

Environment, Climate Change and Land Reform Committee

Environmental impacts of salmon farming

Written submission from the Scottish Creel Fishermen's Association (SCFF)

SCFF is the representative body for Scottish creelers. Creelers use creels to catch shellfish including lobster, crab and nephrops (sold as langoustine) which are sold as a high value Scottish seafood product. Creelers fish by the laying of lines of creels. This tends to be done in the inshore and in many instances creelers are competing for ground with aquaculture or operating in close vicinity. Because of that closeness the Federation has concerns regarding chemical use by the farmers, which may impact their target species. The Federation has particular concerns regarding the increasing use of SLICE, (which contains Emamectin Benzoate (EMB)) in the aquaculture industry and is proven to impact crustacea.¹

SCFF welcomes the ECCLRC enquiry into the environmental impacts of salmon farming.

SCFF welcomes the publication by SAMS of the Review of the Environmental Impacts of Salmon Farming in Scotland. We note on p.69 of the Report that the risk factors with relation to the use of EMB are noted as “especially crustaceans”. It also notes that SEPA, the licensing authority for EMB “has reassessed the EQS and imposed new limits”. We have concerns regarding what appears to be undue interference by the aquaculture industry in the scientific process of establishing safe limits for EMB. It is vital that the scientific advice that establishes safe levels of EMB is demonstrably disinterested and we depend on that to protect our fisheries. We have concerns regarding the way two recent scientific publications on the use of EMB have been treated by the Scottish Government.

In 2016 SEPA was the co-sponsor of a significant study into EMB, which was carried out by SARF. SARF is a charity funded by the Scottish Government and the aquaculture industry to support "sustainable" fishing. [The study, which was posted online in August 2016](#) suggested that EMB contamination of the seabed was causing “substantial, wide-scale reductions” in crabs lobsters and other crustaceans. The study was contained within a [second report that cast doubt over those findings](#). The second report was said to have reflected the concerns of peer review of the original work (carried out by SAMS), however it transpires that five of the six peer reviewers had connections with Merck, the company that manufactures SLICE² and therefore could not be considered disinterested. SCFF has real concerns that SARF, a Scottish Government funded organisation, would permit the use of peer reviewers who may be compromised.

¹ [Para 5.1 Environmental Quality Standards: A review of the marine Emamectin Benzoate standards SEPA 2017](#)

² Salmon and Trout Conservation website section on aquaculture <https://www.salmon-trout.org/category/salmon-farming/>

SEPA also sponsored a follow up independent review of the Environmental Quality Standard (EQS) for EMB³. In line with the earlier report the review found that marine organisms may be considerably more sensitive to EMB and may be affected by considerably lower concentrations than previously believed. In May 2017⁴ SEPA issued interim guidance which stated *'the EQS for EMB residues in sediments should be tightened considerably, to the extent that practically useable quantities are unlikely to be able to be authorised, unless effective mitigation measures are put in place to collect fish faeces and ensure that metabolites from the administration of the medicated feed are contained'*. It was therefore recommended that the EQS for EMB should be very much reduced in line with the advice of the report's authors; in particular that the far-field sediment limit should be 12ngkg-1 (dry weight).

Initially, SEPA determined that the new lower limit would apply to all new applications, which would clearly impact upon the aquaculture industry's ability to manage sea lice on their farms. It then appears that the aquaculture industry may have applied pressure to the Scottish Government to persuade SEPA to rescind this. [SEPA's justification for this was that](#) *'a review of procedure...for commissioning the EQS review indicated that it may not have had access to all available data and information in drawing its conclusions. Given the potentially significant implications for the industry in implementing the proposed new EQS, it is essential that this review is both comprehensive and robust, and that all interested parties have an opportunity to contribute their views. SEPA is therefore inviting the medicine manufacturers, research establishments, fish farm operators and ngos to consider the initial review findings and submit relevant additional data or information they may hold which should be considered as part of the review'*

SEPA then issued another Regulatory Position Statement in June 2017, followed by an amended version in October⁵. This revised position retains the lower limit for EMB (12ngkg-1) in a "relevant protected area" but keeps the old limit of 763ngkg-1 in all other waters. In other words business as usual.

We understand that SEPA has now remitted the issue of what EMB levels are permissible under WFD water quality standard to UKTAG for their advice. SCFF depends upon scientific advice being given free from the influence of the aquaculture industry and this is a concern that we would like to raise with ECCLRC given the foregoing events.

³ Final Report of the Review of the EQS for emamectin Benzoate. Report Reference UC12191.01 undertaken by (WRc)

⁴ [WAT-PS-17-02 Guidance on determining CAR applications to use or changed authorised quantities of the in-feed medicine SLICE](#)

⁵ [WAT-PS-17-03: Interim position statement for protecting the water environment until such time as a direction is issued on an EQS in relation to emamectin benzoate in finfish farm regulation](#)