

Gillian Webster  
Highland Council,  
Golspie Planning Office,  
Drummuie, Golspie  
KW10 6TA

Also by email: [eplanning@highland.gov.uk](mailto:eplanning@highland.gov.uk)

14<sup>th</sup> December 2017

Our ref: 567101

Dear Gillian Webster

**Planning Application 17/04061 | Development of 18 hole golf course, erection of clubhouse, renovation of existing buildings for maintenance facility, pro-shop, caddy hut, workshop, administration building, information booth, formation of new private access from C1026 | Land 1700M NW Of Embo Community Centre, School Street Embo**

I write on behalf of RSPB Scotland in response to the above application to create an 18 hole golf course on a site north of Embo, approximately 4km north of Dornoch ('the proposed development').

The proposed development would impact on international, European and national protected wildlife sites, which support, amongst other species, important numbers of wintering birds. In addition, the sand dune habitats within the protected sites are of international importance for their flora and geomorphology.

The proposed development would include the direct loss of at least 14 ha from within the Dornoch Firth and Loch Fleet Special Protection Area (the SPA), the Dornoch Firth and Loch Fleet Ramsar site (the Ramsar site), and the Loch Fleet Site of Special Scientific Interest (the SSSI). The proposed development would result in the loss of Natura 2000 and UK Biodiversity Action Plan (BAP) Priority Habitats that underpin the protected sites, particularly winter flooded dune slack habitat which is not present elsewhere in the SPA, Ramsar site nor the SSSI.

The red line boundary of the proposed development includes about 140 ha of the SPA, Ramsar Site and SSSI and impacts are likely to extend beyond the footprint of the golf course infrastructure. In addition to the direct habitat loss, indirect impacts would include disturbance to wintering and breeding birds, including qualifying species of the designated sites.

Therefore, amongst other requirements, the Conservation (Natural Habitats, &c.) Regulations 1994 (“the Habitat Regulations”) need to be considered. These Regulations set out the sequence of steps to be taken by the competent authority (here the Highland Council) when considering authorisation for a project that may have an impact on a European site<sup>1</sup>. The Highland Council as competent authority has ultimate responsibility for the protection of the site and its species.

RSPB Scotland **strongly objects** to the proposed development for the following reasons:

1. Due to the location of part of the proposed development within the Dornoch Firth and Loch Fleet SPA, the Ramsar site and the Loch Fleet SSSI, an adverse effect on each of those sites cannot be ruled out.
2. Alternative, less potentially damaging options for golf course creation exist elsewhere in Scotland and also within the Highland area. Any social or economic benefits arising from the proposed development could be derived from an alternative project without the risk posed to the SPA, Ramsar site and SSSI and their species.
3. The Environmental Statement (“ES”) fails to provide an adequate assessment of the significant environmental impacts of the proposed development or the associated reservoir application.
4. The proposed development would be contrary to policies covering the Natural, Built and Cultural Heritage, Protected Species and Other Species in the Highland Wide Local Development Plan (LDP) (2012) and Scottish Planning Policy (SPP).

### **International, European and National Designations**

As set out above the proposal is likely to have a significant effect on the Dornoch Firth and Loch Fleet SPA. Consequently, the Highland Council is required by the Conservation (Natural Habitats, &c.) Regulations 1994 to undertake an Appropriate Assessment of the effects of the project on the SPA and its species in light of the site’s conservation objectives. Where it is not possible to conclude that there would not be an adverse effect on the integrity of the sites, consent can only be granted following consideration of the further Habitats Regulations requirements as set out in Annex 1.

We disagree with the conclusions of SNH (response dated 24<sup>th</sup> November) regarding the SPA impacts and do not agree it is likely these issues could be overcome by a Recreation and Access Management Plan. In our view, the applicant has not fully assessed impacts on the SPA and the survey work used to inform the shadow Habitat Regulations Appraisal is inadequate. The surveys did not cover the full wintering bird period and the full extent of disturbance impacts are unknown. The proposed closure of the course between November and March would not avoid disturbance as wintering

---

<sup>1</sup> As set out in Scottish Planning Policy: “211. All Ramsar sites are also Natura 2000 sites and/or Sites of Special Scientific Interest and are protected under the relevant statutory regimes.” Therefore full consideration of the Ramsar site and its listed features need to be part of the Habitats Regulation Appraisal, recognising that the species listed are of international importance.

birds are present outside this period. We believe that the proposed development would be contrary to the conservation objectives of the SPA. Consequently, we do not believe it is possible to establish beyond reasonable scientific doubt that the proposal would not result in an adverse effect on the integrity of the SPA and its species.

In addition, the proposed development would result in damage to the listed features of the Dornoch Firth and Loch Fleet Ramsar site. We will be contacting SNH about this separately as their initial response hasn't provided advice on how to assess all the listed features of the Ramsar site. Only some of the listed features are included within the SPA and SSSI citations. SNH's response only considers the national importance of the sand dune habitats. Full consideration of the Ramsar site and all of the listed features (including the designated habitats, flora and invertebrates) need to be part of the Habitat Regulations Appraisal recognising that the features listed are of international importance. We do not believe it is possible to rule out an adverse effect on integrity due to the direct loss and resulting impact to the Ramsar site. Consideration must also be given to Article 4.2 of the Ramsar Convention which stipulates that the boundary of a Ramsar site may only be restricted '*in its urgent national interest*'. **The Council should therefore seek the advice of SNH as to whether the proposed development would result in a decision to restrict the boundary of the Ramsar site and whether there would be a need for compensation<sup>2</sup>.**

The proposal would also result in damage to the qualifying habitats and species of the Loch Fleet SSSI, a nationally important nature conservation site. In accordance with sections 15 and 16, the Nature Conservation (Scotland) Act 2004 (as well as Policy 57 of the Highland Wide LDP and also Scottish Planning Policy (SPP)), the Highland Council, having sought the advice of SNH must have regard to that advice and only grant consent if the damage caused to the SSSI and its features is clearly outweighed by social or economic benefits of national importance. We do not believe this has been demonstrated.

