

Item: 3.1

Planning Committee: 6 March 2019.

Create Salmon Farming Site with Feed Barge at a site West of Glimps Holm, Scapa Flow.

Report by Executive Director of Development and Infrastructure.

1. Summary

1.1.

This is a planning application with an Environmental Statement for the development of an Atlantic salmon fish farming site in Scapa Flow, on a site to the West of Glimps Holm. The proposed farm would comprise 12 circular cages, each with a 100 metre circumference, configured in two groups of 2 x 3 formation, held in a 70 metre grid with an overall surface area of 9,750.76 square metres and a mooring containment area of 210,800 square metres, and a 200 tonne feed barge. Scottish Natural Heritage, which is a statutory consultee, has objected to the application based on the cumulative impact of the development on the Scapa Flow proposed Special Protection Area. Letters of objection have been received from five non-statutory consultees. Six letters of objection have been received from the public. The development has been assessed in relation to all relevant National policies and guidance, the policies of the Orkney Local Development Plan 2017 and other relevant material planning considerations. It is considered that, cumulatively, the location, scale and environmental impact of the proposed fish farm on the Scapa Flow proposed Special Protection Area is unacceptable. The proposed development is contrary to Orkney Local Development Plan 2017 Policy 9, Policy 12, Supplementary Guidance: Aquaculture, Supplementary Guidance: Natural Environment; Scottish Planning Policy; and Scotland's National Marine Plan. Accordingly, the application is recommended for refusal.

Application Number	17/343/MAR.
Application Type	Marine Fish Farm.
Proposal	Create a salmon farming site comprising of 12 x 100m circumference cages, arranged 2 x (2 x3) in a 70m grid with the feed barge located in between the two groups of 2 x3 cages.
Applicant	Cooke Aquaculture Scotland, Crowness Road, Hatston Industrial Estate, Kirkwall.

1.2.

All application documents (including plans, consultation responses and representations) are available for members to view at the following website address:

https://www.orkney.gov.uk/Service-Directory/D/application_search_submission.htm
(then enter the application number given above).

2. Statutory Consultations

2.1.

Statutory consultation bodies are listed below:

- Historic Environment Scotland (HES).
- Marine Scotland (MSS) on behalf of Scottish Ministers.
- Scottish Water.
- Scottish Environment Protection Agency (SEPA).
- Scottish Natural Heritage (SNH).

2.2.

Statutory consultation bodies were consulted on 31 July 2017 following receipt of the application. During consideration of the application additional information was submitted, and the application was subject to re-consultation on 26 November 2018. Following both rounds of consultation, an objection was received from Scottish Natural Heritage which is the relevant agency in respect of natural heritage interests.

2.3.

SNH has objected to the development, advising that “Our assessment for displacement and mortality for Slavonian grebe demonstrates that there is potential for Adverse Effect on Site Integrity (AESI) arising from the (revised) West Glimps Holm proposal in combination with the Lober and Lober North developments; the estimated level of impact (up to 4.15% of population) could be considered sufficient to undermine the site’s conservation objectives, therefore we are unable to conclude no AESI”. SNH further advises that the “cumulative assessment does not demonstrate beyond reasonable scientific doubt that the proposal’s disturbance and displacement of Black-throated divers and Slavonian grebes, in combination with other existing developments and proposals in the planning system, will not have an adverse effect on site integrity of Scapa Flow pSPA”.

3. Representations

3.1.

Five objections have been received from non-statutory consultees:

- Orkney Fisheries Association, 4 Ferry Terminal Buildings, Kirkwall Pier, Kirkwall KW15 1HU.
- Orkney Trout Fishing Association, c/o Malcolm Russell, Caolilla, Heddle Road, Finstown, KW17 2EG.
- The Royal Society for the Protection of Birds (Scotland), Orkney Office, 12-14 North End Road, Stromness, KW16 3AG.

- Brian Archibald, Head of Marine Services and Harbour Master to Orkney Islands Council, Marine Services, Harbour Authority Building, Scapa.
- Royal Yachting Association Scotland, Caledonia House, 1 Redheughs Rigg, Edinburgh.

3.2.

Orkney Fisheries Association (OFA) objects to the development, identifying the number of fish farms within Scapa Flow and the total biomass that is produced from those farms as 10,270.1 tones. OFA requests, on the basis of lack of a holistic biological policy for Scapa Flow, that the precautionary principle be used in relation to the uncertainty surrounding the licensed aquaculture depositions on non-adult points of the biological development of species comprising the commercial shellfish fishery, namely Brown Crab (*Cancer pagurus*), European Lobster (*Homarus gammarus*), Velvet Crab (*Necorapuber*), Green Crab (*Cancer maenas*), buckies (*Baccinumundatum*), King Scallop (*Pecten maximus*) and Queen Scallops (*Aequipectinopercularis*).

3.3.

Orkney Trout Fishing Association (OTFA) objects to the proposal owing to the potential negative effects of sea lice spreading from the salmon farm to wild sea trout populations in Scapa Flow, both as an individual site and cumulatively with other existing and planned salmon fish farm sites. OTFA notes the potential doubling of the Controlled Activity Regulations (CAR) licensed tonnage from 8,210 tonnes currently, to 16,000 tonnes, were all proposals currently in the planning system to be approved, with concern over the disease problems in the salmon farm industry experienced elsewhere spreading. OTFA presents a case that Scapa Flow would be the most intensively farmed body of water in the UK with increased risk of disease and parasite outbreaks. Further concerns are expressed as any fish farm in Scapa Flow, as a single disease management area (DMA), has the potential to impact the whole of the area. The current lack of synchronous production cycle within the DMA, as indicated by Marine Scotland as regulator, is not applied currently within Scapa Flow. OTFA concludes that “OIC has a clear responsibility to seriously consider the potential impact that this level of expansion could have on the marine environment of Scapa Flow BEFORE any new salmon farm applications are allowed to progress. The level of development being proposed for the Scapa Flow area (which you could argue is being turned into one huge megafarm) is a knee jerk reaction by the industry to compensate for the problems it is experiencing elsewhere, problems that highlight the unsustainable nature of the salmon farming industry”.

3.4.

The Royal Society for the Protection of Birds, Scotland (RSPB Scotland) objected to the original submission and again following provision of additional information and assessment. RSPB Scotland has adopted a position, informed from the Scottish Government’s Environment, Climate Change and Land Reform (ECCLR) Committee, that “there must be no new marine fish farms using current ‘open cage’ practices, including any increases in farmed fish biomass at existing sites” owing to “current failings in both the regulation of the salmon farming industry and the environmental

problems the industry causes”. Specific to this application, objection is made in respect of the lack of environmental information: “We object to the application at this stage, as we are unable to provide further comment on the potential impacts to the designated bird populations until further environmental information is made available. Further information and assessment is required to illustrate the potential direct disturbance impacts during construction and operation, as well as any indirect impacts to prey species and the structure, function and supporting processes of any habitats supporting the species. We recommend that a technical ornithology assessment is produced, with respect to the pSPA species”.

3.5.

3.5.1.

In respect of navigational safety, Orkney Islands Council (OIC), as Harbour Authority, identifies potential impacts on the safe navigation of larger vessels using anchorage 4 in certain wind conditions or if tugs are required but does not object to the proposal in respect of navigational safety. However, in respect of the operating authority of Scapa Flow, Marine Services notes that the presence of a fish farm at West of Glimps Holm would render the anchorage less usable by larger vessels in certain conditions and hence the Harbour Authority would suffer minor reduction in the use of Scapa Flow due to the reduced use of one of its assets. The Harbour Authority has commented on this application on the basis of “reduced amenity for Scapa Flow and for that comment to be placed on public record for use if and when further fish farms in the vicinity are reconsidered by the relevant planning authority, when balancing the business benefit of the developer, (the Fish Farm applicant in this case) against the impact on the amenity owner (the Harbour Authority)”.

3.5.2.

It is also advised by the Harbour Authority that studies indicate that the impact on water quality due to nutrient level increases will be higher than indicated in the application, namely an increase in classification from two to three. That figure is arrived at through use of the accurate tidal flow analysis available to the Harbour Authority and, although higher than previously indicated, it is not at a level which is significant given the size of Scapa Flow. It is stated that the cumulative effects would require further consideration should further fish farms in the area be proposed.

3.6.

The Royal Yacht Association Scotland (RYA) advises that it is not keen” on fish farm developments here partly because it impedes on the Holm Sailing Club and partly because of the water being sullied by the presence of a fish farm in an area used for recreation. A recent government enquiry has suggested new parameters for fish farms and perhaps we need to suggest that this application at very least meets these”. RYA indicates for this project to proceed “there needs to be far more data required as regards the water conditions in St Mary’s Bay. This should cover whether or not detritus from a fish farm such as the proposed one can cause conditions as would be dangerous to the health of children. As the gathering of this information would not be in the remit of SEPA and the Scottish Government have an interest it should probably [be] put in the hands of the HSE. Let us also not forget the No. 1

Churchill Barrier may also be needed for renewables. This, of course, would also lead to a degree of flushing”.

3.7.

This application was subject to advertisement on two separate occasions owing to the submission of additional environmental information. Six objections have been received, including further representations from some of the objectors following re-advertisement. It should be noted that, where more than one representation is received from a household, it is defined as one ‘valid representation’.

3.8.

Six objections have been received from:

- Mr Eion Ross, Ortleigh Cottage, Loch House Road, St Mary’s.
- Mr Tom Dowie, The Howe, Hoxa, St Margaret’s Hope.
- Ms Jenny Rambridge, Longhouse, Dam of Hoxa, St Margaret’s Hope.
- Mr Ian Nelson, 9 Vincent Road, Cobham, Surrey.
- Mr M Grainger, Ardeonaig, Orphir.
- Mrs Wendy Witten, Crow’s Nest, St Margaret’s Hope.

3.8.1.

Reasons for objections are as follows:

- Impact on environmental factors.
- Impact negatively on the seascape, landscapes and views.
- Impact on wildlife.
- Resultant pollution, chemical treatments from fish farm on the marine environment.
- Health implications.
- Impact on recreational area, for example St Mary’s Bay.
- Issues associated with public health especially as regard to children using the waters.
- Damage to the marine environment, sea bed and marine life.
- Capacity of Scapa Flow to support aquaculture developments without unacceptable cumulative levels of pollution occurring.
- Impact on tourists and visitors to Orkney.
- Light pollution.
- Noise pollution.
- Air pollution (smell) to the area.
- Cumulative impacts with other fish farms in the area.
- Infestation by sea lice.
- No local economic benefit.

- Impact on Loch of Ayre (LoA) Local Nature Conservation Site because of its wintering wildfowl, Sea Trout (*Salmo trutta*) and sedentary Brown Trout (*S.trutta*) as well as Flounder (*Platichthys flesus*), Dab (*Limanda limanda*), European eel (*Anguilla anguilla*) and Three-spined stickleback (*Gasterosteus aculeatus*).
- Lack of data on spawning populations of Sea Trout in Orkney.
- Findings of Scottish Government's Environment, Climate Change and Land Reform (ECCLR) Committees.

