

# Managing interactions between sea lice from finfish farms and wild salmonids

## SEPA response to consultation feedback: Implications assessment



# 1. Overview

## 1.1 Introduction

On 31<sup>st</sup> May, we published our second consultation on the development of a regulatory framework for managing the interactions between sea lice from fish farms and wild salmon and sea trout. The consultation included an initial assessment of the implications of our proposals for communities, the economy and the environment.

We asked consultees to provide us with feedback on this assessment. The information provided in the consultation was intended to inform that feedback. It included the following:

- Sea areas that we proposed to identify as wild salmon protection zones (WSPZs) and the relative risk status of each of these WSPZs.
- The proportion of existing farms on the West Coast and around the Western Isles in the different relative risk categories based on the modelled relative contribution to infective-stage sea lice concentrations in WSPZs of each farm and a measure of the relative capacity of the WSPZs to accommodate those concentrations.
- A description of our proposed risk-based approach to permitting.

We also stressed during stakeholder engagement sessions during the consultation period that consultees should consider how the proposals would be likely to affect their interests and provide feedback on the initial implications assessment when responding to the consultation. This would allow us to update the assessment considering their input.

This report sets out our updated implications assessment for the new framework, taking account of the changes to it that we made following the second consultation and the feedback we received on our initial implications assessment.

## 1.2 Consultation responses

The responses from stakeholders groups were very different. Fish farm operators were strongly critical of the initial implications assessment regarding it as inadequate. They considered that

the regulatory framework would have a serious negative impact on the fish farming industry resulting in:

- Reduced farmed fish survival because of unnecessary treatments required to comply with permit conditions.
- Delays in obtaining authorisation for farm development and increased uncertainty with respect to their plans for farm consolidation, farm expansion or new farm development.
- Increased environmental monitoring costs.
- Increased costs associated with development of refined models.
- Substantial uncertainty in predicting investment options from indicative results of an interim screening approach.

The smaller fish farm operators were particularly concerned about the costs associated with modelling. Some from the sector also asked if we had included the human health benefits associated with the consumption of farmed salmon.

Many in the sector were of the view that fish farming has little adverse impact if any on wild salmon populations and, consequently, the framework would provide little if any benefit to wild salmon populations.

Many wild fisheries interest groups were of the view that existing farms were a problem for wild salmon populations and the benefits of the framework depended on accelerating action to reduce sea lice numbers on these farms. They also believed that our proposals for protecting sea trout populations would not be effective. However, overall wild fisheries and environmental interest groups were positive about the introduction of the framework.

Responses from local authority planning departments emphasised the benefits that the new framework would deliver for the planning system.

## **1.3 More detailed consultation feedback**

### **1.3.1 Aquaculture sector**

Bakkafrost Scotland

*Concerns over the potentially significant, negative impact that the proposals could have on its operations. Analysis of Implications' presents a crude, idealistic and subjective assessment of the magnitude of benefits/impacts arising from the SLRF. BFS disagrees with many aspects of the detail contained in this assessment.*

#### Kames Scotland

*The smaller production scale of independent operators such as Kames, means that the implementation of additional regulatory measures result in significantly greater cost of production burden which can be prohibitive for these operators.*

#### Loch Duart

*The scale of investment needed to develop the proposed models and introduce the proposed technologies (particularly as not yet fully developed) puts Loch Duart at a higher risk of failing to meet the proposed standards and not being able to develop its sites.*

#### Cooke Aquaculture Scotland.

*Would argue that any assessment of the potential impacts of the proposed SLRF needs to include consideration of the wide range of negative effects on fragile communities should the framework lead to a moratorium on development and eventually the removal of long-established farms across Scotland.*

### **1.3.2 Fisheries & environment interest groups**

#### Fishery Management Scotland.

*The effect of the new regulatory system on the health of wild salmonid populations is highly dependent on the manner and speed with which the framework is implemented. In our view the current proposals will have minimal or no positive benefit for sea trout populations. However, if the approach to existing farms is strengthened and accelerated and a more robust approach is adopted for sea trout, we believe that the sea lice framework will provide a positive basis upon which to address and manage the impact of sea lice on wild salmonids.*