In addition the proposed development, in our view, is contrary to the Highland Council's duty to further the conservation and enhancement of SSSIs and more generally further the conservation of biodiversity as set out in sections 12 and 1, Nature Conservation (Scotland) Act 2004.

## **Habitat Management**

RSPB Scotland is extremely concerned that the applicant is promoting the proposed development as a mechanism to fund habitat management (ES Supporting Document 5: Biodiversity Net Gain Report). We do not believe the proposed mitigation measures are appropriate or that the proposed development will lead to a net gain in biodiversity. It is misleading to suggest that the proposed development is required in order to secure the appropriate management of part of the SSSI rather than seeking to fund conservation management through the Scottish Government's Rural Development Programme or a management agreement with SNH.

---

<sup>2</sup> Resolution VII.24 of the Contracting Parties to the Ramsar Convention urges the Contracting Parties to take all practicable measures for compensating any loss of wetland functions, attributes and values, both in quality and surface area, caused by human activities

We do not object in principle to the proposal to create another golf course in east Sutherland provided that it does not damage internationally, European and nationally designated sites for wildlife. Similarly, given the opportunities provided by the North Coast 500 Route which features both Dornoch and Embo, we would not object to other types of development intended to increase local income from tourism, provided that they will not harm protected sites and species.

## **Environmental Impact Assessment**

In addition to the above concerns, there are other serious inadequacies in the ES, to the extent that it fails to meet the requirements of the EIA Regulations<sup>3</sup>.

The environmental effects of the proposed reservoir which is required for irrigation of the golf course have not been adequately assessed. Despite being located within the redline boundary of the proposed development, the reservoir has been submitted as a separate application (ref: 17/04404/FUL). In our view, the application for the reservoir is 'inextricably linked' and approval of associated works before undertaking the EIA for the proposed development would constitute a breach of the EIA Directive<sup>4,5</sup>.

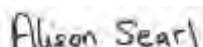
Other concerns include:

- The ecological assessment does not properly describe the floral and invertebrate diversity at the proposed development site and likely impacts;
- The bat surveys are incomplete and do not allow an adequate assessment of likely impacts.
- The coastal erosion study does not address the potential impacts of rising sea level and increases in severe weather events due to climate change, or of coastal engineering measures;
- The assessment of hydrology impacts is inadequate, particularly in relation to the sensitive dune slack habitats.
- The Environmental Management Plan was created for another project and there are no commitments to implement any of its aspirations; and
- Some of the documents contain numerous proofing errors and presentational issues make it difficult to make an independent assessment of the impacts.

The impacts on features and qualifying interests of the designated sites: SPA, Ramsar and SSSI are discussed in Annex 1 to this letter; and other issues with the ES and the supporting documentation are discussed in Annex 2.

Please do not hesitate to get in touch if you require more information or clarification.

Yours sincerely



Alison Searl  
Conservation Officer, North Highland

---

<sup>3</sup> Environmental Impact Assessment (Scotland) Regulations 2011 (Regulations in place at time of EIA screening for this project)

<sup>4</sup> [http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_EIA\\_report\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf)

<sup>5</sup> <http://www.legislation.gov.uk/ssi/2017/102/schedule/2/made>

## **Annex 1: Designated sites**

### **Legislation**

Due to the development proposal being partially within designated sites the Conservation (Natural Habitats, &c.) Regulations 1994 (“the Habitat Regulations”) and the Nature Conservation (Scotland) Act 2004 requirements need to be considered.

#### *Habitats Regulations*

The Habitats Regulations set out the sequence of steps to be taken by the competent authority (here the Highland Council) when considering authorisation for a project that may have an impact on a European site<sup>6</sup> before deciding to authorise that project. These are as follows:

1. Step 1: Under regulation 48(1)(b), consider whether the project is directly connected with or necessary to the management of the SPA. If not –
2. Step 2: Under regulation 48(1)(a) consider, on a precautionary basis, whether the project is likely to have a significant effect on the SPA, either alone or in combination with other plans or projects.
3. Step 3: Under regulation 48(1), make an appropriate assessment of the implications for the SPA in view of its conservation objectives. Regulation 48(2) empowers the competent authority to require an applicant to provide information for the purposes of the appropriate assessment. There is no requirement or ability at this stage to consider extraneous (non-conservation e.g. economics) matters in the appropriate assessment.
4. Step 4: Pursuant to regulation 48(5) and (6), consider whether it can be ascertained that the project will not, alone or in combination with other plans or projects, adversely affect the integrity of the SPA, having regard to the manner in which it is proposed to be carried out, and any conditions or restrictions subject to which that authorisation might be given (the Integrity Test).
5. Step 5: In light of the conclusions of the assessment and in accordance with regulation 48(5) and (6), the competent authority shall agree to the project only after having ascertained that it will not adversely affect the integrity of the SPA, alone or in combination with other plans or projects.
6. Step 6: If, despite not being possible to ascertain that there will not be an adverse effect on the integrity of the site, there are no possible alternative solutions to the proposed development and there are imperative reasons of overriding public interest for it, consent can still be granted if compensation measures are provided to protect the coherence of the Natura 2000 Network.

