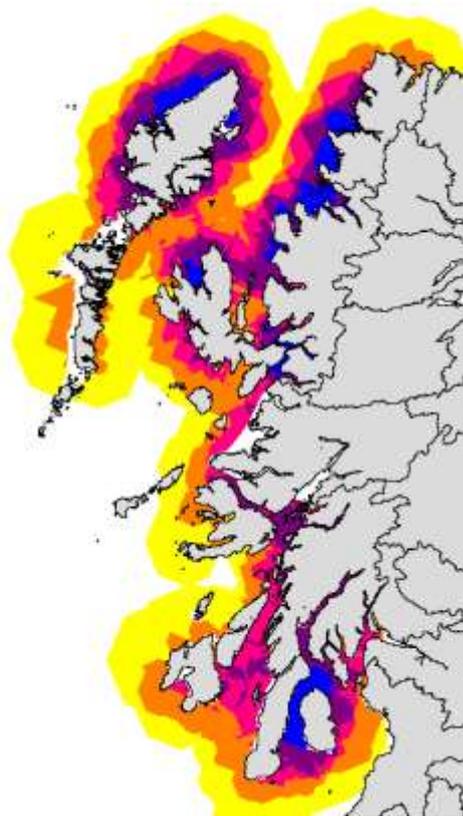


27 September 2019

**Planning application: 19/00609/PPM Installation and operation of an Atlantic Salmon Fish Farm. Site To East Of Millstone Point Lochranza Brodick Isle Of Arran**

The National Trust for Scotland would like to object to the above planning application.

The National Trust for Scotland owns two properties on the Isle of Arran: Goatfell and Brodick Castle and Country Park. These include parts of at least two freshwater systems entering the sea on Arran's eastern coast – Glenrosa Water and the Corrie Burn. Both are within 15 km of the proposed farm site and we are concerned that populations of wild salmonids in both river, particularly sea trout and Atlantic salmon, will be adversely affected by the operation of this farm.



Open-cage salmon farms are known to be the source of considerable numbers of sea lice larvae which are released into the surrounding sea and have been shown to have an adverse impact on populations of salmon and especially sea trout at ranges in excess of 30 km<sup>1</sup>. The arguments presented in the proposal that the impact on salmon is “minor and not significant” are superficial and without value. There has been no assessment of the impact on sea trout, another Priority Marine Feature, and one on which the impact of sea lice is known to be greater than on salmon.

There are already 11 salmon farms operating in Loch Fyne, with 16 in the Firth of Clyde and levels of infestation with sea lice larvae have already been assessed to be excessive. A review conducted by Rivers and Fisheries Trusts Scotland, identified the north end of Arran to be one of the most heavily impacted regions in Scotland. On the map to the left, the blue areas indicate areas of highest sensitivity. This pattern was confirmed in more recent work carried out by Marine Scotland, which concludes that this area already has a heavier load of

<sup>1</sup> Thorstad, E.B and Finstad, B. (2018) Impacts of salmon lice emanating from salmon farms on wild Atlantic salmon and sea trout. Norwegian Institute of Nature Research.

sea lice than is compatible with maintaining healthy populations of wild salmonids and has recommended that no further farms should be added unless compensatory reductions in farm biomass elsewhere in the region.

The north end of the island of Arran sits at the junction between the Fyne and Clyde catchments (see map below) and sea lice emerging from a farm in this location have the potential to affect salmonids throughout the region. Sea lice larvae released from the farm will impact the eastern channel between Arran and Bute but also the Kilbrannan Sound to the west. The former is barely 9 km wide and it is only about 11 km to the coast of the Kintyre Peninsula. The shaded circle in the map has a radius of 15 km, the minimum distance over which sea lice are known to have a detrimental effect. This location is probably the worst that could be chosen in Scotland for the potential to impact wild salmon and sea trout over a wide area.

The report of the video survey of the seabed provides ample evidence of the presence of the Priority Marine Feature, Burrowed Mud. The conclusion that “the seabed surrounding the proposed fish farm area is not indicative of the ‘Seapens and Burrowing Megafauna in Circalittoral Fine Mud’ biotope” based on the absence of tall seapens is simplistic and invalid. Para 7.1.3.2 of the Environmental Impact Assessment Report states “As a result, the PMF ‘Burrowed Mud’ was assessed to be absent.” The area is subject to frequent and repeated trawling for langoustines and it is inevitable that seapens would be regularly destroyed. This does not mean that burrowed mud is not present.



The report goes on to say that “The majority of species found in the ‘Burrowed Mud’ feature are burrowing megafauna and are likely to be tolerant to smothering/ siltation by up to 5 cm of sediment.” This is not true. The siltation arising from fish farms is largely organic in nature and results in grossly elevated oxygen demand leading to oxygen depletion in the

sediment. This causes profound impacts on the burrowed mud macrofauna, very little of which would survive deposition of 5 cm of organic waste.

The proposal indicates that Acoustic Deterrent Devices (ADD) will be used to deter seals. It goes on to discuss their impact on seals but fails to mention that they have been shown to disturb cetaceans (whales and dolphins) over distances of up to 8 km. The deliberate or reckless disturbance of cetaceans is illegal under the Conservation (Natural Habitats &c (Scotland) Regulations 2004. It is essential that any permission for salmon farms is contingent on ADDs not being used.



Stuart Brooks

**Head of Conservation & Policy**

National Trust for Scotland