do not expect that for 2024.

Other Topics

NEFMC staff reviewed the record of Council-related meetings from December 1, 2023, to January 31, 2025, providing links to key meeting notes and reports as well as highlighting particular input (Table 2).

Table 2. Key NEFMC related meeting notes, reports, and input for George's Bank Atlantic cod

Summary of Input	Community Input Topics
Cod Transition Workshops, April 30-May 2, 2024 Opportunities for the public to provide input on the Council's Atlantic cod management transition plan. See workshop summary https://d23h0vhsm26o6d.cloudfront.net/Atlantic-Cod-Management-Transition-Workshops_FINAL_Report_June2024.pdf	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions
Joint Groundfish Advisory Panel and Recreational Advisory meeting, June 10, 2024 <u>Industry Updates:</u> Advisors shared observations on fishing performance, both from the previous fishing year and considerations for the current fishing year, including Georges Bank cod and haddock. <u>Groundfish Advisory Panel Motion:</u> <i>In relation to recent fishery performance and quota utilization, the Groundfish Advisory Panel recommends to the Groundfish Committee to seek a deeper understanding of the factors that continue to constrain the commercial groundfish fleet due to exceedingly low quotas (low stock abundance) as reported by assessments.</i> • FY 2022 data shows only 6,700 Days at Sea used by the fleet (approximately 10% of A16 baseline period average) • 100% of the sector ACE is available to the fleet through leasing while only a small percentage of the fleet permits are on active vessels. • Availability of ACE for both cod stocks, white hake, GOM haddock and witch flounder constrained the fleet both in quantity and lease cost relative to ex-vessel value. See meeting summary, "Industry Updates", pp. 3-5 https://www.nefmc.org/library/jun-10-2024-recreational-and-groundfish-advisory-panels-meeting-summary	Fishing Dynamics and Management Stock Distribution
Scientific and Statistical Committee meeting, July 30-31, 2024 See meeting summary, "Additional Comments and Research Recommendations", Georges Bank Cod, pp. 3-4 See "Recommendations for possible future revisions to the methods", Apportioning the Biomass of Georges Bank Cod and Haddock into the Eastern Georges Bank Management Area, pp. 7 https://www.nefmc.org/library/jul-30-31-2024-ssc-report-re-gbytf-gb-cod-haddock	Fishing Dynamics and Management Stock Distribution Stock Biology

Summary of Input	Community Input Topics
Joint Groundfish Advisory Panel and Recreational Advisory meeting, September 9, 2024 <u>Groundfish Advisory Panel Motion:</u> <i>The GAP recommends the Committee to request the PDT conduct an analysis of the commercial minimum fish size for cod. This could evaluate the current commercial minimum size limit (19 inches) up to 25 inches, in 1-inch increments, and its effects on potential recruitment.</i> See meeting summary, pp. 7 https://www.nefmc.org/library/sep-9-2024-recreational-and-groundfish-advisory-panels-meeting-summary	Fishing Dynamics and Management Stock Biology
Groundfish Committee meeting, September 11, 2024 <u>Motion:</u> <i>Move that the Committee to request the PDT conduct an analysis how potential increases in the minimum fish size for cod in the commercial fishery may impact stock status, including recruitment indices, probability of stock rebuilding, and magnitude of regulatory discards. Minimum fish size increases should be analyzed on one inch increments from the current minimum size of 19 inches up to 25 inches.</i> See meeting summary, pp. 14 https://www.nefmc.org/library/sep-11-2024-groundfish-committee-meeting-summary	Fishing Dynamics and Management Stock Biology
Updates to Essential Fish Habitat (EFH) The Council plans to update Atlantic cod EFH in 2025. Council motions on January 28, 2025 <i>That the Council endorses the EFH Technical Review approaches, findings, and recommended Council actions, with implementation of recommended actions in coming years subject to available resources.</i> <i>That the Council commence development of EFH designation alternatives for skates, monkfish, herring, and cod during 2025, within ongoing Council actions or via an EFH framework, as appropriate.</i> See relevant materials from the January 2025 Council meeting, under the Habitat Committee Report: https://www.nefmc.org/library/january-2025-habitat-committee	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions
Council's Research Priorities, 2024-2028 The Council approved its latest list of research priorities in June 2024. The list is available at: https://www.nefmc.org/library/research-priorities-for-2024-2028 Filter for "Northeast Multispecies" under the "FMP" column	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions

