

By email: [REDACTED]

Our Ref: SIR155552/A2999693

12 July 2019

Dear [REDACTED]

Information Request – Salmon Farms and ADD Use

Thank you for your information request, which we received on 21 May. We have considered your request under the Environmental Information (Scotland) Regulations 2004 ('the EIRs').

Your Request

"Please provide the following information under FOI/EIR:

Please see the attached spreadsheet which lists most of the salmon farms of Scotland.

1. Please could you provide information as to which farms are required by SNH to keep a log of Acoustic Deterrent Device (ADD) use and seal predation events which trigger them.
2. Please provide the log sheets for those farms for the past 5 years, giving the times when the ADDs were triggered, the number and make of the ADDs, and the evidence of seal predation.

I am not interested in the names of the individuals who filled in the logs.

3. The spreadsheet shows 16 farms which are not allowed by SNH to use ADDs without an EPS licence (highlighted in yellow). Please provide correspondence between SNH and the farms and between SNH and Marine Scotland explaining why these farms require an EPS licence.
4. Please supply any information as to why SNH has not informed the other farms of the requirement to hold an EPS licence before ADDs can be used."

Our Response

We have carried out a detailed search of the information we hold, and we have responded to each of your questions in turn.

1. Please could you provide information as to which farms are required by SNH to keep a log of Acoustic Deterrent Device (ADD) use and seal predation events which trigger them.

The fish-farms for which we have recommended that a log of ADD use be established and maintained by their operators are as follows. Relevant advice to the Local Authority concerned in each case is also provided. You should note, however, that we do not have the capacity to 'require' operators to maintain such logs, but make recommendations as appropriate to the relevant Local Authority. They may choose to endorse these or not as they see fit.

- Gravir Outer, Western Isles.
- East Tarbert Bay, Argyll & Bute
- Fishnish A, Argyll & Bute
- Fishnish B, Argyll & Bute
- Bagh Dail Nan Cean, Argyll & Bute
- Port Na Gille, Argyll & Bute
- Port Na Croe, Argyll & Bute
- Colonsay, Argyll & Bute
- Portree Outer, Highland
- Sconser Quarry, Highland
- Scalpay, Highland
- Ru Chorachan, Highland
- Invertote, Highland
- Culnacnoc, Highland

2. Please provide the log sheets for those farms for the past 5 years, giving the times when the ADDs were triggered, the number and make of the ADDs, and the evidence of seal predation. I am not interested in the names of the individuals who filled in the logs.

To date, we have not received any such logs. I therefore need to explain that this means that EIRs Regulation 10(4)(a) (Information not held) applies to this part of your request.

3. The spreadsheet shows 16 farms which are not allowed by SNH to use ADDs without an EPS licence (highlighted in yellow). Please provide correspondence between SNH and the farms and between SNH and Marine Scotland explaining why these farms require an EPS licence.

It is not in our remit to permit or prohibit ADD use, but we do provide advice to Regulators (Local Authorities and Marine Scotland) on this, where appropriate. Our planning advice to the Local Authorities in relation to 15 of the 16 sites referred to is attached along with this letter, plus additional relevant correspondence we have on file in relation to five sites (Westerbister; Bay of Vady; Noust Geo / Backaland; Bring Head; Toyness). We have no information relevant to this request in relation to the Shuna site. Note that in many cases, the advice we have on file (see attached documents) makes no reference to EPS licence requirements; it may be that the apparent requirement for such a licence is based on historic advice from us.

Please note also that, contrary to the assertion made in the email dated 15/09/16 (page 83 of the attached correspondence, and repeated on pages 86 and 91), SNH did not give any manufacturer permission to use ADD devices inside protected sites. As indicated above, it is not within our remit to permit or prohibit use of ADDs, whether in protected areas or not.

4. Please supply any information as to why SNH has not informed the other farms of the requirement to hold an EPS licence before ADDs can be used.

For commercial activities in the marine environment EPS licences are regulated and issued by Marine Scotland Licensing Operations Team (MS-LOT). SNH are formally consulted by MS-LOT as part of the licencing process, but it is not a statutory requirement for us to provide advice on whether or not a marine EPS licence is required. As marine EPS licencing is regulated separately by MS-LOT it is not directly relevant to the planning process and we do not routinely seek to provide the Planning Authority with advice in relation to the requirement for marine EPS licences.

Information Not Released

We have marked out (redacted) personal data in the documents provided. Releasing the personal data into the public domain in response to an access to information request would breach the Data Protection Act 2018. We are therefore withholding the information under EIRs Regulations 11(1) and 11(2) (Personal data).

We have also redacted a very small amount of commercially confidential information. Disclosing the information into the public domain in response to an access to information request would be likely to cause substantial harm to a legitimate economic interest. We are therefore withholding the information under EIRs Regulation 10(5)(e) (Confidentiality of commercial or industrial information).

We have concluded that, in this case, it is not in the public interest for SNH to release information that would harm a legitimate economic interest.

How We Handled Your Request

We believe you have asked for environmental information as defined in the Environmental Information (Scotland) Regulations 2004 ('the EIRs'), so we are dealing with your request under those regulations. To be able to use the EIRs, we must apply an exemption under section 39(2) of the Freedom of Information (Scotland) Act 2002 ('FOISA'). The Scottish Information Commissioner's guidance recommends that public authorities apply this exemption to environmental information and handle requests under the EIRs.

If you would like to find out more about the access to information legislation, there is a guidance booklet available on the Scottish Information Commissioner's website:

<http://www.itspublicknowledge.info/nmsruntime/saveasdialog.aspx?IID=5487&sID=5024>.

Review and Appeal

I hope this information meets your requirements but if you are dissatisfied with how we have responded to your information request, please write to us within 40 working days explaining your concerns. You can contact us at Battleby, Redgorton, Perth, PH1 3EW or email us at FOI@nature.scot. We will carry out a review of our response and contact you with our findings within 20 working days.

If you are not satisfied following this, you can make an appeal to the Scottish Information Commissioner. The Scottish Information Commissioner can be contacted at:

Scottish Information Commissioner
Kinburn Castle
Doubledykes Road
St Andrews
Fife
KY16 9DS

Online appeal service: www.itspublicknowledge.info/Appeal

Website: <http://www.itspublicknowledge.info/>

Telephone: 01334 464610

Yours sincerely

Rhoda Davidson

Rhoda Davidson
Information Officer
FOI@nature.scot

Meeting with Scottish Sea Farms

11th November 2008

Present: Sally Davies and Dave Mealand from Scottish Sea Farms, Charlie and Lesley Sinclair from Xodus, Esther Pawley from SNH.

Summary of discussion:

Scottish Sea Farms wish to install automatic feed barges on four of their sites (eventually all of their sites). These being:

- Toyness, Orphir
- Bring Head, Hoy
- Puldrite, Rendall
- Veantrow Bay, Shapinsay

SSF wish to increase the size of the majority of their fin fish farms in Orkney, but for now were just applying for the installation of these four feed barges.

Photographs of the barges intended for the Puldrite and Veantrow sites were shown – these are presently in Shetland and resemble boats painted in blue and white/grey. They hold 70 and 100 tonnes of feed respectively. The dimensions of the smaller barge are 22 x 6 x 4m, the larger would be a couple of metres longer and wider.

The design had not been decided for the Scapa Flow sites, but I requested that the choice of colour be justified for each site and suggested that a dark, muted, matt colour may be more suitable for Bring Head, which is within the Hoy and West Mainland NSA, and from many view points would be viewed against dark shoreline/cliffs of Hoy.

Landscape and Visual impact assessments: Xodus went through the potential sensitive receptors for each of the sites – they will be undertaking this work for SSF. Leslie will supply me with a copy of the last visual assessment undertaken for Bring Head/Toyness as supplementary information.

Barge lighting: Lighting would be necessary throughout the winter months when there are personnel aboard the barge. This is usually within the working day, but will include evening work when harvesting occurs, although this only takes up to two hours.

EP – to advise SSF that the lighting be shielded/directed as necessary to reduce visual impact.

Barge locations: The barges would be positioned end on to the array of cages on the inshore side in each case. This is to reduce the impact of the waves on the barge.

Boat movement: There would be no difference regarding the number of boat movements to the site from either Kirkwall or Stromness, however, instead of the time being spent by staff pumping feed into the individual cages from the boat (approx 1 hour per cage) time would instead be spent on net maintenance.

Winter maturation lighting: SSF wish to install underwater lighting at Bring Head and Toyness. They wish to get this installed as soon as possible for use from January to May (or possibly late April if the days are long enough). The lights are installed 6m below the surface of the water and appear to glow green. The lights would be on between approximately 3pm and 10am. SSF would not use the lights excessively as this would not be financially viable.

EP – to give some advice/response to this proposal. What is the procedure for this?

New finfish farm site: SSF are in discussions with the owner of a site licenced for mussels but not presently being used. It is located just west of Orphir Bay, south of the Heritage Centre etc and west of the Toyness site (approx 2.5 Km). SSF would like comments from SNH as to their view on this site. My initial response included the proximity to common seal haulout sites, the presence of cetaceans in the area and the need for considerations of the effects on wild trout populations – requested they consult with OTFA for further information on this. I also mentioned the need for a strategic look at the number of fish farms in the area – they are aware of Mainstream Scotland Ltd’s proposal to establish a new finfish farm in the area (to replace an existing one which is too close to the proposed container hub).

I suggested they look at the MNCR for existing benthic information for the proposed site (having checked it doesn’t have any data for this particular location).

EP – to provide comments to SSF as to our initial thoughts on this site.

Request for use of ADDs: SSF wish to use ADDs at their sites within Orkney. Of the four sites discussed there has been a problem with seals at the Puldrite and Veantrow locations and this has resulted in the shooting of seals (both Grey and Harbour seals) at both sites. Winter is a particularly difficult time as there is a scarcity of wild fish. Dave mentioned that there is a strict policy regarding shooting of seals on SSF farms, but that a number of seals had to be shot particularly during the harbour seal pupping season. SSF do not use anti-predator nets (unlike Mainstream Scotland Ltd) for a number of reasons including fouling of the nets and the death of species within the net. Sally mentioned research that was currently being conducted at one of their sites in the Sound of Mull, using PODs, as a SARF project. Jonathan Gordon and Simon Northridge at SMRU are part of this project. Results have not been published, but indications appear to show that porpoises are not excluded for up to 3Km from the site of deployment. SSF use Airmar (?) ADDs but would like to use a more specific one if they were available.

I mentioned the recent serious decline in harbour seal numbers in Orkney which would have implications not only upon their suggestion for a new site in Scapa flow but also upon the use of ADDs. I said that we would have to assess the use of ADDs on a site by site basis and that I would respond to them regarding our view on their use in Orkney given the current status of harbour seals in the County. There was also mention of the need for an EPS licence to deploy ADDs. SSF mentioned that they had a strict policy on their use –i.e. only when ‘necessary’ and that she would send me a copy for information.

EP – to follow up on this and respond to Sally at SSF.

Code: SARF044

Title: Assessment of the impacts and utility of acoustic deterrent devices

Start Date: 1st March 2008

End Date: 31st August 2009

Main Contractor(s): University of St Andrews

Other Sponsor(s): -

Objectives:

1. Measure the degree of disturbance and exclusion caused by commercial and widely used ADD devices on cetaceans over a range of time scales and over spatial scales from 10s m to 10s Kms. We will explore this by conducting a series of controlled experiments and test at least two widely used devices with contrasting acoustic outputs.
2. Investigate effects on porpoises at greater spatial and temporal scales by estimating the relative abundance of porpoises (based on acoustic data) and analysing this with respect to ADD occurrence, from data collected over five years during regular surveys in the Hebrides.
3. Assess, through interviews and analysis of existing log books, how ADDs are used on a representative sample of Scottish salmon farms. Assess how their use affects the pattern of seal attacks at fish farms.
4. Collect data directly from salmon farms during episodes of 'seal attack' and make observations of the effects of ADDs as part of management activities
5. Suggest guidelines for best usage based on these data and their analysis.

Project Summary:

The use of ADDs in Scottish fish farms has become controversial due to a perceived acoustic impact on cetaceans. Uncertainties about the extent to which ADDs are effective in minimising seal damage also remain. This study proposes to examine the extent to which porpoises are affected by different ADD models, and specifically under different duty cycles. We will also use existing acoustic data collected over five years from the West Coast to examine how porpoise distribution is influenced by ongoing ADD use. In collaboration with the industry we will use daily records from farms where ADDs have been used to collate descriptive information on the effectiveness of otherwise of ADDs. We will on an opportunistic basis deploy acoustic and video equipment around the pens of a salmon farm where seal attacks are ongoing to try to understand more about the nature of such attacks, while also testing the effectiveness of 'triggers' used by one of the manufacturers as indicators of seal attack. Finally we will use the results of this work to elaborate guidelines for best practice use of ADDs.

Number of cages at Puldrite: I asked them to clarify how many cages they had at Puldrite as they latest information I had on file suggested the site was licenced for only 8 cages. SSF replied that they presently had 10 cages at the site and that they had had discussions with the OIC regarding this and would be sorting it out in the future.



Scottish Natural Heritage
All of nature for all of Scotland

54/56 Junction Road
Kirkwall
Orkney
KW15 1AW

Tel: 01856 875302
Fax: 01856 876372
E-Mail: northern_isles@snh.gov.uk

Mr J Macvie
Department of Development Services
Planning Services
Orkney Islands Council
Council Offices
Kirkwall
Orkney
KW15 1NY

Our ref: CNS/MFF/ORK/Toyness-53022
Your ref: 09/020/MAR

11th March 2009

Dear Jamie

Marine Fish Farm Planning Application Consultation
Planning Application Ref: 09/020/MAR
Proposal: Install feed barge and 4 underwater lights in each existing cage
Location: Toyness, Orphir

Thank you for your correspondence of the 27th January 2009 requesting comments from Scottish Natural Heritage (SNH), and extension to consultation deadline, on the above application.

Background

Scottish Sea Farms (SSF) propose to install a 29m x 6m x 5.16m feed barge adjacent and at right angles to the existing 10 cages at Toyness fish farm. In addition, SSF propose to install 4 x 400w maturation lights per cage at a depth of 7m below the surface of the water, to be illuminated between dusk and dawn from January until the end of April during the second year of the growth cycle.

SSF also wish to establish a new Predator Control Plan which includes the use of Acoustic Deterrent Devices (ADDs).

SNH POSITION

SNH has no objection but recommends conditions to further minimise impacts arising from the development as detailed below.

SNH APPRAISAL OF THE PROPOSAL

Protected Species

Scottish Sea Farms Bring Head & Toyness Predator Control Plan dated 12th February 2009 that accompanies this application mentions the use of ADDs at point e.

Aquaculture developments in this area have the potential to impact on cetaceans feeding in or passing through Scapa Flow, populations of both harbour and grey seals and on storm petrels which feed in the vicinity.

A limited amount of research has demonstrated that ADDs have the potential to elicit aversion responses in cetaceans up to several kilometres from the source. Habitat exclusion, particularly in fragmented coastal areas with sounds, channels and islands such as Scapa Flow, is of particular concern. SNH advocates the use of a non-invasive anti-predator strategy at marine fish farm sites, at present we recommend net tensioning as the best environmental option, ADDs should only be used as a last resort where tensioned netting and anti-predator netting have proved ineffective.

SNH does not object to the Bring Head and Toyness Predator Control Plan as supplied by SSF with this application. However, SNH strongly advises that the use of ADDs at this site are used only when correctly maintained tension netting has proved inadequate and are strictly operated as described in the previously mentioned Predator Control Plan, a dialogue is maintained with SNH and records of ADD use are made available to SNH when requested and that they are preferably not used during the months of June – August when cetacean activity appears to peak in the area. Due to the importance of Scapa Flow to cetacean species a European Protected Species Licence will be required to operate the ADDs at this site.

Storm petrels, which nest between May and October, feed at night on plankton, often being attracted to the phosphorescent glow produced by some of their prey species. As a result they are likely to be attracted to the underwater lights of fish farms, which may interfere with their feeding and make them more vulnerable to predation. SNH is encouraged that the use of these lights is proposed only between and inclusive of the months of January to April every two years to avoid adversely impacting upon the storm petrel population.

Landscape and visual impacts

In respect of landscape and visual impacts, the proposed feed barge will introduce a new element into the fish farm layout. The barge location suggested for Toyness is not in line with the existing cage layout. To reduce the visual impact of the proposal SNH would suggest that the barge is moored closer to and more in alignment with the cages.

The design of the barge is visually complicated and SNH would suggest simplifying this if possible including the re-painting of the barge, shed and crane in muted colours to reduce visual impact and re-painted regularly to retain a more pleasing appearance.

SNH also suggest that the planning authority considers monitoring the impacts of the barge and lighting after installation.

CONCLUSION

SNH has no objection but recommends conditions to further minimise impacts arising from the development including:

- the strict use of the Predator Control Plan as described within the Bring Head & Toyness Predator Control Plan (as reviewed by Sally Davies 19/12/08 and submitted as part of this application by SSF) and justification of use of ADDs to SNH if and when it may be necessary to use them in addition to the correctly maintained tension netting.

- the likely need for a European Protected Species Licence for use of ADDs at this site.
- the timing of the re-painting of the feed barge and colours chosen are acceptable to the Orkney Islands Council to minimise the visual impact.
- the use of the mitigation measures as described in section 5.3 of the Scottish Sea Farms Feed Barge & Maturation Lighting Installation, Visual Assessment – Toyness (Xodus Aurora for SSF) submitted as part of this application.

Please let me know if you need any further information or advice from SNH in relation to this proposal. I would be grateful if you could let us know of your Council's decision in due course or of any further changes to the proposal which would be relevant to our interests.

Yours sincerely



Esther Pawley
AREA OFFICER
Orkney



54/56 Junction Road
Kirkwall
Orkney
KW15 1AW

Tel: 01856 875302
Fax: 01856 876372
E-Mail: northern_isles@snh.gov.uk

Mr J Macvie
Department of Development Services
Planning Services
Orkney Islands Council
Council Offices
Kirkwall
Orkney
KW15 1NY

Our ref: CNS/MFF/ORK/Bring Head - 53026
Your ref: 09/020/MAR

13th March 2009

Dear Jamie

Marine Fish Farm Planning Application Consultation
Planning Application Ref: 09/031/MAR
Proposal: Install feed barge and 4 underwater lights in each existing cage
Location: Bring Head, Hoy

HOY SPECIAL PROTECTION AREA (SPA)
HOY SPECIAL AREA OF CONSERVATION (SAC)
HOY SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

Thank you for your correspondence of the 27th January 2009 requesting comments from Scottish Natural Heritage (SNH), and extension to consultation deadline, on the above application.

Background

Scottish Sea Farms (SSF) propose to install a 29m x 6m x 5.16m feed barge moored on the north side of the existing 10 cages at Bring Head fish farm and positioned in a south to north direction at right angles to the cage group. In addition, SSF propose to install 4 x 400w maturation lights per cage at a depth of 7m below the surface of the water, to be illuminated between dusk and dawn from January until the end of April during the second year of the growth cycle.

SSF also wish to establish a new Predator Control Plan which includes the use of Acoustic Deterrent Devices (ADDs).

Bring Head fish farm is situated in Hoy Sound to the east of Hoy and to the south of Graemsay. The area is of high natural heritage value having important populations of marine mammals, birds and marine habitats. The fish farm lies within the proposed marine extension to Hoy SPA and in close proximity to Hoy SPA, Hoy SAC and Hoy SSSI. In addition, the site lies within the Hoy and West Mainland National Scenic Area (NSA).

SNH POSITION

SNH has no objection but recommends conditions to further minimise impacts arising from the development as detailed below. Regarding the Natura interest of the site SNH considers that it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly and in SNH's view an appropriate assessment is therefore not required.

SNH APPRAISAL OF THE PROPOSAL

Natural Heritage Interests Affected

Designated Sites

The Bring Head fish farm lies adjacent to Hoy Special Protection Area (SPA), Hoy Site of Special Scientific Interest (SSSI) and within the proposed marine extension to Hoy SPA. This area is of special nature conservation importance, classified because of its outstanding assemblage of aggregations of breeding birds. The qualifying features of Hoy SPA are: the breeding seabird assemblage and breeding populations of Arctic Skua, Northern Fulmar, Great Skua, Greater Black-backed Gull, Common Guillemot, Kittiwake, Peregrine, Atlantic Puffin and Red-throated Diver. The Conservation Objectives for this site are included in Annex A.

The Hoy proposed marine SPA extension extends approximately 2 km into the marine environment to include the seabed, water column and surface, to better protect the seabird interests of the existing terrestrial SPA.

Hoy SAC is designated for the following interests: alkaline fens, alpine and boreal heaths, blanket bogs, calcareous rocky slopes with chasmophytic vegetation, European dry heaths, natural dystrophic lakes and ponds, Northern Atlantic wet heaths with *Erica tetralix*, petrifying springs with tufa formation, vegetated sea cliffs of the Atlantic and Baltic coasts. The Conservation Objectives for this site are included in Annex A.

Hoy SSSI is designated for breeding aggregations of Arctic Skua, Fulmar, Great Skua, Greater Black-backed Gull, Guillemot, blanket bog, dystrophic lochs, geology and geomorphology.

Birds

The area immediately off shore of Bring Head is attractive to Great Northern Diver, a species for which Scapa Flow is internationally important and which is listed on Annex 1 of the EC Wild Birds Directive. In addition, Black-throated Diver and Slavonian Grebe are also Annex 1 birds which occur in Scapa Flow. Breeding Storm Petrels are a Species of European Conservation Concern which regularly breed in Orkney.

Cetaceans

Several species of cetacean have been recorded from Bring Deeps and the immediate surroundings including Harbour Porpoise, Common Dolphin, White-beaked Dolphin and Long-finned Pilot Whale. All species of cetacean are European Protected Species (EPS) protected under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). The legislative requirements for EPS are provided in Annex B.

Landscape

The site also lies within the Hoy and West Mainland National Scenic Area (NSA).

SNH appraisal of the likely impacts of the proposal on Natural Heritage Interests

Designated Sites

The legislative requirements for European sites are summarised in Circular 6/1995, as amended June 2000. Annex C provides further details of the legislative requirements.

The proposal is not connected with or necessary for the conservation management of the site, hence further consideration is required.

It is not considered probable that the installation of the feed barge or underwater lighting will have a likely significant effect on any of the bird species associated with the proposed marine extension to Hoy SPA and hence nor will the integrity of the site be affected. This view is based on the likely distribution of species and these species attraction to fish farms. This application for authorising an activity is not likely to have a significant effect on the qualifying interests of Hoy SPA, Hoy SAC or Hoy SSSI.

Birds

Storm Petrels, which nest between May and October, feed at night on plankton, often being attracted to the phosphorescent glow produced by some of their prey species. As a result they are likely to be attracted to the underwater lights of fish farms, which may interfere with their feeding and make them more vulnerable to predation. SNH is encouraged that the use of these lights is proposed only between and inclusive of the months of January to April every two years to avoid adversely impacting upon the Storm Petrel population.

Cetaceans

Scottish Sea Farms Bring Head & Toyness Predator Control Plan dated 12th February 2009 that accompanies this application mentions the use of acoustic deterrent devices (ADDs) at point e.

A limited amount of research has demonstrated that ADDs have the potential to elicit aversion responses in cetaceans up to several kilometres from the source. Habitat exclusion, particularly in fragmented coastal areas with sounds, channels and islands such as Scapa Flow, is of particular concern. SNH advocates the use of a non-invasive anti-predator strategy at marine fish farm sites, at present we recommend net tensioning as the best environmental option, ADDs should only be used as a last resort where tensioned netting and anti-predator netting have proved ineffective.

SNH does not object to the Bring Head and Toyness Predator Control Plan as supplied by SSF with this application. However, SNH strongly advises that the use of ADDs at this site are used only when correctly maintained tension netting has proved inadequate and are strictly operated as described in the previously mentioned Predator Control Plan, a dialogue is maintained with SNH and records of ADD use are made available to SNH when requested and that they are preferably not used during the months of June – August when cetacean activity appears to peak in the area. Due to the importance of Scapa Flow to cetacean species a European Protected Species Licence will be required to operate the ADDs at this site.

Landscape and visual impacts

In respect of landscape and visual impacts, the proposed feed barge will introduce a new element into the fish farm layout. The barge location suggested for Bring Head is not in line with the existing cage layout. To reduce the visual impact of the proposal SNH would suggest that the barge is moored closer to and more in alignment with the cages rather than at right angles to the cage layout as proposed.

The design of the barge is visually complicated and SNH would suggest simplifying this including the re-painting of the barge, shed and crane in muted colours to reduce visual impact and re-painted regularly to retain a more pleasing appearance.

SNH also suggest that the planning authority considers monitoring the impacts of the barge and lighting after installation, particularly as this site lies within the Hoy and West Mainland NSA.

CONCLUSION

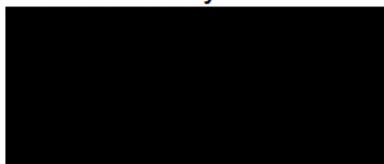
Regarding the Natura interest of the site SNH considers that it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly and in SNH's view an appropriate assessment is therefore not required.

SNH has no objection but recommends conditions to further minimise impacts arising from the development including:

- the strict use of the Predator Control Plan as described within the Bring Head & Toyness Predator Control Plan (as reviewed by Sally Davies 19/12/08 and submitted as part of this application by SSF)
- justification of the use of ADDs at this site as being required to prevent serious stock losses if and when it may be necessary to use them in addition to the correctly maintained tension netting. SSF to be made aware of the need for a European Protected Species Licence in the event of the need of use of ADDs at this site.
- the timing of the re-painting of the feed barge and colours chosen are acceptable to the Orkney Islands Council to minimise the visual impact.
- the strict use of the mitigation measures as described in section 5.3 of the Scottish Sea Farms Feed Barge & Maturation Lighting Installation, Environmental & Visual Assessment – Bring Head (Xodus Aurora for SSF) submitted as part of this application, including the illumination of the underwater lighting only during the months January to April.

Please let me know if you need any further information or advice from SNH in relation to this proposal. I would be grateful if you could let us know of your Council's decision in due course or of any further changes to the proposal which would be relevant to our interests.

Yours sincerely



Esther Pawley
AREA OFFICER
Orkney

Annex A

CONSERVATION OBJECTIVES FOR HOY SPECIAL PROTECTION AREA

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

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

- Population of the species 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:

- Arctic skua (*Stercorarius parasiticus*)*
- Fulmar (*Fulmarus glacialis*)*
- Great black-backed gull (*Larus marinus*)*
- Great skua (*Catharacta skua*)
- Guillemot (*Uria aalge*)*
- Kittiwake (*Rissa tridactyla*)*
- Peregrine (*Falco peregrinus*)
- Puffin (*Fratecula arctica*)*
- Red-throated diver (*Gavia stellata*)
- Seabird assemblage

* indicates assemblage qualifier only

The site overlaps with Hoy Special Area of Conservation

CONSERVATION OBJECTIVES FOR HOY SPECIAL AREA OF CONSERVATION

To avoid deterioration of the qualifying habitats (listed below) 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 habitats that the following are maintained in the long term:

- Extent of the habitat on site
- Distribution of the habitat within site
- Structure and function of the habitat
- Processes supporting the habitat
- Distribution of typical species of the habitat
- Viability of typical species as components of the habitat
- No significant disturbance of typical species of the habitat

Qualifying Habitats:

- Acid peat-stained lakes and ponds
- Alpine and subalpine heaths
- Base-rich fens

- Blanket bog*
- Dry heaths
- Hard-water springs depositing lime*
- Plants in crevices on base-rich rocks
- Vegetated sea cliffs
- Wet heathland with cross-leaved heath

* Indicates priority habitat

The site overlaps with Hoy Special Protection Area

Annex B

Legal position relating to European Protected Species (EPS)

Regulations 39 and 43 of The Conservation (Natural Habitats &c.) Regulations 1994 (as amended) [the Habitats Regulations] provide full protection for certain animal and plant species. The species identified above are referred to as European protected species and are listed on Schedules 2 (animals) and 4 (plants) of the Habitats Regulations.

This means it is illegal to:

- Deliberately or recklessly capture, injure or kill a European protected species of wild animal or to deliberately or recklessly (i) harass an animal or group of animals; (ii) disturb an animal while it's occupying a structure or place used for shelter or protection; (iii) disturb an animal while it's rearing or otherwise caring for its young; (iv) obstruct access to a breeding site or resting place, or otherwise deny the animal use of the breeding site or resting place; (v) disturb an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; (vi) disturb an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young
- Deliberately or recklessly take or destroy its egg
- Deliberately or recklessly disturb any cetacean
- Damage or destroy the breeding sites or resting places of such animals
- Deliberately or recklessly pick, collect, cut, uproot or destroy European protected species of wild plant

Where it is proposed to carry out works which will affect European protected species or their shelter/breeding places, whether or not they are present in these refuges, a licence is required from the licensing authority (in this case likely to be Scottish Executive). It is strongly advised that you refer to the Scottish Executive information on the current interim licensing arrangements, which can be found in the document European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements, (October 2001) before applying for a licence. Copies of this are available at <http://www.scotland.gov.uk/library3/environment/epsg-00.asp> or by writing to the Landscape and Habitats Division, Scottish Executive Environment and Rural Affairs Department, Room GH 93, Victoria Quay, Edinburgh EH6 6QQ or by telephoning 0131 244 7140.

As highlighted in the Interim Guidance, three tests must be satisfied before the licensing authority can issue a licence under Regulation 44(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) to permit otherwise prohibited acts. An application for a licence will fail unless all of the three tests are satisfied. The three tests involve the following considerations:

- Test 1 - The licence application must demonstrably relate to one of the purposes specified in Regulation 44(2) (as amended). For development proposals, the relevant purpose is likely to be Regulation 44(2) (e) for which Scottish Executive is currently the licensing authority. This regulation states that licences may be granted by Scottish Executive only for the purpose of "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment."
- Test 2 - Regulation 44(3) (a) states that a licence may not be granted unless Scottish

Executive is satisfied “that there is no satisfactory alternative”.

- Test 3 - Regulation 44(3) (b) states that a licence cannot be issued unless Scottish Executive is satisfied that the action proposed “will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range” (Scottish Executive will, however, seek the expert advice of Scottish Natural Heritage on this matter).

Consideration of European protected species must be included as part of the planning application process, not as an issue to be dealt with at a later stage. Any planning consent given without due consideration to these species is likely to breach European Directives with the possibility of consequential delays or the project being halted by the EC, as has happened previously.

Government Legislative and Policy Requirements for European Sites

Legislative Requirements for European Sites

The site's status as a SAC under the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the "Habitats Directive") *and* as a classified SPA under the EC Directive 79/409/EEC on the Conservation of Wild Birds (the "Birds Directive"), means that the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, (the "Habitats Regulations") apply. The requirements are summarised in SE Circular 6/1995 as amended June 2000 and include, at paragraph 12,

"The Regulations (48) require that, where an authority concludes that a development proposal unconnected with the nature conservation management of a Natura 2000 site is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated."

The need for appropriate assessment extends to plans or projects outwith the boundary of the site in order to determine their implications for the interest protected within the site.

Under Regulation 48 of the Habitats Regulations, this means that SEPA, as competent authority, has a duty to:

- determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
- determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
- make an appropriate assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdair air fad airson Alba air fad

Ms Margaret Gillon
Development Management
Orkney Islands Council
School Place
Kirkwall
KW15 1AW

Your ref: 10/319/MAR

Our ref: CNS/MFF/ORK/Aquaculture/
Cava – Scapa Flow (65752)

Date: 24 November 2010

Dear Ms Gillon

Town and Country Planning (Scotland) Act 1997 & Environmental Impact Assessment (Scotland) Regulations 1999: Planning Application Ref: 10/319/MAR submitted by Mainstream Scotland Ltd (Northern Isles Salmon Ltd) for installation of twelve aquaculture cages South of Cava, Scapa Flow

Thank you for your e-mail of 17th November requesting our further comments on this application. The advice presented here relates specifically to the Post ES Support Cetacean Review as presented on behalf of the applicant by Xodus Aurora¹ following our initial advice of 28th July 2010.

Position Statement

We advise that any proposed use of ADDs at this site would require an EPS licence and that the information provided in this review is not sufficient to inform future advice with respect to any application for an EPS licence. Some of the mitigation measures proposed may be relevant to such an application, but would require to be developed more fully before they might be suitable for consideration as possible conditions to any licence. The use of ADDs close to common seal haul outs may also be problematic.

Appraisal of the Cetacean Review

The intention of the cetacean review is (p. 4) “to describe the cetacean species likely to be encountered in the area and the periods during which cetacean abundance will be highest”. However, the data sources used are outdated (e.g. Booth, 1994; and, Evans, 1998) or of a resolution not suited to describing cetacean activity within Scapa Flow (i.e. Reid *et al.* 2003; and, JNCC, 2000). We would have anticipated a review of this type accessing the extensive records held by the Orkney Biological Records Centre².

There are also some difficulties with the scientific interpretation and presentation of the data. In Table 1.1 (p.5) the column headed “Sensitive period” is incorrectly labelled and conflates sensitivity with seasonal changes in numbers of sightings. This may indeed reflect seasonal changes in actual occurrence or abundance, but will also reflect varying levels of observer effort (which are likely to be low in the winter months). In addition, the sensitivity of a given



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¹ Cava (South Site) Post ES Support Cetacean Review Northern Isles Salmon Limited Xodus Aurora Document Number: A-30191-S02-REPT-002 17 November 2010

² In this context, for future reference, we draw your attention to a review of Abundance and Behaviour of Cetaceans & Basking Sharks in the Pentland Firth and Orkney Waters recently commissioned by SNH. This will be published later this year.

Scottish Natural Heritage, 54-56 Junction Road, Kirkwall, Orkney, KW15 1AW
Tel: 01856 875302 Fax: 01856 876372

e-mail: kate.thompson@snh.gov.uk
www.snh.org.uk

species to disturbance will be dependent on factors other than abundance, such as stage in the breeding cycle or use of particular areas for activities such as feeding.

With respect to the legal implications of undertaking activities, such as use of ADDs, which may cause disturbance to cetaceans, it should be noted that the Habitats Regulations 1994 as amended *in Scotland*³ include a general disturbance offence for cetaceans (Reg 39(2)). The reference made (p. 6) to the draft 2008 JNCC report on disturbance of marine EPS is incorrect as that report has subsequently been amended and does not apply to Scottish inshore waters.

Implications for use of ADDs

With respect to any proposed use of ADDs at this site, we advise that the operator would require an EPS licence. Of the potential mitigation measures outlined on p7 we would agree that ADDs should not be deployed between May and July. The proposal for visual monitoring might potentially be workable, but much more detail would be required to assess its value. Particular questions would include from where, by whom and by what methods would the presence of cetaceans be checked and over what area; and, what would the protocols be for ADD use in relation to observed cetacean activity?

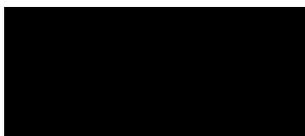
As previously indicated (28th July 2010) we would also be concerned about potential adverse impacts of ADD deployment on common seals, particularly during their breeding season between June and August. More generally, under the Marine (Scotland) Act 2010 there will be a new offence created of harassment of seals at listed haul out sites. This could have wider implications for any future use of ADDs at this site should any of the known haul outs in the vicinity, including those on Cava itself, be listed under this provision.

Conclusions

We advise that any proposed use of ADDs at this site would require an EPS licence and that the information provided in this review is not sufficient to inform future advice with respect to any application for an EPS licence.

Please contact Kate Thompson at our Kirkwall office in the first instance should you need any further advice on this.

Yours sincerely



Kate Thompson
Area Officer, Orkney

³ Please see <http://www.snh.gov.uk/protecting-scotlands-nature/protected-species/legal-framework/habitats-directive/euro/> for more on EPS and the Habitats regulations 1994 (as amended)

FISH FARM REVIEW

Site; Bay of Ham, Rousay Fish Farm Review Comments

Benthic Impacts:

1. We have no knowledge of any significant benthic features of interest at this location. This site is for a maximum biomass of 250 tonnes and we note SEPA results show this site to have a moderate flushing rate.

Interaction with predators:

3. The predator control strategy attached to this application is not up to date with respect to species licensing and consequently is not fully clear. The paragraph relating to shooting seals as a last resort makes no reference to the requirement for a licence, the annual licensing round or the potential constraints of the Potential Biological Removal figures for Orkney and North Coast Seal Management Region. The predator control plan does not deal with the possibility of entanglement of red-throated divers from the nearby Orkney Mainland Moors SPA.

We recommend that the predator plan is updated and would further advise consistency of predator control plans using a layout and hierarchy similar to that for other sites operated by the same developer e.g. Cava South. The use of ADDs in this area would not be suitable as the fish farm lies in a natural bay within a narrow strait and has the potential to affect cetaceans within the area.

Interaction with wild salmonids:

4. Minimising the potential adverse effects upon wild salmonids is an important consideration particularly with respect to sea trout populations from Sourin Burn. We consider the escapee policy, which has been included in the application to be adequate. We note and welcome the intention within the management agreement with Scottish Sea farms Ltd to agree a zonal sea lice treatment plan, including synchronous treatments where possible. We would also encourage developers to liaise with the local Orkney Trout Fishing Association on the interaction with Sea Trout.

Impacts upon species or habitats of conservation importance, including Sensitive Sites:

5. This site has been in operation prior to the marine extension to the Rousay Special Protection Area (SPA) and consequently has not been the subject of a Habitats Regulation Appraisal by the competent authority. Following our own appraisal of the potential impacts of this development upon the qualifying features of the SPA and nearby Natura sites, we can advise that, based upon current information, this development could have a likely significant effect on some qualifying interests. As a consequence Marine Scotland, as competent authority, is required to undertake an Appropriate Assessment in line with the Habitat's Regulations.

Details of the interactions between the fish farm, seals and cetaceans and the various current conservation legislation for the species are not included in the application.

Landscape and Visual Impacts:

7. There are no significant landscape issues associated with this development at present. Landscape and visual impacts would need to be considered where there are any proposed changes to the development.

Our advice as to your Screening opinion is summarised as:

This site has not been the subject of either an Environmental Impact Assessment or a Habitats Regulations Appraisal. Our own appraisal of the potential impacts of this development with respect to Rousay SPA is that there will be no likely significant effect on the qualifying seabird species. However, red throated divers, which are a qualifying species for the nearby Orkney Mainland Moors SPA maybe at risk from entanglement in underwater predator netting and this could lead to a likely significant effect. There is currently no information available on this aspect over the lifespan of the existing fishfarm. This issue can be managed through the use of appropriate netting types. The current predator plan does not address this topic.

Similarly, grey seals from Faray and Holm of Faray SAC and common seals from Sanday SAC may be present in the locality and may be attracted to this development. There will not be a likely significant effect unless any of these animals suffer mortality at the site. Again this matter can be addressed through an adequate predator plan.

As these issues can be covered by a revision of the plan and associated implementation of appropriate management measures, we do not consider that an EIA is required in this instance.

Our advice as to your Scoping opinion/advice, relating to environmental information that should be included in an Environmental Statement, is summarised as:

Our advice on additional information that should be submitted in support of the application is summarised as:

In the absence of clear protocol to avoid mortality of red throated divers and seals, we advise that a likely significant effect may result for the Orkney mainland Moors SPA, the Faray and Holm of Faray SAC and Sanday SAC and as a result Marine Scotland is required to undertake an Appropriate Assessment. However, if a competent predator plan is produced which addresses a hierarchy of predation control measures (eg tensioned nets and mesh sizes), and current licensing requirements linked to the Potential Biological Reduction figures for seals, this likely significant effect can be avoided. In this instance the need for an Appropriate Assessment can also be avoided.

We therefore advise that an updated predator plan which adequately addresses these points is requested. The plan produced for Cava South may provide a useful guide.

From: <Richard.Darbyshire@scottishseafarms.com>
To: [Kate Thompson](#)
Cc: [Donna Yule](#)
Subject: ADD enquiry
Date: 21 April 2011 14:27:28
Attachments: Predator Control Plan - SSF Bring Head & Toyness 2011.doc
Seal Record 2011 v2.xlsx
Mime.822

Hi Kate

Many thanks for getting back to me.
Please find attached a copy of our Predator Control Plan for our Scapa Flow sites.

(See attached file: Predator Control Plan - SSF Bring Head & Toyness 2011.doc)

As you will see, our main lines of defence from seals are...

Highly tensioned nets
Reduced cage netting size
Use of 'superknot' netting.

(We do not use predator nets due to the indiscriminate way they can trap and drown other wildlife. There is also the technical issue that predator nets do not work in highly tidal sites, as the predator net gets tangled up within the 'Froya Ring' and prevents them from working correctly.)

All the systems listed above are usually effective at reducing fish mortality due to seal attacks, however they cannot prevent loss of appetite in the stock and poor growth performance due the fish permanently being in a state of stress.

At our other Orkney sites we have a fourth line of defence which is the use of Airmar DBII plus seal scramblers. These ADD's are only switched on once all other methods have failed.

Our policy for their use is as follows.....

“Rules of Engagement”

- ÿ An assumption must exist that the ADD is "OFF"
- ÿ SSF managers must have direct evidence of seal interaction to enable the system to be turned "ON"
- ÿ Seal interaction may be defined as :
 1. Fresh mortality diagnosed as clearly seal derived
 2. Observation of seal persistently within mooring area & changed fish behaviour. For example reduced feeding associated with seal presence
 3. Seal observed within mooring area & recent abrasion/damage to nets
- Managers must record periods when ADD's are operated & make these logs available to SNH if required

The log which we use that monitors seal interactions is as follows..... (See attached file: Seal Record 2011 v2.xlsx)

All information on this seal scamming system can be found on the manufacturers www. site <http://www.bennex.no/?page=1624&show=1309>

We are also looking at another seal scammer that is fairly new on the market. We have been running trials on this system in Argyll and the results have been excellent. This system, 'The silent seal scammer' is only activated by fish being startled in a cage, due to a seal attack. The system relies on 'triggers' being placed in the cages and it is these triggers that activate the scammer if a seal attacks.

More details can be found here.... <http://www.aceaquatec.com/scarer.htm>

There is also some further information contained here <http://www.aceaquatec.com/AA-01-044.pdf> and here <http://www.aceaquatec.com/AA-01-045.pdf>

Specifically, there is discussion on how Grey Seals in Orkney (50,000 and rising at 7% a year) are successful in attacking salmon farms in Orkney

Orkney waters are characterised by their fast tidal waters that some Grey seals have learned to exploit to their advantage. In strong tides the growing nets become distorted and the fish inevitably swim closer to the nets than they would otherwise do. The Grey seal hooks itself onto the upstream side of the net and waits for a salmon to come too close. When the seal judges the fish is within range he increases his drag by letting go with his back flippers (becoming more upright) and using this impetus coupled with his strength to make the growing net into a pocket to entrap the fish. At one farm the waters are sufficiently clear to regularly witness several animals riding the nets in this fashion

We would like to have ADD systems permanently installed at both our Scapa sites and rely either on a triggered system, or our 'rules of engagement' for switching these systems on. At this stage we do not have a preference for either system, however the Airmars have been successful at our other sites and we have even had Killer Whales visit our sites whilst this system has been ON.

Look forward to hearing from you in due course.

Richard Darbyshire | Regional Manager-Orkney | Scottish Sea Farms Limited
Office No.3, East Pier, Kirkwall, UK, KW15 1HU
Tel +44 1856 870569 | Mob XXXXXXXXXX
www.scottishseafarms.com

"Kate Thompson"
<Kate.Thompson@sn
h.gov.uk>

To

<Richard.Darbyshire@scottishseafarm
21/04/2011 10:25 s.com>

cc

"Donna Yule"

<Donna.Yule@snh.gov.uk>

Subject

Re: ADD enquiry

Hi Richard,

Apologies for having to dash off when you phoned on Tuesday. As then briefly discussed, we would not generally support use of ADDS within Scapa Flow given presence of resident harbour porpoises and occurrence of other cetaceans. Any proposal would require an application for an EPS licence to disturb cetaceans and in considering such applications we would look for detailed supporting information on proposed ADD deployment and mitigation measures. We will be happy to provide some preliminary pre-application advice if you can please send some more details about any proposed ADD use , including:

how this would sit within your wider predator management strategy and what circumstances might prompt you to deploy ADDS rather than using other methods such as tensioned cage nets, false bottom nets or external predator nets;

what time(s) of year you might propose to use any device;

type of device and how it would be deployed (e.g continuously, or when seals visible, or automatically triggered etc)

Once we have this information we can give you some more initial advice.

I hope this is helpful.

Best wishes,

Kate

Kate Thompson

Area Officer

Scottish Natural Heritage
54-56 Junction Road
Kirkwall
Orkney

KW15 1AW

Tel. 01856 875302
Fax. 01856 876372

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Daily Seal /ADD record sheet

	Seals	Seal Activity	Net interaction	Fish behaviour	Fish interaction
Date	number seen	Behaviour, how near cages	abrasion, damage, holes - state what	stress, feeding, swim pattern	seal damaged mortalities (no)
01/06/08	2	feeding on wild fish close to cages	none	normal	none
02/06/08	0		none	normal	none
03/06/08	4	feeding on wild fish	none	normal	none
04/06/08	6	hauled out near site	none	normal	none
05/06/08	0		none	normal	none
06/06/08	2	patrolling about 50m from cages	none	normal	none
07/06/08	2	patrolling about 50m from cages	none	normal	none
08/06/08	2	patrolling about 50m from cages	none	normal	none
09/06/08	2	patrolling about 50m from cages	hole by dead sock C2	normal	20 seal damaged morts
10/06/08	2	patrolling about 50m from cages	none	normal	none
11/06/08	2	patrolling about 50m from cages	none	normal	none
12/06/08	2	patrolling about 50m from cages	none	normal	possible 3 seal damaged morts
13/06/08	0		none	normal	none
14/06/08	0		none	normal	none
15/06/08	0		none	normal	none
16/06/08	0		none	normal	none
17/06/08	0		none	normal	none
18/06/08	0		none	normal	none
19/06/08	1	hanging around	none	normal	none
20/06/08	0		none	normal	none
21/06/08	0		none	normal	none

22/06/08	0		none	normal	none
23/06/08	1	hanging around	none	normal	none
24/06/08	0		none	normal	none
25/06/08	0		none	normal	none
26/06/08	0		none	normal	none
27/06/08	0		none	normal	none
28/06/08	0		none	normal	none
29/06/08	0		none	normal	none
30/06/08	0		none	normal	none

ADDs	Seals Shot	Destruction Report
In use continuously, night time only, not at all?	number and by whom	sent to regional manager : date
continuous use		

Daily Seal /ADD record sheet						
	Seals	Seal Activity	Net interaction	Fish behaviour	Fish interaction	ADDs
Date	number seen, SPECIES	Behaviour, how near cages	abrasion, damage, holes - state what	stress, feeding, swim pattern	seal damaged mortalities (no)	In use continuously, night time only, not at all?
1-Jan-11						
2-Jan-11						
3-Jan-11						
4-Jan-11						
5-Jan-11						
6-Jan-11						
7-Jan-11						
8-Jan-11						
9-Jan-11						
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29-Jan-11						
30-Jan-11						
31-Jan-11						
1-Feb-11						
2-Feb-11						

Scottish Sea Farms Bring Head & Toyness Predator Control Plan

The Predator Control Plan exists to ensure the consideration of fish health & welfare while at the same time minimising escape risk and reducing environmental impact.

The primary objectives of the foregoing plan are as follows:

- **Minimise the risk of fish escapes due to predator related net damage**
- **Reduce the cost of predation at the site in financial and fish welfare terms.**
- **Protect both resident and visiting wildlife whilst maintaining best practice toward's protecting cage reared fish from unnecessary stress, injury or mortality.**
- **Demonstrate that the sites operations comply fully with current legislation and customer requirements/ recommendations.**

Risks Identified

Smolt Loss through **Avian** predation:

- ❖ smolt death (economic)
- ❖ bird death (environmental)
- ❖ disease through injured stock (welfare, economic)

Fish loss through **Seal** interaction:

- ❖ seal kills stock (economic)
- ❖ seal injures stock (disease, economic & welfare)
- ❖ seal destruction (environmental)
- ❖ stock escape through net damage (environmental, economic)

Avian: - "Wild birds are protected under the Wildlife and Countryside Act 1981 Section 1 under which it is an offence to kill, injure or take any wild bird"

As some of the Scottish Sea Farms (SSF) sites play host to several species of fish eating birds which may include:

Herring Gulls, Black back Gulls, Grey Herons, Cormorants, Shags, Guillimots and occasionally Gannets, Sea Eagles and Great Northern Divers.

Scottish Sea Farms Ltd.

Postal address
South Shian
Connel
Argyll PA37 1SB
SCOTLAND

Registered in England
No. 958001
Registered office:
McClure Naismith
Pountney Hill House
6 Laurence Pountney Hill
London EC4R 0BL

Telephone:
(+44) 01631 574000
Telefax
(+44) 01631 720465



Cage reared stock are particularly vulnerable to predation from a majority of these birds during the sites smolt year. It is worth noting that all the aforementioned species are opportunists therefore all reasonable effort is made in order to prevent and discourage them gaining access to fish stocks as follows:

Input to First Grade(primary risk avian predation)

- ❖ Use Top Net to prevent cage surface attack
- ❖ Use 15 mm smolt mesh. Small mesh size deters beak attack from below surface
- ❖ Ensure weighting system optimised to produce max. net wall tension (see below)

Seal:- “It is an offence to kill seals except under licence or for welfare reasons to alleviate suffering, Marine Scotland Act 2010”

Both Common and Grey seals may be present in and around the waters surrounding some of SSF farming operations, which may include their haul outs.

Some sites can be particularly vulnerable to seal attack during the production year as the increase in stocking density within cages affords greater opportunities to **Rogue** elements in both species.

Therefore all reasonable effort is made in order to prevent and discourage them gaining access to fish stocks as follows:

From First Grade (primary risk seal attack) deny predator access through ...

- ❖ Use of high quality, robust, correctly tensioned, well maintained nets
- ❖ Due to the fact that all the Orkney Sites are high energy sites, nets are of ‘**Orkney Specification**’, This means that all netting used is at 15mm (Not 25mm) throughout the production cycle. By using this smaller sized mesh, not only are the nets stronger, they also give the fish better protection from seal attacks. All Orkney nets use ‘superknot’ netting. This netting is much stronger than conventional netting with a B/S of 84kg as opposed to standard netting at 66kg.
- ❖ There is extra tensioning on all the Orkney nets with either Froya Rings used (Bring Head), or 50kg wts positioned every 2m (Toyness). The Puldrite Froya rings have 3.8T of wt in them and the Toyness nets have 2.0T of wts attached to them.

Under weighted - distortion of the net - reduction in density- predator attack - stock safety

Over weighted - damage to net - escapes.

- ❖ The centre weight plays a vital role & all Scottish Sea Farms nets are fitted with a suitably rated centre weight (chain link) to allow the net to: form correctly, maintain maximum stocking area, retain tension on the base netting to deter predator attack, assist with mortalities rolling into the dead basket.

- ❖ Given net wall tension, only the net base will distort to any extent through tidal deformation. While healthy salmon are not typically found in this zone moribund or dead fish present a risk. Scottish Sea Farms nets have added a **double panel** specification to nets to reduce both predation success and lower the risk of escape.
- ❖ All SSF (Orkney nets) are checked daily by underwater camera for mortalities. Divers also check all nets weekly for mortalities and holes. Dead Basket systems are not used in Orkney due to the tides causing abrasion on the base of the nets and potentially allowing a hole to develop.

Because of the presence of important populations of cetaceans SNH have advised that ADDs shall not be used within Scapa Flow except under a European protected species licence. At Toyneess or Bring Head the net tensioning systems we have are generally successful in deterring seal attacks.

Last Resort

! Seals may only be culled with evidence of mortality – confirmation of which will exist in ‘Fishtalk’ and through the ‘Seal Record’ spreadsheet.

! The consent of the Orkney Regional Manager or another Senior Manager must be obtained before any seal is culled. Each individual seal to be shot requires the consent of the Orkney Regional Manager or other Senior Manager.

! A seal is only to be shot if the site staff are confident that an identified individual represents a reasonable threat to net integrity or stock welfare.

The following rules of engagement are applied when the shooting of seals is absolutely necessary:

Prior to site access:

- ❖ The site manager must communicate with the nominated marksman for their area to determine a suitable day for site access to carry out any required work.

- ❖ Before work commences both parties **MUST** complete a ‘**Combined Site visitor/Permit to Work**’ form (found on Achiever).
- ❖ On the day of work The Site Manager or designated Senior Husbandry Personnel must be onsite and be observing the seal activity and then supervise and take full responsibility for the actions of the contracted marksman.

WHO can shoot:

- ❖ Only the Professional nominated licensed marksman listed in the Seal Management Licence may be used for shooting seals! He must also of attended a SG recognised course that specifically covers the correct identification of seals
 - Licence number: ONC11/2011/W

Licence conditions:

- ❖ Seals may only be shot in compliance with the specific conditions set out in each individual licence. This will include the maximum number of seals which may be killed. Each licence covers a number of sites and the record of total number of seals shot is held by the Orkney Regional Manager. It is an Offence to shoot more than the maximum number of each species of seal permitted by the licence
- ❖ The nominated marksman is only authorised to shoot, and will only shoot a maximum of 2 seals per 24 hr period and further shooting depends on continued fresh salmon losses (also documented on ‘Fishtalk’)
- ❖ Both the Licencee (SSF) and the nominated marksman should be familiar with the Marine Scotland Seal Management Code of Practice (Nov 2010) and comply with its recommendations.

When CAN seals be shot:

- ❖ Seals should only be shot when weather conditions are suitable, in good visibility, and sea conditions are such to allow a clear shot.
- ❖ Seals may not be shot at night (between one hour after sunset and one hour before sunrise).

!Judgement of the above conditions should be made in the opinion of either the nominated marksman or licensee (SSF) on a reasonable assessment!

Where CAN seals be shot:

- ❖ Shooting must only be carried out within the specific area stated in the licence. Seals should not be shot outside the Crown Estate Lease area.
- ❖ Seals may not be shot when they are hauled out on land.

Shot Placement:

- ❖ Seals **must not** be shot from an unstable platform.
- ❖ Seals **must** be shot from a range of **No More** than **150meters.**(Marine Scotland Act 2010)
- ❖ A seal is **only** to be shot if **within 50m of cage edge.** (SSF)

Carcase recovery:

- ❖ The licensee must take all reasonable steps to recover the carcass of shot seals but only when it is safe to do so.

- ❖ Following the shooting (and if the animal sank) staff should for a period of at least a week, pay special attention to the shore line in the vicinity of the farm and dispose of any carcasses accordingly.

! If carcase recovery has been successful please follow the next steps:

1. Ensure that you are not putting yourself in danger
 2. Wear suitable heavy-duty gloves
 3. Move the seal carcase above the high water mark, away from water to a discreet location to avoid carcase being washed away and any risk to public health
 4. If necessary cover carcase
 5. Make careful note of its exact location
 6. After handling, wash and disinfect yourself thoroughly
- Please report details of any seal carcase including OS grid reference, site details and your telephone number and address to the following:
Scottish Agricultural College Strandings Scheme: Tel: 01463 243030
 - If you have problems disposing of seal carcasses seek advice from the local office of the Scottish Environment Protection Agency (SEPA).

This area is retained for site specific requirements pertaining to Predator Control:

SPECIFIC LICENCE CONDITIONS

1. Seals should not be shot when they are hauled out on land.
2. Seals should only be shot at fish farm sites which are currently stocked with aquaculture animals.
3. A maximum of 6 grey seals can be shot between 01 October 2011 and 31 December 2011 (inclusive) at the following farms which lie within 20km of the Faray and Holm of Faray SAC for grey seals.

Puldrite FS/0813
Shapinsay FS/0860
Eday Sound (South) FS/0823

Records:

- ❖ **ALL** ADD use, seal interaction and seal damaged mortis **MUST** be logged on a daily basis on 'ADD and Seal Record'; this record sheet is to be maintained on site computer.
- ❖ Completion of a 'Seal Destruction Report' **must** be completed in the event that a **kill** has occurred, this must be **returned to the Orkney Regional Manager within 5 days of the event!**
- ❖ Quarterly returns of seals shot will be returned to Marine Scotland by the Orkney Regional Manager!

- ❖ Freedom Food Standard 2010: requires that 'HP 6.20 After every shooting incident, a review of all predator exclusion procedures must be undertaken and records kept of such reviews'. An example of such can be found on Achiever.

! This Predator Control Plan to be read and understood by all members of staff and signed:

Site Manager: _____

Staff members:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Reviewed and Updated FW 26/04/2010
Reviewed and updated RD 22/09/2010
Reviewed and updated RD 15/02/2011
Reviewed and updated RD 17/04/2011



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Email to MBoyde@freedomfood.co.uk
Cc to
Michelle.Johnson@northernislessalmon.com

Our ref: CNS/MFF/BayofVady

Date: 13th February 2012

Dear Ms Boyde

Freedom Foods – Welfare Standards for farmed Atlantic Salmon

I have been forwarded your enquiry regarding the use of Acoustic Deterrent Devices (ADD) for Bay of Vady and Kirk Noust, Orkney.

The natural topography of Orkney's islands and skerries has created straits, sounds and bays. Cetaceans are recorded as using these waters for feeding and passage. It is our opinion that many of these areas are not suitable for the use of ADDs especially where they may cause distress, displacement and strandings to cetaceans which are European Protected Species. We therefore, must take a precautionary approach until a suitable ADD is manufactured for use in Orkney.

Both Bay of Vady and Kirk Noust marine fish farms are located within the Rousay Sound which is not a suitable area for the use of ADD.

If you have any further questions regarding the above, please do not hesitate to contact myself.

Yours sincerely



Donna Yule
Operations Officer, Orkney



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Tel: 01856 875302 Fax: 01856 876372
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www.snh.org.uk



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Ms Margaret Gillon
Development Management
Orkney Islands Council
School Place
Kirkwall
KW15 1AW

Your ref:12/034/MARSCO

Our ref: CNS/MFF/Noust
Geo/CEA111431

Date: 27th Feb 2012

Email to planningconsultation@orkney.gov.uk

Dear Margaret

**The Environmental Impact Assessment (Scotland) Regulations 2011
Scoping & Screening Opinion for amalgamation of two fish farm sites (Noust
Geo & Kirk Taing) to be located at Noust Geo, 12/034/MARSCO.**

Thank you for your consultation of 30th January 2012 asking for advice on the above proposed development.

This proposal is for the amalgamation of Noust Geo and Kirk Taing by removing the site at Kirk Taing and increasing Noust Geo, Eday. The sites currently operate 6 x 80m circular cages, the proposal is for 14 x 100m circular cages and feed barge of a maximum size of 10 x 20m. This farm will stock Atlantic Salmon to a maximum stocking biomass of 1890 tonnes.

The response has been organised in order to follow the format of the Screening/Scoping Template provided by the developer on the OIC e-planning pages. **We conclude that a full EIA is not required though extra information in support of the application would be desirable.**

Section 5, Screening & Scoping Checklist

1. Benthic Impacts

A seabed survey was carried out in 2011 as requested for the fish farm review. We were satisfied that there was no maerl or Zostera present directly under the existing cages though maerl had been previously recorded. We advise that a seabed survey for the extension area be carried out in accordance with SEPA's Fish Farm manual, Annex F. This information should then be used to inform the micro-siting of the proposed cages in order to minimise overlap with important species.

3. Interactions with Predators

A generic predator control plan has been included with the application. A more site specific version for this large site would be more useful.



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e-mail: forename.surname@snh.gov.uk
www.snh.org.uk

The applicant must be aware that many areas around Orkney are not suitable for the use of Acoustic Deterrent Devices and a European Protected Species (EPS) licence may be required, further discussion with SNH would be advisable.

4. Interactions with Wild Salmonids

Sea trout are a UK BAP species and are present in Orkney waters and it is important that interactions between farmed fish and wild fish are minimised. The main considerations are the effects and transfer of sea lice and effects of escapees on the wild trout population.

A general biosecurity plan has been included but no details of sea lice treatments have been included as the applicant states treatment is not required at present. We advise that reference should be made to routine monitoring of sea lice and an indication of anticipated action should infestations arise.

5. Impacts upon species or habitats of conservation importance including Sensitive Sites

The site is close to SAC for seals, however we have not been made aware of any issues with the two sites and therefore the removal of one site and expansion to the other should not create any significant impacts.

7. Landscape and visual Impacts

The scale of the expanded site at Noust Geo may have a significant visual impact. A Visual Impact Assessment of the proposed development including the feed barge and maturation lighting should be provided. Photomontages should be included from viewpoints as used in the review for Backland as well as from the passenger ferry from Sanday and Stronsay.

Section 6, Statutory Consultee Response

Our advice as to your Screening opinion is summarised as: This fish farm has been through the fish farm review process, prior to the application for extension. Any concerns regarding likely significant effect on designated habitats and species were concluded at that time and we are of the opinion that no further significant effects on these habitats and species are likely with the amalgamation of the sites. An EIA is not required for this proposal though extra information should be provided along with any mitigation measures.

Our advice on additional information that should be submitted in support of any future planning application for the proposed development is summarised as:

- A seabed survey is required to assess the presence and distribution of Zostera and maerl in the proposed extended area.
- We request that a Visual Impact Assessment of the proposed development be carried out.

In addition we advise that the predator control plan is revised to make it more site specific and take account of the likely interaction with species from nearby SPAs and SACs. We also advise that the Biosecurity Plan is amended to take account of wild salmonids.

If you have any further questions, please do not hesitate to contact me.

Yours sincerely



Donna Yule
Operations Officer, Orkney

From: Donna Yule
To: ["Richard.Darbyshire@scottishseafarms.com"](mailto:Richard.Darbyshire@scottishseafarms.com)
Subject: Possible use of ADD at Noust Geo, Eday
Date: 01 April 2013 15:34:00
Attachments: graycol.gif

Hi Richard

You will need to apply to Marine Scotland for a licence to disturb European Protected Species as there are a number of EPS that frequent the Orkney waters. Conditions of use may be applied to the licence such as limited operating times. Marine Scotland will consult with SNH on EPS licensing and the use of ADDs. Installing an ADD at Noust Geo, Eday may be less problematic than some areas in Orkney.

Regards
Donna

Donna Yule
Operations Officer
Scottish Natural Heritage
54-56 Junction Road
Kirkwall
Orkney KW15 1AW
Tel 01856 875302

(Working compressed hours Mon -Thurs)

From: Richard.Darbyshire@scottishseafarms.com [mailto:Richard.Darbyshire@scottishseafarms.com]

Sent: 28 March 2013 15:10
To: Donna Yule
Subject: RE: ADD's - Eday

Hi Donna

Plan would be to put in an Airmar db II plus seal scammer with 4 x projectiles. There has been a bit of seal mortality recently and I need to have a seal scammer in place to comply with Freedom Food guidelines. Scammer would be put on when any seals were in the vicinity of the salmon farm, hours of operation would depend on frequency of seal attacks.

Richard

Richard Darbyshire | Regional Manager-Orkney | [Scottish Sea Farms Limited](#)

Office No.3, East Pier, Kirkwall, UK, KW15 1HU

Tel +44 1856 870569 | Mob XXXXXXXXXX

www.scottishseafarms.com

 Donna Yule ---28/03/2013 08:41:17---Hi Richard

From: Donna Yule <Donna.Yule@snh.gov.uk>
To: "Richard.Darbyshire@scottishseafarms.com" <Richard.Darbyshire@scottishseafarms.com>
Date: 28/03/2013 08:41
Subject: RE: ADD's - Eday

Hi Richard

Send me details of make/model that you would like to use and let me know how many you would like to use. Also give me detail about how and when you would use it. Are you having a lot of problems with seal predation around there at the moment?