**In addition if Step 6 needs to be considered as set out in paragraph 209 of Scottish Planning Policy, Scottish Ministers would need to be notified.**

#### *Nature Conservation (Scotland) Act 2004*

Under sections 15 and 16, the Nature Conservation (Scotland) Act 2004, the Highland Council, having sought the advice of SNH must have regard to that advice and only

---

<sup>6</sup> As set out in Scottish Planning Policy: “211. All Ramsar sites are also Natura 2000 sites and/or Sites of Special Scientific Interest and are protected under the relevant statutory regimes.” Therefore full consideration of the Ramsar site and its listed features need to be part of the Habitats Regulation Appraisal, recognising that the species listed are of international importance.

grant consent despite the damage caused to the SSSI and its features if this is clearly outweighed by social or economic benefits of national importance.

### *Additional Requirements*

In addition the legal considerations set out above, the development proposal, in our view, is contrary to the Highland Council's duty to further the conservation and enhancement of SSSIs and more generally further the conservation of biodiversity as set out in sections 12 and 1, Nature Conservation (Scotland) Act 2004

"12 Exercise of functions by public bodies etc.

(1) This section applies to the exercise by a public body or office-holder of any function on, or so far as affecting, any land which is or forms part of a site of special scientific interest.

(2) The body or office-holder must—

(a) consult SNH in relation to the exercise of the function,

(b) have regard to any advice given by SNH, and

**(c) in exercising the function, take reasonable steps, so far as is consistent with the proper exercise of the functions of the body or office-holder, to—**

**(i) further the conservation and enhancement of the natural feature specified in the SSSI notification, and**

**(ii) maintain or enhance the representative nature of any series of sites of special scientific interest to which the SSSI notification contributes."**

And

"1 Duty to further the conservation of biodiversity

(1) It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.

(2) In complying with the duty imposed by subsection (1) a body or office-holder must have regard to—

(a) any strategy designated under section 2(1), and

(b) the United Nations Environmental Programme Convention on Biological Diversity of 5 June 1992 as amended from time to time (or any United Nations Convention replacing that Convention)."

As well as being in consistent with the duty set out in regulation 3(A) Habitats Regulations, namely:

"3A.— Duties in relation to wild bird habitat

...

(2) Except in relation to the Scottish marine area, the Scottish Environment Protection Agency, the Forestry Commissioners, local authorities and National Park authorities must take such steps in the exercise of their functions as they consider appropriate to contribute to the achievement of the objective in paragraph (3).

(3) The objective is the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in Scotland in implementation of Article 3 of the Wild Birds Directive (including by means of the upkeep, management and creation of such habitat, as appropriate), having regard to the requirements of Article 2 of that Directive.

...."

It is RSPB Scotland's view that granting consent for the proposed development would be inconsistent with these requirements.

## Dornoch Firth and Loch Fleet SPA

### *SPA citation*

The Dornoch Firth and Loch Fleet SPA (“the SPA”) was designated in 1997 due to qualifying under Article 4.1 of the Birds Directive (79/409/EEC) by supporting a wintering population of European importance of the Annex 1 species **bar-tailed godwit** and a breeding population of European importance of the Annex 1 species **osprey**. The SPA qualifies under Article 4.2 by supporting migratory populations of European importance of **greylag goose** and **wigeon**. The SPA also qualifies under Article 4.2 by regularly supporting an overwintering assemblage of at least 20,000 waterfowl, which includes curlew, dunlin, oystercatcher, teal, wigeon, greylag goose and bar-tailed godwit, scaup and redshank.

140 ha of the proposed development is located within the SPA (based on the red line boundary shown on ES Appendix 2-B). As the proposed development is therefore likely to have a significant effect on the SPA (and not directly connected with the management of the SPA), the Highland Council must, as the competent authority, make an appropriate assessment of the implications of the proposed development on the SPA, in light of the site’s conservation objectives. As set out above the proposed development may be consented only after the Highland Council has established beyond reasonable scientific doubt that there would be no adverse effects on the integrity of the SPA. The conservation objectives of the SPA are to ensure for the qualifying species the long term maintenance of:

- Population of the species as a viable component of the site;
- Distribution of the species within site;
- Distribution and extent of habitats supporting the species;
- Structure, function and supporting processes of habitats supporting the species; and
- No significant disturbance of the species.

It is worth noting that unlike other EU countries, the UK does not include any buffer zones in and around its European sites and therefore everything within those sites is included for ecological reasons. This means that any loss will directly impact the reasons for which the site was designated which makes it more difficult for decision makers to be able to conclude that there will be no adverse effect. In addition the UK ranks as second last of EU countries in terms of percentage of territory designated as European Sites<sup>7</sup>.

### *Shadow Habitat Regulations Appraisal for SPA Bird Species (ES Appendix A.4)*

RSPB Scotland has major concerns about the applicant’s Shadow Habitat Regulations Appraisal for SPA Bird Species (hereafter referred as “the Shadow HRA”), as well as the information concerning SPA qualifying species presented in the ES (see Annex 2 below). The bird survey work is fundamentally flawed and as such, it is not possible to properly assess impacts on SPA qualifying species. The Shadow HRA does not take account of the full range of potential impacts on the SPA qualifying species and

---

<sup>7</sup> [http://ec.europa.eu/environment/nature/natura2000/barometer/index\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm)

the habitats that they depend on. It does not consider the loss of winter flooded dune slack habitat, its use as a bad weather refuge by SPA qualifying species or impacts on pasture used for foraging by SPA qualifying species. The Shadow HRA also fails to consider the potential for increased disturbance to SPA qualifying species due to course construction and maintenance work and the likely use of the course by dog walkers. The applicant has not assessed the cumulative effect of multiple impacts from the proposed development on SPA qualifying species.