4. Relevant Planning History and Procedure

Reference.	Proposal.	Location.	Decision.	Date.
17/130/MARSS	Screening and scoping request to create a salmon fish farm	Glimps Holm, Orkney	EIA required	25.07.2017
14/377/MAR	Create a salmon farming site, comprising 12 x 100m circumference cages, 2 x 6 in a 70m grid and include a 200t feed barge	Glimps Holm, Scapa Flow, Orkney	Withdrawn	22.07.2016
12/552/MARSCO	Scoping and screening opinion request to locate a marine pen fish farm (salmon), comprising 8 x 90m circumference cages set in a 2 x 4 formation with a 50m grid	Glimps Holm, Scapa Flow Orkney	EIA required	11.09.2012
09/419/MARSCO	Scoping opinion regarding installing a group of eight 90 metre circumference cages	Glimps Holm, Scapa Flow	Scoping adequate	28.10.2009

5. Relevant Planning Policy and Guidance

5.1.

The full text of the Orkney Local Development Plan (OLDP 2017) and supplementary guidance can be read on the Council website at:

<https://www.orkney.gov.uk/Service-Directory/D/Planning-Policies-and-Guidance.htm>

The policies, supplementary guidance and planning policy advice listed below are relevant to this application:

- Orkney Local Development Plan 2017:
 - Policy 1 – Criteria for All Development.
 - Policy 8 Historic Environment and Cultural Heritage.
 - Policy 9 Natural Heritage and Landscape.
 - Policy 12 Coastal Development.
- Supplementary Guidance Natural Environment (2017):
 - Policy 9A - Natural Heritage Designations: Internationally Designated Sites.
 - Policy 9B - Protected Species.
 - Policy 9C - Wider Biodiversity and Geodiversity.
 - Policy 9D - The Water Environment.
- Supplementary Guidance Aquaculture (2017):
 - DC1 Landscape, coast, siting and design.
 - DC2 Natural heritage designations, protected species and the wider biodiversity.
 - DC3 Predator control and interaction with other species.
 - DC4 Wild salmonid fish populations.
 - DC5 Water quality and benthic impacts.
 - DC6 Historic environment.
 - DC6 Historic Environment.
 - DC7 Social and economic impacts.
 - DC8 Other marine users.
 - DC9 Construction and Operational Impacts.
 - DC10 Decommissioning and Reinstatement.
- Development Management Guidance (2018):
 - Aquaculture Water Quality Impact Modelling Assessment for Scapa Flow (9 October 2018)

5.2. Scotland's National Marine Plan (2015)

5.2.1.

The National Marine Plan states: "Aquaculture contributes to sustainable economic growth in rural and coastal communities, especially in the Highlands and Islands. Many communities depend on the employment and revenue it provides and, as a growing industry, it has potential to contribute to future community cohesion by providing quality jobs in rural areas and helping to maintain community infrastructures such as schools, ferries and other services subject to the continued management of risk".

5.2.2.

The National Marine Plan contains 14 Policies related specifically to Aquaculture:

- **AQUACULTURE 1:** Marine planners and decision makers should seek to identify appropriate locations for future aquaculture development and use, including the potential use of development planning briefs as appropriate. System carrying capacity (at the scale of a water body or loch system) should be a key consideration.
- **AQUACULTURE 2:** Marine and terrestrial development plans should jointly identify areas which are potentially suitable and sensitive areas which are unlikely to be appropriate for such development, reflecting Scottish Planning Policy and any Scottish Government guidance on the issue. There is a continuing presumption against further marine finfish farm developments on the north and east coasts to safeguard migratory fish species.
- **AQUACULTURE 3:** In relation to nutrient enhancement and benthic impacts, as set out under Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters, fish farm development is likely to be acceptable in Category 3 areas, subject to other criteria being satisfied. A degree of precaution should be applied to consideration of further fish farming development in Category 2 areas and there will be a presumption against further fish farm development in Category 1 areas.
- **AQUACULTURE 4:** There is a presumption that further sustainable expansion of shellfish farms should be located in designated shellfish waters these have sufficient capacity to support such development.
- **AQUACULTURE 5:** Aquaculture developments should avoid and/or mitigate adverse impacts upon the seascape, landscape and visual amenity of an area, following SNH guidance on the siting and design of aquaculture.
- **AQUACULTURE 6:** New aquaculture sites should not bridge Disease Management Areas although boundaries may be revised by Marine Scotland to take account of any changes in fish farm location, subject to the continued management of risk.
- **AQUACULTURE 7:** Operators and regulators should continue to utilise a risk based approach to the location of fish farms and potential impacts on wild fish.
- **AQUACULTURE 8:** Guidance on harassment at designated seal haul out sites should be taken into account and seal conservation areas should also be taken

into account in site selection and operation. Seal licences will only be granted where other management options are precluded or have proven unsuccessful in deterrence.

- AQUACULTURE 9: Consenting and licensing authorities should be satisfied that appropriate emergency response plans are in place.
- AQUACULTURE 10: Operators should carry out pre-application discussion and consultation and engage with local communities and others who may be affected, to identify and, where possible, address any concerns in advance of submitting an application.
- AQUACULTURE 11: Aquaculture equipment, including but not limited to installations, facilities, moorings, pens and nets must be fit for purpose for the site conditions, subject to future climate change. Any statutory technical standard must be adhered to. Equipment and activities should be optimised in order to reduce greenhouse gas emissions.
- AQUACULTURE 12: Applications which promote the use of sustainable biological controls for sea lice (such as farmed wrasse) will be encouraged.
- AQUACULTURE 13: Proposals that contribute to the diversification of farmed species will be supported, subject to other objectives and policies being satisfied.
- AQUACULTURE 14: The Scottish Government, aquaculture companies and Local Authorities should work together to maximise benefit to communities from aquaculture development.

5.2.3.

The National Marine Plan also contains seven policies related specifically to shipping, Ports, Harbours and Ferries.

5.2.4.

The 21 general policies of Scotland's National Marine Plan include:

- GEN 9 Natural heritage: Development and use of the marine environment must:
 - Comply with legal requirements for protected areas and protected species.
 - Not result in significant impact on the national status of Priority Marine Features.
 - Protect and, where appropriate, enhance the health of the marine area.

5.3. Scottish Planning Policy (2014)

5.3.1. Valuing the Natural Environment: Development Management

- Planning permission should be refused where the nature or scale of proposed development would have an unacceptable impact on the natural environment. Direct or indirect effects on statutorily protected sites will be an important consideration, but designation does not impose an automatic prohibition on development.
- Planning authorities should apply the precautionary principle where the impacts of a proposed development on nationally or internationally significant landscape or

natural heritage resources are uncertain but there is sound evidence indicating that significant irreversible damage could occur. The precautionary principle should not be used to impede development without justification. If there is any likelihood that significant irreversible damage could occur, modifications to the proposal to eliminate the risk of such damage should be considered. If there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.

5.3.2. Supporting Aquaculture: Policy Principles

The planning system should:

- Play a supporting role in the sustainable growth of the finfish and shellfish sectors to ensure that the aquaculture industry is diverse, competitive and economically viable.
- Guide development to coastal locations that best suit industry needs with due regard to the marine environment.
- Maintain a presumption against further marine finfish farm developments on the north and east coasts to safeguard migratory fish species.

5.3.3. Development Management

Applications should be supported, where necessary, by sufficient information to demonstrate:

- Operational arrangements (including noise, light, access, waste and odour) are satisfactory and sufficient mitigation plans are in place.
- The siting and design of cages, lines and associated facilities are appropriate for the location.

This should be done through the provision of information on the extent of the site; the type, number and physical scale of structures; the distribution of the structures across the planning area; on-shore facilities; and ancillary equipment.

Any land-based facilities required for the proposal should, where possible, be considered at the same time. The planning system should not duplicate other control regimes such as controlled activities regulation licences from SEPA or fish health, sea lice and containment regulation by Marine Scotland.

5.4. Other Relevant Policy and Guidance

- Circular 6/1995 'European Protected Species, Development Sites and the Planning.
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011.
- Circular 1/2007 'Planning Controls for Marine Fish Farming' 'Marine Fish Farming and the Environment' (SEERAD 2003).

- Planning Advice Note (PAN) 51- 'Planning, Environmental Protection and Regulation'.
- Scottish Executive – 'Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters' (2003 and updated June 2009 and December 2012).
- 'A Fresh Start – the Renewed Strategic Framework for Scottish Aquaculture' (2009).
- 'Guidance on Landscape/Seascape Capacity for Aquaculture' (SNH 2008).
- 'The Orkney landscape capacity for Aquaculture: Scapa Flow and Wide Firth' (SNH 2011).
- 'Siting and Design of Marine Aquaculture Developments in the Landscape' (SNH 2011).
- NPF3 highlights the Scottish Governments support the sustainable growth of the aquaculture sector and the significant contribution it makes to the Scottish economy, particularly for coastal and island communities.
- Pilot Pentland Firth and Orkney Waters Marine Spatial Plan (2016).

6. Legal Aspects

6.1.

Section 25 of the Town and Country Planning (Scotland) Act 1997 as amended (the Act) states "Where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination is, unless material considerations indicate otherwise...to be made in accordance with that plan..."

6.2.

Where a decision to refuse an application is made, the applicant may appeal under section 47 of the Act. Scottish Ministers are empowered to make an award of expenses on appeal where one party's conduct is deemed to be unreasonable. Examples of such unreasonable conduct are given in Circular 6/1990 and include:

- Failing to give complete, precise and relevant reasons for refusal of an application.
- Reaching a decision without reasonable planning grounds for doing so.
- Not taking into account material considerations.
- Refusing an application because of local opposition, where that opposition is not founded upon valid planning grounds.

6.3.

An award of expenses may be substantial where an appeal is conducted either by way of written submissions or a local inquiry.

7. Environmental Impact Assessment

7.1.

Regulation 60 of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 describes transitional provisions whereby the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 continue to have effect for consideration of the current application.

7.2.

The proposed development is a Schedule 2 Development – Category: 1(d) Intensive fish farming as defined in the 2011 Regulations.

7.3.

Having assessed the characteristics and location of the development and the characteristics of the potential impact as set out in Schedule 3 to the 2011 Regulations, the Council issued a Screening/Scoping Opinion on 21 March 2017, application reference 17/130/MARSS, stating that, in its opinion, the proposed development is considered likely to have a significant impact on the environment and that submission of an Environmental Statement (ES) was required.

7.4.

Accordingly, this application is accompanied by an ES in accordance with the 2011 Regulations, as confirmed by the transitional provisions set out in the 2017 Regulations 2017. The ES addresses all expected environmental effects associated with the proposed development and any proposed mitigation.

7.5.

The ES includes the matters listed below, which fall within the regulatory control of other bodies, therefore limited weight can be given to those matters as part of any planning decision.

- Benthic (seabed) impacts due to feed and faeces falling to the sea floor are covered by the CAR licensing regime and the allowable zone of effects (AZE) calculations regulated by SEPA with ecological advice provided by SNH. Any impacts on seabed protected species are a material planning consideration but are part of the CAR assessment first and foremost.
- Water column impacts from nutrient enrichment and use of medicinal chemicals are also part of SEPA's CAR licensing regime.
- The health, handling and medicinal treatment of the farmed fish, the control of predators and the physical quality of nets and moorings are all matters regulated by Marine Scotland.
- Depositions from fish farms, to enable monitoring of benthic impacts, is covered by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

- Registration, authorisation and elements of operational regulation is undertaken / required from Marine Scotland under The Aquatic Animal Health (Scotland) Regulations 2009 and the Marine Scotland Act 2010, covering fish health standards and containment, including power to monitor for sea lice infestation.

7.6.

There is some important crossover with local planning authority regulation and, where these matters and associated measures have an impact upon protected species in the wider environment, the matters are assessed below.

8. Habitats Regulations

8.1.