Donna

Donna Yule
Operations Officer
Scottish Natural Heritage
54-56 Junction Road
Kirkwall
Orkney KW15 1AW
Tel 01856 875302

(Working compressed hours Mon -Thurs)

From: Richard.Darbyshire@scottishseafarms.com [<mailto:Richard.Darbyshire@scottishseafarms.com>]

Sent: 27 March 2013 17:27

To: Donna Yule

Subject: ADD's - Eday

Hi Donna

Would SNH have any objection to me installing ADD's at our Eday site ?

Kind regards

Richard

Richard Darbyshire | Regional Manager-Orkney | [Scottish Sea Farms Limited](#)

Office No.3, East Pier, Kirkwall, UK, KW15 1HU

Tel +44 1856 870569 | Mob XXXXXXXXXX

www.scottishseafarms.com

Registered Office:
Scottish Sea Farms Ltd
Equitable House
47 King William Street
London
EC4R 9AF
Company No. 958001

Please address all post to:
Scottish Sea Farms Ltd
Laurel House
Laurel Hill Business Park
Stirling
FK7 9JQ

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Thoiribh an aire airson adhbharan gnothaich, 's dòcha gun tèid sùil a chumail air puist-dealain a' tighinn a-steach agus a' dol a-mach bho SNH



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BY EMAIL

Ms Margaret Gillon
Development Management
Orkney Islands Council
Council Offices
Kirkwall

09 October 2013

Our ref: CNS/MFF/ORK/CDM126340

Dear Margaret

Town and Country Planning (Scotland) Act 1997

13/366/MAR: Create a salmon farming site, comprising 12 x 100m circumference cages, 2 x 6 in a 60m grid and include a feed barge, Gairsay Sound, Wyre.

Thank you for your email of 11th September consulting us on the above proposal.

Summary

The proposal lies close to important seabird breeding sites and seal pupping and haul-out locations, including Sanday SAC and Faray and Holm of Faray SAC. In order to minimise the potential risk of accidental entanglement in netting, or disturbance of seals, we advise on mitigation measures that could be put in place.

Appraisal of the impacts of the proposal and advice

Sanday SAC and Faray and Holm of Faray SAC

The proposal is within the foraging range of seals from Faray and Holm of Faray Special Area of Conservation (SAC) designated for its grey seals and Sanday SAC designated for its harbour seal populations.

The site's status means that the requirements of either the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, (the "Habitats Regulations") apply¹. In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required.

We note that appropriate cage/anti predator nets will be deployed and maintained at the fish farm and these should reduce the risk of seals becoming entangled. We welcome the proposal that Acoustic Deterrent Devices (ADDs) use is not planned at this site. However, we advise that if ADDs are to be used in the future at this site then a licence may be required for their operation.

¹ See <http://www.snh.gov.uk/docs/A423286.pdf> for a summary of the legislative requirements.

Seal Haul out sites

In addition to seals from the SACs foraging within the area, there are a number of haul-out and pupping sites in the immediate vicinity of this proposal, some of which have been proposed for formal designation. The closest of these could be as little as 300m from the proposal site.

Due to high level of seal activity in the location this proposal has the potential to cause significant disturbance. **We therefore advise that a vessel management plan should be created for this site, detailing appropriate routes which avoid disturbance to haul out and pupping sites.**

Feeding seabirds

Underwater netting associated with finfish farms can pose a threat to diving bird species, such as guillemots, shags and red-throated divers, due to the risk of entanglement. We note that the applicant proposes sufficient tensioning and maintenance of cage nets to minimise this risk. However, static gill nets provide significant risks to these birds and the proposal to deploy them during any fish recapture period could result in entanglements and bird mortalities. The use of towed gill nets instead of static nets greatly reduces the risk. **We advise that static gill nets should not be deployed at this site.**

European Protected Species (EPS)

Cetaceans, including orca and long-finned pilot whale occur regularly in Orkney waters and harbour porpoise are resident in Orkney waters throughout the year. Cetaceans are EPS and as such are strictly protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). Under these regulations it is an offence to intentionally or recklessly kill, injure, disturb or harass cetaceans. Any activity likely to cause injury or disturbance requires a licence and strict conditions must be satisfied before licences are granted².

The area around the proposal site is known to be important for cetacean migration and foraging. Use of Acoustic Deterrent Devices (ADDs) can cause serious disturbance to and displacement of cetaceans; for this reason their use is often not suitable at sites in Orkney. We welcome the intention not to use ADDs at this site. However, if ADDs are to be used in the future then a licence may be required for their operation.

Marine Protected Area

The proposal site is located close to the proposed Wyre and Rousay Sounds Marine Protected Area (MPA) which is identified for its kelp and seaweed communities. Our advice is that these features will not be affected by this proposal.

Seascape/Landscape and Visual Impacts

The seascape/landscape and visual impact assessment (SLVIA) is very thorough and clear. Our advice is that the proposed location for the fish farm is the least sensitive, in landscape and visual terms, of the options considered and that it can be accommodated in this area. The development will be screened from sensitive locations on Rousay and around Eynhallow Sound. The proposed feed barge is large and will appear prominent from Wyre Sound. However, the shape of the barge, like a ship, will help to reduce its impact but we do advise that consideration is given to colouring, to help minimise the impact further.

² Please see <http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/european-specieslicensing/> for further information

Conclusion

We advise that the following mitigation measures are adopted:

- 1) A vessel management plan is produced to help minimise disturbance of seals at haul outs and pupping sites.
- 2) No static gill nets are used in the event of a fish escape.

Yours sincerely

Gail Churchill
Operations Manager
Northern Isles and North Highland



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Ms Margaret Gillon
Development Management
Orkney Islands Council
School Place
Kirkwall
Orkney
KW15 1NY

Your ref: 14/021/MAR

Our ref: CNS/MFF/Orkney/Carness Bay (CDM128960 and CEA128961)

By e-mail to: planningconsultation@orkney.gov.uk

12 February 2014

Dear Ms Gillon

**Town and Country Planning (Scotland) Act 1997 and
The Town and Country Planning Environmental Impact Assessment (Scotland)
Regulations 2011**

Thank you for your consultation dated 3rd February 2014 on the application from Meridian Salmon Farms Ltd for repositioning and expansion (from 12 x 70m circumference cages to 12 x 100m circumference cages) of their existing salmon farm at Carness Bay, Orkney.

In considering this application we have referred to the supporting environmental statements provided by the applicant¹. We are largely satisfied with the scope and content of these.

Summary

It is in our view unlikely that the proposal will have a significant effect on the qualifying grey or harbour seal interests associated with Faray and Holm of Faray SAC and Sanday SAC respectively, either directly or indirectly. An appropriate assessment is therefore not required.

We advise that the proposed expansion is not likely significantly to affect other habitats or species of national or international importance, in particular sea trout associated with nearby burns. We note and support the applicant's intention to remain part of the Farm Management Agreement for Orkney Area 2, as this is important to ensure adequate mitigation of potential cumulative impacts on sea trout.

¹ In particular *Evaluation of the potential impacts on wild salmonids of the proposed site modifications at Carness Bay and Meil Bay*

Appraisal of natural heritage impacts

Sanday SAC and Faray and Holm of Faray SAC

Carness Bay is within 30km of the Sanday Special Area of Conservation (SAC) designated for harbour seals and within 25km of the Faray and Holm of Faray SAC, designated for grey seals. These distances are within the foraging ranges for both species and seals are potentially damaging predators at fish farms. Fish farm operators may employ a variety of methods to deter or control seal predation. Hence, the proposal could affect seals from either or both of these SACs.

These sites' status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Orkney Islands Council is required to consider the effect of these proposals on these SACs before they can be consented (commonly known as Habitats Regulations Appraisal²).

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

Carness Bay is already an established fish farm and it is unlikely that the proposed expansion would in itself significantly increase the level of interaction with seals. We have reviewed the Predator Defence and Mitigation Policy document for the Bay of Carness fish farm, as supplied by the applicant to Orkney Islands Council at the EIA screening and scoping stage³. This sets out a hierarchy of proposed measures to deter seals, including tensioned cage nets and deployment of external anti-predator nets. The use of ADDs has currently been excluded on grounds of potential impacts on cetaceans, which are European Protected Species⁴.

We advise that these non-lethal anti-predator mitigation methods are unlikely to have a significant effect upon either species of seal. Any proposal for lethal control will require a licence and will be subject to separate assessment by Marine Scotland, taking account of seals from SACs. Hence we conclude that it is unlikely that the proposals will have a significant effect on the seal qualifying interests of these SACs, either directly or indirectly. An appropriate assessment is therefore not required.

Priority Marine Features

Priority Marine Features (PMFs) represent a prioritised list of marine habitats and species of conservation importance in Scotland's seas, and we consider them to be of national importance. Further information on PMFs is available on our website⁵.

Sea Trout

There are several sea trout spawning burns within a 10km radius of Carness Bay. The proposed increase in maximum permitted biomass at this fish farm, from 700t to 1208t, could potentially increase the risk of exposure of sea trout to sea lice.

² See <http://www.snh.gov.uk/docs/A423286.pdf> for a summary of the legislative requirements

³ OIC case ref 13/362/MARSS

⁴ See <http://www.snh.gov.uk/protecting-scotlands-nature/protected-species/legal-framework/habitats-directive/euro/>

⁵ See <http://www.snh.gov.uk/protecting-scotlands-nature/safeguarding-biodiversity/priority-marine-features/priority-marine-features/>

We are generally content with the applicant's assessment of impacts on sea trout¹, but do not support the suggestion that the southerly residual current in Bay of Carness would hinder the dispersal of mobile life stages of sea lice towards sea trout burns. Rather, as described in section 4.4 of the *Biomass and Chemo-Therapeutant modelling Report*⁶, Bay of Carness has a high refreshment rate such that materials in the water column are likely to disperse out of the Bay and into the strong currents of the adjacent String, enabling dispersion over a wide area.

However, we note that sea lice levels on farmed salmon in Orkney waters are currently generally low⁷ and that sea lice infestation levels on farmed fish at Carness over the past decade have only once exceeded levels triggering requirement for treatment under the industry Code of Good Practice¹. We also note that the proposed stocking density (21.1kg/m³)⁶ is slightly lower than the current at this site (24.9kg/m³)⁸.

Hence we advise that the risks posed to wild sea trout populations in Orkney by the proposed expansion are unlikely to be significant, provided that SEPA is content to issue a CAR licence for sea lice treatments. In addition, continued co-operation between the applicant and other fish farm operators in the vicinity with respect to sea lice management and treatment⁹ is of particular importance to mitigation of potential cumulative impacts on sea trout.

Benthic Habitats and Species

A visual monitoring survey of the fish farm in September 2006 noted the presence of small patches of maerl beyond 35m from the cages, but this observation has not been replicated in other visual monitoring surveys. The most recent survey¹⁰ used grab sampling and is of limited value to assessing presence or absence of benthic PMF. However, given the outputs of models showing predicted extension in AZE^{6,8} we do not require a new survey to advise on this application.

The data held by SNH do not indicate likely presence of significant extents of PMF habitats or populations of PMF species in Carness Bay. Hence, we do not consider that the proposed expansion and repositioning of the fish farm will affect benthic habitats or species of national importance.

If you require any further information or advice from SNH with respect to this application please contact me at our Kirkwall office.

Yours sincerely,

Kate Thompson

⁶ Xodus Group, August 2013 document number A-30082-S29-REPT-001

⁷ See http://www.scottishsalmon.co.uk/science/sea_lice/regional_reports%281%29.aspx

⁸ Xodus Group, February 2010. Bay of Carness Biomass and Chemo-Therapeutant Modelling Report document number A-30082-S16-REPT-01-R00⁹ As specified in the provisions of the Farm

Management Agreement for the area (Orkney Area 2) signed by the applicant in September 2013

⁹ As specified in the provisions of the Farm Management Agreement for the area (Orkney Area 2) signed by the applicant in September 2013

¹⁰ Biotikos, March 2012 Benthic survey of Carness Bay

Operations officer, Orkney



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Dear Sarah

Thank you for consulting with SNH at the pre-application stage. We welcome the process of determining which natura sites/species should be considered during the application process for the development, and we trust that the following advice will be helpful to ongoing discussion.

Section 2 SACS

We agree with your conclusions in this section.

Section 3 SPAs and dSPAs

In order to assess Likely Significant Effect (LSE) you need to understand how the site is currently being utilised by the species of the proposed dSPA in order to establish a baseline. In our response to the screening and scoping consultation (see Annex 1 below), we gave links to some information that you may find useful in establishing a baseline.

Once a baseline is established it is helpful to consider the impacts your development may have on the species that utilise the area. Assessment should include all aspects of the project, i.e. construction, operation, scale of the development, and effects such as disturbance and displacement of species etc.

For the purpose of this exercise Eider should not be screened out. There are other considerations beyond entanglement for each of the species.

Table 3.1

The reasoning for scoping out some of the species is not clear. It is helpful to show why you have concluded that species are not likely to be affected by the proposed development.

Please refer to our response to screening/scoping which screened out red-throated diver from Orkney Mainland Moors because of distance from development.

Section 3.2.2

For the process of the HRA screening report we advise the test of significance is whether a plan or project could undermine the conservation objectives of the site. The conservation objectives of the designated sites have not been considered alongside **all** aspects of the development.

If the dSPA progresses to proposed SPA (pSPA) then cumulative effects from other projects/plans in combination should be considered and assessed for likely significant effect on features. This includes other neighbouring marine developments and those in the planning process.

Predator Exclusion Plan

In general, the predator exclusion plan is suitable, but given the sensitivity of this site, we would recommend an adaptive management monitoring programme. This should include monitoring wildlife interactions with the development, e.g. entanglement records. Data should be sent to SNH/RSPB or OIC at regular intervals and the findings could highlight any potential changes that may be required to equipment to reduce mortalities. The applicant has included this in previous fish farm expansions.

Summary

The format of the HRA is generally clear and user friendly we feel there could be more analysis carried out against the conservation objectives of the sites, otherwise the outcomes remain inconclusive. A copy of our response to the screening and scoping application is in Annex 1. This provides some useful links and guidance to assist in informing your assessment. In summary, our main suggestions are;

- A baseline should be established
- An assessment should be made on all aspects of the project in relation to the conservation objectives of the sites
- An assessment should be made of possible effects on disturbance/displacement of wintering waterfowl
- An assessment should be carried out on cumulative impacts on natura species.

I hope this information is useful. Should you wish further discussion in order to help progress this draft HRA, please contact me at the Kirkwall office.

Yours sincerely

Donna Yule
SNH Orkney

Annex 1



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Ms Margaret Gillon
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to: planningconsultation@orkney.gov.uk

Your ref: 15/039/MARSS

Our ref: CNS/MFF/Westerbister/CEA13542

Date: 27th February 2015

Dear Ms Gillon

The Town and Countryside Planning (Environmental Impact Assessment) (Scotland) Regulations 2011

Screening and scoping request to create a salmon fish farm at Westerbister, Tongue of Westerbister, Holm, Orkney.

Thank you for consultation and extension to consultation for the above proposal dated February 2015.

In summary we conclude that an EIA is required for this development due to nature, size and location of the development and the information and justification supplied below should suggest the scope of detail required for the Environmental Statement.

If you have queries in relation to our response, please contact me at our Kirkwall office.

Yours sincerely

Donna Yule
Operations Officer, Orkney

Project Name: Westerbister

Location: Tongue of Westerbister, Scapa Flow, Orkney

Other identifier: 15/039/MARSS

Screening & Scoping Checklist

For each of the numbered potential impacts in the left hand column, consideration should be given to the following points:

- A. Will the impact have an effect on any of the receptors or issues identified in sections 4.1 to 4.4 Have all the receptors/issues/effects been identified. Explain.
- B. Is the impact covered by other regulation? State your reasons for wishing to discuss it further in this document.
- C. Is there potential for cumulative or indirect impact on an identified receptor. Explain.
- D. SCREENING ADVICE. Is the impact on receptor(s) likely to have a significant effect. Explain.
- E. SCOPING ADVICE. If so, what details of additional information required and methodology

Provide concise information, and refer it specifically to elements A to E where appropriate.

IMPACT TYPE	INSERT YOUR COMMENTS IN THE APPROPRIATE ROW
1. Benthic Impacts	
DEVELOPER	<p>The modelling tool AutoDEPOMOD v2 has been used to assess the maximum biomass which may be sustainably farmed at this site and to establish consent limits for sea lice treatment chemicals. The full modelling report will be supplied with the planning application once the cage configuration has been confirmed.</p> <p>Site specific monitoring protocols will be determined and regular surveys of the sea bed will be conducted in accordance with SEPA Licence requirements.</p> <p>Seabed surveys will be carried out prior to stocking of the site in order to assess baseline faunal diversity and abundance levels, with which future impacts can be compared. Baseline values will also be established for particle size, organic carbon content (loss of ignition) and redox potential.</p> <p>Benthic impacts will be minimised using site specific biomass limits and automated feed systems guided by camera monitoring.</p> <p>Following establishment of the site, benthic impacts beneath the fish cages and the surrounding area will be regularly monitored in accordance with the terms of the CAR licence and results assessed against the relevant site specific Allowable Zone of Effect (AZE).</p> <p>The site will be left fallow for 2 months at the end of each production cycle (typically 22 months out of 24) to allow partial recovery of the seabed</p>

	before restocking.
SNH	<p>As this is a new site we would request that a visual seabed survey be carried out in accordance with SEPA's Fish Farm Manual, Annex F. Visual images should be of a satisfactory resolution to enable identification of habitat and species present.</p> <p>Our records indicate kelp and seaweed communities and ocean quahog may be close to the proposed site.</p>
2. Water Column Impacts	
DEVELOPER	<p>A hydrographic survey was carried out from 3rd to 23rd May 2011 at the site by Xodus Group on behalf of Scottish Sea Farms. A current meter was deployed continuously throughout this period in a mean water depth of 23.6 m, returning average current velocities of 3.5-4 cm s⁻¹ in the upper water column and 3.6 cm s⁻¹ near the seabed. See Attachment 1: Westerbister Hydrographic Report. No other fish farms are currently operating in the immediate vicinity of the site at Westerbister, the closest one (Toyness) is approx 10 km to the NW.</p> <p>An assessment was carried out in 2010 into the potential of fish farms in the Scapa Flow area to enhance nutrient concentrations in the water column. This study indicated that there was significant potential for development in this water body before the likelihood of any measurable or significant change in nutrient levels."</p> <p>A fully revised and updated report will be provided in support of any planning application (this will be dependent upon final cage configuration and the resulting modelled biomass for the site), as well as an update of currently consented sites.</p>
STATUTORY CONSULTEE	
3. Interaction with Predators	
DEVELOPER	<p>SEALS</p> <p>SSF follow a hierarchy of deterrence, in order to minimize the likelihood that a seal will require to be shot. The company is committed to minimizing interactions and any potential impacts upon wildlife.</p> <ol style="list-style-type: none"> 1. Tensioned top nets will be used on every cage to avoid predation by birds. 2. Nets installed on the sites will be checked to be in excellent condition, properly tensioned and regularly checked by diver and camera. Seals typically attack from below the net, and particular attention is paid to checking the most vulnerable areas. 3. Orkney specification nets used which have 15mm mesh throughout the production cycle. Superknot netting used which gives a breaking strength of 84kg as opposed to the standard of 66kg breaking strength. 4. Nets are pressure tested post-cleaning at 18 separate points. 5. Close attention will be paid to good housekeeping and hygiene. Any mortalities will

	<p>be disposed of rapidly and effectively by incineration or ensiling, and should feed be accidentally spilled it is immediately cleared up to avoid attracting the attention of predatory wildlife</p> <ol style="list-style-type: none"> 6. If necessary the sites will be protected by acoustic deterrent devices 7. Records of seal interactions and the use of deterrents will be kept 8. Shooting by trained marksman, in the open season, as a last resort, only on the authority of the production manager and under the conditions of the Licence issued by Marine Scotland. <p>BIRDS</p> <p>Properly tensioned top nets will be used on every cage to avoid predation by birds.</p> <p>Site specific predator control plans will be developed in consultation with all statutory authorities and provided in support of any planning application.</p>
<p>SNH</p>	<p>As there has been a continued dramatic decline in harbour seal populations and some seabird species it is very important that a robust predator control policy is developed. This policy should entail a hierarchy of preventative measures to be deployed. Detail of equipment ie mesh sizes, should be included.</p> <p>An adaptive management plan should be realised which will include wildlife interaction monitoring ie entanglements. Equipment should be reviewed periodically in response to findings of monitoring and/or to lessen impacts on mobile wildlife species.</p>
<p>4. Interaction with Wild Salmonids</p>	
<p>DEVELOPER</p>	<p>Whilst Orkney rivers are not noted for any wild salmon runs, sea trout are present in the Scapa Flow area. Coastal areas within 7 km of known sea trout burns are viewed as potentially sensitive to fish farm developments.</p> <p>However, the site at Westerbister is one of the few places around mainland Orkney that is not within a 7km radius of a significant sea trout river. The nearest sea trout river is Waulkmill/Kirbister system which lies 8.8km to the NW.</p> <p>Lice levels have historically been low at SSF's existing Orkney sites. We will apply to SEPA for consent to use sea-lice medications at Westerbister. Site-specific modelling will be carried out to determine the quantities of medication that could be permitted by SEPA at the site.</p> <p>Medications are administered by bath treatment (Cypermethrin/Deltamethrin or Azamethiphos) or in-feed (Emamectin Benzoate, trade name 'Slice'). Bath treatments could alternatively be carried out in a wellboat, for which a site specific Licence from Marine Scotland is required.</p> <p>We liaise with other salmon farming companies in any areas of operation to</p>

	<p>agree a zonal sea-lice treatment plan, rotating effective medicines and treating synchronously where possible. The sea-lice control strategy for the site will be to the same standards and protocols as at other Scottish Sea Farms sites, and in accordance with the Scottish Salmon Producers' Organisation (SSPO) Code of Good Practice (CoGP) recommendations and targets.</p> <p>With regard to the risk of fish escapes, Scottish Sea Farms have site- or region- specific escapes prevention and containment policies as recommended by the SSPO CoGP. All cages are built at least to the Norwegian Standard (NS 9415:2003) which places technical requirements on the dimensioning, design, installation and operation of floating aquaculture installations.</p> <p>Moorings for all of our installations are installed by experienced contractors and utilise tested and certified components either to BS 3032 or to NS 9415. We purchase all of our nets from reputable manufacturers who meet or exceed the NS 9415 standard. Nets are cleaned by the manufacturer and processed at SSF's own in-house net servicing facility at Lochaline, Morven.</p> <p>Site specific veterinary health and escapes prevention plans will be developed in consultation with all statutory authorities and provided in support of any planning application.</p>
<p>SNH</p>	<p>Sea trout are a UK BAP species and are present in Orkney waters. It is important that interactions between farmed fish and wild fish are minimised. Although the proposed development is not in close proximity to a trout spawning burn it should be noted that Scapa Flow is a semi contained bay and the transfer of lice to wild populations may be intensified.</p> <p>We encourage the development of a Farm Management Agreement where there is more than one fish farm in the area. This should follow the code of good practice http://www.thecodeofgoodpractice.co.uk/ and include good husbandry ie regular inspections for damage to nets and regular monitoring/ inspections for sea lice.</p> <p>An escapee plan and protocol should be included in the EIA specifying actions to be taken in case of escapes. SNH does not endorse the use of static gill nets for escapees.</p> <p>We would also encourage interaction with Orkney Trout Fishing Association in respect of the above issues.</p>
<p>5. Impacts upon species or habitats of conservation</p>	

importance, including Sensitive Sites	
DEVELOPER	<p>The proposed site at Westerbister does not lie within an MPA, SPA, NSA, SSI or SCA. The closest SPA is the Orkney Mainland Moors is located 7.6km to the north west - this site does regularly support populations of red-throated divers. All other SPAs are more than 10km from the proposed site. There are two SSSIs within 10km of the proposed site, Keeland Hill/Swartabeck Burn and Waulkmill, both noted for moorland birds. All other SSSIs are > 10km from the proposed site.</p> <p>SEALS</p> <p>Scottish Sea Farms is aware of the importance of the Orkney Islands as an important breeding ground for the UK's population of grey seals as well as the concerns surrounding the significant decline in common seal numbers. Although the proposed site does not fall close to a SAC for seals, a number of Marine Scotland designated seal haul out sites are located in Scapa Flow. The nearest is at Hunda South ~6.5km away, followed by Toyness at 9.8km away.</p> <p>Seal interaction will be minimised by the use of properly tensioned nets and the application of a site specific predator control policy.</p> <p>WILD BIRDS</p> <p>Hobbister RSPB reserve lies approximately 7.5km to the NW of the proposed site. This area contains important habitats for a variety of wild birds including Red Throated Divers, Short-eared Owls and Hen Harriers. Risks to these species will be minimised by the proper tensioning of all nets including any top-nets fitted to the cages.</p> <p>MAERL/SEAGRASS</p> <p>The National Biodiversity Website (NBW) has no records of either maerl or seagrass (<i>Zostera</i> spp) in the immediate vicinity of the proposed site. The nearest record of seagrass is 4.8 km to the north. Maerl has been recorded 5km to the south of the site, south of St Mary's Bay/Glimps Holm and 15km to the west of the site, south of Cava Island near Hoy Sound.</p>
SNH	<p>Protected sites</p> <p>The proposed development lies approx. 7.5km to the south-east of the Orkney Mainland Moors SPA boundary. The conservation objectives of the Red -throated diver feature could theoretically be affected by the fish cages through entanglement, displacement and loss of foraging area. However, while the SPA boundary is within the foraging range of 9km, it is noted that the nearest lochan in the SPA where red-throated divers nest is at least 17km away from the proposed development. We can therefore conclude that there is no likely significant effect on the red-throated divers from the SPA.</p>

Birds

Scapa Flow is known to accommodate large numbers of nationally and internationally important wintering waterfowl and is currently being considered by Scottish Ministers as a marine SPA. Whilst its current status as a dSPA does not afford policy protection, we would urge developers to consider impacts on the qualifying species, as the status of the dSPA may change during the progression of this application to a pSPA. If this occurs then the pSPA will receive full policy protection from Scottish Government. Birds to be considered should include black-throated diver, European shag, Common eider, red-breasted merganser and Slavonian Glebe, along with other species listed in the summary of <http://jncc.defra.gov.uk/pdf/JNCC407web.pdf> .

A baseline of information should be established for each species, and consideration given to the potential for disturbance and displacement of birds from the footprint of the development. Some useful resources include EMEC Orkney [Scapa Flow Scale Site Environmental Description 2011](#) and APEM (2013) Year 2: Investigation of the utilisation of sea space by sea birds in the Pentland Firth & Orkney area 2012 / 13 report to Scottish Government. (<http://www.thecrownestate.co.uk/media/151992/pfow-utilisation-of-pfow-sea-space-by-sea-birds-2012-13.pdf>)

If the dSPA progresses to a pSPA then cumulative effects on qualifying bird species must also be considered, taking into account other marine developments in the area, including developments currently in the planning system.

The potential for bird entanglement should be considered. SNH recommends that mesh sizes should be chosen so as to minimize the likelihood of birds becoming entangled.

Seals

The ES should consider any impacts on both harbour and grey seals from seal designated haul-outs (nearest Hunda) and ensure mitigation measures are included in their predator control policy. Vessel movements from St Margarets Hope to the site may raise concerns near designated haul outs and should be acknowledged and addressed in the ES.

Cetaceans

Cetaceans are frequently recorded in Scapa Flow, using the area for migration and feeding. Harbour porpoises are resident in Orkney and therefore breeding in Orkney waters. Other sightings include various dolphin species.

Cetaceans are European Protected Species (EPS) and it is an offence to intentionally or recklessly kill, injure, disturb or harass them. Any activity likely to cause of the above would require a licence from Marine Scotland and strict conditions must be satisfied before a licence is considered. We are of the

	<p>opinion that the use of Acoustic Deterrent Devices (ADDs) in Scapa Flow is not advisable due to the fact that the land forms a semi enclosed bay and few escape routes for cetaceans. ADDs could lead to panic, confusion, exclusion from feeding areas and temporary disorientation perhaps leading to stranding.</p> <p>Basking Shark</p> <p>There are reported sightings of Basking Shark in the Westerbister area. This species is offered protection under the Wildlife & Countryside Act 1981 and the Wildlife and Natural Environment (Scotland) Act 2011, with licensing required for disturbance, similar to that of EPS.</p>
6. Navigation, Anchorage, Commercial Fisheries, other non-recreational maritime uses (MOD)	
DEVELOPER	<p>There are no concerns regarding safety of navigation at this location following consultation with Orkney Islands Council Marine Services). Recreational sailing occurs throughout Orkney and the Orkney Sailing Club lists a number of moorings throughout the islands, but none near Westerbister, and there are no marked anchorages in the vicinity of the site. Commercial fishing vessels and several boat tours operate within Scapa Flow.</p> <p>Scottish Sea Farms will ensure that the site is marked effectively in accordance with the recommendations of the Northern Lighthouse Board, and moorings maintained in good order.</p> <p>The feed barge to be used on the site will exhibit an all round fixed white light from a point at least 1 metre above any obstruction, also with a nominal range of 2 nautical miles.</p> <p>During the harvest period the wellboat will call several times a week to collect harvest fish. Each operation will normally take less than two hours.</p>
STATUTORY CONSULTEE	
7. Landscape and Visual Impacts	
DEVELOPER	<p>The proposed site at Westerbister would not be perceptible from a National Scenic Area; the closest such site, Hoy and West Mainland, is located >15km away to the west, and will not be affected by the development.</p> <p>The proposed site lies within Local Coastal Character Area (LCCA) 11 from SNH's 2011 report "Orkney Landscape Capacity for Aquaculture". This report classifies the coast where the Westerbister site is located as "undeveloped" but with scope for a medium scale development and recommends limiting aquaculture development to this eastern portion of</p>

	<p>Scapa Bay. The current definition of medium scale development suggests a maximum number of 12 cages.</p> <p>SSF have commissioned an independent landscape architect to study this particular location and now propose that increasing the scale of the site to 16 cages in this particular location makes little difference to the overall visual impact and zones of theoretical visibility of the site. Please refer to Attachment 2: Coastal landscape and visual input to Scoping Report.</p> <p>Preliminary Zone of Theoretical Visibility (ZTV) mapping has been generated for the proposed development. The convex nature of slopes on the western coast of Holm will restrict views of the proposed development from the A961. The proposed development would however be visible in relative proximity from mainly newer properties overlooking the sea on the west coast of the Holm area. Views from these properties and from the A961 would be elevated, looking over the proposed development. In more distant views from the west, the dark backdrop of cliff would reduce the visibility of the development.</p> <p>There are three scheduled monuments within a 7km radius: Loch of Ayre broch, Lamb Holm settlement and Castle Howe broch (Historic Scotland website). The proposed development is highly unlikely to have a visual impact on any of these sites, particularly the Lambs Holm and Castle Howe sites. There are also a number of listed buildings within the same area; the proposed site may be visible from some of these buildings, in particular those located west of the A961 (four buildings). The commissioned LVIA will highlight any visual impacts to these buildings arising from any development at Westerbister.</p> <p>The cages SSF deploy are circular, constructed of non-reflective material and of low profile. The design of the feed barge will ensure that, as far as possible, it will be sympathetic to the maritime nature of the area. The cage layout and barge will be regular geometric shapes sited parallel to the coastline to maximise the screening effect of the largely linear character of this stretch of coastline.</p>
<p>SNH</p>	<p>The Orkney Landscape Capacity for Aquaculture: Scapa Flow and Wide Firth (http://www.snh.org.uk/pdfs/publications/commissioned_reports/466.pdf) recommends that development within the Bay of Deepdale to Howequoy Head area (LCCA11) can accommodate one medium scale aquaculture development. Medium scale is defined as a fish farm with up to 12 cages with feedbarge. The proposed development is termed as large scale and significantly larger than recommended in the report.</p> <p>The provision of initial coastal and visual information, with a description of the methodology for full assessment, is welcomed. Mitigation measures proposed considering the design of cages layouts and feedbarge is supported. Alternatives for feed barges, design and colours should also be provided.</p> <p>Details of the feedbarge should be included in the ES, including the dimensions and height above water when not weighed with feed stock. Night-time impacts with any requirements for lighting of the cages should be included in the assessment of coastal and visual impact.</p>

	<p>Viewpoints as discussed in the supplementary information provided with the application appear appropriate.</p> <p>The ES should acknowledge and assess possible cumulative impacts of other marine developments in the area and any in the planning system should also be considered.</p>
8. Noise	
DEVELOPER	<p>Every effort will be made to keep our operations as unobtrusive as possible by the use of noise insulation on equipment, and by restricting and adjusting our hours of activity as far as practicable. Normally work would be carried out on site between the hours of 08:00 and 17:00.</p>
STATUTORY CONSULTEE	
9. Marine Cultural Heritage	
DEVELOPER	<p>Scapa Flow is one of the largest natural harbours in the world and a nationally important historic site. The area has a number of WWI & WWII shipwrecks making it popular with recreational divers.</p> <p>The only known wreck in the immediate vicinity of the proposed site is the wreck of the HMS Royal Oak some 3km to the north west (Admiralty chart BA2249). This site is a Designated War Grave and as such is not open to recreational diving.</p> <p>SSF recognise the sensitivity and significance of this wreck site and it is unlikely that our activities would have any impact on the wreck of the HMS Royal Oak, due to the distance from the proposed fish farm.</p> <p>Wrecks off Cava Island are >15km away, according to the UK diving website http://www.ukdiving.co.uk/wrecks/map.php?area=scapa.</p>
STATUTORY CONSULTEE	
10. Waste Management (non-fish)	
DEVELOPER	<p>As far as possible, both for economy and to avoid the creation of waste we reuse and recycle old cages. The sections in good condition are refurbished and will be reused, possibly at one of our other sites. Any remaining plastic or metal scrap is recovered and goes to a dealer for recycling. Any remaining unusable waste is uplifted by an authorised carrier and disposed of to licensed landfill.</p> <p>Feed bags are baled on Orkney then shipped to Shetland where they are pelletised for recycling into a number of different products including traffic cones and garden furniture.</p>

	Special Wastes (oil, batteries) are removed by maintenance contractor, or disposed of via licenced facilities.
STATUTORY CONSULTEE	
11. Socioeconomic, Access and Recreation	
DEVELOPER	<p>The site will employ 6 to 7 members of staff on a full-time basis. Local contractors will be used where required for specialist projects (such as mooring works and survey work).</p> <p>Servicing is expected to be from Scapa Pier.</p> <p>Scapa is a designated harbour area under the Orkney County Council Act 1974 and has a reasonable amount of traffic but as the proposed site is located distant from the pier, access would not be adversely affected by the site.</p>
STATUTORY CONSULTEE	
12. Traffic and Transport	
DEVELOPER	<p>Staff will typically make one return journey to the site each day.</p> <p>Feed supplies and nets are expected to be delivered by boat from the Scottish Mainland to Orkney, and transferred to the site by boat.</p>
STATUTORY CONSULTEE	
13. Any other issue	
DEVELOPER	
STATUTORY CONSULTEE	

6 STATUTORY CONSULTEE RESPONSE

6.1. Organisation: SNH

Contact name: Donna Yule
Directorate/Division/Agency: SNH, Orkney
Telephone number: 01856 875302
Email: donna.yule@snh.gov.uk

We have considered this proposed development in terms of formal EIA Screening and Scoping, and have completed our assessment of the significance of potential environmental impacts.

Check or complete the following fields as required.

We obtained supplementary information from the developer during our consideration

We consulted with other Statutory Consultees during our consideration

Our advice as to your Screening opinion is summarised as:

The size and scale of the proposed development warrants the requirement for an EIA

Our advice as to your Scoping opinion/advice, relating to environmental information that should be included in an Environmental Statement, is summarised as:

- A seabed survey is required in accordance with SEPAs Fish Farm Manual, Annex F
- A baseline survey of winter waterfowl usage determined and the effects of the proposed development assessed.
- A site specific predator control plan detailing equipment to be used in hierarchy format, proposed monitoring and periodic review of equipment.
- An escapes policy, details of biosecurity/emergency procedures and preventative measures
- Landscape and visual assessment including photomontages/wirelines from agreed viewpoints. Feedbarge and any maturation lighting should be included in the assessment.

Our advice on additional information that should be submitted in support of any future planning application for the proposed development is summarised as:

- A Farm management agreement should be developed if more aquaculture developments are permitted in the area.

Electronic signature:

Date:



Scottish Natural Heritage

All of nature for all of Scotland

Dear Sarah

Thank you for consulting with SNH at the pre-application stage. We welcome the process of determining which natura sites/species should be considered during the application process for the development, and we trust that the following advice will be helpful to ongoing discussion.

Section 2 SACS

We agree with your conclusions in this section.

Section 3 SPAs and dSPAs

In order to assess Likely Significant Effect (LSE) you need to understand how the site is currently being utilised by the species of the proposed dSPA in order to establish a baseline. In our response to the screening and scoping consultation (see Annex 1 below), we gave links to some information that you may find useful in establishing a baseline.

Once a baseline is established it is helpful to consider the impacts your development may have on the species that utilise the area. Assessment should include all aspects of the project, i.e. construction, operation, scale of the development, and effects such as disturbance and displacement of species etc.

For the purpose of this exercise Eider should not be screened out. There are other considerations beyond entanglement for each of the species.

Table 3.1

The reasoning for scoping out some of the species is not clear. It is helpful to show why you have concluded that species are not likely to be affected by the proposed development.

Please refer to our response to screening/scoping which screened out red-throated diver from Orkney Mainland Moors because of distance from development.

Section 3.2.2

For the process of the HRA screening report we advise the test of significance is whether a plan or project could undermine the conservation objectives of the site. The conservation objectives of the designated sites have not been considered alongside **all** aspects of the development.

If the dSPA progresses to proposed SPA (pSPA) then cumulative effects from other projects/plans in combination should be considered and assessed for likely significant effect on features. This includes other neighbouring marine developments and those in the planning process.

Predator Exclusion Plan

In general, the predator exclusion plan is suitable, but given the sensitivity of this site, we would recommend an adaptive management monitoring programme. This should include monitoring wildlife interactions with the development, e.g. entanglement records. Data should be sent to SNH/RSPB or OIC at regular intervals and the findings could highlight any potential changes that may be required to equipment to reduce mortalities. The applicant has included this in previous fish farm expansions.

Summary

The format of the HRA is generally clear and user friendly we feel there could be more analysis carried out against the conservation objectives of the sites, otherwise the outcomes remain inconclusive. A copy of our response to the screening and scoping application is in Annex 1. This provides some useful links and guidance to assist in informing your assessment. In summary, our main suggestions are;

- A baseline should be established
- An assessment should be made on all aspects of the project in relation to the conservation objectives of the sites
- An assessment should be made of possible effects on disturbance/displacement of wintering waterfowl
- An assessment should be carried out on cumulative impacts on natura species.

I hope this information is useful. Should you wish further discussion in order to help progress this draft HRA, please contact me at the Kirkwall office.

Yours sincerely

Donna Yule
SNH Orkney

Annex 1



Scottish Natural Heritage

All of nature for all of Scotland

Ms Margaret Gillon
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to: planningconsultation@orkney.gov.uk

Your ref: 15/039/MARSS

Our ref: CNS/MFF/Westerbister/CEA13542

Date: 27th February 2015

Dear Ms Gillon

**The Town and Countryside Planning (Environmental Impact Assessment) (Scotland)
Regulations 2011**

**Screening and scoping request to create a salmon fish farm at Westerbister, Tongue of Westerbister,
Holm, Orkney.**

Thank you for consultation and extension to consultation for the above proposal dated February 2015.

In summary we conclude that an EIA is required for this development due to nature, size and location of the development and the information and justification supplied below should suggest the scope of detail required for the Environmental Statement.

If you have queries in relation to our response, please contact me at our Kirkwall office.

Yours sincerely

Donna Yule
Operations Officer, Orkney

Project Name: Westerbister

Location: Tongue of Westerbister, Scapa Flow, Orkney

Other identifier: 15/039/MARSS

Screening & Scoping Checklist
<p>For each of the numbered potential impacts in the left hand column, consideration should be given to the following points:</p> <ul style="list-style-type: none"> A. Will the impact have an effect on any of the receptors or issues identified in sections 4.1 to 4.4 Have all the receptors/issues/effects been identified. Explain. B. Is the impact covered by other regulation? State your reasons for wishing to discuss it further in this document. C. Is there potential for cumulative or indirect impact on an identified receptor. Explain. D. SCREENING ADVICE. Is the impact on receptor(s) likely to have a significant effect. Explain. E. SCOPING ADVICE. If so, what details of additional information required and methodology <p><i>Provide concise information, and refer it specifically to elements A to E where appropriate.</i></p>

IMPACT TYPE	INSERT YOUR COMMENTS IN THE APPROPRIATE ROW
1. Benthic Impacts	
DEVELOPER	<p>The modelling tool AutoDEPOMOD v2 has been used to assess the maximum biomass which may be sustainably farmed at this site and to establish consent limits for sea lice treatment chemicals. The full modelling report will be supplied with the planning application once the cage configuration has been confirmed.</p> <p>Site specific monitoring protocols will be determined and regular surveys of the sea bed will be conducted in accordance with SEPA Licence requirements.</p> <p>Seabed surveys will be carried out prior to stocking of the site in order to assess baseline faunal diversity and abundance levels, with which future impacts can be compared. Baseline values will also be established for particle size, organic carbon content (loss of ignition) and redox potential.</p> <p>Benthic impacts will be minimised using site specific biomass limits and automated feed systems guided by camera monitoring.</p> <p>Following establishment of the site, benthic impacts beneath the fish cages and the surrounding area will be regularly monitored in accordance with the terms of the CAR licence and results assessed against the relevant site specific Allowable Zone of Effect (AZE).</p> <p>The site will be left fallow for 2 months at the end of each production cycle (typically 22 months out of 24) to allow partial recovery of the seabed</p>

	before restocking.
SNH	<p>As this is a new site we would request that a visual seabed survey be carried out in accordance with SEPA's Fish Farm Manual, Annex F. Visual images should be of a satisfactory resolution to enable identification of habitat and species present.</p> <p>Our records indicate kelp and seaweed communities and ocean quahog may be close to the proposed site.</p>
2. Water Column Impacts	
DEVELOPER	<p>A hydrographic survey was carried out from 3rd to 23rd May 2011 at the site by Xodus Group on behalf of Scottish Sea Farms. A current meter was deployed continuously throughout this period in a mean water depth of 23.6 m, returning average current velocities of 3.5-4 cm s⁻¹ in the upper water column and 3.6 cm s⁻¹ near the seabed. See Attachment 1: Westerbister Hydrographic Report. No other fish farms are currently operating in the immediate vicinity of the site at Westerbister, the closest one (Toyness) is approx 10 km to the NW.</p> <p>An assessment was carried out in 2010 into the potential of fish farms in the Scapa Flow area to enhance nutrient concentrations in the water column. This study indicated that there was significant potential for development in this water body before the likelihood of any measurable or significant change in nutrient levels."</p> <p>A fully revised and updated report will be provided in support of any planning application (this will be dependent upon final cage configuration and the resulting modelled biomass for the site), as well as an update of currently consented sites.</p>
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3. Interaction with Predators	
DEVELOPER	<p>SEALS</p> <p>SSF follow a hierarchy of deterrence, in order to minimize the likelihood that a seal will require to be shot. The company is committed to minimizing interactions and any potential impacts upon wildlife.</p> <ol style="list-style-type: none"> 1. Tensioned top nets will be used on every cage to avoid predation by birds. 2. Nets installed on the sites will be checked to be in excellent condition, properly tensioned and regularly checked by diver and camera. Seals typically attack from below the net, and particular attention is paid to checking the most vulnerable areas. 3. Orkney specification nets used which have 15mm mesh throughout the production cycle. Superknot netting used which gives a breaking strength of 84kg as opposed to the standard of 66kg breaking strength. 4. Nets are pressure tested post-cleaning at 18 separate points. 5. Close attention will be paid to good housekeeping and hygiene. Any mortalities will

	<p>be disposed of rapidly and effectively by incineration or ensiling, and should feed be accidentally spilled it is immediately cleared up to avoid attracting the attention of predatory wildlife</p> <ol style="list-style-type: none"> 6. If necessary the sites will be protected by acoustic deterrent devices 7. Records of seal interactions and the use of deterrents will be kept 8. Shooting by trained marksman, in the open season, as a last resort, only on the authority of the production manager and under the conditions of the Licence issued by Marine Scotland. <p>BIRDS</p> <p>Properly tensioned top nets will be used on every cage to avoid predation by birds.</p> <p>Site specific predator control plans will be developed in consultation with all statutory authorities and provided in support of any planning application.</p>
<p>SNH</p>	<p>As there has been a continued dramatic decline in harbour seal populations and some seabird species it is very important that a robust predator control policy is developed. This policy should entail a hierarchy of preventative measures to be deployed. Detail of equipment ie mesh sizes, should be included.</p> <p>An adaptive management plan should be realised which will include wildlife interaction monitoring ie entanglements. Equipment should be reviewed periodically in response to findings of monitoring and/or to lessen impacts on mobile wildlife species.</p>
<p>4. Interaction with Wild Salmonids</p>	
<p>DEVELOPER</p>	<p>Whilst Orkney rivers are not noted for any wild salmon runs, sea trout are present in the Scapa Flow area. Coastal areas within 7 km of known sea trout burns are viewed as potentially sensitive to fish farm developments.</p> <p>However, the site at Westerbister is one of the few places around mainland Orkney that is not within a 7km radius of a significant sea trout river. The nearest sea trout river is Waulkmill/Kirbister system which lies 8.8km to the NW.</p> <p>Lice levels have historically been low at SSF's existing Orkney sites. We will apply to SEPA for consent to use sea-lice medications at Westerbister. Site-specific modelling will be carried out to determine the quantities of medication that could be permitted by SEPA at the site.</p> <p>Medications are administered by bath treatment (Cypermethrin/Deltamethrin or Azamethiphos) or in-feed (Emamectin Benzoate, trade name 'Slice'). Bath treatments could alternatively be carried out in a wellboat, for which a site specific Licence from Marine Scotland is required.</p> <p>We liaise with other salmon farming companies in any areas of operation to</p>

	<p>agree a zonal sea-lice treatment plan, rotating effective medicines and treating synchronously where possible. The sea-lice control strategy for the site will be to the same standards and protocols as at other Scottish Sea Farms sites, and in accordance with the Scottish Salmon Producers' Organisation (SSPO) Code of Good Practice (CoGP) recommendations and targets.</p> <p>With regard to the risk of fish escapes, Scottish Sea Farms have site- or region- specific escapes prevention and containment policies as recommended by the SSPO CoGP. All cages are built at least to the Norwegian Standard (NS 9415:2003) which places technical requirements on the dimensioning, design, installation and operation of floating aquaculture installations.</p> <p>Moorings for all of our installations are installed by experienced contractors and utilise tested and certified components either to BS 3032 or to NS 9415. We purchase all of our nets from reputable manufacturers who meet or exceed the NS 9415 standard. Nets are cleaned by the manufacturer and processed at SSF's own in-house net servicing facility at Lochaline, Morven.</p> <p>Site specific veterinary health and escapes prevention plans will be developed in consultation with all statutory authorities and provided in support of any planning application.</p>
<p>SNH</p>	<p>Sea trout are a UK BAP species and are present in Orkney waters. It is important that interactions between farmed fish and wild fish are minimised. Although the proposed development is not in close proximity to a trout spawning burn it should be noted that Scapa Flow is a semi contained bay and the transfer of lice to wild populations may be intensified.</p> <p>We encourage the development of a Farm Management Agreement where there is more than one fish farm in the area. This should follow the code of good practice http://www.thecodeofgoodpractice.co.uk/ and include good husbandry ie regular inspections for damage to nets and regular monitoring/ inspections for sea lice.</p> <p>An escapee plan and protocol should be included in the EIA specifying actions to be taken in case of escapes. SNH does not endorse the use of static gill nets for escapees.</p> <p>We would also encourage interaction with Orkney Trout Fishing Association in respect of the above issues.</p>
<p>5. Impacts upon species or habitats of conservation</p>	

<p>importance, including Sensitive Sites</p>	
<p>DEVELOPER</p>	<p>The proposed site at Westerbister does not lie within an MPA, SPA, NSA, SSI or SCA. The closest SPA is the Orkney Mainland Moors is located 7.6km to the north west - this site does regularly support populations of red-throated divers. All other SPAs are more than 10km from the proposed site. There are two SSSIs within 10km of the proposed site, Keeland Hill/Swartabeck Burn and Waulkmill, both noted for moorland birds. All other SSSIs are > 10km from the proposed site.</p> <p>SEALS</p> <p>Scottish Sea Farms is aware of the importance of the Orkney Islands as an important breeding ground for the UK's population of grey seals as well as the concerns surrounding the significant decline in common seal numbers. Although the proposed site does not fall close to a SAC for seals, a number of Marine Scotland designated seal haul out sites are located in Scapa Flow. The nearest is at Hunda South ~6.5km away, followed by Toyness at 9.8km away.</p> <p>Seal interaction will be minimised by the use of properly tensioned nets and the application of a site specific predator control policy.</p> <p>WILD BIRDS</p> <p>Hobbister RSPB reserve lies approximately 7.5km to the NW of the proposed site. This area contains important habitats for a variety of wild birds including Red Throated Divers, Short-eared Owls and Hen Harriers. Risks to these species will be minimised by the proper tensioning of all nets including any top-nets fitted to the cages.</p> <p>MAERL/SEAGRASS</p> <p>The National Biodiversity Website (NBW) has no records of either maerl or seagrass (<i>Zostera</i> spp) in the immediate vicinity of the proposed site. The nearest record of seagrass is 4.8 km to the north. Maerl has been recorded 5km to the south of the site, south of St Mary's Bay/Glimps Holm and 15km to the west of the site, south of Cava Island near Hoy Sound.</p>
<p>SNH</p>	<p>Protected sites</p> <p>The proposed development lies approx. 7.5km to the south-east of the Orkney Mainland Moors SPA boundary. The conservation objectives of the Red –throated diver feature could theoretically be affected by the fish cages through entanglement, displacement and loss of foraging area. However, while the SPA boundary is within the foraging range of 9km, it is noted that the nearest lochan in the SPA where red-throated divers nest is at least 17km away from the proposed development. We can therefore conclude that there is no likely significant effect on the red-throated divers from the SPA.</p>

Birds

Scapa Flow is known to accommodate large numbers of nationally and internationally important wintering waterfowl and is currently being considered by Scottish Ministers as a marine SPA. Whilst its current status as a dSPA does not afford policy protection, we would urge developers to consider impacts on the qualifying species, as the status of the dSPA may change during the progression of this application to a pSPA. If this occurs then the pSPA will receive full policy protection from Scottish Government. Birds to be considered should include black-throated diver, European shag, Common eider, red-breasted merganser and Slavonian Glebe, along with other species listed in the summary of <http://jncc.defra.gov.uk/pdf/JNCC407web.pdf> .

A baseline of information should be established for each species, and consideration given to the potential for disturbance and displacement of birds from the footprint of the development. Some useful resources include EMEC Orkney [Scapa Flow Scale Site Environmental Description 2011](#) and APEM (2013) Year 2: Investigation of the utilisation of sea space by sea birds in the Pentland Firth & Orkney area 2012 / 13 report to Scottish Government. (<http://www.thecrownstate.co.uk/media/151992/pfow-utilisation-of-pfow-sea-space-by-sea-birds-2012-13.pdf>)

If the dSPA progresses to a pSPA then cumulative effects on qualifying bird species must also be considered, taking into account other marine developments in the area, including developments currently in the planning system.

The potential for bird entanglement should be considered. SNH recommends that mesh sizes should be chosen so as to minimize the likelihood of birds becoming entangled.

Seals

The ES should consider any impacts on both harbour and grey seals from seal designated haul-outs (nearest Hunda) and ensure mitigation measures are included in their predator control policy. Vessel movements from St Margarets Hope to the site may raise concerns near designated haul outs and should be acknowledged and addressed in the ES.

Cetaceans

Cetaceans are frequently recorded in Scapa Flow, using the area for migration and feeding. Harbour porpoises are resident in Orkney and therefore breeding in Orkney waters. Other sightings include various dolphin species.

Cetaceans are European Protected Species (EPS) and it is an offence to intentionally or recklessly kill, injure, disturb or harass them. Any activity likely to cause of the above would require a licence from Marine Scotland and strict conditions must be satisfied before a licence is considered. We are of the

	<p>opinion that the use of Acoustic Deterrent Devices (ADDs) in Scapa Flow is not advisable due to the fact that the land forms a semi enclosed bay and few escape routes for cetaceans. ADDs could lead to panic, confusion, exclusion from feeding areas and temporary disorientation perhaps leading to stranding.</p> <p>Basking Shark There are reported sightings of Basking Shark in the Westerbister area. This species is offered protection under the Wildlife & Countryside Act 1981 and the Wildlife and Natural Environment (Scotland) Act 2011, with licensing required for disturbance, similar to that of EPS.</p>
6. Navigation, Anchorage, Commercial Fisheries, other non-recreational maritime uses (MOD)	
DEVELOPER	<p>There are no concerns regarding safety of navigation at this location following consultation with Orkney Islands Council Marine Services). Recreational sailing occurs throughout Orkney and the Orkney Sailing Club lists a number of moorings throughout the islands, but none near Westerbister, and there are no marked anchorages in the vicinity of the site. Commercial fishing vessels and several boat tours operate within Scapa Flow.</p> <p>Scottish Sea Farms will ensure that the site is marked effectively in accordance with the recommendations of the Northern Lighthouse Board, and moorings maintained in good order.</p> <p>The feed barge to be used on the site will exhibit an all round fixed white light from a point at least 1 metre above any obstruction, also with a nominal range of 2 nautical miles.</p> <p>During the harvest period the wellboat will call several times a week to collect harvest fish. Each operation will normally take less than two hours.</p>
STATUTORY CONSULTEE	
7. Landscape and Visual Impacts	
DEVELOPER	<p>The proposed site at Westerbister would not be perceptible from a National Scenic Area; the closest such site, Hoy and West Mainland, is located >15km away to the west, and will not be affected by the development.</p> <p>The proposed site lies within Local Coastal Character Area (LCCA) 11 from SNH's 2011 report "Orkney Landscape Capacity for Aquaculture". This report classifies the coast where the Westerbister site is located as "undeveloped" but with scope for a medium scale development and recommends limiting aquaculture development to this eastern portion of</p>

	<p>Scapa Bay. The current definition of medium scale development suggests a maximum number of 12 cages.</p> <p>SSF have commissioned an independent landscape architect to study this particular location and now propose that increasing the scale of the site to 16 cages in this particular location makes little difference to the overall visual impact and zones of theoretical visibility of the site. Please refer to Attachment 2: Coastal landscape and visual input to Scoping Report.</p> <p>Preliminary Zone of Theoretical Visibility (ZTV) mapping has been generated for the proposed development. The convex nature of slopes on the western coast of Holm will restrict views of the proposed development from the A961. The proposed development would however be visible in relative proximity from mainly newer properties overlooking the sea on the west coast of the Holm area. Views from these properties and from the A961 would be elevated, looking over the proposed development. In more distant views from the west, the dark backdrop of cliff would reduce the visibility of the development.</p> <p>There are three scheduled monuments within a 7km radius: Loch of Ayre broch, Lamb Holm settlement and Castle Howe broch (Historic Scotland website). The proposed development is highly unlikely to have a visual impact on any of these sites, particularly the Lambs Holm and Castle Howe sites. There are also a number of listed buildings within the same area; the proposed site may be visible from some of these buildings, in particular those located west of the A961 (four buildings). The commissioned LVIA will highlight any visual impacts to these buildings arising from any development at Westerbister.</p> <p>The cages SSF deploy are circular, constructed of non-reflective material and of low profile. The design of the feed barge will ensure that, as far as possible, it will be sympathetic to the maritime nature of the area. The cage layout and barge will be regular geometric shapes sited parallel to the coastline to maximise the screening effect of the largely linear character of this stretch of coastline.</p>
<p>SNH</p>	<p>The Orkney Landscape Capacity for Aquaculture: Scapa Flow and Wide Firth (http://www.snh.org.uk/pdfs/publications/commissioned_reports/466.pdf) recommends that development within the Bay of Deepdale to Howequoy Head area (LCCA11) can accommodate one medium scale aquaculture development. Medium scale is defined as a fish farm with up to 12 cages with feedbarge. The proposed development is termed as large scale and significantly larger than recommended in the report.</p> <p>The provision of initial coastal and visual information, with a description of the methodology for full assessment, is welcomed. Mitigation measures proposed considering the design of cages layouts and feedbarge is supported. Alternatives for feed barges, design and colours should also be provided.</p> <p>Details of the feedbarge should be included in the ES, including the dimensions and height above water when not weighed with feed stock. Night-time impacts with any requirements for lighting of the cages should be included in the assessment of coastal and visual impact.</p>

	<p>Viewpoints as discussed in the supplementary information provided with the application appear appropriate.</p> <p>The ES should acknowledge and assess possible cumulative impacts of other marine developments in the area and any in the planning system should also be considered.</p>
8. Noise	
DEVELOPER	<p>Every effort will be made to keep our operations as unobtrusive as possible by the use of noise insulation on equipment, and by restricting and adjusting our hours of activity as far as practicable. Normally work would be carried out on site between the hours of 08:00 and 17:00.</p>
STATUTORY CONSULTEE	
9. Marine Cultural Heritage	
DEVELOPER	<p>Scapa Flow is one of the largest natural harbours in the world and a nationally important historic site. The area has a number of WWI & WWII shipwrecks making it popular with recreational divers.</p> <p>The only known wreck in the immediate vicinity of the proposed site is the wreck of the HMS Royal Oak some 3km to the north west (Admiralty chart BA2249). This site is a Designated War Grave and as such is not open to recreational diving.</p> <p>SSF recognise the sensitivity and significance of this wreck site and it is unlikely that our activities would have any impact on the wreck of the HMS Royal Oak, due to the distance from the proposed fish farm.</p> <p>Wrecks off Cava Island are >15km away, according to the UK diving website http://www.ukdiving.co.uk/wrecks/map.php?area=scapa.</p>
STATUTORY CONSULTEE	
10. Waste Management (non-fish)	
DEVELOPER	<p>As far as possible, both for economy and to avoid the creation of waste we reuse and recycle old cages. The sections in good condition are refurbished and will be reused, possibly at one of our other sites. Any remaining plastic or metal scrap is recovered and goes to a dealer for recycling. Any remaining unusable waste is uplifted by an authorised carrier and disposed of to licensed landfill.</p> <p>Feed bags are baled on Orkney then shipped to Shetland where they are pelletised for recycling into a number of different products including traffic cones and garden furniture.</p>

	Special Wastes (oil, batteries) are removed by maintenance contractor, or disposed of via licenced facilities.
STATUTORY CONSULTEE	
11. Socioeconomic, Access and Recreation	
DEVELOPER	<p>The site will employ 6 to 7 members of staff on a full-time basis. Local contractors will be used where required for specialist projects (such as mooring works and survey work).</p> <p>Servicing is expected to be from Scapa Pier.</p> <p>Scapa is a designated harbour area under the Orkney County Council Act 1974 and has a reasonable amount of traffic but as the proposed site is located distant from the pier, access would not be adversely affected by the site.</p>
STATUTORY CONSULTEE	
12. Traffic and Transport	
DEVELOPER	<p>Staff will typically make one return journey to the site each day.</p> <p>Feed supplies and nets are expected to be delivered by boat from the Scottish Mainland to Orkney, and transferred to the site by boat.</p>
STATUTORY CONSULTEE	
13. Any other issue	
DEVELOPER	
STATUTORY CONSULTEE	

6.1. Organisation: SNH

Contact name: Donna Yule
 Directorate/Division/Agency: SNH, Orkney
 Telephone number: 01856 875302
 Email: donna.yule@snh.gov.uk

We have considered this proposed development in terms of formal EIA Screening and Scoping, and have completed our assessment of the significance of potential environmental impacts.

Check or complete the following fields as required.

We obtained supplementary information from the developer during our consideration

We consulted with other Statutory Consultees during our consideration

Our advice as to your Screening opinion is summarised as:

The size and scale of the proposed development warrants the requirement for an EIA

Our advice as to your Scoping opinion/advice, relating to environmental information that should be included in an Environmental Statement, is summarised as:

- A seabed survey is required in accordance with SEPAs Fish Farm Manual, Annex F
- A baseline survey of winter waterfowl usage determined and the effects of the proposed development assessed.
- A site specific predator control plan detailing equipment to be used in hierarchy format, proposed monitoring and periodic review of equipment.
- An escapes policy, details of biosecurity/emergency procedures and preventative measures
- Landscape and visual assessment including photomontages/wirelines from agreed viewpoints. Feedbarges and any maturation lighting should be included in the assessment.

Our advice on additional information that should be submitted in support of any future planning application for the proposed development is summarised as:

- A Farm management agreement should be developed if more aquaculture developments are permitted in the area.

Electronic signature:

Date:



Scottish Natural Heritage
All of nature for all of Scotland

Ms Margaret Gillon
Development Management
Orkney Islands Council
School Place
Kirkwall KW15 1NY

Email copy only to planningconsultation@orkney.gov.uk

Our ref CNS/MFF/Westerbister/CDM138152
Your ref 15/409/MAR

29th October 2015

Dear Margaret

**The Town and Countryside Planning (Environmental Impact Assessment) (Scotland) Regulations 2011
Town and Country Planning (Scotland) Act 1997**

Create a salmon farming site, comprising 16 x 100m circumference cages, 2 x 8 in a 60m grid and include a feed barge at Westerbister, Scapa Flow

Thank you for your consultation and extension to the consultation period for the above proposal.

Summary

We have **no objection** to the proposal but provide comments with respect to the environmental information provided by the applicant in support of this application, in particular the Habitats Regulations Appraisal (HRA). It is for the planning authority to decide, within the context of its own policies, whether to request the further information suggested below to help assess the impacts and to inform mitigation/enhancement measures.

Background

We have been included in pre-application discussions regarding this proposal with the developer/agent. Our response to the scoping consultation resulted in us requesting the following information to be included in the EIA;

- A seabed survey
- A baseline survey of the winter waterfowl usage and the effects of the proposed development assessed.
- A site specific predator control plan detailing equipment to be used in hierarchy format, proposed monitoring and periodic review of equipment.
- An escapes policy, details of biosecurity/emergency procedures and preventative measures.
- Landscape and visual assessment including photomontages/wirelines from agreed viewpoints. Feedbarge and any maturation lighting should be included in the assessment.



Scottish Natural Heritage. 54-56 Junction Road, Kirkwall, Orkney, KW15 1AW
Tel 01856 875302 Fax 01856 876372 www.snh.gov.uk north@snh.gov.uk

Appraisal of the Impacts of the proposal and advice

SPA interests

Some notified bird features of existing SPAs have been incorrectly screened out of the assessment and for various others the justification provided is unclear¹. Despite these inconsistencies, the degree of connectivity with the Westerbister fish farm site and the listed SPAs is probably small and we therefore advise that the conclusion of no likely significant effect, can be supported.

Pentland Firth and Scapa Flow dSPA (see Appendix 1)

The proposal lies within the draft SPA for wintering waterfowl. The Pentland Firth and Scapa Flow draft SPA (dSPA) does not at present receive any legal or Government policy protection; however, if it becomes a proposed SPA (pSPA) then it will receive full policy protection and be subject to the requirements of The Conservation (Natural Habitats, & c.) Regulations 1994 (as amended); The Habitats Regulations¹. Such protection includes the requirement to conduct Habitats Regulations Appraisals (HRAs) of plans and projects with the potential to negatively affect Natura sites. Please see Annex 1 for our advice with respect to this dSPA.