RSPB Scotland believes that the proposed development is counter to the SPA's conservation objectives (as discussed further below). **Consequently, we do not think it is possible to demonstrate beyond reasonable scientific doubt that there will not be an adverse effect on the integrity of the SPA.**

### *Species populations*

RSPB Scotland believes that the use of the proposed development site and SPA by qualifying species has not been properly evaluated due to inadequate survey work (see Annex 2 below) and considers it likely therefore that impacts on SPA populations have been underestimated. The contextual information about the SPA populations presented in the ES is limited with no evaluation of likely current populations. Table A5 in Annex A of the ES has a column titled "regional" in which the populations of most species are shown as N/A and breeding populations of curlew and dunlin are provided for Natural Heritage Zone (NHZ 21). Greylag goose, redshank, curlew, bar tailed godwit, dunlin, lapwing, oystercatcher, teal, wigeon and eider are part of the SPA wintering assemblage and are regularly counted during surveys undertaken in the Fleet Estuary during the winter months together with ringed plover and shelduck<sup>8</sup>.

The Shadow HRA excludes Icelandic greylag geese. The Wintering Bird Survey (ES Appendix A.1) highlights uncertainty as to the proportion of greylag geese that are of Icelandic origin. Only small numbers of greylag geese breed in East Sutherland. There has not been a population explosion in native greylag geese equivalent to that which has occurred in Orkney and about half the overwintering population of greylag geese in the SPA are thought to be of Icelandic origin<sup>9</sup>.

It is RSPB Scotland's view that the proposed development would impact on the SPA populations through disturbance and changes to the supporting SPA habitats and species distributions as discussed further below.

### *Species distributions*

RSPB Scotland does not believe that the applicant has properly assessed the impacts of the proposed development on the distribution of the SPA qualifying species. In particular, we disagree with the applicant's assessment on page 167 of the ES that the winter use of dune slack habitat by qualifying species is likely to increase. We believe that disturbance within the dune slacks would increase as a result of the construction and operation of the proposed development leading to a likely reduction

---

<sup>8</sup> <https://app.bto.org/webs-reporting/>

<sup>9</sup> Mitchell C (2012) Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl and Wetlands Trust/SNH

in the use of this part of the SPA by qualifying species such as teal and wigeon (see below).

We also disagree with the applicant's assessment that there would be no impacts on qualifying species using parts of the SPA adjacent to the proposed development. Large numbers of waterbirds use areas of the SPA that are within the zone of potential disturbance by activities associated with the proposed development (see section on disturbance below). In addition, pasture in the southwest of the red line boundary provides foraging habitat for SPA qualifying species including greylag goose, curlew and oystercatcher and is also suitable for foraging wigeon. Parts of this habitat would be lost completely to the proposed car park, reservoir and driving range and the remainder subject to increased disturbance.

#### *Distribution and extent of habitats*

The Shadow HRA indicates that the proposed development would result in the permanent loss of 14 ha of the SPA. The applicant claims that the construction footprint would be contained within the footprint of the permanent golf course infrastructure (p205 of the ES). The development would impact on a much greater area of the intricate mosaic of interdependent dune habitats with about 140 ha of the SPA being within the red line boundary.

The assemblage of dune habitats at Coul Links is unique. In particular, the winter flooded dune slack habitat is not present elsewhere within the SPA and provides a bad weather refuge for over-wintering birds. The proposed development is likely to reduce availability of this habitat. Table B18 in the ES indicates that golf course infrastructure would replace 0.27 ha of 15.1 ha of dune slack as mapped by the applicant. Based on the extent of winter flooding in early 2017, we think that the loss of winter flooded habitat is likely to be greater. Parts of the 13<sup>th</sup> and 16<sup>th</sup> fairways are to be constructed directly on habitat that was flooded during the winter of 2016- 2017 (shown as Dune grassland: dune slack in the Phase 1 habitat survey, in ES Annex B Appendix 7) including small waterbodies which were particularly favoured by teal, part of the SPA assemblage. SNH's response (24<sup>th</sup> November) confirms inaccuracies with the ecological survey work, indicating that impacts on the dune slack habitats would be almost 10 times greater than assessed by the applicant.

In addition to the direct destruction of dune slack habitat, there would be a potentially much greater loss as a result of groundwater extraction required for irrigation of the golf course (Planning Application Ref: 17/04404/FUL). The 2017 Groundwater investigation report provided as part addendum to the ES indicates that no impact was detected on groundwater temperature and pressure in two monitor wells at the landward edge of the SSSI during the course of a 2 week period of test pumping at about 290 m<sup>3</sup>/day from the two proposed extraction wells about 1 km to the west. At an extraction rate of 290 m<sup>3</sup>/day, it would take over 2 months to fill the proposed 20,000 m<sup>3</sup> reservoir (ignoring the effects of evaporation and precipitation). The ES provides a conceptual model of the groundwater regime (Section 6.3.7.4) in which it is "assumed" that there is limited hydraulic connectivity between the shallow groundwater in the raised marine deposits which are "likely" to feed dune groundwater and the underlying sandstone aquifer. In the absence of a full description of the underlying groundwater regime and the degree of connectivity between different water bearing geological

units, it is unclear whether the two monitoring wells were sufficient to detect potential impacts on wider dune hydrology during the two week test. The long term impacts of the ongoing extraction of large volumes of water from the underlying sandstone aquifer on dune hydrology and habitats have not been adequately assessed and there is no proposed mitigation to protect dune hydrology.