As Competent Authority, the Council must consider whether any plan or project would have a 'likely significant effect' on a Natura site before it can be consented, and if so carry out an Appropriate Assessment. That process is known as Habitats Regulations Appraisal (HRA). In considering likely significant effects, Revised Circular 6/1995 advises that HRA can be based on the information submitted in support of the application and informed by the appraisal by SNH. In this case SNH has stated that "In our view, the assessment has not ascertained that the integrity of the site will not be adversely affected and we therefore object to the proposal. Cumulative impacts from this proposal is likely to have a significant effect on Slavonian grebe and Black-throated diver of the Scapa Flow pSPA. Consequently, OIC, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest(s)".

8.2.

The Council's Appropriate Assessment is attached as Appendix 1 to this report and concludes, based on the information provided, that it has not been demonstrated beyond reasonable scientific doubt that the potential disturbance and displacement of Black-throated divers and Slavonian grebes resulting from the development, in combination with other existing developments and proposed developments in the planning system, will not have an adverse effect on site integrity of Scapa Flow pSPA.

9. Assessment

9.1. Proposal

9.1.1.

The proposed development involves a new marine fish farm site to be located 260 metres off the west of the island of Glimps Holm within Scapa Flow, as shown on the location plan attached as Appendix 2 to this report. This development is proposed to have a total surface area of 9,750.76 square metres covering the feed barge and cages, with a mooring containment area of 620 metres by 340 metres, totalling 210,800 square metres (21.8 hectares). The twelve cages have a 100-metre circumference (31.8 metre diameter) arranged in two groups of 2 x 3 cages. The two

groups of cages are 70 metres apart with the 200 tonne feed barge located centrally within the area between the two groups of cages. The application also includes the use of underwater lights, used to slow the maturing process and increase yields. The lighting would comprise three 400 watt lights per cage suspended below the surface. Lighting would be used during the months of October to April inclusive.

9.1.2.

The maximum stocked biomass of the site would be 1,247 tonnes with a maximum production biomass of 1,455.95 tonnes per cycle and a stocking density of 10.8 kilogrammes per cubic metre. The production plan is 22 months with a minimum fallow period between production cycles of two months (two months in 24).

9.1.3.

The site would operate 08:00 to 17:00, Mondays to Fridays, with occasional out of hours working primarily associated with harvesting. The original proposal was to have the site serviced from St Margaret's Hope; however, this was amended to St Mary's, Holm, following the potential impacts raised in respect of the Scapa Flow proposed Special Protection Area (pSPA). Re-notification and consultation was undertaken due to this change. Smolts would be delivered to site by well-boat from St Mary's. Harvesting would take place on site, with harvested fish transported to Stromness for further transportation to the company's processing unit at Kirkwall.

9.1.4.

The developer has stated that the farm would create three to four new full-time posts and additional part-time seasonal work.

9.1.5.

Site-specific cage nets have been designed considering water depth, exposure, fish size and wildlife constraints. The cage nets would be to a depth of 12 metres below the water surface.

9.1.6.

The proposed feed barge is a 200 tonne Seamate feed barge, which would allow the fish in the cages to be fed using a semi-automated feeding system from the barge, which is video controlled and aims to minimise any feed waste.

9.1.7.

Impacts on the existing lobster hatchery on Lamb Holm required consideration, which limited options for treatment of fish on the farm. However, the developer has worked with SEPA to agree a series of mitigation measures with the operators of the hatchery, including construction of an alternative seawater abstraction point on the eastern side of Barrier number 3. In addition, a written management agreement would be confirmed with the operators of the hatchery, to outline procedures and notice to be given prior to any bath treatment taking place, minimising any risk to the hatchery.

9.1.8.

Cooke Aquaculture Scotland Ltd (CAS) submitted the planning application on 25 July 2017. Additional bird surveys were requested by SNH, which were undertaken over winter 2017 to 2018 to record the location and abundance of Scapa Flow pSPA bird species around the proposed site at West Glimps Holm, as well as its associated vessel transit route to St Margaret's Hope.

9.1.9.

Following submission of the information referred to above, SNH raised concerns regarding the proposed vessel transit route (VTR) between the site and St Margaret's Hope, due to the potential negative effects particularly on Black Throated Diver and Slavonian Grebe, which are designated features of the Scapa Flow pSPA. An alternative VTR between the site and the pier facility at St Mary's, Holm was proposed, which required revised Cumulative Impact Assessment and further survey data assessments to be carried out and submitted, forming part of the ES. As the change to the VTR was material in respect of the ES, an addendum to the originally submitted ES was submitted; accordingly, the application was re-advertised and re-consulted.

9.2. Interaction with predators

9.2.1.

Scapa Flow is a proposed Special Protection Area (pSPA), identified as an important area for marine birds including a number of wintering and breeding populations. These qualifying species include breeding Red-throated diver and aggregations of non-breeding wintering waterfowl, including Black-throated diver, Common eider, Common goldeneye, Great northern diver, Long-tailed duck, Red-breasted merganser, European shag and Slavonian grebe. Scapa Flow is also a foraging area for avian species, such as Red-throated divers which are the qualifying interests of the Hoy SPA. Several seabird species from the Hoy SPA and SPAs further afield may also use this area. The proposed fish farm lies to the eastern edge of Scapa Flow.

9.2.2.

The pSPA designation protects both the birds themselves and the rich feeding grounds and sheltered waters on which they depend. Article 4 (paragraph 1) of the Habitats Directive makes provision for these species to be protected through the designation of SPA. Annex 1 of the Birds Directive (79/409/EEC) lists 193 species and sub-species which are:

- In danger of extinction.
- Vulnerable to specific changes in their habitat.
- Considered rare because of small populations or restricted local distribution.
- Requiring particular attention due to the specific nature of their habitat.

Great northern diver, Black-throated diver, Slavonian grebe and Red-throated diver are Annex 1 species.

9.2.3.

Article 4 (paragraph 2) also makes provision for similar measures to be put in place for regularly occurring migratory species, not listed in Annex 1. Common eider, Long-tailed duck, Red-breasted merganser and European shag are migratory species that occur regularly within Scotland's seas. Over 20% of the British population of great northern diver, 10% of black throated diver and the largest concentration of Slavonian grebes in Britain spend the winter in Scapa Flow. Scapa Flow also supports the second largest concentration of non-breeding European shag in Britain and large numbers of other wintering wildfowl. Although representing 10% of the British population, the number of Black-throated divers overwintering in Scapa Flow is relatively small. During the summer months, Scapa Flow is an important foraging area for breeding red-throated divers which nest on small lochans on the surrounding land. Non-breeding (ie over-wintering) Common goldeneye was initially included as a qualifying species of the Scapa Flow pSPA, but it is understood this species has now been removed from the list.

9.2.4.

The developer has assessed the impacts of the proposal on the natural environment at the construction/installation stage, operational stage and decommissioning stage and has concluded that there are no significantly adverse impacts resulting from the proposed development in consideration of the following:

- Disturbance along vessel transit route.
- Entanglement.
- Exclusion and displacement.
- Loss of or damage to supporting habitats.

Mitigation has been provided within the ES and supporting information including:

- Good operation procedures.
- Nature and design of cages and nets.
- Tensioned nets.
- Predator nets.
- Monitoring.
- Vessel management plan (VMP).
- Vessel transit route (VTR).

It is concluded within the most recent Shadow Habitats Regulations Appraisal (SHRA) that the mitigation measures would minimise the risk of bird attack, entanglement, disturbance and displacement. It is concluded in the ES that the proposed change to the development would prevent an adverse effect on site integrity for any of the qualifying features of the Scapa Flow pSPA.

9.2.5.

SNH is a statutory consultation body and has a remit to provide advice in respect of impacts on natural heritage. On the basis of the outcome and assessment of the bird

surveys carried out at the fish farm site at Glimps Holm and original VTR from the site to St Margaret's Hope, SNH objected due to the potential effect of the proposed development on the internationally important natural heritage interests of the Scapa Flow pSPA, with particular impacts on two Annex 1 species, Black-throated diver and Slavonian grebe, which were identified as being at risk through disturbance and displacement and due to cumulative impacts with other proposed fish farms within the area.

9.2.6.

The Scapa Flow pSPA conservation objectives for qualifying interests are:

- Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long term.
- To maintain the habitats and food resources of the qualifying features in favourable condition.

9.2.7.

Following the SNH objection, an alternative VTR was proposed from St Mary's, Holm, to the fish farm site, which required further work and the ES updated to take account of that new information. The alternative VTR was sufficient to overcome part of the initial SNH objection, however the objection was maintained, due to cumulative impact with other fish farms proposed within the pSPA.

9.2.8.

SNH advises that "Our assessment for displacement and mortality for Slavonian grebe demonstrates that there is potential for Adverse Effect on Site Integrity (AESI) arising from the (revised) West Glimps Holm proposal in combination with the Lober and Lober North developments; the estimated level of impact (up to 4.15% of population) could be considered sufficient to undermine the site's conservation objectives, therefore we are unable to conclude no AESI". SNH further advises that the "cumulative assessment does not demonstrate beyond reasonable scientific doubt that the proposal's disturbance and displacement of Black-throated divers and Slavonian grebes, in combination with other existing developments and proposals in the planning system, will not have an adverse effect on site integrity of Scapa Flow pSPA".

9.2.9.

Scottish Planning Policy (SPP) advises that the precautionary principle should apply where the impacts on nationally or internationally significant landscape or natural heritage resources are uncertain, but where there is sound evidence indicating that significant irreversible damage could occur (paragraph 204).

9.2.10.

Policy 9A (1) of OLDP 2017 states, "Development will only be permitted where the Assessment ascertains that: (a) it would not adversely affect the objectives of the designation or the integrity of the site; (b) there is no alternative solution; and (c)

there are imperative reasons of over-riding public interest, including those of a social or economic nature.”

9.2.11.

Both common and grey seals, and otters, are likely to be found in the area of Glimps Holm and the wider area of Scapa Flow and beyond. Seals are listed in Annex II of the Habitats Directive and protected under that designation. In addition, locations on land where seals come ashore to rest, moult or breed are protected under the provisions of the Protection of Seals (Designated Sea Haul-out Sites) (Scotland) Order 2014. Designated seal haul-out sites are protected from intentional or reckless harassment of seals. Ten designed seal haul-out sites are located within this part of Scapa Flow, with the closest designated seal haul-out site at Hunda, approximately 2.5 kilometres to the south west of the site. The original VTR between the site and St Margaret’s Hope Pier ran within 0.25 kilometres of that haul-out site; however, the amended VTR to the pier facility at St Mary’s, Holm, would ensure that the VTR was no closer to the haul-out site than the proposed fish farm.

9.2.12.

A Vessel Management Plan (VMP) forms part of the ES, setting out objectives and measures to minimise disturbance to natural heritage interests, including seals within the seal haul-out sites and other conservation features.

9.2.13.

The ES and the Predator Defence and Mitigation Policy (PDMP) for West Glimps Holm sets out the management measures that would be undertaken to mitigate predation by seals including tension nets, subsurface anti-predator nets, efficient husbandry and frequent removal of mortalities. All nets would be checked daily at the surface and weekly subsurface net checks are undertaken by divers to check for any signs of damage. A measure of last resort would be for the humane dispatch of a persistent seal that was not deterred by the primary predator control measures; that would be subject to obtaining the appropriate licence.

9.2.14.

