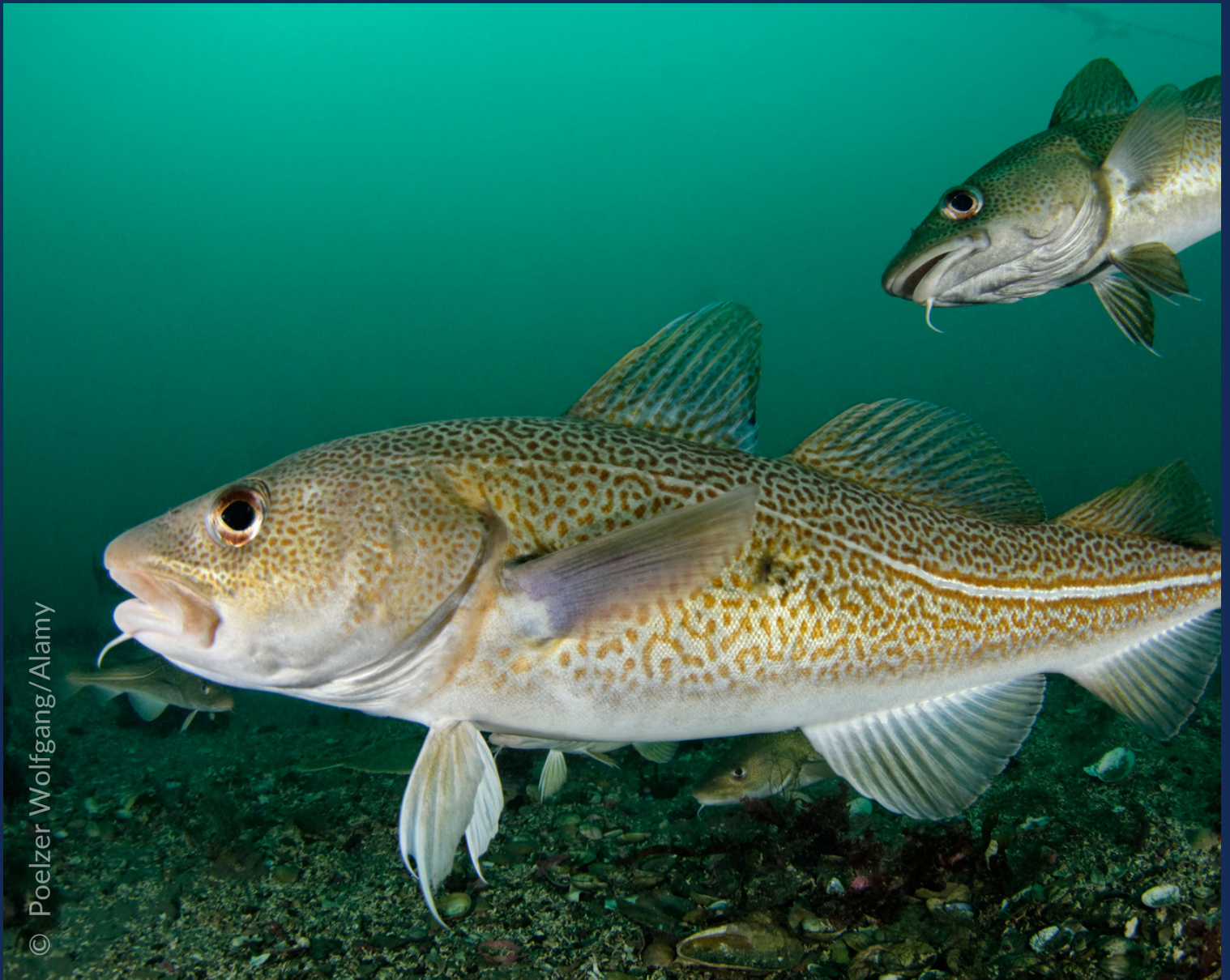




Oceana Canada Recommendations for 2J3KL Northern Cod Management in 2024-2025



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Robyn Morris
Senior Resource Manager
Resource Management and Indigenous Fisheries
Fisheries and Oceans Canada,
Newfoundland and Labrador Region

RE: Oceana Canada Recommendations for 2J3KL Northern Cod Management in 2024-2025

Dear Robyn Morris,

As a recent observer at the 2J3KL Northern Cod Advisory Committee meeting, I am writing today regarding upcoming management decisions for this stock. Oceana Canada is encouraged to see Fisheries and Oceans Canada's (DFO) new assessment of northern cod incorporate a longer time series, juvenile surveys and ecosystem approaches. This new science is welcome and urgently needed to guide cod back to healthy levels. Oceana Canada appreciates the opportunity to participate in the advisory process and recommends the following measures to rebuild northern cod:

- 1. Follow scientific advice.** Reduce fishing removals to minimize the risk of stock decline and support rebuilding by setting the Maximum Authorized Harvest for the stewardship fishery at 50 per cent of current levels;
- 2. Implement the Fishery Monitoring Policy and a robust monitoring program.** Identify and account for all sources of fishing mortality, including the recreational fishery;
- 3. Develop strong fisheries management.** Establish an Upper Stock Reference point, recovery targets, timelines and measurable objectives that follow the Precautionary Approach (PA) Framework and rebuilding regulations under Canada's *Fisheries Act* by the end of 2024.