Georges Bank Haddock

Assessment Lead: Liz Brooks, NEFSC

Background

GB Haddock was last assessed in a 2024 MT assessment using the WHAM model. The assessment included data from 1931 to 2023 and used one fleet with two time blocks; a fixed selectivity (1931-1962) and a time varying selectivity (1963-2023) that shows changes in selectivity that align with changes in size. The assessment indicates several 'boomer' year classes (2003, 2010, 2013) for the stock, and also shows that the most recent 'boomer' year class in 2013 no longer has a large influence on current population abundance. The 2020 and 2021 classes were projected to account for a large proportion of 2024-2025 catch. In addition to the general community input topics, the assessment lead posed the following discussion questions during the input meeting.

- As boomer year classes have aged out, are you seeing improved growth?
- Are the bulk of your landings from those 2020/2021 year classes?
- Any indication of strong year classes behind them (in discards)?
- Any fish distribution shifts?
- Any fishery distribution shifts?

Input Summary

Fishing Dynamics and Management

- A commenter wondered if the price of other fish caught as bycatch are affecting catch of haddock and cod, and if fishermen are having to buy fish from other sector members to allow catch of these other fish.
- NEFMC staff highlighted having specifications in time for May 1 allowed more targeting of haddock. They also noted that market instability is driving catches across the GOM and GB.
- Another commenter noted that regulations not being implemented on time can lead to scarcity of fish when it shouldn't happen and this can influence leasing prices and catch. They thought we should consider catch in relation to how the fishery is operating. They noted leasing has had low costs recently, but it may increase dramatically as low quota kicks in.

Stock Distribution

- NEFMC staff described that early in the year GB saw a smaller run of haddock than normal but saw haddock longer over time and in the eastern portion of stock.
- A fisherman described still seeing landings in statistical areas 521 and 522, with about 90 percent of GB haddock coming from there in 2024 and 2025.
- A commenter described their experience of otter trawling about 30 years ago during winter. They saw large amounts of 3-4 inch baby haddock from Georges Bank to Hudson Canyon one year but they vanished by the next year.

- A commenter noted fish distribution continues to be all west. They expressed concerns with not sampling trips that fish in both stock areas, apportionment methods, and a reliance on the bottom trawl for distribution information.

Stock Biology

- A fisherman stated that anecdotally the ratio of large to small haddock has increased over time, noting they had almost no smalls on some trips. They suggested looking at the distribution of landings by market class. The assessment lead noted the snapper market category picked up in 2016 to account for the boomer 2013 year class.
- A commenter described the 2020 and 2021 year classes as good but not boomer. They noted industry has seen the strong 2019 to 2021 year classes entering landings. The assessment lead noted the last assessment showed the 2013 year class was an order of magnitude greater than the 2020 year class. The assessment lead described the 2020 and 2021 year classes as slightly above average, but that previous year classes were well below average, giving the appearance of big year classes recently.

Other Topics

NEFMC staff reviewed the record of Council-related meetings from December 1, 2023, to January 31, 2025, providing links to key meeting notes and reports as well as highlighting particular input (Table 3).