The PDMP for West Glimps Holm indicates that Acoustic Deterrent Devices (ADDs) would be deployed following consultation with SNH and the Council, and only in the event that tensioned cage nets and subsurface anti-predator nets were not acting as a sufficient deterrent to problematic seals. This approach raises concerns due to the risk of disturbance and disorientation posed to cetacean species by ADDs, as well as the potential for exclusion from feeding areas.

9.2.15.

The ES provides information to inform a Habitats Regulation Appraisal (HRA). SNH considers that the proposal is likely to have a significant effect on the qualifying interests of the Scapa Flow pSPA, therefore the Council, as the competent authority, is required to carry out an Appropriate Assessment, attached as Appendix 1 to this report.

9.2.16.

RSPB Scotland (a non-statutory consultee) has objected to the proposal on the basis the ES does not provide sufficient information to assess the impact on the integrity of the Scapa Flow pSPA designated bird population, including direct impacts during construction and operation as well as indirect impacts to prey species and the structure, function and supporting processes of any habitats supporting the species. In addition, RSPB Scotland considers the findings of the Environment, Climate Change and Land Reform (ECCLR) Committee of the Scottish Government support their objection.

9.2.17.

The proposal has been fully assessed individually and cumulatively taking account of this advice and present designations, and in respect of national and local policy considerations and relevant supplementary guidance. The assessment of the cumulative impact of the development on the Scapa Flow pSPA has not concluded that the integrity of the site would not be adversely affected and nor that there would be no impact on the natural heritage interests of the area. Therefore, it cannot be concluded that the proposed development would not impact adversely on Scapa Flow pSPA. On this basis, the proposal does not accord with Scottish Planning Policy, or the Orkney Local Development Plan 2017 Policies 9A and 12, Supplementary Guidance: Aquaculture or Supplementary Guidance: Natural Environment.

9.3. Carrying capacity and cumulative benthic and water column impacts

9.3.1.

Fish farms have an impact on the seabed through the settlement of fish feed and faeces; however, the details of this deposition are a matter for wider assessment by SEPA in relation to an application for a CAR licence under the Water Environment (Controlled Activities) Scotland Regulation 2011(CAR). Under this licence, SEPA has the ability, if there is significant environmental stress from the biomass level on the site, to require the situation to be improved, through mitigation or reduction in biomass. A CAR licence already exists for the site (CAR/L/1122569) in its proposed configuration with a maximum permissible biomass of 1,247 tonnes. However, a technical variation to the licence has been obtained for additional treatments which would allow the control of sea lice if non-chemical or in-feed agents were not sufficient in their own regard.

9.3.2.

A baseline survey of the seabed was submitted to support the application. The modelling from the information provided predicts that this site would be suitable to hold a biomass of 1,247 tonnes. The modelling also included the usable quantities of sealice treatments and the in-feed medicine. Any change to the licensed amounts for use on this site would be determined under the technical variation sought under their existing CAR licence.

9.3.3.

An Equilibrium Concentration Enhancement (ECE) assessment for this site and existing fish farms in the surrounding water body has been carried out to estimate the input of dissolved inorganic nitrogen and has not raised any issues regarding the ability of the water body to accommodate a further fish farm without detrimental effects due to nutrient loading and enrichment.

9.3.4.

Two seabed surveys of the immediate area surrounding the site have been carried out in 2013 and 2014. SEPA indicates that no species/habitats of natural heritage interest were evident.

9.3.5.

SEPA advises that it has no objection to this planning application. It should be noted that SEPA controls the maximum biomass for the site and discharges of licensed medicines through CAR.

9.3.6.

The Aquaculture Water Quality Impact Modelling Assessment for Scapa Flow was adopted by the Council as Development Management Guidance on 9 October 2018. The conservative modelling which supports the assessment determined that the dissolved nutrient release from the eight existing operational fish farms and three proposed fish farms in Scapa Flow, including this proposed fish farm at Glimps Holm, would maintain current compliance with High Water Framework Directive Coastal Water Dissolved Inorganic Nitrogen (DIN) standards. Therefore, in terms of DIN-related water quality impacts, it is considered that the proposed fish farm at Glimps Holm satisfies the requirements of Supplementary Guidance: Aquaculture, Development Criteria 5.

9.3.7.

Neither Marine Scotland Science (MSS) nor SEPA has raised objection to the proposal in respect of the predicted impact upon water quality. SEPA, SNH and MSS have all indicated satisfaction with the information provided in relation to the water column and benthic impacts. Supplementary Guidance: Aquaculture, Development Criterion 5: Water Quality and Benthic Impacts, requires that it must be clearly demonstrated that the development will avoid causing deterioration in the water quality or overall status of water bodies and, for any water body currently not achieving good status, will not prevent it from being able to achieve good status in the future. It is therefore considered that the proposal would comply with Development Criterion 5 (Water Quality and Benthic Impacts) of the Supplementary Guidance: Aquaculture.

9.4. Navigation

9.4.1.

The Northern Lighthouse Board has provided specifications for the lighting requirements at this site and raises no objections provided the site is marked

accordingly. Marine Scotland is satisfied that the cages and moorings meet the technical standard and are suitable for the conditions at this specific site.

9.4.2.

The proposed fish farm at west of Glimps Holm lies 1,400 metres from anchorage 4 in Scapa Flow. Marine Services, as Harbour Authority, does not object to the proposal in respect of navigational safety but identifies that a fish farm in this location would restrict use of this anchorage by large vessels with certain wind directions or if they were working with tugs on their stern. Marine Services also raise concerns regarding cumulative impact of fish farms within the designated harbour area of Scapa Flow and resultant reduction of area that can safely be used for navigation and anchoring/mooring.

9.4.3.

Taking account of the information supplied within the ES, and by MSS and Marine Services, it is considered that the development would not impact on navigation to such a degree to warrant refusal, and on balance is considered to be in accordance with Supplementary Guidance: Aquaculture, Development Criterion DC7, in respect of navigation.

9.5. Interaction with Wild Salmonids

9.5.1.

The Planning Authority has a duty in the conservation of biodiversity, which includes interaction with wild fish. Sea trout is a UK Biodiversity Action Plan (UKBAP) priority species and included within the draft Marine Priority Species.

9.5.2.

The application site is located in the southeast of Scapa Flow. The site is not in close proximity to any known sea trout spawning/nursery burns, with the nearest sea trout burn over 10 kilometres away at Waulkmill. SNH notes that sea trout frequent the shallower water of Scapa Flow, and MSS notes the presence of sea trout in inshore waters year round, highlighting that the site has the potential to affect sea trout. SNH advises that there is a possibility of transfer of sea lice between farmed and wild salmonids and that escapes of farmed fish may also be detrimental to wild fish. SNH has stated satisfaction with proposed measures to minimise the risk from escapes.

9.5.3.

MSS provided information on potential impacts on wild fisheries, highlighting scientific evidence from Norway and Ireland, but cannot provide clear scientific information for Scottish waters as similar research is yet to be completed in Scotland. However, information presently available from the west coast of Scotland suggests lice from fish farming may cause a risk to local salmon and sea trout. Although it appears likely that numbers of sea lice in open water are likely to have an adverse effect on populations of wild salmonids in some circumstances, the impact on overall mortality in these waters are still not known. MSS also highlights that the siting of a farm and control of sea lice numbers on the farm are critical factors in risk

assessment for wild salmonids, and a greater number of lice on a farm leads to a greater risk to wild salmonids. MSS advises that, although it is not possible to accurately predict the future sea lice numbers on a farm, the performance of existing farms in the area could act as a guide to future performance.

9.5.4.

The applicant is aware of the potential impacts on wild salmonids through the increase in production in Scapa Flow and identifies the risks including:

- Sea lice.
- Disease transfer.
- Genetic dilution through interbreeding.
- Increased competition for food and habitat.

The ES details a range of measures, to minimise the risk to wild salmonid as listed below:

- West Glimps Holm Predator Defence Mitigation Policy.
- Predator Defence Mitigation Policy.
- West Glimps Holm Sea Lice Management Strategy 2017.
- West Glimps Holm Sea-lice Treatment Efficacy Statement 2017.
- West Glimps Holm Production Plan 2017.
- West Glimps Holm Hatchery Treatment Management Agreement.
- Non-synchronised following risk assessment.
- West Glimps Holm Escape Prevention and Emergency Response Plan 2017.
- West Glimps Holm Vessel Management Plan.
- Predator Control Standard Operating Procedure.
- Emergency Mortality Removal (Cooke) Standard Operating Procedure.
- CAS Emergency Escape Procedure Standard Operating Procedure.
- Fish Health and Welfare Standard Operating Procedure.
- Farm management agreements with other operators.

9.5.5.

Orkney Trout Fishing Association (OTFA) has objected to this application due to potential impact on the wild sea trout population and the general marine environment of Scapa Flow. OTFA states that there is a clear responsibility on the Council to fully consider the potential impact this level of expansion could have on the marine environment before any new salmon farm applications are approved. It is highlighted that there are presently 8,210 tonnes consented (under CAR) in Scapa Flow, and, if all sites in the planning process are consented, the tonnage would nearly double to 16,000 tonnes within a year. OTFA indicates that this would make Scapa Flow the most intensively farmed body of water in the UK and would increase the risk of disease and parasite outbreaks.

9.5.6.

One member of the public who has objected raises concerns on the impact of the proposal on the Loch of Ayre which supports significant self-sustaining populations of fully migratory Sea Trout (*Salmo trutta*) and sedentary Brown Trout (*S. trutta*) as well as Flounder (*Platichthys flesus*), Dab (*Limanda limanda*), European eel (*Anguilla anguilla*), and Three-spined stickleback (*Gasterosteus aculeatus*). The lack of up to date information on the status of Sea Trout in Orkney is also highlighted as an issue. Multiple objectors also raise the findings of the Environment, Climate Change and Land Reform (ECCLR) Committee and The Rural Economy and Connectivity (REC) Committee on the farmed salmon sector impacts.

9.5.7.

Marine Scotland Science's revised sea lice policy, The Regulation of Sea Lice in Scotland (2017), introduced a new enforcement regime through MSS's Fish Health Inspectorate (FHI), which triggers enforcement action. It should be noted that these trigger levels are higher than those required under the industry Code of Good Practice (CoGP). The applicant acknowledges the importance of adherence to strict sea lice control.

9.5.8.

Given the above concerns and existing triggers for enforcement action, when considering planning applications for fish farms, the planning authority must be satisfied that the mitigation would establish a robust control mechanism within the planning consent to ensure sea lice numbers remain low throughout the lifetime of any permission, to ensure the planning authority's development plan policies and biodiversity duties as set out in the Nature Conservation (Scotland) Act 2004 are met. Therefore, strict sea lice control is critical in order to minimise risk, year-round, to sea trout populations. An Environmental Management Plan (EMP) for Sea Lice would be provided to ensure the stricter control set through the industry code of good practice standard is achieved to protect the Council's biodiversity duty.

9.5.9.

SEPA and SNH have raised no objections to the development and Marine Scotland has stated that it considers the measures to be satisfactory as far as can reasonably be foreseen. It is therefore considered acceptable in terms of policy considerations and criterion DC4 of Supplementary Guidance: Aquaculture, provided an EMP is prepared.

9.6. Landscape and Visual Impact

9.6.1.

Introduction of a new fish farm site will result in visual change to the area with the introduction of cages and a feed barge, together with activities involved in operation of the site, including vessel movements and lighting. The feed barge would be the most significant structure above water, as the cages would be low-lying and dark in colour. The barge would vary in height above sea level from 4.5 metres to 7 metres, depending of the amount of feed in the barge. In order to assess the landscape, seascape and visual impact, the ES includes a Landscape and Visual Impact

Assessment (LVIA) for the development, which identifies the level of impact on key receptors, landscapes and seascapes.

