Argyll and Bute Council Development and Economic Growth

Delegated or Committee Planning Application Report and Report of Handling as required by Schedule 2 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 relative to applications for Planning Permission or Planning Permission in Principle

Reference No: 20/02358/PP

Planning Hierarchy: Local Application

Applicant: Scottish Sea Farms Ltd.

Proposal: Modification of fin fish farm (Atlantic Salmon) from 9 x 80m

circumference cages to 14 x 100m circumference cages, including increasing biomass to 2350 tonnes and installation of

replacement feed barge

Site Address: Dunstaffnage Fish Farm, North of Ganavan Hill, Dunbeg

SUPPLEMENTARY REPORT NO. 1

1.0 INTRODUCTION

The attention of Members is drawn to the main Report of Handling dated 7th June 2022 that is currently before them for consideration in respect of the above application.

Subsequent to the publication of papers, officers have received two late representations from Friends of the Sound of Jura (FOSOJ) dated 16/6/22 and 20/6/22. Full details of these representations can be viewed on the Council's website www.argyll-bute.gov.uk.

In response to this late representation, the applicant, Scottish Sea Farms Ltd. has provided further clarification on the risk to wild swimmers and bath medicine treatments.

2.0 SUMMARY OF POINTS RAISED

Comments have been made in relation to the published Report of Handling (ROH).

FOSOJ has taken issue with the following quote from the ROH:

"To experience such concentrations, a swimmer would have to be at the pen edge at the moment the tarpaulin was dropped, and swim following the central peak of the patch (most likely parallel to the coastline) for a 2 hr period. Very few (if any) swimmers in Scottish coastal waters will swim for 2 hrs, with a more common swim duration being 30-45 minutes. Allowing for the time taken to swim to a farm (typically over 100 m from the shore), and the need to time the swim perfectly with medicine release and movement, exposure at this level would appear to be exceedingly unlikely. If swimmers follow guidance of remaining outside pen grid marker buoys, risk of exposure is reduced even further. It should also be borne in mind that most swimmers in Scottish coastal waters for the durations modelled here, will be wearing a wetsuit, offering added protection."

It is contended by FOSOJ that this is inaccurate and it is stated that "The WCA report is clear that the main risk due to hydrogen peroxide exposure comes from swallowing it."

The report says that a swimmer weighing 72kg would be at risk if they swallow 50ml of water containing hydrogen peroxide above the NEL. This can happen more than 300m from a farm and up to 100 minutes after discharge. Pens are treated one by one so there would be 14 separate discharge events every time the expanded Dunstaffnage farm was treated. Each plume could take almost two hours to dissipate to NEL. The likelihood of swallowing water is not time-dependent. A swimmer would not need to be exposed to a hydrogen peroxide plume for two hours in order to be at risk above the No Effects Level for that chemical.

The likelihood of swallowing is not reduced by wearing a wetsuit.

People lighter than 72kg (most women and young people) are at substantially higher risk from the same exposure.

Why would you not seek to protect the most vulnerable members of society from exposure to a harmful chemical, rather than just 72kg people, most of whom will be men.

NHS Highland has not objected to the proposals because it is "... not able to give a definitive opinion on the safety of wild swimming in the vicinity of fish farms simple based on the report..."

This is a clear risk to public health. You should not recommend that the farm expansion goes ahead on the basis of this so far inadequately assessed risk."

Applicant Response

In response to these issues the applicant has advised the following in a statement dated 21st June 2022:

"Further clarification on the likely risk to wild swimmers from bath medicine treatments is provided below. It should be noted that the consideration of risk to human health from the use of veterinary medicines, relates to whether, under the approved conditions of use, the medicine has value and does not present an unacceptable risk, rather than eliminating risk completely.

Several representations have expressed concern over whether the use of bath medicines at the Dunstaffnage farm would pose a risk to wild swimmers. When assessing health risks, two key factors are considered: the levels where no health effects occur; and the levels to which people may be exposed. Scottish Sea Farms have already submitted a report from WCA consultants which has identified using a specific scenario for open water swimming, Derived No Effect Levels (DNEL) for the three bath medicines which could be used to treat salmon at the Dunstaffnage farm.

The WCA report concludes that the concentration of medicines Azamethiphos and Deltamethrin used in a pen bath treatment are lower than the DNEL and therefore there is no unacceptable risk to wild swimmers, at any distance from the farm, from the release of medicine residues from a farm pen following completion of a treatment. The DNELs for oral and dermal exposure have been calculated using a 2-hour swim scenario for a 71.8kg. While a swimmer of lower weight would have an increased risk from the same level of exposure to medicine residues, the DNELs are still based on a number of highly precautionary assumptions, including:

• There is no dilution of medicine concentration, or degradation of residues;

- Water concentration of medicines is constant and static (no movement and circulation of medicine residues);
- That a swimmer would remain in an area of the highest concentration for two hours;
- 100% absorption of residues by dermal and oral routes of exposure.