Table 3. Key NEFMC related meeting notes, reports, and input for Georges Bank Haddock

Summary of Input	Community Input Topics
Joint Groundfish Advisory Panel and Recreational Advisory meeting, June 10, 2024 <u>Industry Updates:</u> Advisors shared observations on fishing performance, both from the previous fishing year and considerations for the current fishing year, including Georges Bank cod and haddock. <u>Groundfish Advisory Panel Motion:</u> <i>In relation to recent fishery performance and quota utilization, the Groundfish Advisory Panel recommends to the Groundfish Committee to seek a deeper understanding of the factors that continue to constrain the commercial groundfish fleet due to exceedingly low quotas (low stock abundance) as reported by assessments.</i> • FY 2022 data shows only 6,700 Days at Sea used by the fleet (approximately 10% of A16 baseline period average) • 100% of the sector ACE is available to the fleet through leasing while only a small percentage of the fleet permits are on active vessels. • Availability of ACE for both cod stocks, white hake, GOM haddock and witch flounder constrained the fleet both in quantity and lease cost relative to ex-vessel value. See meeting summary, “Industry Updates”, pp. 3-5 https://www.nefmc.org/library/jun-10-2024-recreational-and-groundfish-advisory-panels-meeting-summary	Fishing Dynamics and Management Stock Distribution
Scientific and Statistical Committee meeting, July 30-31, 2024 See “Recommendations for possible future revisions to the methods”, Apportioning the Biomass of Georges Bank Cod and Haddock into the Eastern Georges Bank Management Area, pp. 7 https://www.nefmc.org/library/jul-30-31-2024-ssc-report-re-gbytf-gb-cod-haddock	Fishing Dynamics and Management Stock Distribution Stock Biology
Scientific and Statistical Committee meeting, October 21, 2024 See meeting summary, “Additional Comments and Research Recommendations”, Georges Bank Haddock, pp. 5-6 https://www.nefmc.org/library/oct-9-and-21-2024-ssc-report-re-groundfish	Stock Distribution Stock Biology
Council’s Research Priorities, 2024-2028 The Council approved its latest list of research priorities in June 2024. The list is available at: https://www.nefmc.org/library/research-priorities-for-2024-2028 Filter for “Northeast Multispecies” under the “FMP” column	Fishing Dynamics and Management Stock Distribution Stock Biology Ecosystem Interactions

Longfin Inshore Squid

Assessment Lead: Jessica Blaylock, NEFSC

Background

Longfin inshore squid was last assessed in a 2023 MT assessment using data-limited methods. A Research Track (RT) Assessment for the stock is scheduled for peer review in 2026; results of the RT will inform the next MT scheduled in 2026. Work for the RT includes life history investigations, development of new assessment models, and extensive collaboration with the squid industry (e.g., summit, fishery-dependent data). In addition to the general community input topics, the assessment lead posed the following discussion questions during the input meeting.

- What large scale movement/migration patterns do you see?
 - Evidence of north-south migration? If so, when and where?
 - When and where do you see small squid in the late winter/early spring?
- Are there seasonal patterns in fishing behavior (e.g., locations fished, net configuration, etc.) that affect the sizes of squid that are caught?

Input Summary

Stock Distribution

- A researcher noticed that last summer the squid came in early then just disappeared in September. They noted they usually see squid south of Long Island. The assessment lead confirmed the “squid squad” was watching this last summer and saw the same thing.

Stock Biology

- A commenter observed that the squid abundance where they fish has gone down in the last 10 years, but recognized that might not adequately represent the overall picture.

Ecosystem Interactions

- A commenter noted squid is forage for most of New England's inshore species such as bluefish, striped bass, fluke, black sea bass, and tuna.

Ocean Quahog

Assessment Lead: Daniel Hennen, NEFSC

Background

Ocean quahog was last assessed in a 2020 MT assessment using a length-based Stock Synthesis model. The assessment included two areas, Georges Bank and everything else. Discards in the assessment were assumed to be essentially zero. For the 2026 MT, the assessment lead is interested in exploring discards and ages. In addition to the general

community input topics, the assessment lead posed the following discussion questions during the input meeting:

- How common is discarding at sea?
- What has changed in the fishery since 2020?
- What important information is not in the data available to the assessment?

Input Summary

Fishing Dynamics and Management

- A fishing industry representative commented that efforts to reduce discards are underway. The work was funded in the fall and work should start in 2025, likely under an exempted fishery permit.