9.6.2.

Glimps Holm has no habitable houses and the closest residential properties are on Burray or Holm, with the closest being approximately 1 kilometre away. Therefore, key receptors are likely to be residents, tourists, walkers, recreational marine activities and commercial marine activities. The site is visible from the north and south, from sections of the A961. These views are generally at a distance; however, closer views of the development would be visible from Barriers number 2 and 3. The site would also be viewed from core paths and coastal walks. The views from the elevated locations are the most significant, nevertheless the fish farm is unlikely to be seen in isolation and would generally be seen in context with a back drop of islands or the activities that take place within Scapa Flow.

9.6.3.

Views to the site from the Pentland Ferries' route to the south would be very limited. Views from the main body of Scapa Flow are likely to be greatest, however when viewed from this body of water, the fish farm would generally be seen with the backdrop of islands. The nature and use of Scapa Flow as a harbour area means there are frequent vessel movements and activity, resulting in a constantly changing seascape. It is considered that the magnitude of visual change that would occur is not so significant, in relation to the development alone or cumulatively with other existing development, and in the context of the landscape/seascape of Scapa Flow, to merit refusal.

9.6.4.

There are several fish farms within Scapa Flow, which are sited principally in the west and north coasts. The positioning and distances between the existing fish farms minimises the cumulative visual impacts between these sites. Presently there is a fish farm at Lober, which is consented but not yet on site, with a further site at Hunda under consideration through an appeal to The Planning and Environmental Appeals Division (DPEA) of the Scottish Government. The cumulative visual impacts of these fish farms would be most obvious when viewed from elevated positions in Burray, Holm or Glimps Holm.

9.6.5.

The application site is not itself subject to any landscape designation; however, in terms of the SNH document 'The Orkney Landscape Capacity for Aquaculture', the site is within an area with potential for small scale aquaculture development. SNH considers there would be a significant adverse sequential cumulative effect from this proposal.

9.7. Socio Economic Impact

9.7.1.

The information in the ES suggests the commercial fishing interests within the vicinity of the site are shellfish fishing and creel boats; therefore, there is the potential for a loss of existing fishing grounds. However, the ES uses data from Scotmap to categorise the area as low importance to the fishing fleet. The applicant advises that they have previously permitted creel boats to drop creels between the cages and shore line at sites such as Cava and would consider this as an option at this site provided the operations are navigationally safe. The area taken up by the fish farm is small relative to the whole Scapa Flow area, therefore the impact on commercial fishing in terms of displacement, employment and loss of fishing/diving grounds is not considered to be significant. OFA raises concerns of the potential impacts of the aquaculture depositions on the development on commercial shellfish fishery.

9.7.2.

Potential risk to recreation (including fishing) and tourism is raised as an issue by a number of objectors including OTFA, if the Scapa Flow marine environment is affected by the continual expansion of fish farms. The Aquaculture Water Quality Impact Modelling Assessment for Scapa Flow adopted by the Council concludes that the development would maintain current compliance with High WFD Coastal Water Dissolved Inorganic Nitrogen (DIN) standards. Therefore, in terms of DIN-related water quality impacts, it is considered that the proposed fish farm at Glimps Holm satisfies the requirements of Supplementary Guidance: Aquaculture, Development Criterion 5, by ensuring no unacceptable deterioration in the water quality or overall status of water bodies and, for any water body currently not achieving good status, not preventing it from being able to achieve good status in the future.

9.7.3.

Marine Services has objected to the proposal on the basis of a reduction of available space for the shipping activities within Scapa Flow and has expressed concerns that future fish farms should not cause any degradation in current water quality standards. Objectors have also raise concerns on the impact on the quality of the water, some in particular highlighting St Mary's Bay, from the proposed fish farm as the area is a recreation area used by Holm Sailing Club, where dinghy sailing takes place every week during the summer months and involves some training of children and young people. The Royal Yachting Association for Scotland, although they have no objections on navigational grounds, indicate that concerns have been expressed locally about the risk of a deterioration in water quality in St Mary's Bay.

9.7.4.

The applicant has stated that the proposal will create three to four permanent full-time jobs and additional part-time employees being required seasonally.

9.7.5.

The Scottish Government's National Marine Plan and Scottish Planning Policy together recognise the contribution of the aquaculture sector to the rural economy

and 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 environmentally 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. In this case the development has the potential to affect internationally important natural heritage interests (Scapa Flow pSPA).

9.7.6.

In considering the competing socio-economic issues raised regarding this development, it is accepted that there will be impacts. It is nevertheless considered that there will not be a significant impact on the other users of the marine environment at such a level as to outweigh the socio-economic value that would be brought by the proposed development.

9.8. Noise and light pollution

9.8.1.

The normal working hours at the fish farm is to be 08:00 to 17:00, Mondays to Fridays. Outwith these times noise would result from the equipment on the feed barge and occasional work that is required to take place during these hours such as well-boat activities and harvesting. Glimps Holm is presently uninhabited therefore the potential for noise disturbance from the fish farm operations to residential properties is not considered significant, when considered in respect of working hours and the noise associated with the activities of the fish farm.

9.8.2.

The fish farm would introduce an artificial source of light into this area during hours of darkness, when work is being undertaken on the feed barge. There would also be underwater maturation lights fitted to each cage. These would only be in use during the winter months of October to April inclusive. The effects of maturation lighting associated with the proposed farm would be localised, given that the submerged artificial lights are mainly confined to the cage structures. The undeveloped nature of the coastline of Glimps Holm is such that there would be an impact on this immediate area and from the public road, and at a distance from Holm and Burray. However, when seen in context with the general activities in Scapa Flow, introduction of the lighting of the feed barge and from the maturing lights should not have a significant impact on residential or visual amenity. It is considered that the noise and lighting associated with this development will be acceptable and in accordance with criterion DC9 of Supplementary Guidance: Aquaculture.

9.9. Historic Environment

9.9.1.

The proposal is located 0.9 kilometres north west of the category A listed Churchill Barrier Number 3. Historic Environment Scotland has no objection to the development and is content that the impact of the proposal will not be significant on

the setting of the Barrier. The topography of the island is such that the fish farm would not be visible from the Italian Chapel on Lambs Holm, which is 2.8 kilometres from the fish farm, and a very popular tourist attraction. Other listed buildings within the wider area are all over 2 kilometres from the fish farm site.

9.9.2.

There are several marine sites of historic interest within the area, principally blockships. Due to the nature of the development and the tidal condition, the ES considers that it is unlikely there would be a significant effect on the marine sites of historic interest. However, mitigation should provide a process to follow to ensure that any archaeology found during construction or survey work should be reported to the County Archaeologist.

9.9.3.

It is considered that the development would not have a significant impact on the historic environment of the area and is considered acceptable in terms of policy and criterion DC6 historic environment of Supplementary Guidance: Aquaculture.

10. Conclusion and Recommendation

10.1.

The Orkney Local Development Plan 2017 supports finfish development through Policy 12 Coastal Development, section D – Aquaculture, where it can be demonstrated, “with regard to SG and through appropriate mitigation where necessary, that there will not be unacceptable effects, directly, indirectly or cumulatively”. Supplementary Guidance: Aquaculture, Spatial Policy 1, sets out the spatial sensitivities that have potential to be affected by aquaculture developments, as well as the 10 development criteria that all aquaculture development will be assessed against. These specific policies on aquaculture must be considered along with the other relevant policies of the Orkney Local Development Plan 2017, particularly Policy 9 Natural Heritage and Landscape, and Supplementary Guidance: Natural Environment.

10.2.

Scotland’s National Marine Plan supports sustainable growth of aquaculture subject to the proposal complying with the relevant policies and the 14 Policies which relate specifically to Aquaculture. However, the general policies include policies to support natural heritage and indicate that development within the marine environment must comply with legal requirements for protected areas and protected species.

10.3.

Scottish Planning Policy advises that, although a designation does not prohibit development, planning permission should be refused where the nature or scale of the proposed development would have an unacceptable impact on the natural environment. Further, SPP advises that direct or indirect effects on statutorily protected sites will be an important consideration, indicating that a Planning Authority should apply the precautionary principle where the impacts of a proposed

development on nationally or internationally significant landscape or natural heritage resources are uncertain but there is sound evidence indicating that significant irreversible damage could occur. It is highlighted that the precautionary principle should not be used to impede development without justification. In this instance the justification is provided through the potential cumulative impact of the proposal on the Scapa Flow pSPA.

10.4.

The Planning Authority takes into account the assessments and conclusions of any ES submitted with an application, but that content can only influence the decision where it is a material planning consideration. The ES identifies and assesses the potential areas of interaction between the proposed development and the environment. However, cumulatively with other fish farms in the planning system, there is the potential for an adverse effect on the pSPA. The location, scale and environmental impact of the proposed fish farm near West Glimps Holm is unacceptable. The ES fails to conclude that the integrity of the site would not be adversely affected. Therefore, it cannot be concluded that the proposed development would not impact adversely on Scapa Flow pSPA. On that basis, the proposed development is contrary to Orkney Local Development Plan 2017 Policies 9A and 12, Supplementary Guidance: Aquaculture, Supplementary Guidance: Natural Environment, Scotland's National Marine Plan and Scottish Planning Policy. Accordingly, the application is **recommended for refusal**.

11. Contact Officer

Margaret Gillon, Senior Planner, extension 2505, Email:
margaret.gillon@orkney.gov.uk

12. Appendices

Appendix 1: Appropriate Assessment.

Appendix 2: Location Plan.

Appendix 1.

Regulation 48 of the Conservation (Natural Habitats etc.) Regulations 1994

Appropriate Assessment by Orkney Islands Council



Application reference number: **17/343/MAR.**

Type of application: **Full.**

Development description: **Create a salmon farming site comprising of 12 x 100m circumference cages, arranged 2 x (2 x3) in a 70m grid with the feed barge located in between the two groups of 2 x3 cages.**

Applicant: **Cooke Aquaculture Scotland.**

Grid Reference: **HY346496 999141.**

Relevant Natura site: **Scapa Flow proposed Special Protection Area (pSPA).**

1. Judgement of Likely Significant Effect

The proposed site lies within the Scapa Flow pSPA, it is considered this proposal is likely to have a significant effect on the qualifying interests of the Scapa Flow pSPA. There may be potential for a significant effect from Disturbance along vessel transit route, Direct displacement from cage area, Entanglement, Loss of or damage to supporting habitats, cumulatively with other developments on qualifying species of the pSPA. It is therefore considered that there may be potential for a significant effect from operations of the fish farm on qualifying species of the pSPA.

2. Scoping

The proposal lies within the Scapa Flow proposed Special Protection Area (pSPA) selected for its aggregations of breeding Red-throated diver and aggregations of non-breeding wintering waterfowl, including Black-throated diver, Eider, Goldeneye, Great northern diver, long-tailed duck, Red-breasted merganser, Shag and Slavonian grebe.

The Scottish Government has a policy of protecting such sites as if they were designated as set out in Scottish Planning Policy. The legal protection afforded to designated European sites is set out in 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. Orkney Islands Council as the competent authority is required to consider the likely impact of the proposed development on the qualifying interest and conservation objectives of the Scapa Flow pSPA.

3. Qualifying Interest:

The Scapa Flow proposed Special Protection Area (SPA) qualifies under Article 4.1 by regularly supporting a non-breeding population of European importance of the following Annex 1 species:

- great northern diver.
- black-throated diver.
- Slavonian grebe.