#### Orkney Trout Fishing Association

*present system has no ability to protect wild sea trout, or salmon for that matter. The lice framework proposed by SEPA, if implemented correctly, should represent a massive step forward towards a situation where harm to wild sea trout is reduced.*

Scottish Environment LINK

*Proposed framework and its effective implementation will help our interests by managing risks to wild salmonid post-smolts from sea lice from finfish farms, helping to protect wild salmonids. The framework will also work as part of an adaptive regulatory and management system for aquaculture, working to ensure that any development of the industry is sustainable and within environmental limits.*

### **1.3.3 Public bodies**

Shetland Island Council

*having such a framework in place will provide greater clarity for planning authorities and certainty for developers on the information required to support planning applications and SEPA CAR licences.*

Argyll and Bute Council

*The Framework will make a positive contribution to the planning application process for finfish aquaculture. It will also mean that decisions relating to wildfish interactions and sea lice will be made by experts.*

## **1.4 SEPA response**

Fish farming businesses generally believed that the regulatory framework would have substantial negative impacts on the sector, with some suggesting that it would result in a moratorium on farm development.

The regulatory framework is designed to prevent deterioration in wild salmon populations and, in due course, drive improvements in sea areas where there is evidence that sea lice from farms are adversely affecting the condition of wild salmon or sea trout populations. It will place limits on the types and scales of farm developments able to proceed in higher risk locations. Scope for the development of conventional new open-net pen farms operating on a 2-year production

cycle or significant expansions of existing such farms will be most limited in the highest relative risk locations. This may make significant farm development is economically unattractive in such locations.

Farm developments in many of the higher-risk locations for sea lice and wild salmon interactions are already likely to be subject to other environmental constraints (e.g., ability of the environment to accommodate discharges of organic solids). This is because many higher-risk locations have relatively limited dispersion. They also tend to be in proximity to other farms and are likely to increase sea lice pressure on surrounding farms, potentially adding to the costs of sea lice management on those neighbouring farms. In our response to feedback we received on the second consultation, we provided information on the results of screening for 164 existing fish farms on the West Coast and Western Isles. Of these, 19 were identified as being in the highest-relative risk category.

The framework accounts for mitigation and, thus, does not create any no-go areas for development. For example, developments proposing short fish growth periods at sea timed to minimise the number of sea lice on the farms during the Spring sea lice management period for protecting wild salmon would be compatible with otherwise high relative-risk locations.

Considering all the above factors, our assessment is that the framework will:

- not lead to a moratorium on fish farm development.
- not have a significant effect on overall farmed salmon and rainbow trout production.
- have at most only very limited adverse implications for the economy and communities.

Responses from the sector stressed that Scottish low-carbon salmon and rainbow trout make an important contribution to a healthy diet. They considered that this public health benefit could be undermined by the sea lice regulatory framework. We can see no basis for the claim that the regulatory framework would compromise the production of salmon or rainbow trout in Scotland. It is also possible that the framework could help reassure consumers of the environmental credentials of Scottish-produced farmed fish.

Several responses from the sector were concerned that the framework would result in tensions between the responsibility of operators for farmed fish health and complying with sea lice limit

conditions that we would add to their permits. In our consultation, we recognised that such tension may arise, for example, where farm operators are faced with reconciling the requirements to control lice for the protection of the environment with managing farmed fish health issues that preclude some active interventions to control sea lice.

We do not expect significant tensions to arise frequently between farmers' responsibilities for farmed fish health and compliance with sea lice limit conditions:

- Farmers proposing new farms or expansions of existing farms will have a good understanding of the sea lice limit conditions that will apply to potential developments during the pre-application process. This will allow them to consider how they will both manage farmed fish health and comply with sea lice limit conditions when preparing applications.
- For existing farms, we will not impose blanket new, restrictive sea lice limits. The sea lice limit conditions we will apply from mid-March 2025 to existing farms will be for the purpose of controlling increases in sea lice numbers. As these conditions will reflect existing sea lice management performance, their achievement is expected to be compatible with the farms' existing farmed fish health management practices.
- If a farm fails to comply with sea lice limit conditions, we will require the farmer to bring the farm back into compliance. However, it will be up to the farmer to decide on the best ways to do so considering farmed fish health.