Priority Marine Features (PMF)

Although empty Ocean Quahog shells were evident at the site the seabed survey did not reveal any live species and we therefore conclude no significant impacts on the species through the proposed development. Flame shells are present in Scapa Flow and although the benthos appears to be suitable, the grab samples / benthic baseline report show that none were found.

We are satisfied that no PMFs were found in the surveyed areas².

Landscape

The Orkney Landscape Capacity Study³ suggests that a medium scale development would be appropriate for this area in Scapa Flow, however the proposal is for a large scale development. We agree with the conclusion of the LVIA and consider the layout and alignment of the proposed development to be appropriate for this location.

If you have any further questions regarding our above advice, please do not hesitate to contact me at the Kirkwall office or at donna.yule@snh.gov.uk.

Yours sincerely

Donna Yule
Operations Officer, Orkney

¹ Table 3.2 in the Habitats Regulations Appraisal

² Transposition error on Benthic ROV Survey, p11 Figure 4.1 'poisons' should read 'positions'.

³ Orkney Landscape Capacity Study <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail?id=1827>

Appendix 1 Pentland Firth and Scapa Flow dSPA

Advice given at screening/scoping regarding the status of Pentland Firth and Scapa Flow dSPA remains unchanged.

We acknowledge and welcome consideration of the dSPA within the HRA document included with the consultation. We here provide some advice to support your role as Competent Authority with respect to any future statutory HRA for this site.

Deleted: .

The HRA considers the potential impacts of the development on qualifying species of the dSPA; however, it is unclear what scale of impact this development might have as no baseline regarding bird numbers or usage of the surrounding area has been established. Additional information on distributions of birds would be required to support the conclusion of no likely significant effect.

One of the most important issues regarding diving birds is risk of death by entanglement in cage nets. Whilst the HRA concludes no likely significant effect on populations due to the content of the Predator Exclusion Plan, a reasoned explanation as to why the detail provided in the predator plan will reduce risk of entanglement so as to ensure no likely significant effect should be included. Additional supporting material should be provided; including, for example, relevant bird entanglement monitoring data from existing fish farms where measures in the Predator Exclusion Plan are similar.

The Predator Exclusion Plan states that top nets will be used to stop/reduce risk of bird attacks. It should be noted in the Plan when these will be used (eg. throughout the production cycle). Detail of the mesh size should also be included.

We support the use of an adaptive management plan and monitoring of wildlife entanglements to be used as tools for reviewing of equipment. Presentation of monitoring data to SNH/Marine Scotland/OIC should be agreed and reported on a regular basis (eg. bi-annually, end of production cycle etc.)

Westerbister Escapes Prevention & Recapture Strategy⁴ refers to the use of gill nets where re-capture is necessary; we advise that any use of gill nets to recapture fish in event of an escape is likely to have a significant effect on diving bird qualifying interest(s) of SPA species. Consequently, any proposed authorisation of use of gill nets would first require Marine Scotland to carry out an appropriate assessment in view of these sites' conservation objectives for these qualifying interests.

⁴ Section 3d discusses use of ADDs – not to be used at this site as per predator exclusion plan

From: [Donna Yule](#)
To: ["Richard Darbyshire"](#)
Subject: RE: Low Frequency ADD's
Date: 15 September 2016 17:11:00
Attachments: image001.jpg
image002.jpg
image003.jpg
image004.jpg

Hi Richard

Thank you for your enquiry. I will look in to this and get back to you as soon as possible.

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Richard Darbyshire [mailto:richard.darbyshire@scottishseafarms.com]
Sent: 15 September 2016 16:05
To: Donna Yule
Cc: Kirsty Brown; Suzanne Henderson
Subject: Low Frequency ADD's

Hi Donna

I was hoping that you could help me out. We were hoping to trial a new low frequency (Cetacean Friendly) Anti Deterrent Device at two sites in Orkney this winter. The sites we had in mind were Toyness and Wyre, I'd appreciate it if you could advise on how we would get the appropriate permission to install the systems.

Further details on the proposed system is attached, the manufacturer claims that they have permission from SNH (Via Suzanne Henderson) to deploy these ADD's in protected areas. However, I thought I'd double check locally that this was indeed the case before I took the project any further.

Look forward to hearing back in due course.

Regards

Richard Darbyshire | Regional Production Manager - Orkney | Scottish Sea Farms Limited
Regional Office, Scapa, St Ola, Kirkwall, ORKNEY ISLANDS, KW15 1SD
Tel +44 (0) 1856 898033 **Mobile +** [REDACTED]
www.scottishseafarms.com | www.facebook.com/scottishseafarms |
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[Scottish Sea Farms](#)

From: [Donna Yule](#)
To: ["Richard Darbyshire"](#)
Cc: ["Kirsty Brown"](#); [Suzanne Henderson](#)
Subject: RE: Low Frequency ADD's
Date: 26 September 2016 15:17:00
Attachments: image001.jpg
image002.jpg
image003.jpg
image004.jpg

Hi Richard

Thanks for your email enquiry.

Just wondering if you could provide a few more details on your proposed ADD trials.

- What are the objectives of your ADD trial and why the Toyness and Wyre sites been chosen.
- When and how long is the trial period
- What ADD model is to be trialled and which way are they to be used ie which settings, random trigger/frequency?
- If using more than one device at a site, how will they be used together and what is the combined transmission range, have you done any prediction modelling for the sites?

If you could provide any of the above additional information this would enable us to provide a more succinct response.

Thanks
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Richard Darbyshire [mailto:richard.darbyshire@scottishseafarms.com]
Sent: 15 September 2016 16:05
To: Donna Yule
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Further details on the proposed system is attached, the manufacturer claims that they have permission from SNH (Via Suzanne Henderson) to deploy these ADD's in protected areas. However, I thought I'd double check locally that this was indeed the case before I took the project any further.

Look forward to hearing back in due course.

Regards

Richard Darbyshire | Regional Production Manager - Orkney | Scottish Sea Farms Limited

Regional Office, Scapa, St Ola, Kirkwall, ORKNEY ISLANDS, KW15 1SD

Tel +44 (0) 1856 898033 Mobile [REDACTED]

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Best Aquaculture Company of 2015



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[Scottish Sea Farms](http://www.scottishseafarms.com)

From: [Donna Yule](#)
To: "[Kirsty Brown](#)"; "Richard.Darbyshire@scottishseafarms.com (Richard.Darbyshire@scottishseafarms.com)"
Cc: [Liam Wright](#)
Subject: RE: Low Frequency ADD"s
Date: 26 October 2016 16:32:00
Attachments: image001.jpg
image002.jpg
image003.jpg
image004.jpg

Hi Kirsty/Richard

In response to your original email and my earlier discussion on the phone today with Kirsty, I have the following information for you.

As we understand it, this is a proposal to test an ADD at a fish farm facility for two purposes

- 1) it's efficacy at deterring seals and
- 2) for a lack of response from any cetacean present.

This therefore falls under a research proposal. There is some data to suggest that low frequency devices do not affect cetaceans to the same degree as standard ADDs and therefore this is an area of research that we support. However, conclusive evidence is lacking so there remains the potential for disturbance to cetaceans.

It would be very useful to have information on the effectiveness of this ADD and/or the reaction (or lack of) of non-target species, but we consider that this should proceed under licence, particularly given the proposed locations.

We would advise that you apply for an EPS research licence for the period for which you have funding in the first instance. To do this you will need to contact our licensing team either by email licensing@snh.gov.uk or by telephone 01463 725364 and they will be able to advise you on the application process. See <http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/mammal-licensing/marine/>

It is likely that you will need to provide details of the research project including methods (you can use some of the detail you forwarded to me already) and you will also need a named person for the licence, not the company name. You will also be required to report your findings at the end of this period.

Here is a link to the licensing section on our website including which includes a pdf of guidance notes which may be useful <http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/european-species-licensing/>

Please feel free to mention that you have already been in contact with me.

Regards
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157

Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Kirsty Brown [mailto:Kirsty.Brown@scottishseafarms.com]
Sent: 26 October 2016 10:58
To: Donna Yule; Richard Darbyshire
Subject: RE: Low Frequency ADD's

Good morning Donna,

I was just wondering if you have had a chance to look into this at all?

Regards
Kirsty

From: Donna Yule [mailto:Donna.Yule@snh.gov.uk]
Sent: 28 September 2016 12:57
To: Richard Darbyshire
Cc: Kirsty Brown
Subject: RE: Low Frequency ADD's

Hi Richard

Thank you for this extra information, most useful. It may take me a little time to look in to your enquiry due the nature of the request and other high priority workload at present, but I will provide response as soon as possible.

Regards
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Richard Darbyshire [mailto:richard.darbyshire@scottishseafarms.com]
Sent: 28 September 2016 12:40
To: Donna Yule
Cc: Kirsty Brown
Subject: RE: Low Frequency ADD's

Afternoon Donna

Answers below as requested, let me know if you require any further information.

Kind regards

Richard Darbyshire | Regional Production Manager - Orkney | Scottish Sea Farms Limited

Regional Office, Scapa, St Ola, Kirkwall, ORKNEY ISLANDS, KW15 1SD

Tel +44 (0) 1856 898033 Mobile [REDACTED]

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Best Aquaculture Company of 2015

From: Donna Yule [<mailto:Donna.Yule@snh.gov.uk>]

Sent: 26 September 2016 15:18

To: Richard Darbyshire <richard.darbyshire@scottishseafarms.com>

Cc: Kirsty Brown <Kirsty.Brown@scottishseafarms.com>; Suzanne Henderson <Suzanne.Henderson@snh.gov.uk>

Subject: RE: Low Frequency ADD's

Hi Richard

Thanks for your email enquiry.

Just wondering if you could provide a few more details on your proposed ADD trials.

- What are the objectives of your ADD trial and why the Toyness and Wyre sites been chosen.

In the initial discussions the manufacturer (Ace Aquatec) had with SNH when these systems were just prototypes, they were given special dispensation to test these new deterrents on sites where no deterrent systems had previously been allowed. This was because Ace Aquatec had presented their new technology to SNH as a way to avoid effects on cetaceans. This was due to the fact that the deterrents were focused on the 1-2khz frequency range which is outside the hearing range of cetaceans. Dr Simon Northridge and his team at St Andrews University are carrying out observation studies on the deterrents over a two year period to ensure that the effect on cetaceans is non-existent. This requires deployment on sites where there is no experience of ADDs and where there are abundant porpoises. This research will be presented alongside the recent SARF call looking into the low frequency systems Ace Aquatec have developed, however as an actual system deployed and over a longer period of study, we believe the St Andrews' study should prove more insightful and helpful to policy makers. Simon Northridge chairs the seal committee meetings so has good knowledge of the issues involved.

As part of the trial, I wish to test the systems both in North Orkney and South Orkney waters to see if there is any difference in effectiveness between the two areas. As a result, Wyre and

Toyness have been chosen due to the size of the fish and also the ease at which the farms can be accessed by researchers. (The only other sites stocked this winter by SSF will be Bring Head and Eday, both are less accessible from Orkney mainland)

- When and how long is the trial period

These are commercial systems, however there is ongoing work on sound patterns to ensure that the impact on seals is optimal and the impact on cetaceans is minimal. The study being undertaken by St Andrews' University and hopefully with the support of SAIC (pending) will ensure the impact of the deterrents are observed over successive winters with maximum feedback to inform the use and development of the technology. So effectively two years from October 2016.

- What ADD model is to be trialled and which way are they to be used ie which settings, random trigger/frequency?

The system is the Ace Aquatec RT1 low frequency deterrent, deployed as part of Cage Guard. It is configured to play noise in the sensitive hearing range of seals but outside the hearing range of porpoises and the system will be controlled remotely to adjust duty cycle to match the rise and fall of seal mortalities at the cage side. The maximum rate that the system will operate at is 144 scrams per hour, and the minimum rate is 0-12 scrams per hour. The on and off periods will be recorded remotely and corroborated with porpoise and seal siting's.

The sonar triggering systems come online in year two and these can be added to the system, however the main intention of this deployment is to measure continuous sound exposure in a non-target species when the sound is theoretically beyond the species hearing threshold.

- If using more than one device at a site, how will they be used together and what is the combined transmission range, have you done any prediction modelling for the sites?

No more than two systems are required on a single site. In terms of noise pollution, it compares more favourably to the standard 12khz deterrents which require typically one per cage. These two systems will sit at either end of the cage group of each site. The deterrent range is approximately 100m based upon previous deployments. The sound propagation will be measured directly in the water as part of this study to determine the maximum distance that the sound can carry. Typically sound can usually be detected around 5km away, however it should be emphasised that the system has been pitched down to avoid the hearing threshold of mammals usually effected by standard 10-20khz deterrents. The combination of a sophisticated wireless remote operation will allow the barge operator, or the area manager, or Ace Aquatec's engineers, or St Andrews' University to adjust the scam rate. This means that the sound can be used more appropriately to target predatory behaviour.

If you could provide any of the above additional information this would enable us to provide a more succinct response.

Thanks
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Richard Darbyshire [<mailto:richard.darbyshire@scottishseafarms.com>]
Sent: 15 September 2016 16:05
To: Donna Yule
Cc: Kirsty Brown; Suzanne Henderson
Subject: Low Frequency ADD's

Hi Donna

I was hoping that you could help me out. We were hoping to trial a new low frequency (Cetacean Friendly) Anti Deterrent Device at two sites in Orkney this winter. The sites we had in mind were Toyness and Wyre, I'd appreciate it if you could advise on how we would get the appropriate permission to install the systems.

Further details on the proposed system is attached, the manufacturer claims that they have permission from SNH (Via Suzanne Henderson) to deploy these ADD's in protected areas. However, I thought I'd double check locally that this was indeed the case before I took the project any further.

Look forward to hearing back in due course.

Regards

Richard Darbyshire | Regional Production Manager - Orkney | Scottish Sea Farms Limited

Regional Office, Scapa, St Ola, Kirkwall, ORKNEY ISLANDS, KW15 1SD

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Best Aquaculture Company of 2015



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Thoiribh an aire airson adhbharan gnothaich, 's dòcha gun tèid sùil a chumail air puist-dealain a' tighinn a-steach agus a' dol a-mach bho SNH.



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From: [Naomi Dempsey](#)
To: [Donna Yule](#)
Cc: [Chris Webb](#)
Subject: FW: Kirknoust and Vady
Date: 16 November 2016 14:09:47
Attachments: image002.jpg
image004.png
REVISED Bay of Vady Predator Defence and Mitigation Policy.pdf
REVISED Kirknoust Predator Defence and Mitigation Policy.pdf

Good afternoon Donna,
Please find attached revised Predator Defence Policies for the Kirknoust and Bay of Vady sites as per the amendments discussed by yourself and Chris. Please can you advise whether SNH is content with these amendments so that I am able to resubmit these to OIC asap.

Kind regards

Naomi Dempsey
Environmental Officer

Cooke Aquaculture Scotland Ltd.
Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom

T: +44(0)1856876101
DD:+44 (0)1856 889370
M:+44 [REDACTED]



From:
Sent: 10 November 2016 15:52
To: Donna.Yule@snh.gov.uk
Cc: Margaret Gillon <Margaret.gillon@orkney.gov.uk>; Naomi Dempsey <Naomi.dempsey@cookeaqua.com>
Subject: Kirknoust and Vady

Dear Donna,

Further to your phone call today with regards to predator net size at Kirknoust and the Bay of Vady, Cooke Aquaculture Scotland Limited can commit to using 50mm predator nets if required, to protect species of importance in the area namely Red Throated divers. Following the recently proposed North Orkney PSPA

We will amend the predator defence policies asap and re-submit to Orkney Islands council as soon as possible.

Regards

Chris Webb

Environmental and Development

Manager

Cooke Aquaculture Scotland

Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom.

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T +44 (0)1856876101

M [REDACTED]





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Telephone 01856 876101 – Fax 01856 873846

PREDATOR DEFENCE AND MITIGATION POLICY

Applicable to:
Bay of Vady, Rousay Sound, Orkney



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Registered Office: Brodies, 110 Queens Street, Glasgow, G1 3BX



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Cooke Aquaculture Scotland Ltd is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species within a 20km radius of the site. These comprise:

Seal Haul-out Sites

SITE NO.	NAME	CLASSIFICATION	DISTANCE FROM SITE
NOO-031	SE Egilsay	Key Site based on August Survey Count	0.55km E
NOO-029	Egilsay North	Key Site based on August Survey Count	3.07km NE
NOO-028	Holm of Scockness	Key Site based on August Survey Count	3.33km N
NOO-027	Sweyn Holm	Key Site based on August Survey Count	4.34km S
BC-028	Gairsay	Additional Grey Seal Breeding Colony	5.49km S
BC-021	Muckle and Green Holm	Additional Grey Seal Breeding Colony	5.67km E
BC-030	Little Green Holm	Additional Grey Seal Breeding Colony	5.75km E
NOO-018	Seal Skerry (Eday)	Key Site based on August Survey Count	6.98km E
NOO-022	Holm of Rendall	Key Site based on August Survey Count	7.65km S
NOO-019	Taing Skerry and Grass Holm	Key Site based on August Survey Count	7.67km S
BC-033	Rusk Holm	Additional Grey Seal Breeding Colony	8.49km NE
NOO-001	Eynhallow and Westside	Key Site based on August Survey Count	8.55km W
NOO-016	Costa & Burgar	Key Site based on August Survey Count	10.14km W
NOO-015	Helliar Holm North Elwick	Key Site based on August Survey Count	10.67km S
BC-034	South Westray	Additional Grey Seal Breeding Colony	13.62km NE
NOO-004	Skerry of Wasbist	Key Site based on August Survey Count	13.80km N

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BC-026	Holms of Spurness	Additional Grey Seal Breeding Colony	13.91km E
BC-024	Little Linga	Additional Grey Seal Breeding Colony	13.99km E
BC-018	Linga Holm	Additional Grey Seal Breeding Colony	14.15km E
BC-025	Sty Taing	Additional Grey Seal Breeding Colony	14.64km E
NOO-025	Damsay and Holm of Grimbister	Key Site based on August Survey Count	14.92km S
BC-022	Calf of Eday	Additional Grey Seal Breeding Colony	15.20km NE
NOO-034	Greenli Ness	Key Site based on August Survey Count	15.71km ESE
BC-020	Holm of Huip	Additional Grey Seal Breeding Colony	16.04km E
NOO-025	Spo Ness to Ness of Brough	Key Site based on August Survey Count	18.15km N
NOO-024	North end of Mill Bay	Key Site based on August Survey Count	18.17km E
NOO-010	Bay of Holland E & Tor Ness	Key Site based on August Survey Count	18.65km ESE
NOO-005	Deer Sound	Key Site based on August Survey Count	19.06km S

Species of conservation importance

SITE	DESIGNATION	SPECIES	DISTANCE FROM SITE
North Orkney	dSPA	Great northern diver, Slavonian Grebe, Red-throated diver, Short eared owl	WITHIN
Rousay	SSSI	Arctic Skua, Arctic tern, Guillemot, Kittiwake and seabird colony	2.84km W
Rousay	SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, seabird assemblage	3.64km W
Muckle and Little Green Holm	SSSI	Grey Seal	5.77km E
Eynhallow	SSSI	Harbour Seal	10.07km W
Doomy and Whitemaw Hill	SSSI	Arctic skua and Whimbrel	8.45km E

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Faray and Holm of Faray	SSSI	Grey Seal	10.02km NE
Faqay and Holm of Faray	SAC	Grey Seal	10.02km NE
West Mainland Moorlands	SSSI	Hen harrier, Red-throated diver, Short-eared owl	10.46km SW
Orkney Mainland Moors	SPA	Hen harrier, Red-throated Diver, Short eared owl	10.46km SW
Mill Loch	SSSI	Red-throated diver	13.11km NE
Calf of Eday	SSSI	Cormorant	15.55km NE
West Westray	SSSI	Arctic skua, Arctic tern, Guillemot, Kittiwake, Razorbill, seabird colony	16.52km E
Keelylang Hill and Swartaback Burn	SSSI	Hen harrier	17.79km SW
Loch of Banks	SSSI	Hen harrier	19.10km SW
Sanday	SAC	Harbour Seal	19.97km NE

The potential for designated species within the vicinity of the Bay of Vady site interacting with the operations is dependent on several factors including, the mobility of the feature, foraging strategies and range, the reliance on the marine environment and the species potential for attraction to aquaculture operations. In this respect, many of the designated protected species within the vicinity of the Bay of Vady site have the potential to interact with the operations. Cooke Aquaculture Scotland Ltd thus wish to propose and outline the necessary predator defence and mitigation strategy which has a hierarchy of control measures in order to prevent the predation of stock on site by aerial birds, diving birds, seal species and otters etc.

It is the objective of Cooke Aquaculture Scotland Ltd by implementing these strategies at the Bay of to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for the stock.

PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages on the Bay of Vady site for the duration of the production cycle. These will be constructed of black mesh netting of 50mm in gauge, that will be fully laced around the handrail of the cages, with no gaps, in order to prevent potential ingress by birds or otters. By using 50mm top

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nets elsewhere on its sites in Orkney, Cooke Aquaculture Scotland Ltd have excluded all aerial predators whilst preventing entanglement issues. Top nets will also be supported by net supports in order to raise the nets above the surface of the water to a minimum height of 1.5m; this prevents birds from aggregating on the top nets, causing them to bag, allowing access to both feed and fish.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure fish size and any wildlife constraints. Cage nets to be used on the Bay of Vady site will vary depending on purpose for example: for smolts net mesh of 15mm upwards is used and for growers a minimum mesh size of 24mm is used. Cage nets will be tensioned using a Froyer ring weighted to 30+kg per meter, with an additional 50kg centre weight. This method of net tension is used elsewhere on Cooke Aquaculture Scotland Ltd sites with cages of a 100m circumference and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at maintaining a constant net tension thus eliminating net bagging which in turn reduces the potential of predator interactions. All nets are checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage.

SUBSURFACE ANTI-PREDATOR NETS

Subsurface anti-predation nets constructed of 50mm orange mesh will be deployed on the Bay of Vady site if seal predation becomes problematic or above 1% cumulative, or greater than 0.25% monthly mortalities associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrent devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council, and SNH. ADD's will be of the 'silent scammer' type to prevent disturbance to non-target species.

HUMANE DISPATCH

Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure, by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and dictates the number of each seal that can be shot directly relating to permitted biological removal numbers and when they can be shot if such limitations are in place. Any seals shot will be reported to Marine Scotland on a quarterly basis, as per the specification on the issued licence.

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PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DETAIL/DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned 50mm black mesh netting	Deployed to discourage bird aggregation around cages and prevent ingress by predators over cage hand rails	To be deployed to deter aggregation of birds and ingress of predators over cage handrails	Deployed for the entire duration of the production cycle, from the first day of fish input to the harvesting of all fish from the cage.	Regular surface checks by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and any entanglement issues are reported to SNH on a minimum of a 6 monthly basis.
TENSIONED CAGE NETS	Standalone tensioned cage nets using a Froyer ring weighted to 30+kg per meter in addition to a 50kg center weight. Mesh size is dependent on stocking requirements	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera to ensure nets are correctly tensioned to prevent bagging or wear points/damage.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm orange mesh, subsurface and predator nets that	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is	Will be deployed if mortalities by seal predation is	Correct deployment and tensioning to	To be checked daily by site operative using

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	are suitably weighted to ensure a constant tension.		greater than 1% cumulative or 0.25% monthly	greater than 1% cumulative or 0.25% monthly, for the remainder of the production cycle.	ensure net entanglement risk is minimized to the lowest possible levels	spyball cameras and weekly by divers to ensure correct tensioning, no bagging and evidence of damage
ACOUSTIC DETERRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and subsurface anti-predator nets fail to deter persistent seals	As per the seal predation threshold for the deployment of subsurface anti-predator nets	An EPS license will be applied for in the event of ADD deployment being necessary	All units to be removed and cleaned on a weekly basis to maintain effectiveness	Seal predation levels are monitored through the examination of fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot be deterred by using other means	If seal mortalities of stock remains high despite the use of all other deterrence measures then problem seals will be identified, observed prior to actions being taken	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular refresher courses to this effect.	Seal predation levels are monitored through the examination of mortalities and visual observation of predator activities.

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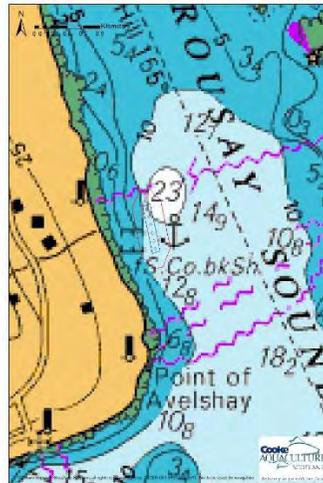
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Crowness Point, Hatston Industrial Estate, Kirkwall, Orkney KW15 1RG
Telephone 01856 876101 – Fax 01856 873846

PREDATOR DEFENCE AND MITIGATION POLICY



Applicable to:
Kirknoust, Rousay Sound, Orkney

Cooke Aquaculture Scotland Ltd is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species within a 20km radius of Kirknoust site. These comprise:

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Seal Haul-out Sites

SITE NO.	NAME	CLASSIFICATION	DISTANCE FROM SITE
NOO-031	SE Egilsay	Key Site based on August Survey Count	2.23km E
NOO-029	Egilsay North	Key Site based on August Survey Count	2.61km NE
NOO-028	Holm of Scockness	Key Site based on August Survey Count	1.77km N
NOO-027	Sweyn Jolm	Key Site based on August Survey Count	5.65km S
BC-028	Gairsay	Additional Grey Seal Breeding Colony	6.72km S
BC-021	Muckle and Green Holm	Additional Grey Seal Breeding Colony	7.37km E
BC-030	Little Green Holm	Additional Grey Seal Breeding Colony	7.72km E
NOO-018	Seal Skerry (Eday)	Key Site based on August Survey Count	7.93km E
NOO-022	Holm of Rendall	Key Site based on August Survey Count	8.45km S
NOO-019	Taing Skerry and Grass Holm	Key Site based on August Survey Count	9.12km S
BC-033	Rusk Holm	Additional Grey Seal Breeding Colony	8.25km NE
NOO-001	Eynhallow and Westside	Key Site based on August Survey Count	6.86km W
NOO-016	Costa & Burgar	Key Site based on August Survey Count	8.73km W
NOO-015	Helliar Holm North Elwick	Key Site based on August Survey Count	12.41km S
BC-034	South Westray	Additional Grey Seal Breeding Colony	13.10km NE
NOO-004	Skerry of Wasbist	Key Site based on August Survey Count	12.67km N
BC-026	Holms of Spurness	Additional Grey Seal Breeding Colony	15.11km E
BC-024	Little Linga	Additional Grey Seal Breeding Colony	15.34km E
BC-018	Linga Holm	Additional Grey Seal Breeding Colony	15.76km E
BC-025	Sty Taing	Additional Grey Seal Breeding Colony	16.10km E
NOO-025	Damsay and Holm of Grimbister	Key Site based on August Survey Count	15.73km S
BC-022	Calf of Eday	Additional Grey Seal Breeding Colony	15.33km NE
NOO-034	Greenli Ness	Key Site based on August Survey Count	17.78km ESE

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BC-020	Holm of Huip	Additional Grey Seal Breeding Colony	17.40km E
NOO-025	Spo Ness to Ness of Brough	Key Site based on August Survey Count	16.95km N
NOO-024	North end of Mill Bay	Key Site based on August Survey Count	19.80km E
NOO-010	Bay of Holland E & Tor Ness	Key Site based on August Survey Count	20.56km ESE
NOO-005	Deer Sound	Key Site based on August Survey Count	20.90km S

Species of conservation importance

SITE	DESIGNATION	SPECIES	DISTANCE FROM SITE
North Orkney	pSPA	Great northern diver, Slavonian Grebe, Red-throated diver, Short eared owl	WITHIN
Rousay	SSSI	Arctic Skua, Arctic tern, Guillemot, Kittiwake and seabird colony	1.58km W
Rousay	SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, seabird assemblage	1.58km W
Muckle and Little Green Holm	SSSI	Grey Seal	7.55km E
Eynhallow	SSSI	Harbour Seal	8.34km W
Doomy and Whitemaw Hill	SSSI	Arctic skua and Whimbrel	9.22km E
Faray and Holm of Faray	SSSI	Grey Seal	10.11km NE
Faqay and Holm of Faray	SAC	Grey Seal	10.11km NE
West Mainland Moorlands	SSSI	Hen harrier, Red-throated diver, Short-eared owl	9.72km SW
Orkney Mainland Moors	SPA	Hen harrier, Red-throated Diver, Short eared owl	9.72km SW
Mill Loch	SSSI	Red-throated diver	13.49km NE
Calf of Eday	SSSI	Cormorant	15.77km NE
West Westray	SSSI	Arctic skua, Arctic tern, Guillemot, Kittiwake, Razorbill, seabird colony	14.73km N
Keelylang Hill and Swartaback Burn	SSSI	Hen harrier	18.67km S
Loch of Banks	SSSI	Hen harrier	18.02km NW
Sanday	SAC	Harbour Seal	

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The potential for designated species within the vicinity of the Kirknoust site to interact with the operations is dependent on several factors including: the mobility of the feature, foraging strategies and range, the reliance on the marine environment and the species potential for attraction to aquaculture operations. In this respect, many of the designated protected species within the vicinity of the Kirknoust site have the potential to interact with the operations. Cooke Aquaculture Scotland Ltd thus wish to propose, and outline, the necessary predator defence and mitigation strategy which has a hierarchy of control measures in order to prevent the predation of stock on site by aerial birds, diving birds, seal species and otters etc.

It is the objective of Cooke Aquaculture Scotland Ltd, by implementing these strategies at the Kirknoust site, to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for the stock.

PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages at the Kirknoust site for the duration of the production cycle. These will be constructed of black mesh netting of 50mm in gauge, and will be fully laced around the handrail of the cages with no gaps in order to prevent potential ingress by birds or otters. By using 50mm top nets elsewhere on its sites in Orkney, Cooke Aquaculture Scotland Ltd have excluded all aerial predators whilst preventing entanglement issues. Top nets will also be supported by net supports in order to raise the nets above the surface of the water to a minimum height of 1.5m; this prevents birds from aggregating on the tops nets, causing them to bag, allowing access to both feed and fish.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure fish size and any wildlife constraints. Cage nets to be used on the Kirk Noust site will vary depending on purpose for example: for smolts net mesh of 15mm upwards is used and for growers a minimum mesh size of 24mm is used. Cage nets will be tensioned using a Froyer ring weighted to 30+kg per meter, with an additional 50kg centre weight. This method of net tensioning is used elsewhere on Cooke Aquaculture Scotland Ltd sites with cages of a 100m circumference and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at maintaining a constant net tension thus eliminating net bagging which in turn reduces the potential of predator interactions. All nets are checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage.

SUBSURFACE ANTI-PREDATOR NETS

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Subsurface anti-predation nets constructed of 50mm orange mesh will be deployed on the Kirknoust site if seal predation becomes problematic, or above 1% cumulative, or greater than 0.25% monthly mortalities associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrents devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council and SNH. ADD's will be of the 'silent scrammer' type to prevent disturbance to non-target species.

HUMANE DISPATCH

Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure, by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and dictates the number of each seal that can be shot directly relating to permitted biological removal numbers and when they can be shot if such limitations are in place. Any seals shot will be reported to Marine Scotland on a quarterly basis, as per the specification on the issued license.

SUMMARY

PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DETAIL/DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned, 50mm black mesh netting	Deployed to discourage bird aggregation around cages and prevent ingress by predators over cage hand rails	To be deployed to deter aggregation of birds and ingress of predators over cage handrails	Deployed for the entire duration of the production cycle, from the first day of fish input to the harvesting of	Regular surface checks by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis

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				all fish from the cage.		
TENSIONED CAGE NETS	Standalone tensioned cage nets using a Froyer ring weighted to 30+kg per meter in addition to a 50kg center weight. Mesh size is dependent on stocking requirements	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera to ensure nets are correctly tensioned to prevent bagging or wear points/damage.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm orange mesh, subsurface and predator nets that are suitably weighted to ensure a constant tension.	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly	Will be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly, for the remainder of the production cycle.	Correct deployment and tensioning to ensure net entanglement risk is minimized to the lowest possible levels	To be checked daily by site operative using spyball cameras and weekly by divers to ensure correct tensioning, no bagging and evidence of damage
ACOUSTIC DETERRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and	As per the seal predation threshold for the deployment of	An EPS license will be applied for in the event of ADD	All units to be removed and cleaned on a weekly basis to	Seal predation levels are monitored through the examination of

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		subsurface anti predator nets fail to deter persistent seals	subsurface anti-predator nets	deployment being necessary	maintain effectiveness	fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot be deterred by using other means	If seal mortalities of stock remains high despite the use of all other deterrence measures then problem seals will be identified, observed prior to actions being taken	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular refresher courses to this effect.	Seal predation levels are monitored through the examination of mortalities and visual observation of predator activities.

From: [Naomi Dempsey](#)
To: [Donna Yule](#)
Cc: [Chris Webb](#)
Subject: RE: Kirknoust and Vady
Date: 16 November 2016 15:53:05
Attachments: image002.jpg
image004.png

Thanks Donna, I will amend those now with your comments.

Regards

Naomi

From: Donna Yule [mailto:Donna.Yule@snh.gov.uk]
Sent: 16 November 2016 15:29
To: Naomi Dempsey <Naomi.dempsey@cookeaqua.com>
Cc: Chris Webb <chris.webb@cookeaqua.com>
Subject: RE: Kirknoust and Vady

Hi Naomi

One small change on the Bay of Vady, update North Orkney dSPA to pSPA. We would also request that monitoring of entanglements should continue, including timings of when anti-predator nets are deployed. Please discuss any intended use of ADDs in this area. I am happy for the defence policy to be submitted to the OIC.

Thank you
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Naomi Dempsey [mailto:Naomi.dempsey@cookeaqua.com]
Sent: 16 November 2016 13:55
To: Donna Yule
Cc: Chris Webb
Subject: FW: Kirknoust and Vady

Good afternoon Donna,
Please find attached revised Predator Defence Policies for the Kirknoust and Bay of Vady sites as per the amendments discussed by yourself and Chris. Please can you advise whether SNH is content with these amendments so that I am able to resubmit these to OIC asap.

Kind regards

Naomi Dempsey

Environmental Officer

Cooke Aquaculture Scotland Ltd.

Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom

T: +44(0)1856876101

DD:+44 (0)1856 889370

M: + [REDACTED]



From:

Sent: 10 November 2016 15:52

To: Donna.Yule@snh.gov.uk

Cc: Margaret Gillon <Margaret.gillon@orkney.gov.uk>; Naomi Dempsey <Naomi.dempsey@cookeaquaculture.com>

Subject: Kirknoust and Vady

Dear Donna,

Further to your phone call today with regards to predator net size at Kirknoust and the Bay of Vady, Cooke Aquaculture Scotland Limited can commit to using 50mm predator nets if required, to protect species of importance in the area namely Red Throated divers. Following the recently proposed North Orkney PSPA

We will amend the predator defence policies asap and re-submit to Orkney Islands council as soon as possible.

Regards

Chris Webb

Environmental and Development

Manager

Cooke Aquaculture Scotland

Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom.

DD +44(0)1856889378

T +44 (0)1856876101

M [REDACTED]



From: [Donna Yule](#)
To: ["Naomi Dempsey"](#)
Cc: ["Chris Webb"](#)
Subject: RE: Kirknoust and Vady
Date: 16 November 2016 15:29:00
Attachments: image002.jpg
image004.png

Hi Naomi

One small change on the Bay of Vady, update North Orkney dSPA to pSPA. We would also request that monitoring of entanglements should continue, including timings of when anti-predator nets are deployed. Please discuss any intended use of ADDs in this area. I am happy for the defence policy to be submitted to the OIC.

Thank you
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

Working days Mon-Thurs

From: Naomi Dempsey [mailto:Naomi.dempsey@cookeaqua.com]
Sent: 16 November 2016 13:55
To: Donna Yule
Cc: Chris Webb
Subject: FW: Kirknoust and Vady

Good afternoon Donna,
Please find attached revised Predator Defence Policies for the Kirknoust and Bay of Vady sites as per the amendments discussed by yourself and Chris. Please can you advise whether SNH is content with these amendments so that I am able to resubmit these to OIC asap.

Kind regards

Naomi Dempsey
Environmental Officer

Cooke Aquaculture Scotland Ltd.
Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom

T: +44(0)1856876101
DD:+44 (0)1856 889370
M:+XXXXXXXXXX



From:**Sent:** 10 November 2016 15:52**To:** Donna.Yule@snh.gov.uk**Cc:** Margaret Gillon <Margaret.gillon@orkney.gov.uk>; Naomi Dempsey <Naomi.dempsey@cookeaquaculture.com>**Subject:** Kirknoust and Vady

Dear Donna,

Further to your phone call today with regards to predator net size at Kirknoust and the Bay of Vady, Cooke Aquaculture Scotland Limited can commit to using 50mm predator nets if required, to protect species of importance in the area namely Red Throated divers. Following the recently proposed North Orkney PSPA

We will amend the predator defence policies asap and re-submit to Orkney Islands council as soon as possible.

Regards

Chris Webb

Environmental and Development

Manager

Cooke Aquaculture Scotland

Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom.

DD +44(0)1856889378

T +44 (0)1856876101

M [REDACTED]



From: [Naomi Dempsey](#)
To: ["margaret.gillon@orkney.gov.uk"](mailto:margaret.gillon@orkney.gov.uk); [planning](#)
Cc: [Donna Yule](#); [Chris Webb](#)
Subject: SNH additional information request 16/482/MAR Bay of Vady & 16/483/MAR Kirknoust
Date: 17 November 2016 10:09:36
Attachments: image001.jpg
Cover letter.pdf
REVISED Bay of Vady Predator Defence and Mitigation Policy.pdf
REVISED Kirknoust Predator Defence and Mitigation Policy.pdf

Good morning,

Please find attached Cooke Aquaculture Scotland's response to the additional information requested by SNH for the 16/482/MAR Bay of Vady and 16/483/MAR Kirknoust site applications.

Should further information be required or if you wish to discuss this further, please contact me directly.

Regards

Naomi Dempsey
[Environmental Officer](#)

Cooke Aquaculture Scotland Ltd.
Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom

T: +44(0)1856876101
DD:+44 (0)1856 889370
M: + XXXXXXXXXX





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Crowness Point, Hatston Industrial Estate, Kirkwall, Orkney KW15 1RG
Telephone 01856 876101 – Fax 01856 873846

17/11/2016

BAY OF VADY (16/482/MAR) & KIRKNOUST (16/483/MAR) PLANNING APPLICATIONS: PREDATOR DEFENCE POLICIES AND THE USE OF 50MM MESH PREDATOR NETS

Dear Margaret Gillon,

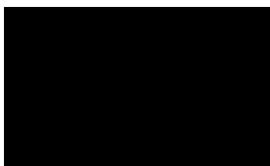
Further to recent discussions between Chris Webb (Cooke Aquaculture Scotland) and Donna Yule (SNH) on the 10/11/2016 by phone, I can confirm that Cooke Aquaculture Scotland Ltd will commit to using 50mm predator nets during the operation of the Bay of Vady and Kirknoust sites should planning permission be granted. This is in order to protect species of importance in the area, namely Red-throated divers, following the recently proposed North Orkney pSPA within which these sites are located. In this respect, please find attached revised copies of the Predator Defence and Mitigation Policies for the proposed Bay of Vady and Kirknoust sites.

Cooke Aquaculture Scotland Ltd are also committed to monitoring entanglement incidents in this area during production cycles. This information, alongside additional information regarding the deployment of anti-predator nets at the site, will be reported to SNH. Should ADDs be required for use at either site, discussions will take place in advance of deployment between Cooke Aquaculture Scotland Ltd, the Orkney Islands Council and SNH.

It is the objective of Cooke Aquaculture Scotland Ltd, by implementing the strategies outlined within the Predator Defence and Mitigation Policies for the Bay of Vady and Kirknoust sites, to reduce the potential risks to wildlife and the environment. This will be to a level that is as low as can be considered reasonably practicable, whilst also maintaining sufficient protection for the stock on site.

Should further information be required or if you wish to discuss this further, please contact me directly.

Yours Sincerely



Naomi Dempsey

Environmental Officer, Cooke Aquaculture Scotland Ltd

Naomi.dempsey@cookeaqua.com

Dd: 01856 889370



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Crowness Point, Hatston Industrial Estate, Kirkwall, Orkney KW15 1RG
Telephone 01856 876101 – Fax 01856 873846

PREDATOR DEFENCE AND MITIGATION POLICY

Applicable to:
Bay of Vady, Rousay Sound, Orkney



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Cooke Aquaculture Scotland Ltd is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species within a 20km radius of the site. These comprise:

Seal Haul-out Sites

SITE NO.	NAME	CLASSIFICATION	DISTANCE FROM SITE
NOO-031	SE Egilsay	Key Site based on August Survey Count	0.55km E
NOO-029	Egilsay North	Key Site based on August Survey Count	3.07km NE
NOO-028	Holm of Scockness	Key Site based on August Survey Count	3.33km N
NOO-027	Sweyn Holm	Key Site based on August Survey Count	4.34km S
BC-028	Gairsay	Additional Grey Seal Breeding Colony	5.49km S
BC-021	Muckle and Green Holm	Additional Grey Seal Breeding Colony	5.67km E
BC-030	Little Green Holm	Additional Grey Seal Breeding Colony	5.75km E
NOO-018	Seal Skerry (Eday)	Key Site based on August Survey Count	6.98km E
NOO-022	Holm of Rendall	Key Site based on August Survey Count	7.65km S
NOO-019	Taing Skerry and Grass Holm	Key Site based on August Survey Count	7.67km S
BC-033	Rusk Holm	Additional Grey Seal Breeding Colony	8.49km NE
NOO-001	Eynhallow and Westside	Key Site based on August Survey Count	8.55km W
NOO-016	Costa & Burgar	Key Site based on August Survey Count	10.14km W
NOO-015	Helliar Holm North Elwick	Key Site based on August Survey Count	10.67km S
BC-034	South Westray	Additional Grey Seal Breeding Colony	13.62km NE
NOO-004	Skerry of Wasbist	Key Site based on August Survey Count	13.80km N

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BC-026	Holms of Spurness	Additional Grey Seal Breeding Colony	13.91km E
BC-024	Little Linga	Additional Grey Seal Breeding Colony	13.99km E
BC-018	Linga Holm	Additional Grey Seal Breeding Colony	14.15km E
BC-025	Sty Taing	Additional Grey Seal Breeding Colony	14.64km E
NOO-025	Damsay and Holm of Grimbister	Key Site based on August Survey Count	14.92km S
BC-022	Calf of Eday	Additional Grey Seal Breeding Colony	15.20km NE
NOO-034	Greenli Ness	Key Site based on August Survey Count	15.71km ESE
BC-020	Holm of Huip	Additional Grey Seal Breeding Colony	16.04km E
NOO-025	Spo Ness to Ness of Brough	Key Site based on August Survey Count	18.15km N
NOO-024	North end of Mill Bay	Key Site based on August Survey Count	18.17km E
NOO-010	Bay of Holland E & Tor Ness	Key Site based on August Survey Count	18.65km ESE
NOO-005	Deer Sound	Key Site based on August Survey Count	19.06km S

Species of conservation importance

SITE	DESIGNATION	SPECIES	DISTANCE FROM SITE
North Orkney	pSPA	Great northern diver, Slavonian Grebe, Red-throated diver, Short eared owl	WITHIN
Rousay	SSSI	Arctic Skua, Arctic tern, Guillemot, Kittiwake and seabird colony	2.84km W
Rousay	SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, seabird assemblage	3.64km W
Muckle and Little Green Holm	SSSI	Grey Seal	5.77km E
Eynhallow	SSSI	Harbour Seal	10.07km W
Doomy and Whitemaw Hill	SSSI	Arctic skua and Whimbrel	8.45km E

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Faray and Holm of Faray	SSSI	Grey Seal	10.02km NE
Faqay and Holm of Faray	SAC	Grey Seal	10.02km NE
West Mainland Moorlands	SSSI	Hen harrier, Red-throated diver, Short-eared owl	10.46km SW
Orkney Mainland Moors	SPA	Hen harrier, Red-throated Diver, Short eared owl	10.46km SW
Mill Loch	SSSI	Red-throated diver	13.11km NE
Calf of Eday	SSSI	Cormorant	15.55km NE
West Westray	SSSI	Arctic skua, Arctic tern, Guillemot, Kittiwake, Razorbill, seabird colony	16.52km E
Keelylang Hill and Swartaback Burn	SSSI	Hen harrier	17.79km SW
Loch of Banks	SSSI	Hen harrier	19.10km SW
Sanday	SAC	Harbour Seal	19.97km NE

The potential for designated species within the vicinity of the Bay of Vady site interacting with the operations is dependent on several factors including, the mobility of the feature, foraging strategies and range, the reliance on the marine environment and the species potential for attraction to aquaculture operations. In this respect, many of the designated protected species within the vicinity of the Bay of Vady site have the potential to interact with the operations. Cooke Aquaculture Scotland Ltd thus wish to propose and outline the necessary predator defence and mitigation strategy which has a hierarchy of control measures in order to prevent the predation of stock on site by aerial birds, diving birds, seal species and otters etc.

Cooke Aquaculture Scotland Ltd are committed to monitoring entanglement incidents at the Bay of Vady site during production cycles. This information, alongside additional information regarding the deployment of anti-predator nets at the site will be reported to SNH. Should ADDs be required for use in this area, discussions will take place between Cooke Aquaculture Scotland Ltd, the Orkney Islands Council and SNH prior to the deployment of such devices. It is the objective of Cooke Aquaculture Scotland Ltd, by implementing these strategies at the Bay of Vady, to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst also maintaining sufficient protection for the stock on site.



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PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages on the Bay of Vady site for the duration of the production cycle. These will be constructed of black mesh netting of 50mm in gauge that will be fully laced around the handrail of the cages, with no gaps, in order to prevent potential ingress by birds or otters. By using 50mm top nets elsewhere on its sites in Orkney, Cooke Aquaculture Scotland Ltd have excluded all aerial predators whilst preventing entanglement issues. Top nets will also be supported by net supports in order to raise the nets above the surface of the water to a minimum height of 1.5m; this prevents birds from aggregating on the tops nets, causing them to bag, allowing access to both feed and fish.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure fish size and any wildlife constraints. Cage nets to be used on the Bay of Vady site will vary depending on purpose for example: for smolts net mesh of 15mm upwards is used and for growers a minimum mesh size of 24mm is used. Cage nets will be tensioned using a Froyer ring weighted to 30+kg per meter, with an additional 50kg centre weight. This method of net tension is used elsewhere on Cooke Aquaculture Scotland Ltd sites with cages of a 100m circumference and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at maintaining a constant net tension thus eliminating net bagging which in turn reduces the potential of predator interactions. All nets are checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage.

SUBSURFACE ANTI-PREDATOR NETS

Subsurface anti-predation nets constructed of 50mm orange mesh will be deployed on the Bay of Vady site if seal predation becomes problematic or above 1% cumulative, or greater than 0.25% monthly mortalities associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrents devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council, and SNH. ADD's will be of the 'silent scammer' type to prevent disturbance to non-target species.

HUMANE DISPATCH

Registered in Scotland No:419789
Registered Office: Brodies, 110 Queens Street, Glasgow, G1 3BX



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Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure, by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and dictates the number of each seal that can be shot directly relating to permitted biological removal numbers and when they can be shot if such limitations are in place. Any seals shot will be reported to Marine Scotland on a quarterly basis, as per the specification on the issued licence.

PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DETAIL/DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned 50mm black mesh netting	Deployed to discourage bird aggregation around cages and prevent ingress by predators over cage hand rails	To be deployed to deter aggregation of birds and ingress of predators over cage handrails	Deployed for the entire duration of the production cycle, from the first day of fish input to the harvesting of all fish from the cage.	Regular surface checks by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and any entanglement issues are reported to SNH on a minimum of a 6 monthly basis.
TENSIONED CAGE NETS	Standalone tensioned cage nets using a Froyer ring weighted to 30+kg per meter in addition to a 50kg center weight. Mesh size is dependent on stocking requirements	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera to ensure nets are correctly tensioned to prevent bagging or

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						wear points/damage.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm orange mesh, subsurface and predator nets that are suitably weighted to ensure a constant tension.	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly	Will be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly, for the remainder of the production cycle.	Correct deployment and tensioning to ensure net entanglement risk is minimized to the lowest possible levels	To be checked daily by site operative using spyball cameras and weekly by divers to ensure correct tensioning, no bagging and evidence of damage
ACOUSTIC DETERRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and subsurface anti predator nets fail to deter persistent seals	As per the seal predation threshold for the deployment of subsurface anti-predator nets	An EPS license will be applied for in the event of ADD deployment being necessary	All units to be removed and cleaned on a weekly basis to maintain effectiveness	Seal predation levels are monitored through the examination of fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot	If seal mortalities of stock remains high despite the use of all other deterrence measures then	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular	Seal predation levels are monitored through the examination of mortalities and visual observation

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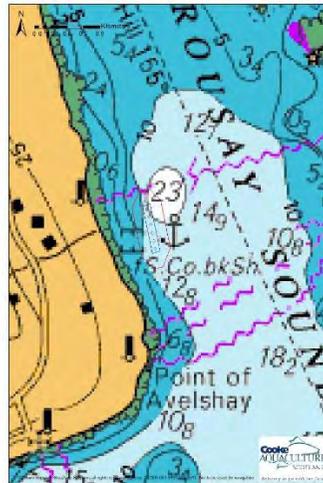
		be deterred by using other means	problem seals will be identified, observed prior to actions being taken		refresher courses to this effect.	of predator activities.
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Crowness Point, Hatston Industrial Estate, Kirkwall, Orkney KW15 1RG
Telephone 01856 876101 – Fax 01856 873846

PREDATOR DEFENCE AND MITIGATION POLICY



Applicable to:
Kirknoust, Rousay Sound, Orkney

Cooke Aquaculture Scotland Ltd is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species within a 20km radius of Kirknoust site. These comprise:

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Seal Haul-out Sites

SITE NO.	NAME	CLASSIFICATION	DISTANCE FROM SITE
NOO-031	SE Egilsay	Key Site based on August Survey Count	2.23km E
NOO-029	Egilsay North	Key Site based on August Survey Count	2.61km NE
NOO-028	Holm of Scockness	Key Site based on August Survey Count	1.77km N
NOO-027	Sweyn Jolm	Key Site based on August Survey Count	5.65km S
BC-028	Gairsay	Additional Grey Seal Breeding Colony	6.72km S
BC-021	Muckle and Green Holm	Additional Grey Seal Breeding Colony	7.37km E
BC-030	Little Green Holm	Additional Grey Seal Breeding Colony	7.72km E
NOO-018	Seal Skerry (Eday)	Key Site based on August Survey Count	7.93km E
NOO-022	Holm of Rendall	Key Site based on August Survey Count	8.45km S
NOO-019	Taing Skerry and Grass Holm	Key Site based on August Survey Count	9.12km S
BC-033	Rusk Holm	Additional Grey Seal Breeding Colony	8.25km NE
NOO-001	Eynhallow and Westside	Key Site based on August Survey Count	6.86km W
NOO-016	Costa & Burgar	Key Site based on August Survey Count	8.73km W
NOO-015	Helliar Holm North Elwick	Key Site based on August Survey Count	12.41km S
BC-034	South Westray	Additional Grey Seal Breeding Colony	13.10km NE
NOO-004	Skerry of Wasbist	Key Site based on August Survey Count	12.67km N
BC-026	Holms of Spurness	Additional Grey Seal Breeding Colony	15.11km E
BC-024	Little Linga	Additional Grey Seal Breeding Colony	15.34km E
BC-018	Linga Holm	Additional Grey Seal Breeding Colony	15.76km E
BC-025	Sty Taing	Additional Grey Seal Breeding Colony	16.10km E
NOO-025	Damsay and Holm of Grimbister	Key Site based on August Survey Count	15.73km S
BC-022	Calf of Eday	Additional Grey Seal Breeding Colony	15.33km NE
NOO-034	Greenli Ness	Key Site based on August Survey Count	17.78km ESE

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BC-020	Holm of Huip	Additional Grey Seal Breeding Colony	17.40km E
NOO-025	Spo Ness to Ness of Brough	Key Site based on August Survey Count	16.95km N
NOO-024	North end of Mill Bay	Key Site based on August Survey Count	19.80km E
NOO-010	Bay of Holland E & Tor Ness	Key Site based on August Survey Count	20.56km ESE
NOO-005	Deer Sound	Key Site based on August Survey Count	20.90km S

Species of conservation importance

SITE	DESIGNATION	SPECIES	DISTANCE FROM SITE
North Orkney	pSPA	Great northern diver, Slavonian Grebe, Red-throated diver, Short eared owl	WITHIN
Rousay	SSSI	Arctic Skua, Arctic tern, Guillemot, Kittiwake and seabird colony	1.58km W
Rousay	SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, seabird assemblage	1.58km W
Muckle and Little Green Holm	SSSI	Grey Seal	7.55km E
Eynhallow	SSSI	Harbour Seal	8.34km W
Doomy and Whitemaw Hill	SSSI	Arctic skua and Whimbrel	9.22km E
Faray and Holm of Faray	SSSI	Grey Seal	10.11km NE
Faqay and Holm of Faray	SAC	Grey Seal	10.11km NE
West Mainland Moorlands	SSSI	Hen harrier, Red-throated diver, Short-eared owl	9.72km SW
Orkney Mainland Moors	SPA	Hen harrier, Red-throated Diver, Short eared owl	9.72km SW
Mill Loch	SSSI	Red-throated diver	13.49km NE
Calf of Eday	SSSI	Cormorant	15.77km NE
West Westray	SSSI	Arctic skua, Arctic tern, Guillemot, Kittiwake, Razorbill, seabird colony	14.73km N
Keelylang Hill and Swartaback Burn	SSSI	Hen harrier	18.67km S
Loch of Banks	SSSI	Hen harrier	18.02km NW
Sanday	SAC	Harbour Seal	

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The potential for designated species within the vicinity of the Kirknoust site to interact with the operations is dependent on several factors including: the mobility of the feature, foraging strategies and range, the reliance on the marine environment and the species potential for attraction to aquaculture operations. In this respect, many of the designated protected species within the vicinity of the Kirknoust site have the potential to interact with the operations. Cooke Aquaculture Scotland Ltd thus wish to propose, and outline, the necessary predator defence and mitigation strategy which has a hierarchy of control measures in order to prevent the predation of stock on site by aerial birds, diving birds, seal species and otters etc.

Cooke Aquaculture Scotland Ltd are committed to monitoring entanglement incidents at the Kirknoust site during production cycles. This information, alongside additional information regarding the deployment of anti-predator nets at the site will be reported to SNH. Should ADDs be required for use in this area, discussions will take place between Cooke Aquaculture Scotland Ltd, the Orkney Islands Council and SNH prior to the deployment of such devices. It is the objective of Cooke Aquaculture Scotland Ltd, by implementing these strategies at Kirknoust, to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst also maintaining sufficient protection for the stock on site.

PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages at the Kirknoust site for the duration of the production cycle. These will be constructed of black mesh netting of 50mm in gauge, and will be fully laced around the handrail of the cages with no gaps in order to prevent potential ingress by birds or otters. By using 50mm top nets elsewhere on its sites in Orkney, Cooke Aquaculture Scotland Ltd have excluded all aerial predators whilst preventing entanglement issues. Top nets will also be supported by net supports in order to raise the nets above the surface of the water to a minimum height of 1.5m; this prevents birds from aggregating on the tops nets, causing them to bag, allowing access to both feed and fish.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure fish size and any wildlife constraints. Cage nets to be used on the Kirk Noust site will vary depending on purpose for example: for smolts net mesh of 15mm upwards is used and for growers a minimum mesh size of 24mm is used. Cage nets will be tensioned using a Froyer ring weighted to 30+kg per meter, with an additional 50kg centre weight. This method of net tensioning is used elsewhere on Cooke Aquaculture Scotland Ltd sites with cages of a 100m circumference and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at

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maintaining a constant net tension thus eliminating net bagging which in turn reduces the potential of predator interactions. All nets are checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage.

SUBSURFACE ANTI-PREDATOR NETS

Subsurface anti-predation nets constructed of 50mm orange mesh will be deployed on the Kirknoust site if seal predation becomes problematic, or above 1% cumulative, or greater than 0.25% monthly mortalities associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrents devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council and SNH. ADD's will be of the 'silent scammer' type to prevent disturbance to non-target species.

HUMANE DISPATCH

Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure, by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and dictates the number of each seal that can be shot directly relating to permitted biological removal numbers and when they can be shot if such limitations are in place. Any seals shot will be reported to Marine Scotland on a quarterly basis, as per the specification on the issued license.

SUMMARY

PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DETAIL/DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned, 50mm black mesh netting	Deployed to discourage bird aggregation around	To be deployed to deter aggregation of birds and	Deployed for the entire duration of the production	Regular surface checks by site staff on a daily basis for	Checked on a daily basis

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		cages and prevent ingress by predators over cage hand rails	ingression of predators over cage handrails	cycle, from the first day of fish input to the harvesting of all fish from the cage.	holes, gaps and general wear and tear	
TENSIONED CAGE NETS	Standalone tensioned cage nets using a Froyer ring weighted to 30+kg per meter in addition to a 50kg center weight. Mesh size is dependent on stocking requirements	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera to ensure nets are correctly tensioned to prevent bagging or wear points/damage.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm orange mesh, subsurface and predator nets that are suitably weighted to ensure a constant tension.	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly	Will be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly, for the remainder of the production cycle.	Correct deployment and tensioning to ensure net entanglement risk is minimized to the lowest possible levels	To be checked daily by site operative using spyball cameras and weekly by divers to ensure correct tensioning, no bagging and evidence of damage



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ACOUSTIC DETRRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and subsurface anti-predator nets fail to deter persistent seals	As per the seal predation threshold for the deployment of subsurface anti-predator nets	An EPS license will be applied for in the event of ADD deployment being necessary	All units to be removed and cleaned on a weekly basis to maintain effectiveness	Seal predation levels are monitored through the examination of fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot be deterred by using other means	If seal mortalities of stock remains high despite the use of all other deterrence measures then problem seals will be identified, observed prior to actions being taken	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular refresher courses to this effect.	Seal predation levels are monitored through the examination of mortalities and visual observation of predator activities.

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Scottish Natural Heritage
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All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Ms Margaret Gillon
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to: planningconsultation@orkney.gov.uk

Our ref: CNS/MFF/BayofVady/CDM143328 & Kirknoust/CDM143329
Your ref: 16/482/MAR & 16/483/MAR

Date: 17th November 2016

Dear Ms Gillon

The Town and Countryside Planning (Environmental Impact Assessment) (Scotland) Regulations 2011

16/482/MAR Increase salmon cage size, Bay of Vady, Orkney

16/483/MAR Increase salmon cage size, Kirk Noust, Orkney

Thank you for your consultations and extension to the consultation period whilst we awaited further information.

The proposals lie within the North Orkney pSPA selected for its Red-throated diver (breeding), Great northern diver, Slavonian grebe, Common eider, Long-tailed duck, Velvet scoter, Red-breasted merganser and Shag (all non-breeding).

The proposals are for an increase in cage size from 90m circumference to 100m at two neighbouring fish farms at Bay of Vady and Kirk Noust. There is no change in the biomass and no change to the moorings footprint of the fish farm. An increase in cage size will mean an increase in the amount of net required. Revised predator defence policies have been provided by the applicant to show no change in mesh size of nets. The increase in cage size will have a small reduction on preferred foraging area but there is no increased risk of injury or mortality to the bird species utilising this area.

In our view, it is unlikely that the proposals will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required.

If you have any questions regarding our advice, please do not hesitate to contact me at the Kirkwall office or at donna.yule@snh.gov.uk.

Yours sincerely

Donna Yule
Operations Officer, Orkney



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All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Ms Margaret Gillon
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to planningconsultation@orkney.gov.uk

19th December 2017

Your ref: 17/134/MAR
Our ref: CNS/MFF/Cava (CEA148387&CDM148385)

Dear Ms Gillon

**Town and Country Planning (Scotland) Act 1997 and
The Town and Country Planning Environmental Impact Assessment (Scotland)
Regulations 2011**

Re-consultation – Create a salmon farming site, comprising 16x120 circumference cages, 2 x 8 in a 70m grid and a 200t feed barge at South Cava, Scapa Flow, Orkney

Thank you for your re-consultation dated 21st November for the above proposal.

Summary

In our view, given the revision of vessel movement and transportation of cages as listed in the revised vessel management plan, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required.

Appraisal of the impacts of the proposal and advice

Natura interests – Scapa Flow pSPA and Hoy SPA

The proposal lies within the Scapa Flow proposed Special Protection Area (pSPA) selected for the following qualifying interest(s): Great northern diver (non-breeding), Red-throated diver (breeding), Black-throated diver (non-breeding), Slavonian grebe (non-breeding), Common eider (non-breeding), Long-tailed duck (non-breeding), Common goldeneye (non-breeding), Red-breasted merganser (non-breeding) and European shag (non-breeding).

The Scottish Government has a policy of protecting such sites as if they were designated, as set out in Scottish Planning Policy¹. The legal protection afforded to designated European sites is set out in the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations"). Consequently, OIC is required to consider the effect of the proposal on the pSPA before it can be consented (commonly known as a Habitats Regulations Appraisal – (HRA)).

In addition, the site is located within known foraging areas for the breeding red-throated diver qualifying interest of the Hoy SPA. Our following appraisal of potential impacts on this species is relevant to both the Scapa Flow pSPA and Hoy SPA.

Disturbance along vessel transit route

Red-throated divers are considered to have a high sensitivity to visual disturbance created by vessel movement. Great northern diver, black-throated diver, Slavonian grebe, and red-breasted merganser are considered to have a medium sensitivity to such disturbance. Disturbance associated with vessel movements to support construction and/or operation of the fish farm could disturb these birds and potentially displace them from preferred foraging or resting areas. Such disturbance could be potentially significant for breeding red-throated divers which have restricted foraging distributions and high energetic requirements during the chick-rearing period.

The applicant's additional technical assessment² of impacts on SPA bird interests indicate (Figure 11) that there may be vessel transit along the western shore of Cava, in addition to the more direct route along the eastern shore. This western route transit area has low levels of existing vessel movements and the area is identified as of relatively high importance to foraging breeding Red-throated divers. This additional transit route could cause disturbance during breeding season, potential temporary displacement from preferred foraging area and, for Hoy SPA, associated risk of reduced breeding success. However, strict adherence to the mitigation measures proposed in the revised vessel management plan³ to avoid the western route between 1 July and 31 August will minimise impacts during the critical chick rearing period and so allow a conclusion of no likely significant effect on the red-throated diver interests of the Hoy SPA and Scapa Flow pSPA.

Disturbance through re-configuration/construction phase of development

For removal of existing infrastructure: the applicant's additional technical assessment of impacts on SPA bird interests indicates that Lyness will be the destination and indicates a total of 7 return trips over 3-4 days. For cage installation transporting the cages from Lyness involves 9 return trips, with 2 cages or one barge towed at a time, over 4 -6 days. This activity, though temporary has the potential to disturb red-throated divers at a very vulnerable period during the chick-rearing phase where disturbance from preferred foraging areas can have a detrimental effect on chick-rearing capabilities.

