

Appendix 1

Statutory Consultation Bodies

Historic Environment Scotland

I note that this is a re-consultation on the planning application for South Cava Fish Farm. I refer to our previous response of 10 April 2017 and can confirm that the advice provided in that response is still valid. For the avoidance of doubt, we do not wish to object to the proposed development. We have no further comments to make on this proposal.

Planning authorities are expected to treat our comments as a material consideration, and this advice should be taken into account in your decision making. Our view is that the proposals do not raise historic environment issues of national significance and therefore we do not object. However, our decision not to object should not be taken as our support for the proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy guidance.

Marine Scotland Science

MSS have previously provided comment with regard to the proposal, and this has been attached for ease of reference.

With respect to our previous comment (see below) on chemotherapeutants available for use at the site, we would request that the applicant provides a revised sea lice efficacy statement that takes into account SEPA's interim position statement on the use of emamectin benzoate and thus the quantities of SLICE likely to be permitted for use at the site.

The submitted modelling indicates that provided a CAR licence is granted as per the submitted modelling, SLICE would be available in sufficient quantities to treat the maximum biomass upto 5 times. The bath treatments Cypermethrin and Deltamethrin would be available in sufficient quantities to allow the treatment of the site within 3 days, however the predicted quantity of Azamethiphos would be limited to the treatment of one cage per day, thus taking 16 days to complete a treatment of all cages. As far as can reasonably be foreseen, 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 EQS.

Scottish Natural Heritage

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 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 states 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, through 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.

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 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.

SEPA

We have reviewed the submitted documents and we have no objection to this planning application. Please note the advice provided below.

1. The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) (as amended)

1.1 A technical variation to the current authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011(As amended) (CAR) will be required. We can confirm that a CAR application has not yet been submitted to us. However, based on our current understanding, the proposals appear potentially consentable under CAR. Please note however that we cannot guarantee this until the submission and determination of the CAR application.

1.2 Please also note, we will control the maximum biomass and discharges of licensed medicines through CAR.

2. Benthic Impacts

2.1 The fish farm is situated off the south-east of the island of Cava, in water depths of 20-30m.

2.2 The 3 visual surveys carried out across this site have shown a seabed of muddy sand with patches of red algal cover (most likely biotope SS.SMp.KSwSS.Pcri). The epifauna noted (including scallops, towershells, crabs, urchins, starfish and gobies) were typical of those found in this habitat. Although the Priority Marine Features of maerl-beds, horse-mussel beds and flame-shell beds are reported to be present to the west of the fish-farm, none were seen in any of these surveys.

2.3 The 4 benthic surveys carried out in compliance with the CAR licence have indicated enrichment within the immediate vicinity of the cages. At the edge of the footprint (the allowable zone of effect), the faunal communities indicated little enrichment. A survey of copper in the sediments indicated levels well below SEPA's far-field action level.

2.4 Modelling estimates 2500t is a sustainable max. biomass using the proposed cage configuration. The estimated footprint will increase from 92,605m² to 148,927m². Usable quantities of sea-lice medicines are also given.

3. Water Column Impacts

3.1 Scapa Flow is an uncategorised Locational Guideline water body.

3.2 The fish farm is located in the Scapa Flow Water Framework Directive water body (water body 200474), which has been classified as “Good” status in the 2015 classification scheme.

3.3 The Equilibrium Concentration Enhancement (ECE) estimate of nutrient loading to the Scapa Flow water body from the proposed modified fish farm, and also from all the other fish farms in the water body, indicate it would be unlikely to result in a downgrade to the status of the water body under the Water Framework Directive.

4. Natural Heritage Interests

4.1 The fish farm lies within the Scapa Flow proposed Special Protection Area (SPA), the designated features of which are aggregations of breeding Red-throated divers and aggregations of non-breeding birds. The fish farm also lies 3km east of the Hoy SPA (also a SAC and SSSI), the designated features of which are the Peregrine and assemblages of breeding birds. With mitigation measures in place, potential conflicts are considered unlikely with respect to these features. However, we recommend that you seek advice from SNH.

SEPA – further response

We note that you have enclosed a copy of Scottish Natural Heritage’s consultation response. Following consideration of this, we confirm that we continue to have no objection to this application from a planning perspective.

