



Oceana Canada's recommendations for 4T spring and fall spawning herring

RESPONSE TO GSPAC SPECIAL MEETING ON NOVEMBER 7, 2023



Oceana Canada

Halifax Office

1701 Hollis St, Suite 800

Halifax, NS Canada B3J 3M8

+1.844.362.3262

[OCEANA.CA](https://www.oceana.ca)

November 24, 2023

Carole LeBlanc

Acting Associate Regional Director, Fisheries and Harbour Management.

Gulf Region

Fisheries and Oceans Canada

Carole.LebLANC@dfo-mpo.gc.ca

RE: Oceana Canada recommendations in response to GSPAC special meeting on November 7, 2023

Dear Carole LeBlanc,

Oceana Canada appreciates Fisheries and Oceans Canada (DFO) Gulf Region's proactive approach to the 2024 management season for 4T herring spring and fall spawning components and for the opportunity to provide feedback as a member of the Gulf Small Pelagic Advisory Committee (GSPAC). In response to the GSPAC special meeting held on November 7, 2023, we provide the following recommendations regarding 4T herring spring and fall spawning components management measures, the spring spawners draft rebuilding plan and multi-year management decisions for the fall spawners.

Maintain full closure of fisheries intercepting the spring spawner component

The spring spawning component of 4T herring continues to suffer from poor recruitment driven by environmental conditions, reduced weight-at-age, high natural mortality conditions and unaccounted fishing mortality due to bait removals. Given the poor state of the stock and negative outlook, we recommend that the department follow all the draft rebuilding plan management measures including maintaining a full closure of the commercial and bait spring fisheries to retain the potential for stock growth.¹ Given the episodic fluctuations of forage fish populations and ability for strong year classes to dramatically change the potential yield, continuing the closure to ensure that removals are kept to the absolute minimum provides the best chance for recovering this population while the rebuilding plan is finalized.

The department must follow the precautionary approach framework which states that management actions must promote stock growth and removals from all sources must be kept to the lowest possible level. We also direct the department to the Fish Stocks Provisions (FSP) of the *Fisheries Act* which states that while a rebuilding plan is being developed, the level of fishing on the stock must be consistent with rebuilding the stock above the limit reference point (LRP).

Adopt a precautionary Total Allowable Catch (TAC) of 8,000 metric tonnes for the fall spawner component, implement multi-year management decisions and initiate a rebuilding plan

Given that the stock has been declining since 2011, and the 2022 research document states that fishing mortality has been exceeding the removal reference since 2020, we recommend a reduced

¹ See Table 7 in draft rebuilding plan.

TAC of 8,000 metric tonnes. This level is estimated to promote stock growth and arrest further declines. Annual catch levels below 10,000 metric tonnes offer the greatest probabilities of increasing spawning stock biomass (SSB) in the short and long term. While higher probabilities correspond with catch levels from 0 to 4,000 t, the 8,000 t catch level is expected to have a 60 per cent probability of growth in the next year and a 51 per cent probability of a 5 per cent increase in SSB. We also recommend that management decisions for the fall spawners be extended to a 2-year management cycle to provide for consistency to the fishing industry while also ensuring a precautionary quota over multiple years to arrest further declines in the SSB.

Given that the fall spawner component is declining to the LRP and is in the proposed next batch of stocks to be prescribed to the FSP in the *Fisheries Act*, we urge the department to initiate a rebuilding plan process. Since the spring rebuilding plan is near completion, the collective knowledge to address many of the challenges with the development process is already in place. To provide the best chance of maintaining herring in its vital place as a forage fish in the Gulf ecosystem, and to maintain any portion of the Gulf herring fishery in the future, action needs to be taken now to rebuild the stock and prevent its decline into the critical zone.

