



Marine Finfish Aquaculture Conditions of Licence Review for July 1, 2024 Implementation

Summary of Proposed Changes Phase 2: January to March 2024

The purpose of this document is to summarize proposed changes to the marine finfish conditions of licence that may be implemented when licences are re-issued on or before July 1, 2024, and is based on Departmental reviews, science advice and engagement to date. This review is part of a scheduled process, as current marine finfish aquaculture licences expire on June 30, 2024.

Key Steps and Timelines for Marine Finfish Conditions of Licence Review

Phase 1: Plan & Set Objectives for conditions of licence Review – June 2023 - January 2024 - COMPLETE

Phase 2: Collect Input on proposed changes – January - March 2024

Phase 3: Initial Drafting - January - March 2024

Phase 4: Engage, Review and Re-draft – March - April 2024

Phase 5: Finalize – April - June 2024

In **phase 1** DFO identified the intended objectives of the conditions of license, which pinpoint what we want to achieve and issues to be addressed.

In **phase 2** DFO is engaging on a summary of changes, proposed by partners and stakeholders, including DFO, and inviting any new input.

In **phase 3** DFO will draft conditions of licence to help to achieve the stated objectives.

In **phase 4** DFO will provide a revised summary of proposed changes to external partners and stakeholders for review as we continue to refine our conditions of licence recommendations.

In **phase 5** DFO will finalize and publish the 2024 Marine Finfish Conditions of Licence.

Context

DFO may implement licence conditions for:

- proper management and control of fisheries
- conservation and protection of fish

Current marine finfish conditions of licence expiring in June 2024 are accessible here: <https://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permis/docs/licence-cond-permis-mar/index-eng.html>

Objectives

The Departmental objectives of the COL review are as follows:

- To mitigate risks to fish and fish habitat
- To write clear, consistent, enforceable and fair conditions of licence
- To collect clear, accurate and timely data for transparency and proper management and control of the fishery
- To increase ability to adaptively manage and deal with emergent issues in a timely manner



Instructions

This document may be reviewed and feedback returned to DFO by **March 8, 2024**. Written feedback can be provided to DFO.AQConsult-AQConsultez.MPO@dfo-mpo.gc.ca.

DFO will provide a summary of feedback received during Phase 4. Note that the management measures which are proposed through the reissuance process but fall outside the scope of licence conditions may be addressed through other Departmental management tools. If you would like to discuss the rationale for not implementing specific suggestions, please contact DFO.AQConsult-AQConsultez.MPO@dfo-mpo.gc.ca.

Changes Considered for 2024 Licences

Administration

There are several administrative changes being considered to improve flow, clarity and enforceability. The changes include clarifying language and adding definitions, standardizing mandatory reporting timelines, and updating reporting templates.

Interactions with Wild Fish and Megafauna

The marine finfish conditions of licence currently do not require that companies record and submit photos or videos of entangled or entrapped seals or sea lions as required for other megafauna (i.e. whales, sharks, and turtles). To improve species identification and to aid in adaptive management and mitigation measures, the Department is considering also requiring photographs/video of entangled and/or deceased seals and sea lions.

Sea Lice Management

Hydrogen peroxide bath treatments can effectively immobilize sea lice, removing them from salmon. However, a small proportion of sea lice can remain viable after immobilization, with the potential to reattach to wild or farmed fish. To address this, the Department proposes requiring licence holders that utilize hydrogen peroxide baths as a sea lice management tool to ensure the equipment captures all sea lice removed from fish, and that captured sea lice are disposed of at land-based facilities.

Freshwater baths are effective at killing sea lice under specific treatment conditions, but current conditions do not describe how licence holders must utilize freshwater baths for effective treatment. The Department is considering adding conditions that outline the required minimum duration and initial salinity of freshwater baths used for sea lice management.

In 2020, the Department introduced a restriction on the number of days that farms could exceed the regulatory sea lice threshold during the out-migration window, with an intent to reduce the potential time wild fish may be exposed to higher levels of sea lice. This limit was informed by the efficacy period of emamectin benzoate (six weeks/42 days), one of the most prevalent tools at that time utilized to manage sea lice. Data collected since 2020 has demonstrated that companies are reducing their sea lice numbers in significantly less time, largely due to the use of new treatment technologies like mechanical removal and bath treatments. The Department is considering reducing the 42-day threshold to a lower target.

The Department has utilized the 3.0 motile sea lice/salmon threshold since 2010. The Department is considering if this threshold, or a reduced threshold, is appropriate into the future. In addition, the Department is considering how a farm-level or area-level threshold could be utilized in addition to the fish-level threshold.

Inventory Accounting

Companies maintain records of fish inventories, counting the number of fish that enter farms at the beginning of the production cycle, the number of fish mortalities, escapes, and finally the number of fish landed at a



processing plant. At present, while DFO collects data at various points within this process, companies are not required to conduct inventory accounting at the completion of a production cycle. The Department is considering adding a condition requiring inventory accounting, which would include a summary of the number of fish which enter a net pen, a summary of fish lost due to escape, fish deaths related to treatments or mortality, and fish transported for harvest, along with an explanation, if necessary, for any discrepancy in this accounting.

Licence Duration

At this time, the Department is consulting on a licence duration of between two (2) and six (6) years.

New Technologies

The marine finfish aquaculture industry is often trialing innovative technology to meet conditions of licence or to advance social, environmental, or economic targets. At present, not all of these tools and products are being shared with nor approved by the Department. DFO is considering creating conditions that will require licence holders to share more information on current and future plans for deployment of new technologies, share technical information on products, and monitor and report on the effectiveness and potential impacts of those technologies. The amount of information sharing, monitoring, and reporting would be appropriate to the expected risk of the product, and clarity will be provided on what DFO must approve in order to be utilized at facilities.

The Department is seeking Science advice on the use of new tools (e.g., eDNA or eRNA) in the finfish aquaculture context, and if appropriate, may require new types of water, sediment, or biological sampling to understand wild fish or fish habitat impacts.

Area-Based Aquaculture Management

The Department piloted an Area-Based Aquaculture Management initiative from 2022-2024, and is considering adding requirements for licence holders to participate in area-based management committees, comprised of Canada, the Province of BC, and local First Nations partners, which will start to set out the framework for future implementation of the Transition Plan. In addition to information-sharing and transparency, this approach could look more closely at hydro-connectivity and interactions between farms within defined geospatial areas of the coast.