As we have referenced previously, the proposals require a technical variation to the current authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011(As amended) (CAR). This had previously be applied for and we can confirm that, since our previous response, the technical variation has been determined and issued on 9 January 2018.

As part of the CAR variation process, a Habitats Regulations Appraisal was carried out by SEPA, which concluded that the proposed changes would not result in any likely significant effects on the protected bird species or flame shells. However, please note that this only considered those aspects which are controlled through CAR for example deposition of organic waste and chemical residues.

You will be aware that we control the maximum biomass and discharges of licensed medicines through CAR. As referenced previously, for information please be aware of our current position on the use of emamectin benzoate (an active ingredient of Slice) as set out in our interim position statement (currently WAT-PS-17-03, Version 1.1, 18 October 2017). We can confirm that the CAR variation application has been determined in line with that statement.

Non-statutory consultees

County Archaeologist

I agree with the conclusions of the archaeology report undertaken by ORCA, that there are no known physical impacts likely in this case. The impact of the proposed development on known archaeology is very slight and is mainly in terms of visual setting. I would concur with HES in not considering the changes to merit any adverse comment.

I therefore have no adverse comments to make in regard to the development of this site.

I would recommend that the developers brief divers and those working on the site on the potential for archaeological survival for either smaller items (that might have been previously unobserved) or for impacts upon sediments that might conceal previously unobserved material, and refer to good practice in regard to reporting etc.

The above is to ensure that any previously unobserved historic or ancient material that may be on the site is recorded.

Development and Marine Planning - Senior Policy Planner

Orkney Islands Council are developing three separate work strands to inform future planning policy for aquaculture development:

- Modelling estimated nutrient enrichment and benthic impacts from fish farm development within the water body of Scapa Flow.
- Assessment of the impact of existing and planned fish farm development in Scapa Flow on harbour operations, harbour infrastructure, ferries, shipping and navigation (taken forward through an Orkney Harbours Master Plan).
- Improve knowledge of the local seatrout population and interactions with fish farming (taken forward through the Orkney Local Biodiversity Action Plan).

The modelling project for Scapa Flow will assess the impact of existing and planned fish farms, in terms of water quality and benthic impacts, with particular reference to nutrient enrichment. This project aims to consider how multiple fish farms interact within Scapa Flow, modelling/assessing cumulative impacts. It is anticipated that the project will identify areas that are more suitable and less suitable for fish farm development from the perspective of nutrient enrichment/pollution/benthic effects. These modelling outputs will be presented in the form of 'heat' maps which have potential to be used in planning guidance/spatial strategy. It is anticipated that these study outputs could be available in the form of planning policy/guidance to inform planning decisions by the end of 2018 following the appropriate consultation and approval processes.

The Orkney Harbours Master Plan will be completed in March 2019.

The seatrout project is in the early stages of development. There is no agreed timeline for completion at this stage.

Marine Services

Please be advised that Marine Services has no comment to make on this extension.

Northern Lighthouse Board

We recommend that,

- The site should be marked with 2 lit yellow poles fitted with yellow 'X' topmarks.
- Each light should display a character of flashing group four yellow every twelve seconds (Fl(4) Y 12s) with a nominal range of 2 nautical miles and be installed above the 'X' topmark.
- The poles should be positioned at the most Easterly and Southerly corners of the cage group.
- Each light should be 1 metre above site equipment handrails and installed to be clearly seen by vessels approaching from all navigable directions.
- Poles should be ≥ 75 mm diameter, the 'X' topmark should be ≥ 75 cm length by 15cm width.
- The feed barge should exhibit an all-round fixed white light with a nominal range of 2 nautical miles from a point at least 1 metre above any other obstruction.
- A weekly check of the site's marking equipment shall be performed and records kept of its physical and working status for audit purposes.
- Outlying anchor points should not be marked with buoys, unless specifically requested by local users, and alternative means to locate anchors should be utilised.
- Loose floating lines around site equipment are strongly discouraged as this can cause serious safety implications for other mariners.