However as above, strict adherence to the measures proposed in the revised vessel management plan to avoid the transportation of cages between 1 July and 31 August will minimise impacts and enable conclusion of no likely significant effect on the red-throated diver interests of the Hoy SPA and Scapa Flow pSPA.

Entanglement

Diving birds are considered to be highly sensitive to pressures associated with nets set in the water column, including cage nets and external anti-predator nets. All of the qualifying features of the Scapa Flow pSPA are potentially vulnerable to entanglement and drowning in sub-surface nets. Fish-eating pursuit feeders (divers, Slavonian grebe, red-breasted merganser and shag) are most likely to be at risk as aggregations of wild fish on which these birds feed may be attracted to the vicinity of aquaculture cages. Common eider are also known to be attracted to fishfarm sites in Orkney waters and may be vulnerable to

¹ Please see <http://www.snh.gov.uk/docs/A1121365.pdf> for a summary of Scottish Government policy

² Technical ornithology assessment submitted as addendum to ES listed on e-planning as further information dated 12 July 2017

³ South Cava Vessel management plan version 3 14/12/2017 submitted to SNH 14/12/17

entanglement in sub-surface nets when feeding on biofouling organisms Shags may also be vulnerable to entanglement in cage top nets as they are attracted to fish farms and will rest on associated infrastructure.

We have reviewed the proposed Predator Defence and Mitigation Policy in the context of detailed entanglement records⁴ for five fish farms in Scapa Flow, including the current South Cava site, for the period from August 2015 to December 2016. No bird entanglement incidents were noted in either cage nets or sub-surface anti-predator nets. We also note that there was no deployment of sub-sea predator nets at the existing South Cava site in this period and are satisfied that the proposed cage net specification, which incorporates "Sapphire" mesh, should keep likely future requirement for use of such nets at a low level. The applicant also states⁵ that gill nets will not be used in event of fish escape.

We conclude that the risks of bird entanglement associated with the proposed development are insignificant.

Impacts on supporting habitats of Scapa Flow pSPA

Potential impacts on the natural heritage relevant to these CAR licence applications could arise from the deposition of organic waste and/or the discharge of chemical residues into the marine environment. Species of the pSPA that feed on benthic invertebrates (including eider, long-tailed duck and goldeneye) could be impacted by the loss of such prey items from areas of seabed impacted by fish farm operations.

SEPA should consider the effect of these proposals on the conservation objectives of the Scapa Flow pSPA, though the Habitats Regulation Appraisal (HRA) process.

Other natural heritage considerations – Priority Marine Features (PMF)

Flame shells (*Limaria hians*) were recorded approximately 150m to the west of the AZE for the proposed fish farm and there are other records in the vicinity. Flame shell beds in Scotland are of global importance and have a restricted distribution. They can be sensitive to various pressures associated with aquaculture developments, in particular physical damage, changes in siltation, smothering and discharge of chemicals. However, modelling of the deposition levels beyond the AZE for the proposed site, together with consideration of observed deposition patterns at the existing site, indicates that any deposition at the location of the flame shell bed record would be at an extremely low level. Hence any potential impacts arising from deposition of solid materials are unlikely to have a significant impact on this specific area of flame shell bed and therefore will not result in a significant impact on the national status of flame shell beds.

We consider the risk posed as a result of the discharge of chemicals to be low. This is primarily based on the past record of no chemical treatments having been administered at this site, and more widely across Scapa Flow. However, while the risk of chemical treatment appears to be low, as chemicals are proposed to be licenced then potential impacts need to be considered. SEPA are the primary regulator for impacts as a result of chemical discharges. Any potential impacts on PMFs as a result of chemical discharges will be considered by SEPA through the CAR process. Though this aspect of the proposal is not within the Local Authorities remit they may wish to liaise further with SEPA on this prior to determining the planning application.

Deleted:

Sea trout (marine phase)

Sea trout are resident in Orkney inshore waters and are PMF in their marine phase. There are a number of sea trout spawning burns on Hoy within 5km of the proposed fish farm site. Potential interactions between farmed salmon and wild salmonids are complex and there is a lack of empirical data for Scapa Flow, and Orkney waters generally, on which to base informed assessments of levels of risk to sea trout populations. The main concern identified

⁴ Provided by the applicant using recording protocol developed by SNH in consultation with OIC.

⁵ Environmental Statement section 3.4.7 and Escape Prevention and Emergency Response Plan dated 24/03/2017

is potential for increased risk of exposure of wild fish to sea lice resulting from presence of concentrations of farmed fish.

With respect to mitigation of potential impacts, we note that Marine Scotland have advised that the applicant should supply a detailed site specific sea lice management plan. We advise that you seek further advice from MS as to the potential efficacy of any such plan to management of sea lice risk to wild fish in the context of industry expansion in Scapa Flow.

Conclusion

Given the location of this proposed development we recommend that systematic and context specific wildlife entanglement monitoring and reporting, using the protocol agreed by SNH and OIC in August 2015, should be continued. This would facilitate future adaptive management (e.g. adjustments to cage net tensioning) to ensure adequate safeguard of (inter)nationally important natural heritage interests in the event of unanticipated levels of entanglement. It is for Orkney Islands Council, as the planning authority, to decide, within the context of your own policies, whether to request this information.

If you require any further information or advice from SNH with respect to this application please contact me at our Kirkwall office.

Yours sincerely,

Donna Yule
Operations Officer, Orkney

From: [Naomi Dempsey](#)
To: [Donna Yule](#)
Cc: [David Barclay](#); [planning](#)
Subject: Lyrawa Bay and Pegal Bay
Date: 15 March 2018 16:31:45
Attachments: image003.jpg
6 Pegal Bay Predator Defence and Mitigation Plan Revised 15.3.2018.pdf
6 Lyrawa Bay Predator Defence and Mitigation Plan Revised 15.3.18.pdf

Good afternoon,

Please find attached revised predator defence plans for Lyrawa Bay and Pegal Bay as per discussions between Cooke and SNH today.

These documents have been updated to state that Cooke intend to use full sapphire cage nets at both sites for the duration of production.

Regards

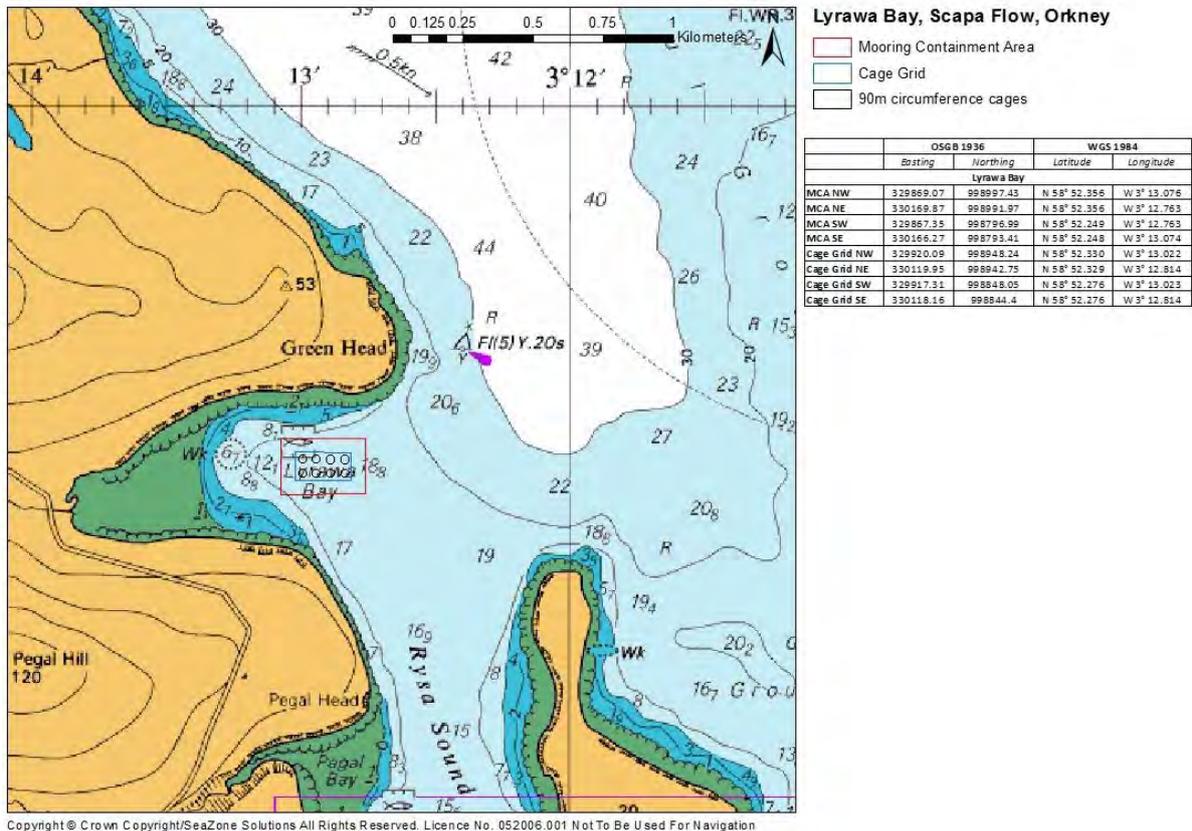
Dr. Naomi Dempsey
[Environmental Officer](#)

Cooke Aquaculture Scotland Ltd.
Crowness Road, Hatston, Kirkwall, Orkney, KW15 1RG, United Kingdom

T: +44 (0)1856 889370
M: [REDACTED]
www.cookeaquaculture.com



PREDATOR DEFENCE AND MITIGATION POLICY



Applicable to:
Lyrawa Bay, Scapa Flow, Orkney

Cooke Aquaculture Scotland Ltd, hereafter referred to as CAS, are committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for stock during production at the Lyrawa Bay site.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account all relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species and habitats within a 20km radius of the Lyrawa Bay site (Tables 1 & 2). The potential for designated species to interact with the Lyrawa Bay site is dependent on factors including feature mobility and range; foraging strategies and reliance on the marine environment and species attraction to aquaculture installations. On this basis, many of the designated specie (and also other, non-designated species) have the potential to interact with equipment and operations whilst the site is in operation.

Seal Haul-out Sites

SITE ID	SITE NAME	TYPE	DISTANCE
BC-035	NE Hoy	Additional grey seal breeding colony	0.40km N
NOO-032	N&E Fara	Designated seal haul out site based on August counts	2.77km SE
NOO-014	Cava	Designated seal haul out site based on August counts	2.13km E
NOO-013	Holm of Houton	Designated seal haul out site based on August counts	4.11km NE
NOO-017	Flotta Oil Terminal	Designated seal haul out site based on August counts	6.14km SE
NOO-011	Barral of Butter	Designated seal haul out site based on August counts	5.61km ENE
BC-023	N Flotta	Additional grey seal breeding colony	7.44km ESE
BC-029	Calf of Flotta	Additional grey seal breeding colony	7.75km ESE
NOO-003	Switha	Designated seal haul out site based on August counts	9.94km SE
NOO-006	Selwick	Designated seal haul out site based on August counts	8.21km NW
NOO-020	Ve Ness	Designated seal haul out site based on August counts	9.42km NE
NOO-009	Bay of Ireland	Designated seal haul out site based on August counts	10.31km NNW
NOO-021	NW Water Sound	Designated seal haul out site based on August counts	13.37km ESE
BC-019	Swona	Additional grey seal breeding colony	15.95km SE
NOO-012	Damsay and Holm of Grimbister	Designated seal haul out site based on August counts	15.74km NNE
BC-032	South Ronaldsay E	Additional grey seal breeding colony	17.93km SE
BC-027	South Ronaldsay W	Additional grey seal breeding colony	17.37km SE
NOO-030	Stroma	Designated seal haul out site based on August counts	19.82km SSE

Sites/Species of Conservation Importance

SITE NAME	TYPE	SPECIES (subject to likely significant effects)	DISTANCE
Scapa Flow	pSPA	Red-throated dive, Breeding; Black-throated diver, non-breeding; Eider, non breeding; Goldeneye, non-breeding; Great northern diver, non-breeding; Long-tailed duck, non-breeding; Red-breasted Merganser, non-breeding; Shag, non-breeding; Slavonian grebe, non-breeding.	Within
Hoy	SPA	Arctic skua, breeding; Fulmar, breeding; Great black-backed gull, breeding; Great Skua, breeding; Guillemot, breeding; Kittiwake, breeding; Peregrine, breeding; Puffin, breeding; Red-throated diver, breeding; sea bird assemblage, breeding.	0.60km N
Hoy	SSSI	Arctic skua, breeding; Breeding bird assemblage; Fulmar, breeding; Great black-backed gull, breeding; Great Skua, breeding; Guillemot, breeding; Peregrine, breeding; Red-throated diver, breeding; Seabird colony, breeding.	1.93km W
Pentland Firth	pSPA	Arctic skua, breeding; Arctic tern, breeding; Guillemot, breeding; Seabird assemblage, breeding	5.83km S
Orkney Mainland Moors	SPA	Hen harrier, breeding; Hen harrier, non-breeding; Red-throated diver	7.69km NNE
Orphir and Stennes Hills	SSSI	Breeding bird assemblage; Hen harrier, breeding;	7.69km NNE
Switha	SPA	Greenland barnacle goose, non-breeding	10.05km SE

Switha	SSSI	Greenland barnacle goose, non-breeding	10.05km SE
Keelylang Hill and Swartaback Burn	SSSI	Breeding bird assemblage; Hen harrier, breeding;	11.66km NW
Lochs of Harray and Stenness	SSSI	Goldeneye, non-breeding; Pochard, non-breeding; Scaup, non-breeding; Tufted duck, non-breeding	12.51km N
Loch of Stenness	SAC	Marine (including marine mammals)	12.51km N
Pentland Firth Islands	SPA	Arctic tern, breeding	16.30km SE
Pentland Firth Islands	SSSI	Arctic tern, breeding	16.89km SSE
North Caithness Cliffs	SPA	Fulmar, breeding; Guillemot, breeding; Peregrine falcon, breeding; Puffin, breeding; Razorbill, breeding; seabird assemblage, breeding	17.59km S
West Mainland Moorlands	SSSI	breeding bird assemblage, hen harrier, breeding; Red-throated diver, breeding; Short-eared owl, breeding;	16.89km NNE

CAS use an adaptive management approach to predator defence at Lyrawa Bay. This is based on the continued monitoring of wildlife entanglements at the site.

- All nets are checked on a daily basis and any entanglement incidents are recorded and reported on a biannual basis to the appropriate authorities.
- A site specific predator defence and mitigation strategy has also been devised and comprises a hierarchy of control measures in order to deter predation of stock by aerial birds, diving birds, seal species and other marine mammals.

By implementing these strategies, it is the aim of CAS to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for the stock at the site.

PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages at Lyrawa Bay for the duration of the production cycle. These will be constructed of black mesh netting of 50mm gauge. These are fully laced around the handrail of the cages with no gaps – this is in order to prevent potential ingress by birds or otters. Top nets will also be supported by a net support; this is in order to raise the nets above the surface of the water to a minimum height of 1.5m and prevents birds from aggregating on the tops nets, causing them to



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bag, allowing access to both feed and fish. By using 50mm top nets elsewhere on its sites in Orkney, CAS have excluded all aerial predators whilst preventing entanglement issues.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure, fish size and any wildlife constraints. Cage nets to be used at Lyrawa Bay will vary in gauge depending on use purpose:

- Smolts: 15mm mesh
- Growers: up to 24mm

Cage nets are tensioned using a Froyer ring weighted appropriately. This method of net tension is used elsewhere on CAS sites and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at maintaining a constant net tension thus eliminating net bagging that in turn also reduces the potential of predator interactions. All nets are checked daily at the surface. Weekly subsurface net checks are undertaken by divers to check for any signs of damage.

Several options for cage nets exist (table below) but it is anticipated that full sapphire cage nets will be installed for use a Lyrawa Bay for the duration of production at the site.

NET MATERIAL & CONFIGURATION	COMMENTS
Nylon nets	Traditional nets without additional, integral predator defence capacity
Nylon nets with base comprising 'snug fit' 50mm sapphire netting	Traditional net with added predator defence to the bottom 1m and base of the net. 50mm sapphire netting is overlain and lies on the surface of the net without separation and is thus integral to the cage net and deployed for the duration of site use.
Full sapphire net cage nets (with/without additional 50mm snug fit base)	Sapphire nets are made of a twine stiffened with injected waxes and 6 strands of marine grade stainless steel. This means the geometry of the netting is more robustly held than braided nylon. The blend of polymers and metal that have a high cut and bite resistance.

SUBSURFACE ANTI-PREDATOR NETS

External subsurface anti-predation nets constructed of brightly coloured 50mm mesh that is adequately weighted to prevent net bagging will be deployed at Lyrawa Bay site if seal predation becomes problematic i.e. above 1% cumulative, or greater than 0.25% of monthly mortalities being associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrent devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council, SNH and Marine Scotland for a European



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Protected Species licence. If used, ADD's will be of the 'silent scrammer' type to prevent disturbance to non-target species. Cooke Aquaculture Scotland however acknowledge that the use of ADD's in Scapa Flow is generally prohibited due to cetacean presence in Scapa Flow.

HUMANE DISPATCH

Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and indicate the number of each seal that can be shot directly. This will relate to permitted biological removal numbers, in addition to when certain species can be shot if such limitations are in place. Any seals shot are to be reported to the Cooke Aquaculture Scotland Environmental team who will notify Marine Scotland within 48 hours of the incident. The RSPCA will also be notified within 72 hours of the incident and reports will be submitted on quarterly basis to Marine Scotland as per the specification on the issued license.



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SUMMARY

PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned 50mm black mesh netting	Deployed to discourage bird aggregation around cages and prevent ingress by predators over cage hand rails	To be deployed to deter aggregation of birds and ingress of predators over cage handrails	Deployed for the entire duration of the production cycle, from the first day of fish input to the harvesting of all fish from the cage.	Regular surface checks by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and reports submitted to SNH on a biannual basis of any entanglement incidents.
TENSIONED CAGE NETS	Tensioned cage nets using an adequately weighted Froyer ring in addition to a center weight. Mesh size is dependent on stocking requirements.	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera. Reports submitted to SNH on a biannual basis of any entanglement incidents.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm Yellow Mesh suitably weighted with a froyer ring to prevent bagging.	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly	Will be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly,	Correct deployment and tensioning to ensure net entanglement risk is minimized to the	To be checked daily by site operatives using spyball cameras and weekly by divers. Reports submitted to



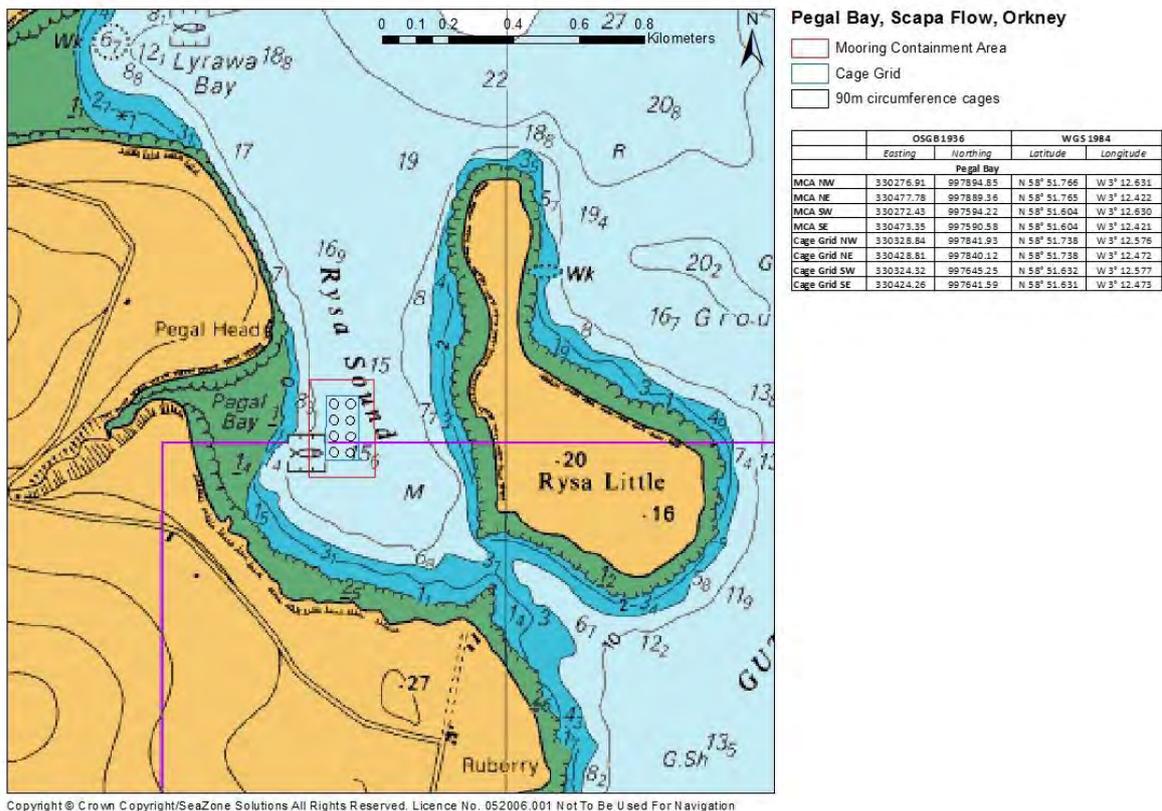
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				for the remainder of the production cycle.	lowest possible levels	SNH on a biannual basis of any entanglement incidents.
ACOUSTIC DETRRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and subsurface anti predator nets fail to deter persistent seals	As per the seal predation threshold for the deployment of subsurface anti-predator nets	An EPS license will be applied for in the event of ADD deployment being necessary	All units to be removed and cleaned on a weekly basis to maintain effectiveness	Seal predation levels are monitored through the examination of fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot be deterred by using other means	If seal mortalities of stock remains high despite the use of all other deterrence measures then problem seals will be identified, observed prior to actions being taken	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular refresher courses to this effect.	Seal predation levels are monitored through the examination of mortalities and visual observation of predator activities. Any seals shot are to be reported to the Cooke Aquaculture Scotland Environmental team who will notify Marine Scotland within 48 hours of the incident. The RSPCA will also be notified within 72 hours of the incident and, reports will be submitted on quarterly basis to Marine Scotland as per the specification on the issued license.



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PREDATOR DEFENCE AND MITIGATION POLICY



Applicable to:
Pegal Bay, Scapa Flow, Orkney

Cooke Aquaculture Scotland Ltd, hereafter referred to as CAS, are committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for stock during production at the Pegal Bay site.

In preparing this predator defence and mitigation strategy, Cooke Aquaculture Scotland Ltd has taken into account all relevant seal haul-outs designated by the Scottish Government, as well as other relevant designations for the protection of species and habitats within a 20km radius of the Pegal Bay site (Tables 1 & 2). The potential for designated species to interact with the Pegal Bay site is dependent on factors including feature mobility and range; foraging strategies and reliance on the marine environment and species attraction to aquaculture installations. On this basis, many of the designated specie (and also other non-designated species) have the potential to interact with equipment and operations at the Pegal Bay site.

Seal Haul-out Sites

SITE ID	SITE NAME	TYPE	DISTANCE
BC-035	NE Hoy	Additional grey seal breeding colony	1.44km N
NOO-032	N&E Fara	Designated seal haul out site based on August counts	1.75km SE
NOO-014	Cava	Designated seal haul out site based on August counts	2.39km E
NOO-013	Holm of Houton	Designated seal haul out site based on August counts	5.03km NNE
NOO-017	Flotta Oil Terminal	Designated seal haul out site based on August counts	5.35km SE
NOO-011	Barral of Butter	Designated seal haul out site based on August counts	5.41km NE
BC-023	N Flotta	Additional grey seal breeding colony	6.74km ESE
BC-029	Calf of Flotta	Additional grey seal breeding colony	7.16km ESE
NOO-003	Switha	Designated seal haul out site based on August counts	9.33km NW
NOO-006	Selwick	Designated seal haul out site based on August counts	10.98km NE
NOO-020	Ve Ness	Designated seal haul out site based on August counts	11.11km NW
NOO-009	Bay of Ireland	Designated seal haul out site based on August counts	13.70km N
NOO-021	NW Water Sound	Designated seal haul out site based on August counts	14.80km Se
BC-019	Swona	Additional grey seal breeding colony	15.95km SE
NOO-012	Damsay and Holm of Gribbister	Designated seal haul out site based on August counts	15.74km NNE
BC-032	South Ronaldsay E	Additional grey seal breeding colony	17.06km SE
BC-027	South Ronaldsay W	Additional grey seal breeding colony	17.11km SE
NOO-030	Stroma	Designated seal haul out site based on August counts	18.62km SSE

Sites/Species of Conservation Importance

SITE NAME	TYPE	SPECIES	DISTANCE
Scapa Flow	pSPA	Red-throated diver, Breeding; Black-throated diver, non-breeding; Eider, non breeding; Goldeneye, non-breeding; Great northern diver, non-breeding; Long-tailed duck, non-breeding; Red-breasted Merganser, non-breeding; Shag, non-breeding; Slavonian grebe, non-breeding.	within
Hoy	SSSI	Arctic skua, breeding; Blanket bog; Breeding bird assemblage; Fulmar, breeding; Great black-backed gull, breeding; Great Skua, breeding; Guillemot, breeding; peregrine, breeding; Red-throated diver, breeding, Seabird colony, breeding;	2.31km W
Pentland Firth	pSPA	Arctic skua, breeding; Arctic tern, breeding; Guillemot, breeding; Seabird assemblage, breeding	5.17km S
Orkney Mainland Moors	SPA	Hen harrier, breeding; Hen harrier, non-breeding; Red-throated diver	8.71km NNE
Orphir and Stennes Hills	SSSI	Breeding bird assemblage; Hen harrier, breeding;	8.71km NNE
Switha	SPA	Greenland barnacle goose, non-breeding	9.90km SE
Switha	SSSI	Greenland barnacle goose, non-breeding	10.93km SE
Keelylang Hill and Swartaback Burn	SSSI	Breeding bird assemblage; Hen harrier, breeding;	14.01km NW
Lochs of Harray and	SSSI	Goldeneye, non-breeding; Pochard, non-breeding; Scaup, non-breeding; Tufted duck, non-breeding	13.70km N



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Stenness			
Pentland Firth Islands	SPA	Arctic tern, breeding	15.09km SE
Pentland Firth Islands	SSSI	Arctic tern, breeding	15.09km SE
North Caithness Cliffs	SPA	Fulmar, breeding; Guillemot, breeding; Peregrine falcon, breeding; Puffin, breeding; Razorbill, breeding; seabird assemblage, breeding	16.40km S
West Mainland Moorlands	SSSI	breeding bird assemblage, hen harrier, breeding; Red-throated diver, breeding; Short-eared owl, breeding;	17.90km N
Stroma	SSSI	Arctic tern, breeding; Guillemot, breeding; Sandwich tern, breeding; sea bird colony, breeding	19.00km SE

CAS use an adaptive management approach to predator defence at Pegal Bay. This is based on the continued monitoring of wildlife entanglements at the site. All nets are checked on a daily basis and any entanglement incidents are recorded and reported on a biannual basis to the appropriate authorities. A site specific predator defence and mitigation strategy has also been devised and comprises a hierarchy of control measures in order to deter predation of stock by aerial birds, diving birds, seal species and other marine mammals. By implementing these strategies, it is the aim of CAS to reduce the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable whilst maintaining sufficient protection for the stock at the site.

PREDATOR DEFENCE MEASURES

TOP NETS

Top nets will be used on all cages at the Pegal Bay site for the duration of the production cycle. These will be constructed of black mesh netting of 50mm gauge that will be fully laced around the handrail of the cages with no gaps in order to prevent potential ingress by birds or otters. By using 50mm top nets elsewhere on its sites in Orkney, CAS have excluded all aerial predators whilst preventing entanglement issues. Top nets will also be supported by a net support; this is in order to raise the nets above the surface of the water to a minimum height of 1.5m and prevents birds from aggregating on the tops nets, causing them to bag, allowing access to both feed and fish.

CAGE NETS

Cage nets are designed specifically for a site and take into account water depth, exposure, fish size and any wildlife constraints. Cage nets to be used on the Pegal Bay site will vary in gauge depending on use purpose: for smolts, from 15mm mesh and up to 24mm for growers. Cage nets will be tensioned using a Froyer ring weighted appropriately. This method of net tension is used elsewhere on CAS sites and is designed to ensure minimal tidal current distortion of stock nets during high current events. It also ensures the maximum volume is available for the stock at all times. This method is also deemed adequate at maintaining a constant net tension thus eliminating net bagging that in turn also reduces the potential of predator interactions. All nets are checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage.

Several options for cage nets exist (table below) but it is anticipated that full sapphire cage nets will be installed for use a Pegal Bay for the duration of production at the site.

NET MATERIAL & CONFIGURATION	COMMENTS
Nylon nets	Traditional nets without additional, integral predator defence capacity
Nylon nets with base comprising 'snug fit' 50mm sapphire netting	Traditional net with added predator defence to the bottom 1m and base of the net. 50mm sapphire netting is overlain and lies on the surface of the net without separation and is thus integral to the cage net and deployed for the duration of site use.
Full sapphire net cage nets (with/without additional 50mm snug fit base)	Sapphire nets are made of a twine stiffened with injected waxes and 6 strands of marine grade stainless steel. This means the geometry of the netting is more robustly held than braided nylon. The blend of polymers and metal that have a high cut and bite resistance.

SUBSURFACE ANTI-PREDATOR NETS

External subsurface anti-predation nets constructed of brightly coloured 50mm mesh that is adequately weighted to prevent net bagging will be deployed on the Pegal Bay site if seal predation becomes problematic or above 1% cumulative, or greater than 0.25% monthly mortalities associated with seal predation.

ACOUSTIC DETERRENT DEVICES

In the event of the tensioned cage nets and subsurface anti-predator nets not fulfilling the deterrence of problematic seals, acoustic deterrent devices (ADD) will be deployed in consultation with the local authority - the Orkney Islands Council, SNH and Marine Scotland for a European Protected Species licence. If used, ADD's will be of the 'silent scrammer' type to prevent disturbance to non-target species.

HUMANE DISPATCH

Cooke Aquaculture Scotland Ltd hold the necessary license to humanly dispatch seals under the Marine (Scotland) Act 2010: part 6 – Conservation of Seals Act. In accordance with the act, the human dispatch of seals will only be carried out as a last resort measure by a qualified marksman. Marine Scotland issues these licenses on a yearly basis and dictate the number of each seal that can be shot directly. This will relate to permitted biological removal numbers, in addition to when certain species can be shot if such limitations are in place. Any seals shot are to be reported to the Cooke Aquaculture Scotland Environmental team who will notify Marine Scotland within 48 hours of the incident. The RSPCA will also be notified within 72 hours of the incident and, reports will be submitted on quarterly basis to Marine Scotland as per the specification on the issued license.



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SUMMARY

PROPOSED ANTI PREDATOR DEFENCE STRATEGY	DESCRIPTION	CIRCUMSTANCES SURROUNDING DEPLOYMENT	DECISION MAKING SURROUNDING DEPLOYMENT	TIMING AND DURATION OF DEPLOYMENT	MAINTENANCE MECHANISMS	MONITORING PROTOCOLS
TOP NETTING	Tensioned 50mm black mesh netting	Deployed to discourage bird aggregation around cages and prevent ingress by predators over cage hand rails	To be deployed to deter aggregation of birds and ingress of predators over cage handrails	Deployed for the entire duration of the production cycle, from the first day of fish input to the harvesting of all fish from the cage.	Regular surface checks by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and reports submitted to SNH on a biannual basis of any entanglement incidents.
TENSIONED CAGE NETS	Tensioned cage nets using an adequately weighted Froyer ring in addition to a center weight. Mesh size is dependent on stocking requirements.	Deployed throughout the life cycle of each generation of fish	N/A	To be used throughout the operational lifecycle of the farm	Correct net deployment, tensioning and maintenance to ensure no bagging or damage.	Checked daily on the surface by site operatives and subsurface weekly by divers or spyball camera. Reports submitted to SNH on a biannual basis of any entanglement incidents.
TENSIONED SUB SURFACE ANTI PREDATOR NETS	50mm Yellow Mesh suitably weighted with a froyer ring to prevent bagging.	To be deployed if predator attacks become persistent.	To be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly	Will be deployed if mortalities by seal predation is greater than 1% cumulative or 0.25% monthly,	Correct deployment and tensioning to ensure net entanglement risk is minimized to the	To be checked daily by site operatives using spyball cameras and weekly by divers. Reports submitted to



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				for the remainder of the production cycle.	lowest possible levels	SNH on a biannual basis of any entanglement incidents.
ACOUSTIC DETERRANT DEVICES	Silent scammer type to prevent disturbance to non-target species	To be deployed in the event that the tensioned cage nets and subsurface anti predator nets fail to deter persistent seals	As per the seal predation threshold for the deployment of subsurface anti-predator nets	An EPS license will be applied for in the event of ADD deployment being necessary	All units to be removed and cleaned on a weekly basis to maintain effectiveness	Seal predation levels are monitored through the examination of fish mortalities and the visual observation of predator activities on site
HUMANE DISPATCH	Lethal control of rogue seals that cannot be deterred through other means by licensed marksmen	Only to be used as a last resort against seals that have become habituated towards attacking stock and cannot be deterred by using other means	If seal mortalities of stock remains high despite the use of all other deterrence measures then problem seals will be identified, observed prior to actions being taken	Due to licensing restrictions this method is held as a last resort and is not used on a regular basis	Licensed marksmen are fully trained in seal identification and marksmanship – attending regular refresher courses to this effect.	Seal predation levels are monitored through the examination of mortalities and visual observation of predator activities. Any seals shot are to be reported to the Cooke Aquaculture Scotland Environmental team who will notify Marine Scotland within 48 hours of the incident. The RSPCA will also be notified within 72 hours of the incident and, reports will be submitted on quarterly basis to Marine Scotland as per the specification on the



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						issued license.
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Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Mr David Barclay
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to: planningconsultation@orkney.gov.uk

Your ref: 18/058/MAR
Our ref: CNS/MFF/PegalBay/CDM149486

Date: 19^h March 2018

Dear Mr Barclay

The Town and Countryside Planning (Environmental Impact Assessment) (Scotland) Regulations 2011
18/058/MAR Increase consented cage size from 8 x 70 meter to 8 x 90 meter circumference cages at Pegal Bay, Scapa Flow, Orkney

Thank you for your consultation on the above dated 19th February 2018 and extension to the consultation period.

Summary

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required. We previously provided advice at the screening/scoping stage in our response to your consultation ref 17/211/MARSS. Whilst there are natural heritage interests of international importance on the site, in our view, these are not likely to be significantly affected, and therefore cannot be adversely affected by the proposal. We provide the following advice.

Natura interests – Scapa Flow pSPA and Hoy SPA

The proposal lies within the **Scapa Flow proposed Special Protection Area (pSPA)** selected for the following qualifying interest(s): Great northern diver (non-breeding), Red-throated diver (breeding), Black-throated diver (non-breeding), Slavonian grebe (non-breeding), Common eider (non-breeding), Long-tailed duck (non-breeding), Common goldeneye (non-breeding), Red-breasted merganser (non-breeding) and European shag (non-breeding).

In addition, the proposal is close to the **Hoy Special Protection Area (SPA)** and within known foraging areas for the breeding red-throated diver qualifying interest of the Hoy SPA¹. This 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.

The status of the classified SPA (Hoy SPA) 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. In addition the Scottish Government has a policy of protecting proposed SPAs (e.g. Scapa Flow pSPA) as if they were classified, and as set out in Scottish Planning Policy. Consequently, Orkney Islands Council (OIC) is required to consider the effect of the proposal on the SPA and pSPA before it can be consented (commonly known as a Habitats Regulations Appraisal). The SNH website has a summary of Scottish Government policy:

<https://www.snh.scot/sites/default/files/2017-06/A1396043%20-%20Scottish%20Government%20Policy%20for%20proposed%20SACs%20and%20proposed%20SPAs%20PDF%20-%2010%20September%202014.pdf>.

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests of either Natura site either directly or indirectly. An appropriate assessment is therefore **not** required. The reasons to support this decision are as follows;

Disturbance through re-configuration/construction phase of development

According to the Vessel Management Plan, the development phase of this proposal is envisaged to take approximately 2-4 days with approximately 8 return trips and a further 2-3 days for installation of nets on to cages. The towing vessel will operate at a speed of less than 5 knots. The plan includes mitigation to avoid disturbance to the Red-throated diver during peak chick-rearing period when most energy is expended;

- The transportation of equipment (i.e. the removal of existing equipment and the installation of the new infrastructures during the site construction phase) will be avoided during period July 1st – August 31st inclusive.

Entanglement

Most of the qualifying interests of the Scapa Flow pSPA are potentially vulnerable to entanglement and drowning in sub-surface nets. The use of small-mesh cage nets tensioned using Froyer ring system is considered to be effective in reducing probability of entanglement of diving birds in cage nets to negligible levels. Evidence to support this conclusion comes from entanglement data supplied by the applicant which shows no incidents of entanglement at Pegal Bay from 2015 onwards. The proposal is for the use of the same mesh size for both cage nets and top nets as previously used. The high tensioning through use of Froyer ring and the robust Sapphire nets² reduces risk of entanglement further.

Impacts on supporting habitats of Scapa Flow pSPA

This proposal has been considered alone and in-combination and as the proposal is for an increase in cage size only with no increase to the biomass or chemical treatments the loss of supporting habitat is minimal and not significant.

Other natural heritage considerations – Priority Marine Features (PMF)

As the proposal is for a change in equipment only, there should be no increased interaction between wild trout populations and the farmed fish stocks. The predator defence measures of weekly routine checks of the nets and pro-active checks prior to any storms will reduce the risk of escapes and thus minimise any interaction. Should the robust Sapphire nets be used the likelihood of escapes is almost negligible.

¹ This SPA is also classified for the protection of several other breeding bird species. These are Arctic skua, Fulmar, Great black-backed gull, Great skua, Guillemot, Kittiwake, Peregrine, Puffin and Seabird assemblage, details found at ² Revised version of Predator defence and mitigation policy indicating anticipated use of full sapphire cage nets, received 15/3/18

Conclusion

The proposed changes to this established site are confined to cage dimensions and netting type, with no alterations in cage grid and mooring areas or biomass. Given this, and in light of the information provided by the applicant with respect to Predator Defence and Mitigation Policy and Vessel Management Plan, both of which should be adhered to, we do not consider that this proposal will have significant effects on natural heritage interests of national or international importance.

If you require any further information or advice from SNH with respect to this application please contact me at our Kirkwall office.

Yours sincerely,

Donna Yule
Operations Officer, Orkney



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All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Mr David Barclay
Orkney Islands Council
Dept of Development Services
School Place
Kirkwall KW15 1NY

By email only to: planningconsultation@orkney.gov.uk

Your ref: 18/057/MAR
Our ref: CNS/MFF/LyrawaBay/CDM149484

Date: 19^h March 2018

Dear Mr Barclay

The Town and Countryside Planning (Environmental Impact Assessment) (Scotland) Regulations 2011
18/057/MAR Increase consented cage size from 8 x 70 meter to 8 x 90 meter circumference cages at Lyrawa Bay, Scapa Flow, Orkney

Thank you for your consultation on the above dated 19th February 2018 and extension to the consultation period.

Summary

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required. We previously provided advice at the screening/scoping stage in our response to your consultation ref 17/214/MARSS. Whilst there are natural heritage interests of international importance on the site, in our view, these are not likely to be significantly affected, and therefore cannot be adversely affected by the proposal. We provide the following advice.

Natura interests – Scapa Flow pSPA and Hoy SPA

The proposal lies within the **Scapa Flow proposed Special Protection Area (pSPA)** selected for the following qualifying interest(s): Great northern diver (non-breeding), Red-throated diver (breeding), Black-throated diver (non-breeding), Slavonian grebe (non-breeding), Common eider (non-breeding), Long-tailed duck (non-breeding), Common goldeneye (non-breeding), Red-breasted merganser (non-breeding) and European shag (non-breeding).

In addition, the proposal is close to the **Hoy Special Protection Area (SPA)** and within known foraging areas for the breeding red-throated diver qualifying interest of the Hoy SPA¹. This 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.

The status of the classified SPA (Hoy SPA) 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. In addition the Scottish Government has a policy of protecting proposed SPAs (e.g. Scapa Flow pSPA) as if they were classified, and as set out in Scottish Planning Policy. Consequently, Orkney Islands Council (OIC) is required to consider the effect of the proposal on the SPA and pSPA before it can be consented (commonly known as a Habitats Regulations Appraisal). The SNH website has a summary of Scottish Government policy:

<https://www.snh.scot/sites/default/files/2017-06/A1396043%20-%20Scottish%20Government%20Policy%20for%20proposed%20SACs%20and%20proposed%20SPAs%20PDF%20-%2010%20September%202014.pdf>.

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests of either Natura site either directly or indirectly. An appropriate assessment is therefore **not** required. The reasons to support this decision are as follows;

Disturbance through re-configuration/construction phase of development

According to the Vessel Management Plan, the development phase of this proposal is envisaged to take approximately 2-4 days with approximately 8 return trips and a further 2-3 days for installation of nets on to cages. The towing vessel will operate at a speed of less than 5 knots. The plan includes mitigation to avoid disturbance to the Red-throated diver during peak chick-rearing period when most energy is expended;

- The transportation of equipment (i.e. the removal of existing equipment and the installation of the new infrastructures during the site construction phase) will be avoided during period July 1st – August 31st inclusive.

Entanglement

Most of the qualifying interests of the Scapa Flow pSPA are potentially vulnerable to entanglement and drowning in sub-surface nets. The use of small-mesh cage nets tensioned using Froyer ring system is considered to be effective in reducing probability of entanglement of diving birds in cage nets to negligible levels. Evidence to support this conclusion comes from entanglement data supplied by the applicant which shows no incidents of entanglement at Lyrawa Bay from 2015 onwards. The proposal is for the use of the same mesh size for both cage nets and top nets as previously used. The high tensioning through use of Froyer ring and the robust Sapphire nets² reduces risk of entanglement further.

Impacts on supporting habitats of Scapa Flow pSPA

This proposal has been considered alone and in-combination and as the proposal is for an increase in cage size only with no increase to the biomass or chemical treatments the loss of supporting habitat is minimal and not significant.

Other natural heritage considerations – Priority Marine Features (PMF)

As the proposal is for a change in equipment only, there should be no increased interaction between wild trout populations and the farmed fish stocks. The predator defence measures of weekly routine checks of the nets and pro-active checks prior to any storms will reduce the risk of escapes and thus minimise any interaction. Should the robust Sapphire nets be used the likelihood of escapes is almost negligible.

¹ This SPA is also classified for the protection of several other breeding bird species. These are Arctic skua, Fulmar, Great black-backed gull, Great skua, Guillemot, Kittiwake, Peregrine, Puffin and Seabird assemblage, details found at ² Revised version of Predator defence and mitigation policy indicating anticipated use of full sapphire cage nets, received 15/3/18

Conclusion

The proposed changes to this established site are confined to cage dimensions and netting type, with no alterations in cage grid and mooring areas or biomass. Given this, and in light of the information provided by the applicant with respect to Predator Defence and Mitigation Policy and Vessel Management Plan, both of which should be adhered to, we do not consider that this proposal will have significant effects on natural heritage interests of national or international importance.

If you require any further information or advice from SNH with respect to this application please contact me at our Kirkwall office.

Yours sincerely,

Donna Yule
Operations Officer, Orkney

From: LICENSING@snh.gov.uk
To: [REDACTED]
Cc: [LICENSING](#)
Subject: [REDACTED] Fish Farm, Orkney - Harbour Porpoise - Licence 126567 - licence issued - 11 September 2018
Date: 11 September 2018 07:47:53
Attachments: Licence - 126567.pdf

Dear [REDACTED]

Please find your licence attached for you to print out as required. Please read over this carefully and ensure that you fully understand any conditions contained in the licence.

Your attention is drawn to ""SNH survey, education and research licences - accompanying notes"" which you will find on the SNH website. Please follow this link or paste into your browser <https://www.nature.scot/cetaceans-licence-forms-and-guidance-documents>

It is a condition of this licence that you must provide SNH licensing team with an annual return, describing the action taken under this licence. The final return must be submitted within one month of the expiry of this licence. Failure to submit an annual return may result in SNH revoking this licence. The return must include: The location, number, species and status (breeding, non-breeding, migrating) of any cetacean disturbed; and number and type of any samples taken and method employed. Please send this information by email (including your licence number in the subject line of the email) to: licensing@nature.scot.

If you have any queries, please get in touch - our full contact details are on your licence.

Best wishes,

[REDACTED]
SNH Licensing Team

We would welcome some feedback. Please reply to this email rating our service (1 = poor, 5 = very good). If it is not a 5, please tell us how we could make the service perfect.



Scottish Natural Heritage
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All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Scottish Natural Heritage
Species Licensing
Great Glen House
Leachkin Road
Inverness
IV3 8NW
01463 725364
e-mail: licensing@nature.scot

Animal Licence		
Licence Number: 126567	Valid from :11-SEP-18	Valid to :30-SEP-19
This Licence has been amended from Licence Number : 102873		
Licence Holder : ██████████		
Address:	██████████ ██████████ ██████████	
This Licence is Granted under the following Legislation:		
The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended): Regulation 44 (2) (a)		
Project Details		
This licence permits the licence holder to disturb common porpoise (<i>Phocoena phocoena</i>) at ██████████ ██████████) as part of a research project to measure disturbance from seal scarers for the purposes of science, research and education. This licence also permits the incidental disturbance of minke whale, killer whale, Risso's dolphin, white-beaked dolphin and Atlantic white-sided dolphin.		
Activities, species and locations covered by this licence are listed in Annex 1		
Conditions		
1	Acoustic deterrent devices are only to be used for research purposes. On completion of the monitoring study, acoustic deterrent devices must be removed from the site.	
2	The licence holder must follow the guidance given in the documents entitled: "SNH survey, education and research licences - accompanying notes".	
3	All working methods, mitigation and compensation measures must be carried out in accordance with those set out in the licence application and supporting documents as listed in the project details of this licence, and any subsequent correspondence agreed in writing between SNH Licensing Team and the licence holder, but subject to any modifications or amendments imposed by this licence.	
4	When carrying out work permitted under this licence, the licence holder must make all efforts to ensure that disturbance to marine wildlife is kept to a minimum, including breaking off engagement if animals continue to show signs of disturbance or active avoidance or if the group or adults and young become separated.	

5	While engaged in work authorised by this licence, the licence holder and agents if appointed, must each be able to produce a copy of this licence to any Police Officer, authorised person, or official of SNH on demand.
6	No later than one month after the date on which this licence expires, the licence holder must provide SNH Licensing Team with a licence return, detailing all actions carried out under this licence. The return must include details of: numbers, dates and locations of any devices deployed, number of cetaceans disturbed and, a brief report on the outcomes of the project and its successes. Please send this information by email (including your licence number in the subject line of the email) to: licensing@nature.scot .
Notes	
Licence holders or any other persons covered by this licence should note the following;	
1	This licence is granted subject to compliance with the conditions as specified. Anything done otherwise than in accordance with the terms of the licence may constitute an offence.
2	Agents may work independently of the licence holder. It is the responsibility of the licence holder to ensure that agents have the appropriate training and experience and that they understand the terms and conditions of this licence.
3	Agents may work under the personal supervision of the licence holder or agents. The number of assistants that can be appropriately supervised is at the discretion of the licence holder or agent.
4	Nothing in this licence shall confer any right of entry on to land or property.
5	This licence may be modified or revoked at any time by SNH.
6	This licence only exempts any legal provision contained in the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

This licence is granted subject to compliance with the terms and conditions specified

Licence no:126567

Authorised on behalf of Scottish Natural Heritage by: [REDACTED] Date: 11-SEP-2018

Licence no:126567

Annex 1: Permitted activities

Action	Purpose	Species	Location	Grid Reference	Method
Disturb	Science, Research and Education	Minke Whale White-sided Dolphin Risso's Dolphin Killer Whale	[REDACTED] rkney	[REDACTED]	N/A

Action	Purpose	Species	Location	Grid Reference	Method

Disturb	Science, Research and Education	Common Porpoise White-beaked Dolphin	Orkney		N/A
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This licence is granted subject to compliance with the terms and conditions specified

Licence no:126567

Authorised on behalf of Scottish Natural Heritage by: [REDACTED] Date: 11-SEP-2018



[REDACTED]

Scottish Natural Heritage
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All of nature for all of Scotland
Nàdar air fad airson Alba air fad

[REDACTED]



Meridian Salmon Farms Limited.

PREDATOR DEFENCE & MITIGATION POLICY

Chalmers Hope, Scapa Flow.

Meridian Salmon Farms Limited is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable, whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation policy we have made consideration with regards to the Hoy SSSI, SAC and SPA along with known seal haul out sites.

Meridian Salmon Farms limited wish to propose the outlined predator defence strategy which has a hierarchy of control measures to prevent predation from aerial birds, diving birds, seals and otters etc.

SITE OVERVIEW

The Chalmers Hope site comprises of twelve 90m circumference cages, the fish are generally stocked from one of its sister sites Pegal Bay or Lyrawa Bay. Chalmers Hope is classified as extremely well flushed and is a high energy site. As such extra weights are added to ensure a constant net tension.

PREDATOR DEFENCE MEASURES.



Meridian Salmon Farms Limited.

TOP NETS

Top nets will be used on all cages onsite for the length of the production cycle, these will be of 50mm to 75mm black diameter mesh netting, which will be fully laced around the handrail of the cages, with no gaps to potentially allow ingress from either birds or otters. All top nets will be supported to raise the nets above the surface of the water to a height of 1.5m above water level. This prevents birds from being able to bag the net sufficiently to gain access to both feed and fish and subsequently discourages them from the site. By using 50mm to 75mm mesh we have excluded all aerial predators whilst preventing entanglement incidents. This is in line with current guidance issued by SNH.

CAGE NETS

All cage nets used onsite will be of 14mm to 24mm diameter depending on fish size, netting and will be tensioned by the use of 36 x 70kg weights (Minimum) with 1 x 210kg centre weight. The use of a froyer ring net tensioning system at this site is not possible due to the high energy of the tidal streams. This method of net tensioning has proved to be efficient in previous cycles and is deemed to be adequate at ensuring a constant net tension thus eliminating net bagging and reducing predator interactions. False Bottom nets constructed of 50mm mesh netting shall be fitted if seal predation becomes problematic prior to the use of anti predator netting. False bottoms are stitched to the base of the nets forming a further barrier between seals and fish but eliminating potential for entanglement due to the depth of deployment. These nets are generally only fitted to the larger 24mm mesh nets.

ANTI – PREDATOR NETS.

Anti-Predator nets shall be constructed of 50mm orange mesh and will only be deployed if seal predation is problematic or above 1% cumulative or greater than 0.25% monthly mortality with association to seal predation. The top two meters of netting will be constructed using a heavier gauge net to prevent chaffing and wear from bio-fouling on the cages.



Meridian Salmon Farms Limited.

REPORTING OF ENTANGLEMENT INCIDENTS

Meridian Salmon Farms Ltd commit to provide RSPB and SNH with a regular update of entanglement incidents. Detailing the species of birds involved, the number of birds involved and whether the birds were caught in top netting or predator nets. We will also detail how many cages predator nets were installed along with the number of cages onsite. We will review our predator defence policy at the end of each cycle or if any serious entanglement issues have taken place. Taking into consideration new developments in predator defence and entanglement mitigation measures etc.

ACCOUSTIC DETERRENT DEVICES.

ADDs will not be used in line with SNH guidance due to the potential interactions with cetaceans. If however an acoustic deterrent becomes available that does not pose a threat to cetacean movement, Meridian Salmon Farms Limited may wish to pursue this option, subject to the appropriate European Protective Species license being granted if appropriate. Along with recommendations of their use by SNH.



Meridian Salmon Farms Limited.

SHOOTING SEALS

Meridian Salmon Farms Limited has applied for a license to shoot seals under the MARINE (SCOTLAND) ACT 2010: PART 6 – CONSERVATION OF SEALS. At the Chalmers Hope site.

In accordance with the said act, the shooting of seals will only be carried out as a last resort measure, by a qualified marksman. In line with any conditions laid down by the license issued by Marine Scotland for the year in question, relating to the number of each species of seals that can be shot directly related to the permitted biological removal numbers and when they can be shot if such limitations are in place.

Any seals shot at the site will be reported to Marine Scotland on a quarterly basis as per the specification on the license.

Anti- Predator defence strategy Lyrawa Bay, Scapa Flow, Orkney.

Proposed Anti- Predator Defence	Detail/ Description	Circumstances surrounding deployment	Decision making Surrounding deployment	Timings duration of deployment	Maintenance Mechanisms	Monitoring Protocols
Deployment of Top bird netting	Tensioned 50mm to 75mm black mesh top nets	Deployed to discourage aggregations of birds accumulating around the cages and to prevent ingress from seals and otters over the hand rails.	To be deployed on all cycles to discourage bird activity and	Deployed from the 1st day of input, and removed when the last fish are harvested from the site at the end of each cycle	Regularly checked by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and any entanglement incidents will be reported to the RSPB and SNH on a minimum of a six monthly basis
Tensioned Cage Nets	Standalone tensioned cage nets using 36 x	Tensioned cage nets will be deployed throughout the lifecycle of each generation of	Deployed from start of cycle.	To be used at all times throughout the operational lifecycle of the fish farm	Correct net deployment and regular maintenance to ensure no net bagging occurs	Checked daily by site staff using spy ball cameras and weekly

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Registered Office: Johnstone House, 52 -54 Rose Street, Aberdeen, AB10 1HA



Meridian Salmon Farms Limited.

	70kg weights + 1 x 210kg centre weight. Constructed of 14mm to 24mm nylon mesh which does not pose an entanglement risk. False bottoms may be used prior to the use of anti predator nets	fish				by diver inspection to ensure nets are correctly tensioned and weighted to prevent bagging, wear points etc.
Tensioned anti predator nets	50 mm orange anti predator netting suitably weighted to ensure a constant tension	To be deployed if predator attacks become persistent	To be deployed if seal predation exceeds 1% of the cause of death cumulative of the stock held onsite or greater than 0.25% on a monthly basis	Will be deployed if predation is greater than 1% cumulative or greater than 0.25% monthly for the remainder of that cycle.	Correct net deployment and tensioning to ensure net entanglement risk is minimised to the lowest possible levels	Nets will be checked daily by site staff using spy ball cameras and weekly by diver inspection, to ensure nets are correctly tensioned with no bagging or holes present. Any entanglement incidents will be reported to RSPB and SNH on a minimum of a six monthly basis.



Meridian
Salmon Group
A Morpol Company

Meridian Salmon Farms Limited.

Registered in Scotland No.: 419789

Registered Office: Johnstone House, 52 -54 Rose Street, Aberdeen, AB10 1HA



Northern Isles Salmon Limited

PREDATOR DEFENCE & MITIGATION POLICY BAY OF HAM, ROUSAY, ORKNEY.

Northern Isles Salmon Limited is committed to reducing the potential risks to wildlife and the environment to a level that is as low as can be considered reasonably practicable, whilst maintaining sufficient protection for our stock.

In preparing this predator defence and mitigation policy we have made consideration with regards to the Rousay SPA, Orkney Mainland Moors SPA as well as the SACs that are in place to protect both Grey and Common seals within the locality.

Northern Isles Salmon limited wish to propose the outlined predator defence strategy which has a hierarchy of control measures to prevent predation from aerial birds, diving birds, seals and otters etc.

SITE OVERVIEW

The Bay of Ham site is used for smolt on growing prior to the movement of the stock to one of its sister sites Kirknoust and Bay of Vady, primarily due to the maximum biomass limits, imposed by SEPA.

This site is generally stocked with S1 smolts in the spring and the fish subsequently moved by well boat when they reach approximately 1kg in weight, as such the site is generally only stocked for a period of 9 to 12 months after which it remains fallow, with all nets being removed offsite for cleaning, disinfection and strength testing prior to re-use.

The site has historically had low levels of predation predominantly from Grey seals.



Northern Isles Salmon Limited

PREDATOR DEFENCE MEASURES.

TOP NETS

Top nets will be used on all cages onsite for the length of the production cycle, these will be of 50mm black diameter mesh netting, which will be fully laced around the handrail of the cages, with no gaps to potentially allow ingress from either birds or otters. All top nets will be supported to raise the nets above the surface of the water to a height of 1.5m above water level. This prevents birds from being able to bag the net sufficiently to gain access to both feed and fish and subsequently discourages them from the site. By using 50mm mesh we have excluded all aerial predators whilst preventing entanglement incidents.

CAGE NETS

All cage nets used onsite will be of 14mm diameter smolt netting and be tensioned by the use of 24 x 25kg weights (Minimum) with 1 x 25kg centre weight. The use of a froyer ring net tensioning system at this site is not possible due to the site depth. As this site is relatively sheltered and does not experience strong tidal currents this method of net tensioning has proved to be efficient in previous cycles and is deemed to be adequate at ensuring a constant net tension thus eliminating net bagging and reducing predator interactions.

ANTI – PREDATOR NETS.

Anti-Predator nets shall be constructed of 50mm orange mesh and will only be deployed if seal predation is problematic or above 1% cumulative or greater than 0.25% monthly mortality with association to seal predation. The top two meters of netting will be constructed using a heavier gauge net to prevent chaffing and wear from bio-fouling on the cages.



Northern Isles Salmon Limited

REPORTING OF ENTANGLEMENT INCIDENTS

Northern Isles Salmon Ltd commit to provide RSPB and SNH with a regular update of entanglement incidents on at least a six monthly basis. Detailing the species of birds involved, the number of birds involved and whether the birds were caught in top netting or Predator nets. We will also detail how many cages predator nets were installed along with the number of cages onsite. We will review our predator defence policy at the end of each cycle or if any serious entanglement issues have taken place. Taking into consideration new developments in predator defence and entanglement mitigation measures.

ACCOUSTIC DETERRENT DEVICES.

ADDs will not be used in line with SNH guidance due to the potential interactions with cetaceans. If however an acoustic deterrent becomes available that does not pose a threat to cetacean movement, Northern Isles Salmon Limited may wish to pursue this option, subject to the appropriate European Protective Species license being granted if appropriate. Along with recommendations of their use by SNH.

SHOOTING SEALS

Northern Isles Salmon Limited has applied for a license to shoot seals under the MARINE (SCOTLAND) ACT 2010: PART 6 – CONSERVATION OF SEALS. At the Bay of Ham site.

In accordance with the said act the shooting of seals will only be carried out as a last resort measure, by a qualified marksman. In line with any conditions laid down by the license issued by Marine Scotland for the year in question, relating to the number of each species of seals that can be shot directly related to the permitted biological removal numbers and when they can be shot if such limitations are in place.

Any seals shot at the site will be reported to Marine Scotland on a quarterly basis as per the specification on the license.



Northern Isles Salmon Limited

Anti- Predator defence strategy for the Bay of Ham, Rousay, Orkney.

Proposed Anti- Predator Defence	Detail/ Description	Circumstances surrounding deployment	Decision making Surrounding deployment	Timings duration of deployment	Maintenance Mechanisms	Monitoring Protocols
Deployment of Top bird netting	Tensioned 50mm black mesh top nets	Deployed to discourage aggregations of birds accumulating around the cages and to prevent ingress from seals and otters over the hand rails.	To be deployed on all cycles to discourage bird activity and	Deployed from the 1st day of input, and removed when the last fish are harvested from the site at the end of each cycle	Regularly checked by site staff on a daily basis for holes, gaps and general wear and tear	Checked on a daily basis and any entanglement incidents will be reported to the RSPB on a minimum of a six monthly basis
Tensioned Cage Nets	Standalone tensioned cage nets using 24 x 25kg weights + 1 x 25kg centre weight. Constructed of 14mm nylon mesh which does not pose an entanglement risk	Tensioned cage nets will be deployed throughout the lifecycle of each generation of fish	N/A	To be used at all times throughout the operational lifecycle of the fish farm	Correct net deployment and regular maintenance to ensure no net bagging occurs	Checked daily by site staff using spy ball cameras and weekly by diver inspection to ensure nets are correctly tensioned and weighted to prevent bagging, wear points etc.
Tensioned anti predator nets	50 mm orange anti predator netting suitably weighted to ensure a constant tension	To be deployed if predator attacks become persistent	To be deployed if seal predation exceeds 1% of the cause of death cumulative of the stock held onsite or greater than 0.25% on a monthly basis	Will be deployed if predation is greater than 1% cumulative or greater than 0.25% monthly for the remainder of that cycle.	Correct net deployment and tensioning to ensure net entanglement risk is minimised to the lowest possible levels	Nets will be checked daily by site staff using spy ball cameras and weekly by diver inspection, to ensure nets are correctly tensioned with no bagging or holes



Northern Isles Salmon Limited

						present. Any entanglement incidents will be reported to RSPB on a minimum of a six monthly basis.
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Our ref: CNS/MFF/West Fara/32950

Your ref: PDM/IHC/9/39(a)(1)(2)(c)

Paul Maxton
Legal Services
Orkney Islands Council
School Place
Kirkwall
KW15 1NY

23 June 2006

Dear Paul

**Orkney County Council Act 1974
Renewal and Amendment of Works Licence at West Fara, Orkney
Environmental Impact Assessment (Fish Farming in Marine Waters) Regulations 1999
Mainstream Scotland Ltd**

Thank you for your letter dated 30 May 2006 regarding the renewal with proposed modifications of the above Works Licence and the enclosed Environmental Statement relating to this fish farm.

1. BACKGROUND

The application is for the renewal of a Works licence and a change of equipment to be deployed on the fish farms at West Fara, Hoy. The proposed modifications are:

- Replacement of the present twenty 70m circumference cages with sixteen 90m circumference cages, to be arranged in a 2 x 8 grid pattern.
- Reservation of the option, from 2007, to install the Storvik appetite feeding system.
- Utilisation of subsea lighting between the months of October to June.
- Increase in tonnage from 1000 tonnes peak biomass, as currently consented, to 2102 tonnes (subject to approval by SEPA)
- Increase in net depth from 8m to 12m.
- Reduction in top net mesh size from 100mm to 50mm
- Use of Acoustic Deterrent Devices for predator control as a final resort

2. SNH POSITION

SNH has no objection to the proposed development but recommends conditions to further minimise any adverse natural heritage impacts arising from the development as detailed below.

3. SNH APPRAISAL OF THE PROPOSALS

Natural Heritage Interests Affected:

European Protected Species

Cetaceans utilise Scapa flow for feeding and migration. The most commonly recorded species is the harbour porpoise, but also utilising Scapa flow are minke whale, sperm whale, white sided dolphin, killer whale, white beaked dolphin and risso's dolphin. Otters are also found around most of the Orkney coastline. All species of cetacean, and otters, are European protected species.

Seals

Fara is a breeding and haul out site for over 450 common seals (*Phoca vitulina*) (listed on Annex V of the Habitats and Species Directive).

Fish

Ore burn supports a population of brown trout (*Salmo trutta*). Trout are a UK Biodiversity Action Plan priority species.

Birds

Scapa flow is also internationally important for great northern diver and slavonian grebe (listed on Annex I of the Wild birds Directive). In addition Scapa flow is nationally important for red-throated diver, black-throated diver, shag, wigeon, teal, eider, long-tailed duck, goldeneye, red breasted merganser and black guillemot. The area around Fara and Ore Bay, known as Gutter sound, is particularly important for black guillemot, red breasted merganser, long tailed duck and eider, with a winter (October – March) total for eider of 760

Benthic

SNH is unaware of any sensitive species of habitats that may be located within the vicinity of the proposed development.