### *Structure, function and supporting processes of habitats supporting the species*

The proposed development would lead to complete restructuring of about 10% of the protected habitats within the red line boundary and would impact on dune processes and hydrology over a much greater area. In order to maintain the playability of the golf course, it is likely that both sand movement and surface flooding would need to be controlled with impacts on natural dune processes. The groundwater extraction required for irrigation could also have a significant impact on dune hydrology. Further adverse effects may arise from changes in drainage, irrigation runoff, pesticide and fertiliser use. The applicant has not fully assessed these impacts nor considered appropriate mitigation measures to reduce these effects. The generic assessment of fertiliser use provided as Supporting Document 10 to the ES is not site specific, largely based on US publications and provides no reassurance that the dune habitats would be protected.

The applicant has failed to demonstrate that the structure, function and supporting natural processes of dune habitat would not be adversely impacted by the proposed development. SNH's response (24/11/2017) does not include consideration of how the habitat changes/loss will impact SPA qualifying features (impacts in relation to the sand dune habitats are considered in the context of the SSSI requirements only). RSPB Scotland will be contacting SNH about this issue separately.

### *Disturbance*

RSPB Scotland believes that the construction and operation of the proposed development would greatly increase the potential for disturbance of overwintering waterfowl. Frequent disturbance has been associated with reduced waterfowl densities in a number of English estuaries<sup>10,11,12,13</sup>, a significant reduction in the number of over-wintering wigeon at a site in Northern Ireland<sup>14</sup> and a reduction in the

---

<sup>10</sup> Liley D, Fearnley H (2011) Bird Disturbance Study, North Kent 2010-2011. Footprint Ecology / Greening the Gateway.

<sup>11</sup> Liley, D., Cruickshanks, K., Waldon, J. & Fearnley, H. (2011) Exe Disturbance Study. Footprint Ecology / Exe Estuary Management Partnership.

<sup>12</sup> Liley D, Fearnley H (2012). Poole Harbour Disturbance Study. Report for Natural England. Footprint Ecology Ltd., Wareham, Dorset.

<sup>13</sup> Ross K, Liley D (2014) Humber Winter Bird Disturbance Study. Unpublished report for the Humber Management Scheme by Footprint Ecology

<sup>14</sup> Mathers RG, Watson S, Stone R, Montgomery WI (2000) A study of the impact of human disturbance on wigeon *anas penelope* and brent geese *branta berniclahrota* on an Irish sea loch. Wildfowl 51:67-81

number of birds that wetland habitats can support<sup>15,16,17</sup>. Although some species return to foraging once disturbance has ceased, the interruption to foraging for other species including curlew and wigeon can be much greater<sup>17,18</sup>. The impacts on birds using the dune slack habitats are likely to be particularly severe because this habitat is restricted to the part of the SPA within the red line boundary of the proposed development. SNH in their response to this application (24/11/2017) have recommended that no green keeping activities are undertaken within 1 hour of sunrise or sunset from December to March but the effectiveness of this proposed mitigation for birds using the dune slacks as a high tide refuge would be limited as high tide would frequently be at other times. The proposed mitigation would also fail to prevent disturbance to wintering birds present outside the period from November to March.

In addition to disturbance within the part of the SPA within the red line boundary, RSPB Scotland has serious concerns about disturbance to birds within adjacent parts of the SPA and to SPA qualifying species foraging in the fields in the southwest of the application site (outside the SPA). Typically overwintering waders and wildfowl would take flight in response to humans on foot at distances of 50 to 500 m depending on the species and circumstances, and show an increase in alertness at much greater distances<sup>10,11,13,19,20,21,22,23</sup>. Large flocks such as those that gather on the Fleet close to the proposed development may be more susceptible to disturbance than individual birds<sup>23</sup>. There is evidence that both construction plant and smaller machinery such as that likely to be used in course maintenance can cause disturbance to waterfowl<sup>24</sup>.

People and equipment on parts of the northern part of the proposed course would be visible to nearby birds on Loch Fleet. Under certain conditions, large numbers of teal, wigeon, greylag geese and other waterfowl gather in the bay at NH798952, about 500 m west of the 3<sup>rd</sup> hole and at other times, large numbers of eider and other birds are present in the narrow straits of the Fleet to the north of the proposed development. Birds at both locations could be disturbed by people and/or machinery and unexpected

---

<sup>15</sup> Platteeuw M, Henkensj RJHG (1997) Possible impacts of disturbance to waterbirds: individuals, carrying capacity and populations. *Wildfowl* 48: 225-236

<sup>16</sup> Burton NH, Rehfish MM, Clark NA (2002) Impacts of disturbance from construction work on the densities and feeding behavior of waterbirds using the intertidal mudflats of Cardiff Bay, UK. *Environmental Management*;30:865-71

<sup>17</sup> Navedo JG, Herrera AG (2012) Effects of recreational disturbance on tidal wetlands: supporting the importance of undisturbed roosting sites for waterbird conservation. *Journal of Coastal Conservation*:16; 373–381

<sup>18</sup> Fox AD, Bell DV, Mudge GP (1993) A preliminary study of the effects of disturbance on feeding Wigeon grazing on Eelgrass *Zostera*. *Wader Study Group 68 Special Issue*: 67-71

<sup>19</sup> Dwyer RG (2010) Ecological and anthropogenic constraints on waterbirds of the Forth Estuary: population and behavioural responses to disturbance. PhD Thesis, Centre for Ecology and Conservation, University of Exeter

<sup>20</sup> Pease ML, Rose RK, Butler MJ (2005) Effects of human disturbances on the behavior of wintering ducks. *Wildlife Society Bulletin*, 33(1):103-112

<sup>21</sup> University of Hull (2009) Construction and waterfowl defining sensitivity, response, impacts and Guidance. Institute of Estuarine and Coastal Studies Report to Humber INCA.