If non-compliance with sea lice limit conditions occurs repeatedly because a farm is unable to act to control sea lice because of farmed fish health issues, we will require the operator to re-assess whether the farm is sustainable in its current form, taking account of its location, stocking density, and operating model. If the operator wishes to explore re-locating production to another location as a means of reducing fish health challenges, we will run our sea lice and farm discharge screening models to help identify potential environmentally optimal locations.

If tensions do occur between farmers' responsibilities for farmed fish health and their obligations under the framework, we will seek to bring together, and work with, bodies and organisations with farmed fish health responsibilities and expertise to help us understand those tensions and

whether information we can provide about the water environment may be of use to operators in solving those tensions.

The responses from fisheries/environment interest groups suggested that the benefits of the framework would depend on the way in which the framework was introduced. We accept that the credibility of the framework will depend on our actions over the next two years. We are committed to delivering the environmental benefits which we believe can be delivered by the new framework.

The responses from local authorities highlighted the benefits to the planning system of the framework. We believe that the expansion of our pre-application screening to include sea lice will contribute to the development of a joint pre-application process.

## 2. Analysis of implications

### 2.1 Introduction

SEPA's primary role is to protect and improve the environment. In carrying out our regulatory functions for this purpose, we must contribute to improving the health and wellbeing of people in Scotland and to achieving sustainable economic growth, except if doing so would be inconsistent with our primary role<sup>1</sup>.

We also have specific duties to:

- have regard to the social and economic impact of the exercise of our functions in protecting the water environment; and
- act in the way best calculated to contribute to the achievement of sustainable development in so far as is consistent with our purpose of protecting the water environment<sup>2</sup>.

Engagement and consultation with relevant stakeholders allows us to understand the effects of our proposals on their interests which informs the development of our proposals.

---

<sup>1</sup> <https://www.legislation.gov.uk/asp/2014/3/section/51>

<sup>2</sup> <https://www.legislation.gov.uk/asp/2003/3/part/1/chapter/1/2022-10-24?timeline=false&view=plain>



This implications assessment reflects what we have taken from discussions with, and comments from, a wide range of interests, including finfish producers, environmental NGOs, community groups, other regulators and public bodies, wild fishery organisations, and researchers during the development of the proposals and from the feedback on the two consultations.

For this analysis, we considered the National Performance Framework outcomes<sup>3</sup>, and focussed on the Communities, Economy and Environment outcomes (See Section 2.2 below).

## 2.2 Context for the assessment

Scottish Ministers have made the commitment that the regulatory framework must:

- be designed to protect the environment by managing the risk to wild salmonids from sea lice from fish farms.
- utilise an adaptive, spatially-based risk assessment framework.
- be applied through the Water Environment (Controlled Activities) (Scotland) Regulations 2011.

The framework is intended to support the following three outcomes in the National Performance Framework:

- Communities. *We live in communities that are inclusive, empowered, resilient and safe.*

There are strongly divergent views among local communities and third sector bodies. Many welcome the investment and jobs that aquaculture developments can bring. Others are strongly opposed to such developments because of concerns about risks to the local environment, including to wild salmonid populations.

Our framework is based on an objective risk assessment process. This will improve understanding of the potential environmental effects of farm developments, helping developers and communities identify the best locations for farm developments.

- Economy. *We have a globally competitive, entrepreneurial inclusive and sustainable economy.*

---

<sup>3</sup> <https://nationalperformance.gov.scot/national-outcomes>

The framework will help fish farm developers understand where it will be relatively easy to develop a farm and where more investment in lice control, and in evidence to justify development, will be required. Operators of farms that are complying with the conditions of their licence will be able to reassure fish buyers of their farms' environmental performance.