Landscape and Visual

SNH is unaware of any particularly sensitive landscape areas or features within the vicinity of the proposed development.

SNH Appraisal Of The Likely Impacts Of The Proposal on Natural Heritage Interests.

- Deployment of the Storvik appetite feeding system would involve the incorporation into the grid of feed silos, with a capacity of 1000kg, each installed on a raft/pontoon and located at the eastern side of each cage. Presumably this system would be powered by a generator which would required to be housed on a raft. SNH would recommend that all feeding and ancillary equipment are grey in colour and located to minimise any adverse landscape impacts. However scope for minimising the numbers and size of structures should also be considered, for example sharing a feed hopper between two cages.
- SNH would recommend that any generator or ancillary equipment relating to the lighting system should be grey in colour in order to minimise impact on the

landscape. The precise location should be agreed in writing with Orkney Islands Council prior to the development commencing.

- The proposed increase will result in more than double the present maximum biomass on site. Due to the proximity of this site to the Ore Bay site, also leased by Mainstream, **SNH recommends that a clear written commitment to cease use of the Ore Bay site is given by Mainstream** prior to an increase in biomass at West Fara. The Ore burn which flows into the head of Ore Bay is a recognised trout burn. An increase in biomass at West Fara in addition to the operation of the site at Ore Bay could result in an increased risk of transfer of sea lice to the wild salmonid population.
- SNH views the proposed reduction of top net mesh size from 100mm to 50mm as a positive change.
- SNH is satisfied that anti-predator methods currently used by Mainstream Scotland Limited accord with SNH recommendations. However, Mainstream state that, should all other methods prove unsuccessful in deterring seals, then as a last resort, they would consider using an Acoustic Deterrent Device (ADD). SNH advocates the use of tensioned netting in preference to ADDs. When used as a predator deterrent, ADDs also cause disturbance of non-target species including otters and cetaceans, which are European Protected Species (see Annex A for the legislative requirements relating to European Protected Species). Otters are known to be present on both the islands of Fara and Hoy, and cetaceans, in particular harbour porpoises, are regularly seen in the waters around Fara. These and other cetacean species are also regularly sighted in other areas of Scapa Flow, particularly in Switha Sound to the south, both feeding and on passage. **SNH advise that, prior to the installation and use of an Acoustic Deterrent Device (ADD), a licence must be obtained from the Scottish Executive** (Scottish Executive Environment and Rural Affairs Department, Area 1-H, Victoria Quay, Edinburgh, EH6 6QQ). **However SNH advise that we are unlikely to sanction the use of an ADD at this location**

Conclusion

SNH therefore has no objection to the proposal but recommends the following conditions:

- Scope for minimising the numbers and size of feeding, lighting and ancillary equipment should be considered. All feeding, lighting and ancillary equipment should be grey in colour.
- Renewal of a works licence should only be granted where a clear written **commitment is given by Mainstream to cease use of the Ore Bay site.**
- **Prior to the installation and use of an Acoustic Deterrent Device (ADD), a licence must be obtained from the Scottish Executive.**

Please let me know if you need any further information or advice from SNH in relation to this proposal. I would be grateful if you could let us know of your Council's decision in due course, or of any further changes the proposal that would be relevant to our interests.

Yours sincerely

Ruth Priestley
Area Officer
Orkney

Appendix 1

European Protected Species

Legal Position

The Wildlife and Countryside Act 1981 (as amended) provides full protection for certain animal and plant species. Some of these species are further protected as 'European Protected Species' under Regulations 39 and 43 of the Conservation (Natural Habitats &c.) Regulations 1994. The species identified above are European Protected Species.

This means it is illegal to:

Deliberately or recklessly kill, injure, disturb or capture/take European Protected Species of animal

Damage or destroy the breeding sites or resting places of such animals

Deliberately or recklessly pick, collect, cut, uproot or destroy European Protected Species of wild plant

Where it is proposed to carry out works that will affect European Protected Species or their shelter/breeding places, whether or not they are present in these refuges, a licence is required from the licensing authority (in this case likely to be Scottish Executive). It is strongly advised that you refer to the Scottish Executive information on the current interim licensing arrangements, which can be found in the document *European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements*, (October 2001) before applying for a licence. Copies of this are available at <http://www.scotland.gov.uk/library3/environment/epsg-00.asp> or by writing to the Species Licensing Team, Countryside & Natural Heritage Unit, 1 H South, Victoria Quay, Leith Edinburgh, EH6 6QQ or by telephoning 0131 244 7381.

As highlighted in the Interim Guidance, three tests must be satisfied before the licensing authority can issue a licence under Regulation 44(2) of the Conservation (Natural Habitats &c.) Regulations 1994 to permit otherwise prohibited acts. An application for a licence will fail unless all of the three tests are satisfied. The three tests involve the following considerations:

Test 1 - The licence application must demonstrably relate to one of the purposes specified in Regulation 44(2). For development proposals, the relevant purpose is likely to be Regulation 44(2)(e) for which Scottish Executive is currently the licensing authority. This regulation states that licences may be granted by Scottish Executive only for the purpose of "*preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.*"

Test 2 - Regulation 44(3)(a) states that a licence may not be granted unless Scottish Executive is satisfied "*that there is no satisfactory alternative*".

Test 3 - Regulation 44(3)(b) states that a licence cannot be issued unless Scottish Executive is satisfied that the action proposed “*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*” (Scottish Executive will, however, seek the expert advice of Scottish Natural Heritage on this matter).

Consideration of European Protected Species must be included as part of the planning application process, not as an issue to be dealt with at a later stage. Any planning consent given without due consideration to these species is likely to breach European Directives with the possibility of consequential delays or the project being halted by the EC, as has happened previously.



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Planning and Development
The Highland Council
Tigh Na Sgìre
Park Lane
Portree
IV51 8GP

FAO: Alison Harvey

7 October 2016

Your ref: 16/03352/FUL

Dear Ms Harvey,

TOWN & COUNTRY PLANNING (SCOTLAND) ACT 1997 NEW FISH FARM COMPRISING 10 X 38M DIAMETER CAGES IN OUTER LOCH PORTREE/SOUND OF RAASAY, ISLE OF SKYE

Thank-you for your consultation dated 2 August regarding the above proposal.

Summary

This proposal could be progressed with appropriate changes/mitigation. However, because it could affect internationally important natural heritage interests (harbour porpoise), **we object to this proposal unless it is made subject to conditions so that the works are done strictly in accordance with the changes/mitigation detailed in our appraisal below.**

A number of Priority Marine Features are present at this site and will be affected by these proposals but there are unlikely to be significant impacts on their national status.

Background

We responded to an EIA screening and scoping consultation for this proposal in March 2015. The current proposals are being treated as a separate development for the purposes of planning and CAR licencing. However the close proximity and sharing of a feed barge with the existing Portree fish farm means that cumulative impacts are particularly relevant.

Appraisal of the impacts of the proposal and advice

1. Inner Hebrides and the Minches candidate Special Area of Conservation

The proposal lies within Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise. The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994

Scottish Natural Heritage, King's House, The Green, Portree, Isle of Skye, IV51 9BS
Tel: 01478 612625 www.snh.gov.uk

Dualchas Nàdair na h-Alba, Taigh an Rìgh, An Àilean, Port Rìgh, An t-Eilean Sgitheanach, IV51 9BS. Fòn: 01478 612625 www.snh.gov.uk

as amended (the “Habitats Regulations”) or, for reserved matters the Conservation of Habitats and Species Regulations 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

In our view, this proposal is likely to have a significant effect on harbour porpoise within Inner Hebrides and the Minches cSAC. Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site’s conservation objectives for its qualifying interest. To help you do this, we advise that in our view on the basis of the information provided, and if the proposal is undertaken strictly in accordance with the following changes/mitigation then the proposal will not adversely affect the integrity of the site:

- If ADDs are used which are within the hearing range of harbour porpoise they must be devices which are only triggered in the presence of predators. They should not sound continuously, or be set to intermittent unless agreed in writing by the Highland Council.
- For each device deployed, a detailed record should be kept by the operator of the cue for deployment, dates when the devices are operating, how often they sound and for what duration. Information should be provided of the noise profile of the devices when they are sounding.
- The use of ADDs should be subject to regular review by the Highland Council, in consultation with SNH, which should initially be on an annual basis. The Highland Council should have the power to amend/restrict the types of devices used and how they are used.

The appraisal we carried out considered the impact of the proposals on the following factors:

- Subsequent to EIA scoping the area around the site has been selected as a cSAC for harbour porpoise. An overview of the sightings and modelling data used to inform cSAC selection is available at: <http://www.snh.gov.uk/docs/A1918277.pdf> . This demonstrates that Sound of Raasay is an important part of the cSAC for harbour porpoise.
- The hearing range of harbour porpoise includes the sound frequencies emitted by the proposed ADD model. The use of ADDs may result in disturbance/habitat exclusion. The evidence of impacts on cetaceans from ADDs currently in use is varied and is dependent on many variables (e.g. noise characteristics of device, how the device is used, the topography, animal behaviour and importance of the area/habitat where the ADD is being used). However, the quoted sound output for the proposed device and the topography of the area suggests that it is likely to be audible across a large part of the Sound of Raasay. Disturbance is likely in a smaller (but nevertheless significant) area around each device.
- Sound of Raasay has a number of other fish farms which currently use, or have the option to use, ADDs in an unregulated manner. Working with industry, we are currently undertaking a review of ADD use within the cSAC. This will determine the level of ADD noise emission currently in operation and whether further constraints should be considered.

- In the meantime we consider that it is important to minimise additional noise inputs into the cSAC, monitor the usage of ADDs and have in place a mechanism to address any issues arising from ADD usage at the proposed farm, by itself or in combination with existing farms in the area. It is also important that the Council retains the opportunity to influence best practice, such as better acoustic targeting to seals, in order to reduce overall noise levels in the future.
- Deployment of secondary anti-predator nets has been quoted as a possibility. Such nets are unlikely to present a significant entanglement risk if correctly deployed and properly tensioned.
- Gill nets such as those used in recapturing escaped fish do present an entanglement hazard. However we would expect Marine Scotland to take porpoise into account in deciding whether to grant approval for the use of such nets at this site.

You may wish to carry out further appraisal before completing the appropriate assessment.

Other cetacean species also use Sound of Raasay, particularly Bottlenose dolphin. All cetaceans are European Protected Species. Similar issues regarding disturbance/habitat exclusion apply to those species and effects on them would also be mitigated by the measures outlined above.

2. Priority Marine Features and benthic impacts

Priority Marine Features (PMFs) are marine habitats and species considered by SNH, JNCC and Scottish Government to be of particular conservation importance in Scotland's seas.

We have reviewed both the 2013 and 2015 benthic video transect footage. Taken together these cover the depositional zone of the proposed farm and a sufficient buffer around the edge to provide some context. The quality of the video footage is adequate to assess the relatively simple and uniform biotopes present at this site.

The majority of the shallower parts of the site comprise muddy sand with typical species: tower shells (*Turritella communis*) being the most obvious and abundant. The habitats become muddier and the density of burrows increases as the depth increases, with squat lobster (*Munida rugosa*) and prawns (*Nephrops norvegicus*) more abundant. The proposed site is located at the outer edge of Loch Portree and a steep drop-off into Sound of Raasay is evident in the 2015 transects, at around 60m depth. Below the cliffs (outside Loch Portree) the habitats are uniform well burrowed mud. Extensive dredge/trawl marks are visible and vary in prominence, suggesting that this area is regularly fished.

The mud habitats are examples of the PMF 'Burrowed mud'. The species observed are typical of this habitat and none of the rarer component biotypes on the adopted PMF list (<http://www.snh.gov.uk/docs/A1327320.pdf>) were observed.

A small amount of seagrass was recorded at the inshore end of transect 4, occurring in a narrow band at around 3m depth. The individual plants are small and sparsely distributed. Seagrass beds are also a PMF habitat and it may be more

widely distributed along this shoreline. However, the benthic report suggests it would be outside the AZE and it is not a high quality example of the habitat.

It is likely that Northern sea fan *Swiftia pallida* is also present (but rare) on boulders and rock at this site, although it was not possible to confirm identification based on the video footage provided. Northern sea fan and sponge communities are also a PMF. Based on the information available we expect there to be areas of similar or better quality present elsewhere within Loch Portree and in the Sound of Raasay.

Considering the extent, sensitivity and quality of the PMF habitats that are likely to be affected, we advise that the proposals do not raise any issues of national interest.

3. Landscape and visual impacts

The proposed fish farm lies within Trotternish and Tianavaig Special Landscape Area. The landscape of Portree bay is specifically mentioned in the Special Qualities identified for this site. Views from the Scorrybreac coastal path, Ben Chraic, and the summit of Ben Tianavaig are particularly important for locals and visitors alike.

A full Landscape and Visual Impact Assessment has been carried out by chartered landscape architects as requested. The supporting information includes an assessment of visibility and a series of photomontages representative of the main sensitive receptors. These are high quality and appear to accurately represent the proposals. The consultant's summary of the effects on the individual LVIA components appears plausible and we agree that they have identified the most significant landscape and visual effects. These include the views from Ben Chraic, Torvaig (and the Skye Trail in that area) and cruise boats at anchor. We agree that these effects are localised but note that they will be experienced by relatively large numbers of people. It is for you to weigh up the importance of the issues raised in the context of your own policies.

Further comments are provided in annex 1.

Conclusion

This proposal will affect features of international importance but we consider that it could be progressed subject to appropriate planning conditions. If the planning authority intends to grant planning permission against our advice without the suggested changes/mitigation, you must notify Scottish Ministers.

If you would like clarification or any further advice regarding this case please contact Alex Turner in our Portree office on 01470 612625 or alex.turner@snh.gov.uk.

Yours sincerely,

George Hogg
Area Manager, South Highland Area

ANNEX 1 - APPRAISAL OF LANDSCAPE AND VISUAL IMPACTS

LANDSCAPE CHARACTER

In this case the proposed location and layout appears compatible with the landscape character and SNH guidance. The proposal has a simple linear design with a horizontal emphasis. Although the existing and proposed cages would not align with each other they would align with, and relate to, the dominant coastal edge along the northern shore of the loch. The combined farm would remain inferior in scale to the loch and the dominance of the open water and visual movement up and down the loch would be maintained. The scale of the surrounding cliffs and slight elevation of the viewpoints closest to the farm mean that the height of the top nets and feed barge are unlikely to be a significant issue. Activity at the farm would appear consistent with the general bustle and activity of Portree Bay.

VISUAL IMPACTS

The new farm would visually read as an extension to the existing farm. The combined development would be a prominent feature in the landscape. Unfortunately the developer has not taken the opportunity to consider the layout of both farms in their entirety, in particular the gap in the existing farm layout.

Views from the water – VPs 7 & 8

These low-angle viewpoints show that both the existing and proposed fish farms are often back-clothed by the adjacent coastline. Even when they are not, the scale of both layouts is inferior to the expanse of water in outer Loch Portree and diminished further by the significant height of the adjacent cliffs and open seascape across the Sound of Raasay. However the red colour of the current cage nets attracts attention: this could be addressed via conditions but that is for you to consider in the context of your policies. We agree with the LVIA assessment that visual impacts from taller boats such as cruise ships will be notably greater and this will be particularly true when the ships are stationary at anchor.

Bench adjacent to Sgeir Mhor on Scorrybreac footpath – VP1

The offset alignment of the two cage groups are obvious from the viewpoint and create visual confusion because the logic behind the alignment is not immediately obvious. However, the farm is viewed from a low angle and there are wide views from this viewpoint, both inland and out to sea so the dominance of the open water should be maintained. The farm is clearly related to the northern shore of the loch and both cage groups appear to be contained within the bay by Rubha na h-Airde Glaise.

Views from Ben Chracraig and the Torvaig track – VPs 2 & 3

The farm is highly prominent from these viewpoints. The proposed and existing layouts align reasonably well with the dominant coastal edge. The curve in alignment of the cages appears to relate to the shelter of the adjacent cliffs rather than projecting into the open water of the Sound of Raasay. Even at this close proximity the dominance of the open water and lines of movement along the length of the loch are maintained.

Ben Tianavaig – VP6

360 degree panoramic views are a key feature of this viewpoint and as a result the effect of the development would be less significant than from the previous viewpoints. Although large, the proposed layout remains subordinate in scale to Loch Portree. It should appear well aligned with the northern shore of the loch. It appears to be sited within Loch Portree rather than spilling out into the Sound of Raasay.



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Argyll and Bute Council
Planning Services
Municipal Buildings
Albany Street
Oban
PA34 4AW

FAO: Richard Kerr

8th March 2017

You ref: 16/03407/MFF

Dear Mr Kerr,

TOWN & COUNTRY PLANNING (SCOTLAND) ACT 1997 RE-EQUIPMENT OF AN EXISTING MARINE FISH FARM AT PORT NA CROE, ISLE OF SHUNA FROM 8 24 X 24M SQUARE PENS TO 4 120M CIRCUMFERENCE ROUND CAGES, INSTALLATION OF FEED BARGE AND ENLARGED MOORING AREA

Further to our letter of 9th February and following receipt of the "PNC ADD Deployment Strategy" from Marine Harvest please find below updated comments on the above proposal.

Appraisal of the impacts of the proposal and advice

Inner Hebrides and the Minches candidate Special Area of Conservation

The proposal lies within the Inner Hebrides and the Minches candidate Special area of Conservation (cSAC) selected for its harbour porpoise interest. 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 2010 as amended apply. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

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, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required.

We have come to this conclusion because the applicant has stated that they will follow best practice for Acoustic Deterrent Device (ADD) use and will only use an ADD of lower volume (around 179 dB re 1µPa rms) in comparison to some other ADDs on the market (192/193 dB re 1µPa rms). The lower volume means that the area over which harbour porpoise may be

Scottish Natural Heritage, Cameron House, Albany Street, Oban, Argyll PA34 4AE
Tel: 0300 244 9360 www.snh.org.uk

Dualchas Nàdair na h-Alba, Taigh Chamshron, Sràid Albany, An t-Òban, Earra- Ghàidheal PA34 4AE
Fòn: 0300 244 9360 www.snh.org.uk

disturbed or displaced is such that Shuna Sound will not be acoustically blocked to the passage of harbour porpoise.

If you would like any further advice regarding this case please contact Jane Dodd in our Oban office on 0300 2449360 or jane.dodd@snh.gov.uk.

Yours sincerely,



Jane Dodd
Operations Officer – Marine, Argyll and the Outer Hebrides

PLANNING PERMISSION

Reference No: 16/03352/FUL

To:
The Scottish Salmon Company
8 Melville Crescent
Edinburgh
EH3 7JA

Per:
The Scottish Salmon Company
Per: Mr Paul Condy
Marybank Industrial Estate
Isle Of Lewis
HS2 0DB

**Town and Country Planning (Scotland) Act 1997 (As Amended)
Planning Etc. (Scotland) Act 2006**

DECISION NOTICE

**New Atlantic Salmon fish farm comprising 10 x 38m diameter cages in one group (of 5 x 2)
within a 80m grid layout
Site 1525M SE Of 2 Torvaig Portree Loch Portree/Sound Of Raasay**

The Highland Council in exercise of its powers under the above Acts **grants planning permission** for the above development in accordance with the particulars given in the application and the following documents:

Document Type	Document No.	Version No.	Date Received
Site Layout Plan	FIGURE 2		28.10.2016
Site Layout Plan	FIGURE 3		28.10.2016
Location Plan	FIGURE 1		25.07.2016
Site Layout Plan	FIGURE 4		25.07.2016

CONDITIONS AND REASONS

This consent is granted subject to the following conditions and reasons:

1. No deployment or use of any acoustic deterrent device (ADD) shall take place until an ADD Deployment and Usage Plan has been submitted to and approved in writing by the planning authority. This plan shall include the following information;
 - i. full technical details of the sound output of the devices to be used including source level and their operating frequency(s),
 - ii. how many of these devices are to be deployed and in what locations,
 - iii. confirmation that they will only be triggered in the presence of predators - manually or by sensor - and that this triggering will only result in a single finite operation of the device, details of which shall be submitted, with no continuous or auto-intermittent operation possible,
 - iv. confirmation that a log will be kept recording the exact dates when the devices were operated, how often they were operated on that date, for what duration and what the cue for their manual or auto-sensor operation was,
 - v. details of any predation events by seals and any predation measures, including ADD deployment, in use at that time should be logged,
 - vi. details of the person or persons responsible for maintaining the log,

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

- vii. an undertaking that a regular meeting (at least annually) will be held with the Planning Authority and SNH to review the log and the ADD Deployment and Usage Plan and adopt a revised Plan if deemed necessary by the Planning Authority.
No deployment or use of any ADD on the site shall take place unless it is in strict accordance with the provisions of the ADD Deployment and Usage Plan as may be approved.

Reason : In recognition of the legal responsibilities of both the applicant and the planning authority in respect of the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise.

- 2. All surface equipment, with the exception of navigational markers and safety equipment shall be finished in a dark matt neutral colour unless alternative finishes are agreed in advance in writing with the Planning Authority. In particular, the top nets and netting along walkways shall be matt grey. Pipes between the automated feed barge and the cages shall be neatly bundled to minimise clutter and routed below water where it is practical to do so.

Reason : to minimise the visual impact of the installation and to help safeguard the integrity of the Trotternish and Tianavaig Special Landscape Area.

- 3. All lighting above the water surface and not required for safe navigation purposes shall be directed downwards by shielding. It should be extinguished when not required for the purpose for which it has been installed. If lighting is required for security purposes, infra-red lights and cameras should be used.

Reason : to minimise the visual impact of the installation; to ensure that lights left on in the daytime do not draw the eye towards the site and at night do not present unnecessary sources of light pollution

- 4. In the event of equipment falling into disrepair or becoming damaged, adrift, stranded, abandoned or sunk in such a manner as to cause an obstruction or danger to navigation, the site operator shall carry out or make suitable arrangements for the carrying 'out of all measures necessary for lighting, buoying, raising, repairing, moving or destroying, as appropriate any associated obstruction or danger.

Reason : in the interests of amenity and navigational safety

- 5. At least three months prior to cessation of use of the site for fish farming, a scheme for the decommissioning and removal of all equipment shall be submitted to and agreed in writing with the Planning Authority. Upon cessation the approved scheme shall be implemented

Reason : to ensure that decommissioning of the site takes place in an orderly manner and to ensure proper storage and disposal of redundant equipment in the interest of amenity and navigational safety.

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

- 6. Mitigation measures submitted as part of the Environmental Statement shall be fully implemented

Reason : To ensure environmental impacts are satisfactorily mitigated

- 7. Prior to the commencement of development and notwithstanding the information submitted with this application, an Environmental Management Plan (EMP), or similar document, will be submitted to and approved in writing by the Planning Authority and should include adequate details to address how compliance can be assessed. This should also detail triggers/thresholds and associated actions in order to secure that any risk to local wild fish populations is minimised. Upon commencement the development and ongoing operation of the site must be carried out in accordance with the EMP as approved.

The EMP shall be prepared as a single, stand alone document, which shall include the following:

- (1). Sea Lice Management in relation to impact on wild fish
 - a) A method statement for the regular monitoring of local wild fish populations based on available information and/or best practice approaches to sampling;
 - b) details of site specific operational practices that will be carried out following the stocking of the site in order to manage sea lice and minimise the risks to the local wild fish population;
 - c) details of site specific operational practices that will be carried out in order to manage the incidence of sea lice being shed to the wider environment through routine farming operations such as mort removal, harvesting, grading, sea lice bath treatments and well boat operations;
 - d) details of the specification and methodology of a programme for the monitoring, recording, and auditing of sea lice numbers on the farmed fish;
 - e) details of the person or persons responsible for all monitoring activities;
 - f) an undertaking to provide site specific summary trends from the above monitoring to the Planning Authority on a specified, regular basis;
 - g) details of the form in which such summary data will be provided;
 - h) details of how and where raw data obtained from such monitoring will be retained by whom and for how long, and in what form;
 - i) an undertaking to provide such raw data to the Planning Authority on request and to meet with the planning authority at agreed intervals to discuss the data and monitoring results;
 - j) details of the site specific trigger levels for treatment with sea lice medicines. This shall include a specific threshold at which it will be considered necessary to treat on-farm lice during sensitive periods for wild fish;
 - k) details of the site specific criteria that need to be met in order for the treatment to be considered successful;
 - l) details of who will be notified in the event that treatment is not successful;
 - m) details of what action will be taken during a production cycle in the event that a specified number of sea lice treatments are not successful;
 - n) details of what action will be taken during the next and subsequent production cycles in the event that sea lice treatment is not successful.

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

PLANNING PERMISSION

- (2). Escape Management to minimise interaction with wild fish
- a) details of how escapes will be managed during each production cycle;
 - b) details of the counting technology or counting method used for calculating stocking and harvest numbers;
 - c) details of how unexplained losses or escapes of farmed salmon will be notified to the Planning Authority;
 - d) details of an escape prevention plan. This shall include:
 - net strength testing;
 - details of net mesh size;
 - net traceability;
 - system robustness;
 - predator management; and
 - record-keeping methodologies for reporting of risk events. Risk events may include but are not limited to holes, infrastructure issues, handling errors and follow-up of escape events; and
 - e) details of worker training including frequency of such training and the provision of induction training on escape prevention and counting technologies.
- (3). Procedure in event of a breach or potential breach.
- a) A statement of responsibility to "stop the job/activity" if a breach or potential breach of the mitigation / procedures set out in the EMP or legislation occurs. This should include a notification procedure with associated provision for the halt of activities in consultation with the relevant regulatory and consultation authorities in the event that monitoring demonstrates a significant and consequent impact on wild fish populations as a result, direct or otherwise of such a breach.
- (4). Requirement for update and review
- a) The development and operation of the site, shall be carried out in accordance with the approved EMP unless changes to the operation of the site dictate that the EMP requires amendment. In such an eventuality, a revised EMP will require to be submitted to, and approved in writing by the Planning Authority beforehand. In addition, a revised EMP shall be submitted to and approved in writing by the Planning Authority every 5 years, as a minimum, following the start date, to ensure it remains up to date and in line with good practice.

Reason : To ensure that good practice is followed to mitigate the potential impacts of sea lice loading in the marine environment in general and on wild salmonids in particular; in accordance with the Planning Authority's biodiversity duty.

Variations

During the processing of the application the following variations were made to the proposal:

1. An amended Environmental Management Plan (received 02.12.2016) and clearer site layout plans were submitted (28.10.2016), the latter of which showed the site in the context of the applicant's existing adjacent site.

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

Section 75 Obligation

An Obligation in terms of Section 75 of the 1997 Planning Act relates to this development. The terms of the Section 75 Obligation are as follows:

1. None.

IMPORTANT INFORMATIVES

Please read the following informatives and, where necessary, act upon the requirements specified:

REASON FOR DECISION

The proposals accord with the provisions of the Development Plan and there are no material considerations which would warrant refusal of the application.

TIME LIMITS

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.
2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Accordance with Approved Plans & Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

Environmental Impact Assessment

In accordance with Regulation 3 of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, environmental information, in the form of an Environmental Statement, has been taken into consideration in the determination of this application and the granting of planning permission.

Building Regulations

Please note that Building Regulations and/or a Building Warrant may be applicable to some or all of the works described in this decision notice. You must check with the Council's Building Standards service prior to work commencing to establish what compliance or approval is necessary. If a warrant is required, you must not commence work until one has been applied for and issued. For more information, please contact Building Standards at Building.Standards@highland.gov.uk or on 01349 886608.

Land Ownership/Planning Permission

For the avoidance of doubt, the existence of planning permission does not affect or supersede an individual's ownership or other legal rights. Please be advised that this permission does not entitle you to build on, under or over ground outwith your ownership or to enter private ground to demolish, construct or maintain your property.

Accordance with Approved Plans & Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager

RIGHT OF APPEAL

1. If the applicant is aggrieved by the decision to refuse planning permission for, or approval required by a conditions in respect of the proposed development, or to grant permission or approval subject to conditions, the applicant may appeal to the Scottish Ministers under Section 47 of the Town and Country Planning (Scotland) Act 1997 (as amended) within three months from the date of this notice. The notice of appeal should be addressed to:

Directorate for Planning and Environmental Appeals
4 The Courtyard
Callendar Business Park
Callendar Road
Falkirk
FK1 1XR

Appeals can also be lodged online via the ePlanning Portal at:

<https://www.eplanning.scot>

2. If permission to develop land is refused or granted subject to conditions, whether by the planning authority or by the Scottish Ministers, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997 (as amended).

Dated: 13th April 2017

Mark Harvey

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Area Planning Manager



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The Highland Council
Tigh-na-Sgìre
Park Lane
Portree
IV51 9GP

FAO: Shona Turnbull

Date: 28 July 2017

Your ref: 17/02430/FUL

Dear Shona,

Marine Fish Farm - Increase moorings and site area of existing fish farm 14/01595/FUL (no changes to equipment), Ru Chorachan, nr Uig, Isle of Skye Town and Country Planning (Scotland) Act 1997

Thank you for your consultation dated 20 June regarding the above proposal and for the supplementary information we received on 24 July 2017.

Summary

There are natural heritage interests of international importance at this the site, but in our view, these will not be adversely affected by the proposal.

Background

This application is to install longer moorings at an existing marine fish farm. The inshore moorings would extend into the intertidal. All other equipment and details are unchanged.

We responded to application 14/0595/FUL in July 2014. Since that time the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) has been proposed. You requested additional information from the applicant regarding installation of the inshore moorings and the use of Acoustic Deterrent Devices (ADDs) at this site.

Appraisal of the impacts of the proposal and advice

Inner Hebrides and the Minches cSAC

The proposal lies within Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise. 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 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly

known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

In our view, this proposal is likely to have a significant effect on harbour porpoise within the site. Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest.

To help you do this we advise that, in our view, based on the information provided to date, the proposal will not adversely affect the integrity of the site. The appraisal we carried out considered the impact of the proposals on the following factors:

- There is a low risk of entanglement for harbour porpoise from aquaculture infrastructure including the longer moorings.
- There is likely to be some increase in marine noise arising from fixing the inshore moorings. Holes will be hand drilled into the intertidal rock at low tide and the rock pins will be grouted into place. The small scale of the works, drilling being carried out in air on the exposed intertidal and the short duration mean that the level of noise and associated disturbance is unlikely to be significant.
- Use of ADDs at aquaculture sites is one of the activities considered likely to affect harbour porpoise. No changes are proposed to the ADDs that are currently used at this site.
- The applicant is using the Ace Aquactec US3. The noise output characteristics of this device are such that disturbance/displacement of harbour porpoise is possible. However the applicant has committed to using triggered devices so they will not sound continuously. They have also integrated appropriate feedback loops into their predator control measures to ensure that ADD use is minimised.
- We have published a document entitled '*Inner Hebrides and the Minches proposed SAC - Advice to support management*' - <http://www.snh.gov.uk/docs/A1918723.pdf> . This includes the draft conservation objectives and provides an overview of existing activities considered likely to affect harbour porpoise.

You may wish to carry out further appraisal before completing the appropriate assessment. We advise that you consider whether it is necessary to condition the use of ADDs at this site. This may include conditions to ensure that:

- The ADD devices and the way they are used are as described by the applicant. Any changes should be agreed in writing by the Highland Council.
- For each device deployed, a detailed record should be kept by the operator of the cue for deployment, dates when the devices are operating, how often they sound and for what duration. Information should be provided of the noise profile of the devices when they are sounding.
- The use of ADDs should be subject to regular review by the Highland Council, in consultation with SNH. The Highland Council should have the power to amend/restrict the types of devices used and how they are used. This is to allow for implementation of best practice as new devices and research become available.

Other comments

Regarding Ascrib, Isay and Loch Dunvegan SAC we maintain our previous advice that there will be no likely significant effect on common seals.

We advised that Priority Marine Feature (PMF) habitats were unlikely to be present when we reviewed the benthic video footage submitted with the original application. That footage did

not extend throughout the new mooring area. However it is very unlikely that a development of this scale will have any impacts of national importance on PMFs.

This site remains within a White-tailed eagle territory. However this is an existing site and so the birds will be used to activity at the fish farm. There are unlikely to be significant impacts on this pair arising from extending the moorings.

Please let me know if you wish to discuss any aspect of this response.

Yours sincerely,

Alex Turner
Area Officer, Skye and Lochalsh



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Director of Planning and Development
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX

FAO: Shona Turnbull

Your ref: 17/02707/FUL

Date: 6 October 2017

Dear Shona,

TOWN & COUNTRY PLANNING (SCOTLAND) ACT 1997 NEW FISH FARM SITE CONSISTING OF 12 X 120M CIRCUMFERENCE CIRCULAR CAGES PLUS FEED SYSTEM SITE 2130M EAST OF SCONSER QUARRY, SCONSER, ISLE OF SKYE

Thank you for your consultation on the above proposal.

Summary

The proposed development lies within an area of international importance for harbour porpoise. In our view, assuming that the proposed mitigation is implemented, harbour porpoise will not be adversely affected by the proposals. We recommend that you consider whether it is necessary to condition the proposals to ensure this.

Background

The original Environmental Statement and supporting information did not adequately address the points we raised in our EIA scoping response regarding harbour porpoise. We had detailed discussions with the applicant in July 2017 regarding Acoustic Deterrent Devices (ADDs) and their possible usage at the new fish farm site, as well as considering cumulative effects arising from existing ADD use at the adjacent MHS fish farm sites. We updated you on those discussions in an e-mail dated 25 July 2017.

Appraisal of the impacts of the proposal and advice

1. Inner Hebrides and the Minches candidate Special Area of Conservation

The proposal lies within Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise. 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

Scottish Natural Heritage, King's House, The Green, Portree, Isle of Skye, IV51 9BS
Tel: 01478 612625 www.snh.gov.uk

Dualchas Nàdair na h-Alba, Taigh an Rìgh, An Àilean, Port Rìgh, An t-Eilean Sgitheanach, IV51 9BS. Fòn: 01478 612625 www.snh.gov.uk

of Habitats and Species Regulations 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

In our view, this proposal is likely to have a significant effect on harbour porpoise within Inner Hebrides and the Minches cSAC because ADDs are included as part of the range of predator control measures. Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this we advise that, in our view, based on the information provided to date, the proposal will not adversely affect the integrity of the site. The appraisal we carried out considered the following factors:

- An overview of the sightings and modelling data used to inform cSAC selection is available at: <http://www.snh.gov.uk/docs/A1918277.pdf> . This demonstrates that Caol Mor is an important part of the cSAC for harbour porpoise. Caol Mor connects the Inner Sound and Sound of Raasay which both have very high levels of predicted and observed harbour porpoise activity and Caol Mor is likely to be important for animals moving from one part of the cSAC to another.
- A range of alternative predator control measures will be used before ADDs are considered.
- MHS have proposed exclusively using the Ace Aquactec TR1 ADDs at the Sconser Quarry site (if ADDs are required). The scientific trials for this device have not been completed but based on the currently available information we expect this low frequency transducer to have lower impacts on cetaceans than the US3 currently used on adjacent fish farms.
- The ADD deployment guidance indicates that ADDs will not be used constantly: they will only be turned on when stock mortalities attributed to seals occur. Their use will be reviewed daily by the Site Manager and weekly by the Area Manager. They will be switched off promptly when there are no stock mortalities attributed to seals.
- MHS have committed to maintain a record of the ADD used, settings and deployment dates and to make that information available to SNH and THC (although there is no specific commitment to organising regular meetings).
- MHS operate three other fish farms in the Caol Mor area which currently use, or have the option to use, ADDs. In discussion with SNH and as part of their 'cumulative assessment' document they have committed to: operating their Sconser, Cairidh and Maol Ban sites using the same 'ADD deployment guidance' as at Sconser Quarry; logging and reviewing ADD use; using the TR1 device in preference to the US3 in the first instance. Taken together these measures would be likely to reduce the noise output from the existing farms in comparison with previous production cycles.

We recommend that you consider whether it is necessary to impose conditions to achieve the above mitigation. You may wish to carry out further appraisal before completing the appropriate assessment.

Other cetacean species also use the Caol Mor area, particularly Bottlenose dolphin. All cetaceans are European Protected Species. Similar issues regarding disturbance/habitat exclusion apply to those species and effects on them would also be mitigated by the measures outlined above.

2. Landscape

A Landscape and Visual Impact Assessment has been carried out by chartered landscape architects as requested. The supporting information includes an assessment of visibility and a series of photomontages representative of the main sensitive receptors, including those we recommended in our scoping response. They broadly follow our guidance on '*Visualisations for aquaculture*' and are of a reasonable quality.

The consultant's summary of the effects on the individual LVIA components appears plausible and we agree that they have identified the most significant landscape and visual effects.

We requested that the LVIA consider the impacts of the development from Glamaig which lies within the Cuillin Hills National Scenic Area (NSA). The ZTV suggests that the development will be visible from the NE slopes of Glamaig (An Coileach) and a small part of the summit. No photomontage was produced. However, given the restricted visibility and 3-5km distance to the development we advise that the proposal will not have an adverse effect on the integrity of the NSA or the qualities for which it has been designated

The photomontages highlight the difficulty of achieving good alignment for a farm of this size on a curving coastline. The LVIA correctly highlights the cumulative impacts with existing fish farms (especially Maol Ban which is itself prominent from a number of viewpoints) and a likely perception of a fish farming seascape in some locations. However these are not regionally or nationally designated landscapes, and it is for you to weigh up the importance of the issues raised in the LVIA in the context of your own policies.

3. Benthic / Priority Marine Features (PMFs)

Benthic visual surveys were carried out in January 2017. These appear to have reasonable coverage of the predicted depositional footprint. The quality of the video footage is adequate to assess the biotopes present at this site. The seabed comprises mixed sediments with smaller sections of boulder and bedrock. We advise that the proposals do not raise any issues of national interest regarding PMF habitats or species.

Please let me know if you would like clarification or any further advice regarding this case.

Yours sincerely,

Alex Turner
Area Officer, Skye and Lochalsh
alex.turner@snh.gov.uk

From: [Roddy MacMinn](#)
To: [Morag Ferguson \(mferguson@cne-siar.gov.uk\)](mailto:mferguson@cne-siar.gov.uk); planningconsultations-ben@cne-siar.gov.uk
Subject: Mol na Ceanamhoir Modifications - SNH Updated Response - Dec 2017
Date: 12 December 2017 11:43:23
Attachments: Mol na Ceanamhoir Modifications - SNH Updated Response - Dec 2017.pdf

Hi Morag

Please see updated response – I had hoped to discuss this with you last week but was defeated by snow & school closures. Please feel free to give me a call if you'd like to discuss.

With best wishes

Roddy

**Roddy MacMinn | Operations Officer | Scottish Natural Heritage |
32 Francis Street | Stornoway | Isle of Lewis | HS1 2ND | Tel: 01851 705258**

**Ruairidh MacMhèin | Oifigear Obraichean | Dualchas Nàdair na h-Alba
32 Sràid Fhrangain | Steòrnabhagh | Eilean Leòdhais | HS1 2ND | Fòn: 01851 705258**



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Morag Ferguson
Comhairle nan Eilean Siar
Balivanich
BENBECULA
HS7 5LA

Your Ref: 17/00536/FFPA

Our Ref: CNS/MFF/WI/L&H
RM

Date: 12 December 2017

via: planningconsultations-sty@cne-siar.gov.uk

Dear Morag

MODIFICATION TO FISHFARM AT MOL NA CEANAMHOIR, LOCH ODHAIRN, ISLE OF LEWIS. TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

Thank you for your consulting SNH on the above planning application which we received on 25th October 2017. The proposal is to install an additional two 120m circumference cages at the existing marine fishfarm, whilst increasing the maximum stocked biomass from 2285 tonnes to 2800.7 tonnes (+23%). We requested additional information from the Scottish Salmon Company in the form of an ADD Deployment Plan on 28th November.

Summary

The proposal could affect the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its Harbour porpoise interest.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended apply. Consequently, Comhairle nan Eilean Siar is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal).¹

There are natural heritage interests of international importance likely to be effected, but in our view, these will not be adversely affected by the proposal.

Appraisal

In our view, this proposal is likely to have a significant effect on harbour porpoise of the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC). Consequently, Comhairle nan Eilean Siar is required to carry out an appropriate assessment in view of the site's conservation objectives.

To help you do this we advise that, in our view, based on the information provided the proposal will not adversely affect the integrity of the site. The appraisal we carried out considered the impact of the proposals as set out below:

¹ See <https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra> for further information and advice

Scottish Natural Heritage, 32 Francis Street, Stornoway, Isle of Lewis, HS1 2ND
Tel: 01851 705258 Fax: 01851 704900

e-mail: roddy.macminn@snh.gov.uk
www.nature.scot

The draft Conservation Objectives for the site seek to maintain the integrity of the cSAC by ensuring that, among other things, the distribution of harbour porpoise throughout the site is secured by avoiding significant disturbance. The typical frequencies of ADDs are within the hearing range of harbour porpoise which can result in disturbance and/or displacement. In order to determine the impact of the proposal on the site, we asked for a detailed plan that describes their use from The Scottish Salmon Company (TSSC).

TSSC have selected the ACE Aquatec Seal Deterrent System for use at their Mol na Ceanamhoir site in Loch Odhairn. This ADD is triggered manually by the site manager based on a perceived threat to stock on site (if there are seals spotted in close proximity or there is evidence of an increase in fish mortality attributable to seals). Once triggered the ADD will undertake an intermittent 24 hour cycle, before its continued use is reviewed by the site manager. [REDACTED]

[REDACTED] However, given the relatively open topography of the coastline east of Loch Odhairn and the distance of other fishfarm sites likely to be using ADDs, we consider that the disturbance caused will not be significant (in terms of the site's conservation objectives). We would therefore advise that an appropriate assessment could conclude 'no adverse effect on site integrity', provided the deployment plan (as submitted) is adhered to and an accurate log of activity is maintained and made available to the Comhairle and/or SNH upon request. You may wish to carry out further appraisal before completing the appropriate assessment.

I hope you find the above comments useful, however should you wish to discuss the issues raised further, please don't hesitate to contact me.

Yours sincerely

RODDY MACMINN
Operations Officer
Argyll & Outer Hebrides



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Planning and Regulatory Services
Argyll and Bute Council

By email only to: centralvalidationteam@argyll-bute.gov.uk
Cc: Alicia.kerr@argyll-bute.gov.uk

Date: 3 September 2018

Our ref: CDM151650 / A2697075
Your ref: 18/01561/MFF

Dear Sir / Madam,

18/01561/PP - Relocation and enlargement of existing marine fish farm (currently comprising; 12 No. 80 metre circumference cages and feed barge) by re-equipment with 12 No. 120 metre circumference cages and feed barge (Increase in biomass from 600 Tonnes to 2500 Tonnes of Atlantic salmon). East Tarbert Bay, Gigha.
TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

Thank you for your consultation dated the 25^h July 2018 requesting comments on the above proposal.

1. Background

We understand the proposal is to remove all existing cages from the existing fish farm and to install new cages and associated farming equipment approximately 300 m east of original fish farm site. The new site will comprise 12 x 120 m cages held in 65 m x 65 m grid formation and a feeding barge will be installed adjacent to the site. It is also understood that the proposal wishes to increase the maximum standing biomass from 600 tonnes to 2500 tonnes.

The East Tarbert Bay fish farm proposal lies within the Sound of Gigha proposed Special Protection Area (pSPA) selected for its qualifying interest of wintering great northern diver, red-breasted merganser, eider and Slavonian grebe.

SNH previously provided advice on the proposal at Screening / Scoping stage.

2. Summary of Advice

2.1 Protected species. The proposal could affect a nationally important population of a protected species as described in the accompanying confidential Annex A. Note that we either **object to the**

Scottish Natural Heritage, 1 Kilmory Industrial Estate, Lochgilphead, Argyll, PA31 8RR
Tel: 0131 3162690 www.nature.scot

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Fòn: 0131 3162690 www.nature.scot

proposal until the further information we have requested is supplied, and/or we object to the proposal unless conditions are put in place to mitigate the potential impacts on the population. Note the former requested information may negate the need for the latter position. Our advice on this matter can be found in Annex A - Confidential.

2.2 Sound of Gigha proposed Special Protection Area.

This proposal could be progressed with appropriate mitigation. However, because it could affect internationally important natural heritage interests, **we object to this proposal unless it is made subject to conditions so that the works are done strictly in accordance with the mitigation detailed in our appraisal below** (and Annex B).

The relocation of the proposed fish farm will cause a Likely Significant Effect for the designated species of interest as a result of potential effects on mortality, disturbance from vessel movements, displacement of foraging areas and loss or damage to supporting habitat. Therefore, Argyll and Bute Council will be required to undertake an Appropriate Assessment for the Sound of Gigha pSPA. If mitigation procedures, as advised in Annex B, are followed, the magnitude of the effects are predicted to be low, such that we would anticipate that no adverse effect on site integrity is expected following the Appropriate Assessment. Our advice on this issue is contained in Annex B.

2.3 Benthic Impacts / Horse mussel beds Priority Marine Feature habitat. Horse mussels occur in the general area, but we consider it unlikely that this proposal will result in any significant impacts on the national status of the horse mussel beds PMF habitat. We provide our advice on this matter in Annex C.

2.4 Inner Hebrides and the Minches candidate Special Area of Conservation.

This proposal is likely to have a significant effect on the harbour porpoise interest of the site. Consequently, Argyll and Bute Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. In our view, based on the information provided, the proposal will not adversely affect the integrity of the site. We provide our advice on this matter in Annex D.

2.5 We accept the findings of the Landscape and Visual Impact Assessment.

If you have any queries regarding this advice, please contact Stan Phillips at our Lochgilphead office, contact details as per our address or telephone number at the foot of the first page.

Yours sincerely,

[by email]

David MacLennan
Area Manager
Argyll and Outer Hebrides

Annex A – Confidential

Please see separate confidential document.

Annex B – Sound of Gigha proposed Special Protection Area.

The East Tarbert Bay fish farm proposal lies within the Sound of Gigha proposed Special Protection Area (pSPA) selected for its qualifying interest of wintering great northern diver, red-breasted merganser, eider and Slavonian grebe.

Background

This is a request for advice on an Environmental Impact assessment Report (EIAR) to relocate and enlarge an existing marine fish farm from 12 x 25.5m cages arranged within a 50m grid to 12 x 38m cages arranged within a 65m grid, 280m east of the current location.

The total proposed increase in moorings area is 188,372m². Installation of a feed barge is also proposed to be installed at the relocated site, which is predicted to decrease boat traffic to and from the site as well as potentially lessening the amount of excess feed reaching the seabed. The fishfarm will be active 22 months out of every 24.

Decommissioning of the old site is expected to take 7-10 days. Installation of the relocated site is expected to take a further 7-10 days. The developer intends these activities to take place between June and August.

SNH position

In our view, this proposal is likely to have a significant effect on the wintering great northern diver, red-breasted merganser, eider and Slavonian grebe populations of the Sound of Gigha proposed Special Protection Area. Consequently, Argyll and Bute Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest(s). To help you do this, we advise that in our view on the basis of the appraisal carried out to date, if the proposal is undertaken strictly in accordance with the following mitigation, then the proposal will not adversely affect the integrity of the site:

- **Gillnets are NOT used as a method for recovering escaped fish, as proposed in the EIAR, when wintering birds are present** (mid-August-mid-May; the period which encompasses all qualifying species).
- **No anti-predator nets to be used.**
- **The proposed decommissioning and installation timing of between June and August is adhered to.**
- **The code of conduct laid out in the Table 32 of the EIAR for boat movements should be strictly adhered to.**

The appraisal we carried out considered the impact of the proposals as outlined below.

Consequently, **we object to this proposal unless it is made subject to conditions** which address the issues above.

Summary

The relocation of the fishfarm will cause a Likely Significant Effect (LSE) for the designated species of interest as a result of potential effects on mortality, disturbance from vessel movements, displacement of foraging areas and loss or damage to supporting habitat. Therefore, **an Appropriate Assessment will be required from Argyll and Bute Council for the Sound of Gigha pSPA.**

The magnitude of the effects are predicted to be low providing strict mitigation and best practice procedures are followed, such that we would anticipate that no adverse effect on site integrity is expected following the Appropriate Assessment. However, no cumulative assessments for designated species of interest were carried out for the EIAR: this will need to be considered within the AA, and may change the outcome of predicted no Adverse Effect on Site Integrity.

It is recommended that gillnets are NOT used as a method for recovering escaped fish, as proposed in the EIAR, when wintering birds are present (mid-August-mid-May; the period which encompasses all qualifying species). Nor should any anti-predator nets be used. The daily checking of net tensions to mitigate against bird entanglements is welcomed. Any instances of entanglement should be reported immediately to SNH.

It is also **recommended that their proposed decommissioning and installation timing of between June and August is adhered to**, to avoid the non-breeding timings of the qualifying species of interest. However, the developer is to note that eiders are in moult from mid-June to October, and so are less able to move away from vessels during this period. The best practice procedures laid out for vessel movements and also for ensuring strict water quality procedures are welcomed.

Summary table

Protected site	Potential effect	Species	Likely Significant effect?	Predicted Adverse Impact on Site Integrity?
Sound of Gigha pSPA	Mortality	Great-northern diver Common eider Red-breasted merganser Slavonian grebe	YES	NO, provided mitigation followed.
	Disturbance from vessel movements	Great-northern diver Common eider Red-breasted merganser Slavonian grebe	YES	NO, provided boat-based practices followed.
	Displacement from foraging areas	Great-northern diver Common eider Red-breasted merganser Slavonian grebe	YES	NO
	Loss or damage to supporting habitat	Great-northern diver Common eider Red-breasted merganser Slavonian grebe	YES	NO, provided mitigation followed but requires cumulative assessment to ascertain if combined effects would cause AESI.

Appraisal of protected site and qualifying features

The Sound of Gigha proposed Special Protection Area (pSPA) selected for its qualifying interest of wintering great northern diver, red-breasted merganser, eider and slavonian grebe.

Qualifying species:

Great northern diver: non-breeding season is October to mid-May (inclusive). Sound of Gigha pSPA supports the second largest aggregation of non-breeding great northern divers in Scotland. The proposed area for the relocation of the fish farm is within the greatest density of great northern divers (SNH, 2016).

Common eider: non-breeding season is September to mid-April, with moult taking place for eider between mid-June to October. The proposed area for the relocation of the fish farm is within the greatest density of eiders (SNH, 2016).

Red-breasted mergansers: non-breeding season is mid-August to March (inclusive). Distribution of red-breasted mergansers is low in the proposed fish farm location (SNH, 2016).

Slavonian grebe: non-breeding season is mid-September to April (inclusive). Slavonian grebes were an additional species following the original site selection documentation. Slavonian grebe numbers are found in large numbers in the region near the fish farm.

Potential impacts:

Overall approach:

The developer's appraisal on ornithological species of interest is summarised in Table 31 of the EIAR. The EIAR has assessed that no Likely Significant Effects are present for any of the qualifying features of the pSPA for any of the potential effects. We disagree with this assessment and would advise that Likely Significant Effect is a more precautionary concept than how it has been assessed in the EIAR.

Mortality through entanglement

Operation

Bird nets: mesh sizes given in the supporting document uses 25mm mesh for bottom of walls, 100mm mesh for top 3m of wall and top section to have mesh of 300mm. Bird and cage netting daily checks for tensioning and high site husbandry standards, as stated in the EIAR, are welcomed and are necessary in order to mitigate potential entanglement effects. An email from the developer on 13th August 2018 stated that *"There have been no incidences of recorded bird entanglement associated with operations at the existing East Tarbet site"*. Whilst the current fish farm set up have stated that no known mortality incidences have occurred as a result of their mitigation, recent guidance indicates that we cannot necessarily accept mitigation as a means to avoid Likely Significant effects. Procedures on daily net checks and monitoring should continue, as should reporting to SNH should any entanglement event occur.

The suggested use of gillnets as a way of recapturing escaped fish is contrary to the recommended management measure for the new pSPA which states:

Prohibiting the use of set (gill) nets for capture of farm fish in the event of escape is recommended.

<https://www.nature.scot/sites/default/files/2017-12/Marine%20Protected%20Area%20%28Proposed%29%20-%20Advice%20to%20support%20management%20-%20Sound%20of%20Gigha.pdf>

We therefore recommend that **no gill nets are to be used in the event of escaped fish when wintering birds are present** (mid-August-mid-May; the period which encompasses all qualifying species).

Furthermore, in the Predator Control Plan it is stated that the use of anti-predator nets is not common practice for The Scottish Salmon Company. It should be reiterated that **anti-predator nets should not be used in this proposal**.

Due to the fact no entanglements have been recorded for the current fish farm, it is unlikely that there will be mortality through entanglement to such a level which would cause *significant* mortality to the qualifying features, as stated in the conservation objectives. Therefore, we would anticipate that no adverse effect on site integrity would be concluded following an appropriate assessment due to mortality. However, this should be reviewed if any future mortality events occur, following the relocation of the fish farm.

Disturbance from vessel movements

Red-breasted merganser and Slavonian grebes are classified as having a very high sensitivity to vessel movements, great northern diver is classified as high, and common eider as medium (Jarett *et al.* 2018).

The EIAR notes that great northern divers and eiders have been seen around the site but red-breasted mergansers have not been recorded (Table 32, page 46). Slavonian grebes were not mentioned. The distribution maps recorded in the Sound of Gigha pSPA site selection documentation demonstrates that the fish farm is in the densest area of the pSPA for eiders and great-northern divers, but in a low density area for red-breasted mergansers (SNH, 2016). Shore-based counts show that Slavonian grebes are in large numbers in the area close to the proposed fish farm location (mean of 15.7 birds over 18 winter surveys between 2008-2013). The EIAR also notes that “there does not appear to have been any significant impact, in terms of disturbance, of the qualifying species of the SPA”, but no indication as to how this has been quantified has been given.

Installation

The greatest disturbance is likely to occur during the decommissioning of the old fish farm and the installation of the new fish farm. The developer intends to carry this out between June and August to avoid the non-breeding periods of the qualifying species. This is welcomed, although it should be noted that eiders start to moult from mid-June onwards and are less able to move away from disturbance in this period. **The code of conduct laid out in the Table 32 for boat movements should be strictly adhered to.**

Operation

No additional increase in boat journeys are predicted: 2 trips per day to and from the site using a Polarcirkel work boat or RIB is expected. As the relocated fish farm is proposed to be further from the shore than its current location, the boat journeys will take marginally longer than before, but probably not notably so. We welcome the use of best practice procedures as laid out in Table 32 and would ensure that that is implemented into the management of the site.

Again, there is the potential for disturbance to occur, particularly for those species with high overlapping distributions (great northern diver and eider) during the operation of the fish farm. All species are predicted to be sensitive to disturbance caused by vessel activity, which could cause displacement from areas used for foraging, moult and shelter. Therefore, Likely Significant Effects are predicted for all species. However, there is not expected to be *significant* disturbance of the features so that the distribution of the species and ability to use the site is compromised. Therefore, we would anticipate that no adverse effect on site integrity would be concluded following an appropriate assessment due to vessel noise, provided best practice measures are implemented. It is welcomed that the route of any larger vessels servicing the proposed East Tarbet site will be similar to the current route and that measures will be taken to avoid any roosting sites of divers, eiders, or Slavonian grebes.

Displacement from foraging areas

Operation

The EIAR assessed the availability of the area that will be now limited to birds as being 0.052%, but this calculation was based on the entirety of the Sound of Gigha pSPA area which is not a true representation of the amount of area available to the qualifying species. The birds will to some extent be accustomed to where the current fish farm is, so may be displaced as a result of the relocation.

The depth profile from Figure 2 suggests that the fish farm footprint will be in water depths of between 10-50m, with the cages themselves being lowered to 10m within water of 50m depth. Great northern divers are capable of diving to depths in excess of 60m, whereas eiders and red breasted mergansers are more likely to feed at depths not exceeding 15m (SNH, 2016), and Slavonian grebes up to 25m depth (Furness *et al.* 2012). Red-breasted merganser distribution is low and none have previously been recorded in the site. Great northern divers and eiders are known to be in the area and therefore there is the potential for them to be displaced. Slavonian grebes are recorded in greatest densities to the east of the proposed site and are also have the potential to be displaced. The qualifying species will be feeding on a variety of fish but also on crustaceans and molluscs. As it is a relatively small area that they will be displaced from in relation to the entirety of the pSPA, it is unlikely to compromise the conservation objectives. Therefore, we would anticipate that no adverse effect on site integrity would be concluded following an appropriate assessment due to displacement during the operation of the fish farm.

Loss or damage to supporting habitats

The benthic habitat survey carried out as part of this proposal revealed burrowed mud, a potential horse mussel bed and muddy sand, all of which are high quality environments for diving birds. The increase of moorings area with the expansion of the fish farm is 188,372m².

Installation

The area of the horse mussel bed, if within the diving depths of the eiders, would be a potential foraging area for them. Depending on the anchoring set up of the fish farm this area could become damaged, which would reduce this food resource for the eiders in particular. From the benthic survey it appears this horse mussel bed has already been disturbed by fishing activity in the area, and it is not known how important this horse mussel bed is for the eiders.

Operation

Loss or damage to supporting habitat can occur due to organic waste from excess feed and farmed fish faeces is released into the environment. With the introduction of an automated feed system from the new feeding barge, it has been predicted that there will be less waste feed reaching the seabed. This potentially means the supporting habitat will not be as affected as much as the current set up. The EIAR also notes that the hydrographic conditions at the site means the dilution and dispersion of nutrients occurs within the water column. Mitigation measures are being put in place to minimise waste, and this is welcomed.

Damage to the habitat can also occur due to chemicals used in the treatment of the farmed fish. The developer intends to use emamectin benzoate or EMBZ. This chemical has been known to reduce crustacean abundance, which could have implications for the birds feeding on them. It is also a known neurotoxin to birds. It is the remit of SEPA to assess the potential effects of these chemicals on the surrounding environment and to ensure that measures are in place to minimise their effects.

There is a potential to affect the habitat. However, due to the relatively small area of the fish farm in relation to the overall pSPA, we would anticipate that no adverse effect on site integrity would be concluded following an appropriate assessment, provided mitigation procedures are strictly adhered to and following SEPA's own assessment on water quality and environmental effects of the fish farm.

Cumulative effects:

The EIAR did not take into consideration the cumulative effects of nearby fish farms in relation to potential effects on the qualifying species; it was only taken into consideration in relation to water quality (page 32). There is another fish farm less than 1km from the proposed new location and so there is the potential for a combined effect of disturbance and displacement from foraging areas. As the existing fish farm is also close to the additional SSC Druimyeon Bay site, there is not expected to be much change from the existing set up in terms of cumulative effects. Therefore, though Likely Significant Effects are predicted for all species, there is not expected to be such significant further impacts on the features that the site is compromised, provided the mitigation measures outlined above are implemented. Therefore, we would anticipate that no adverse effect on site integrity would be concluded following an appropriate assessment due to cumulative effects, **provided the mitigation measures outlined above are implemented.**

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Jarrett, D., Cook, A. S. C. P., Woodward, I., Ross, K., Horswill, C., Dadam, D. and Humphreys, E.M. (2018) Short-Term Behavioural Responses of Wintering Waterbirds to Marine Activity (CR/2015/17) Scottish Marine and Freshwater Science Vol 9 No 7 <https://data.marine.gov.scot/sites/default/files//SMFS%200907.pdf>

SNH (2016) Sound of Gigha Site Selection Documentation. <https://www.nature.scot/sound-gigha-proposed-marine-spa-supporting-documents>

Annex C – Benthic Impacts - Horse mussel beds Priority Marine Feature habitat.

Benthic Impacts

The majority of the benthos directly beneath the site consists of mud habitat, some of which may represent the PMF habitat, Burrowed Mud. However, this is not a high quality example of the habitat. Due to the widespread distribution of this PMF in Argyll, including areas of much higher quality habitat, we do not consider any potential impacts as a result of this proposal to be of regional or even local significance.

Areas of horse mussel were identified to the north of the proposal. These largely consisted of aggregations of horse mussels forming scattered clumps. We disagree with the survey report, which states that the horse mussels present would not be considered as a bed. We define [horse mussel beds](#) as being formed from clumps of horse mussels and shells covering more than 30% of the seabed over an area of at least 5 m x 5 m. Some of the areas identified in the survey appear as though they may meet this criteria and would therefore represent areas of the PMF habitat, horse mussel beds. This is supported in the seabed survey report which identifies many locations as having over 30% cover (some locations consist of 100% cover). Table 11 of the seabed survey report estimates the average cover of each transect and the average cover of the entire survey area. These figures range between 4.54-7.66% which is well below the 30% cover required for the habitat to be classified as a bed. However, these figures are misleading as they are estimates of average cover over the entire area, including areas where no horse mussels are present. If these figures are correct they may demonstrate that the entire area does not consist of a horse mussel bed. However, they do not demonstrate that no areas of horse mussel bed are present in the survey area. Contrary to this the survey report presents information which indicates that some areas of the horse mussels present may well in fact represent areas of horse mussel bed.

The benthic modelling report for this proposed expansion / relocation indicates that the vast majority (>99%) of the waste will be exported out with the modelled domain and will be dispersed widely before being deposited on the seabed. As such the benthic footprint for the proposal is very small and is restricted to within the direct footprint of the cages.

The information provided in the EIAR documentation does not provide a very clear representation of the areas of horse mussel in relation to the fish farm cages or AZE. However, using what information is available I estimate the closest horse mussel record to be approximately 80-100m from the closest cage edge. The occurrence and density of horse mussels generally increases with distance from the proposed development location, with the denser areas appearing to occur mostly beyond approx. 150m from the cage edge.

Horse mussels are considered to be sensitive to the pressures associated with finfish aquaculture. However, the energetic nature of this location is predicted to result in a very limited benthic footprint. The vast majority of waste is predicted to be transported out with the modelled domain and subsequently dispersed widely within and beyond the Sound of Gigha. The residual current runs in a south / south easterly direction and therefore much of the waste is likely to be transported away from the horse mussel records. In addition, the closest Horse mussels are positioned approx. 80-100m from cage edge with the density and occurrence generally increasing with distance from the proposed development. Taking these factors in to account we can consider the risk of any significant impacts occurring on any areas of horse mussel bed to be low. It is therefore unlikely that this proposal will result in any significant impacts on the national status of the horse mussel beds PMF habitat.

However, we note that it would appear as though the moorings could overlap with the most southerly records of horse mussels. This area appears to consist of fewer, less dense records of horse mussels and it is likely to be possible to avoid impacting these areas through the placement of moorings by using drop down video to microsite the moorings to avoid any areas of horse mussel.

Annex D – Inner Hebrides and the Minches candidate Special Area of Conservation.

The East Tarbert Bay fish farm proposal lies close to the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its qualifying interest, harbour porpoise.

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, Argyll and Bute Council is required to consider the effect of the proposal on the cSAC 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>).

There are natural heritage interests of international importance on the site, but in our view, these will not be adversely affected by the proposal.

In our view, this proposal is likely to have a significant effect on the harbour porpoise interest of the site. Consequently, Argyll and Bute Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest.

To help you do this we advise that, in our view, based on the information provided, the proposal will not adversely affect the integrity of the site. The appraisal we carried out considered the impact of the proposals on the following factors:

Risk of entanglement in cage nets and / or secondary predator nets

We are not aware of any cases of harbour porpoise becoming entangled in nets associated with the fish farming industry in Scotland. Therefore entanglement with cage nets or anti-predator nets is not considered to be a significant risk and we do not consider there to be a likely significant effect.