For hydrogen peroxide the concentration used in the treatment pen is higher than the DNEL so the risk to wild swimmers depends on the dilution and dispersion of medicine residues in relation to the proximity of a wild swimmer, and the time for which the swimmer might be exposed to medicine residues.

Appendix 1 of the WCA report identifies some calculated statistics of the dispersion and concentration of hydrogen peroxide for a range of environmental conditions typical of marine fish farms. The current speeds at the Dunstaffnage fish farm are 0.067m/s and looking at the figures for a 120m pen at a mean current speed of 0.07 m/s, the time taken for the peak concentration of hydrogen peroxide to fall below the NEL of 59.84mg/l is 47 minutes and the potential distance travelled by a patch before it is below the NEL is 197.36m. Using the same calculations for a 100m pen the time taken for peak concentration to fall below the NEL is 36.9 minutes and potential distance travelled by a patch before falling below the NEL is 155.0m. This means that a swimmer who is 150-200m away from the farm would not be exposed to concentrations of hydrogen peroxide above the NEL due to dilution and dispersal, in terms of skin contact or swallowing water. Therefore, under the approved conditions of use, it would not present an unacceptable risk to human health, considering the levels to which people could potentially be exposed to.

Should a swimmer choose to swim within 150-200m from the treated pen they could be exposed to concentrations of hydrogen peroxide above the NEL for a predicted period of between 45 and 47 minutes, which is considerably below the 2 hour scenario for which the DNEL was set. It should be noted that guidance for wild swimmers strongly advises that swimmers should always undertake a risk assessment of their proposed swim before entering the water which should consider any potential risks related to water quality, weather conditions, temperature and other marine users and activities. It is reasonable to expect that water users, including wild swimmers stay a safe distance from a salmon farm to avoid any risk of collision with workboats or entanglement in farm equipment (pens, ropes, moorings, nets). The same principle would apply to wild swimming in a working harbour or adjacent to sewage outfalls. Wild swimmers should therefore not be swimming within the planning/moorings boundary of the farm and to do so would be irresponsible. A farms boundary is typically 150-300m from the edge of the farm pens and therefore if swimmers stay outwith the farm boundary then they should not be exposed concentrations of hydrogen peroxide above the DNEL.

A number of vessels will be active around the farm pens at the time of a bath medicine treatment and therefore will be very obvious to other water users that for their own safety they should maintain a safe distance from the fish farm pens."

Officer Comment: Given the above and taking account of the fact that NHS Highland has not objected to the application on public health grounds, the risk to wild swimmers is considered to be within acceptable limits. However, in order to ensure that the risks are even further mitigated, a condition is proposed that the applicant produces a communication strategy with other marine users advising when bath medicines will be actively used at the site as well as advising on other health and safety issues associated with fish farms. In these circumstances it is considered that it would be unreasonable and unsustainable to refuse the application on these grounds.

Further FOSOJ Comments

"Your two statutory advisors on wild fish impacts are contradicting each other on this issue. This is an unfortunate situation but you have no sound basis for favouring Marine Scotland's advice over the ADSFB's.

When there is a likelihood of significant impact and uncertainty about how to mitigate it, the council is obliged to take a precautionary position until better information is available.

On this basis you should accept the ADSFB's advice and not recommend this development until you are sure that the cumulative impact can be managed to harmless levels, which will only be possible after SEPA has its new regulatory framework for sea lice in place.

Please explain which aspects of Marine Scotland's advice has allowed you not to apply the precautionary principle in this case, against the advice of FMS/ADSFB."

Officer Comment: The planning application has been assessed using current guidance from the Scottish Government. EMPs were introduced in order to provide an interim measure to mitigate the risk relating to wild fish interactions. No moratorium has been introduced for marine fish farms and EMPs will continue until such time that SEPA take over the regulation of wild fish interactions. Marine Scotland Science has specified the minimum requirements of an EMP and the planning authority has been advised that the submitted EMP satisfies these requirements.

3.0 RECOMMENDATION

It is recommended that planning permission be approved subject to the conditions attached to the Report of Handling.

Author of Report: Sandra Davies **Date:** 20th June 2022

Reviewing Officer: Peter Bain Date: 21 June 2022

Fergus Murray Head of Development and Economic Growth