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Mr Iain Davies
North Ayrshire Council
Development Management
1st Floor Cunninghame House
Irvine
KA12 8EE

Date: 18 September 2019
Our Ref: CNS/MFF/NA/MILL: CEA156564
Your Ref: 19/00609/PPM

Dear Mr Davies

Environmental Impact Assessment (EIA) – Installation and operation of an Atlantic Salmon Fish Farm comprising 20 x 120m circumference fish pens and an accompanying feed barge at Site to East of Millstone Point, Lochranza, Brodick, Isle of Arran, North Ayrshire

Thank you for consulting Scottish Natural Heritage (SNH) on the above Environmental Impact Assessment (North Arran Marine Fish Farm, The Scottish Salmon Company, Arcus August 2019) (EIA). We responded to the EIA scoping opinion request on 28 March 2019. We also requested that further environmental information should be assessed in the EIA in our email of 22 May 2019. Following a review of the recent increase of marine fish farm activity in the upper Clyde estuary, we identified a potential risk to the Endrick Water Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI). There are applications for marine aquaculture installations at Great Cumbrae, Little Cumbrae and North Arran.

We have not yet completed a full assessment of the proposals and EIA report and will respond in due course, however we note that key information which we requested at the scoping stage has not been included in the submitted EIA report (our e-mail of 22 May 2019). In our email we identified a likely significant effect on the Atlantic Salmon qualifying interest of the Endrick Water Special Area of Conservation (SAC). The site's status as a SAC will require North Ayrshire Council, as competent authority, to undertake a Habitats Regulations Appraisal (HRA) of the proposal in view of the site's conservation objectives for the Atlantic salmon qualifying interest.

The scope of the information necessary to inform a HRA is included in Annex 1. The conservation objectives for the Endrick Water SAC are in Annex 2.

Summary

In the absence of this information we will not be able to advise North Ayrshire Council. As the proposal could affect internationally important natural heritage interests **we therefore object to this proposal until further information is obtained from the applicant.** We

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will be able to give further consideration to this proposal once you have carried out your appraisal of these effects.

If the planning authority intends to grant planning permission against this advice without the requested information, you must notify Scottish Ministers.

The purpose of submitting this interim response to the consultation is to provide the applicants more time to prepare and submit the requested information. We will submit a full response, including advice on the impacts on the North Arran National Scenic Area in due course.

We would be happy to discuss the information required in Annex 1 to inform the appropriate assessment. Should you wish to discuss this proposal in further detail, please do not hesitate to get in touch with Graeme Walker Graeme Walker@nature.scot.

Yours sincerely

Lyndsey Kinnes
Operations Manager
Strathclyde and Ayrshire

cc Marc Browne The Scottish Salmon Company
Jamie Gilliland Arcus Consulting

Annex1

Appraisal of the impacts of the proposal and advice

The proposal could affect the Endrick Water Special Area of Conservation (SAC) designated for its brook lamprey *Lampetra planeri*, river lamprey *Lampetra fluviatilis* and Atlantic salmon (*Salmo salar*) qualifying interests. The site of the proposed North Arran Marine Fish Farm is on the migration route of the Atlantic Salmon qualifying interest of the Endrick Water SAC.

The Endrick Water was classified as a Special Area of Conservation for these three species of freshwater fish in 2005. The primary qualifiers for this site are brook lamprey *Lampetra planeri* and river lamprey *Lampetra fluviatilis*. Atlantic salmon (*Salmo salar*) is a secondary qualifier for this site. Brook lamprey and river lamprey will not be impacted by the proposed development.

An extensive scientific literature exists which demonstrates the negative impact of aquaculture-derived sea lice on the early marine survival of post-smolt Atlantic salmon (and sea trout, which may remain resident within the Inner and Outer Clyde) and the proximity of marine finfish aquaculture units. The proposed development of new sites between Bute and Great Cumbrae may therefore pose a significant risk to the Atlantic salmon qualifying interest of the Endrick Water SAC, either on their own, or in combination with, other planned or existing marine fish farms (potentially North Arran).

