Ecosystem Component Species Evaluation Framework

The IRA 3.3 Ecosystem Component Species Evaluation project establishes an evaluation framework based on the general guidelines for the National Standards under the Magnuson-Stevens Act Provisions (MSA; § 600.305). Qualitative and quantitative evidence will be gathered to demonstrate that the selected case study species do not require conservation and management as defined by the MSA and National Standard Guidelines.

STOCKS THAT REQUIRE CONSERVATION AND MANAGEMENT

The guidelines at § 600.305(c) state that any stock that is predominately caught in Federal waters and is overfished or subject to overfishing, or likely to become overfished or subject to overfishing, is considered to require conservation and management. Beyond that the guidelines also include a non-exhaustive list of factors that a council should consider when deciding whether additional stocks require conservation and management (see below), and states that no one of the factors is determinative or required when considering adding a stock to or removing a stock from a Fishery Management Plan (FMP). Ecosystem component species are identified as such in an FMP provided the Council determines they do not require conservation and management based on the considerations and factors below.

(i) The stock is an important component of the marine environment.

(ii) The stock is caught by the fishery.

(iii) Whether an FMP can improve or maintain the condition of the stock.

(iv) The stock is a target of a fishery.

(v) The stock is important to commercial, recreational, or subsistence users.

(vi) The fishery is important to the Nation or to the regional economy.

(vii) The need to resolve competing interests and conflicts among user groups and whether an FMP can further that resolution.

(viii) The economic condition of a fishery and whether an FMP can produce more efficient utilization.

(ix) The needs of a developing fishery, and whether an FMP can foster orderly growth.

(x) The extent to which the fishery is already adequately managed by states, by state/Federal programs, or by Federal regulations pursuant to other FMPs or international commissions, or by industry self-regulation, consistent with the requirements of the Magnuson-Stevens Act and other applicable law.

EXAMPLE: CONSIDERATION OF FACTORS FOR ADDING THE FOUR ATLANTIC COD STOCKS TO THE NORTHEAST MULTISPECIES FMP

In 2025, the Council pursued Amendment 25 to add the new four Atlantic cod stocks to the Northeast Multispecies FMP[1]. Through this action, the Council considered each of the factors listed above and included the results in the final submission. The excerpt of these considerations and the final analysis from Amendment 25 is included below as an example of how the IRA 3.3 Ecosystem Component Species Evaluation project might address these factors and the extent of information that would be provided.

i. The stock is an important component of the marine environment.

Cod are generalists and important predators and prey within the marine environment. As prey, it has been noted that they are especially vulnerable to gray seals, spiny dogfish, and black sea bass; the latter two of which are managed under their own fishery management plans through the New England Fishery Management Council and the Mid-Atlantic Fishery Management Council, respectively. As juvenile

[1] NEFMC | Northeast Multispecies (Groundfish) Amendment 25 (Revised)

predators, they feed on mainly copepods, mysid shrimp, hermit crab larvae, and crustaceans, while as small adult predators they feed on smaller fish like sand lance and silver hake, with prey size increasing as a function of adult size.

ii. The stock is caught by the fishery.

Atlantic cod have been commercially harvested for centuries. Recently, during fishing years 2019-2023, the average landed amount of cod within[2]:

- *the proposed new GB stock area was 271,753 pounds generating an average revenue of $617,725 and constituting 4.4% of the revenue landed by species in the GB stock area;*
- *the proposed WGOM stock area was 853,661 pounds generating an average revenue of $2,200,952, constituting 4.4% of the revenue landed by species in the WGOM stock area;*
- *the proposed EGOM stock area was 2,259 pounds generating an average revenue of $7,090, constituting 0.4% of the revenue landed by species in the EGOM stock area; and*
- *the proposed SNE stock area was 6,324 pounds generating an average revenue of $16,920 constituting 0.5% of the revenue landed by species in the SNE stock area. The majority of cod catch in the SNE stock area comes from the recreational fishery, averaging around 93% of the catch in calendar years 2019 through 2023.*

Atlantic cod is also caught recreationally. During fishing years 2019-2023, average total catch of cod by the recreational fishery within[3]:

- *The previous GOM stock area, which for the recreational fishery largely overlaps with the WGOM stock area, was 149 mt;*
- *The previous GB stock area, which for the recreational fishery largely overlaps with the SNE stock area, was 215 mt.*

It is important to note that management actions since their introduction into the Northeast Multispecies FMP have reduced fishery catch as a function of decreasing populations of Atlantic cod over time to meet the goals and objectives of the FMP. Nonetheless, the commercial and recreational fisheries on average utilize the majority of the annual catch limits that they are allocated for Atlantic cod.

iii. Whether an FMP can improve or maintain the condition of the stock.

