

Scottish salmon farming can significantly impact the surrounding marine or freshwater environments, in particular through using open net pens. Fidra's Best Fishes<sup>1</sup> project highlights the major environmental impacts, from use of chemical treatments to discharging fish waste products. A 2018 inquiry into salmon farming by the Scottish Parliament's Rural Economy and Connectivity (REC) Committee had 65 recommendations, the majority on reducing environmental impacts of the industry<sup>2</sup>. A subsequent 2022 regulatory review of aquaculture in Scotland had a further 21 recommendations<sup>3</sup>. Both call for increased transparency, reflecting Fidra's ask for a dashboard presenting clear and detailed information on environmental parameters at farm level. This will be invaluable for adjacent communities to understand the impacts of the industry locally, and can be used by retailers to show true accountability when combined with transparent supply chain information. A clear and transparent database will enable suppliers and retailers to source salmon responsibly, encouraging best practice through the selection of farms showing lowest environmental impacts.

Action is urgently needed to minimise environmental damage and improve accountability. To achieve this, **Fidra believes that the management of salmon farming in Scotland must be based upon 10 principles covering transparency, traceability, operational best practice and broader environmental impacts.**

**Increased transparency and traceability in the Scottish salmon supply chain** is an important prerequisite for positive change across the industry and requires:

1. **Farm level reporting of compliance** with the Controlled Activities Regulation (CAR) licence issued by the regulator, the Scottish Environment Protection Agency (SEPA), including details of failures and resulting penalties or action taken;
2. **Development of a single central salmon farming dashboard presenting clear data** down to individual farm level (e.g. Tasmania's Salmon Portal<sup>4</sup>, Norway's Barents Watch<sup>5</sup>);
3. **Use traceability programmes** that allow labelling of goods at point of sale with information such as name of farm and certification<sup>6</sup>;
4. **Publication of 3rd party audits from certification schemes**, as already undertaken by the Aquaculture Stewardship Council (ASC).

**A commitment to best operational practices is urgently required** in addition, with a need to:

5. **Act on REC Committee's recommendations** and statutory obligations, specifically, to solve current environmental issues before expanding the industry, such as those associated with sea lice, disease, medicine use, waste and predators;

6. **Urgently commit to move towards sustainable feed**, including traceable ingredients, and alternatives to forage fish sources of omega 3, such as algal oil or fish processing waste<sup>7</sup>;
7. **Increase innovation, especially digitisation and automated monitoring** of environmental parameters, with information sent to a central, publicly accessible platform;
8. **Certify farms by best practice schemes** such as ASC, GLOBAL G.A.P., RSPCA and Soil Association (organic).

**The broader environmental impacts due to plastic waste, the climate emergency and the biodiversity crisis need addressed** in addition to the areas highlighted by the REC Committee, and parameters covered by current regulation, with commitments to:

9. **Act on plastic use and waste**, including policies on responsible sourcing and disposal, monitoring of use and waste including microplastics, research into sustainable alternatives, and reusable/recyclable replacement of single use plastics such as polystyrene fish boxes<sup>8</sup>;
10. **Responsibly act on the climate emergency and the biodiversity crisis**, with policies that show how the industry contributes to and responds to both, and clear processes to mitigate and monitor impacts, including precautionary actions.

<sup>1</sup> Fidra (n.d) Know your Scottish salmon. <https://www.bestfishes.org.uk/>

<sup>2</sup> Scottish Parliament (2018) Salmon farming in Scotland <https://sp-bpr-en-prod-cdneq.azureedge.net/published/REC/2018/11/27/Salmon-farming-in-Scotland/REC-S5-18-09.pdf>

<sup>3</sup> Griggs, R. (2022) *A Review of the Aquaculture Regulatory Process in Scotland*, pp 50. Scottish Government. ISBN: 978-1-80435-022-5 (web only)

<sup>4</sup> Tasmanian Government Tasmanian (n.d) Salmon Farming Data (Salmon Portal): <https://salmonfarming.nre.tas.gov.au/>

<sup>5</sup> Barents Watch (n.d) Fish Health: <https://www.barentswatch.no/fiskehelse/?lang=en>

<sup>6</sup> IBM platform (n.d) IBM Supply Chain Intelligence Suite (<https://www.ibm.com/blockchain/solutions/food-trust>)

<sup>7</sup> WWF (2022) Blue Food: Rethinking the cost of what we feed farmed fish. In World Wildlife Magazine, Summer 2022, <https://www.worldwildlife.org/magazine/issues/summer-2022/articles/rethinking-our-global-food-systems>.

<sup>8</sup> TAUW (2021) Assessment of alternatives for EPS fish boxes <https://www.bestfishes.org.uk/wp-content/uploads/TAUW-2021-Assessment-of-alternatives-for-EPS-fish-boxes.pdf>