- **Environment.** *"We value, enjoy, protect and enhance our environment."*

Atlantic salmon have been in serious decline in recent decades across their North Atlantic range. Scotland has an international responsibility to play its full part in a collective response.

The framework aims to help prevent further deterioration in the condition of wild salmon by managing risks to wild salmon post-smolts from sea lice from farm developments. It will also allow action to be taken to reduce pressure from sea lice where impacts are identified.

These outcomes, our general purpose and Scottish Ministers' specific expectations for the regulatory framework have framed the choices we have made in developing our proposals.

## 2.3 How we structured the assessment

Our assessment considers the implications of the new regulatory framework in relation to each of the three National Performance Framework outcomes referred to above.

In assessing the implications of the proposal, we have considered differences between what we expect once the framework is implemented and the situation under the current arrangements for managing

Under existing arrangements, local authorities are responsible for assessing the risk to wild salmonids from sea lice from fish farms when determining planning applications.

Marine Directorate and NatureScot (if a Special Area of Conservation or Marine Protected Area is potentially affected) provide advice<sup>4</sup>, on risks to wild salmonids to local authorities as statutory consultees.

Local authorities can also require farmers to produce an environmental management plan as a

<sup>4</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/factsheet/2020/11/marine-scotland-science-requirements-for-planning-applications-and-environmental-impact-assessments/documents/working-arrangements/working-arrangements/govscot%3Adocument/working%2Barrangements.pdf>

interactions between sea lice from finfish farms and wild salmonids.

We also considered the likely differences in the implications of the framework compared to the implications of adopting Norway’s spatially-based risk management framework, known as the traffic light system.

condition of planning consent. The plan can require farmers to report fish numbers and adult female lice numbers; carry out monitoring to assess potential interaction with wild salmonids; and detail how monitoring information will feed back to management practice.

We focused the assessment on the groups and organisations that we think are most likely to be affected by the implementation of the framework:

- Marine finfish farm operators
- Parts of the food chain (e.g., buyers such as supermarkets)
- Coastal communities
- Wild salmonid fishery organisations
- Regulators and public body consultees: Marine Scotland, NatureScot, local authorities, SEPA.

## 2.4 Initial analysis of implications

Communities. *We live in communities that are inclusive, empowered, resilient and safe.*

	Fish farming industry	Market	Communities	Fishery interests	Regulators
Early engagement on development proposals			+++	+++	+
Information on environmental risk/farm performance			++	++	+
Public debate based on objective risk assessment			+	+	++

**Key:** *Relative magnitude of an implication is indicated by the number of “+” signs (for positive implications) or “-“ signs (for negative implications).*

#### Early engagement

- Access to comprehensive screening assessments, including on sea lice and wild salmon interaction.
- Understanding of the environmental challenges that proposed fish farm developments would need to overcome.
- Enhanced ability to engage in early pre-application consultations.
- Reassurance that environmental concerns are being considered from the outset, helping reduce worry and concern.

#### Information and data provided

- Comprehensive information about key aspects of finfish farm environmental performance.
- Increased confidence and assurance that there is a clear framework in place to consider risks to the environment and act when necessary.

#### Public debate

- Mechanism available for first time to understand the scale of risk to wild salmon in Scotland.
- Public debate on sea lice and wild salmonid interactions moved onto an objective basis (how models are constructed etc).
- More and better information available to understand where environmental risks are greatest and where risk is lowest.

#### Public health.

- Some from the sector emphasised the importance of salmon farming as a low carbon healthy food. We do not anticipate that the new framework will have a significant impact on the supply of Scottish salmon and rainbow trout. The framework is intended to ensure developers can match the type and scale of their farm developments to the capacity of the environment to sustainably accommodate the developments.

- Community representations emphasised the importance of balancing farm development with the uses of the environment by other parties. They considered that this would improve mental health and wellbeing of local people.

Economy. We have a globally competitive, entrepreneurial inclusive and sustainable economy.