We provide more detail on these recommendations below.

- 1. Follow scientific advice.** Reduce fishing removals to minimize the risk of stock decline and support rebuilding by setting the Maximum Authorized Harvest for the stewardship fishery at 50 per cent of current levels;

The new assessment of northern cod now incorporates a crucial factor: linking cod productivity and the availability of capelin¹. Capelin are expected to remain at only 9 per cent of pre-collapse levels in the short term², this limitation significantly hampers the potential growth of cod populations. It's imperative that robust measures to rebuild both stocks be implemented this year. The critical ecological relationship between cod and capelin means that rebuilding these populations will strengthen the resilience of the northeast coast marine ecosystem, never more important given the growing threats posed by climate change. The upcoming management decisions regarding cod and capelin will serve as a litmus test for how well the Minister of Fisheries and Oceans adheres to both the letter and the intent of the *Fisheries Act*, particularly under sections 6.2 and 6.1.

As stipulated in section 6.1(1) of the Fish Stock Provisions, the Minister is mandated to implement measures that maintain major fish stocks at levels that promote their sustainability, accounting for biological factors and environmental conditions. However, the biological indicators for cod paint a picture that is a cause for great concern: high levels of natural mortality, declines in weight and length at age, stagnant or negative surplus production and insufficient capelin availability to support growth.

As of 2024, the stock is 1.24 times the Limit Reference Point (LRP) with 22 per cent probability that it is in the critical zone. By next year under current catch levels, the stock is projected to be further depleted at 1.17 times the LRP with 34 per cent probability of being in the critical zone. Worse still, by 2027 the stock decreases to a dismal 1.06 times the LRP with 47 per cent probability of being in the critical zone. This forecast can improve if action is taken now. By reducing catch levels by 50 per cent, the stock is projected to be 1.19 times the LRP with 32 per cent probability it is in the critical zone by 2025, and 1.10 times the LRP with 44 per cent probability it is in in the critical zone in 2027. The probability of the stock declining into the critical zone increases from 42 per cent with zero removals to 52 per cent if removals are doubled from current levels. Therefore, the level of total removals increases the risk of the stock declining sooner and to a lower biomass at current or increased levels.

In keeping with the 2009 PA Framework, management measures must encourage stock growth and arrest preventable declines when a stock's biomass is decreasing and approaching the LRP³. Despite the revised outlook indicating that the stock has been above the revised LRP since 2016, growth has stagnated. This stagnation

¹ As presented at the CSAS Technical Briefing on Stock Assessment of Northern Cod in 2J3KL on Tuesday, March 26th, 2024.

² DFO. 2024. Assessment of Divisions 2J+3KL Capelin in 2022 and Evaluation of Proposed Limit Reference Points. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2024/004.

³ DFO. 2009. A fishery decision-making framework incorporating the precautionary approach. <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precaution-eng.htm>

coincided with a period of substantial increase in total landings⁴ from the stewardship fishery. Looking ahead, maintaining or increasing current fishing removals poses a significant risk to the stock declining into the critical zone in the short-term. To mitigate this risk and arrest any further preventable decline, it's advisable to reduce fishing removals by 50 per cent from current levels. Keeping fishing pressure low enables a faster rebuilding period for the long-term prosperity of coastal communities and a resilient cod population in the face of changing climate conditions.

2. Implement the Fishery Monitoring Policy and a robust monitoring program. Identify and account for all sources of fishing mortality, including the recreational fishery;

We are encouraged by the incorporation of a likely range of catch (lower and upper bounds) in the new assessment framework, which allows for an estimation of nonreported catches to be included in the estimate of fishing mortality. Similarly, we support the prioritization of northern cod for implementing the Fishery Monitoring Policy.

In consultation with participants of the recreational or 'food' fishery in the province, we recognize the importance of this fishery as the only opportunity for people to engage in the fishing heritage of northern cod outside of the stewardship fishery. As evident throughout literature^{5,6} and community knowledge, the level of recreational catches for the northern cod stock can be substantial. In 2023, recreational removals are estimated based on mark-recapture tag returns to be 2,200 (± 63) tonnes. It continues to be an urgent matter to strengthen monitoring measures for the recreational fishery given the impact that fishing mortality has on the recovery of cod.

According to the Fish Stock Provisions, the Minister's management decision regards total removals. However, there are no direct measures of landings from the recreational fishery. There is no way to set and assess an appropriate harvest level without improved monitoring. The Office of the Auditor General's report on fisheries monitoring⁷ also emphasizes the need for measurable catch monitoring objectives, which are not determined for this stock yet.

⁴ Reported landings in 2015 were 4,436. Landings more than doubled to 10,105 tonnes in 2016 and increased to 12,999 in following years.