Strengthen and implement the spring spawner herring rebuilding plan

On February 3, 2023, Oceana Canada submitted our feedback on the draft rebuilding plan for the spring spawners. We appreciate the department's efforts to strengthen the draft plan and address some of our key recommendations by including both short and long-term projections, an estimated generation time to inform the rebuilding timeline, as well as clearly stating the limitations of these estimates and plan to reassess this information in future review periods. As well, the addition of management measures to advance current scientific knowledge on the changing environment and ecosystem, with specific mention to incorporate climate change-related processes in the provision of advice.

Several of our recommendations remain unaddressed including:

- **Short and long-term stock conservation objectives** – We recommend including a milestone or specific and measurable interim targets, such as achieving a positive stock growth trajectory with a 75 per cent probability over a five-year timeframe. When rebuilding to beyond the LRP is not expected to occur in a reasonable timeframe, milestones are helpful to direct efforts and decision making and monitor the trajectory of rebuilding. In the absence of an up-to-date and publicly available integrated fisheries management plan (IFMP), we also recommend including long-term objectives such as achieving a target size or age structure and restoring historical distribution.² These objectives will guide the long-term vision for the stock's health and should carry forward to the IFMP upon its scheduled completion in 2023-2024.³
- **Socio-economic and cultural objectives** – We recommend including additional objectives such as maintaining social or cultural value or restoring economic benefits. Further detail is needed on the economic, social and ecological impacts of the rebuilding plan to account for broader ecosystem interactions and allow for mitigation planning such as the use of alternative bait. Examples of monitoring the success of ecological, social, economic and

² DFO (2022). Guidelines for writing rebuilding plans per the Fish Stocks Provisions and A Fishery Decision-making Framework Incorporating the Precautionary Approach. Fisheries and Oceans Canada. <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precautionary-precaution-eng.htm>

³ DFO (2023). Sustainable Fisheries Framework Work Plan for Fiscal 2023–2024. Fisheries and Oceans Canada. <https://www.dfo-mpo.gc.ca/about-notre-sujet/publications/work-plan-travail/2023-2024/wp-pt-eng.html#2b>

cultural priorities as components of rebuilding progress are seen in Tables 23-27 in the draft Haida Gwaii Pacific herring rebuilding plan.⁴

In response to the November 7 presentation on the rebuilding plan, we are extremely supportive of the department's priorities for ongoing and future research including on the role of large fish for reproductive output; pre-recruit growth and diet; incorporation of fish harvester knowledge; and microbial genetics to help spatially disaggregate the spring spawners. We recommend that these research recommendations be fully integrated into measurable aspects of the rebuilding plan.

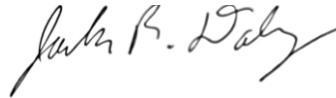
The rebuilding plans for herring and groundfish, which the department is scheduled to produce by Spring 2024, must be consistent with ecosystem approaches. Ecosystem approaches to fisheries management can both aid in the rebuilding of herring and groundfish populations in the medium to long-term and restore the Gulf of St. Lawrence to an abundant and biodiverse ecosystem. This comprehensive approach is essential for the long-term sustainability of coastal communities and fishing enterprises.

We appreciate the opportunity to participate in the committee and provide input. We will continue to be engaged in the process and look forward to discussing the recommendations above and any upcoming developments.

Sincerely,



Rebecca Schijns, M.Sc.
Fishery Scientist, Oceana Canada
Tel: (647) 457-7712
rschijns@oceana.ca



Jack Daly, M.A.
Marine Scientist, Oceana Canada
Tel: (508) 961-7059
jdaly@oceana.ca

⁴ Council of Haida Nation (CHN), Department of Fisheries and Oceans (DFO), Parks Canada Agency (PCA). Haida Gwaii 'iináng | iinang Pacific Herring: An Ecosystem Overview and Ecosystem-based Rebuilding Plan. 2022. <https://haidamarineplanning.com/wp-content/uploads/2022/11/1.-DRAFT-Haida-Gwaii-Herring-An-Ecosystem-Overview-and-Ecosystem-based-Rebuilding-Plan-4.pdf>