	Fish farming industry	Market	Communities	Fisheries	Regulators
Predictable regulatory decision-making	+++			+	
Risk of reputational harm reduced	++	+++			
Change in regulatory burden	--				+
Cost of expansion	-		-		
Increase in costs	-		-		-

**Key:** Relative magnitude of an implication is indicated by the number of “+” signs (for positive implications) or “-“ signs (for negative implications).

**Changes because of consultation:** We have added a negative impact on communities resulting from the potential additional operational costs of expanding farming in higher relative risk locations. Feedback from the sector suggested that the framework could have a negative impact on investment decisions in the highest relative-risk locations. We have defined this as a small-scale effect because of the relatively small proportion of high relative-risk locations and because some of these will already be subject to other constraints on development.

Predictable regulatory decision-making

- Developers know in advance if obtaining permits will be straightforward; or will need investment to provide evidence for proposals’ environmental acceptability and to ensure high performance in lice control.
- Developers informed about whether proposed farms likely to be subject to high lice infestation pressure from lice from existing farms. Better able to evaluate potential

operating costs before deciding on investments<sup>5</sup>; or to plan farm consolidations to reduce cross-infection risk.

- Local authorities can rely on advice from SEPA on risk assessments making the planning process more straightforward and streamlined.

#### Risk of reputational harm reduced

- Objective basis for understanding the risks posed by sea lice to wild salmon populations and a clear decision-making framework to manage those risks.
- Fish farm operators able to demonstrate to product buyers and the wider public that they are complying with permit conditions for protecting wild salmon populations.

#### Change in regulatory burden

- Developers wishing to expand in some sea areas may be required to collect data to calibrate and validate the refined models needed to assess the risk posed to wild salmon.
- Operators will be required to fund targeted monitoring programmes required to underpin the adaptive approach for protecting sea trout and those required to support further assessment in those WSPZs in which the sea lice exposure threshold for wild salmon post-smolts may be exceeded or close to being exceeded. However, the monitoring currently required under planning consent environmental monitoring plans will be phased out or incorporated into the framework's monitoring programmes.
- The pre-application process will minimise risk of subsequent applications being refused.
- Regulation of all risks to the water environment will simplify and streamline regulatory regime for developers.
- Local authorities will be able to work with us to simplify the Environmental Impact Assessment process. The requirement for local authority environmental management plans will be phased out.
- No additional regulatory burdens in low-risk areas for developers, and fish farm consenting processes in these areas should become demonstrably more straightforward.
- Farms assessed as posing the highest relative-risk may need to increase the precision of their counts.

---

<sup>5</sup> <https://www.gov.scot/publications/understanding-relative-cost-effectiveness-sea-lice-management-measures-farmed-salmon-production-scotland/documents/>

Costs of expansion.

- Expansion in areas of sea where there is little or no available environmental capacity is likely to require either investment in pen designs that minimise contact between sea lice and farmed fish; or the use of the farm for appropriately timed, sub-1 year production cycles.
- Many locations with little or no remaining capacity for infective-stage sea lice are also likely to have low dispersion. Where this is the case, the potential for expansion of conventional farms may be already be limited because of a lack of capacity to accommodate large discharges of fish faeces or anti-sea lice medicines.
- Our screening assessment Indicates that 8 out of 65 WSPZs may have limited capacity. This does not mean there will be no locations within the WSPZ at which farm developments using conventional open-net pen designs could proceed. Our assessments indicate that sea lice from farms in some locations in WSPZs do not add significantly to exposure risk: For example, our assessments indicate that sea lice from farms in some locations disperse out of the WSPZ before reaching the infective stage.

Increased costs for existing farms.

- “No deterioration conditions” applied to existing farms. Not expected to add significant new cost.
- Technical and funding support to help develop, calibrate and validate refined models for up to 8 WSPZs in which our initial, simple screening method indicates sea lice infestation pressure is highest.

Action requiring farmers to reduce sea lice numbers at existing farms (i.e., by amending farm permit conditions) will not be taken until suitable evidence of the need for such action is available. This may increase operational costs at some farms. Sector representative have suggested that this could affect investment decisions which could adversely affect the local economy.