Roads Authority

While it is accepted that this application is for the replacement of an existing fish farm, the new fish farm is substantially larger than the existing with an expected production 3125 tonnes compared to the existing 1888 tonnes. With the increase in size of the fish farm there will undoubtedly at least in the short term be an increase in vehicular traffic from the Kirkwall central base to Copelands Dock, although it is accepted that this will reduce should the feed barge be serviced by bulk carrier with no feed being transported from shore. A condition should therefore be applied requiring the all feed to the proposed development is made by bulk carrier within a timescale to be determined, and then only be supplied by bulk carrier for the remainder of the time the development remains in use.

With regard to harvesting from the fish farm, the information provided indicates that the fish will be landed at Copelands Dock for onward transportation to the Kirkwall processing facility. Given the increase in the size of the development there will obviously be increased vehicular movements which could have a negative impact on the existing public road infrastructure.

Royal Yachting Association

I write to inform you that RYA Scotland has no objections to this application.

RSPB Scotland

We are engaged with a number of aquaculture proposals including new farms and extensions to existing operations that are all located within the proposed Scapa Flow Special Protection Area (pSPA). As previously noted in our earlier correspondence of 12th May, we hold significant concerns with the potential for the South Cava and other fish farm developments to have adverse effects on this pSPA both in isolation and in-combination. These concerns also relate to the Hoy SPA and red-throated divers.

Despite receipt of the additional environmental information RSPB Scotland wish to maintain their objection to the proposal. Our primary concern of the in isolation and in-combination effects on the SPA/pSPA have not been adequately addressed to enable a robust Appropriate Assessment to be undertaken by Orkney Islands Council. Specifically there exists, within the assessment, a reliance on adherence to the quality standards and monitoring requirements set by the Controlled Activities Regulations as a means to justify the environmental assessment conclusions. We cannot support this approach as it has led to environmental matters of material consideration being left out of the process.

We provide further detail of our objection in the enclosed Annex, which sets out what additional information we consider is necessary to inform the Habitats Regulations Appraisal. Should the required information become available we would be willing to reconsider our position.

ANNEX: RSPB SCOTLAND DETAILED RESPONSE TO PROPOSED REDEVELOPMENT OF A SALMON FARM AT SOUTH CAVA SCAPA FLOW – 20th DECEMBER 2017

Policy Context

Our approach to aquaculture is guided by Scottish Government policy, which is very clear in emphasising that development of this sector must happen in appropriate locations and within the bounds of environmental carrying capacities (see Scotland's National Marine Plan, Chapter 7, Part 1: Objective 2 and Marine Planning Policy Aquaculture 1 and 2). This policy is provided further context and is reinforced by the Orkney Local Development Plan Policy 12 – Coastal Development: Aquaculture and the recently adopted supplementary guidance on aquaculture. Each relevant policy requires robust cumulative and in-combination environmental assessments be undertaken for each proposed aquaculture farm.

Potential Environmental Impacts

As set out in our previous correspondence of 12th May, RSPB Scotland is principally concerned about the potential impacts of the proposal on birds, including those qualifying species of Hoy SPA and the proposed Scapa Flow SPA. The potential

impacts are reflected in Scottish Natural Heritage's draft Advice to Support Management document for the Scapa Flow pSPA, which identifies finfish aquaculture as an activity that is considered likely to affect the qualifying features via the pressures described above. Finfish farms are specifically identified as posing '...a risk to the conservation objectives because of the sensitivities of all species to reduction in prey availability through damage or loss of prey supporting habitat.' In addition, 'the seabed footprint, including the Allowable Zone of Effect (AZE), associated with finfish farms also has potential to exert pressures on birds, through reduction in extent of accessible foraging areas and/or loss or damage to supporting habitat for prey species.'

Environmental Information and Information to Inform an Appropriate Assessment

We reiterate the need for a Habitats Regulations Appraisal (HRA) of this proposal, given the likely significant effects on both the Hoy and Scapa SPA/pSPAs. We note SNH consider there to be no requirement for an Appropriate Assessment (AA) (see letter dated 19th December 2017). However, in the same letter SNH advice is for SEPA to consider the impacts of 'deposition of organic waste and/ or the discharge of chemical residues into the marine environment... on the conservation objectives of the Scapa Flow pSPA' (note: the conservation objective in question relates to the supporting habitat and prey species). On this topic, SEPA's letter of 27th April advises that 'with mitigation measures in place, potential conflicts are considered unlikely' but go on to state the Council should 'seek advice from SNH.' Neither SNH nor SEPA have provided detailed advice on this particular aspect relating to the relevant pSPAc conservation objective. For the HRA it is considered necessary for this information to be presented, especially when considering whether or not an AA is required. In our view the information requested below on the potential impacts to supporting habitat and prey species of the pSPA is required (see bullet point c). The applicant has clearly identified a likely significant effect on the above noted SPAs and as such an Appropriate Assessment is required.