Risk of disturbance / exclusion of harbour porpoise as a result of the use of ADDs

The proposed fish farm site is located outside the cSAC and will only impact on the periphery of the southern boundary. The proposal itself is located within Gigha Sound, approximately 1 km from the boundary of the cSAC. However, the area of the cSAC which could be impacted by the use of ADDs is open and unconstrained in nature and is not considered to be at high risk of cumulative impacts. However, the sound frequencies emitted from the ADDs proposed at this site will extend to within the boundary of the cSAC. Harbour porpoise are known to be sensitive to the frequencies of sound that are emitted by most 'standard frequency' ADD devices. On this basis we conclude that the use of ADDs at this proposed has potential to result in the disturbance of harbour porpoise within the cSAC.

If ADDs are to be activated continuously, whilst the farm is stocked, then this could result in a significant disturbance and a long term exclusion of harbour porpoise from an area within the cSAC. However, in this instance, the applicant has submitted a detailed ADD deployment plan. The plan outlines an appropriate decision making process that will ensure that ADDs are not activated continuously. Instead, if they are required, they will be activated and deactivated in response to the identification of fish mortalities that can be attributed to seal predation. In doing so this will ensure that ADDs will not be activated continuously, over a long term period. We conclude that this will avoid the risk of resulting in any significant disturbance to the harbour porpoise feature of the cSAC.

In addition, the applicant has committed to keeping a record of ADD use at this site. This will ensure Argyll and Bute Council has a mechanism to review the use of ADDs at this site in the future.

In summary, provided the mitigation outlined in the ADD deployment plan is adhered to, we conclude that this proposal will not result in any adverse effect on the integrity of the Inner Hebrides and Minches cSAC.



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Director of Planning and Development
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX

FAO: Shona Turnbull

Your ref: 17/04735/FUL

Date: 12 January 2018

Dear Shona,

TOWN & COUNTRY PLANNING (SCOTLAND) ACT 1997 NEW FISH FARM SITE - 12 X 120M CIRCUMFERENCE CIRCULAR PLUS FEED BARGE INVERTOTE, TROTTERNISH, ISLE OF SKYE

Thank you for your consultation on the above proposal.

Summary

- The proposed development lies within an area of international importance for harbour porpoise. In our view, assuming that the proposed mitigation is implemented, harbour porpoise will not be adversely affected by the proposals. We recommend that you consider whether it is necessary to condition the proposals to achieve this.
- The proposal is likely to affect a number of Priority Marine Features (PMFs). Significant impacts on Northern sea fan communities are likely at a regional scale, but would not impact upon the national status of the PMF. Moving the cages north would reduce these impacts.
- The visibility and landscape impacts of the development will be restricted in extent, particularly when viewed from the land. However there will be significant landscape impacts in localised areas which are likely to erode some of the special qualities of the Trotternish and Tianavaig Special Landscape Area.
- The effects of sea lice on wild salmonid populations and associated species should also be considered.
- This proposal will not affect the favourable conservation status of white-tailed eagles on Skye.

It is for you to determine, within the context of its own policies, whether conditions are necessary to secure the mitigation set out below.

Scottish Natural Heritage, King's House, The Green, Portree, Isle of Skye, IV51 9BS
Tel: 01478 612625 www.snh.gov.uk

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Background

We provided pre-application advice on this proposal in March 2017 and EIA scoping advice in June 2017.

Appraisal of the impacts of the proposal and advice

1. Inner Hebrides and the Minches candidate Special Area of Conservation

The proposal lies within Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise. 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 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

In our view, this proposal is likely to have a significant effect on harbour porpoise within Inner Hebrides and the Minches cSAC because Acoustic Deterrent Devices (ADDs) are included as part of the range of predator control measures. These may disturb harbour porpoise. Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this we advise that, in our view, **based on the information provided to date, the proposal will not adversely affect the integrity of the site**. The appraisal we carried out considered the following factors:

- Sound of Raasay is wide at this point (~8km) and opens into the Minch to the North. Most of the Sound of Raasay has similarly high levels of predicted and observed harbour porpoise activity. The modelling and effort-corrected observational data suggests that the area around Invertote is of similar importance to other parts of the cSAC.
- A range of measures will be implemented to reduce the chances of seal attacks including seal blinds, maintenance of net tension, regular removal of morts and lower salmon stocking densities (than is standard practice on non-organic farms).
- Annexes 2B (*Statement on the use of ADDs*) and Annex 2C (*Containment and Escapes Contingency*) provide details on ADD usage. This includes measures to ensure that ADDs are only activated in the event of a significant seal predation event, will not sound continuously, and will be switched off promptly.
 - ADDs will only be switched on if >50 fish are killed due to seal predation and then only if it is the second such event within the last 5-7 days. ADDs will be used for a maximum of 14 days with a minimum of 7 days between usage periods.
 - When in use the ADDs will not sound continuously. The intention is for the ADDs to be triggered by the panic reaction of the fish but there is doubt as to whether this will work with the lower stocking

densities proposed. In the event that it does not the devices will be set to sound intermittently/randomly.

- They also plan to switch off the ADDs at night (between 6pm-8am).
- The source level quoted for the proposed ADD is also lower than other devices.
- They propose to deploy hydrophones to record cetaceans in the vicinity of the farm. It would be helpful to clarify if this data will be recorded all of the time or only when ADDs are activated. The latter scenario would be less useful because the ADDs may well displace cetaceans further than the range of the hydrophones.
- The developer has committed to keeping a log of ADD use and to make this available to THC and SNH on timescales to be defined by THC.
- The proposed Invertote and Culnacnoc fish farm sites are sufficiently close that cumulative impacts may occur if ADDs were in use at both farms at the same time. However, given the above mitigation measures we do not consider this to be a major factor in the overall assessment.

We recommend that you consider whether it is necessary to impose conditions to achieve the above mitigation. You may wish to carry out further appraisal before completing the appropriate assessment.

Other cetacean species have also been recorded in the wider area. In particular there are above average densities of bottlenose dolphin (year round) and minke whale (during the summer months). All cetaceans are European Protected Species. Similar issues regarding disturbance/habitat exclusion apply to those species and effects on them would also be mitigated by the measures outlined above.

2. River Kerry Special Area of Conservation (SAC)

The Invertote site lies 33km from River Kerry SAC (in Wester Ross) which is designated for Freshwater Pearl Mussel (FWPM). FWPM populations require healthy juvenile salmonid populations to complete their life cycle. We have considered the potential impacts of sea lice from this proposal (in combination with the Invertote fish farm proposals and other existing farms) on the SAC

In our view there is **unlikely to be a significant effect on the SAC** in this case because:

- Two surveys have indicated that the pearl mussel population uses both salmon and trout as the host for the larval stage. However, salmon is the principal and disproportionately the most important host.
- Recent survey results in the Kerry suggest that fish densities were sufficient to support recruitment.
- The salmon post smolts (the most vulnerable life stage) arising from the Kerry will tend to head out to sea as they emigrate towards the North Atlantic/Norwegian Sea. As such, they would not be expected to interact with sea lice emanating from the proposed farm locations.

3. Shiant Isles Special Protection Area (SPA)

The proposed fish farm is approximately 35km from the Shiant Isles SPA which is classified for a range of breeding seabirds including fulmar, common guillemot, puffin, kittiwake, razorbill and shag. The fish farm is within foraging distances of a number of these species. In our view there is **unlikely to be a significant effect on the SAC** in this case because:

- This site is not of particular importance for these species;
- Mitigation measures have been included to reduce the risk of entanglement, including well tensioned nets and avoiding the use of secondary anti-predator nets.

The ES refers to the use of '*an appropriate mesh size*' for the top nets to avoid entanglement but does not specify a specific size.

4. Landscape

A Landscape and Visual Impact Assessment has been carried out by a chartered landscape architect as requested. The methodology follows the relevant guidance, our scoping advice and reflects pre-application discussions. The resulting assessment is systematic, thorough and well balanced. The visualisations are of good quality and the use of buoys in the water to define the edges of the farm gives us confidence that they are accurate.

a. Trotternish National Scenic Area (NSA)

The Invertote fish farm site lies approximately 3-4km south of the NSA. The proposals would have very limited visibility from within the NSA. Our advice is that the proposal will not have an adverse effect on the integrity of the NSA or the qualities for which it has been designated, either alone or in combination with the Culnacnoc proposals.

b. Trotternish and Tianavaig Special Landscape Area (SLA)

The site lies within Trotternish and Tianavaig SLA which is of regional landscape importance and is protected via the Local Development Plan.

We agree with the overall conclusion of the LVIA (17.13) that *'the area of the proposed development is one of high sensitivity, in both character and visual amenity, and although proposals have been developed with sensitivity in design and siting, this LVIA recognises that levels of significance are high, with potential to erode the special landscape characteristics and particular views of the area. However, it is also to be noted that the scope of the areas affected is restricted, minimising impact upon the area as a whole and containing effects to selected sites'*.

Sites/zones where significant levels of landscape and visual impact have been identified include:

- Coastal landscape and seascape character –
 - The development would *'interrupt the uncluttered, undeveloped coastline, creating a focal point within the broad sweeping vistas of the Sound. However, when viewed from within the seascape, the proposals would be mitigated by the scale of the view and the height*

of cliffs which create a regularity of backdrop and shadowing effect to the shoreline' (13.6 & Table 9)

- *And: 'Introduction of built structures into the otherwise unspoilt seascape will adversely affect the wild character'* (13.7 & Table 9).
- *This includes effects on the SLA Special Qualities 'in particular, views of the coast....and potential to impinge on the natural arches found within the coastline at Invertote'*
- *The cumulative assessment concludes that the combined effect of Invertote and Culnacnoc fish farms would result in 'an extension of the area affected rather than an increase in the significance levels'* (15.4).

- Visual

- We agree that the most significant visual impacts are likely to be from the A855 layby, close to the site (VP1). Viewed from here the *'Sweeping nature of the view will be affected, as cage group will create a focal point, interrupting the open seascape and drawing the viewers eye to the man made structures within the natural scene'* (14.7). We also agree that the immediate surroundings of the layby and parallel alignment of the cages with a linear stretch of coastline would mitigate these effects.

Cumulative effects with Culnacnoc are described as creating a *'zone of infrastructure within the seascape...with misalignment further drawing attention. However, as part of a much larger panorama, development sites remain a feature within the view rather than a dominant form'* (15.6).

- Careful siting of the two farms either side of Invertote/Lealt Gorge (VP3) means that only a small part of each farm would be visible on the edge of a wide panorama. Both farms would not be seen simultaneously due to the wide angle of the view.
- From Rubha nam Brathairean (VP5), Invertote would form a distant element in the view to the south and would not significantly increase the effect of the Culnacnoc site alone.
- From the Storr (VP6) each farm would form a distant feature within the broader view. We agree that they do not fall within the key parts of this view.

The LVIA does a good job teasing out the specific landscape and visual impacts but **it is for you to decide how much weight you attach to the significant but localised impacts in the context of your own policies.**

5. Benthic / Priority Marine Features (PMFs)

Benthic grab sample and visual surveys were carried out in March and April 2017. These appear to follow the relevant guidance and have reasonable coverage of the predicted depositional footprint. The quality of the video footage is adequate to assess the biotopes present.

The seabed comprises primarily sandy sediments in the shallows. We agree with the visual survey report that the habitats observed at the start of transects 2 and 3

are likely to be sand and shell sand rather than **maerl** (similar pixelation artefacts have been seen at other sites).

As the depth increases to around 40m (the offshore ends of transects 2 & 3 and the northern part of transect 1) the substrate becomes increasingly muddy and much of this habitat would be classified as **burrowed mud**, which is a PMF. Many of the typical species such as *Nephrops norvegicus* are present, but sea pens were rare (only two *Virgularia mirabilis* were seen). A single fireworks anemone (*Pachycerianthus multiplicatus*) was also recorded. This type of habitat is widespread in Scotland and the **proposals do not raise any issues of national interest for this PMF habitat.**

Ocean quahog (*Arctica islandica*) is another PMF that is present (probably at low density) in areas of suitable habitat at the proposed site. Two individuals were recorded in the grab samples, one in the centre of the site and the second in one of the 300m N samples. The **proposals do not raise any issues of national interest regarding this PMF species.**

The southern end of the site has boulders interspersed with finer sediments. **Northern sea-fan and sponge communities** PMF is present at the start of transect 1 (section 1). There is 67mins of footage along transect 1 and the PMF is present for the first 23mins of this, though decreasing in quality and abundance over the course of that time. Abundances of Northern sea-fan (*Swiftia pallida*) are Frequent at the start of the footage, this gradually decreases to Occasional / Rare at the end of the 23min with no cup coral *Caryophyllia smithii* and ascidians rare by the end. This reflects a reduction in suitable substrate with a transition to a mud habitat.

The substrate consists of sedimented cobbles/boulders on mud rather than bedrock/boulders which is more typical for this PMF. Other species present within this habitat include, hydroids and ascidians including *Diazona violacea* and erect bryozoans and sponges with some *Caryophyllia* identified.

The PMF habitat Northern Sea Fan and Sponge Communities is considered to have a high sensitivity to organic enrichment and siltation, both of which are associated with aquaculture. In addition, *Swiftia* is a passive suspension feeder, catching food on a filter held into flowing water. Siltation, associated with high levels of suspended sediments, will inhibit the ability of *Swiftia* to feed. *Swiftia* is likely to be tolerant of a degree of suspended sediment and siltation, and this is evidenced by its presence on some areas of reef habitat covered with a fine layer of silt. However, in our opinion *Swiftia* is unlikely to be able to tolerate the levels of increased suspended sediment and siltation that are associated with the scale of aquaculture that is proposed at this location.

Northern sea fan and sponge communities are of global importance with all British records in Scotland where they are considered scarce. They are in decline or under threat of decline and are functionally important due to high diversity within these habitats.

Although this is a good example of the PMF it only occurs at one end of the proposed development and *Swiftia* abundance (recorded as Frequent to Rare) is lower than some other examples of the feature (densities of sponges, bryozoans and ascidians are also lower). **We therefore advise that this area of PMF would not be regarded as being of national interest.**

We advise that **potential impacts could be mitigated by micro-siting the development as far to the north of the existing planning boundary as is possible**. This would help reduce the extent and severity of any impacts on the area of habitat which is located at the south end of the development area. However the effects of this change would also need to be considered against other non-benthic interests (e.g. landscape).

Black guillemot (also a PMF) breed along the adjacent coastline and are likely to forage in the area. Although they can forage in water up to 50m deep they generally prefer water less than 30m deep. There is also some information which suggests an association with sub-littoral kelp beds. The fish farm is proposed in waters >40m depth and kelp beds were not seen in the benthic visual footage. We advise that these **proposals do not raise any issues of national interest regarding this PMF species**.

Please let me know if you would like clarification or any further advice regarding this case.

Yours sincerely,

Alex Turner
Area Officer, Skye and Lochalsh
alex.turner@snh.gov.uk



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Director of Planning and Development
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX

FAO: Shona Turnbull

Your ref: 17/04749/FUL

Date: 15 January 2018

Dear Shona,

TOWN & COUNTRY PLANNING (SCOTLAND) ACT 1997 NEW FISH FARM SITE - 12 X 120M CIRCUMFERENCE CIRCULAR CAGES IN 80M X 80M GRID PLUS FEED BARGE CULNACNOG, TROTTERNISH, ISLE OF SKYE

Thank you for your consultation on the above proposal.

Summary

- The proposed development lies within an area of international importance for harbour porpoise. In our view, assuming that the proposed mitigation is implemented, harbour porpoise will not be adversely affected by the proposals. We recommend that you consider whether it is necessary to condition the proposals to achieve this.
- The visibility and landscape impacts of the development will be restricted in extent, particularly when viewed from the land. However there will be significant landscape impacts in localised areas which are likely to erode some of the special qualities of the Trotternish and Tianavaig Special Landscape Area. The most significant visual impacts are likely to be experienced at Rubha nam Brathairean.
- A number of Priority Marine Features (PMFs) are present at this site but significant impacts are unlikely.
- The effects of sea lice on wild salmonid populations and associated species should also be considered.

It is for you to determine, within the context of its own policies, whether conditions are necessary to secure the mitigation set out below.

Background

We provided pre-application advice on this proposal in March 2017 and EIA scoping advice in June 2017.

Scottish Natural Heritage, King's House, The Green, Portree, Isle of Skye, IV51 9BS
Tel: 01478 612625 www.snh.gov.uk

Dualchas Nàdair na h-Alba, Taigh an Rìgh, An Àilean, Port Rìgh, An t-Eilean Sgitheanach, IV51 9BS. Fòn: 01478 612625 www.snh.gov.uk

Appraisal of the impacts of the proposal and advice

1. Inner Hebrides and the Minches candidate Special Area of Conservation

The proposal lies within Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise. 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 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

In our view, this proposal is likely to have a significant effect on harbour porpoise within Inner Hebrides and the Minches cSAC because Acoustic Deterrent Devices (ADDs) are included as part of the range of predator control measures. These may disturb harbour porpoise. Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this we advise that, in our view, **based on the information provided to date, the proposal will not adversely affect the integrity of the site.** The appraisal we carried out considered the following factors:

- Sound of Raasay is wide at this point (~8km) and opens into the Minch to the North. Most of the Sound of Raasay has similarly high levels of predicted and observed harbour porpoise activity. The modelling and effort-corrected observational data suggests that the area around Invertote is of similar importance to other parts of the cSAC.
- A range of measures will be implemented to reduce the chances of seal attacks including seal blinds, maintenance of net tension, regular removal of morts and lower salmon stocking densities (than is standard practice on non-organic farms).
- Annexes 2B (*Statement on the use of ADDs*) and Annex 2C (*Containment and Escapes Contingency*) provide details on ADD usage. This includes measures to ensure that ADDs are only activated in the event of a significant seal predation event, will not sound continuously, and will be switched off promptly.
 - ADDs will only be switched on if >50 fish are killed due to seal predation and then only if it is the second such event within the last 5-7 days. ADDs will be used for a maximum of 14 days with a minimum of 7 days between usage periods.
 - When in use the ADDs will not sound continuously. The intention is for the ADDs to be triggered by the panic reaction of the fish but there is doubt as to whether this will work with the lower stocking densities proposed. In the event that it does not the devices will be set to sound intermittently/randomly.
 - They also plan to switch off the ADDs at night (between 6pm-8am).
- The source level quoted for the proposed ADD is also lower than other devices.

- They propose to deploy hydrophones to record cetaceans in the vicinity of the farm. It would be helpful to clarify if this data will be recorded all of the time or only when ADDs are activated. The latter scenario would be less useful because the ADDs may well displace cetaceans further than the range of the hydrophones.
- The developer has committed to keeping a log of ADD use and to make this available to THC and SNH on timescales to be defined by THC.
- The proposed Invertote and Culnacnoc fish farm sites are sufficiently close that cumulative impacts may occur if ADDs were in use at both farms at the same time. However, given the above mitigation measures we do not consider this to be a major factor in the overall assessment.

We recommend that you consider whether it is necessary to impose conditions to achieve the above mitigation. You may wish to carry out further appraisal before completing the appropriate assessment.

Other cetacean species have also been recorded in the wider area. In particular there are above average densities of bottlenose dolphin (all year) and minke whale (during the summer months). All cetaceans are European Protected Species. Similar issues regarding disturbance/habitat exclusion apply to those species and effects on them would also be mitigated by the measures outlined above.

2. River Kerry Special Area of Conservation (SAC)

The Culnacnoc site lies 31km from River Kerry SAC (in Wester Ross) which is designated for Freshwater Pearl Mussel (FWPM). FWPM populations require healthy juvenile salmonid populations to complete their life cycle. We have considered the potential impacts of sea lice from this proposal (in combination with the Invertote fish farm proposals and other existing farms) on the SAC

In our view there is **unlikely to be a significant effect on the SAC** in this case because:

- Two surveys have indicated that the pearl mussel population uses both salmon and trout as the host for the larval stage. However, salmon is the principal and disproportionately the most important host.
- Recent survey results in the Kerry suggest that fish densities were sufficient to support recruitment.
- The salmon post smolts (the most vulnerable life stage) arising from the Kerry will tend to head out to sea as they emigrate towards the North Atlantic/Norwegian Sea. As such, they would not be expected to interact with sea lice emanating from the proposed farm locations.

3. Shiant Isles Special Protection Area (SPA)

The proposed fish farm is approximately 35km from the SPA which is classified for a range of breeding seabirds including fulmar, common guillemot, puffin, kittiwake, razorbill and shag. The farm is within foraging distances of a number of these species. In our view there is **unlikely to be a significant effect on the SAC** in this case because:

- There is no evidence that this site is of particular importance for these species

- Mitigation measures have been included to reduce the risk of entanglement, including well tensioned nets and avoiding the use of secondary anti-predator nets.

The ES refers to the use of ‘*an appropriate mesh size*’ for the top nets to avoid entanglement but does not specify a specific size.

4. Landscape

A Landscape and Visual Impact Assessment has been carried out by a chartered landscape architect as requested. The methodology follows the relevant guidance, our scoping advice and reflects pre-application discussions. The resulting assessment is systematic, thorough and well balanced. The visualisations are of good quality and buoys in the water were used to define the edges of the farm in the photomontages which should mean that the visualisations are accurate.

a. Trotternish National Scenic Area (NSA)

The Culnacnoc fish farm site lies just outside (~800m south) of the NSA, the boundary being formed by the promontory of Rubha nam Brathairean. The proposals will have limited visibility from within the NSA. We have considered the published special qualities for the NSA. Our advice is that **the proposal will not have an adverse effect on the integrity of the NSA** or the qualities for which it has been designated, either alone or in combination with the Invertote proposals.

b. Trotternish and Tianavaig Special Landscape Area (SLA)

The site lies within Trotternish and Tianavaig SLA which is of regional landscape importance and is protected via the Local Development Plan.

We agree with the overall conclusion of the LVIA (17.13) that *‘the area of the proposed development is one of high sensitivity, in both character and visual amenity, and although proposals have been developed with sensitivity in design and siting, this LVIA recognises that levels of significance are high, with potential to erode the special landscape characteristics and particular views of the area. However, it is also to be noted that the scope of the areas affected is restricted, minimising impact upon the area as a whole and containing effects to selected sites’.*

Sites/zones where significant levels of landscape and visual impact have been identified include:

- Coastal landscape and seascape character –
 - The development would *‘interrupt the uncluttered, undeveloped coastline, creating a focal point within the broad sweeping vistas of the Sound. However, when viewed from within the seascape, the proposals would be mitigated by the scale of the view and the height of cliffs which create a regularity of backdrop and shadowing effect to the shoreline’* (13.6 & Table 9)
 - And: *‘Introduction of built structures into the otherwise unspoilt seascape will adversely affect the wild character’* (13.7 & Table 9).
 - Adverse effects on the landscape experience at historic sites at Rubha nam Brathairean are highlighted. *As the development will form a noticeable part of the view it is likely to adversely affect the*

landscape experience, in terms of incongruity of features and noticeable change to the balance of the view (Table 10). It will erode the feeling of tranquillity and affect the sense of place.

- The cumulative assessment concludes that the combined effect of Invertote and Culnacnoc fish farms would result in *'an extension of the area affected rather than an increase in the significance levels'* (15.4).

- Visual

- We agree that the most significant visual impacts are likely to be from Rubha nam Brathairean (VP5). It is distant from the main road but accessed by a core path. Views from the tip of the headland are towards Kilt Rock and the NSA, Rona and the mountains of Wester Ross, and round in a continuous panorama to the south including the fish farm site.

'The proposed development will form a distinct feature within the view at only 0.9km from the headland, introducing man made elements into an otherwise unspoilt landscape' (14.5). The proposal would not dominate the view because it would occupy only a small part of the panorama. However it would become a new focus, altering the balance of this view and be of a large magnitude.

Invertote fish farm would form a distant element in the view to the south and would not significantly increase the effect of the Culnacnoc site alone.

- Careful siting of the two farms either side of Invertote/Lealt Gorge (VP3) means that only a small part of each farm would be visible on the edge of a wide panorama. Both farms would not be seen simultaneously due to the wide angle of the view.
- From the A855 layby (VP1) Culnacnoc would form a distant element and visually links to the headland at Rubha nam Brathairean. Cumulative effects with Invertote are described as creating a *'zone of infrastructure within the seascape...with misalignment further drawing attention. However, as part of a much larger panorama, development sites remain a feature within the view rather than a dominant form'* (15.6).
- From the Storr (VP6) each farm would form a distant feature within the broader view. We agree that they do not fall within the key parts of this view.

Section 4.5 explains that *'consideration was given to realignment of the Culnacnoc fish farm from direct alignment to the immediate shoreline to an echo of the alignment of the proposed sister site (Invertote) to the south.* However this was not possible due to water depths, with requirement for depths of c.40m.

The LVIA does a good job teasing out the specific landscape and visual impacts but **it is for you to decide how much weight you attach to the significant but localised impacts in the context of your own policies.**

5. Benthic / Priority Marine Features (PMFs)

Benthic visual surveys and grab samples were carried out in January and March 2017. These appear to follow the relevant guidance and have reasonable coverage of the predicted depositional footprint. The quality of the video footage is adequate to assess the biotopes present.

The seabed comprises primarily mud, muddy sand and sand. The species present are typical of these habitats. Much of the seabed would be regarded as **burrowed mud** which is a PMF. However none of the rarer biotopes and few of the rarer macro-faunal species were recorded. This type of habitat is widespread in Scotland and the **proposals do not raise any issues of national interest for this PMF habitat.**

Ocean quahog (*Arctica islandica*) is another PMF that is present (probably at low density) in areas of suitable habitat at the proposed site. A single individual was recorded in one of the grab samples (300m N). We advise that the **proposals do not raise any issues of national interest regarding this PMF species.**

Black guillemots (also a PMF) breed along the adjacent coastline and are also likely to forage in the area. Although they can forage in water up to 50m deep they generally prefer water less than 30m deep. There is also some information which suggests an association with sub-littoral kelp beds. The fish farm is proposed in waters >40m depth and kelp beds were not seen in the benthic visual footage. We advise that these **proposals do not raise any issues of national interest regarding this PMF species.**

Please let me know if you would like clarification or any further advice regarding this case.

Yours sincerely,

Alex Turner
Area Officer, Skye and Lochalsh
alex.turner@snh.gov.uk



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

FAO: Richard Kerr
Argyll & Bute Council
Planning Services
1A Manse Brae
Lochgilphead
PA31 8RD

23 February 2018
Our ref: CDM148988 - A2538266
Your ref: 18/00005/MFF
By email only

Dear Sir / Madam

Town and Country Planning (Scotland) Act 1997 Marine fish farming planning application – Alterations to existing site - Bagh Dail Nan Ceann (BDNC), Loch Shuna – 18/00005/MFF

Thank you for your consultation on the above proposal dated 15 January 2018. The proposal is to enlarge the existing marine fin fish (Atlantic salmon) farm by installing an additional two 120m circumference cages, to upgrade and move the feed barge, and to increase the biomass at this site from 2,500t to 3,500t.

Summary

The proposal could affect the Inner Hebrides and the Minches Candidate Special Area of Conservation (cSAC) selected for its harbour porpoise interest. This proposal could be progressed with appropriate mitigation. However, because it could affect internationally important natural heritage interests and therefore, **we object to this proposal unless it is made subject to conditions, so that the works are done strictly in accordance with the mitigation as detailed in our appraisal below.**

We also provide advice about impacts on other aspects of the natural heritage. We have included details of these in our appraisal below.

Appraisal

1. Inner Hebrides and the Minches cSAC

The proposal lies within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<https://www.nature.scot/professional->

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

In our view, this proposal is likely to have a significant effect on the harbour porpoise qualifying interest of the Inner Hebrides and the Minches cSAC. Consequently, Argyll and Bute Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this, we advise that in our view, on the basis of the information provided and the appraisal carried out to date, if the proposal is undertaken strictly in accordance with the following mitigation, then it will not adversely affect the integrity of the site. Our mitigation advice is as follows:

- 1) Any Acoustic Deterrent Devices (ADDs) that are deployed at this site will be done so in accordance with the agreed ADD deployment plan (as detailed in annex 1 of the supporting information provided with the application). Any future changes to the plan must be approved by the Planning Authority.
- 2) The operator must undertake reporting on ADD usage at the site including:
 - a. The exact dates when the device was operated, how often it was operated on that date, for what duration, and what was the cue for its manual or auto-sensor operation;
 - b. Details of any predation events by seals and any anti-predation measures (including ADD) deployment) in use at the time should be logged;
 - c. Details of the person (or persons) responsible for maintaining the logs;
 - d. An undertaking that all logs will be maintained for review by the Planning Authority and/or SNH, if deemed necessary by the Planning Authority.

The appraisal that we carried out considered the impact of the proposal on the following factors:

- The risk posed through potential entanglement of cetaceans in farm equipment is not considered to be significant.
- The risk of injury as a result of exposure to sound emanating from ADDs at this site is not considered to be significant. We conclude that it is unlikely that harbour porpoise will spend significant periods of time within the distances required to result in injury from the use of the equipment as proposed within the ADD deployment plan. We therefore consider the risk of auditory injury as a result of this individual development to be low.
- With the proposed mitigation any potential disturbance as a result of exposure to sound emanating from ADDs at this site is not considered to be significant. This is because:
 - a) The ADD deployment plan provides an appropriate protocol to ensure that the use of ADDs will be limited, and their repeated, continuous use over prolonged periods of time will be prevented, and;
 - b) Due to the relatively low source level of the devices that are proposed. It is predicted that the sound levels emanating from the devices that are proposed at this site will result in a reduced area of potential disturbance, in comparison to some other higher power device types.
- The operator has committed to keeping a record of ADD use at the site and will provide this information to the Planning Authority on request. This will provide an opportunity for the Planning Authority to consider and review the use of ADDs at this site, thus ensuring that long-term cumulative issues can be taken into account in the future.

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

We would be happy to provide the full details and reasoning of these recommendations in the form of our Habitats Regulations Appraisal (HRA) proforma.

Background information on the cSAC can be found at: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/harbour-porpoise-candidate>

2. Loch Sunart to the Sound of Jura MPA

The proposal lies within the Loch Sunart to the Sound of Jura Nature Conservation Marine Protected Area (NC MPA) selected for its common skate and Quaternary of Scotland glaciated channels and troughs.

The site's status means that the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the NC MPA before it can be consented. In our view, the proposal is capable of affecting the common skate protected feature of the Loch Sunart to the Sound of Jura MPA.

We have reached this conclusion because the proposal could theoretically result in a reduced availability of prey species, particularly crustaceans, in a relatively localised area around the proposed development. It could also affect egg-laying areas of common skate locally through deposition of materials onto suitable substrate. However, within the context of the MPA as a whole, we consider that any reduction in prey species or the degradation of egg-laying substrates as a result of the deposition of organic waste is unlikely to be significant.

We therefore consider that the risk of this proposal being capable of affecting, other than insignificantly, the protected features of the Loch Sunart to the Sound of Jura NC MPA is low.

The discharge of chemicals is primarily SEPA's remit and we would expect this aspect of the proposal to be considered in detail through the CAR licensing process. Argyll and Bute Council may wish to consult with SEPA when undertaking their own assessment of the effect of the proposal on the NC MPA.

3. Firth of Lorn SAC

The proposal is close to the Firth of Lorn Special Area of Conservation (SAC) designated for its reefs.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Argyll and Bute 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 (see link under section 2 above).

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required. We have reached this conclusion because the proposal is located approximately 2.5km from the boundary of the Firth of Lorn SAC. The applicant states that no material is predicted to be exported outwith the modelled domain. However, we note that SEPA have stated that final modelling has not yet been verified for this proposal. Given the separation distance between the proposal and the SAC boundary, and on account of the expansive and energetic nature of this area of water, we would expect any potential waste material exported in to the SAC to be dispersed widely and therefore unlikely to result in any impacts on the feature on the SAC.

The discharge of chemicals is primarily SEPA's remit and we would expect this aspect to be considered in detail through the CAR licensing process.

4. Benthic Impacts

The applicant has reached the decision that no new baseline visual survey is required. At screening/scoping stage we advised that further dialogue between MHS, SEPA and SNH would be required to determine whether or not additional visual survey information was necessary, and if so, to agree where any such transects should be carried out. As far as we are aware this advice does not appear to have been taken into account by the applicant. No further information was provided subsequent to our screening/scoping response being issued and it is unclear whether or not this decision was agreed with SEPA.

We have data from a visual survey carried out in 2015 which suggests that the Priority Marine Feature (PMF) habitat Burrowed Mud is present in the vicinity of the cages. The component PMF species tall sea pen (*Funiculina quadrangularis*) was also recorded. Any increase in the footprint of this site is likely to result in increased impacts on these PMF habitats and species. These features do not have legislative protection, but the basis for protection of their national status across Scottish waters is included in the National Marine Plan.

As the information/dialogue that we requested at screening/scoping was not provided, there is insufficient information to complete an impact assessment for PMFs, and therefore we have no means of predicting the degree or extent of likely impacts. Therefore, we cannot advise further on the benthic impacts arising from this proposal. However, we note that this aspect of the proposal will be considered in detail through the CAR licencing process and we would expect to discuss this further with SEPA during that process.

I trust that our advice is clear but please do not hesitate to contact me if you require any further information or clarification.

Yours faithfully

Andrew Campbell
Operations Manager
Lorn and North Argyll
andrew.campbell@snh.gov.uk



Decision by Karen Black, a Reporter appointed by the Scottish Ministers

- Planning appeal reference: PPA-270-2190
- Site address: Site 2130 metres east of Sconser Quarry, Sconser, Isle Of Skye, IV48 8TD
- Appeal by Marine Harvest (Scotland) Ltd against the decision by The Highland Council
- Application for planning permission 17/02707/FUL dated 25 May 2017 refused by notice dated 30 January 2018
- The development proposed: New site consisting of 12 x 120 metre circumference circular cages plus installation of feed system
- Application drawings listed in annex 2 of this notice
- Date of site visits by Reporter: 22 June and 23 June 2018

Date of appeal decision: 29 November 2018

Decision

I allow the appeal and grant planning permission subject to the seven conditions listed in annex 1 of the decision notice. Attention is also drawn to the advisory notes in annex 3 and the Habitats Regulations Appraisal in annex 4.

Preliminaries

On 16 May 2017, the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 came into force. The 2017 regulations revoked the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 with certain exceptions. The 2011 Regulations continue to have effect for an application (and any subsequent appeal) for planning permission where the applicant made a request for a scoping opinion or direction in respect of the proposed development before 16 May 2017. In this case the request was made on 8 February 2017. I have therefore determined this appeal in accordance with the 2011 regulations as they applied before 16 May 2017.

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (the "Habitats Regulations") require that, where a project is likely to have a significant effect on a Natura site, the competent authority must carry out an "appropriate assessment" of the implications for the site in view of that site's conservation objectives. This is known as Habitats Regulations Appraisal (HRA). In this case, the site is located within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC). The qualifying interest for which the site is proposed to be designated is Harbour Porpoise (*Phocoena phocoena*). The HRA I have undertaken as the competent authority, is attached as annex 4 to this decision notice.



Reasoning

1. I am required to determine this appeal in accordance with the development plan, unless material considerations indicate otherwise. The development plan consists of the Highland wide Local Development Plan 2012 (HwLDP). Although the council refers only to Policy 28 in its reasons for refusal, I also consider policies 50, 57, 58, 59 and 61 of the local development plan to be relevant to my assessment of the proposal.
2. I note that the proposed West Highland and Islands Local Development Plan (WestPlan) is currently subject to examination, but as yet, remains as a proposed plan. In response to my request for further written submissions on its relevance and the weight I should attach to the plan, the council confirm that the plan does not contain a specific fish farm policy although its vision and strategy towards development remains relevant. No parties have raised any policy matters related to the proposed plan. My assessment is therefore based on the current adopted development plan policies.
3. Having regard to the development plan, the main issues in this appeal are:
 - landscape and visual impacts;
 - marine pollution;
 - impacts on wild fish; and
 - potential impact on the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC);

Landscape and visual impacts

4. Policy 28 sets out a number of considerations against which developments should be assessed. The impact on landscape, cultural heritage and scenery, together with the sensitivity of the siting and the quality of design are relevant in this case.
5. Policy 50 is supportive of aquaculture where there are no significant adverse effects on landscape, natural heritage or water quality objectives. Where proposals are located on a suitable site they will also need to show amongst other things: appropriate operational and site restoration arrangements including the management of noise and lighting impacts; effective control of pollution; fish farm escapes; predator interaction and disease.
6. Policy 57 requires that development proposals have to take account of Special Landscape Areas (SLA). Policy 61 also requires that new developments should be designed to reflect the landscape characteristics and special qualities of the area in which they are proposed. In this case the proposal, although not located within, lies close to the Cuillin Hills National Scenic Area (NSA), Trotternish and Tianavaig Special Landscape Area (SLA) and Raasay and Rona SLA.
7. The local development plan policies, although pre dating, largely reflect policy guidance contained in Scottish Planning Policy 2014 (SPP) and the National Marine Plan 2015. Aside from the local development plan policies, a number of council guidance documents relating to aquaculture and sustainable design have also been drawn to my attention. However, these other policies and guidance do not add a different policy

dimension, and in my view can be seen to complement and support the local development plan.

8. I consider that the key elements of the proposal likely to result in significant landscape and visual impacts are the 12 pens, each at 120 metres circumference and moored in two rows of six; the 80 metre x 80 metre mooring grid; 2.5 metre central net support; feed barge; feed pipes between the barge and pens; underwater cage lights; and navigational lights.

9. The 120 metre circumference pens incorporate tensioned top nets. The central net support would be used to raise the net above the water surface to prevent birds from accessing the fish feed. The height above sea level of the 'boat style' feed barge when unloaded would be approximately 6.4 metres, and loaded would be approximately 5.3 metres. The barge hull would be painted black and the superstructure a combination of battleship grey, white and black.

10. Bearing in mind the council's reasons for refusal and concerns raised by local residents I have also considered the potential cumulative impacts of the three nearby fish farms at Balmeanach Bay, Maol Bans and Cairidh.

11. The appeal site is located to the east of Sconser Quarry, in the Caol Mor waters at the southern end of Raasay Sound, to the west of the entrance to Loch Ainort and east of the mouth of Loch Sligachan. The landscape around the proposed site, recognised by its inclusion in the Cuillin Hills NSA, Trotternish and Tianavaig SLA, and Raasay and Rona SLA is of an exceptionally high quality in a national, regional and local context. The HwLDP highlights that landscapes designated as NSAs and SLAs are of the highest quality and value within Highland. Although not located directly within these areas, the proposed site is located approximately 3 kilometres at the nearest point to the boundary of the NSA. The SLA boundaries are all located between approximately 3 and 4 kilometres to the north east and west of the appeal site.

12. I visited all of the viewpoints included in the appellant's Landscape Seascape and Visual Impact Assessment (LSVIA). I also viewed the site from additional locations at The Braes, Peinchorran, the golf course at Sconser, the distillery at Borodale House and Eyre Point on Raasay. The council's particular concerns relate to insensitive siting due to the proximity of the appeal site to residences at Sconser and Luib and to roads and ferry routes used by residents and visitors to Skye and Raasay. Overall, I agree that the scenic quality of the area is derived from the coastal panoramas, mountainous upland landscape and backdrop of the Cuillins to the south and west of the proposed site. The views along the coast from Sconser, Balmeanach, and Raasay in particular are generally of very high quality, along with views from the ferry travelling between Sconser and Raasay.

13. The LSVIA considered the potential for significant impacts affecting a number of key receptors, including the immediate vicinity of the proposal at the Moll Road, the A87 and receptors on the island of Raasay. It also assessed the cumulative impacts, especially with the adjacent site at Maol Bans. The appellant has submitted photomontages of the site from each viewpoint in support of the LSVIA. I note that SNH and other statutory consultees had no objections to the methodology, which is based on an assessment of the

magnitude of effects, sensitivity of receptors, significance of effects, including cumulative impacts.

14. Based on my site inspections and the submitted evidence I agree that the most significant and immediate view of the appeal site is obtained from the unclassified Moll Road in the vicinity of viewpoint 1. The feed barge would be located approximately 460 metres at its nearest to the road at this point. Although there are no residential properties adjacent to, or in the immediate vicinity of the site I noted a small number of sparsely located residential properties lying approximately 2 kilometres south of the appeal site. Two of these properties currently have a distant view of the existing Maol Bans fish farm. The road appears to be infrequently used and during my site inspection I encountered only one other vehicle using this route.

15. I noted the relatively open views of the proposed site from parts, but not the whole road. However these open views, looking both east and north towards the appeal site are set against a wide and expansive view of the Caol Mor seaway between Scalpay and Raasay and the Narrows of Raasay in the distance to the north. There are limited opportunities along this road to view the existing Caol Mor farm and the appeal site together. I must therefore concur with the conclusions of the assessment that although the proposed development would be seen in the immediate foreground adjacent to the coastal road, it would not detract from the attraction of the road for tourists and locals, nor erode the landscape and visual qualities of the area from this particular location. Cumulative impacts are similarly acceptable.

16. Opportunities to appreciate the scenic quality of the area, including the coastal panoramas, and upland landscape of the Cuillins are perhaps best appreciated from travelling on the Sconser to Raasay ferry (viewpoint 2). The existing Balmeanach farm is readily visible from the ferry, set against the moorland and rugged massif character areas at The Braes to the north and west of the existing farm. I agree that the effects of the existing Balmeanach farm are significant and adverse from this viewpoint. The appeal site, just over 2 kilometres to the south can also be seen from the ferry, however when set against the backdrop of the Cuillins and the Sconser Quarry in the foreground, the eye is drawn across to the quarrying operations at Sconser Quarry. In combination with the wide seascape and mountainous backdrop, the proposal would not be dominant from this location. I therefore consider that the landscape and visual effects of the proposal would be negligible.

17. In terms of cumulative impacts, although both the existing Balmeanach site and the appeal site can be seen from the ferry, they cannot be seen in combination in the same view. I consider therefore that the cumulative impacts are also negligible.

18. From the ferry jetty on Raasay, and the area around Raasay House and nearby distillery, I could see the existing farm at Balmeanach with only a distant view of the appeal site. The existing farm at Maol Bans was not visible. From the pier at Suisnish and other locations along the Raasay coast (viewpoints 3, 6 and 7) to Eyre Point, the existing farm at Balmeanach is visible and the Maol Bans farm, together with the appeal site could be seen approximately 2 kilometres in the distance. The dominant views however, are of the ferry terminal, associated infrastructure and buildings, Sconser Quarry to the south and the Cuillins in the distant background.

19. Overall, I would agree that the proposal would be visible from some viewpoints on Raasay, however given the low profile of the cages and neutral coloured finishing materials of the feed barge, the impacts, including cumulative impacts set against the expansive and panoramic views from these locations would negligible.

20. Concerns have been raised in representations that the development would be detrimental to the view looking from the Peinchorran and Braes area (viewpoint 5). Consequently, I viewed the proposed site from these elevated locations along the coast. As the LSVIA highlights, there are commanding views to the proposed site from some houses at various points in this area. From these locations the appeal site is seen as an integral part of the wider coastal panorama to the south and east. However, the view is dominated by the existing fish farm at Balmeanach in the foreground, the operational quarry at Sconser and the mountain backdrop of the Cuillins around Sconser. There is an absence of any intervening landform and only sparse vegetation of limited height which accentuates the openness of the views from this area, however I found the appeal site, at approximately 4 kilometres distant to be largely indecipherable at this range.

21. The council's concerns focus primarily on the insensitive siting of the proposal because of the proximity of the appeal site to residences at Sconser and Luib. The layby at viewpoint 4 on the A87 between Luib and Dunan and viewpoint 8 from the Sconser Hotel afford views of the proposed site.

22. The A87 is the main road north and south and used by almost all visitors to the island. For the majority of the route the proposed site is not visible due to intervening topography, buildings and roadside vegetation. The proposed site at approximately 3.5 kilometres in the distance is visible from the A87 at Ard Dorch, as are the existing sites at Cairidh and Maol Bans. The existing farm at Cairidh is prominent in the foreground from this location. I did not however find either the Maol Bans and the proposed site to be dominant in view, nor prominent from the A87 at this point. The surrounding landscape, open waters to the north, and Raasay to the east are the primary focus of views from this point. Consequently, I consider that the additional combined landscape and visual effects of all three farms at this location, would be low.

23. Only the proposed farm and the existing at Balmeanach are visible from Sconser, the local hotel (viewpoint 8) and golf club. The surrounding upland landscape and expansive seaways, in my judgement, again remain the predominant features from these viewpoints. The proposed development would not be a detractive feature.

24. I cannot agree with some of the assertions of the council that the LSVIA underplays the seascape and landscape effects of the existing Maol Bans and the appeal proposal. On the contrary, I note that some of the photomontage evidence expands on the views and to a certain extent enhances the visual effects of the proposal. I would agree that the proposal would be visible, however the impacts, including cumulative impacts on the expansive and panoramic views from these locations would negligible. Consequently, I am satisfied that that the proposal, either in combination with the existing Balmeanach farm nor in its own right would be so dominant, that it would result in significant adverse impacts in landscape or visual terms.

25. Matters related to the impacts of lighting are addressed in section 5.7.1 of the environmental statement. The Northern Lighthouse Board requires navigational lighting at the extremities of fish farms using lit yellow poles. The feed barge would also be required to display a fixed white light to be seen by vessels approaching from all directions. I note that submerged lights within the fish pens result in a localised glow which is of low visibility. These lights are not always required depending on the year class of fish and the site. I note the council propose a condition to mitigate any impacts from above surface lighting, and I agree that such a condition is appropriate.

26. Drawing all these matters together, I am satisfied that although the proposal would be seen in combination primarily with the farm at Maol Bans and Balmeanach at some viewpoints, particularly from some locations on Raasay and at a short section of the A87 at Ard Dorch, they would be a small component of the overall coastal panorama and landscape backdrop. The proposal, being low profile and finished in neutral colours would not be of sufficient size and presence as to dominate the landscape. I therefore agree with the conclusions of SNH that the proposal, including consideration of the cumulative impacts, would not have an adverse effect on the integrity of the NSA or the SLAs, nor the qualities for which they have been designated. Overall, I find that the proposal, subject to mitigation regarding surface equipment colours and lighting required by condition, would have very limited impact on the appreciation of the NSA and SLAs and would not detract from the scenic qualities of the area in general. Consequently I am satisfied that the proposal would be in accordance with the relevant criteria in policies 28, 50, 57 and 61 of the HwLDP.

27. I also note the evidence highlighting the recent planning consent for an additional 2 cages to be added to the centre the existing farm at Maol Bans. The cages would be added to the middle of the existing farm, however I do not consider that adverse cumulative impacts would arise. My conclusions therefore remain as set out above.

Marine pollution

28. Policy 28 of the local development plan includes a requirement to assess the impacts of proposals, on the extent to which they have an impact on pollution and marine systems.

29. Policy 50 supports the sustainable development of fin-fish and shellfish farming subject to there being no significant adverse effect, directly, indirectly or cumulative benthic and water column impacts. The council's aquaculture guidance also highlights that development and activities rely on high water quality. Potential impacts from fish cages come from the discharge of treatment chemicals, waste feed, feed treated with anti-sea lice chemicals and fish faeces, which in turn can have biodiversity impacts. A degree of tidal flushing to disperse waste materials and provide plankton for shellfish developments is therefore required.

30. My assessment of these matters must also take account of the guidance in paragraph 108 of SPP, which indicates that the planning system should not duplicate other control regimes such as Controlled Activities Regulations (CAR) licences from SEPA or fish health, sea lice and containment regulation by Marine Scotland.

31. A number of objections have been made by local residents, however neither SEPA, Marine Scotland Science (MSS) nor SNH have objected to the proposed development.
32. Uneaten food and faeces are the main components of particulate waste generated at a fish farm which may impact on the benthic environment and seabed. A number of representations to the planning application and in response to the appeal process express concerns about the detrimental impacts of such waste on the seabed and resulting increased pollution. Potential benthic and water column impacts are therefore key considerations in any aquaculture planning application. Both are assessed in section 5 of the Environmental Statement.
33. Benthic impacts of fish farming are regulated by SEPA under the CAR regime. Planning permission does not negate the need for a CAR licence and it is not possible to operate a farm without a CAR licence. In this case an application for a CAR licence has been submitted to SEPA. A baseline benthic seabed survey, visual baseline and video survey have also been carried out and the results provided to SEPA as part of the CAR licence application. The exact biomass and the quantities of sea lice therapeutants would be determined as part of the CAR determination process. SEPA confirm that it has received all the required information and based on the information provided, the licence is likely to be authorised. Consequently, it has no objection to the planning application.
34. Section 5.1 of the environmental statement addresses benthic impacts. In compliance with SEPA requirements modelling was completed to predict the fate of the fish faeces and uneaten food particles dropping down from the pens. The appellant confirms that the modelling has shown that the site layout would adhere to SEPA's environmental quality standards. In addition the automated feed systems allow for a high level of control over feed input and a consequent reduction in the volume of feed which is wasted. Benthic conditions at the site would also be monitored as part of the CAR regime.
35. The environmental statement also addresses matters related to chemical treatments. Discharges from the use of medicines at fish farms are once again limited by conditions in licences issued by SEPA under the CAR regime. Efficient medicine treatment through good husbandry management is used to avoid the requirement for an increase in medicine output and reduces the potential for waste feed and thus reduces medicinal release to the environment. In addition to the above measures, routine monitoring of the seabed, as stipulated in the SEPA CAR discharge consent, would be carried out at the proposed site. The site would have a regular monitoring program which checks that the ongoing benthic impacts are controlled and kept within SEPA standards.
36. Section 5.2 of the environmental statement assesses water column impacts. As noted above, currents are an important aspect of fish farms as they play a large role in dissipating waste throughout the water column thus lessening the potential for accumulations of high concentration loads of nutrients. Impacts are also regulated by SEPA under the CAR regime, advised by Marine Scotland. The appellant's modelling work and hydrographic survey of the site indicate that the cumulative effects of nutrient enhancement from the proposed site is not considered to be significant and results suggest that the fish farm would not cause unacceptable environmental impact in terms of nutrient enhancement. The appellant advises that figures provided are negligible when compared with background levels and are well below regulatory thresholds.

37. I also note that once a fish farm is built, the seabed would be subject to regular monitoring for in-faunal disturbance, epifauna assessment and surveys for medicine residues. All survey data is submitted to SEPA for assessment against environmental standards. Routine monitoring of the seabed, as stipulated in the SEPA CAR discharge consent, would be carried out at the site.

38. I note that neither SEPA nor Marine Scotland disagree with these results, nor is there any other evidence before me to suggest that the conclusions are not valid. SNH similarly advise that the proposal does not raise issues of national interest in relation to benthic impacts.

39. Overall, whilst being mindful of the regulatory function of SEPA and Marine Scotland, I consider that appropriate mitigation to ensure monitoring of benthic and water impacts can be mitigated by planning conditions. This mitigation would ensure compliance with policies 28 and 50 of the local development plan.

Impact on wild fish

40. Although a CAR licence is required, impacts on wild salmon are also a material planning consideration. As noted in paragraph 5, Policy 50 of the local development plan requires consideration of impacts on the wild fish population. I also note that Atlantic salmon are included in the UK Biodiversity Action Plan Priority Species List. Policies 58 and 59 of the HwLDP are therefore relevant. The policies require the council to have regard to the presence of, and any adverse effect of development proposals, either individually and/or cumulatively on priority habitat or protected species.

41. Paragraph 109 of SPP similarly highlights the potential for conflict between fish farming and local fishing interests, and that the effects of fish farm development on traditional fishing grounds and angling interests should, therefore, be considered.

42. The council's aquaculture guidance advises that a sea lice management plan will be required by planning condition. In addition, fish farming businesses located within a farm management area must be party to a farm management agreement or prepare and maintain a farm management statement. This was provided by the appellant in July 2017.

43. As the appellant confirms, the relationship between farmed salmon stocks and their wild counterparts is complex and the transfer of lice from one to the other is subject to ongoing research and monitoring. The use of medicinal substances to control and remove lice at fish farms is regulated by SEPA under the CAR regime and the quantities of sea lice therapeutants would be determined as part of the CAR determination process.

44. Registration and authorisation is also required from Marine Scotland under the Aquaculture and Fisheries (Scotland) Act 2007, which covers fish health standards and containment, including powers specifically related to sea lice infestation. The Aquatic Animal Health (Scotland) Regulations 2009 requires the authorisation of all aquaculture production businesses in relation to animal health requirements for aquaculture animals and products, and on the prevention and control of certain diseases in aquatic animals. In addition, marine farms are required to apply for a marine licence under Part 4 of the Marine

(Scotland) Act 2010. Ministers also have powers to vary, revoke or suspend a licence, and to take enforcement action.

45. The council, in the committee report confirm that data from the Scottish Salmon Producers Organisation shows that sea lice levels in the past few years for the existing farms in this area have reduced, however remain around 2.5 - 4 times over the recommended levels.

46. Matters related to sea lice management and monitoring are included in sections 5.1 and 5.4 of the environmental statement. To control infections, the appellant confirms that weekly sampling to assess lice population dynamics is implemented at all its sites and a broad range of treatment types are employed to control lice numbers to meet and exceed good practice codes. New measures, set out in the appellant's 'sea lice attestation' allow more reliable and greater control of sea lice numbers. Interventions, such as biological control, medicinal treatments, and thermic/physical removal of sea lice in combination with good husbandry form part of the control strategy. With modern techniques of cleaner fish, mechanical controls and freshwater treatments the salmon industry is moving away from medicinal treatments. The appellant also comments on the effectiveness of on-going lice management strategies within the farm management area which should remain constant or improve, regardless of the increased tonnage of fish within the area. It also points to its involvement in gathering, monitoring and sharing lice data with Fisheries Trusts.

47. Marine Scotland Science (MSS) indicates that the development has the potential to increase the risks to wild salmonids but confirm that provided the CAR licence is granted to include the quantities of chemicals detailed in the submitted modelling reports, chemotherapeutants should be available in sufficient quantities to provide treatment options for the maximum biomass throughout the production cycle, without breaching environmental quality standards. I also note that MSS do not object to the proposal and conclude that "suitable measures for the control of parasites would remain in place in the farm management area despite the increase in biomass and pens as far as can be reasonably foreseen".

48. The Wester Ross Area Salmon Fishery Board, whose boundaries lie adjacent to those of the Skye District Salmon Fisheries Board, object to the planning application on the basis that the proposal has the potential to present further significant adverse impact within an area where there have been sea lice control issues. Its concerns relate to the potential impacts on migratory wild salmonids mainly in relation to the Sligachan, Broadford and Applecross rivers.

49. In response, the appellant advises that the variety of treatment methods for removal of sea lice would result in the possibility of a simultaneous sea louse infestation being minimal. I also note from the containment and contingency escapes plan (annex 5 of the environmental statement) that regular inspections of moorings, nets, pens and equipment would be undertaken. Escapes would also be reported to Marine Scotland Science, the Skye and Wester Ross District Salmon Fishery Board and Skye and Wester Ross Fisheries Trust. Farm Managers are also encouraged to hold an escapes protocol meeting with the representatives of these organisations at least once during a cycle. Recapture strategies would also be agreed as part of this process.

50. Concern have also been expressed about the appellant's existing site at Balmeanach Bay creating a funnelling effect with the appeal proposal through which any salmon migrating to the River Sligachan would be required to pass. However I note that the appellant confirms that if the appeal proposal goes ahead and proves viable, the Balmeanach site will close. Any funnelling effect should therefore only exist for a single cycle and both sites would be operated to strict lice figures, minimising the risk to wild stock over this period.

51. Although there are clearly some on-going debates about the impact of sea lice on wild fish, there is no evidence submitted which would lead me conclude other than that the proposal complied with all necessary government guidelines on these matters. I am also mindful of the lack of any objections from the regulatory authorities. Previous appeal decisions, including reference to planning conditions addressing such matters have been drawn to my attention and I agree that my consideration of the potential effects on wild fish necessarily involves some repetition between the relevant regulatory regimes. Paragraphs 20 and 21 of Circular 4 /1998 'The use of conditions in planning permissions' advises that conditions which duplicate the effect of other controls will normally be unnecessary. However, whilst other matters may be subject to control under separate legislation, they may be of concern to the planning system and conditions may be needed to deal with circumstances for which a concurrent control is unavailable.

52. In this case, I note that the council's committee report includes a recommended condition, modelled upon the previous appeal decisions. It requires the submission and approval of an environmental management plan, a sea lice management plan, escape management plan, a requirement to carry out wild fish monitoring and to provide the planning authority with summary data on sea lice levels and notification of any losses or escapes. A number of these requirements are already in draft form, in separate documents as part of the planning application submission. Consequently, the appellant agrees with such a condition.

53. I consider that a requirement to provide data on sea lice levels and notification of any losses or escapes, would ultimately allow the planning authority to monitor impacts on wild fish and in my view, such measures would complement, rather than duplicate other regulatory regimes, whilst discharging the planning authority's biodiversity duty. The imposition of the condition and requirement to provide this data would meet the enforceability requirements of Circular 4/1998. It would also provide the planning authority with ongoing information at any time during the lifetime of the permission to take action if the operations of the farm were considered to be causing material harm to wild fish stocks.

54. In the circumstances therefore, I am satisfied that these measures would ensure mitigation in respect of any impacts on wild salmonids. Such a planning condition would bring together the relevant monitoring and mitigation proposals in so far as they relate to the protection of wild fish. This should enable the full scope of available mitigation in relation to the protection of wild fish to be considered and monitored in terms of any planning consent. Subject to the imposition of such a condition I conclude that the proposal would meet the relevant criteria in policies 50, 58 and 59 of the local development plan, and in turn relevant national policy guidance.

Potential impact on the candidate SAC

55. As noted above, policies 58 and 59 refer to a requirement to consider impacts on priority habitat or protected species. Policy 57 also specifically references the requirement for appropriate assessment in circumstances where developments are likely to have a significant effect on these features.

56. In this case, the proposed site is located within the Inner Hebrides and Minches candidate Special Area of Conservation (cSAC), identified given its importance for harbour porpoise interests. The proposal aims to use acoustic deterrent devices (ADDs) which emit a high frequency sound below water to deter seals away from the pens. The harbour porpoise feed on a wide variety of fish associated with a range of seabed substrates in the cSAC. I therefore consider that the proposal has potential to have a significant effect on the harbour porpoise interests of the site. That view is also supported by SNH. Consequently, taking the consultation response from SNH into account, I have undertaken an appropriate assessment of the implications for the conservation interests for which the site has been designated (see annex 4 of this decision notice) as required by the Habitats Regulations.

57. All cetacean species found in Scottish territorial waters are classed as European Protected Species. SNH advise that other cetacean species also use the Caol Mor area, particularly bottlenose dolphin. Similar issues regarding disturbance/habitat exclusion apply to those species and effects on them should also be considered.

58. I also note that SEPA has undertaken assessment, as required by the Habitats Regulations, for the impacts of marine cage fish farms on harbour porpoise. The assessment concluded that those pressures, which can be controlled under CAR, are unlikely to have a significant impact on harbour porpoise and are therefore unlikely to adversely affect the integrity of the SAC.

59. The proposal lies approximately 3 kilometres from the Cuillins SPA. The qualifying feature is the golden eagle. SNH did not provide comments on this aspect and the council confirm it has not received any reports of any adverse effects from the current fish farms nearby. Consequently, I agree with the council that it is likely that the proposal would not have any adverse effect on the eagles and therefore the integrity of the SPA. An appropriate assessment is therefore not required for this SPA.

60. Potential effects on species or habitats of conservation importance are assessed in sections 2 and 5 of the environmental statement. The appellant comments that the effect of ADDs on marine mammals is very difficult to determine scientifically and the appellant is not aware of any definitive studies on the subject. The farm manager would decide which method of predator control is most suitable for the site and the predator issues being experienced. In this case, high levels of net tension would be the principal system used. As a second line of defence, ADDs would be used.

61. A draft Predator Mitigation Plan is included in Annex 4 of the environmental statement. The appellant confirms that any changes, and the final version would be approved by SNH before ADDs are used at the site. Under SNH guidance and recommendation ADD transducer heads that emit signals would be used, which the appellant states are unlikely to disturb cetaceans. The appellant has also been working

with SNH to develop a site specific ADD plan for the appeal proposal and current methods will be kept under review taking account of SNH advice. I note that SNH recommend that where it becomes evident that ADD use at a specific site is not preventing seal predation from occurring, alternative defences should be deployed rather than continue with the same type of ADD. The latest version of the appellant's plan (document APP 226) includes such a step. SNH confirm that while the precise wording of the flow chart still has scope for improvement, an updated version of the plan, including a requirement for updates to take account of developing good practice, could be included as a condition, with provision for review.

62. The appellant also confirms that the use of ADDs at the proposed site and the existing farms at Balmeanach, Maol Bans and Cairidh is site specific i.e. activity at the proposed site would not automatically trigger ADDs to be turned on or switched off at the existing farms. Other measures would include feedback loops to encourage ADDs to be switched off if there is not a risk posed by seals; logging and review of ADD use at the end of each production cycle; employees to log cetacean sightings; and review of data at the end of each production cycle. I note that SNH also comment that the commitment to remove the Balmaenach Bay farm at the end of the production cycle reduces the potential for cumulative impacts with ADDs used at other farms in the area.

63. In response to my request for further written submissions regarding an update on progress of discussions with SNH, the appellant agrees that a planning condition modelled on the council's proposed condition 3, including a requirement to implement the final ADD plan would be acceptable. The appellant also acknowledges that on rare occasions there can be a problem with particularly aggressive and persistent seals and that shooting of persistent seals is a deeply emotive and often controversial issue. This option is only ever considered as a last resort, when other methods fail, and is conducted in line with the appropriate regulations. In this context I note that from 2011, where fish farms in Scotland require to manage seals, an annual seal management licence is required. Predator control at the farm would therefore have to be managed in a manner which is also compliant with the conditions of such a licence.

64. Taking all these matters into account, I agree that a condition, including provision for monitoring, review and implementation of any ADD plan, would be appropriate, whilst potentially complementing current good practice methods and regulatory requirements in relation to predator control.

65. Whilst I am aware that wider discussions on this topic are ongoing between SNH and the aquaculture industry, based on the submitted evidence, I consider that by employing best practice at this site, the use of ADDs, in combination with the mitigation required by condition provides sufficient control such that the proposal would not be significantly harmful to harbour porpoise, nor the bottlenose dolphin.

66. Drawing all these matters together, including the outcomes of the appropriate assessment in annex 4, I therefore consider that operation of the fish farm is unlikely to have any adverse effect on the conservation interests for which the site has been designated, nor adversely affect the integrity of the cSAC. I conclude that, with the conditioned mitigation measures in place, the proposal would comply with relevant criteria

in policies 57, 58 and 59 of the local development plan. My conclusions are supported by both SNH and SEPA.

Other Material Considerations

67. As I have found that the proposed development would result in no unacceptable impacts, I find the proposal to be consistent with paragraphs 249 - 253 of SPP on supporting aquaculture and the council's aquaculture guidance.

68. Although the appellant is committed to removing the existing fish farm at Balmeanach if the appeal proposal proves to be viable, I do not consider it necessary or appropriate to make the operation of the proposed site conditional on the removal of the Balmeanach Bay operation. I have previously concluded that landscape and visual impacts, including cumulative impacts are acceptable. On the basis of the evidence before me, I have also found no reason to suggest that the cumulative effects on marine pollution and sea lice cannot be addressed by appropriately worded conditions relating to a requirement for a detailed environmental management plan. In my view, a planning condition requiring the cessation of operations at the existing Balmeanach site, would neither be necessary or reasonable, thereby not meeting the tests in circular 4/1998.