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010001/EN010001-005116-HPC-NNBPEA-XX-000-RET-000089%201.pdf>

<sup>22</sup> University of Hull (2013) Waterbird disturbance mitigation toolkit: Informing Estuarine planning and construction projects. Institute of Estuarine and Coastal Studies  
<http://www.tide-toolbox.eu/tidetools/>

<sup>23</sup> Smit CJ, Visser GJM (1993) Effects of disturbance on shorebirds: a summary of existing knowledge from the Dutch Wadden Sea and Delta area. *Wader Study Group Bull.*, 68, 6-19.

<sup>24</sup> Davidson NC, Rothwell PI (1993) Disturbance to waterfowl on estuaries: the conservation and coastal management implications of current knowledge. *Wader Study Group 8u* .68..97-105.

noise on the northwest part of the golf course. Birds foraging in fields in the southwest of the application site are likely to be disturbed by people, vehicles and equipment on adjacent parts of the golf course and access road. Foraging greylag geese have been reported to be disturbed at an average distance of about 140 m by an approaching human<sup>25</sup> and pink footed geese (a species that passes through the Fleet Estuary) show reduced levels of foraging activity within 200 m of a road<sup>26</sup>.

The Construction Management Statement (ES Supporting Document 10) indicates that work on heath translocation in areas close to dune slack habitats would be undertaken during October-November. This is an important time for migratory birds passing through the SPA as well as birds arriving for the winter. Heath translocation work is scheduled to continue through the winter combined with clearing and grubbing up between January and March and excavation and shaping from February onwards. Given that all of the dune slack habitat is within 500 m of proposed course infrastructure and most is within 250 m, there is the potential for substantial disturbance to SPA qualifying species. We do not believe that there should be any construction activity that could cause disturbance to migratory and over-wintering birds between mid-September and early May.

The applicant is proposing to close the golf course during some of the winter months, from November to March (paragraph 2.3.4.2.4 of the ES). However, this would not prevent disturbance to wintering birds which start to arrive in the area in September and can be present until April. Under Scottish law the public have a right to walk across golf courses with their dogs (with the exception of greens). Access across the SPA is currently limited by the extent of winter flooding. The proposed development is likely to greatly increase the attractiveness of Coul Links as a winter dog walking destination as it would create a network of well drained short grass. The applicant is proposing to preserve the existing core path and indicated that new public paths would be created. Even if walkers stick to paths, the extent of human intrusion and associated disturbance SPA qualifying species is likely to increase. Disturbance associated with footpaths has been reported to lead a permanent reduction in the use of suitable habitat by curlews<sup>27</sup>. Studies of four English estuaries<sup>10,11,12,13</sup> and in Findhorn Bay<sup>28</sup> found that dog walkers caused disturbance at much greater distances than unaccompanied walkers. This has also been reported for other types of bird and habitat<sup>29</sup>. Although SNH in their response to this application (24/11/2017), imply that it would be possible to prevent disturbance through an appropriate recreation and access plan, RSPB Scotland do not believe that it would be possible to stop the public right of access to the course or that the disturbance impacts can be fully mitigated.

---

<sup>25</sup> Månsson J (2017) Lethal scaring: Behavioral and short-term numerical response of greylag goose *Anser anser*. *Crop Protection* 96, 258-264

<sup>26</sup> Gill JA (2007) Approaches to measuring the effects of human disturbance on birds. *Ibis* 149 (Suppl. 1), 9-14

<sup>27</sup> Burton, N. H., Armitage, M. J., Musgrove, A. J., & Rehfisch, M. M. (2002). Impacts of man-made landscape features on numbers of estuarine waterbirds at low tide. *Environmental Management*, 30(6), 0857-0864

<sup>28</sup> Holloway S (1997) Winter Distribution and Disturbance of Wildfowl and Waders on Findhorn Bay. BTO Research Report No. 179

<sup>29</sup> Banks, P. B., & Bryant, J. V. (2007). Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology letters*, 3(6), 611-613

RPSB Scotland welcomes the landowner's commitment to cease winter wildfowling on Coul Links but any member of the public would still have the legal right to shoot birds from the foreshore. There is currently frequent recreational firearms activity in the area around Coul Links, and there is no indication that this would cease if the proposed development were to be consented. A recent British Association for Shooting and Conservation (BASC) sponsored PhD study on the Wash showed that shooting can cause disturbance to waders, ducks and geese at distances of more than 500 m<sup>30</sup>.

The likely increase in disturbance to SPA qualifying species associated with the proposed development would be in addition to a background of rising levels of disturbance due to the vast increase in year round visitor numbers to East Sutherland that has resulted from the promotion of the NC500 route.