To adequately understand the nature and potential for any impact on the qualifying features of the SPA and pSPA the assessment should include sufficient site characterisation data and no dedicated site survey has been undertaken. As an alternative, existing and relevant baseline data is provided, however the purpose of this data series was not to inform project level impact assessments and is not of a high resolution. This is a limitation to the robustness of the environmental assessment, in addition to that outlined in Section 4.2.2.

South Cava Environmental Assessment – Further Environmental Information

A summary of our specific concerns for each of the impact categories is provided below.

a. Entanglement: We agree generally with the assessment of potential entanglement risk and the proposed mitigation measures and have no further comment to make on this impact.

b. Disturbance / displacement: we welcome the additional information provided to help determine the relative importance of the South Cava site to each of the

qualifying features of the SPAs. The conclusions set out in Table 4 illustrate that the site is of moderate or high importance to at least six species.

The assertions that there has been habituation of species to boat movements and events cannot be supported. However, we would agree that short term construction impacts will be high and there will be an impact, despite the proposed mitigation measures set out in Section 6. Similarly, there will be long term displacement from the site and its surroundings, for all species and continuous yet intermittent disturbance throughout the operation of the site and the servicing vessels. The assessment concludes that these will be of moderate impact.

The mitigation measures detailed in Section 6 are not sufficient, nor practically achievable, in some instances. As an example the vessel management plan suggests staff will 'keep a lookout for protected species' and 'the vessel's course will be adjusted to avoid disturbance.' These are not practical measures that can be implemented to avoid or mitigate against disturbance, especially for some bird species that are highly sensitive at distances of 1000m (see Table 5).

The potential in-combination impacts to highly sensitive species from this and other fish farms and other marine activities taking place in Scapa Flow pSPA could amount to a significant proportion of the entire available habitat space. This impact has not been accounted for in the assessment and is unlikely to be well understood. Table 8 quantifies the footprint of fish farm development as a proportion of the pSPA. However, as noted above, some species are highly sensitivity and therefore, in addition, a buffer should be applied to each development and vessel route to adequately assess the extent of any disturbance or displacement impact.

c. Loss or damage to supporting habitat and prey species: the assessment of impacts on the pSPA supporting habitat and prey species relies heavily on adherence to the quality standards and monitoring requirements set by the Controlled Activities Regulations. This adherence is considered in the report to be sufficient justification to conclude there will be no adverse effects on the qualifying features of the SPAs. We cannot support this approach as it is not within SEPA's remit, in determining CAR licenses, to also determine the implications of operations on designated sites or species for nature conservation.

Some information is provided on the impacts to the benthic habitat and fauna and the potential toxicity of the various chemicals to species are detailed. However there is limited consideration of the ecological consequences of these potential impacts, especially on the implications for the food chain that supports the qualifying features. What is required, using the best available science, is a consideration of the implications of a worst case scenario both on a project in isolation basis and in-combination with other development, which includes buffer zones (where relevant).

Without these considerations there is a very limited understanding of the environmental implications of this development and other operations within Scapa Flow. Additionally, there is no mechanism in place to determine whether the environmental capacity of this region is being approached or breached and there is no ability to determine whether fish farms are having an adverse effect on integrity of the new proposed SPA.

RSPB Scotland objects to the South Cava application for the reasons given above. As identified in national and local government policy the environmental carrying capacity, in this case at Scapa Flow pSPA, must be understood to ensure that aquaculture proposals are appropriately located and avoid significant adverse effects. We do not consider there is sufficient information to be able to reach a conclusion on whether the proposal in-isolation or in-combination would not have an adverse effect on integrity of the pSPA. Should this information be forthcoming then RSPB Scotland would be willing to reconsider its position of objection.