⁵ DFO. 2022. Stock assessment of Northern cod (NAFO Divisions 2J3KL) in 2021. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2022/041. <https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/41078457.pdf>

⁶ DFO. 2021. 2020 Stock Status Update for Northern Cod. DFO Can. Sci. Advis. Sec. Sci. Resp. 2021/004. <https://waves-vagues.dfo-mpo.gc.ca/Library/40966458.pdf>

⁷ Office of the Auditor General of Canada. 2023. Reports of the Commissioner of the Environment and Sustainable Development to the Parliament of Canada. Monitoring Marine Fisheries Catch—Fisheries and Report 9. Oceans Canada.

We strongly recommend that DFO, in consultation with Indigenous Peoples and stakeholders, co-develop a recreational fishery monitoring program for northern cod so that total fishing mortality can be estimated. Measures to consider include mandatory logbooks, app-based reporting and licensing. This must also take place alongside advancing the Fishery Monitoring Policy. Given the five-year delay for initiating monitoring assessments, we recommend that both the gap analysis and stakeholder consultation to set monitoring objectives be completed this year. Finally, the stewardship fishery tagging program is an important input for the stock assessment and must be a scientific priority to continue this program.

3. Develop strong fisheries management. Establish an Upper Stock Reference point, recovery targets, timelines and measurable objectives that follow the Precautionary Approach (PA) Framework and rebuilding regulations under Canada's Fisheries Act by the end of 2024.

The current state and trajectory of the northern cod stock signals the need for urgent intervention to reverse decline and manage to healthy levels. The 2009 PA Framework states that if a fish stock is decreasing and approaching the LRP a rebuilding plan should be developed so that it is ready to be implemented if the stock declines to its LRP. In the short-term, the risk of stock decline is moderately high (62 per cent) to high (76 per cent) under various catch scenarios and would likely trigger the requirement for a rebuilding plan in three years under high catches⁸.

Last year, the rebuilding plan working group identified a schedule to complete a rebuilding plan by April 4th, 2024. According to this timeline, measurable objectives would be developed by late spring or early summer 2023. However, after the stock assessment framework review took place in October 2023, the working group arrested activities since the stock was likely above the LRP. This stock has a wealth of data and a state-of-the-art model capable of supporting all the necessary management elements including targets, timelines and measurable objectives. We recommend the working group re-engage to establish these elements by the end of the year.

Comprehensive rebuilding and management plans offer an opportunity to identify socio-economic, cultural, ecological, monitoring and compliance objectives with

⁸ According to DFO guidelines for writing rebuilding plans, a stock is considered to be at or below its LRP if the terminal year stock status indicator is estimated to be at or below the LRP with a greater than 50 per cent probability or if the projected stock status indicator falls below the LRP with a greater than 50 per cent probability under a zero catch scenario in a 1-year projection. For more, see: Guidelines for writing rebuilding plans per the Fish Stocks Provisions and A Fishery Decision-making Framework Incorporating the Precautionary Approach. 2022. <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precautionary-precaution-eng.htm>

Indigenous Peoples and stakeholders to achieve a shared vision for success⁹. DFO must follow the guidance^{10,11} outlining best management practices demonstrated to rebuild fish populations. Managing northern cod without a comprehensive plan in place is a disservice to the communities of Newfoundland and Labrador, deeply rooted in the cultural and socioeconomic fabric of cod fishing.

Furthermore, the interdependence between northern cod productivity and the availability of capelin underscores the necessity for clear targets and objectives within a rebuilding plan. Since 2017, the stability of the capelin to cod ratio suggests that current management practices are maintaining the northern cod stock at the LRP rather than facilitating growth. To foster the recovery of both stocks, higher biomass targets are imperative. By aligning management efforts with these targets and engaging stakeholders in the development process, DFO can ensure a more inclusive and effective approach to rebuilding fisheries in Newfoundland and Labrador.

This is an exciting time for DFO to fulfill its mandate to rebuild fisheries. We appreciate the opportunity to provide input and thank you for considering our recommendations for upcoming management decisions. We will continue to be engaged in the process and look forward to discussing our recommendations and any further developments.

Sincerely,



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⁹ For a discussion of potential long-term socio-economic benefits of rebuilding Northern cod see: Oceana Canada. 2019. Oceans of Opportunity: The Economic Case for Rebuilding Northern Cod https://oceana.ca/sites/default/files/the_economic_case_for_rebuilding_northern_cod_report.pdf

¹⁰ Guidelines for Implementing the Fish Stocks Provisions in the Fisheries Act. 2022. <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/guidelines-lignes-directrices-eng.htm>

¹¹ Noting that DFO is undergoing an internal process to update guidance on preparing an IFMP. The current guidance is from 2010, see:

Preparing an Integrated Fisheries Management Plan (IFMP). 2010. <https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/guidance-guide/preparing-ifmp-pgip-elaboration-eng.html#toc-n7>

For international best practices on rebuilding fisheries see:

Garcia, S. M., Ye, Y., Rice, J., & Charles, A. (2018). Rebuilding of Marine Fisheries, Part 1: Global Review. FAO Fisheries and Aquaculture Technical Paper No 630/1. UN Food and Agriculture Organization. <http://www.fao.org/3/ca0161en/CA0161EN.pdf>