### **Dornoch Firth and Loch Fleet Ramsar site**

In addition to the European and national sites listed above and below, the Dornoch Firth and Loch Fleet are also of international importance recognised through their listing as a Ramsar Site, under the Ramsar Convention on Wetlands of International Importance 1971. The Ramsar citation describes the Dornoch Firth as one of the best examples in north-west Europe of a large complex estuary which has been relatively unaffected by industrial development, whilst Loch Fleet is an example of a shallow, bar-built estuary. Extensive sandflats and mudflats are backed by saltmarsh and sand dunes with transitions to dune heath. In addition, backing onto Loch Fleet are the Mound Alderwoods which form the largest estuarine alderwood in Great Britain (see pages 4-5 of the Ramsar site information sheet).

#### *Listing*

Around 140 ha of the proposed development is located within the Dornoch Firth and Loch Fleet Ramsar site, which qualifies under Ramsar criteria 1, 2, 5 and 6, which includes sand dune, saltmarsh and estuary habitats of international importance. In addition the tidal flats within the Ramsar site support internationally important numbers of waterfowl in winter and are the most northerly and substantial extent of intertidal habitat for wintering waterfowl in Britain, as well as Europe.

In Scotland all Ramsar sites are also SPAs, SAC and/or SSSIs and therefore for the purposes of considering planning applications that may affect them or their species those Natura 2000 and/or SSSI regimes are applicable as set out in the Scottish Planning Policy, para 211:

*'All Ramsar sites are also Natura 2000 sites and/or Sites of Special Scientific Interest and are protected under the relevant statutory regimes. And confirmed in the Nature Conservation (Scotland) Act 2004, Explanatory Note, para 254 - It should be noted that the principal legal protection given to Ramsar sites in Scotland is provided by means of the SSSI and Natura 2000 systems. The provisions of this Act and the Conservation (Natural Habitats &c.) Regulations 1994 should therefore be consulted*

---

<sup>30</sup> Collop HC (2016) Impact of human disturbance on coastal birds: Population consequences derived from behavioural responses. PhD Thesis, Bournemouth University

*in relation to any activities or operations which might impact upon wetlands designated under the Ramsar Convention. Consideration should also be given to relevant provisions in the Water Environment and Water Services (Scotland) Act 2003’.*

The applicant has not assessed impacts on the Ramsar site and its listed features. The ES states that these are assessed as part of the SSSI (Paragraph 5.5.3.4 of the ES) however, the listed features of the Ramsar site are different to the qualifying features of the SSSI (and also different to the SPA qualifying species). Due to the international importance of the Ramsar site, all of the listed features (including the designated habitats, flora and invertebrates) need to be considered as part of the Habitat Regulations requirements. Consideration must be given to Article 4.2 of the Ramsar Convention which stipulates that the boundary of a Ramsar site may only be restricted ‘*in its urgent national interest*’. The Council should therefore seek the advice of SNH as to whether the proposed development would result in a decision to restrict the boundary of the Ramsar site. Consideration must also be given to Resolution VII.24 of the Contracting Parties to the Ramsar Convention which urges the Contracting Parties to ‘*take all practicable measures for compensating any loss of wetland functions, attributes and values, both in quality and surface area, caused by human activities*’.

RSPB Scotland believes that the proposed development would have an adverse effect on qualifying features of the Ramsar site as outlined below.

### *Habitats*

Ramsar criterion 1 makes specific reference to the sand dune habitats. The following Habitats Directive Annex 1 interest features are of greatest relevance to the proposed development at Coul Links:

H2120 Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)

H2130 Fixed dunes with herbaceous vegetation (“grey dunes”)

H2140 Decalcified fixed dunes with *Empetrum nigrum*

H2150 Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

H2190 Humid dune slacks

H2250 Coastal dunes with *Juniperus* spp.

The proposed development would destroy the completeness of the dune system that has formed over thousands of years. An important geomorphological component of the Ramsar site would be removed impacting on habitats that are part of its qualifying features. The Construction Management Statement indicates that considerable volumes of sand would be moved, substantially modifying dune topography and halting natural geomorphological processes. The applicant has not assessed the impact on geomorphological features that are an integral component of the Ramsar site.

The proposed location of the 15<sup>th</sup> and 17<sup>th</sup> holes within 10 m of the vegetation edge of shifting dune habitat (H2120) would have a profound impact on this habitat. The applicant’s coastal erosion study shows vegetation retreat along the eastern margin of the dune system of up to 11 m at some locations between 2009 and 2015 (ES Appendix 11). As shown in the proposed Earthworks (plans included with the

application documents), it is proposed to re-profile the dunes to be replaced by the 15<sup>th</sup> and 17<sup>th</sup> holes thus creating the potential for extensive erosion prior to the re-establishment of vegetation. The creation of these holes and the coastal defence measures recommended in Appendix 11 to the ES are likely to lead to a substantial modification of the shifting dune habitat. The applicant has not assessed the likely impacts on habitats at Coul Links or elsewhere within the Ramsar site. We note that SNH (24/11/2017) have asked that no coastal defences should be installed but it is unclear how the proposed course layout could be implemented in the absence of coastal defences.

The H2130 fixed dune habitat at Coul Links contributes to it being one of the best sites for wildflowers in East Sutherland. The proposed course layout shows direct loss of about a third of the dune grassland habitat within red line boundary, mainly to the 6<sup>th</sup>, 7<sup>th</sup> and 16<sup>th</sup> holes. There would be further negative impacts arising from pesticide and fertiliser run off and increased nutrient levels. The fragmentation of the remaining grassland would impact on the genetic diversity and fitness of plant species stranded on islands of natural habitat and on invertebrate species that depend on this habitat.

