



Consultation Response

SEPA Finfish Aquaculture Sector Plan

Scottish Wildlife Trust Response

21 December 2018

The Trust is pleased to see the proposed Sector Plan contain ambitions for tougher regulation, increased monitoring, and measures designed to protect the health of the marine environment.

The Scottish Wildlife Trust recognises that finfish aquaculture in Scotland is a growing industry and has a social and economic importance to remote, coastal communities. However, the Trust considers the environmental impact of finfish aquaculture is unacceptable and believes that effective regulation of the industry will be paramount to addressing these concerns.

Overview

The Trust supports sustainable finfish aquaculture and will campaign for effective regulation, monitoring, enforcement and research to achieve a Scottish fish farming industry based on high quality and unrivalled environmental credentials.

The Trust has actively called for better regulation of the salmon farming industry, most recently by providing oral and written evidence to the ECCLR Committee's inquiry into the environmental impacts of salmon farming in Scotland, and written evidence to the REC Committee's inquiry on the salmon farming industry.

The Trust is pleased to see the proposed Sector Plan contain ambitions for tougher regulation, increased monitoring, and measures designed to protect the health of the marine environment within which salmon farming operates.

Does the Finfish Aquaculture Sector Plan identify the right partners and influencers for SEPA to work with to achieve the vision?

The Trust believes that SEPA have identified the right partners and influencers to achieve their vision, however the Trust is concerned that SEPA's Sector Plan has been developed independently, rather than collaboratively with other regulating bodies, such as the Fish Health Inspectorate, Local Authorities and Marine Scotland. Additionally, the Trust has concerns over the timing of publication, as it occurred prior to the publication of the Rural Economy and Connectivity Committee's salmon farming inquiry report, which contained some significant recommendations for regulation.

The Trust believes that to manage the broader environmental impacts of finfish farming in Scotland, **it is essential that all regulators work closely to ensure regulations complement one another and work towards a collective vision of environmental sustainability.** To achieve this, all environmental impacts of finfish farming must be addressed and regulated – at present, for example, the impacts on wild fish and the use of acoustic deterrent devices are not regulated.

Does the Finfish Aquaculture Sector Plan contain the right actions and priority actions to tackle non-compliance?

The Trust welcomes the proposals for increased data collection and monitoring of salmon farms by the industry and by SEPA. The move away from self-regulation by the industry will improve transparency on the status of each salmon farm and build trust amongst stakeholders.

The Trust welcomes the proposed dedicated monitoring unit at SEPA and considers it will play an integral role in ensuring the industry takes appropriate measures to ensure it meets environmental standards. To assist SEPA with monitoring the industry, the Trust would like to see the publication of weekly data (or as close to) on sea lice, disease, and medicine use for each farm in operation – similar to the 'traffic light system' currently in place in Norway. The publication of these data will allow SEPA to rapidly detect any potential risks and apply mitigation measures when required – an adaptive management approach.

The Trust considers that finfish farmers found breaching environmental standards (in particular sea lice numbers) should be required to develop and implement a **site management plan** (with assistance from SEPA) **that ensures adequate mitigation measures are in place to prevent the same problem reoccurring in the following production cycle.**

Does the Finfish Aquaculture Sector Plan contain the right actions and priority actions to help businesses go beyond compliance?

The Trust believes that, to ensure finfish aquaculture develops sustainably, the Scottish Government should introduce an **incentives scheme that provides economic and/or logistical support for the development and trialling of new technology**, such as closed and semi-closed systems, aimed at reducing their impact on the environment.

The establishment of an incentives scheme could work jointly with a spatial management plan that identifies areas where salmon farming, using current open-cage methods, can and cannot go. By investing in new technology that aims to reduce the environmental impact of salmon farming, areas that are closed to open-cage practices could, potentially, be re-opened for development – increasing the potential for growth of the industry.

What actions do you think are the most important to ensure protection of the environment, and why?