Site Condition Monitoring of the Endrick Water SAC showed that the Atlantic salmon qualifying interest was in unfavourable condition (for both juvenile and adult fish) in 2005 and 2011. The most recent assessments of adult Atlantic salmon carried out by Marine Scotland Science, to fulfil their reporting obligations under The Conservation of Salmon (Scotland) Regulations 2016, determined that, for 2019, the Endrick Water SAC met the criteria for inclusion in Category 2 (where the population has a 60-80% probability of meeting its Conservation Limit and may require management action to reduce exploitation). Rod catch for the whole of Scotland, which is frequently used as a proxy for population trend, showed that the 2018 rod catch was at the lowest level since records began in 1952. Atlantic salmon, both nationally, and within the Endrick Water SAC, are therefore considered to be vulnerable.

Atlantic salmon are anadromous and undertake extensive migrations between freshwater and marine habitats. Smolt migration is associated with high mortality and is thus considered a critical life stage in the Atlantic salmon life history. Currently, only approximately 5% of smolts who make this journey return to freshwater as adults. Smolts originating from the Lomond catchment (which includes the Endrick Water SAC) and the Clyde catchment (which includes the rivers Clyde, Gryfe, Black Cart Water and White Cart Water) migrate to their oceanic feeding grounds in the Norwegian Sea and West Greenland via the Inner and Outer Clyde. This means that these fish will pass through the main channel and southwards past the east coast of Bute and the islands of Little and Great Cumbrae (possibly including the Fairlie Roads) as they pass into the Arran Basin and outer Firth of Clyde.

These proposals could affect the Atlantic salmon qualifying interest of the Endrick Water Special Area of Conservation (SAC). The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") or, for reserved matters, The Conservation of Habitats and Species Regulations 2017 apply. Consequently, North Ayrshire Council is required to consider the effect of the proposal on the SAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<https://www.snh.scot/professional-advice/safeguarding-protected-areas->

[and-species/protected-species/legal-framework/habitats-directive-and-habitats-regulations](#)).

In our view, from the information available, it appears that in this case the proposal is not connected with or necessary for the conservation management of the site. Hence, further consideration is required.

In our view, this proposal is likely to have a significant effect on the Atlantic salmon feature of the Endrick Water SAC because of the connection between the site of the North Arran Marine Fish Farm and the Endrick Water SAC through the Atlantic salmon migratory route. Consequently, North Ayrshire Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its Atlantic salmon qualifying interest (see Annex 2 for the site's conservation objectives). This assessment should include an appraisal of the following:

We recommend that as an initial step to consider the potential connectivity between these sites and the Endrick Water SAC that sea lice dispersion modelling is undertaken and provided with the application / EIA. If dispersion modelling confirms there is connectivity between the proposed fish farm and migrating salmon from the Endrick Water, the applicants should include detailed information (ideally within an overall Environmental Management Plan) on mitigation and monitoring measures that will be employed to manage and control sea lice to ensure there is no adverse impact on site integrity.

Once this appraisal has been carried out we will be able to give further consideration to this proposal before the appropriate assessment is finalised.

There are six new fish farms, with a combined total of approximately 14,000T of maximum standing biomass, currently proposed in areas of the Firth of Clyde which are likely to have a likely significant effect on the Endrick Water SAC. The assessment will need to consider the potential cumulative impact from multiple developments on the SAC, and therefore information on any coordinated activity/management should be included in the assessment. It is therefore particularly important that any mitigation proposed in any subsequent planning application / EIA takes potential cumulative impacts into account and is robust and sufficient to protect the SAC from any adverse effect. Three of the proposed fish farms around Bute and the Cumbraes appear to be very close to an apparent bottleneck created by islands on the migration route for salmon leaving from, or returning to, the Endrick Water SAC. Given this, it may be particularly challenging to mitigate the risks posed by these sites to the SAC.

Annex 2

Conservation Objectives for Endrick Water Special Area of Conservation

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species, including range of genetic types for salmon, as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Qualifying Species:

- Atlantic salmon
- Brook lamprey
- River lamprey

The site overlaps with Loch Lomond Special Protection Area