Screening using our virtual salmon post-smolt model in the Loch Linnhe system WSPZ and the Loch Fyne system WSPZ indicates that a very small number of farms contribute a large proportion of exposure; and tight but achievable lice control on key farms during the relevant

part of the year is likely to be sufficient to address any exceedance of the sea lice exposure threshold.

Environment. *We value, enjoy, protect and enhance our environment.*

	Fish farming industry	Market	Communities	Fisheries	Regulators
Protect wild salmonid populations				++	+
Where environmental improvements required				++	+
Enhance Scotland's environmental reputation	+	++	+	+	++

**Key:** *Relative magnitude of an implication is indicated by the number of “+” signs (for positive implications) or “-” signs (for negative implications).*

#### Protect wild salmonid populations.

- Risk-based approach will contribute to protecting wild salmonid populations. This will also contribute to the protection of freshwater pearl mussel populations in rivers on the West Coast and Western Isles.

#### Identify where improvements required.

- Targeted monitoring and modelling programmes identify where reducing pressure for sea lice will contribute to improving the resilience and condition of salmon populations.

#### Enhanced environmental reputation.

- Robust, transparent and science-led framework, which gives confidence that pressures on wild salmonids are being appropriately managed.



## 2.5 Comparison with Norway's regulatory framework

Norway's traffic light system represents an alternative mechanism for delivering a spatial risk-assessment framework for managing interactions between sea lice from fish farms and wild salmon. We have included this assessment because there is widespread interest in how the Scottish framework compares to that in Norway.

<b>Features of Norway's regulatory framework</b>	<b>Features of our regulatory framework</b>
Applies to large sea areas with low cross-area sea lice transmission (i.e., work as independent management zones for sea lice)	Based on comparatively small WSPZs. Lice from a farm may contribute to infestation pressure in multiple WSPZs.
<p>Approach based on classification of large sea areas (by infestation pressure) and associated area-wide rules.</p> <p>Provides upfront certainty for developers and communities.</p>	<p>Site-based environmental capacity approach.</p> <p>Screening reports and access to screening models will allow developers and others to understand the potential capacity available at different locations.</p>
Automatic 6 % reduction in biomass at farms in red areas	<p>Process to determine if, and where, reductions in sea lice infestation pressure are necessary is part of implementation process rather than an upfront classification of WSPZs.</p> <p>Initial analysis indicates that, if reduction in infestation pressure is required, tighter lice control at key, higher relative risk farms is likely to be sufficient.</p> <p>Any action will be targeted according to the contributions of farms to exposure risk.</p>
A clear, simple no expansion in production rule in amber and red areas.	No area-wide rules. Expansion is dependent on:

	<ul style="list-style-type: none"> <li>• the available environmental capacity for sea lice in WSPZs; and</li> <li>• the contribution to wild salmon exposure to infective-stage sea lice that a development will make.</li> </ul> <p>Inclusion in development proposals of mitigation<sup>6</sup> to reduce contributions to exposure is considered. For example, developments involving a suitably timed, sub-1 year production cycle; or using pen designs that minimise contact between farmed fish and sea lice may be able to proceed at locations where there is very limited remaining environmental capacity, subject to meeting other regulatory requirements.</p> <p>Developments may also be able to proceed using conventional open-net pen containment designs in WSPZs with no or very limited remaining environmental capacity if the location of the development means that infective-stage lice from the farm will not add to infestation pressure (e.g., because sea lice from the farm will disperse out of the WSPZ before reaching the infective stage).</p>
<p>Up to 6 % production increase allowed in green areas</p>	<p>No specific limit on production increases but also no automatic allowance.</p>

<sup>6</sup> Barrett L. T., Oppedal F., Robinson N. and Dempster, T. (2020). Prevention not cure: a review of methods to avoid sea lice infestations in salmon aquaculture. *Reviews in Aquaculture*; Vol. 12: <https://doi.org/10.1111/raq.12456>