The Scottish Wildlife Trust considers the following actions are essential for ensuring the future development of the finfish aquaculture industry is environmentally sustainable:

- Effective marine spatial planning
- Adequate protection for MPAs and PMFs
- Effective regulation of medicines and chemicals
- Sea lice management

Marine spatial planning

The Trust considers that **marine spatial planning will play a fundamental role in developing a sustainable aquaculture industry in Scotland.** Therefore, we would like to see an Aquaculture Planning Strategy developed to guide the future development of Scotland's finfish aquaculture industry. The Strategy should identify areas where wildlife and habitats are particularly sensitive to aquaculture development, determine the carrying capacity of Scottish waters, and identify a **realistic, evidence-based growth target** for the industry.

Although the spatial planning of salmon farming may lie outside of SEPA's remit, it is essential that SEPA are involved with the development of such a strategy. A key component of the proposed Sector Plan is identifying the environmental capacity of the surrounding waters, which will inform the total biomass and chemical use allowed on a farm. This information will directly inform any assessment on the production potential for salmon farming in Scotland, using open-cage practices.

It is, however, unclear whether SEPA will proactively assess the environmental capacity of Scottish waters to identify areas for future development or if this will only be assessed once interest in an area has been shown – on a case-by-case basis. The Trust would like to see SEPA take a proactive approach to assessing the environmental capacity of Scottish waters and guide salmon farm development towards appropriate locations away from sensitive habitats and species.

Marine Protected Areas and Priority Marine Features

It is the Trust's view that salmon farming should not take place within MPAs (i.e. nature conservation MPAs, SACs, and SPAs) that contain protected features (species or habitat) that are at direct or indirect threat from salmon farming activity. To date, the management of marine activity in MPAs has focused on fishing activity, but the Trust considers this must be broadened out to include salmon farming. Existing farms located within MPAs that pose a threat to protected features (e.g. farms located above maerl beds, as raised in the ECCLR Committee's inquiry) should be required to apply appropriate mitigation measures or be relocated.

The Trust considers that salmon farms located outside of MPAs must demonstrate they do not pose an unacceptable impact on the health of Priority Marine Features. Marine Scotland are currently reviewing the impact fishing activity has on PMFs outside of the MPA network and we feel this assessment should be expanded to include the impacts of finfish farming. The future spatial management of finfish farming should provide adequate protection to PMFs throughout Scottish waters.

Medicine and chemical use

The Trust considers it essential that a peer-reviewed assessment of the direct and indirect environmental impacts of all the chemical therapeutants, treatments, and medicines used by the salmon farming industry is carried out by an independent body. It is essential that **all chemicals found to present an unacceptable environmental risk are phased out** and where the risks are particularly high, for the chemical to be taken out of use.

The Trust welcomes the research on the widespread presence and persistence of emamectin benzoate and teflubenzuron, and the introduction of tighter environmental standards for emamectin for new farms. The Trust would, however, like to see the tighter standards applied across the industry (including existing farms), and for retroactive measures to be put in place to reduce its use.

The Trust would like to see the same level of research applied to all chemical therapeutants, treatments, and medicines being used in salmon farming in Scotland.

Sea lice monitoring

The Trust would like to see the approach for calculating sea lice threshold levels reviewed, as the current method (average lice per fish) does not account for larger farms containing more fish and, therefore, higher total numbers of sea lice. The Trust considers that the sea lice threshold levels should be calculated using the number of fish being held at a site (i.e. an acceptable number of lice per farm), rather than an average number of lice per fish.

The Trust believes that, to fully assess strategies for controlling sea lice and gain a broader understanding of the impacts on wild fish, **historical data and results of weekly sea lice monitoring from individual farms and surrounding wild populations should be made publicly available**. Sea lice data from wild fish will identify when the total number of sea lice at a farm, rather than on individual fish, has reached a threshold where the impact on wild fish has become significant and additional farm management action is required.

The Trust believes that the monitoring of sea lice levels on farmed and wild fish should not be carried out by the industry alone, and that for transparency it is important that either a second

stakeholder is involved (e.g. stakeholders with wild fisheries interests) or the counts are performed by an independent body.