Stock Distribution

- A fishing industry representative commented that landings patterns shifting more towards New England has been cited as climate change evidence, but that is not the case. They said landings in the Mid-Atlantic have come back recently. They noted the shift in landings were operational decisions and not based on the scarcity of quahogs in some regions.

Appendix 1 - Agenda

Management Track Community Input Meeting For June 2026 Management Track Assessments

Wednesday, February 26, 2025

To join the meeting: meet.google.com/jkh-mjbj-ppc

Phone: (US) +1 862-243-5239; PIN: 933 800 690#

<u>Time</u>	<u>Subject</u>	<u>Presenter</u>
9:00 a.m.	Welcome/Logistics Background Information	Brian Hooper Kristan Blackhart
9:15 a.m.	Atlantic Herring Assessment Overview	Jon Deroba
9:25 a.m.	Atlantic Herring Assessment Input	Public
9:45 a.m.	Butterfish Assessment Overview	Chuck Adams
9:55 a.m.	Butterfish Assessment Input	Public
10:15 a.m.	Georges Bank Atlantic Cod Assessment Overview	Amanda Hart
10:25 a.m.	Georges Bank Atlantic Cod Assessment Input	Public
10:45 a.m.	Break	
11:00 a.m.	Georges Bank Haddock Assessment Overview	Liz Brooks
11:10 a.m.	Georges Bank Haddock Assessment Input	Public
11:30 a.m.	Longfin Inshore Squid (<i>Loligo</i>) Assessment Overview	Jessica Blaylock
11:40 a.m.	Longfin Inshore Squid (<i>Loligo</i>) Assessment Input	Public
12:00 p.m.	Ocean Quahog Assessment Overview	Dan Hennen
12:10 p.m.	Ocean Quahog Assessment Input	Public
12:30 p.m.	Wrap Up and Adjourn	Kristan Blackhart

Appendix 2 - Attendance

Management Track Community Input Meeting For June 2026 Management Track Assessments

Wednesday, February 26, 2025

Industry Representatives

Paul Axelsson, Commercial Fishermen, New Jersey
Tim Barrett, Commercial Fisherman, Massachusetts
Rick Bellavance, Priority Charters
John Paul Bilodeau, New England Fish Company
Cassie Canastra, Canastra Fishing Company
Patrick Chadbourne, CBS Lobster
Jessica Daniels, New England Fish Company
Dustin Delano, Commercial Fisherman, Maine
Greg DiDomenico, Lund's Fisheries
Ben Durkee, Bring It Bait
Aubrey Ellertson, Cape Cod Commercial Fishermen's Alliance
James Fletcher, United National Fishermen's Association
Sam Fuller, Commercial Fisherman, Massachusetts
Vito Giacalone, Commercial fisherman, Massachusetts
Tony Hooper, Commercial Fisherman, Maine
Kimberly Matthews, F/V Ocean Venture, Maine
Jerry Morgan, Recreational Fisherman, Connecticut
Emily Morse, Cribstone Guide and Charters
Joseph Myers, SeaWatch International
Jacqueline O'Dell, Northeast Seafood Coalition
Gerry O'Neill, Cape Seafoods Inc
Nicholas O'Toole, Commercial fisherman, Massachusetts
Michael Pierdinock, Steelwater Bank Waterman's Association
Suzannah Raber, New England Fish Company
Jeffrey Stevens, Commercial Fisherman
Mary Beth Tooely, O'Hara Corporation

Academics

Ryan Adams, University of New Hampshire
Steve Cadrin, University of Massachusetts
Tara McClintock, Cornell Cooperative Extension
Angelia Miller, University of Massachusetts
Hailee Nigro, University of Southern Mississippi
Eric Powell, Rutgers
Molly Spencer, University of Southern Mississippi

NGO/Non-profits

Elizabeth Etrie, Conservation Law Foundation

Geoff Klein, Wildlife Conservation Society
Gareth Lawson, Conservation Law Foundation
Bill Lucey, Save the Sound
Zane Ruzicka, Wild Oceans
Matthew Seeley, Environmental Defense Fund