The site also qualifies under Article 4.1 by regularly supporting a population of European importance of the following Annex 1 species during the breeding season:

- red-throated diver.

The site further qualifies under Article 4.2 by regularly supporting populations of European importance of the following migratory species:

- common eider.
- long-tailed duck.
- common goldeneye.
- red-breasted merganser.
- European shag.

4. Site Conservation Objectives

The conservation objectives for the Scapa Flow marine pSPA are:

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long-term and it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

5. Identify Affects

- Disturbance along vessel activity associated with the proposal.
- Direct displacement from cage area.
- Entanglement.
- Construction of development.
- Loss of, or damage to, supporting habitats.
- Cumulative impacts.

6. Appraisal

In its response to the Council, SNH concluded there is likely significant effect on some features of Scapa Flow pSPA. The assessment has not concluded that the integrity of the site would not be adversely affected. Insufficient information and/or mitigation has been provided within the application to conclude that no adverse

effect on site integrity would result due to cumulative impacts with other developments within the planning system, proposed in the Scapa Flow pSPA. SNH considered the impact of the proposals on Black-throated diver and Siavonian grebe. The Council's assessment pays cognisance to the conclusions of SNH.

Orkney Islands Council's assessment has not ascertained that the integrity of the site will not be adversely affected and we therefore object to the proposal.

Black-throated diver

The amendment to the VTR for the proposed fish farm at West Glimps Holm removes risk of adverse effect on site integrity (AESI) arising from displacement impacts with respect to this proposal alone.

Assessment for displacement and mortality demonstrates that there is potential for adverse effect on site integrity (AESI) with respect to black-throated diver arising from the (revised) West Glimps Holm proposal in combination with the Lober and Hunda North developments; this stems from high sensitivity to disturbance, limited distribution and small population of this species within the pSPA.

Siavonian grebe

The amendment to the VTR for the proposed fish farm at West Glimps Holm removes risk of AESI arising from displacement impacts with respect to this proposal alone.

The Council concurs with the assessment by SNH regarding displacement and mortality for Siavonian grebe, which demonstrates that there is potential for AESI arising from the (revised) West Glimps Holm proposal in combination with the Lober and Hunda North developments; the estimated level of impact (up to 4.15% of population) could be considered sufficient to undermine the site's conservation objectives, therefore we are unable to conclude no AESI.

7. Conclusion

Having undertaken an Appropriate Assessment of the development described above Orkney Islands Council as the competent authority for the purposes of Regulation 48 of the Conservation (Natural Habitats etc.) Regulations 1994 adopts the appraisal and conclusions.

In letters dated 26 October 2017, 27 August 2018 and 20 December 2018 (attached to this notice), SNH has not been able to conclude the natural heritage interests of international importance on the site would not be adversely affected by the proposal. SNH also concludes that the cumulative assessment does not demonstrate beyond reasonable scientific doubt that disturbance and displacement of Black-throated divers and Siavonian grebes, caused by the development in combination with other existing developments and proposals in the planning system, would not have an adverse effect on site integrity of Scapa Flow pSPA.

Therefore, Orkney Islands Council, as the competent authority for the purposes of Regulation 48 of the Conservation (Natural Habitats etc.) Regulations 1994,

concludes that, the development as proposed would adversely affect the integrity of the Scapa Flow pSPA.

Date: 19 February 2018

Signed: Jamie Macvie, Planning Manager

Development Management
Orkney Islands Council
School Place
Kirkwall
KW15 1NY



Scottish Natural Heritage Dualchas Nàdair na h-Alba

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

Your ref: 17/343/MAR
Our ref: CNS/MFF/ORK/WestGlimps (CEA151419)

Date: 24th August 2018

Dear Ms Gillon

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

Create a salmon farming site comprising of 12x100m circumference cages with associated feed barge West of Glimps Holm, Scapa Flow, Orkney.

Thank you for your re-consultation dated 5th July 2018 and subsequent extension to the consultation period for the above proposal.

Summary

The proposal could affect internationally important natural heritage interests (Scapa Flow pSPA) and we therefore **object to this proposal**.

It may be possible to accommodate a fish farm of this scale in this location. However, the vessel transit routes in this application as it currently stands are problematic. We would be happy to continue work with the developer to identify alternative vessel transit routes that have less impact on the important bird features of this pSPA.

We recognise that the developer has gone to considerable additional effort to carry out the cumulative impact assessment. However, in our opinion the assessment does not demonstrate beyond reasonable scientific doubt that the proposal's disturbance of black-throated divers and Slavonian grebes, both on its own and in combination with Lober fish farm, will not have an adverse effect on site integrity of Scapa Flow pSPA.

Our earlier advice, for all other natural heritage interests i.e. Priority Marine Features (PMFs) and landscape impacts, remains unchanged.

Background

We objected to this proposal on 25th October 2017, requesting further information. The applicant has now carried out winter surveys of the proposed mooring extent and the vessel transit route. They have provided an assessment of impacts on the Scapa Flow pSPA and a cumulative assessment, encompassing other existing and proposed fish farms within the East Scapa Flow area.

We are now able to update our advice on the effects on the Scapa Flow pSPA.

Appraisal

In our view, this proposal is likely to have a significant effect on Scapa Flow pSPA. Consequently, Orkney Islands Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests. On the basis of current information, and for the reasons given below, it is unlikely that OIC will be able to ascertain that there will be no adverse effect on the integrity of the site.

Black-throated diver

This species is scarce in the pSPA¹ and the main concentrations are within the vessel transit route and buffer. Black-throated divers are very vulnerable to disturbance² so there is a high likelihood that daily disturbance from work vessels will have a negative effect on the species. Displacement at the upper end of the range proposed by the applicant (0-60%) could result in a failure to meet the conservation objectives³ for the species. Therefore it is not possible to ascertain that there will be no adverse effect on site integrity. There could be additional in-combination impacts associated with the existing Westerbister development, but this cannot be quantified due to the lack of pre-development survey data.

Slavonian grebe

This species is also likely to be affected by the vessel transit route. However it is more numerous in the pSPA and the expected impact of the West Glimps Holm fish farm alone would not adversely affect site integrity.

With respect to the WGH proposal in combination with the proposed development at Lober the levels of displacement and mortality for Slavonian grebe could result in loss of over 4% of the pSPA population. This could result in a failure to meet the conservation objectives⁴ and therefore an adverse effect on site integrity.

Our detailed assessment of the survey and HRA appraisal is contained in the appendix to this letter.

If the planning authority intends to grant planning permission against this advice you must notify Scottish Ministers.

If you have any questions regarding the advice in this letter, please do not hesitate to contact Donna Yule (Donna.Yule@nature.scot) in this office.

Kind regards

Graham Neville

Area Manager, Northern Isles & North Highland

¹ Only 57 birds recorded in Scapa Flow pSPA (9.5% of GB population), see SPA site selection document <https://www.nature.scot/scapa-flow-proposed-marine-spa-supporting-documents>

² The very high sensitivity score (5) for this species (Table 3.6) is corroborated by the recent study by Jarrett *et al*, 2018) which ranked the relative sensitivity of individual black-throated diver to vessel movements as very high.

³ Conservation objectives: Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long term and, To maintain the habitats and food resources of the qualifying features in favourable condition

Appendix 1

Assessment of survey and HRA appraisal

Survey comments;

Methodology

The survey methods are largely in line with previous advice given.

The defined survey area is also appropriate, encompassing the proposed fish farm site and associated vessel transit route plus a 500m buffer around each. However, it is not clear whether the northern half of the buffer zone around the fishfarm site would have been fully visible from either VP1 or VP1A on Glimps Holm and the distance from VP1B on Burray, which does have line of sight, is too great for accurate detection of birds; an additional VP on the NW part of Glimps Holm may have ensured better coverage of this area. More generally, no details are given as to how the VPs were selected and there is no map indicating the areas visible from each. It is also unclear which of the 6 VPs listed and mapped were actually used for each survey as the methods state "Each survey day consisted of 4 x separate 1hr counts at various vantage points".

Presentation and quality of results

The results maps presented in the report are of a good standard and suitable for application to the EIA/HRA. The species spot maps indicate both survey month and numbers of birds associated with each observation; however the spot size ranges overlap (e.g. for great northern diver there are categories for 1, 1-2, 2-3, 3-5 and 5-13) and as such it is unclear how many birds each actually represents.

The text summaries accurately reflect the data shown in the maps and summary tables on a species by species basis. It is evident from the species accounts that relatively high numbers of great northern diver, black-throated diver and Slavonian grebe were consistently observed within the transit route and buffer in the area just west of the fish farm buffer (grid squares N5-N7 and P4-P7). These three species have been shown by recent studies in Orkney to be highly or very highly sensitive to vessel movements (Jarrett et al, 2018).

HRA appraisal comments;

The approach is appropriate and in line with our previous advice

Screening of species to include in detailed assessments (section 3.3.5)

While the overall approach is valid, the initial screening exercise should not have been screened out Great northern diver, Common eider and Long-tailed duck. This conclusion is based on numbers of birds of each species potentially impacted, overall populations within the pSPA and sensitivities to disturbance/displacement.

With respect to the WGH proposal, the HRA correctly identifies black-throated diver and Slavonian grebe as the two species potentially most vulnerable to significant population level impacts.

Black-throated diver (section 3.3.6.1)

The use of displacement values in the range 0 - 60% as proposed by the applicant, rather than 90 - 100% as per generic guidance, is appropriate. However, the assessment should have used mortality levels from 0 - 20% rather than 0-10% as proposed by the applicant.

Estimated levels of displacement and disturbance impacts associated with the proposed fish farm at WGH could potentially adversely affect the integrity of the Scapa Flow pSPA. However, there is a high degree of uncertainty around this conclusion given unknowns in

likely extent of displacement that may arise from vessel movements associated with the proposed site, associated levels of mortality and current status of the pSPA population. The potential impacts are largely associated with the vessel transit route, particularly in the area to the west of the proposed farm site.

Cumulative assessment;

Overall approach

The potential for in-combination impacts arising from vessel movements has not been formally assessed in the HRA.

Species included (section 4.1.1)

The applicant's assessments of cumulative impact were limited to black-throated diver, Slavonian grebe, red-breasted merganser and goldeneye. Given the survey data for WGH (which includes much of the proposed Hunda North site and VTR), great northern diver and long-tailed duck should also be considered.

Black-throated diver (4.1.9.1); Estimated levels of displacement and disturbance impacts on black-throated divers associated with the proposed fish farm at West Glimps Holm and associated VTR could potentially adversely affect the integrity of the Scapa Flow pSPA (see section 2). There would be no additional in-combination impacts associated with either the Lober site (as no black-throated diver present) or Hunda North sites (given overlap between Hunda North MCA and West Glimps Holm VTR). However, any impacts would be additional to any associated with the existing Westerbister site but there is no data to enable this assessment. **This means we cannot advise the Competent Authority (OIC) that there will not be an adverse effect on site integrity.**

Slavonian grebe (4.1.9.2); The potential level of losses of Slavonian grebe associated with the west Glimps Holm development in combination with the Lober and Hunda North proposals remain within the range of variation observed in the Scapa Flow pSPA population. However, at over 4% they are at a level that could be considered trigger a conclusion of AESI, in particular given potential additional impacts of the Westerbister development. Potential disturbance along the proposed VTR for the West Glimps Holm development is the main contributor to the estimated overall impact. **This means we cannot advise the Competent Authority (OIC) that there will not be an adverse effect on site integrity.**

Red-breasted merganser (4.1.9.3); the analysis supports the conclusion of no AESI with respect to in-combination impacts for red-breasted merganser (see Lober advice for consideration of AESI for this species).