Do you agree with our proposals for a new, strengthened regulatory framework for marine cage fish farms?

The Trust is pleased to see the inclusion of the cumulative effect of multiple finfish farms and the identification of waste accumulation hotspots that fall outside of an individual farm's immediate vicinity. It is imperative when evaluating the impacts on the wider marine ecosystem that the impact finfish aquaculture activity has as a whole, rather than individual farms, is assessed.

The Trust agrees that a farms size should be determined by the capacity of the surrounding environment to disperse and assimilate wastes. This is important when considering the future growth and development of the industry, but also when reviewing existing farms. It is important that the finfish aquaculture industry (new and existing farms) is operating within environmental limits.

The Trust is pleased to see that the proposed regulatory framework within the Sector Plan acknowledges that some farms may be required to reduce their biomass, relocate or install waste capture technology.

The Trust recognises that under the proposed regulatory framework the biomass limit for individual farms will be removed, allowing for much larger farms. While the Trust is concerned that larger farms may exacerbate the problems currently experienced with small farms, we also recognise that, in some cases, replacing a poorly located small farm with an appropriately located large farm could result in a net benefit for the environment. However, we remain concerned that there seems to be an assumption that larger farms in high-energy environments are better for the environment than small farms close to shore. The Trust would like to see further research into the potential risks associated with larger farms, in particular the dispersal of large volumes of waste material. **It is essential that decisions made on the future development of the finfish farming industry are evidence based and apply the precautionary principle.**

The Trust considers that operators of finfish farms exceeding the current 2500-tonne biomass limit should be required to perform an extensive and detailed data collection and monitoring strategy and implement additional measures to ensure any potential risks are mitigated. The Trust believes that **there should be a responsibility on the operator to demonstrate that larger farms can operate within environmental limits** and reduce/eliminate, rather than exacerbate, the environmental concerns associated with smaller farms close to shore.

The Trust is pleased to see that all new farms or farm extensions must develop and implement a plan aimed at minimising the need to use medicine. However, the Trust considers that this should be a requirement for all farms, not just new farms.

The Trust is pleased to see that SEPA plan to review all farms using bath medicines and identify those that do not comply with the new mixing zone requirements.

Does the appendix to the Sector Plan deliver an appropriately strengthened regulatory framework to protect the environment and contribute to the vision of the Finfish Aquaculture Sector Plan?

The Trust considers that any further growth of the finfish industry must not be to the detriment of Scotland's environment and that there should be no further growth of the finfish aquaculture sector using open-net practices. However, we consider that exceptions should only be granted where the relocation of an existing fish farm results in a significant net environmental benefit, or the applicant proposes to trial innovative new designs and practices that aim to reduce their environmental impact.

The Trust is pleased to see tougher regulations proposed for both organic and inorganic waste coming from finfish farms and considers it vital that SEPA proactively identify those farms that currently do not meet the required standards. **The Trust consider it essential that those farms found exceeding the required environmental standards are required to either implement mitigation measures or close/relocate.**

The Trust considers that the regulatory framework proposed within the Sector Plan will begin to address some of the environmental concerns associated with finfish farming and encourage operators to move away from the current practice of open-cage farms close to shore. However, to ensure the move to larger farms and/or new technology reduces the impact on the environment, the Trust believes that short term licences should be granted for trialling new practices. Operators who demonstrate they can operate within environmental limits could then apply for a longer-term licence.

Do you agree with the timetables proposed for introducing the new regulatory framework to new and existing farms?

The Trust believes an evidence-based, adaptive management approach is essential for minimising the environmental impact of the finfish aquaculture industry, but for this to be effective data collection and monitoring needs to take place as soon as possible.

The Trust is pleased that the new regulatory framework's enhanced environmental monitoring requirements will be introduced in 2019 and will apply to all existing farms

If you have any additional questions or comments on the Finfish Aquaculture Sector Plan and the strengthened regulatory framework, please add them here.