Other Matters

69. Section 5.6.2 of the environmental statement also addresses matters related to the impacts on commercial fishing activities. The appellant's benthic video survey footage indicated little evidence of high quality commercial fishing ground at the appeal site. Exclusion of commercial fishing activities would be mitigated by maintaining minimum appropriate length of mooring lines, and once installed, the majority of the area taken up by mooring lines would still be accessible for creeling or diving, with full exclusion only required during maintenance of mooring lines or boat operations on site. I note that there are no objections from the council, nor statutory consultees. I therefore conclude that subject to mitigation required by condition in relation to escape prevention methods, there would be no significant effects in this respect.

70. The economic and social benefits of the proposal are not in dispute. I agree that the potential to create full time jobs; additional seasonal employment; supporting the local supply chain, helping to sustain local communities in a rural location; and its contribution to the Scottish economy would meet the provisions of both SPP and the National Marine Plan.

71. Some objections relate to the potential adverse impacts on tourism. I have found that there are no significant landscape and visual impacts resulting from the proposal and I agree with the appellant that the assertions regarding the impacts on tourism are unsubstantiated by any evidence in this case.

72. Objectors also raise concerns about the potential increase in noise levels and sea traffic. Section 5.8 of the environmental statement notes that as all generators and compressors within the feed barge have acoustic protection, there should not be any significant impacts on key receptors. I also note the lack of any concerns from the council's environmental health service and agree that the council's suggested condition which ensures noise impacts are controlled would be appropriate.

73. The appellant acknowledges that there may be a slight increase in boat traffic to service the site. The greater storage capacity of the feed barge would however reduce boat movements in this respect. I also noted at my site inspections that the existing ferry base at Sconser appears to be a fairly busy crossing point in any case, with half hourly sailings when I visited. Consequently, any increase in traffic movements to serve the proposed fish farm would, in my view be negligible. On the whole I consider that there would be no adverse impact on road safety, nor adverse impacts from additional boat traffic in accordance with relevant criteria in policy 28 of the local development plan.

Conditions

74. The council's committee report includes a number of planning conditions, to be used in the event that the appeal is allowed. In reaching my conclusions on this matter, I have given consideration as to whether the suggested conditions meet the tests set out in Circular 4/1998: The Use of Conditions in Planning Permissions. I have adopted the suggested wording in the main. However, I have amended condition 3 to include provision for review of the acoustic deterrent device plan, in line with a similar requirement for the environmental management plan, to take account of changing practice as suggested by SNH.

Overall Conclusions

75. Overall, I conclude the proposal has been sensitively sited and does not detract from the special qualities of the nearby NSA, SLAs nor has any adverse impacts on the surrounding area, all in accordance the requirements of the relevant criteria in policies 28, 50, 57 and 61 of the HwLDP. This conclusion is also based on my assessment of the potential cumulative effects of the proposed and nearby existing fish farms.

76. In reaching my conclusions, I have carefully considered all the relevant environmental information. I have also taken account of the responses of the consultation authorities and my assessment is that aside from those effects referenced above, which can be satisfactorily addressed by the relevant mitigation, there are no other significant effects.

77. Mitigation measures required by condition would complement existing regulatory controls in terms of marine pollution and impacts on wild salmonids. The proposal is unlikely to have any adverse effect on the conservation interests for which the site has been designated, nor adversely affect the integrity of the Inner Hebrides and the Minches candidate Special Area of Conservation, in accordance with policies 57, 58 and 59.

78. I therefore conclude, for the reasons set out above, that the proposed development accords overall with the relevant provisions of the development plan and that there are no material considerations which would justify refusing to grant planning permission. I have considered all the other matters raised, but there are none which would lead me to alter my conclusions.

Karen Black

Reporter

Annex 1: Conditions

1. All surface equipment, with the exception of navigational markers, shall be finished in a dark, matt neutral colour unless alternative finishes are agreed in advance in writing with the planning authority. Pipes between the automated feed barge and the cages shall be neatly bundled to minimise clutter.

Reason: To minimise the visual impact of the installation and to help safeguard the integrity of The Cuillin Hills National Scenic Area.

2. All lighting above the water surface and not required for safe navigation purposes should be directed downwards by shielding. It should be extinguished when not required for the purpose for which it has been installed. If lighting is required for security purposes, infra-red lights and cameras should be used.

Reason: To minimise the visual impact of the installation; to ensure that lights left on in the daytime do not draw the eye towards the site and at night do not present unnecessary sources of light pollution.

3. Prior to the commencement of development, the final Acoustic Deterrent Device Plan shall be submitted and agreed in advance in writing with the planning authority. The development and operation of the site, shall be carried out in accordance with the approved plan unless changes to the operation of the site dictate that the plan requires amendment. In such an eventuality, a revised Acoustic Deterrent Device Plan will require to be submitted to, and approved in writing by the planning authority. Notwithstanding such a requirement, a revised Acoustic Deterrent Device Plan shall be submitted to, and approved in writing by the planning authority every 5 years, as a minimum, following the start date, to ensure it remains up to date and in line with good practice.

Reason: To minimise the impact on the Inner Hebrides and the Minches candidate Special Area of Conservation.

4. Prior to the commencement of development and notwithstanding the information submitted with this application, an Environmental Management Plan (EMP), or similar document, will be submitted to and approved in writing by the planning authority and should include adequate details to address how compliance can be assessed. This should also detail triggers/thresholds and associated actions in order to secure that any risk to local wild fish populations is minimised. Upon commencement, the development and ongoing operation of the site must be carried out in accordance with the EMP as approved. The EMP shall be prepared as a single, standalone document, which shall include the following:

(1). Sea Lice Management in relation to impact on wild fish:

a) A method statement for the regular monitoring of local wild fish populations based on available information and/or best practice approaches to sampling;

- b) details of site specific operational practices that will be carried out following the stocking of the site in order to manage sea lice and minimise the risks to the local wild fish population;
- c) details of site specific operational practices that will be carried out in order to manage the incidence of sea lice being shed to the wider environment through routine farming operations such as mort removal, harvesting, grading, sea lice bath treatments and well boat operations;
- d) details of the specification and methodology of a programme for the monitoring, recording, and auditing of sea lice numbers on the farmed fish;
- e) details of the person or persons responsible for all monitoring activities;
- f) an undertaking to provide site specific summary trends from the above monitoring to the planning authority on a specified, regular basis;
- g) details of the form in which such summary data will be provided;
- h) details of how and where raw data obtained from such monitoring will be retained by whom and for how long, and in what form;
- i) an undertaking to provide such raw data to the planning authority on request and to meet with the planning authority at agreed intervals to discuss the data and monitoring results;
- j) details of the site specific trigger levels for treatment with sea lice medicines. This shall include a specific threshold at which it will be considered necessary to treat on-farm lice during sensitive periods for wild fish;
- k) details of the site specific criteria that need to be met in order for the treatment to be considered successful;
- l) details of who will be notified in the event that treatment is not successful;
- m) details of what action will be taken during a production cycle in the event that a specified number of sea lice treatments are not successful;
- n) details of what action will be taken during the next and subsequent production cycles in the event that sea lice treatment is not successful.

(2). Escape Management to minimise interaction with wild fish:

- a) details of how escapes will be managed during each production cycle;
- b) details of the counting technology or counting method used for calculating stocking and harvest numbers;
- c) details of how unexplained losses or escapes of farmed salmon will be notified to the planning authority;
- d) details of an escape prevention plan. This shall include:
 - net strength testing;
 - details of net mesh size;
 - net traceability;
 - system robustness;
 - predator management; and
 - record-keeping methodologies for reporting of risk events. Risk events may include but are not limited to holes, infrastructure issues, handling errors and follow-up of escape events; and
- e) details of worker training including frequency of such training and the provision of induction training on escape prevention and counting technologies.

(3). Procedure in event of a breach or potential breach:

a) A statement of responsibility to "stop the job/activity" if a breach or potential breach of the mitigation / procedures set out in the EMP or legislation occurs. This should include a notification procedure with associated provision for the halt of activities in consultation with the relevant regulatory and consultation authorities in the event that monitoring demonstrates a significant and consequent impact on wild fish populations as a result, direct or otherwise of such a breach.

(4). Requirement for update and review:

a) The development and operation of the site, shall be carried out in accordance with the approved EMP unless changes to the operation of the site dictate that the EMP requires amendment. In such an eventuality, a revised EMP will require to be submitted to, and approved in writing by the planning authority beforehand. In addition, a revised EMP shall be submitted to and approved in writing by the planning authority every 5 years, as a minimum, following the start date, to ensure it remains up to date and in line with good practice.

Reason: To ensure that good practice is followed to mitigate the potential impacts of sea lice loading in the marine environment in general and on wild salmonids in particular; in accordance with the planning authority's biodiversity duty.

5. In the event of equipment falling into disrepair or becoming damaged, adrift, stranded, abandoned or sunk in such a manner as to cause an obstruction or danger to navigation, the site operator shall carry out or make suitable arrangements for the carrying out of all measures necessary for lighting, buoying, raising, repairing, moving or destroying, as appropriate, the whole or any part of the equipment so as to remove the obstruction or danger to navigation.

Reason: In the interests of amenity and navigational safety.

6. At least three months prior to cessation of use of the site for fish farming, a scheme for the decommissioning and removal of all equipment shall be submitted to and agreed in writing with the planning authority. Upon cessation the approved scheme shall be implemented.

Reason: To ensure that decommissioning of the site takes place in an orderly manner and to ensure proper storage and disposal of redundant equipment in the interests of amenity and navigational safety.

7. All plant, machinery and equipment shall be so installed, maintained and operated such that any associated operating noise does not exceed NR 20 when measured or calculated within any noise-sensitive premises with windows open for ventilation purposes. For the purposes of this condition, "noise-sensitive premises" includes, but is not necessarily limited to, any building, structure or other development the lawful use of which

a) falls within Classes 7 (Hotels & Hostels), 8 (Residential Institutions) or 9 (Houses) of the Town and Country Planning (Use Classes) (Scotland) Order 1997 (as amended), or b) is as a flat or static residential caravan.

Reason: In order to safeguard the amenity of neighbouring properties and occupants.

Annex 2: Schedule of approved plans

Figure 1: Cage elevations
Figure 3: Location plan
Figure 4: Feedbarge elevations
Figure 6: Site layout plan
Annex 2: Equipment plans and elevations

Annex 3: Advisory notes

- 1. The length of the permission:** This planning permission will lapse on the expiration of a period of three years from the date of this decision notice, unless the development has been started within that period (See section 58(1) of the Town and Country Planning (Scotland) Act 1997 (as amended)).
- 2. Notice of the start of development:** The person carrying out the development must give advance notice in writing to the planning authority of the date when it is intended to start. Failure to do so is a breach of planning control. It could result in the planning authority taking enforcement action (See sections 27A and 123(1) of the Town and Country Planning (Scotland) Act 1997 (as amended)).
- 3. Notice of the completion of the development:** As soon as possible after it is finished, the person who completed the development must write to the planning authority to confirm the position (See section 27B of the Town and Country Planning (Scotland) Act 1997 (as amended)).

Annex 4: Habitats Regulations Appraisal (Appropriate Assessment)

1. The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (the "Habitats Regulations") require that, where a project is likely to have a significant effect on a Natura site, the competent authority must carry out an "appropriate assessment" of the implications for the site in view of that site's conservation objectives. This is known as Habitats Regulations Appraisal (HRA). The competent authority can only agree to the proposal after having ascertained that it will not adversely affect the integrity of the site. This document records the results of the Habitats Regulations Appraisal, including the appropriate assessment that I have undertaken, as the competent authority. In carrying out the assessment I have also taken account of the consultation responses to the planning application from Scottish Natural Heritage (SNH).

Project Description and Candidate Special Area of Conservation (cSAC)

2. The proposal is to install a new fish farm in the waters to the east of Sconser Quarry. The proposal is for 12 x 120 metre circumference pens within an 80 metre x 80 metre mooring grid with 12 metre deep nets, operating to a maximum biomass of 2,500 tonnes. The farm would be serviced by an automated barge feed system which is computer-controlled and backed up by the use of feed-back loops and feed guides.
3. The site is located within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC). The qualifying interest for which the site is proposed to be designated is harbour porpoise which are present throughout the year. The conservation objectives for the cSAC are solely to aid the conservation of the porpoise. The cSAC is the largest protected area in Europe for harbour porpoise and covers just over 13,800 square kilometres, supporting over 5000 individuals.
4. Sightings and modelling data used to inform the cSAC selection demonstrates that Caol Mor, within which the proposal is located, is an important part of the cSAC for harbour porpoise. Caol Mor connects the Inner Sound and Sound of Raasay, both having very high levels of predicted and observed harbour porpoise activity. Caol Mor is also likely to be important for animals moving from one part of the cSAC to another.
5. SNH indicates the proposal has the potential to have a significant effect on harbour porpoise within the cSAC because acoustic deterrent devices (ADDs) are included as part of the range of predator control measures. I agree that proposal is likely to have a significant effect on the qualifying interest of the site ie harbour porpoise. Consequently, as competent authority I am required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest.

Appropriate Assessment

6. In carrying out the assessment and following advice from SNH I have considered the following factors:
 - The proposal is not directly connected with or necessary to site management for conservation;
 - A range of alternative predator control measures would be used before ADDs are considered. These include top nets, tension nets, seal blinds and daily stock mortality removal;
 - The appellant proposes to use TR1 ADDs at the Sconser Quarry site (if ADDs are required). The scientific trials for this device have not been completed but based on the currently available information it is expected that this low frequency transducer would have lower impacts on cetaceans than the US3 currently used on adjacent fish farms;
 - ADDs would not be used constantly. They would only be turned on when stock mortalities attributed to seals occur. Their use would be reviewed daily by the site manager and weekly by the area manager;

- The appellant is committed to maintaining a record of ADD usage, make and model of device, deployment dates, settings used, position of transducers, including the use of deployment logs and to make that information available to the regulatory authorities;
- The appellant operates three other fish farms in the Caol Mor area which currently use, or have the option to use ADDs. In discussion with SNH, and as part of the appellant's 'cumulative assessment' document they are committed to operating the Sconser, Cairidh and Maol Bans sites using the same 'ADD deployment guidance' as at Sconser Quarry, logging and reviewing ADD use; and using the TR1 device in preference to the US3 in the first instance. Taken together these measures would be likely to reduce the noise output from the existing farms in comparison with previous production cycles;
- Implementation of seal licence requirements;
- Implementation of CAR licence requirements.

7. By employing such measures at this site, the use of ADDs, in combination with the mitigation required by condition requiring submission of an acoustic deterrent device plan and detailed environmental management plan, with a requirement for monitoring of methods and reporting of data, I am satisfied that the proposal would not be significantly harmful to harbour porpoise.

Conclusion

8. Overall, my appropriate assessment of the implications on the conservation objectives of the cSAC is such that any effects can be mitigated by imposing planning conditions where appropriate, addressing the above matters as outlined in this decision notice. Consequently, I conclude that the proposal would not adversely affect the qualifying interest and conservation objectives of the Inner Hebrides and the Minches cSAC, nor adversely affect the integrity of the cSAC.



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
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Argyll & Bute Council
Major Applications Team
1A Manse Brae
Lochgilphead
PA31 8RD

8 Feb 2019

Our Ref: CDM153973
Your ref: 18/02657/MFF

Dear Sir/Madam,

Town and Country Planning (Scotland) Act 1997

Proposal: Modification to equipment and biomass by increasing the number of pens from 12 to 14, increase the biomass from 2500t to a maximum biomass of 3500t and extension of mooring grid to accommodate the additional pens

I write in response to your consultation dated 21st January 2019 requesting comment from Scottish Natural Heritage regarding the above proposal. We advise Argyll and Bute Council that this application be subject to the following condition to ensure it does not have an adverse impact upon the integrity of the Inner Hebrides and the Minches Special Area of Conservation:

- Acoustic deterrent device (ADD) deployment will adhere to the principles and protocol set down in Annex 12, 13 and 14 of the documentation supporting this application. Any changes to these principles and protocol must be agreed by Argyll and Bute Council, in consultation with SNH.

The proposal lies within the Inner Hebrides and the Minches Special Area of Conservation (SAC) selected for its harbour porpoise interest. Background information on the SAC can be found at: <https://www.snh.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/harbour-porpoise-candidate>

The site's status as a SAC means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Argyll & Bute 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: (<http://www.snh.gov.uk/docs/A423286.pdf>).

The typical frequencies of ADDs are within the hearing range of harbour porpoise. A significant body of evidence exists to suggest that in some instances ADDs can result in the disturbance, displacement and potential hearing damage to harbour porpoise. The use of ADDs at this site will have a likely a significant effect on the harbour porpoise qualifying interest of the Inner Hebrides and the Minches SAC. The main impact relates to temporary displacement of this species from designated waters around the Colonsay fish farm.

Scottish Natural Heritage, Main Street, Bowmore, Isle of Islay, Argyll, PA43 7JJ,
Tel 01496 810711 Fax 01496 810665 www.snh.org.uk

Dualchas Nàdair na h-Alba, A' Phrìomh Shràid, Bogha Mòr, Eilean Ile, Earra-Ghàidheal, PA43 7JJ,
Fòn 01496 810711 Fax 01496 810665

We advise that where the deployment of ADDs adheres to the principles and protocols detailed within the annex 12, 13 and 14 of the application supporting documentation, the impacts would be minimised to an acceptable level and that the proposal will not have an adverse impact upon the sites integrity.

Consequently, Argyll and Bute Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests and we would advise the implementation of a planning condition to ensure that any displacement is minimised to acceptable levels.

Please do not hesitate to contact me if you require any further information regarding the above.

Yours sincerely

Colin MacFarlane
Operations Officer
Argyll & Outer Hebrides
Colin.MacFarlane@snh.gov.uk



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

By email to: planning.oland@argyll-bute.gov.uk

Planning Services
Argyll & Bute Council
Municipal Buildings
Albany Street
Oban
PA34 4AW

Date: 13 February 2019
Your ref: 18/02024/MFF
Our Ref: CDM152613

Dear Sir/ Madam,

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

PROPOSAL: Replacement of existing steel square cages with 10 x 100m circumference cages and retention of feed barge (with no increase in biomass)

SITE ADDRESS: Fishnish A, Fish Farm Fishnish Craignure Isle of Mull Argyll and Bute

Thank you for your consultation dated 12th February 2019 regarding the above proposal. As requested in our response letter to you dated 2nd November 2018, the applicant has submitted a revised Acoustic Deterrent Device (ADD) Deployment Plan (version 0.7), which allows us to conclude our advice on this application. Please note that our advice on all other natural heritage matters detailed in our letter of 2nd November 2018 remain valid.

Summary

In combination with other fish farm sites, this proposal will have a likely significant effect upon the Inner Hebrides and Minches Special Area of Conservation (SAC), notified for its harbour porpoise interest. However, implementation of the revised ADD deployment plan (version 0.7) will ensure that disturbance to harbour porpoise will be minimised to an acceptable level and that it will not have an adverse impact upon site integrity. As this proposal affects an internationally important natural heritage interest, we object to this proposal unless it is subject to a planning condition which ensures full implementation of the ADD Deployment Plan (version 0.7) and that any future revisions are approved by the Council, in consultation with SNH.

Appraisal

Inner Hebrides and Minches Special Area of Conservation

Fishnish is located within the Sound of Mull, which falls within the boundaries of the Inner Hebrides and Minches Special Area of Conservation (SAC), designated for its harbour porpoise population. Our previous response dated 2nd November 2018 detailed our concerns regarding the initial ADD Deployment Plan for the Sound of Mull. We advised there was potential for ADDs to cause significant disturbance and displacement to harbour porpoise and that in combination with other existing sites, this proposal would have a likely significant effect upon the SAC and we could not rule out adverse impact upon site integrity at this time.

The alterations contained within the revised ADD deployment plan ensure that the risks to harbour porpoise are reduced to an acceptable level. Improvements include fewer sites using ADDs, an agreed protocol for their activation/ deactivation and a guarantee limiting systematic ADD activation within the Sound of Mull. The applicant has liaised with us regarding these improvements.

In our view, this proposal is likely to have a significant effect on harbour porpoise. Consequently, Argyll and Bute, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest(s). To help you do this, we advise that in our view on the basis of the information provided, if the proposal is undertaken strictly in accordance with the ADD Deployment Plan (version 0.7), then the proposal will not adversely affect the integrity of the site.

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

If you require any further advice from regarding on the above please do not hesitate to contact Colin MacFarlane on 0131 3162688 (Colin.MacFarlane@nature.scot).

Yours sincerely

Andrew Campbell
Operations Manager
Andrew.Campbell@nature.scot



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
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By email to: planning.olandi@argyll-bute.gov.uk

Planning Services
Argyll & Bute Council
Municipal Buildings
Albany Street
Oban
PA34 4AW

Date: 13 February 2019
Your ref: 18/02166/MFF
Our ref: CDM152993

Dear Sir/ Madam,

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

PROPOSAL: Replacement of existing steel square cages with 7 x 100m circumference cages and replacement of feed barge (with no increase in biomass)

SITE ADDRESS: Fishnish B, Fish Farm Fishnish Craignure Isle of Mull Argyll and Bute

Thank you for your consultation dated 12th February 2019 regarding the above proposal. As requested in our response letter to you dated 22nd November 2018, the applicant has submitted a revised Acoustic Deterrent Device (ADD) Deployment Plan (version 0.7), which allows us to conclude our advice on this application. Please note that our advice on all other natural heritage matters detailed in our letter of 22nd November 2018 remain valid.

Summary

In combination with other fish farm sites, this proposal will have a likely significant effect upon the Inner Hebrides and Minches Special Area of Conservation (SAC), notified for its harbour porpoise interest. However, implementation of the revised ADD deployment plan (version 0.7) will ensure that disturbance to harbour porpoise will be minimised to an acceptable level and that it will not have an adverse impact upon site integrity. As this proposal affects an internationally important natural heritage interest, we object to this proposal unless it is subject to a planning condition which ensures full implementation of the ADD Deployment Plan (version 0.7) and that any future revisions are approved by the Council, in consultation with SNH.

Appraisal

Inner Hebrides and Minches Special Area of Conservation

Fishnish is located within the Sound of Mull, which falls within the boundaries of the Inner Hebrides and Minches Special Area of Conservation (SAC), designated for its harbour porpoise population. Our previous response dated 22nd November 2018 detailed our concerns regarding the initial ADD Deployment Plan for the Sound of Mull. We advised there was potential for ADDs to cause significant disturbance and displacement to harbour porpoise and that in combination with other existing sites, this proposal would have a likely significant effect upon the SAC and we could not rule out adverse impact upon site integrity at this time.

The alterations contained within the revised ADD deployment plan ensure that the risks to harbour porpoise are reduced to an acceptable level. Improvements include fewer sites using ADDs, an agreed protocol for their activation/ deactivation and a guarantee limiting systematic ADD activation within the Sound of Mull. The applicant has liaised with us regarding these improvements.

In our view, this proposal is likely to have a significant effect on harbour porpoise. Consequently, Argyll and Bute, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest(s). To help you do this, we advise that in our view on the basis of the information provided, if the proposal is undertaken strictly in accordance with the ADD Deployment Plan (version 0.7), then the proposal will not adversely affect the integrity of the site.

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

If you require any further advice from regarding on the above please do not hesitate to contact Colin MacFarlane on 0131 3162688 (Colin.MacFarlane@nature.scot).

Yours sincerely

Andrew Campbell
Operations Manager
Andrew.Campbell@nature.scot



Scottish Natural Heritage
Dualchas Nàdair na h-Alba
nature.scot

Shona Turnbull
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX
By email to: epc@highland.gov.uk

Your ref: 18/05907/FUL
Our ref: CDM153767

19th February 2019

Dear Shona,

MARINE FISH FARM – NEW SITE CONSISTING OF 12 X 120M CIRCUMFERENCE CIRCULAR CAGES PLUS FEED BARGE, ISLE OF SCALPAY

Many thanks for your email of 8th January consulting us on this planning application.

Summary

The proposal could affect the Inner Hebrides and the Minches Candidate Special Area of Conservation (cSAC) selected for its harbour porpoise interest. However, based on the information provided, this is unlikely to result in an adverse impact on site integrity. It should be noted that our advice is based on the ADD Deployment Plan provided (Appendix 5.3a of the application), and the use of Terecos units. We recommend that you consider whether conditions are required to ensure the development is implemented as proposed.

We also provide advice about impacts on other aspects of the natural heritage in our appraisal below.

Appraisal of the impacts of the proposal and advice

Inner Hebrides and the Minches cSAC

This proposal is located within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC), designated for its population of harbour porpoise.

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 2010 as amended apply. Consequently, The Highland Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra/habitats-regulations-appraisal-hra>).

Scottish Natural Heritage, Fodderty Way, Dingwall Business Park, Dingwall, IV15 9XB
Tel: 01349 865333 Fax: 01349 865609 www.nature.scot

Dualchas Nàdair na h-Alba, Slighe Fodhraitidh, Pàirc Gnìomhachas Inbhir Pheofharain,
Inbhir Pheofharain IV15 9XB
Fòn: 01349 865333 Facs: 01349 865609 www.nature.scot

In our view, this proposal is likely to have a significant effect on harbour porpoise within Inner Hebrides and the Minches cSAC because the predator control plan includes the use of acoustic deterrent devices (ADDs). Consequently, The Highland Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this, we advise that in our view, on the basis of the information provided and the appraisal carried out to date, it will not adversely affect the integrity of the site. The advice from our appraisal is as follows:

- The hearing range of harbour porpoise includes the sound frequencies emitted by the proposed ADD model. The use of ADDs may result in disturbance/habitat exclusion¹. The evidence of impacts on cetaceans from ADDs currently in use is varied and is dependent on many variables (e.g. noise characteristics of device, how the device is used, the topography, animal behaviour and importance of the area/habitat where the ADD is being used).
- The area around the proposed fish farm has a number of other fish farms which currently use, or have the option to use, ADDs and therefore there is the potential for cumulative impacts, particularly at the southern end of Sound of Raasay.
- The ADD deployment plan indicates that, if required, the developer will deploy two Terecos ADD units. Terecos have lower source levels than many other commercially available devices. Lepper et al. (2014)² quote the Terecos DSMS-4 as having a source level of 178 dB re 1 µPa (RMS). Northridge et al (2010; 2013)³ considered the use of Terecos and found a possible reduction in acoustic behaviour out to 1km, in one case, and no significant disturbance in another.
- In addition, the ADD deployment plan indicates that even when switched on the devices will not sound continuously. The developer's ADD policy states that maximum percentage of days in the production cycle that the devices are operational is required to be ≤ 40%.
- Conservation Objective 2b states that the distribution of harbour porpoise throughout the site is maintained by avoiding significant disturbance. Significant disturbance in this context is where changes to the distribution of harbour porpoise occur on a continuing or sustained basis. In this case the combination of Terecos devices and the ADD deployment plan proposed means there will no adverse effect on the integrity of the cSAC.
- However, the Environmental Statement makes reference to alternative ADD devices and the ADD deployment plan also refers to deployment of Terecos devices 'in the first instance' Use of alternative devices may have greater effects and we therefore recommend that you consider whether it is necessary to condition the ADD deployment plan.

¹ For example - **Coram A.**, Gordon J., Thompson D. & Northridge S. 2014. Evaluating and assessing the relative effectiveness of non-lethal measures, including Acoustic Deterrent Devices on marine mammals. Scottish Government

Götz T., & Janik V.M. 2013 Acoustic deterrent devices to prevent pinniped depredation: efficiency, conservation concerns and possible solutions. *Marine Ecology Progress Series* 492: 285-302

² **Lepper P.A.**, Gordon J., Booth C., Theobald P., Robinson S., Northridge S. & Wang L. 2014. Establishing the sensitivity of cetaceans and seals to acoustic deterrent devices in Scotland. Scottish Natural Heritage Commissioned Report no. 517

³ **Northridge S.P.**, Gordon J.G., Booth C., Calderan S., Cargill A., Coram A., Gillespie D., Lonergan M. & Webb A. 2010. *Assessment of the impacts and utility of acoustic deterrent devices*. Final report to the Scottish Aquaculture Research Forum, project code SARF044

Northridge S., Coram A. & Gordon J. 2013. Investigations on seal depredation at Scottish fish farms. Edinburgh. Scottish Government

Supplementary advice regarding the ADD deployment plan

- Any Acoustic Deterrent Devices (ADDs) that are deployed at this site will be done so in accordance with the agreed ADD Deployment Plan (Appendix 5.3a of the application). Any future changes to the plan must be agreed with the Planning Authority.
- The operator must undertake reporting on ADD usage at the site including:
 1. The exact dates when the device was operated, how often it was operated on that date, for what duration, and what was the cue for its manual or auto-sensor operation;
 2. Details of any predation events by seals and any anti-predation measures (including ADD) deployment) in use at the time should be logged;
 3. Details of the person (or persons) responsible for maintaining the logs;
 4. An undertaking that all logs will be maintained for review by the Planning Authority and/or SNH, if deemed necessary by the Planning Authority.
- This is a new farm and our policy is that in the first instance the developer should consider if it is possible for the site to be operated without the use of ADDs. The Environmental Impact Assessment Report considers and discounts some alternatives, such as use of predator nets, but the assessment is incomplete. In particular we recommend consideration of some of the new seal-proof cage nets which are now available and being used successfully at other fish farm sites.
- While the use of 2 x Terecos ADD devices as currently proposed is likely to be acceptable, swapping to alternative ADD devices (if the Terecos prove to be ineffective) may not be. We understand that swapping cage nets part way through a production cycle would be difficult and, given the proximity of significant seal haul-outs, it would be prudent for the developer to fully consider all alternatives at the outset.
- It would be beneficial if the applicant could produce an integrated plan for their fish farms in this area, as has been done for the Sound of Mull. This will need to ensure that not all of their farms are using ADDs at the same time, potentially creating a significant, cumulative effect on cetaceans using the area.

We recommend that you consider whether it is necessary to impose conditions to achieve the above mitigation. You may wish to carry out further appraisal before completing the appropriate assessment.

Other cetacean species may also use the area of the proposal site. All cetaceans are European Protected Species and similar issues regarding disturbance/habitat exclusion apply to those species and effects on them would also be mitigated by the measures outlined above.

Benthic impacts/Priority Marine Features (PMFs)

The proposal will impact Priority Marine Features (PMFs). The Highland Council should consider the effect of the proposal on the PMF(s) before consenting. We advise that the proposal does not raise any issues of national interest regarding PMF habitats or species. Our appraisal below provides further information.

From analysis of the visual benthic survey provided by the applicant, and carried out in 2015, we can confirm that some areas of the burrowed mud habitat and at least one tall seapen are

present, both of which are PMFs. However, on account of the extent and quality of the burrowed mud that is present and, the absence of any high densities of key component PMF species, we do not consider the potential impacts to be significant.

Protected Species

White-tailed eagles have bred nearby to the proposal site in the past, and as a Schedule A1 and Schedule 1A species they are afforded special protected status. However, as there are currently no nest or roost sites close to the proposal we do not foresee any impacts in terms of disturbance.

Landscape

A Landscape and Visual Impact Assessment has been carried out as requested, following our 'Aquaculture in the landscape' guidance. This includes an assessment of visibility and a series of photomontages representative of the main sensitive receptors, including those we recommended in our scoping response, as well as photos from the summit of Beinn na Caillich.

We agree with the conclusions of the LVIA report, and are satisfied that the proposal is unlikely to adversely affect the special qualities of The Cuillin Hills National Scenic Area (NSA).

Please let me know if you would like clarification or any further advice regarding this case.

Yours sincerely,

Kirsty North
Operations Officer
South Highland
kirsty.north@nature.scot

From: Liam Wright
To: [Catriona Laird](#)
Subject: SNH Responses to: BDNC 19/00005/MMF and PNG 18/0004/MFF
Date: 23 February 2018 12:13:00
Attachments: Loch Shuna - Enlargement of BDNC fish farm - 18_00005_MFF - SW response to ABC (vA4525065).pdf
Poll na Gille - 18_00004_MFF - Modification of Fish Farm - SW response to ABC (A2538375).pdf

Hi Catriona,

As discussed, could you use the AOH mailbox to send these two response to centralvalidationteam@argyll-bute.gov.uk

Could you also cc Sarah West and Richard.kerr@argyll-bute.gov.uk

Thanks for helping out.

Liam

Liam Wright | Marine Policy and Advice Officer - Aquaculture
Coastal and Marine Ecosystem Unit
Scottish Natural Heritage | 1 Kilmory Industrial Estate | Lochgilphead | PA31 8RR
T: 0131 316 2695
E: liam.wright@snh.gov.uk

Current working pattern Mon – Thu 8:00 – 18:00



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

FAO: Richard Kerr
Argyll & Bute Council
Planning Services
1A Manse Brae
Lochgilphead
PA31 8RD

23 February 2018
Our ref: CDM148988 - A2538266
Your ref: 18/00005/MFF
By email only

Dear Sir / Madam

Town and Country Planning (Scotland) Act 1997 Marine fish farming planning application – Alterations to existing site - Bagh Dail Nan Ceann (BDNC), Loch Shuna – 18/00005/MFF

Thank you for your consultation on the above proposal dated 15 January 2018. The proposal is to enlarge the existing marine fin fish (Atlantic salmon) farm by installing an additional two 120m circumference cages, to upgrade and move the feed barge, and to increase the biomass at this site from 2,500t to 3,500t.

Summary

The proposal could affect the Inner Hebrides and the Minches Candidate Special Area of Conservation (cSAC) selected for its harbour porpoise interest. This proposal could be progressed with appropriate mitigation. However, because it could affect internationally important natural heritage interests and therefore, **we object to this proposal unless it is made subject to conditions, so that the works are done strictly in accordance with the mitigation as detailed in our appraisal below.**

We also provide advice about impacts on other aspects of the natural heritage. We have included details of these in our appraisal below.

Appraisal

1. Inner Hebrides and the Minches cSAC

The proposal lies within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<https://www.nature.scot/professional->

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

In our view, this proposal is likely to have a significant effect on the harbour porpoise qualifying interest of the Inner Hebrides and the Minches cSAC. Consequently, Argyll and Bute Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this, we advise that in our view, on the basis of the information provided and the appraisal carried out to date, if the proposal is undertaken strictly in accordance with the following mitigation, then it will not adversely affect the integrity of the site. Our mitigation advice is as follows:

- 1) Any Acoustic Deterrent Devices (ADDs) that are deployed at this site will be done so in accordance with the agreed ADD deployment plan (as detailed in annex 1 of the supporting information provided with the application). Any future changes to the plan must be approved by the Planning Authority.
- 2) The operator must undertake reporting on ADD usage at the site including:
 - a. The exact dates when the device was operated, how often it was operated on that date, for what duration, and what was the cue for its manual or auto-sensor operation;
 - b. Details of any predation events by seals and any anti-predation measures (including ADD) deployment) in use at the time should be logged;
 - c. Details of the person (or persons) responsible for maintaining the logs;
 - d. An undertaking that all logs will be maintained for review by the Planning Authority and/or SNH, if deemed necessary by the Planning Authority.

The appraisal that we carried out considered the impact of the proposal on the following factors:

- The risk posed through potential entanglement of cetaceans in farm equipment is not considered to be significant.
- The risk of injury as a result of exposure to sound emanating from ADDs at this site is not considered to be significant. We conclude that it is unlikely that harbour porpoise will spend significant periods of time within the distances required to result in injury from the use of the equipment as proposed within the ADD deployment plan. We therefore consider the risk of auditory injury as a result of this individual development to be low.
- With the proposed mitigation any potential disturbance as a result of exposure to sound emanating from ADDs at this site is not considered to be significant. This is because:
 - a) The ADD deployment plan provides an appropriate protocol to ensure that the use of ADDs will be limited, and their repeated, continuous use over prolonged periods of time will be prevented, and;
 - b) Due to the relatively low source level of the devices that are proposed. It is predicted that the sound levels emanating from the devices that are proposed at this site will result in a reduced area of potential disturbance, in comparison to some other higher power device types.
- The operator has committed to keeping a record of ADD use at the site and will provide this information to the Planning Authority on request. This will provide an opportunity for the Planning Authority to consider and review the use of ADDs at this site, thus ensuring that long-term cumulative issues can be taken into account in the future.

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

We would be happy to provide the full details and reasoning of these recommendations in the form of our Habitats Regulations Appraisal (HRA) proforma.

Background information on the cSAC can be found at: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/harbour-porpoise-candidate>

2. Loch Sunart to the Sound of Jura MPA

The proposal lies within the Loch Sunart to the Sound of Jura Nature Conservation Marine Protected Area (NC MPA) selected for its common skate and Quaternary of Scotland glaciated channels and troughs.

The site's status means that the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the NC MPA before it can be consented. In our view, the proposal is capable of affecting the common skate protected feature of the Loch Sunart to the Sound of Jura MPA.

We have reached this conclusion because the proposal could theoretically result in a reduced availability of prey species, particularly crustaceans, in a relatively localised area around the proposed development. It could also affect egg-laying areas of common skate locally through deposition of materials onto suitable substrate. However, within the context of the MPA as a whole, we consider that any reduction in prey species or the degradation of egg-laying substrates as a result of the deposition of organic waste is unlikely to be significant.

We therefore consider that the risk of this proposal being capable of affecting, other than insignificantly, the protected features of the Loch Sunart to the Sound of Jura NC MPA is low.

The discharge of chemicals is primarily SEPA's remit and we would expect this aspect of the proposal to be considered in detail through the CAR licensing process. Argyll and Bute Council may wish to consult with SEPA when undertaking their own assessment of the effect of the proposal on the NC MPA.

3. Firth of Lorn SAC

The proposal is close to the Firth of Lorn Special Area of Conservation (SAC) designated for its reefs.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Argyll and Bute 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 (see link under section 2 above).

In our view, it is unlikely that the proposal will have a significant effect on any qualifying interests either directly or indirectly. An appropriate assessment is therefore not required. We have reached this conclusion because the proposal is located approximately 2.5km from the boundary of the Firth of Lorn SAC. The applicant states that no material is predicted to be exported outwith the modelled domain. However, we note that SEPA have stated that final modelling has not yet been verified for this proposal. Given the separation distance between the proposal and the SAC boundary, and on account of the expansive and energetic nature of this area of water, we would expect any potential waste material exported in to the SAC to be dispersed widely and therefore unlikely to result in any impacts on the feature on the SAC.

The discharge of chemicals is primarily SEPA's remit and we would expect this aspect to be considered in detail through the CAR licensing process.

4. Benthic Impacts

The applicant has reached the decision that no new baseline visual survey is required. At screening/scoping stage we advised that further dialogue between MHS, SEPA and SNH would be required to determine whether or not additional visual survey information was necessary, and if so, to agree where any such transects should be carried out. As far as we are aware this advice does not appear to have been taken into account by the applicant. No further information was provided subsequent to our screening/scoping response being issued and it is unclear whether or not this decision was agreed with SEPA.

We have data from a visual survey carried out in 2015 which suggests that the Priority Marine Feature (PMF) habitat Burrowed Mud is present in the vicinity of the cages. The component PMF species tall sea pen (*Funiculina quadrangularis*) was also recorded. Any increase in the footprint of this site is likely to result in increased impacts on these PMF habitats and species. These features do not have legislative protection, but the basis for protection of their national status across Scottish waters is included in the National Marine Plan.

As the information/dialogue that we requested at screening/scoping was not provided, there is insufficient information to complete an impact assessment for PMFs, and therefore we have no means of predicting the degree or extent of likely impacts. Therefore, we cannot advise further on the benthic impacts arising from this proposal. However, we note that this aspect of the proposal will be considered in detail through the CAR licencing process and we would expect to discuss this further with SEPA during that process.

I trust that our advice is clear but please do not hesitate to contact me if you require any further information or clarification.

Yours faithfully

Andrew Campbell
Operations Manager
Lorn and North Argyll
andrew.campbell@snh.gov.uk



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

FAO: Richard Kerr
Argyll & Bute Council
Planning Services
1A Manse Brae
Lochgilphead
PA31 8RD

23 February 2018
Our ref: CDM149075/A2538375
Your ref: 18/00005/MFF
By email only

Dear Sir / Madam,

Town and Country Planning (Scotland) Act 1997 Marine fish farming planning application – Alterations to existing site – Poll Na Gille (PNG), Sound of Shuna – 18/00004/MFF

Thank you for your consultation on the above proposal dated 18 January 2018. The proposal is to enlarge the existing marine fin fish (Atlantic salmon) farm by replacing the current 16 x 100m circumference cages with 12 x 120m circumference cages, move the site 75m to the east of its current location, and to increase the biomass at this site from 2,262 to 2,500t.

Summary

The proposal could affect the Inner Hebrides and the Minches Candidate Special Area of Conservation (cSAC) selected for its harbour porpoise interest. This proposal could be progressed with appropriate mitigation. However, because it could affect internationally important natural heritage interests and therefore, **we object to this proposal unless it is made subject to conditions, so that the works are done strictly in accordance with the mitigation as detailed in our appraisal below.**

We also provide advice about impacts on other aspects of the natural heritage. We have included details of these in our appraisal below.

Appraisal

1. Inner Hebrides and the Minches cSAC

The proposal lies within the Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) selected for its harbour porpoise.

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Argyll and Bute Council is required to consider the effect of the proposal on the cSAC before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a

summary of the legislative requirements (<https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-species/legal-framework/habitats-directive-and-habitats-regulations>).

In our view, this proposal is likely to have a significant effect on the harbour porpoise qualifying interest of the Inner Hebrides and the Minches cSAC. Consequently, Argyll and Bute Council is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. To help you do this, we advise that in our view, on the basis of the information provided and the appraisal carried out to date, if the proposal is undertaken strictly in accordance with the following mitigation, then it will not adversely affect the integrity of the site. Our mitigation advice is as follows:

- 1) Any Acoustic Deterrent Devices (ADDs) that are deployed at this site will be done so in accordance with the agreed ADD deployment plan (as detailed in annex 1 of the supporting information provided with the application). Any future changes to the plan must be approved by the Planning Authority.
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- The operator has committed to keeping a record of ADD use at the site and will provide this information to the Planning Authority on request. This will provide an opportunity for the Planning Authority to consider and review the use of ADDs at this site, thus ensuring that long-term cumulative issues can be taken into account in the future.

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

We would be happy to provide the full details and reasoning of these recommendations in the form of our Habitats Regulations Appraisal (HRA) proforma.

Background information on the cSAC can be found at: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/harbour-porpoise-candidate>

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We have reached this conclusion because the proposal could theoretically result in a reduced availability of prey species, particularly crustaceans, in a relatively localised area around the proposed development. It could also affect egg-laying areas of common skate locally through deposition of materials onto suitable substrate. However, within the context of the MPA as a whole, we consider that any reduction in prey species or the degradation of egg-laying substrates as a result of the deposition of organic waste is unlikely to be significant.

We therefore consider that the risk of this proposal being capable of affecting, other than insignificantly, the protected features of the Loch Sunart to the Sound of Jura NC MPA is low.

The discharge of chemicals is primarily SEPA's remit and we would expect this aspect of the proposal to be considered in detail through the CAR licensing process. Argyll and Bute Council may wish to consult with SEPA when undertaking their own assessment of the effect of the proposal on the NC MPA.

3. Benthic Impacts

During the screening/scoping stage of this proposal, in the template submitted by the applicant on 14 August 2017, in relation to benthic impacts the applicant stated that:

"Once a new footprint for the site has been modelled discussions will be carried out with SEPA and SNH to determine whether a baseline video survey is required for the proposed development."

We are not aware of any discussions between SNH, SEPA and the applicant, prior to this application being submitted, to agree upon the requirement for a new baseline visual survey. However, from the limited information that we have available, it appears as though a new baseline visual survey may have been required.

We have no information relating to the benthic habitats and species that are likely to be present at this site and cannot therefore advise further on the benthic impacts arising from this proposal. However, we note that this aspect of the proposal will be considered in detail through the CAR licencing process and we would expect to discuss this further with SEPA during that process.

I trust that our advice is clear but please do not hesitate to contact me if you require any further information or clarification.

Yours faithfully,

Andrew Campbell
Operations Manager
Lorn and North Argyll
andrew.campbellt@snh.gov.uk

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:	18/00005/MFF
Planning Hierarchy:	Local Development
Applicant:	Marine Harvest (Scotland) Ltd
Proposal:	Enlargement of marine fin fish (Atlantic salmon) farm from 10 No. x 120 metre circumference cages to 12 No. x 120 metre circumference cages and replacement of feed barge, including increase in biomass to 3,500 tonnes
Site Address:	Bagh Dail Nan Ceann (BDNC) Fish Farm, Loch Shuna, Ardfern

DECISION ROUTE

Local Government Act 1973

(A) THE APPLICATION

(i) Development Requiring Express Planning Permission

- Increase in cage numbers from 10 No. to 12 No. 120m circumference cages;
- Increase in size of mooring grid cells from 75m² to 80m²;
- Enlargement of seabed mooring area from 34.2ha. to 34.8ha;
- Localised realignment of southern end of cage group;
- Replacement of 200 tonne feed barge with 400 tonne feed barge;
- Installation of service raft (9m x 12m);
- Installation of lice skirts;
- Increase in maximum standing biomass from 2,500 to 3,500 tonnes.

(ii) Other specified operations

- Servicing from existing shore base at Craobh Haven;
 - Use of underwater maturation lighting
 - Proposed relinquishment of the long-term fallowed 2,500 tonne farm at Ardmaddy South, Seil Sound.
-

(B) RECOMMENDATION:

It is recommended that permission be granted subject to the conditions and reasons listed in the report.

(C) CONSULTATIONS:

Marine Scotland Science (07.03.2018) – the site lies in an uncategorised water body for the purposes of Locational Guidelines. Modelling indicates that the proposals should not result in an unacceptable level of nutrient impacts at the site level or cumulatively with other sites in the same water body. The proposed stocking density is acceptable and the proposals should not affect current husbandry practices, disease management, predator interaction or escapes contingencies.

There has been a recent history of elevated sea lice levels at this site and other sites within the Add and Ormsary reporting area, exceeding the industry Code of Good Conduct levels for treatment within that area during October 2015 – July 2016, and increasing above reporting levels at this site during September - November 2017. In response to a Fish Health Inspectorate request, a review of sea lice management has been carried out by the applicant resulting in a comprehensive report outlining improvements made in the applicant's sea lice strategy, both across Scotland and specifically in this Farm Management Area (M-40). These have included the deployment of cleaner fish (wrasse and lumpfish), the installation of lice skirts and non-medicinal removal methods such as hydrolicer and thermolicer use, and freshwater bath treatments. Latterly, lice levels have fallen below reporting levels since the November 2017, peak suggesting the effectiveness of these additional interventions. The site is due to fallow in April 2018.

Whilst there remain some concerns that increased biomass may aggravate the issues which have been experienced with sea lice across this FMA, the impact from the overall increase proposed at this site together with that proposed at the Pol Na Gille site is potentially minor provided that the applicant's inactive site at Ardmaddy is not reactivated. The applicant's Farm Management Statement which details the intended lice management strategy is acceptable. FMA M-40 is not subject to synchronous stocking and fallowing across all sites but is operated as two distinct areas which reflects the limited connectivity between those areas. The FMA risk assessment conducted in November 2017 confirmed the ongoing appropriateness of this approach, subject to regular review.

There are 5 salmon and 5 rainbow trout farms within 15km of this site posing cumulative impacts for wild fish within an area which has been subject to past difficulties in lice control, especially in the second year of production. Subject to SEPA consent being obtained for the chemical treatment of the enhanced biomass, with intended treatment synchronicity with other local sites and with other means of intervention in place, the applicant aims to satisfy CoGP trigger levels. The Add statistical district has seen a collapse in wild salmon and trout with a general decline evident in catch records since

the 1960's/70's. Although the Rivers Add and Barbreck do have fisheries, there are no notable fisheries in the vicinity of the site. Nonetheless lice from farms will present a risk to migratory salmon and to sea trout which are in coastal waters year round. Additional biomass presents additional hosts for lice and the greater number of lice present the greater the risk to wild fish.

Scottish Environment Protection Agency (23.02.2018) – Initial response objecting to the application on the grounds of inadequate information. A recent benthic survey is required to demonstrate the existing condition of the seabed following a production cycle with a peak biomass of 2,456tonnes, along with a visual survey, plus additional modelling and calculations. The site lies 2.5km east of the Firth of Lorn Special Area of Conservation (SAC designated for reef habitat) prompting the need for a Habitats Regulations Assessment as part of the determination of this application. It also lies in the proposed Hebrides and Minches candidate Special Area of Conservation (cSAC designated for Harbour porpoise) It also lies within the Loch Sunart to Sound of Jura Marine Protected Area (MPA designated for Common skate and Quaternary of Scotland). A CAR licence variation application is under consideration and HRA and MPA assessments would be undertaken by SEPA as part of that process.

Further responses confirming receipt of additional information from the applicant (14.05.18) and subsequently confirmation of the withdrawal of the holding objection (01.06.18), on the basis that the submitted information indicates that there would not appear to be any fundamental impediment to a CAR licence variation being obtained.

Scottish Natural Heritage (27.02.2018) – object to the proposal on the grounds of potential impacts on internationally important heritage interests, unless it is made subject to conditions requiring specific mitigation. Any intention to grant planning permission in the absence of recommended mitigation and conditions would prompt notification of the application to Scottish Ministers.

As part of the application process the Council is required to consider the effect of the proposal on the Firth of Lorn Special Area of Conservation (SAC) and the Hebrides and Minches candidate Special Area of Conservation (cSAC). In advising the Council in this matter, SNH has indicated their view that the proposal is unlikely to pose significant effects upon the SAC but that in terms of the cSAC it is likely to have a significant effect upon the site's conservation objectives for its qualifying interest, unless the farm is operated strictly in accordance with identified mitigation. This relates to the deployment and use of Acoustic Deterrent Devices (ADD's) at this site. In terms of the Loch Sunart to the Sound of Jura MPA, SNH considers it unlikely that the proposal presents any significant impact upon common skate.

In terms of Priority Marine Features (PMF's) a previous visual survey undertaken in 2015 identified Burrowed Mud habitat, which is a PMF. The component PMF species tall sea pen was also recorded. There is insufficient information accompanying the application to allow comment on the benthic impacts of the proposal, although it is understood that this will be required by SEPA as part of the CAR licensing process.

Argyll & District Salmon Fishery Board (18.01.2018 and 18.05.2018) – object to the application on the grounds of increased risk to wild salmonids from sea lice and escapee fish. Wild fish numbers on the west coast have collapsed in recent years. The site lies within 12km of the River Add, 16km of the Barbreck River, 30km of the River Euchar and 35km of the River Nell, which are within or close to the range which scientific studies have found lice associated with farmed fish. Published data has shown elevated lice levels in the Add and Ormsary management area and the Awe and Nell area to the north with the most elevated levels in the spring of 2016, which would have coincided with the time when young salmon and sea trout would have entered the sea.

The proposal presents additional risk to wild fish due to a higher number of on-farm hosts. Other proposals to expand production elsewhere in the management area will present cumulative impacts. Whilst the fish farm companies are diversifying their lice control methods, the view of the Board and the Argyll Fisheries Trust is that no expansion should be permitted until the operators are able to demonstrate effective control over a production cycle, to implement control measures to accommodate lice arising from additional biomass, to monitor the health of wild fish populations, and to commit to all possible action to recover escape fish, and in the event of interbreeding investigate consequences via genetic studies. These could form part of an Environmental Management Plan linked to any planning permission.

Aware that there is a specific project underway managed by Scottish Natural Heritage, to reintroduce Freshwater Pearl Mussel into a river local to the application. It is highlighted that the freshwater pearl mussel is protected under the Wildlife and Countryside Act (1981). It is also listed on Annexes II and V of the EC Habitats Directive, Appendix III of the Bern Convention and the UK Biodiversity Action Plan as a 'Priority Species' requiring the implementation of a Species Action Plan (SAP) dedicated to its survival. Freshwater Pearl Mussel are dependent on juvenile salmonids as a host for the mussel's parasitic life-stage and therefore any reduction of juvenile salmonids may affect the pearl mussel population.

Council's Marine and Coastal Officer (06.02.18) – Benthic and water column impacts will be assessed by SEPA as part of a CAR Licence determination. The applicants have submitted a detailed sea lice management statement which demonstrates a range of measures which can be changed or added to if lice levels are higher than expected and additional action is required. At the time a small expansion to this site was permitted in 2015, a condition was imposed requiring monitoring of impact of the site on wild salmon populations within nine months of stocking. The document submitted includes monitoring results to inform the consideration of this subsequent proposal. The site is located in the Add and Ormsary SSPO reporting region within which there are six farms under the control of three operators, so it is difficult on the basis of aggregated data to relate these figures to this individual farm. Lice levels for this reporting region overall were high throughout seven months of 2016 but have remained low from August 2016. Advice from Marine Scotland and the Salmon Fishery Board will influence whether and Environmental Management Plan is appropriate to provide for adaptive management if sea lice control is not as effective as the applicant's anticipate. SNH will advise on consequences for other habitats and species. No significant effects are expected in terms of predator interactions, navigation, anchorages, commercial fishing or

recreational use. The lengthening of the cage group and replacement of the barge will cause some landscape and visual effects but these are not expected to be significant.

Northern Lighthouse Board (22.01.18) – no objection. Navigation marking advice provided.

Royal Yachting Association (01.02.18) – no objection.

Clyde Fishermen's Association – no response.

South West Inshore Fisheries Group – no response.

Craignish Community Council (15.01.18) – objects to the creeping incremental increase in capacity posed by this application and the associated application (outwith the CCC area but in the same water body) at Pol na Gille. Reference is made to the recent findings of the Scottish Parliament's Environment Climate Change and Land Reform Committee, which has provided evidence as to the lack of proper understanding of the environmental impacts of salmon farming. The CC's view is that there should be a moratorium on any expansion until further research has been concluded and the results published. Marine tourism, sailing, kayaking fishing and so on is jeopardised by the expansion of fish farming particularly in Loch Shuna and Loch Melfort. The existing farm already poses a nuisance to residents in terms of lights and generator noise from visiting vessels and this would be exacerbated by any expansion.

(D) HISTORY:

FFA/ABC/019 Scottish Government Audit and Review consent granted by Development Order 2011.

14/02660/SCRSCO - EIA screening and scoping for modification of fin fish farm – Negative screening opinion issued 24.12.14.

15/01179/MFF - Formation of new Salmon Fish Farm on site of existing Salmon Fish Farm, comprising larger moorings extent, installation of ten 120m circumference cages and feed barge – granted 21.08.2015.

17/02102/SCRSCO - EIA screening and scoping for extension of fin fish farm – Negative screening opinion issued 26.10.17.

(E) PUBLICITY:

The proposal has been advertised in the local newspaper with the publicity periods having expired on 16.02.2018.

(F) REPRESENTATIONS:

24 objections have been received from the following individuals and organisations:

[REDACTED] (04.02.18)
[REDACTED] (04.02.18)
[REDACTED] (05.02.18)
[REDACTED] (19.02.18);
[REDACTED] (05.02.18);
[REDACTED] by email, no address supplied (dated 05.02.18);
Friends of the Sound of Jura [REDACTED]
(15.2.18);
[REDACTED] (19.2.18);
[REDACTED] (09.03.18);
[REDACTED] (10.03.18);
[REDACTED] (08.03.18);
[REDACTED] by email (07.03.18);
National Trust for Scotland (12.03.18)
[REDACTED] (dated 06.03.18);
Craignish Restoration of Marine and Coastal Habitats (CROMACH) c/o [REDACTED]
(06.03.18);
Nell and Euchar River Improvement Association c/o [REDACTED]
[REDACTED] (03.18);
[REDACTED] by email (dated 07.03.18);
[REDACTED] (09.03.18);
[REDACTED] (09.03.18);
[REDACTED] by email (10.03.18);
Salmon and Trout Conservation Scotland c/o [REDACTED] (12.04.18)
[REDACTED] (03.03.18)
[REDACTED] (05.03.18)
[REDACTED] (05.02.18)

7 expressions of support have been received from the following individuals and organisations:

[REDACTED] (19.02.18)
[REDACTED] (11.02.18)
Holt Leisure Parks Ltd, [REDACTED] (21.02.18)
[REDACTED] (02.03.18)
[REDACTED] (16.02.18)
[REDACTED] (16.02.18)
[REDACTED] (08.02.18)

i) Summary of issues raised by objectors

Disturbance of cetaceans

- The use of Acoustic Deterrent Devices (ADD's) will disturb, exclude and potentially cause hearing damage to cetaceans, including porpoises, and such disturbance is illegal under wildlife legislation. Legal and scientific opinion recently submitted to the government's Economic Climate change and Land Reform Committee has been supplied and is cited in support of this contention.
- It is suggested that advice provided to the Planning Authority by SNH about the use of ADD's in previous cases has not had regard to the consequence of cumulative use of ADD's at multiple sites, or the lack of control over and monitoring as to use of ADD's in practice by SNH. In terms of time exposure and volume, it is contended that SNH has failed to adopt the required precautionary approach in circumstances of 'reasonable scientific doubt, and has failed to advise the Planning Authority appropriately in terms of the need for 'appropriate assessment' under the Habitats Regulations.
- Based on scientific evidence currently available, it is not credible to argue that the current use of ADDs is not adversely affecting the integrity of the cSAC. We urge Scottish Ministers to commission scientifically robust Appropriate Assessments into the use of ADDs at individual farms and also for the cumulative effect of ADDs on the cSAC. The Waddenzee ruling confirms that Appropriate Assessment must be carried out if there is any doubt as to the possibility of adverse effects.
- It is not open operators to deploy ADD's without the agreement of Planning Authorities and SNH, as there is evidence that their use does disturb porpoise, in which case ADD's could only be used following a European Protected Species Licence being issued by Marine Scotland. Fish farms would be unable to satisfy the requirement for such within an area designated for porpoise.
- Alternative techniques avoiding the use of ADD's are available such as the use of anti-predator nets or closed containment systems.
- The technology to completely separate seals and farmed salmon obviating the need to use ADDs or shoot seals already exists and is used worldwide e.g. the use of anti-predator nets.

Comment: In order to maintain containment in the interests of both securing production and avoiding escapees posing adverse consequences for wild fish, the applicants may need to resort to the use of ADD's to deter persistent seal attack where there is risk of containment being lost. Successful use of ADD's avoids need to resort to the licensed shooting of seals, which are themselves a protected species. SNH as the government's nature conservation advisory body advises the Council as part of the planning process as to whether ADD use is appropriate at a particular site and if so under what circumstances. SNH has concluded in this case that although the development poses potentially significant effects, provided that ADD deployment is controlled via condition in the manner recommended by them. On this basis SNH do not object to the proposal. It

should be noted that there is currently no planning condition restricting the use of ADD's at the current site.

Wild fish interactions

- Concern about the detrimental effects of sea lice on wild trout and salmon populations in local rivers - the Add and Barbreck Rivers.
- The Council's legal duty to protect and promote biodiversity obliges it to adopt the precautionary principle and not to grant permission for an increase in biomass without being able to predict the impact this would have on wild salmonids and be able to apply meaningful mitigation measures.

Comment: Issues concerning impacts upon wild salmonids are considered in detail in Section 4 of Appendix A to this report. The applicant's agreement to relinquish the lease for the farm currently in long-term fallow at Ardmaddy South in Seil Sound prior to increasing biomass at either this site or Pol Na Gille, will maintain the status quo in terms of farmed fish within the receiving water body, which provides reassurance that there will be no additional prejudice to wild fish interests as a result of the enlargement of this farm.

Nature conservation designations

- Both the PNG and BDNC fish farms are located within the Loch Sunart to Sound of Jura MPA which has been designated for the resident breeding population of critically endangered common skate. The impacts of fish farming on this priority species is completely unknown and a precautionary approach should be adopted.

Comment: SNH has commented on likely effects on the qualifying interests of this designation and have not objected to the proposals on these grounds.

Pollution control

- Aquaculture is the only industry allowed to dump its untreated waste and toxic chemicals into the sea.
- SEPA inappropriately fail to regard Shuna and Seil as sea lochs which influences the number of farms they are prepared to consent. There has been an absence of a comprehensive Environmental Impact Assessment to address the cumulative consequences of discharges from both terrestrial and marine developments into these waters in circumstances where high levels of nitrogen enrichment are experienced, even before the effects of fish farms are added, all in an area of limited tidal flushing.
- SEPA cap all fish farms at 2500 tonnes and have not yet had their new DZR system or its computer model approved for use yet Marine Harvest are using this in their application.
- Concern is expressed over the use of environmentally damaging chemicals such as emamectin benzoate which are known to harm marine crustaceans, potentially impacting on the livelihood of local fishermen.
- Effluent from the fish creates de-oxygenated dead zones under the cages and also disperses into the wider marine area. The contents of fish food is another concern.

Comment: SEPA has the remit for pollution control in the case of marine fish farms which it exercises via the CAR licence process. Although a licence has not yet been issued, this is not an impediment to the granting of planning permission, given that the regulatory processes are separate from one another and there is no prescribed order in which these consents should be sought. Government advice in the matter is clear that planning authorities should not seek to replicate the functions of other regulatory bodies. Accordingly, pollution control issues are not material planning considerations in this case. It should be noted that a CAR licence variation is required by SEPA and that there will be opportunities for third parties to make representation in response to that process. SEPA has confirmed that on the basis of information available to date, they do not anticipate an impediment a CAR licence variation for the additional biomass proposed.

Sustainability of the salmon farming industry

- The salmon farming industry is the subject of an ongoing parliamentary investigation being undertaken by the Rural Economy and Connectivity Committee and has already been the subject of a recent damning report from the Scottish Parliament Environment Committee about the environmental effects of fish farming. There should be a moratorium on all fish farm development until there is independent proof of the sustainability of this industry.

Comment: Government policy is currently to seek to expand the aquaculture sector where opportunities exist within the carrying capacity of the receiving environment and this stance is reflected in the Council's LDP policy. The findings of the recent Environment Committee report are a material consideration in this case, but not one of the same weight as national or local policy. It is open to the government to impose national moratoria on particular types of development (as currently in force for fracking, for example), but the report in question has not prompted that response. Further consideration by the Scottish Parliament is ongoing via its Rural Economy and Connectivity Committee's investigation into Salmon Farming in Scotland, which has yet to report.

- The sourcing of food for farmed salmon is currently unsustainable at a global level with pelagic fish stocks being decimated and large areas of forest destroyed to allow the production of alternatives and additives such as soy.

Comment: Sourcing of protein for fish feed purposes is not a material planning consideration.

Cumulative impact

- BDNC is at the south end of an enclosed water system stretching from Cuan Sound in the north including Loch Melfort, Seil Sound and Shuna Sound. In order to ascertain the overall impact of fish farms in this enclosed area the information from the three areas mentioned above and the Sound of Jura needs to be studied. The overall tonnage of fin fish licenced within the enclosed area is now around 16,000 tonnes. A few of the farms are currently inactive but the licences still stand for this tonnage.

Comment: In responding to the consultations on this application, consultees have had regard to cumulative impacts arising with the management area within which the

application proposal is situated and cumulative impact considerations have influenced the content of this report.

Amenity considerations

- Fish farming operations in the area already create considerable levels of pollution in terms of litter, sound and light.
- Where well boats are used to treat salmon by washing off the sea lice with fresh water, there is an issue of noise and light pollution.
- The plastic pollution of these farms is a major concern. There is litter pollution on the coastline as a result of these farms.

Comment: No properties are located sufficiently close to the site for actionable nuisance to be likely to arise during the normal operation of this site, although the otherwise tranquil and relatively remote situation of the isolated dwellings on the west coast of Craignish will nonetheless render them particularly sensitive to any form of disturbance, regardless of its intensity. At the distances involved it is not considered that the operation of the site poses unreasonably adverse consequences for residential amenity.