	<p>Permitted increases in production depend on assessments of available capacity.</p> <p>Screening models and, where necessary, refined models used to assess available capacity</p>
<p>Upfront modelling and monitoring by agencies and science institutes used to categorise sea lice infestation pressure of sea areas</p>	<p>Our screening models used to provide initial assessments.</p> <p>Collaborative approach, including sector modellers, for developing refined models for WSPZs where sea lice exposure threshold may be exceeded.</p> <p>Refined modelling used to assess development proposals if screening indicates there may be insufficient environmental capacity to accommodate the development. SEPA will carry out the modelling unless the developer wishes to use their own model, in which case SEPA will audit the model. In both cases, the developer will collect the data necessary to calibrate and validate the model.</p>
<p>Standard on-farm control limits of an average of 0.2 adult female sea lice per fish during sensitive wild salmonid migration period and 0.5 at other times.</p>	<p>Sea lice limit conditions not added to the permits of farms in the lowest risk category.</p> <p>Where limit conditions apply, based on limits proposed by developer or derived from modelling demonstrating the environment can sustainably accommodate the development.</p>

	Limits will represent a measure of adult female sea lice on the farm. This means operators will have flexibility to manage compliance by controlling sea lice, fish numbers or both.
Comprehensive and easily accessible information on sea lice performance of farms published on BarentsWatch website <sup>7</sup> , including information on different lice development stages.	Aim to modernise Scotland's Aquaculture website.  Information published will combine fish numbers and average adult female sea lice per fish to help understanding of overall lice numbers on farms.

### 3. Conclusions

The multiple discussions we have had with a range of stakeholders, particularly over the last two years, and the responses to our two consultations have been important in helping shape the framework we will implement on 1<sup>st</sup> February 2024. We have used the feedback, including on our initial implications assessment, to make choices about the details of the framework with the aim of ensuring it will deliver effective, streamlined and risk-proportionate protection of wild salmon and sea trout populations.

For example, in response to the last consultation, we have:

- Changed how further assessments of development proposals can be delivered. Under our original proposal, if further assessment of a proposed farm development was required, the developer would have had to prepare a suitable refined model. In the finalised framework, we can carry out the modelling required with the developer responsible for supplying the data to calibrate and validate the model.
- Simplified our proposals for permit sea lice limit conditions by removing the proposal to set limits for some higher relative-risk farms based on 0.2 adult female sea lice per fish times

<sup>7</sup> <https://www.barentswatch.no/fiskehelse/?lang=en>

the maximum number of farmed fish. Limit conditions will be based on the limits proposed by the developer if initial screening does not identify the need for further assessment or, if further assessment is required, the limits derived from the modelling undertaken for the further assessments.

- Revised the way in which implementation will be phased, including requiring existing farms (other than farms in the lowest relative-risk category) to comply with “standstill” sea lice limit conditions from mid-March 2025 rather than mid-March 2024.
- Decided not to proceed with our proposed approach to protecting sea trout but, instead, adopt an adaptive approach based on feedback from targeted monitoring. This approach is similar in principle to that currently taken by local authorities via environmental management plans. We will apply the approach across the aquaculture zone, including the Northern Isles, from March 2025.

The focus of these and other changes has been to improve the effectiveness and targeting of the framework whilst minimising negative effects on the economy and communities.

The interaction between sea lice from fish farms and wild salmon and sea trout has been a controversial and emotive topic in Scotland. We believe that the introduction of the new regulatory framework will provide the basis for improved understanding of, and objective debate about, those interactions. We consider that this will deliver important benefits for communities, the sector and regulators.

We are grateful for all the input we have received and will now ensure the new framework plays its part alongside the wide range of other actions Scotland is taking, and will take, to protect and improve populations of wild salmonids.

For information on accessing this document in an alternative format or language, please contact SEPA by emailing [equalities@sepa.org.uk](mailto:equalities@sepa.org.uk)

If you are a user of British Sign Language (BSL), the Contact Scotland BSL service gives you access to an online interpreter, enabling you to communicate with us using sign language.

[contactscotland-bsl.org](http://contactscotland-bsl.org)