Atlantic cod in U.S. waters are currently included in the Northeast Multispecies FMP. Historically, Atlantic cod has been managed and assessed as two stock units: a GOM stock unit, which encompasses the proposed EGOM stock areas and the northern portion of the WGOM stock areas, and a GB stock unit which encompasses the new GB and SNE stock areas and the southern portion of the WGOM stock area. Each stock has a status of overfished and two stocks, WGOM and SNE, are subject to overfishing. The current GB stock is in a rebuilding plan scheduled to end in 2026 and the GOM stock is in a rebuilding plan scheduled to end in 2024. The Atlantic Cod Stock Structure Working Group (McBride and Smedbol 2022) and the subsequent research track stock assessment (NEFSC 2023) have attributed these statuses

[2] See: Groundfish PDT memo to SSC re OFLs and ABCs for Atlantic cod stocks, FY2025 -2027

[3] See: Northeast Multispecies Year-End Catch Reports: https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/groundfish_catch_accounting and https://d23h0vhsm26o6d.cloudfront.net/4_241108-Recreational-Catch-and-Effort-Statistics-Cod-and-Haddock-NEFSC.pdf

due to the lack of understanding between the biologically distinct populations and the potential for stock mixing, as well as a mismatch between management units and the biological populations.

Recognizing the new stock structure in the FMP could help prevent loss of spawning populations and balance fishing mortality across biological populations. It could also allow stock-specific management measures that facilitate recovery of depleted stocks and strengthen their resilience (McBride and Smedbol 2022).

iv. The stock is a target of a fishery.

Historically, Atlantic cod was a primary target of the commercial and recreational groundfish fisheries. The Northeast Multispecies FMP was created in 1985 and included Atlantic cod from the beginning. However, in recent years, it has become a constraining species for the sector program within the commercial and recreational groundfish fleets. As detailed above, cod remains an important part of the commercial and recreational fisheries.

v. The stock is important to commercial, recreational, or subsistence users.

Each new proposed Atlantic cod stock is important commercially and/or recreationally. The SNE cod stock mainly supports a recreational fishery with little effort seen from the commercial fishery in recent years. Conversely, the revised GB cod stock and EGOM cod stock supports the commercial fishery contingent and sees little to no effort from the recreational fleet. The WGOM stock supports commercial and recreational fisheries. Further, once rebuilt, it is expected these stocks would support more vibrant fisheries.

vi. The fishery is important to the Nation or to the regional economy.

Historically, cod was the basis of the economy in New England, as memorialized among some of the first coinage minted in the region and the iconic 'Sacred Cod' that hangs in the Massachusetts State House in Boston. Because of its historic role in the founding of the region's economy, cod resonates in the culture of this place and the people that live within it. The cod fishery continues to be an important part of the regional character, culture, and local communities. Once rebuilt, the cod stocks will support a stronger fishery with increased economic and social benefits for communities within the region.

vii. The need to resolve competing interests and conflicts among user groups and whether an FMP can further that resolution.

Recognizing the new stock structure in the FMP could allow stock-specific management measures that facilitate recovery of depleted stocks and strengthen their resilience (McBride and Smedbol 2022). There are multiple sectors in the fishery that fish in these geographic areas and have catch or bycatch of cod. Revising the stock structure to better match the biological populations may allow for tailored management measures for the corresponding stocks and areas. Additionally, for the recreational fishery it could allow for component-specific measures to balance the needs of private anglers and for-hire recreational businesses.[4]

The United States and Canada have been jointly managing several groundfish stocks included in the Northeast Multispecies FMP since 1998 under the U.S./Canada Resource Sharing Understanding. The eastern portion of the current GB cod stock was added to the shared management agreement in 2004. The revised GB stock would continue to be jointly managed by the US and Canada.

viii. The economic condition of a fishery and whether an FMP can produce more efficient utilization.

[4] See: Atlantic Cod Management Transition Workshops Summary Report

Atlantic cod has been managed under the Northeast Multispecies FMP since 1985. Notable amendments to the FMP include Amendment 16 (2010) which broadly adopted the sector management program and a system of annual catch limits and accountability measures to maintain catch levels, and Amendment 17 which expanded sector provisions to state operated permit banks. Members within the sector program noted at the Atlantic Cod Management Transition Workshops[5] the importance of permit banks to allow for the distribution of fish at reduced costs, and its role as a buffer supporting the sustainability of the fishery. Revising the stock structure to better match the biological populations is expected to improve the probability of rebuilding the U.S. populations of Atlantic cod and could allow further support to the commercial fishery to stabilize the market.

ix. The needs of a developing fishery, and whether an FMP can foster orderly growth.

The U.S. fishery for Atlantic cod is well established, but revising the stock structure to better match the biological populations is expected to improve the probability of rebuilding the U.S. populations of Atlantic cod. Recognizing the new stock structure in the FMP could facilitate stabilizing of the commercial fishery market and a reduction in barriers to entry of the fishery to foster orderly growth as the stocks rebuild to healthy populations. Additionally, including the stock boundaries would be instrumental to improved monitoring and better performing assessments that could in turn provide support for further growth in the cod fishery.

x. The extent to which the fishery is already adequately managed by states, by state/Federal programs, or by Federal regulations pursuant to other FMPs or international commissions, or by industry self-regulation, consistent with the requirements of the Magnuson-Stevens Act and other applicable law.

The Atlantic cod fishery is currently managed under the Northeast Multispecies FMP and by state fishery management agencies. The sector program allows for the flexibility and self-regulation of permitted vessels to operate within the bounds of their allocated sub-ACL. Revising the stock structure for Atlantic cod within the Northeast Multispecies FMP would be consistent with National Standard 2 requirements for use of the best scientific information available. Further, revising the stock structure to better match biological populations would better support management to rebuild the Atlantic cod stocks, consistent with National Standard 1, to support commercial and recreational fisheries.

[5] Atlantic Cod Management Transition Workshops Summary Report