Tourism impacts

- The value of marine tourism far outweighs that of fish farming and fish farm infrastructure detracts from the landscape and seascape upon which tourism relies.

Comment: There is no demonstrable evidence to suggest that aquaculture materially influences the decisions of tourist to visit or to return to areas where developments have been carefully located under the auspices of the planning system.

Economic considerations

- Past approval of the expansion of fish farming in lochs Seil, Shuna and Melfort has been unduly influenced by economic considerations. The most significant employment associated with aquaculture (fish processing, feed production etc.) is invariably far removed from the location of farms where tourism and leisure are the main sources of employment.
- Major sources of employment, for example, equipment manufacture, fish processing, the manufacture of feed stuffs and road transport are almost invariably far removed from the location where the salmon populations are caged. In these areas the main sources of employment in the private sector are in tourism and leisure.
- Concern that the proposal will have an adverse effect on the harvesting and selling of edible seaweed due to pollution caused by fish farms.
- Fish Farming poses impacts on a local wildlife photography business as it is increasing difficult to photograph wild salmon that are not infested with lice. Chemical treatments

also impact on other benthic species which in turn impact on otter which are another photographic subject.

Comment: Anticipated economic benefits in terms of direct and indirect employment associated with the construction and operation of a fish farm, and downstream economic activity and benefits to the export economy will all be material considerations which weigh in favour of a development proposal, whilst adverse effects upon existing non-fish farm related businesses and activities should be regarded as negative influences. It is for the decision-makers to weigh the relative merits of these in the balance of decision making.

Procedural issues

- Concern that an Environmental Impact Assessment was not required for this proposal.

Comment: The proposal was the subject of an EIA screening request in advance of the submission of the planning application. At that time the Council took the opportunity to seek the views of key consultees in the matter even though there was not a procedural requirement to do so. Having had due regard to views expressed by consultees, a negative screening opinion was issued. Accordingly EIA has not been required in this case.

Summarised expressions of support

- The development of the site will support local jobs, particularly for young people with opportunity for progression, and will help retain working age people in Argyll;
- The development will help support other local businesses providing goods and services to the applicants;
- The applicants have invested heavily in the area and their commitment should be regarded as encouraging;
- The company is dedicated to local employment, the training of employees, the use of local contractors where possible and the desire to integrate into the local environs both economically and socially;
- In terms of complaints made regarding sound and light pollution, the site manager is approachable and sympathetic to local opinion.

Note: The foregoing comments represent a summary of the representations. Full details of all representations can be viewed on the Council's Public Access System at:

www.argyll-bute.gov.uk

(G) SUPPORTING INFORMATION

Has the application been the subject of:

(i) Environmental Statement:

No. Negative screening opinion issued 26.10.17.

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|---|--|
| (ii) An appropriate assessment under the Conservation (Natural Habitats) Regulations 1994: | Yes – attached as appendix. |
| (iii) A design or design/access statement: | No |
| (iv) A report on the impact of the proposed development e.g. Retail impact, transport impact, noise impact, flood risk, drainage impact etc: | Yes:
Supporting Statement
Equipment Attestation
Predator Mitigation Plan
Sea Lice Management Statement
Farm Management Statement
Example Treatment Plan
Sea Lice Attestation
Firth of Lorn Farm Management Agreement
Risk Assessment informing Farm Partnership Agreement
NEWDEPOMOD modelling report
Landscape and Visual Report |
-

Applicant's Supporting Statement

A further supporting statement has been received from the applicant dated 29th May 2018. This advises that Marine Harvest are seeking to rationalise operations in the Sound of Shuna at location which are environmentally sustainable and where they can achieve commercial success. They have confirmed that if both applications for PNG and BDNC are approved they will immediately commence the surrender of all regulatory permissions associated with the Ardmaddy South site. It is noted that while this location is presently fallow, it remains an operationally viable location allowing for a maximum biomass of 2,500 tonnes.

It is advised that Marine Harvest have invested heavily and continue to invest in the management and advancement of tools and methodologies to combat the spread of sea lice. There is an increase in the range and deployment of practical and environmentally friendly fish health strategies and evidence of a long term commitment to protect the welfare of farmed fish and to minimise the potential impact on wild salmonids.

A CAR application is also being undertaken which involves a detailed environmental modelling assessment, as agreed with SEPA. The methods will include the use of a wider scale hydrodynamic model of the Sound of Shuna to demonstrate that the proposed increase in biomass and medicine usages associated with the applications do not constitute a significant risk to the water environment and will include an assessment of source apportionment and risk of cumulative impacts from fish farms across the wider area. It is known that the Ardmaddy South site is in a tidally dispersive location resulting in the export of material from the locally modelled grid. The surrender of permissions associated with Ardmaddy South will remove any modelling uncertainty over the fate and behaviour of material from this location.

(H) PLANNING OBLIGATIONS

Is a Section 75 agreement required: No

(I) Has a Direction been issued by Scottish Ministers in terms of Regulation 30, 31 or 32: No

(J) Section 25 of the Act; Development Plan and any other material considerations over and above those listed above which have been taken into account in the assessment of the application

(i) List of all Development Plan Policy considerations taken into account in assessment of the application.

Argyll and Bute Local Development Plan (2015)

LDP STRAT 1 – Sustainable Development

LDP DM 1 – Development within the Development Management Zones

LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment

LDP 5 – Supporting the Sustainable Growth of Our Economy

LDP 9 – Development Setting, Layout and Design

Supplementary Guidance (2016)

SG LDP AQUA 1 – Aquaculture Development

SG LDP CST 1 – Coastal Development

SG LDP ENV 1 – Development Impact on Habitats, Species and our Biodiversity

SG LDP ENV 2 – Development Impact on European Sites

SG LDP ENV 13 – Development Impact on Areas of Panoramic Quality (APQs)

(ii) List of all other material planning considerations taken into account in the assessment of the application, having due regard to Annex A of Circular 4/2009.

Scotland's National Marine Plan (2015)

Scottish Planning Policy (2014)

Scottish Parliament Environment, Climate Change and Land Reform Committee '*Report on the Environmental Impacts of Salmon Farming*' (March 2018)

Circular 1/2007 '*Planning Controls for Marine Fish Farming*'

'A Fresh Start – the Renewed Strategic Framework for Scottish Aquaculture' (Scottish Government 2009)

Scottish Executive – *'Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters'* (updated March 2018)

'Argyll and Bute Economic Development Action Plan' 2013 -18 (Argyll and Bute Council)

(K) Is the proposal a Schedule 2 Development not requiring an Environmental Impact Assessment: Yes, negative screening opinion issued

(L) Has the application been the subject of statutory pre-application consultation (PAC): No

(M) Has a sustainability check list been submitted: No

(N) Does the Council have an interest in the site: No

(O) Requirement for a hearing (PAN41 or other): No.

In deciding whether to exercise the Council's discretion to allow respondents to appear at a discretionary hearing, the following are of significance:

- How up to date the Development Plan is, the relevance of the policies to the proposed development and whether the representations are on development plan policy grounds which have recently been considered through the development plan process.
- The degree of local interest and controversy on material considerations together with the relative size of community affected set against the relative number of representations, and their provenance.

The current Local Development Plan was approved in 2015 and the relevant policies within it are not considered to be outdated.

At the time of writing a total of 24 objections, objection from the community council and six letters of support have been received. The points of objection relate to the disturbance of cetaceans, wild fish interactions, nature conservation designations, pollution control, the sustainability of the salmon farming industry, cumulative impact, tourism impacts, economic considerations and procedural issues.

The supporters to the application are of the view that the proposal has a positive economic effect upon the local area.

It is considered that all of these issues have been effectively addressed in the planning report. With regard to wild fish issues, the fact that the applicant has agreed to relinquish the use of the Ardmaddy Fish Farm through the imposition of a planning condition means that there will be a minor decrease in biomass over the whole water body. In these circumstances it is considered that there would be little value to be gained from convening a discretionary hearing.

(P) Assessment and summary of determining issues and material considerations

This application relates to a long standing marine fish farm located off the west coast of the Craignish peninsula within Shuna Sound. The site was originally established under Crown Estate leasing arrangements, but following fish farming being brought under planning control the site received consent under the Scottish Government's Audit and Review procedure in 2011 for 8 No. 100m circumference cages plus a feed barge. In 2015, consent was given for the re-equipment of the farm by 10 No. 120m circumference cages in an expanded 75m x 75m mooring grid with retention of the existing feed barge and an increase in biomass to 2,500 tonnes at a stocking density of 14kg/m³. The site is now so equipped with a 5 x 2 cage matrix with the feed barge located inshore of the cage group.

The current proposal stems from the applicant's intention to rationalise production following the cessation of use of its site at Ardmaddy South (in long-term fallow since 18.02.16) by increasing production at this site and at Pol Na Gille (subject of separate application), and by maintaining existing production at Port Na Cro and Shuna South West. This will see a transition from the position in 2015/6 when 9,600 tonne capacity was provided across five sites, by a reduction to four locations able to provide a combined capacity of 9,500 tonnes.

The proposal is add two additional cages at the north end of the site, to increase cage spacing and to locally realign the extended cage group at the southern end of the site. It is also proposed to replace the existing feed barge with a larger capacity unit and to add a small service barge. This will enable an increase in biomass (subject to separate SEPA CAR licence consent being obtained) to 3,500 tonnes at a slightly reduced stocking density of 13.5kg/m³.

In terms of the 'Argyll & Bute Local Development Plan' (2015), the site lies off the 'Very Sensitive Countryside' zone established by LDP Policy DM 1 which presumes against most forms of development, but which provides for aquaculture located on appropriate sites. Policy LDP 3 affords protection to marine environment interests and requires that development respects the local distinctiveness of the landscape in terms of location form and design. Policy LDP 5 supports sustainable economic growth and requires cognisance to be given to the spatial needs and locational requirements of business related development. Policy LDP 9 requires development to be positioned

in a manner which pays regard to its context and inappropriate layouts or scales of development will be resisted. Particular attention to design will be required in designated areas (including Areas of Panoramic Quality).

Supplementary Guidance SG LDP AQUA 1 provides sector specific guidance as to how aquaculture proposals should be assessed. It requires consideration of the positive and negative effects relating to both the locational and operational characteristics of the development proposed in terms of specified criteria. Aquaculture will be supported other than where there are significant adverse effects upon those criteria which are incapable of being minimised or mitigated by identified operational measures. SG ENV 2 seeks to safeguard European designated habitats and species and to further biodiversity interests. SG ENV 13 resists development with significant impacts on APQ's, unless that impact is clearly outweighed by social, economic or environmental benefit of community wide importance. SG LDP CST 1 accords the 'isolated coast' status to locations within or adjoining 'very sensitive countryside'. This requires developments to safeguard special coastal qualities and to have regard to a range of consideration which, in the case of aquaculture, are addressed via SG LDP AQUA 1.

Having regard to the assessment required to satisfy SG LDP AQUA 1 as set out in the appendix to this report, the proposal is found to be satisfactory in terms of its landscape and visual effects, its implications for the historic environment, its consequences for benthos and the water column, for navigational safety, recreational use of the water, residential and other amenity considerations. The proposal will contribute to the rural economy as a result of direct and indirect employment and the supply of goods and services and also potentially to the national export economy. The government regard the aquaculture sector as one with growth potential and has ambitious targets for increased production.

Given the long standing presence of this farm in the Sound and its inshore location, taken together with the isolation of this site which is only exposed to a few regularly frequented locations, the relatively small impact of the additional equipment and the lengthening of the cage group are in themselves unlikely to present any significant additional effects beyond those associated with the existing equipment.

Objectors have cited what they regard to be the inappropriate use of Acoustic Deterrent Devices (ADD's) to repel seal predation on fish farm sites within contained waters on the west coast. SNH recognises that use of such devices poses a potentially significant risk to cetaceans and the qualifying interest of the Hebrides and Minches candidate Special Area of Conservation (cSAC) and a Habitats Regulations 'appropriate assessment' has been undertaken in response to this, which is included as an appendix to this report. Further to advice from SNH, this concludes that with appropriate mitigation in place and underpinned by planning condition, potentially significant effects can be avoided.

The proposal poses issues in terms of interactions with wild salmon and sea trout and a number of the objections to the application are founded around concerns relating to

the interests of wild fish and their associated fisheries. Any increase in biomass necessarily raises concerns as to whether the applicants are likely to be able to control sea lice levels to a point where individually, and cumulatively with the associated proposal to increase biomass at Pol Na Gille, the development will not be likely to significantly prejudice the interests of these species. The applicants have acknowledged difficulties in controlling sea lice up to 2015, but since that there has been a recorded steady increase in performance. This may be due to naturally fluctuating conditions, or to better control measures, or a combination of both. Certainly during that period the applicants have diversified their control measures from reliance upon chemical treatments to include innovative control methods such as fresh water treatments, mechanical/temperature control lice removal, and the deployment of cleaner fish as a biological control.

In seeking permission for biomass increases at this site and the nearby site at Pol Na Gille, the applicant has agreed to the imposition of a planning conditions in both cases which will prevent the currently fallowed Ardmaddy South Fish Farm in Seil Sound from being brought back into use. This will result in the level of biomass across the whole water body being maintained at a level similar to the existing levels which will limit the potential for increased numbers of sea lice due to greater numbers of farmed fish. In this way, although the distribution of farmed fish will change as a result of rationalisation from five sites sites to four, the overall risk presented to wild fish from cumulative biomass within the Shuna Sound/Seil Sound area will not be increased.

Subject to recommended conditions, particularly the obligation for the farm site at Admaddy to be relinquished in advance of the implementation of this development, and the need to operate the site in accordance with an agreed Environmental Management Plan, and also having regard to the outcome of the associated Habitats Regulations 'appropriate assessment', the proposal satisfies LDP SG AQUA 1 and other relevant LDP policy.

(Q) Is the proposal consistent with the Development Plan: Yes.

(R) Reasons why Planning Permission or Planning Permission in Principle Should be Granted:

The enlargement of this site satisfies the criteria set out in Policy SG AQUA 1 and other relevant policies of the Council's Local Development Plan and there are no material considerations, including matters raised by consultees and third parties, which would indicate that the provisions of the development plan ought not to prevail.

(S) Reasoned justification for a departure to the provisions of the Development Plan

Not applicable

(T) Need for notification to Scottish Ministers or Historic Environment Scotland: No

Author of Report:

Richard Kerr

Date:

5th June 2018

Angus Gilmour

Head of Planning, Housing and Regulatory Services

CONDITIONS AND REASONS RELATIVE TO APPLICATION 18/00005/MFF

1. The development hereby permitted shall not be carried out other than wholly in accordance with the following plans and details unless the prior written approval of the Planning Authority is obtained for a non-material amendment to the approved details under Section 64 of the Town and Country Planning (Scotland) Act 1997:
 - Application Form dated 14.12.17;
 - Plan 1 of 15 – location plan;
 - Plan 2 of 15 – Admiralty chart location of existing site;
 - Plan 3 of 15 – planning boundary area;
 - Plan 4 of 15 – Admiralty chart location of proposed site;
 - Plan 5 of 15 – proposed site layout;
 - Plan 6 of 15 – Admiralty chart location of equipment;
 - Plan 7 of 15 – Admiralty chart site layout;
 - Plan 8 of 15 – site co-ordinates;
 - Plan 9 of 15 – site configuration;
 - Plan 10 of 15 – pen design 1;
 - Plan 11 of 15 – pen design 2;
 - Plan 12 of 15 – mooring design;
 - Plan 13 of 15 – feed barge 1;
 - Plan 14 of 15 – feed barge 2;
 - Plan 15 of 15 – feed barge 3

Reason: For the purpose of clarity, to ensure that the development is implemented in accordance with the approved details.

2. The stocking of the site shall not exceed a maximum biomass of 3,500 tonnes.

Reason: In order to restrict production to that assessed for the purposes of this application in the interests of managing wild fish interactions.

3. The development hereby approved shall not be implemented until evidence has been provided to the Planning Authority that the Crown Estate lease held by the applicants for the farm site at Ardmaddy South, Seil Sound has been relinquished and the site has been permanently de-equipped.

Reason: In order to restrict available biomass within the management area within which the proposal is located in the interests of managing wild fish interactions.

4. Prior to any increase in biomass above current consented levels, the site operator shall submit a Strategy for monitoring and managing the interactions between the operation of the farm and the wild fish environment for the written approval of the Planning Authority, in consultation with the District Salmon Fishery Board, or any successor body.

The Strategy shall address the intended response to breaches of containment and sea lice control measures at the development site, and shall set out a programme for the monitoring of changes in the prevalence of sea lice infestations amongst wild Salmonids within a zone of 30 kilometres from the development site.

The Strategy shall:

- A) Define a regime of regular monitoring and reporting of sea lice infestation on and at representative locations within 30km of the development site;
- B) Propose thresholds of ovigerous sea lice infestation (in terms of both severity and persistence) on and at representative locations within 30km of the development site above which additional mitigation measures are required;
- C) Specify the additional mitigation measures which shall be implemented in the event of either threshold being breached. This shall include a progressive response extending from enhanced monitoring, to additional chemical/biological treatment, to premature harvesting and to temporary biomass reduction, dependent upon the severity and persistence of the elevated risk to wild fish interests;
- D) Identify a minimum threshold for escape events, above which the implementation of additional monitoring activity as specified in the plan will be undertaken with the intention of furthering knowledge as to the genetic impact of escapes;
- E) Include for the periodic review of the Strategy in the light of operational experience, and to accommodate changes in scientific knowledge and 'best practice'.

Following the approval of the Strategy by the Planning Authority, the site shall be operated, monitored, and managed thereafter in accordance with the duly approved Strategy, or any subsequently approved variation thereof.

Reason: In the interests of nature conservation.

- 5. Any deployment and use of Acoustic Deterrent Devices (ADD's) at this site shall be in accordance with the ADD deployment plan detailed in Annex 1 of the supporting information accompanying the application submission, or such alternative as may be agreed in advance in writing by the Planning Authority in consultation with Scottish Natural Heritage. In the event of ADD deployment, the operator shall maintain a log which details:
 - a) the model and specification of any ADD deployed at the site;
 - b) the dates and durations of ADD operation;
 - c) the prompt for use (manual or auto sensor)
 - d) details of any predation events;
 - e) other anti-predation measures deployed at the time of ADD use;

f) details of person(s) responsible for maintaining the log,

The log shall be maintained available for inspection on request by the Planning Authority.

Reason: In order to avoid disturbance of harbour porpoise and to maintain the favourable conservation status of this species within the Hebrides and Minches candidate Special Area of Conservation and to avoid disturbance of other marine mammals in the interests of nature conservation.

6. In the event that the development or any associated equipment approved by this permission ceases to be in operational use for a period exceeding three years, the equipment shall be wholly removed from the site thereafter unless otherwise agreed in writing by the Planning Authority.

Reason: In the interest of visual amenity and to ensure that redundant development does not sterilise capacity for future development within the same water body.

7. In the event of equipment falling into disrepair or becoming damaged, adrift, stranded, abandoned or sunk in such a manner as to cause an obstruction or danger to navigation, the developer shall carry out or make suitable arrangements for the carrying out of all measures necessary for lighting, buoying, raising, repairing, moving or destroying, as appropriate, the whole or any part of the equipment.

Reason: In the interest of visual amenity.

APPENDIX A RELATIVE TO APPLICATION 18/00005/MFF

Introduction

This application relates to one of a suite of Atlantic salmon farms operated by Marine Harvest in the waters around the Isle of Shuna and Seil Sound. The site is situated close to the mainland off the west coast of the Craignish peninsula in a location removed from roads and generally frequented locations. It is a long-standing farm site which was consented for planning purposes via the government's Audit and Review process with planning permission having been given for enlargement in 2015. Following difficulties with the operation of a new site at Ardmaddy to the north in Seil Sound, the applicants have placed that site in long-term fallow and are looking to consolidate production at four rather than five locations, which has prompted this application to extend the BDNC site (and also the associated site at Poll Na Gille elsewhere on the agenda).

The consented farm is aligned north-east to south-west and is located close to and parallel the shore with a feed barge inshore of the cage group. It consists of two rows of cages with a feed barge positioned at the southern end. It comprises a group of 10 No. 120m circumference cages held within a grid matrix of 75m x 75m cells. The surface equipment covers an area of 11,461m² held within a seabed mooring area of around 34.4 hectares.

The permitted equipment comprises conventional polyethylene flotation rings from which 12m deep nets are suspended, plus a horizontal hamster wheel arrangement to support top nets to exclude piscivorous birds. The site is served by a permanently moored 200 tonne feed barge and is serviced from a shore base at Craobh Haven. The site is licensed by SEPA to hold a maximum standing biomass of 2,500 tonnes. The farm is operated on a 22.5 month production cycle with a minimum fallowing period of 6 weeks between production cycles. Stocking and harvesting takes place by well boat.

Location

This farm lies off the LDP defined 'very sensitive countryside' development management zone, which in turn confers 'isolated coast' status on the adjacent land. There are no buildings or sensitive receptors immediately overlooking the farm, with most population and activity being concentrated on the opposite site of the peninsula facing Loch Craignish. There is some isolated habitation on the west coast the nearest dwelling being some 800m (although this is not orientated towards the farm), the next nearest dwellings being over 1.2km along the coast to the south. Whilst it is possible to access the coast via the path from Corranmor, or from the Lunga Estate via Gemill, it does not appear that this rather inaccessible stretch of coast is routinely visited in numbers. The farm is therefore most likely to be experienced by boat from the water or from more distant offshore island locations. The site does lie close to waters used for recreational purpose and by craft transiting to and from the marina at Craobh Haven. These sheltered and picturesque waters are valued by yachtsmen so there will be marine receptors who will experience this location. This section of coast is subject to an LDP defined Area of Panoramic Quality designation in view of its scenic qualities of regional importance.

The site is located within undesignated waters under Marine Scotland's Locational Guidelines, which indicates better prospects of fish farm developments being acceptable in environmental terms. The Water Framework Directive water body status of the Sound of Shuna is classified as 'good' by SEPA. The site lies 2km outwith the Firth of Lorn Special Area of Conservation (SAC) (reef habitat), but within the Inner Hebrides and the Minches candidate SAC (harbour porpoise) and the Loch Sunart to Sound of Jura Marine Protected Area (MPA) (common skate). There are no historic environment designations applicable to the site although there are some sites of local archaeological importance along the west coast of the Craignish peninsula.

Proposal

The proposed development involves a spacing out of the current equipment by employing a larger dimensioned mooring grid with 80m cells, adding a further two cells at the northern end to accommodate two additional cages, retaining a roughly similar centre point to that of the existing equipment, but rotating the site slightly further offshore at its southern end. The existing feed barge is to be removed in favour of an alternative design of twice the capacity to be sited in the same inshore location as the current model. Whilst the alteration in equipment increases the surface area from 11,461 to 13,753m² and lengthens the site by some 95m, the mooring area is to be reduced by some 50m in width, so that overall, the increase in extent of mooring area to facilitate the proposed alteration in surface equipment is negligible (0.4ha).

The proposed enlarged equipment would enable a modest reduction in maximum stocking density from 14g/m² to 13.5g/m² but will facilitate a biomass increase to 3,500 tonnes. The spreading out of cages will increase the size of the depositional footprint of the existing farm and would be likely to result in a reduced loading below each cage, but over a larger area. Additional nutrient loading will be occasioned by the addition of two further cages and the overall increase in biomass. The impact of the development upon the water column and upon benthos will be considered separately from the planning process by SEPA's CAR licensing of the site.

Planning Policy

The proposal benefits from general support from the Scottish Government's National Marine Plan and from Scottish Planning Policy which together recognise the contribution of the aquaculture sector to the rural economy and which seek to support sustainable economic development. The National Marine Plan and Scottish Planning Policy both support the expansion of marine fish farming where it can take place in environmental sustainable locations, where it does not exceed the carrying capacity of the water body within which it is to be located, and where it does not give rise to significant adverse effects upon nature conservation, wild fish, historic environment or other commercial or recreational water users.

The Council's Local Development Plan includes the land to the east of the site within the 'very sensitive countryside' zone which confers 'isolated coast' status. LDP Supplementary guidance SG LDP AQUA 1 – Aquaculture Development provides a general framework

against which fish farm applications should be considered, along with other relevant LDP policy and SG.

The following Local Development Plan provisions are applicable to this development:

Policy LDP STRAT 1 – Sustainable Development supports the presumption in favour of sustainable economic development established by Scottish Planning policy and lends weight to aquaculture developments unless there are environmental considerations which outweigh this presumption.

Policy LDP DM 1 – Development within the Development Management Zones – Land immediately east of the site is designated as ‘very sensitive countryside’ zone.

Policy LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment – seeks to control development in a manner which protects, conserves or where possible enhances the built, human and natural environment.

Policy LDP 5 – Supporting the Sustainable Growth of Our Economy – requires regard to be had to economic benefit and the spatial needs and locational requirements of business sectors.

Policy LDP 9 – Development Setting, Layout and Design – requires that regard should be had to the setting of developments, the sensitivity of the receiving environment and the need to secure appropriate forms of scale, design and appearance.

Supplementary Guidance SG LDP AQUA 1 – Aquaculture Development stems from Policy LDP 5 which identifies aquaculture as a key economic sector in Argyll & Bute. It sets out criteria against which the locational and operational characteristics of a development require to be assessed. Proposals are to be supported if direct, indirect or cumulative significant effects are avoided, or adverse effects can be minimised or mitigated by operational measures.

Beyond development plan considerations, in determining the application regard has to be had to the Council’s Economic Development Action Plan which identifies aquaculture as an important contributor to the local economy, and to national government economic and sectoral policy, the stated intention of which is to seek to expand the finfish sector substantially to meet internal and export demands and to help sustain direct and indirect employment in rural areas.

A further recent consideration prompted by continuing demands from wild fish interests for more stringent controls over marine fish farming, has been the Scottish Parliament’s Rural Economy and Connectivity Committee Inquiry into Salmon Farming in Scotland, the adopted remit of which is:

‘to consider the current state of salmon industry in Scotland, identify opportunities for its future development and explore how the various fish health and environmental challenges it currently faces can be addressed’.

As part of this process, the Scottish Parliament's Environment, Climate Change and Land Reform Committee has submitted the findings of its own inquiry – '*Report on the Environmental Impacts of Salmon Farming*' (March 2018). This concluded that the significance of environmental issues has increased as the sector has expanded and that targets for the expansion of the sector over the next 10 – 15 years place even more pressures on the marine environment. Whilst the Inquiry considered a wide range of environmental consequences stemming from the operation of marine fish farms, its specific conclusions on the issues presented by sea lice were, in summary, as follows:

- Efforts of the industry have been proven to be largely insufficient to address lice issues;
- Lice data should be made available by operators in real time on a site by site basis (as proposed latterly by the SSPO), in favour of Marine Scotland's published aggregated data. Mortality data should be made similarly available;
- Research into best lice management practice and further scientific study in respect of wild fish is required, to address knowledge gaps in terms of matters such as lice impacts at population level, distribution of migratory routes, genetic mixing between farmed and wild fish, treatment effects upon other species, for example;
- Regulators appear to have had too little focus on the precautionary principle in the expansion of the sector and that regulators should place their biodiversity duty to the fore in assessing further developments.

These views will form part of the considerations being reviewed by the ongoing Inquiry by the Rural Economy and Connectivity Committee into Salmon Farming in Scotland, which has yet to report.

Assessment against policy criteria

Assessment of the proposal in this case will primarily be against the criterial set out in sector specific supplementary guidance SG LDP AQUA1. There is a requirement to consider the locational and operational characteristics of the development against each of the specified criterial with the presumption that proposals will be supported where:

- Direct, indirect or cumulative significant adverse effects on the criteria are avoided in relation to the locational characteristics of the development (*this would be relevant in this case in terms of the impact of the development upon nature conservation designations, for example*);
- The applicant can demonstrate that the level of risk of potential impacts on criteria relating to the operation of the site can be effectively minimised or mitigated by appropriate operational measures (*this would be relevant in this case to the impact of the operation of the development upon wild fish interests*);
- Proposals are consistent with other local and national policies and guidance
The eight development criteria set out in SG LDP AQUA 1 are reviewed in the sections below.

1) Landscape/Seascape and Visual Amenity

The proposal will result in an increase in surface area by approximately 2,292m². Two additional pens will be added to the northern end of the site resulting in a 2 x 6 cage group configuration. Each of the 120m circumference cages will be 38m in diameter contained within an 80m cell mooring grid, producing cage spacing of 42m. The replacement barge will be larger than the existing model and will be located inshore of the cage group. Whilst the centre of the cage group will remain in approximately the same position the use of an expanded grid matrix will increase spacing between the cages and the orientation of the group will pivot slightly offshore at the southern end of the site.

This site has been occupied by a large scale finfish farm for many years and it is a well-established feature of the locality, being one of a suite of sites operated by the applicants in Loch Shuna. This farm is only readily capable of being experienced at close quarters from the sea and there appears little in the way of public access for recreational or other purposes to the coast overlooking the site, so terrestrial receptors are likely to be very limited in number. Any visibility from isolated dwellings is at a distance.

The applicants have commissioned accredited landscape consultants to provide a landscape and visual commentary on this proposal (the requirement for a full LVIA having been previously screened out as part of the EIA screening process). This has resulted in the production of Zones of Theoretical Visibility for existing and proposed equipment and has entailed consideration of designations, constraints and likely visual receptors. This concludes that there are few additional locations which would be affected by the enlargement of the site. Visibility would remain largely confined to the largely unfrequented western coastal edge of Craignish, from east facing locations on the islands of Shuna, Luing and Scarba, and from locations at sea.

In terms of nationally important landscape designations the Jura Scarba, Lunga and the Garvellach National Scenic Area (NSA) and the associated Wild Land Area are located 4.5 – 5.0km west of the site. The area surrounding the site is identified by the Local Development Plan as being ‘very sensitive countryside’, ‘isolated coast’ and ‘area of panoramic quality’ in recognition of its generally undeveloped nature and its scenic qualities.

The alterations proposed to the established farm are relatively small in visual terms and from those locations where the extended farm could be appreciated, there is an expansive landscape/seascape setting and the moderating effect of distance from likely frequented locations. The farm is most likely to be appreciated from the well-used sailing route through Shuna Sound although the relatively small magnitude of change relative to the existing situation is such that this would not result in a significant additional visual effect. Views from offshore islands would be between 2 and 5km away where the farm appears low lying and close inshore relative to a rocky shoreline and rising backdrop. Nearly all of the mainland is shielded by the effect of topography except for the extreme west facing coastal edge and a few elevated locations within the interior of Craignish.

The application site lies off the SNH defined 'Craggy Upland' Landscape Character Type applicable to the western side of Craignish and to the Isle of Shuna. This is an area with coastal landscapes of scenic quality as recognised by the inclusion of the site within LDP defined Isolated Coast and Area of Panoramic Quality. Although this is not an area which would lend itself to development generally, a fish farm has been operated at this site for many years and it is a well-established feature of the area for those on boats accessing the waters around Shuna or the marina at Craobh Haven.

The proposal extends the site in a linear fashion parallel to the coast with the barge located behind the cage group in views from the sea, in a manner which is compliant with published SNH Siting and Design Guidance. This proposal for a 12 cage fish farm is not exceptional in terms of current industry practice and there are no particular landscape or visual sensitivities associated with this location in terms of either receptors or designations, which would warrant particular caution being exercised over the addition of two cages in terms of the visual presence of surface equipment as extended. The marginal change would not introduce any intrusion upon additional key viewpoints, nor would it dominate the expanse of visible water and the feeling of openness experienced at this location. The ZTV and visualisations produced on behalf of the applicant provide reassurance that this will be the case.

The replacement feed barge is larger than the current model which is angular and utilitarian in appearance. The replacement will be more boat-like in appearance with the superstructure including wheelhouse type accommodation for staff. Much of the additional capacity of the barge will be accounted for in volume which will be below the waterline. The barge is to be located inshore of the cage group, so from the sea where this farm is most likely to be routinely appreciated, there will be other surface equipment in the foreground and a rising backdrop of land behind.

Overall, it is considered that the proposal will not significantly detract from established landscape character, nor would it intrude further in available views to a point at which it would be appropriate to resist the enlargement of what is a long standing feature of this locality.

2) Isolated Coast and Wild Land

The site adjoins the 'Very Sensitive Countryside' development management zone which in turn confers 'Isolated Coast' status by virtue of SG LDP CST 1 – Coastal Development. It also lies within an LDP defined 'Area of Panoramic Quality' which recognised the scenic qualities of the wider area. The site does not lie within an SNH defined Wild Land Area. There are a number of fish farms in Argyll and Bute which are located on the Isolated Coast in situations where they are able to benefit from a relative absence of visual receptors. Provided these do not proliferate to a point where they become a defining characteristic of the water body, they have proven to be capable of assimilation in their landscape settings. Enlargement of an existing site does not pose the cumulative considerations which demand for the development of additional locations might, so consideration can be restricted to the marginal change

arising from the adjustment and enlargement of the existing equipment, which is considered to be acceptable as per the reasoning in the previous section..

3) Historic or Archaeological Sites and their settings

The proposal does not lie within any protected wreck sites and does not pose significant impacts upon the settings of any terrestrial historic environment assets. Historic Environment Scotland commented at pre-application stage that extension of the site *'does not pose significant impact on historic environment features within our statutory remit and are therefore content for the proposal to proceed without any further requirements for environmental information for our interests'*. Accordingly, the proposal may be accepted in terms of its implication for the historic environment.

4) Priority Habitats and Species (including wild migratory salmonids) and designated sites for nature conservation.

The Firth of Lorn European Special Area of Conservation (SAC) lies approximately 2km south and west of the site. SEPA approved modelling has been employed to demonstrate that the change in discharge associated with the enlarged site is not likely to lead to increased deposition of residues within the SAC.

The site also lies in the Inner Hebrides and the Minches candidate European Special Area of Conservation (cSAC), designated for harbour porpoise. SNH has indicated the need for the Council as determining authority to carry out a Habitats Regulations 'appropriate assessment' as part of the decision-making process and that can be found in an appendix to this report. It concludes that although without mitigation the proposal could present significant effects, with identified mitigation in place, significant effects will not result upon the site's conservation objectives for its qualifying interest.

The site lies within the Loch Sunart to Sound of Jura Marine Protected Area, designated for Common Skate and Quaternary of Scotland – glacial channels and troughs. SNH does not anticipate significant impacts upon this species.

The applicants propose a suite of measures to control interaction with predators, namely:

- Use of top nets to exclude piscivorous birds;
- Net tensioning and use of seal blinds to deter predation;
- Regular removal of mortalities;
- Use of Acoustic Deterrent Devices (ADD's) in the event of persistent seal attacks;
- Licenced seal shooting as a last resort.

In view of the potential consequences of the operation of ADD's on cetaceans (and the harbour porpoise cSAC designation) the applicants have submitted an ADD deployment plan which has been produced in consultation with SNH. Use of ADD's at the current site is not subject to restriction. SNH has recommended that the deployment of ADD's be controlled by condition and that their usage is subject to monitoring and reporting. This can be secured by means of a condition; but if Members are minded to approve the application in the absence of such a condition,

SNH's stance will in that circumstance be one of objection, in turn prompting notification to the Scottish Ministers before any decision may be made.

The District Salmon Fishery Board has raised an issue about the potential effect of the development upon an SNH sponsored project to re-introduce Freshwater Pearl Mussel into a river local to the proposed farm expansions at this site and at Pol Na Gille. Freshwater Pearl Mussel are dependent on juvenile salmonids as hosts for the mussel's parasitic life stage and therefore any reduction in the recruitment of juvenile salmonids may affect the success of this project.

SNH has not commented adversely in respect of the implications of this proposal upon this protected species or the likely success of their project to increase the distribution of this protected species. It has confirmed that the site is not designated for this species nor is the population of national interest status. For designated pearl mussel sites a zone of 35km is deemed appropriate by SNH for triggering that likely significant effect may occur on a site due to a fish farm and needs to be given further consideration. Whilst the location in this case does fall within such a distance, it is not a designated site.

The only other nature conservation interest which could be impacted upon significantly by the development, both in isolation and in combination with the associated application to extend the site at Poll Na Gille is that of wild salmonids. The implications for this species are reviewed separately in the sub-section below.

4) Wild fish interactions

a) Containment and risk of escapes

It is important to ensure containment of farmed fish in the interests of avoiding undesirable impacts upon wild fish populations. The potential for escapes can be reduced by having an equipment specification determined by site specific wave and climate analysis so as to ensure that it is fit for purpose, and a predator control strategy which avoids the prospect of containment being breached. Predator control plans, and escapes contingency plans, as adopted by the applicants, are important elements in risk management.

Although containment risks can be managed, they cannot however be eradicated, and there remains a residual risk that an unforeseen event can propagate escaped farmed fish in large numbers into the uncontrolled marine environment. Escapes of farmed stock are generally low, but can occur through equipment failure, predation, operator error, severe weather or foul play. It is, of course, in the interests of the producer to ensure that the product being farmed does not escape into an uncontrolled environment. Appropriate equipment specification, predator control and other management procedures as practiced by the applicants conform to best practice within the aquaculture industry, and are likely to reduce the risk of escapes to an acceptable level.

b) Sea lice management

The most intractable issue influencing the interaction between farmed fish and wild fish species is that of sea lice transmission. Farmed fish are routinely hosts to parasitic sea lice, the numbers of which require to be controlled, in order to assure the health of farmed fish and to avoid lice dispersal into surrounding waters. Lice are distributed in the surface level of the sea by wind and tide, and available science suggests that they may travel up to 35km from their source. Wild salmon can be exposed to sea lice from fish farms close to salmon rivers during their migration periods, whilst sea trout tend to remain in coastal waters throughout the year, so are potentially at greater risk.

Sea lice are naturally occurring marine parasitic crustacea that attach to the skin of salmon, and harm the fish by feeding on skin and blood and by causing wounds. Eggs laid by female lice hatch into free-living young that are transported by water movements to both farmed and wild fish. Generally, lice prevalence will be expected to be greater in the second year of production when host fish are more developed. Wild fish interests consider that increased abundance of lice on farmed salmon may correlate with increased numbers of lice on wild salmon in the same water-body. However, cause and effect in the marine environment is difficult to substantiate, and hence whilst it is asserted that there is a correlation between increased numbers of farmed fish and declining wild fish numbers, it is not possible to be scientifically definitive. Wild salmon may be affected by a wide range of environmental conditions including climate change, river modification, and commercial fishing, as well as sea lice, so lice transmission from farm is not the only factor affecting conservation status of wild fish populations. Indeed, sea lice levels themselves will be the subject of natural fluctuation in the environment, regardless of the presence of farmed fish.

The well-established method of controlling sea lice has been by chemical means, generally by way of a combination of in-feed treatments and periodic bath treatments. There are five chemicals licensed for use for the purposes of lice control and SEPA imposes limits on usage at individual sites via its CAR licensing process. Over time, resistance developed by lice to the effect of in-feed chemicals has diminished their effectiveness, although this has been offset to a degree by improved bath treatments some of which now take place in contained conditions on board well-boats moored alongside a farm, as an alternative to the more common practice of net shallowing using tarpaulins as a means of containing fish for the administration of chemicals in situ within the cages. The aquaculture industry accepts that consentable chemical treatments alone no longer provide an adequate means of controlling lice on farms, and operators have begun to introduce a broader suite of methods, including biological controls by the use of 'cleaner fish' (wrasse and lumpsucker) and freshwater, water temperature and mechanical cleaning processes, all of which are intended to reduce the lice burden on farmed fish.

The Scottish Salmon Producers Organisation has for some years adopted 'Code of Good Conduct' (CoGP) standards as a means of self-regulating the practices of its constituent members. These include a threshold for the presence of ovigerous lice

per fish, based upon weekly counts. The criteria prompting lice treatment are an average of 0.5 adult female per fish (Feb – June) and an average of 1.0 per fish (July – January).

The stocking of greater numbers of fish necessarily increases the potential hosts for sea lice, so even when there is an ability to meet the Scottish Salmon Producers 'Code of Good Practice' (CoGP) targets for sea lice management, increased fish numbers necessarily mean that more sea lice will be released into surrounding waters. It is important therefore to bear in mind that even when adherence with CoGP trigger levels for treatment can be attained by operators, the expansion in the size and numbers of fish farms will in any event, as a result of the increased number of potential hosts, still prompt the release of lice into the environment in substantial numbers. However, it is not necessarily the case that additional biomass will increase the risk to wild fish proportionately to the additional tonnage. Biomass reflects the total permitted tonnage to be held rather than the number of fish to be stocked, so if fish are grown to a larger size before harvesting this will present a lesser number of hosts than if stocking density is higher and harvesting is sooner. Potential host numbers are therefore partly a result of production decisions and are not dependant solely upon maximum biomass.

Wild salmon are a European Protected Species, and having regard to the division of regulatory responsibilities acknowledged in the National Marine Plan, and as part of its biodiversity duty, the Council in its capacity as Planning Authority must assume responsibility for the consideration of the implications of aquaculture development for the welfare of this species. In considering aquaculture applications, the Council therefore has to satisfy itself that there is both an effective and a consentable sea lice strategy identified, and that there are controls in place to ensure that necessary steps are taken in the event that sea lice levels prove not to be capable of being controlled in a satisfactory manner using the measures identified at the application stage. Similarly, the Council has to satisfy itself that proposed containment is adequate in order to minimise the risk of escape events.

Marine Scotland's Fish Health Inspectorate have the responsibility for regulating the health of fish being produced on the farm, but this responsibility does not extend to the consideration of the effects of fish farming upon wild fish; although Marine Scotland does provide wild fish interaction advice to the Council to inform decision-making. SEPA are the regulatory body responsible for licensing biomass permitted to be held on farms and for the permitted use of chemicals, but the propagation of sea lice into the wider environment from within farms is not construed to be 'pollution', and therefore wild fish impacts are not considered as part of their licensing process.

The government is a participant in North Atlantic Salmon Conservation Organisation (NASCO) established by an inter-governmental Convention in 1984. The objective of NASCO is to conserve, restore, enhance and rationally manage Atlantic salmon through international co-operation, taking account of the best available scientific information. It seeks to avoid lice induced mortality which is attributable to the operation of marine farms. In 2016, in response to declining wild salmonid numbers,

NASCO urged operators and regulators to adopt additional corrective measures to ensure that convention obligations can be met.

In response, in July 2017, having regard to the demand by NASCO for more stringent controls, and the government's obligations under the Aquaculture and Fisheries (Scotland) Act 2007, Marine Scotland's Fish Health Inspectorate (FHI) introduced a new Sea Lice Management Policy which now obliges salmon farmers to develop site specific escalation action plans to be implemented when sea lice levels rise above an average of 3 female lice per farmed fish. Furthermore, if levels exceed an average of 8 female adult lice, the new policy prompts enforcement action by the FHI. This can include *inter alia* a requirement for measures such as medicinal treatment, topical bath treatment, mechanical removal, biological interventions, or reduction of the biomass held on the site.

The FHI lice control standards have been prompted by Marine Scotland's responsibility for the health of farmed fish. They do not specifically take into account the conservation interests of wild fish, which are the separate responsibility of Planning Authorities. These new standards do, however, provide a regulatory 'backstop' which indirectly benefits wild fish, insofar as they prompt action when lice numbers on farmed fish are elevated well beyond CoGP limits.

In terms of sea lice management, the applicant currently employs a suite of methods over and above in-feed and chemical bath treatments; including 'hydrolicer' and 'thermolcer' systems, freshwater treatments and the use of cleaner fish as a biological control. It also employs lice skirts around the first 5m of nets below the surface in order to restrict water exchange in the upper part of the water column where higher concentrations of lice are expected to be found. The employment of fallow periods and single year class stocking also contributes to restricting sea lice transfer to successive generations of farmed fish. There have been periods since 2013 when the applicants have been unable to manage lice levels to satisfy CoGP thresholds, particularly during the second year of production when fish are larger. Latterly, however the applicants have been able to demonstrate a track record of improving lice control on this farm as a result of these various initiatives.

Aggregated data for the SSPO Add and Ormsary reporting region indicates improving lice control during the production cycle following that in which severe problems in lice control were experienced in 2015 – 16. Recorded adult female lice counts were:

October 2015	7.0
November 2105	6.7
December 2015	14.0
January 2016	9.8
February 2016	7.7
March 2016	10.8

October 2017	3.4
November 2017	5.1
December 2017	2.5

This indicates some improvement in lice management as a result of diversification in the control measures, rather than reliance solely upon the administration of licenced medicines. It does, however, still indicate lice levels prompting treatment to satisfy SSPO trigger levels (1.0 July – January and 0.5 February – June) and lice levels which prompting action to address the lower of the two FHI Sea Lice Management Policy triggers (3 and 8).

Generally, it would be expected that sea lice numbers would peak during the second year of production when fish sizes and overall biomass levels are greatest. It should be borne in mind that sea lice numbers can fluctuate considerably due circumstances in the natural environment, as well as in response the efficacy of treatments administered on farms. Nonetheless, fish farming does pose an additional threat over and above background conditions; albeit one which is difficult to quantify other than by monitoring lice levels on the farm itself.

Whilst there is evidence to support the contention that lice propagated from farms can be transmitted to wild fish, it is not possible to reliably demonstrate cause and effect between farmed and wild fish within a given water body. Lice levels in the natural environment will fluctuate and there will be good years and bad years for wild fish, regardless of the presence of fish farms. Elevated lice levels in a wild population cannot be directly attributed to the performance of lice control on a particular farm, especially where a water body has multiple farms, or in some cases, multiple operators. There is a lack of reliable science in this area and even some of the most basic considerations, such as the routes used by migratory salmon at sea, are founded on assumptions rather than science. The only position which can be adopted in response to the issue is that in consenting marine fin fish farms there is a need for risk management, with identified mitigation to help offset some of the predicted, but ultimately unquantifiable potential effects of fish farming on wild fish populations.

In response to continuing demands from wild fish interests for more stringent controls over marine fish farming, the Scottish Parliament's Rural Economy and Connectivity Committee has recently commenced an Inquiry into Salmon Farming in Scotland, the adopted remit of which is:

'to consider the current state of salmon industry in Scotland, identify opportunities for its future development and explore how the various fish health and environmental challenges it currently faces can be addressed'.

As part of this process, the Scottish Parliament's Environment, Climate Change and Land Reform Committee has submitted the findings of its own inquiry – 'Report on the Environmental Impacts of Salmon Farming' (March 2018). This concluded that the significance of environmental issues has increased as the sector has expanded and that targets for the expansion of the sector over the next 10 – 15 years place even more pressures on the marine environment. Whilst the Inquiry considered a

wide range of environmental consequences stemming from the operation of marine fish farms, its specific conclusions on the issues presented by sea lice were, in summary, as follows:

- Efforts of the industry have been proven to be largely insufficient to address lice issues;
- Lice data should be made available by operators in real time on a site by site basis (as proposed latterly by the SSPO), in favour of Marine Scotland's published aggregated data. Mortality data should be made similarly available;
- Research into best lice management practice and further scientific study in respect of wild fish is required, to address knowledge gaps in terms of matters such as lice impacts at population level, distribution of migratory routes, genetic mixing between farmed and wild fish, treatment effects upon other species, for example;
- Regulators appear to have had too little focus on the precautionary principle in the expansion of the sector and that regulators should place their biodiversity duty to the fore in assessing further developments.

These views will form part of the considerations being reviewed by the ongoing Inquiry by the Rural Economy and Connectivity Committee into Salmon Farming in Scotland, which has yet to report.

The conclusion of the District Salmon Fishery Board in this case is that the proposal to extend this farm to accommodate additional biomass, along with the other site proposed for similar expansion, would both individually and cumulatively pose an unacceptable risk to the welfare of wild salmonids. The applicant's response is that it is in their own interest to manage lice effectively for fish husbandry reasons, and that in response to recent difficulties they are proposing methods of control which extend beyond reliance upon chemical treatments, including the introduction of cleaner fish and the use of other non-chemical intervention methods.

The applicant's commitment to relinquish the use of the Ardmaddy South site in combination with the mitigation measures advanced, provides sufficient reassurance that there is likely to be adequate sea lice control at both this site and the PNG site.

The Ardmaddy South site has consent for a maximum biomass of 2,500 tonnes. The proposed biomass increases across PNG and BDNC amount to a further increase of 1738 tonnes (PNG – 238 tonnes, BDNC – 1,500 tonnes). This will, therefore, result in a minor reduction in biomass across the whole water body.

The existing BDNC site is already subject to a condition requiring the production of a strategy for monitoring and managing the interactions between the operation of the farm and the wild fish environment (commonly known as an Environmental Management Plan). Environmental Management Plans (EMP) are intended to inform an ongoing operational response to the experience of sea lice prevalence on farms. This would be intended to respond to the level of threat posed to wild fish, and would go beyond the management of lice simply to be able satisfy Marine Scotland's Fish

Health Inspectorate as to the health of fish on the farm. The EMP would provide a programme for the monitoring and auditing of sea lice loading on the farm, and also for the monitoring of effects on fish off-site, with an identified suite of potential mitigation measures (such as chemical treatment, early harvesting or biomass reduction) to control the release of lice into the wider environment, in the event that lice numbers persistently infringe recognised industry standards, or there were to be evidence of high levels of lice loading on wild fish in surrounding waters. Such a plan would be submitted to the Council for approval in consultation with the Salmon Fishery Board and would identify a monitoring regime and thresholds beyond which agreed and successive mitigation measures should be invoked by the site operator in order to maintain sea lice numbers within previously identified limits. The EMP would be expected to be the subject of ongoing discussion and review between the applicant, the Council and the Salmon Fishery Board and the management response would be adjusted in the light of operational experience.

The timescale of the submission of an EMP required by the previous consent was 9 months following first stocking at enhanced biomass, given that lice levels would not be expected to be high during the initial stocking period, because EMP's were a new concept with no 'off the shelf' plan was available for use, and because it was recognised that it would take time to devise and agree a plan from scratch with third parties. To date, agreement with third parties has not been concluded, so a finalised EMP has not been adopted within the required timescale. This amounts to a Breach of Condition in respect of the ongoing operation of the site as it stands, which requires to be addressed, regardless of the outcome of this application.

In response to this, the applicants have confirmed that they are progressing discussions with Argyll District Salmon Fishery Board and Argyll Fisheries Trust on developing a Memorandum Of Understanding which will set out the framework as to how they will establish and manage a working relationship with wild fish stakeholders. It will be based on the first such MOU the applicants have agreed with stakeholders in Skye and Lochalsh. The hope is that a similar agreement will cover all the applicant's operational sites in Argyll, and also include the farms operated by Kames in the Sound of Shuna. At the moment the applicants only have two sites in Argyll subject to planning conditions requiring an EMP. The applicants have acknowledged the reasoning behind EMP's and they expect the continuation of such conditions. Their hope is that a wider MOU agreement will provide the framework for compliance with EMP obligations. This approach should also allow consideration of the potential interactions between farmed and wild fish over larger waterbody areas, irrespective of whether sites have an EMP requirement prompted by a planning application. The MOU approach will allow a more comprehensive response to wild fish interactions, rather than the situation where some sites could be subject to EMP obligations and others not. It is the applicant's intention to consult shortly with stakeholders on a draft Argyll wide MOU

Although the intended MOU would provide a more strategic response to wild fish issues across the applicant's whole portfolio of sites, and whilst a more comprehensive approach is to be welcomed, given that this MOU has yet to be concluded, it is for the time being still appropriate that an Environmental Management

Plan requirement should be a condition in the event this application were to be approved, and no stocking beyond currently consented biomass should be allowed until the EMP has been approved and is capable of being implemented.

Marine Scotland has considered the applicants suggested husbandry practices and the extent to which these would provide confidence that sea lice numbers could be brought under control to a satisfactory level, and the extent to which an increase in biomass should be countenanced in advance of any new initiatives being implemented. It should be borne in mind that their advice relates to their role under the Fish Health Inspectorate regime, relative to the health and welfare of farmed fish. Nonetheless adequate control of lice under the FHI regime would provide reassurance that risk to wild salmonids should also benefit. Their conclusion in this case is that subject to SEPA consent being obtained for the chemical treatment of the enhanced biomass, with intended treatment synchronicity with other local sites and with other means of intervention in place, the impact from the overall increase proposed at this site together with that proposed at the Pol Na Gille site is potentially minor, provided that the applicant's inactive site at Ardmaddy is not reactivated.

Given that it is difficult to attribute impacts on wild fish to individual sites when multiple farms are being operated in one water body, particularly where there are multiple operators, it is important not only to consider the circumstances of individual farms but to consider the cumulative position and the impacts upon what should be viewed as a water body wide issue. In this case, the applicants are seeking to reduce from five farms to four, by giving up the site at Ardmaddy which has proven difficult to operate in the prevailing conditions, and by enlarging as a consequence two other sites, namely that subject to this application and the site at Pol Na Gille. Although these enlargements would pose additional risk at each location, the relinquishment of the farm at Ardmaddy would offset these impacts when wild fish interactions are considered on a water body basis. With that in mind, given the applicant's agreement to accept an EMP condition for this site pending the adoption of a more comprehensive MOU for all of their sites in Argyll, then it is considered that it would be appropriate to grant permission for the equipment change requested with a condition restricting biomass increase until an EMP has been agreed and is capable of being implemented.

5) Ecological Status of Water Bodies and Biological Carrying Capacity

The site is located within uncategorised waters under Marine Scotland's Locational Guidelines, which indicates better prospects of fish farm developments being acceptable in environmental terms given the open situation, and the depth of water with unconstrained water exchange. SEPA are responsible for controlling water column impacts via its CAR licensing process and are in receipt of an application to address the additional biomass proposed. As part of the information required to support a CAR licence, including a visual survey, SEPA has recognised there has latterly been an improvement in seabed conditions beneath the farm and that whilst the seabed biotope comprises 'seapens and burrowing meagafuana in circalittorial soft mud' which is a Priority Marine Feature, this is distributed widely across Scottish sea lochs. SEPA has also confirmed that cumulative impact calculations have indicated that the nutrient impacts from this site in combination with Pol Na Gille will

remain within acceptable limits, and will not be likely to result in any downgrading of water body status under the Water Framework Directive.

6) Commercial and Recreational Activity

In terms of non-commercial maritime use, it is considered unlikely that recreational interests will be significantly affected by the proposed development. The BDNC farm is a long established feature of the locality and has proven capable of co-existing with recreational boat traffic and inshore fishing. The Royal Yachting Association has no objections and the fishermen's associations consulted have not responded. The proposal will not present adverse navigational safety issues, subject to navigational marking to satisfy Northern Lighthouse Board requirements.

7) Amenity arising from operational effects (waste, noise, light and colour)

The site will be operated using a 22.5 month production cycle with a minimum 6 week fallow period. Access to the site will be taken via the shore base at Croabh Haven. The proposals do not introduce new sources of traffic associated with the servicing of the site. Feed will continue to be delivered to the replacement barge by boat (approx. 3 a month). The site will be stocked by smolts delivered by well boat (5 deliveries per production cycle). Fish will also be harvested by well boat (projected 40 harvests per production cycle).

There are no dwellings or other sensitive receptors in close proximity to the site. The nearest dwelling is 800m away with further isolated dwellings at around 1.2km. Given that the west coast of Craignish is a relatively unpopulated area, the occupiers of these properties would not otherwise expect to be exposed to sources of noise or light. Whilst the routine operation of the site would not be expected to give rise to disturbance, periodic visits by well boats by virtue of the operation of on board generators, use of lights and operation at unsocial hours, despite the distances involved, will introduce a sources of noticeable activity into otherwise tranquil surroundings, which may constitute disturbance but which is unlikely to amount to actionable nuisance. Residents have the opportunity to engage with the operator to seek to address any avoidable sources of disturbance, and should a statutory nuisance arise, this would need to be pursued by Environmental Health. It is not anticipated that the marginal changes proposed to the site would result in circumstances pointing to the need to withhold planning permission on residential amenity grounds.

There are no attributes of the development which would not routinely be encountered with a farm of this size. Underwater maturation lighting is proposed for use January to July as per past practice. Navigational lighting would require a light to be visible at a range of two nautical miles. There will be no change to the waste management practice as a result of this development.

8) Economic Impact

It is necessary to have regard to net economic impacts, taking account of any negative effects imposed upon existing businesses as well as economic benefits accrued by the

applicants and any indirect benefits to the manufacturing/service sector. No adverse impact of significance has been identified in terms of commercial fishing or recreational boating, and there is no suggestion that expansion of the site would prejudice operator viability within any of these sectors. In the event that Members are persuaded that the proposal would seriously prejudice wild fish interests, then there could well in turn be some adverse implications for the tourism and economic value of the fisheries in the area, although the attribution of such effects to the scale of the project at hand and the quantification of those effects would be difficult.

The expansion of the aquaculture sector is being actively encouraged by government policy in view of the contribution it makes to the national and export economy, and in view of the employment it sustains. It is supported by development plan policy unless there are locally significant adverse effects which cannot be avoided, reduced or mitigated to an extent which renders development acceptable. The Council's Economic Development Strategy identifies the food and drink sector as being one of the areas key sustainable economic assets helping to retain and create jobs in rural areas.

The site will continue to support 5 FTE jobs and will also support indirect employment associated with the supply of equipment, goods and services. Production will be capable of contributing to the national export economy. Ensuring that this farm is suitably equipped to be able to guarantee its continuing use and the ability to be able to maximise production within the environmental constraints presented, is important in terms of the ongoing contribution of the applicants to aquaculture production in Argyll. Economic benefits associated with the equipping and operation of this site, including indirect benefits arising from locally sources components, supplies and services, all lend weight to the application proposal in the balance of decision-making.

APPENDIX B – HABITATS REGULATIONS ‘APPROPRIATE ASSESSMENT’

HABITAT DIRECTIVE 92-43-EEC THE CONSERVATION (NATURAL HABITATS AND C.) REGULATIONS 1994 AS AMENDED

Purpose of the designation

The Habitats Directive aims to conserve biodiversity by maintaining or restoring Annex I Habitats or Annex II species to favourable conservation status. The Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC) was identified in 2016 covering an area of 13,000 square kilometres between the Isle of Lewis and the Isle of Jura. It does not contain any Annex I habitats and is confined to a single Annex II species interest; namely harbour porpoise *Phocoena phocoena*.

Candidate SAC's are sites which have been identified as fulfilling European designation criteria and have been submitted to the European Commission for adoption. They are afforded protection in the interim in the same way as if they had been adopted

The purpose of this designation is to maintain the favourable conservation status of harbour porpoise in the marine Atlantic Biogeographic region, by providing protection for habitats that support high predicted and observed densities of this species, likely to be a consequence of the variety of sediments in the designated area and the prey species they support which provides a productive foraging area supporting the species in higher densities.

Consequences of the designation

In circumstances where European Protected Species could be subject to significant effects as a consequence of development proposals, the competent authority, in considering whether development should be consented, is required to undertake an 'appropriate assessment' to inform its decision-making process on the basis that where unacceptable effects are identified, or in cases of 'reasonable scientific doubt', then permission ought not to be granted.

An 'appropriate assessment' is required to be undertaken in cases where any plan or project which:

- (a) Either alone or in combination with other plans or projects would be likely to have a significant effect on a European site designated for nature conservation; and
- (b) Is not directly connected with the management of the site.

It is considered by Scottish Natural Heritage that the development proposed by means of above planning application (reference 18/00005/MFF) has the potential to have a significant effect on the qualifying interests of The Inner Hebrides and the Minches candidate Special Area of Conservation (cSAC). As a consequence, Argyll and Bute Council has conducted an 'appropriate assessment', as per the Conservation (Habitats and C.) Regulations 1994 (as

amended), having regard to the anticipated effects of development and the conservation objectives for the site's qualifying interests. This assessment is detailed below.

Characteristics of the development

The proposal is for the equipment and operation of a marine fish farm in coastal waters with farmed fish to be contained in nets supported from flotation rings secured to a mooring grid anchored to the sea bed. The presence of farmed fish in large quantities poses an attraction to seals and attempted predation poses a risk to containment. In the event of net damage due to predation it poses the possibility of farmed fish escaping into the marine environment. Loss of containment of farmed fish would not be in the interests of production at the site and escapees would present a risk to the health of wild salmonids. This foreseeable operational characteristic and its undesirable consequences requires the operator to have a predator control plan in place with a range of measures available to deter seals and to avoid predation. The range of measures identified by the applicant in order to deter attacks by seals at this site includes the potential use of acoustic deterrent devices (ADD's), the operation of which would present conflicts to the conservation interests of harbour porpoise during the operational phases of the development when the cages are stocked with fish, but not during the equipping, fallowing or decommissioning of the farm.

Assessment

The assessment considers the impact of the proposals on harbour porpoise frequenting the designated area and has regard to the applicant's submitted information in support of the planning application, and to consultation advice provided by Scottish Natural Heritage.

Scottish Natural Heritage has raised concerns about the submitted proposal on the basis that the operation of the farm, as envisaged by the applicants, is in their view likely to have significant effects on the conservation interests of the qualifying interests of the Hebrides and Minches cSAC.

The impact of the proposal has been considered in terms of the following:

Potential entanglement in equipment – cetacean entanglement is not a feature of fish farm operation and entanglement risk not considered to be significant;

Risk of auditory injury – the species is unlikely to spend significant periods of time within the distances likely to present risk of injury due to exposure to noise emitted from ADD's and therefore the risk presented is low.

Disturbance – the likely disturbance is dependent upon the sound output of the model of ADD intended to be deployed and the periods of operation. The applicant's ADD plan provides reassurance that the model use will be lower powered than some higher output devices and that use will be periodic rather than continuous. The maintenance of a usage log as proposed by the applicants will provide opportunity for review and inform future decision-making.

In responding to consultation SNH has had regard to the opportunity to secure mitigation in order to avoid the development adversely affecting the integrity of the cSAC. The conclusion of this is that if the development is implemented strictly in accordance with particular mitigation measures, then it will be possible to operate the site without adversely affecting the integrity of the designation. The recommended mitigation, which should be secured by means of planning conditions is set out below. Any decision to grant consent without the mitigation being secured by condition would present a significant effect upon the conservation interests of the cSAC and would, in that case, prompt a formal objection by Scottish Natural Heritage.

Recommended mitigation to be secured by planning condition

- a) ADD's to be deployed at the site shall be as per the deployment plan detailed in Annex 1 to the supporting information supplied with the planning application;
- b) Any changes to deployment should be approved in advance by the planning authority in consultation with SNH;
- c) The operator shall maintain a log of the use of ADD's at the site which shall be available for review on request by the Planning Authority and SNH. The log shall record:
 - Prompt for use (manual or sensor)
 - Dates and duration of use;
 - Details of predation events
 - Other anti-predation measures deployed at the time of ADD use;
 - Details of person(s) responsible for maintaining the log.

Conclusion

The potential impacts of the development in relation to the conservation objectives cited in the cSAC designation have been considered in the light of the above and it has been concluded that with identified mitigation measures in place the impacts arising from the construction, operation and decommissioning of the amended development as proposed, in combination with the operation of other farms nearby will not with identified mitigation in place have a significant impact upon qualifying interests, and accordingly there is no reason to withhold permission on European nature conservation grounds.

From: [Kerr, Richard](#)
To: [Liam Wright](#)
Subject: BDNC fish farm [OFFICIAL]
Date: 13 June 2018 13:04:43
Attachments: 180005 ROH RK 050618.docx

Classification: OFFICIAL

Hi Liam. Had a note on file to send you details of this. Committee report attached. Due for determination Wednesday 20th.

Richard Kerr
Principal Planning Officer
Development Management
Planning Housing and Regulatory Services
Argyll & Bute Council

Tel: 01546 604845
e-mail richard.kerr@argyll-bute.gov.uk
web address : <http://www.argyll-bute.gov.uk>

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