Wild fish

The Trust remains concerned that the impact salmon farming has on wild salmonid populations, in particular from sea lice, has not been addressed within the sector plan and continues to be unregulated. Although the impact on wild fish currently falls outside the remit of SEPA, it is important to acknowledge that two key factors that influence sea lice numbers on a farm, biomass and chemical and medicine use (CAR Licence), both do fall with SEPA's remit. Therefore, when determining the biomass limit and chemical usage permitted at a potential site, SEPA should consider the potential risks to wild fish within the area and require operators to monitor wild fish (in particular salmonids) to ensure their operation does not negatively impact the health of the surrounding population.

The Trust believes that escapes through system or human failure are not acceptable and that fines should be considered when escapes occur. While events such as extreme weather are difficult to anticipate, it should be the aim of the finfish aquaculture industry to eliminate all escapes through

technological means and standards for the construction and operation of facilities. A statutory minimum technical standard, specifying the design, installation and operation of fish farms should be established in Scotland as a matter of urgency.

The Trust believes that to improve accountability for escapes, regulation to take or require samples from fish farms must be introduced so that escaped fish can be traced back to the farm or company of origin. Such a step would ensure that farm operators are held to account and remedial action can be initiated. The Trust considers that the salmon farming industry and the Scottish Government should be jointly responsible for funding a monitoring programme for wild salmon and sea trout populations in marine regions that contain salmon farms.

Acoustic Deterrent Devices (ADDs)

The Trust would like to see better regulation on the use of ADDs and that they should be banned from seal haul out and breeding sites and from SACs and MPAs established for the protection of marine mammals. The Trust would like to see industry-led research on the impact ADDs have on marine life, in particular cetaceans, and for the findings to inform a clear and strict protocol for the future use of ADDs. The Trust believes that **alternative measures to prevent predation, such as double netting, should be prioritised and that ADDs should be used as a 'last resort' once other methods have failed, with the aim of phasing out their use completely.**

Litter

The Scottish Wildlife Trust would like to see all large equipment (e.g. feeding pipes, metal frames) used on finfish farms tagged with the operators details to ensure that, in the event of equipment being lost at sea, the costs of removal, once/if found, should be covered by the farm operator.

Cleaner fish

The Trust recognises that currently there are no regulations on the use of cleaner fish within salmon farms but has concerns that the number of cleaner fish being used and the number of farms using them as a method for controlling sea lice is increasing. The Trust considers it important that when SEPA is determining the biomass limit for a new farm and assessing volumes of feed entering and waste exiting a farm, that cleaner fish are included in that assessment. Cleaner fish require food supplements and will contribute to the waste coming from a farm and total biomass of fish being held at the farm. The contribution of cleaner fish on small farms may be minimal, but this will increase as the size of the farm increases.

Conclusion

- It is essential that all regulators work closely to ensure regulations complement one another and work towards a collective vision of environmental sustainability.
- Farm operators found breaching environmental standards should develop a site management plan for the following production cycle(s). Operators that fail to control their impact on the environment should be required to close or relocate.
- An incentives scheme should be established that provides economic and/or logistical support for the development and trialling of new technology.
- Marine spatial planning will play a fundamental role in developing a sustainable aquaculture industry in Scotland.

- Industry growth targets should be evidence based and determined by the carrying capacity of the environment.
- All chemicals found to present an unacceptable environmental risk are phased out.
- Historical data and results of weekly sea lice monitoring from individual farms and surrounding wild populations should be made publicly available.
- Decisions on the future development of the finfish farming industry must be evidence based and apply the precautionary principle.
- Farm operators should be responsible for demonstrating that larger farms can operate within environmental limits.
- The Trust is concerned that the impact of salmon farming on wild salmonid populations has not been addressed within the sector plan and remains unregulated.
- The use of acoustic deterrent devices is currently unregulated and should be addressed within the Sector Plan. Alternatives, such as double netting, should be prioritised and ADDs should be used as a 'last resort' once other methods have failed, with the aim of phasing out their use completely.