State Government Employees

Chris Batsavage, North Carolina Division of Marine Fisheries
Addie Binstock, Maine Department of Marine Resources
Matt Cieri, Maine Department of Marine Resources
Tara Dolan, Massachusetts Division of Marine Fisheries
Corrin Flora, Maine Department of Marine Resources
Kevin Job, Connecticut Department of Energy and Environmental Protection
Cheri Patterson, New Hampshire Fish and Game Department
Sefatia Romeo Theken, Massachusetts Department of Fish and Game
Melissa Smith, Maine Department of Maine Resources
Kelly Whitmore, Massachusetts Division of Marine Fisheries

Other Government Employees

Irene Andrushchenko, Fisheries and Oceans Canada
Melanie Barrett, Fisheries and Oceans Canada
Andrew Jacobs, Wampanoag Tribe of Gay Head (Aquinnah)

Council Staff

Jessica Coakley, MAFMC
Jose Montanez, MAFMC

Emily Bodell, NEFMC
Jamie Cournane, NEFMC
Alexander Dunn, NEFMC
Cate O'Keefe, NEFMC

NOAA Fisheries Staff

Charles Adams, NEFSC
Larry Alade, NEFSC
Kristan Blackhart, NEFSC
Jessica Blaylock, NEFSC
Liz Brooks, NEFSC
Russell Brown, NEFSC
Jonathan Deroba, NEFSC
Teri Frady, NEFSC
Giovanni Giancesin, NEFSC
Alex Hansell, NEFSC
Amanda Hart, NEFSC
Daniel Hennen, NEFSC
Brian Hooper, NEFSC
Chris Legault, NEFSC

Chengxue li , NEFSC
Dave McElroy, NEFSC
Anna Mercer, NEFSC
Charles Perretti, NEFSC
Michael Simpkins, NEFSC
Michele Traver, NEFSC

Andy Ostrowski, Southeast Fisheries Science Center
Alexander Jensen, Southwest Fisheries Science Center

Ashley Asci, GARFO
Benjamin Galuardi, GARFO
Emily Gilbert, GARFO
Jerome Hermsen, GARFO
Laurie McKenna, GARFO
Heather Nelson, GARFO
Carrie Nordeen, GARFO
Douglas Potts, GARFO
Liz Sullivan, GARFO
Spencer Talmage, GARFO
Samantha Tolken, GARFO
Ashley Trudeau, GARFO

Appendix 3 - Management Track Assessment Community Input Topics

The Northeast Fisheries Science Center seeks on-the-water observations about changes in fisheries that may affect the upcoming [management track assessments](#). Input on the five topic areas below may help guide development of the assessment and improve our scientists' understanding of what is happening on the water.

Fishing Dynamics and Management

- Have there been changes in effort and/or fishing techniques used to target the stock?
- Do you think discards are under- or over-estimated? If so, why?
- Are there any market patterns driving fishing patterns in recent years?
- Is enforcement of fishing regulations effective? If not, why?

Stock Distribution

- Have there been recent changes in the timing that you're seeing fish in usual locations?
- Have there been recent changes in the locations that you're seeing fish?
- Have you noticed any changes in movement or migration patterns for the stock?
- Have you seen larger or smaller fish in areas that is not typical?
- Have there been recent changes in the depths that you're seeing fish?

Stock Biology

- Are you seeing changes in the condition or health of fish?
- Are you seeing fish that are larger or smaller than typical?
- Are there changes to the timing and location of spawning compared to what you're used to seeing?
- Are you seeing any notable patterns in recruitment?

Ecosystem Interactions

- Are you seeing 'fatter' or 'skinnier' fish more than usual?
- Have you noticed any changes in what fish are eating?
- Are you noticing other changes that indicate shifts in predator/prey dynamics for the stock?

Other Topics

- Do you have other information that might be helpful to the Management Track Assessment?
- Do you know of a data source that could help resolve known uncertainties in the assessment?
- Does the trend in population size from the [most recent assessment](#) match your perception of the stock? If not, why do you think that might be so?