Common goldeneye (4.1.9.4); the analysis supports the conclusion of no AESI with respect to in-combination impacts for common goldeneye.

Great northern diver (not assessed); Our analysis supports the conclusion of no AESI with respect to in-combination impacts for great northern diver.

Long-tailed duck (not assessed); given the range of variation in peak numbers of long-tailed ducks in the three surveys supporting site designation (1582 birds in 1998/99, 1474 in 2000/01, 1122 in 2006/07 – Lawson et al 2016) our analysis supports the conclusion of no AESI with respect to in-combination impacts for long-tailed duck.

References;

Joint SNCB Interim Displacement Advice Note (January 2017): Advice on how to present assessment information on the extent and potential consequences of seabird displacement from Offshore Wind Farm (OWF) developments
(http://jncc.defra.gov.uk/pdf/Joint_SNCB_Interim_Displacement_AdviceNote_2017.pdf)

Lawson, J., Kober, K., Win, I., Bingham, C., Buxton, N.E., Mudge, G., Webb, A., Reid, J.B., Black, J., Way, L. & O'Brien, S. 2015. An assessment of numbers of wintering divers, seaduck and grebes in inshore marine areas of Scotland. JNCC Report No 567. JNCC, Peterborough.



Scottish Natural Heritage Dualchas Nàdair na h-Alba

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

Your ref: 17/343/MAR
Our ref: CNS/MFF/ORK/WestGlimps (CEA147189)

Date: 25th October 2017

Dear Ms Gillon

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

Create a salmon farming site comprising of 12x100m circumference cages with associated feed barge at West of Glimps Holm, Scapa Flow, Orkney.

Thank you for your consultations dated 21st August 2017 and subsequent extension to the consultation period for the above proposal.

Summary

The proposal could affect internationally important natural heritage interests and **we therefore object to this proposal until further information is provided**. This will enable us to carry out an appraisal of these effects and help you determine this proposal.

Advice on Environmental Statement (ES)

General

In considering this application we have referred to the supporting Environmental Statements and appendices provided by the applicant. The layout and content of the Environmental Statement is to a good standard although we observe some data gaps which are acknowledged in our response.

Landscape

The visualisations (VPs 1-6, contained within the ES and presented at A4 size) do not appear to conform to any recognised guidance in the production and presentation of the photomontages. As such these visualisations are misleading and significantly underestimate the level of visual effect incurred by the development.

Appraisal of the Impacts of the proposal and advice

Natura interests – Scapa Flow pSPA & Hoy SPA

The proposal lies within the Scapa Flow proposed Special Protection Area (pSPA) selected for its aggregations of breeding Red-throated diver and aggregations of non-breeding wintering waterfowl, including Black-throated diver, Eider, Goldeneye, Great northern diver, long-tailed duck, Red-breasted merganser, European shag and Slavonian grebe.

Work associated with the construction phase of the proposal could affect breeding Red-throated diver species of the Hoy SPA.

The Scottish Government has a policy of protecting such sites as if they were designated as set out in Scottish Planning Policy. The legal protection afforded to designated European sites is set out in 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. Consequently, Orkney Islands Council (OIC) is required to consider the effect of the proposal on the pSPA, and ascertain there is no adverse effect on Natura site integrity before it can give consent (this is commonly known as a Habitats Regulations Appraisal). The SNH website has a summary of Scottish Government policy (<http://snh.gov.uk/docs/A1121365.pdf>).

In our view, this proposal is likely to have a significant effect on the qualifying interests of the Scapa Flow pSPA and Red-throated diver interest of the Hoy SPA. Consequently, Orkney Islands Council, as competent authority, is required to carry out an appropriate assessment in view of the site’s conservation objectives for its qualifying interests. To help you do this we propose to carry out an appraisal to inform your appropriate assessment.

To enable us to carry out this appraisal, the following information is required;

Submission of a site-specific bird survey for the winter season, monitoring the qualifying bird features of the Scapa Flow pSPA in order to assess the effects of both site specific and cumulative impacts on displacement and disturbance. Referring to the survey results, the applicant should submit an assessment of the cumulative impacts on the conservation objectives of the qualifying species of the Scapa Flow pSPA

Direct displacement from cage area

Distribution maps for SPA designations suggest relatively high densities of Slavonian grebe, Red-breasted merganser, Black-throated diver and Long-tailed duck. No site-specific surveys have been undertaken to characterise usage of the proposed sites by the qualifying features of the pSPA. Instead, the assessments rely solely on the systematic survey data used to support selection of the Scapa Flow pSPA. An appropriate baseline has not been established¹. To determine Likely Significant Effect (LSE) and any adverse effect on site integrity, further survey is required.

Disturbance through marine vessel activity associated with proposal

The proposed transit route is from St Margaret’s Hope with generally a single return trip per day. The transit route passes through an area of importance for Slavonian grebe, Black-throated diver, Great northern diver and Goldeneye which all show medium to high sensitivity to disturbance. There may be some displacement but without further survey work of how the area is being utilised we have to conclude LSE.

¹ See Annex 1

There are also some omissions to the current vessel management plan² (VMP) which should be addressed and a revised plan submitted for consideration.

Assessing baseline and cumulative impacts

In Annex 1, we provide advice on how to establish a more accurate baseline for assessing impacts such as displacement, disturbance and loss of preferred foraging areas. More survey work will provide more robust information on the location and area usage of aggregations of birds.

In addition, the cumulative impact on the pSPA species has not been adequately assessed in the ES. Information on our appraisal of the cumulative effect of displacement on species is provided in Annex 1. The applicant should submit a cumulative assessment of the effects on the conservation objectives of the qualifying species of the Scapa Flow pSPA specifically in relation to existing and in-planning proposals in the east of Scapa Flow.

Once this information has been provided, we will be able to give further consideration to this proposal and carry out our appraisal.

Disturbance through construction of development

The applicant has identified Lyness Pier for construction and towage of cages to proposed site. The timing for the transit of cages has not been specified and therefore without this information we have to conclude LSE on breeding Red-throated diver interest of the Hoy SPA and Scapa Flow pSPA. Mitigation may be relatively straight forward avoiding brooding Red-throated divers in July and August and the wintering waterfowl period. Optimal timing for transportation would be May to June.

Further assessment;

Entanglement

Diving species of the Scapa Flow pSPA are at risk of mortality by entanglement in nets associated with fish farms. The applicant's intention is to use highly tensioned cage nets of small mesh sizes 14mm and 24mm and external predator nets of 50mm mesh size which pose very low risk of entanglement to the diving species of pSPA. We therefore conclude no LSE.

European shags and Common eiders are often seen resting on associated infrastructure of fish farm and both could become entangled in sub-sea nets. The applicant has stated that top nets of the 50mm mesh size will be used which is the mesh size that SNH would advise in an area where there are aggregations of birds which are vulnerable to entanglement. We conclude no LSE.

Gill nets used for re-capture of fish can pose entanglement risks to birds, the applicant has confirmed that these will not be used, therefore no LSE on diving species.

Loss of, or damage to, supporting habitats (for features of Scapa Flow pSPA)

All qualifying features of the pSPA could potentially be permanently displaced from the surface area of fish farm, with consequent loss of access to feeding areas. Species of the pSPA that feed on invertebrate benthic prey (eider, long-tailed duck and goldeneye) could be impacted by the loss of such prey from areas of seabed indirectly impacted by fish farm operations (e.g. use of chemical treatments for sealice listed in appendix J of the application).

It should be noted that the detailed consideration of the discharge of chemicals falls out with the remit of the Local Authority. As the Competent Authority through the CAR process, SEPA is required to consider the implications of chemical discharges on any protected sites

² See Annex 1, Disturbance by workboats

or PMFs which could be affected, prior to their determination of the application. The determination of the CAR licence is currently being considered by SEPA.

Priority Marine Features (PMF)

Sea trout (marine phase)

The proposed development is not in close proximity to any known spawning/nursery burns, however it is known that trout frequent the shallower waters of Scapa Flow and there is a possibility of transfer of sealice to wild salminoids. Escapes of farmed fish could also be a potential risk to wild trout, however we are satisfied that all attempts to ensure cage nets and tensioning are appropriate to stop escapes.

Landscape

Our advice at scoping stage was that the Orkney landscape capacity study indicates that there is capacity for a small development at this site. The proposal is for 12x100m circumference cages with a feedbarge and is identified as large scale. We therefore consider that the large scale of this development would incur significant adverse landscape and visual effects on the local landscape, coastal and visual receptors.

The applicant has aligned the development with the shore; however the large scale of the development is significantly greater in linear extent compare with the small extent of Glimps Holm. The visual effect of maturation lighting which is not modelled in the visualisations could be considerable in the context of the undeveloped coastline.

Considering the cumulative effects of the proposed developments in the immediate landscape, the addition of a large scale development at Glimps Holm would significantly contribute to adverse sequential cumulative effects, which is contrary to the assessed capacity for these local landscapes.

Conclusion

There is insufficient information provided at present to conclude no adverse effect on the integrity of the Scapa Flow pSPA with the high degree of certainty required. Therefore, the additional following information should be submitted;

- A site specific winter season of monitoring the birds from the Scapa Flow pSPA. Survey work should consist of monthly surveys between November and April inclusive, from suitable on-shore agreed vantage points.
- A cumulative impact assessment should be submitted.
- Applicant should provide confirmation of timing for transporting cages from Lyness to the proposed site and revise the Vessel Management Plan (VMP).

We also advise that this scale of proposal (and cumulative consideration) is contrary to the Orkney Landscape Capacity Study for Aquaculture.

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

If you require any further information or advice from SNH with respect to this application please contact Donna Yule (donna.yule@snh.gov.uk) at our Kirkwall office.

Yours sincerely,

Gail Churchill
Operations Manager
Northern Isles and North Highland

Annex 1: Assessment of the cumulative effects on features of the Scapa Flow pSPA to inform HRA - Ornithological Advice

Previous advice re Scapa Flow pSPA

In our responses to scoping we advised that HRA was required with respect to potential displacement, disturbance or entanglement impacts, in particular with respect to qualifying features of the Scapa Flow pSPA, and that additional site-specific bird surveys may be required within the proposed development footprints and vicinity to enable the significance of potential impacts to be assessed.

We also stated that in-combination and 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.

Information provided by the applicants to support HRA

West Glimps Holm

The applicant for West Glimps Holm has included a “shadow” HRA in support of the planning application. Note that in the ES text for WGH, Scapa Flow is incorrectly described as a dSPA, although in the HRA it is recognised that it now has pSPA status. The summary of the applicant’s conclusions with respect to impacts on the qualifying features of the pSPA are in Table 3.5 of the HRA. No site-specific surveys have been undertaken to characterise usage of the proposed sites by the qualifying features of the pSPA. Instead, the assessments rely solely on the systematic survey data used to support selection of the Scapa Flow pSPA. As detailed below, this is of concern with respect to assessment of the potential displacement impacts.

Direct displacement from cage area

The distribution maps used for SPA designations suggest that the waters in the vicinity of these sites hold relatively high densities of Slavonian grebe and also red-breasted merganser. There are also relatively high densities of black-throated diver and common goldeneye close to the Lober site. **We therefore conclude LSE associated with displacement.**

Number of long-tailed duck (1,393) red-breasted merganser (539) and goldeneye (219) within the pSPA are relatively high and these species are relatively widespread across the site. However, the population of the Annex 1 species Slavonian grebe (135; 12.3% of GB population) is relatively small and is particularly concentrated in the eastern part of Scapa Flow. Black-throated diver (also Annex 1) are more widely dispersed across inshore waters of Scapa Flow but the population in the site is small (57, 9.5% of GB population). Hence, the potential for impacts on site integrity arising from displacement is highest for these two species.

Potential for impact on site integrity

As shown in the following table, the percentages of the surface area of the entire pSPA within the mooring areas of the proposed development is very small. Use of mooring extent is precautionary as birds may potentially still use waters within these areas; cage and feed barge areas from which birds would be permanently displaced are considerably smaller. The cumulative area of all (4) existing or planned fish farms in the eastern part of Scapa Flow is also small in relation to the whole site (0.24%).

A more precautionary approach is to consider the extent of waters within the pSPA with water depths of 15m or less as representing the principal areas used by the more inshore

qualifying features. We have calculated this to be c.9800 Ha. This is indicative only as birds may also use slightly deeper waters and the proposed fishfarms straddle this depth contour. However, it provides some indication of the relative likely extent of areas within the pSPA that may be used by inshore species such as Slavonian grebe.

The proposed farm occupies a space equivalent to c0.2% of this indicative area; the figure for all (4) existing or planned fish farms in the eastern part of Scapa Flow taken together is c.0.9%. Across Scapa Flow the cumulative mooring extent of existing and proposed fish farm sites is equivalent to c 2% of this indicative inshore area. However, while these overall area(s) is/are relatively small, the displacement impacts will depend on actual distributions of birds within the site.

Area of the Scapa Flow pSPA is 37,065.53Ha; extent of waters within the pSPA with water depths of 15m or less is c. 9800 Ha

Site	Location (centre)	Depth	Mooring area	% of Scapa Flow pSPA	% of equivalent area within 15m
West Glimps Holm	ND4650199104 (c. 260m W of Glimps Holm)	range from 14.4 m to 27.7 m, c. 26m at the site centre	21.08Ha	0.057%	0.215%
Lober	343358 E 994633 N (c.48m north of nearest shore)	17m at site centre, range 12.0 to 17.3 ³	21.08Ha	0.057%	0.215%
Westerbister			23.68Ha	0.064%	0.242%
Hunda			23.80Ha	0.064%	0.243%
All existing & in-planning for east Scapa Flow			89.64Ha	0.242%	0.915%
All existing and in planning in Scapa Flow			206.33Ha	0.557%	2.105%

In winter, Slavonian grebe frequent coastal inshore waters up to 10-20m in depth (Fjeldså 2004) where they feed on fish and invertebrates and may aggregate in sheltered bays (Liley *et al*, 2014). Black-throated divers may also flock and have potential to feed in slightly deeper waters when pursuit diving for fish (Liley *et al*, 2014). Neither species is likely to be highly directly dependent on specific areas of benthic habitat for foraging.

However, the restricted distributions of these species, and in particular Slavonian grebe, across Scapa Flow as a whole, are indicative of preference for particular locations. The underlying drivers for fine scale distribution across potentially suitable foraging areas are unclear but could potentially include aspects such as shelter or freedom from disturbance.

³ From Annex O to ES

The potential for important (in relation to total SPA populations) aggregations of these birds to use restricted locations is indicated by records from Orkney Bird Reports (OBRs).

Adequacy of existing information to determine absence of impact on site integrity

The applicant's assessment is based mainly on the distributions shown in the Scapa Flow pSPA selection documents and associated reports. However, for inshore species such as Slavonian grebe and black-throated diver, these are derived from land-based counts in a series of 43 sectors around Scapa Flow with observations extending out to 1.5-2km; the spots on the maps represent mean densities across multiple surveys and are positioned in the centre of the relevant sectors - they do not illustrate locations, distributions or extent of flocking of birds within these count sectors. **The spatial resolution of the data on distribution used by the applicants does not enable presence/absence of regular aggregations of birds at specific locations to be ascertained. Additional information is necessary to inform a robust determination of potential for impact on site integrity arising from displacement.**

As highlighted at the scoping stage, bespoke survey data (e.g. ideally monthly surveys between October and April inclusive, from suitable on-shore vantage points) would enable robust determination of potential for impact on site integrity arising from displacement. As we are now in to October and to avoid major delays surveys from November would be acceptable. Survey work would also enable potential displacement impacts to be assessed following construction of any site.

The need for project-specific bird surveys with respect to proposed new fish farms is increasing with ongoing expansion of the industry in Scapa Flow and associated growing potential for (cumulative) impact on site integrity.

Disturbance by workboats

It is proposed that West Glimps Holm will be serviced from St Margaret's Hope Pier with single return trip to the sites on a daily basis. **The applicant correctly concludes LSE for displacement effects along the routes shown.**

For West Glimps Holm, the proposed work vessel transit route is 8.79 km (c.30 minutes) and the proposed travel speed is 10 knots. As identified by the applicant this route passes through areas of the pSPA, notably outer Water Sound, identified as of importance to Slavonian grebe, black-throated diver, great northern diver and goldeneye, all of which show medium to high sensitivity to visual disturbance. The proposed transit route for work vessels associated with the Hunda North application also crosses outer Water Sound.

Given the relatively long transit route, its location and vessel speed there is some inherent risk of permanent displacement of birds. Site-specific bird surveys to characterise use of the waters along and in vicinity of the proposed transit route would considerably strengthen analysis of the significance of this potential impact pathway and enable robust determination of potential for impact on site integrity. Such additional data on the birds' use of this corridor would also enable amendments to be made, if appropriate, to the vessel routing to minimise risk of damaging disturbance.

Irrespective of further survey and analyses, the VMP for West Glimps Holm should be improved and enhanced. The current VMP, as summarised in the HRA, lacks reference to the SMWWC⁴ and to approach distances. Co-operation with the operator of the proposed Hunda North site to co-ordinate transit routes, and so minimise extent of areas subject to

⁴ Scottish Marine Wildlife Watching Code <https://www.snh.scot/professional-advice/land-and-sea-management/managing-coasts-and-seas/scottish-marine-wildlife-watching-code>

daily disturbance in outer Water Sound, would provide additional safeguard and enhance potential for birds to habituate to routine vessel movements.

Construction phase disturbance

For West Glimps Holm cages are to be constructed at Lyness Pier and towed approximately 17km across Scapa Flow to the site. This route would include foraging areas used by breeding red-throated divers associated with the Hoy SPA and Scapa Flow pSPA. Assuming a single cage is towed each time, this will equate to 12 return trips with cages and an additional return trip for the feed barge. The timing of proposed construction is not specified. If these movements are avoided in July and August LSE (on red-throated diver interest) can be avoided. The optimal timing of such movements would be in May or June as this would avoid risk of disturbance to both brooding red-throated divers and the inshore wintering waterfowl interests of the pSPA.

References

Fjeldså, J. 2004. *The grebes*. Oxford University Press, Oxford

Liley, D., Fearnley, H., Waldon, J. & Jackson, D. (2014) *Distribution and Ecology of Wintering Grebes and Divers in the Falmouth-St. Austell pSPA*. Footprint Ecology Unpublished Report, Natural England.



Scottish Natural Heritage Dualchas Nàdair na h-Alba

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

Your ref: 17/343/MAR
Our ref: CNS/MFF/ORK/WestGlimps (CEA153371)

Date: 20th December 2018

Dear Ms Gillon

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

Create a salmon farming site comprising of 12x100m circumference cages with associated feed barge West of Glimps Holm, Scapa Flow, Orkney.

Thank you for your consultation dated 26th November 2018 for the above proposal.

Summary

The proposal could affect internationally important natural heritage interests (Scapa Flow pSPA) and **we therefore object to this proposal.**

Background

In our response of 24 August 2018 we objected and raised concerns regarding the proposed Vessel Transit Route (VTR) and cumulative impacts of the existing and proposed fish farm developments within the East Scapa Flow area of the pSPA.

The applicant has proposed a revised route using Holm pier as the base and revised the cumulative assessment to take account of the proposed VTR.

Appraisal

In our view, the assessment has not ascertained that the integrity of the site will not be adversely affected and we therefore object to the proposal.

Black-throated diver

The amendment to the VTR for the proposed fish farm at West Glimps Holm removes risk of adverse effect on site integrity (AESI) arising from displacement impacts with respect to this proposal alone.

Our assessment for displacement and mortality demonstrates that there is potential for adverse effect on site integrity (AESI) with respect to black-throated diver arising from the (revised) West Glimps Holm proposal in combination with the Lober and Hunda North

developments; this stems from high sensitivity to disturbance, limited distribution and small population of this species within the pSPA.

Slavonian grebe

The amendment to the VTR for the proposed fish farm at West Glimps Holm removes risk of AESI arising from displacement impacts with respect to this proposal alone.

Our assessment for displacement and mortality for Slavonian grebe demonstrates that there is potential for AESI arising from the (revised) West Glimps Holm proposal in combination with the Lober and Hunda North developments; the estimated level of impact (up to 4.15% of population) could be considered sufficient to undermine the site's conservation objectives, therefore we are unable to conclude no AESI.

Conclusion

The applicant has demonstrated that it may be possible to accommodate a fish farm of this scale in this location utilising the Holm pier for daily transit. However, in our opinion the cumulative assessment does not demonstrate beyond reasonable scientific doubt that the proposal's disturbance and displacement of Black-throated divers and Slavonian grebes, in combination with other existing developments and proposals in the planning system, will not have an adverse effect on site integrity of Scapa Flow pSPA.

If the planning authority intends to grant planning permission against this advice you must notify Scottish Ministers.

We acknowledge and appreciate the amount of work that the developer has put in to this application and are happy to continue discussions. If you have any questions regarding the advice in this letter, please do not hesitate to contact Donna Yule (Donna.Yule@nature.scot)

Kind regards

Graham Neville

Area Manager, Northern Isles & North Highland

Appendix 1

We provide the following additional comments to assist with any future application should circumstances change.

Vessel Transit Route (VTR)

The applicant has adopted the ranges for displacement and associated mortality figures recommended by SNH and also the figures provided (from the SNH 2017/18 surveys) with respect to numbers of birds that might be displaced along the revised VTR.

The applicant's calculations with respect to potential impacts arising from the revised West Glimps Holm application in isolation appear correct. However, as described below, there are some discrepancies with respect to figures used when considering in-combination effects.

We also note that should aggregations of birds be present during the transit, the applicant states that they will reduce speeds to below 6 knots, we welcome this but the applicant should also where possible, avoid the aggregation of birds as to not split the grouping. The Vessel Management Plan should be amended to reflect this.

Cumulative Assessment

There may be additional impacts associated with the existing Westerbister site and this should be acknowledged within the text of the cumulative assessment. However, in the absence of a pre-construction survey, any displacement impacts cannot be quantified and therefore the inclusion of the data is not a true representation in the tables within the assessment. We would suggest that the data be removed from the tables but remain within the text.

West Glimps Holm
Location Plan 1

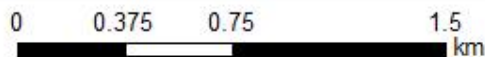


Contains OS data © Crown Copyright and database right 2017



Refusing to go with the flow

- WGH MCA
- WGH Grid
- WGH 100m Cages
- WGH Feed Barge



Scale 1:25,000