The proposed golf course layout shows holes 2, 3, 4 and 5 replacing heath established on decalcified dunes – H2140 and H2150. The applicant plans to transplant heath from ridges of nutrient poor sand to lower, damp areas with naturally higher nutrient levels. RSPB Scotland does not believe that the proposed translocation of heath habitat is feasible or appropriate (see Annex 2 below). We wish to highlight that the UK Joint Nature Conservation Committee does not consider the translocation of habitats to be an acceptable alternative to in situ conservation<sup>31</sup> and that SNH (24/11/2017) do not believe that the proposed translocation would be successful or appropriate.

We have noted above our concerns about impacts on dune slack habitat above.

Juniper within coastal dune environments (H2250) is rare in Scotland. The largest area of mature juniper on Coul Links would be removed in order to create the 16<sup>th</sup> hole.

There are small areas of the Annex 1 interest features H1330 Atlantic salt meadows and H2110 Embryonic shifting dune habitat in the northeast of the red line boundary that are at risk of impacts arising from pesticide/fertiliser/sediment runoff and any changes in coastal sediment transport arising as a result of coastal engineering required to protect the 15<sup>th</sup> and 17<sup>th</sup> holes.

### *Flora and invertebrates*

Ramsar criteria 2 makes reference to nationally-scarce aquatic plants and British Red Data Book invertebrates. The ES does not adequately assess impacts on flora or invertebrates. Key issues in relation to flora are considered in Annex 2 below. Some of our partner organisations have provided a more detailed response on plant and invertebrate issues.

---

<sup>31</sup> JNCC (2003) A Habitats Translocation Policy for Britain. Joint Nature Conservation Committee ([http://jncc.defra.gov.uk/pdf/habitats\\_policy.pdf](http://jncc.defra.gov.uk/pdf/habitats_policy.pdf))

### *Internationally important populations of overwintering birds:*

Ramsar criterion 5 identifies the winter assemblage of waterfowl (all species) as being of international importance. Ramsar criterion 6 identifies qualifying species wigeon, greylag goose and bar tailed godwit as populations of international importance. Noteworthy populations of over-wintering birds identified as national importance were whooper swan (not included in the applicant's assessment), teal and redshank. As discussed above in relation to the SPA, RSPB Scotland do not believe that the applicant has provided sufficient evidence to demonstrate that an adverse impact on overwintering birds would not arise.

### **Loch Fleet SSSI**

#### *Citation*

The Loch Fleet SSSI citation describes Coul Links as “*an extensive dune system which is unusual in displaying a complete transition from foredune to slacks.*” This underlines the national importance of Coul Links for its geomorphology, habitats and associated assemblages of plants and animals. The SSSI citation also indicates that the tidal flats of Loch Fleet support nationally important populations of wintering birds and the surrounding coastal and woodland habitats support nationally important assemblages of plants and breeding birds. Many of the features at Coul Links are not found elsewhere within the SSSI. In particular, the SSSI citation highlights that “*the flooded slacks and winter lochs contribute to the diversity of habitat with a rich diversity of vascular plants*” and notes that Coul Links has a richer flora than the Ferry Links on the other side of the Fleet.

Listed features in the SSSI citation that are relevant to Coul Links are:

- Coastlands: Saltmarsh
- Coastlands: Sand dunes
- Vascular plants: Vascular plant assemblage
- Birds: Breeding bird assemblage
- Birds: Eider (*Somateria mollissima*), non-breeding

The management objectives for the SSSI relevant to Coul Links are listed below:

- To maintain the condition, distribution and extent of the sandflats and saltmarsh habitats.
- To restore the condition of the sand dune habitat.
- To maintain the distribution and population size of rare and scarce plants.
- To maintain the population of breeding birds and to avoid significant disturbance to these birds during the breeding season.
- To increase the wintering population of eider and to avoid significant disturbance to this species.
- To maintain non-breeding populations of waterfowl and avoid significant disturbance.

The 2011 Site Management Statement published by SNH notes the importance of an appropriate grazing regime to maintaining the sand dune habitat and in managing human activities to minimise disturbance to breeding and non-breeding birds<sup>32</sup>.

### *SSSI Assessment*

RSPB Scotland believes that the proposed development is contrary to most of the SSSI management objectives and is likely to damage the SSSI and its features. As noted above, we do not believe that the applicant has adequately assessed potential damage to sandflat, saltmarsh and dune habitats or damage to rare and scarce plants that are present in the various dune habitats.

RSPB Scotland believes that the proposed development is likely to damage the SSSI's breeding birds. Of those noted in the citation, ringed plover, oystercatcher, eider, Arctic tern, common tern and little tern breed on the foreshore, dune and saltmarsh habitats within 300 m of proposed golf course infrastructure. Ringed plover, oystercatcher and eider have successfully raised chicks over the last two breeding seasons. We do not believe that the applicant has adequately assessed the impacts of habitat change and increased disturbance on these species.

Other breeding birds noted in the SSSI citation are wheatear, sedge warbler and reed bunting. These species all nested within the red line boundary of the proposed development in 2016 and 2017. These species would lose habitat as a result of scrub clearance, "remediation" of the felled plantation and the smoothing out of hummocky mixed dune slack, grassy dune habitat to create holes 10, 11 and 13. Grasshopper warbler, reed bunting and sedge warbler seem to particularly like the intimate mixture of wet and dry ground and cover provided by both the felled plantation and the area around the proposed 13<sup>th</sup> fairway.

The list of breeding birds in the SSSI citation is not intended to be exhaustive and red listed birds of conservation concern<sup>33</sup> that currently use the Coul Links during the breeding season include lapwing, curlew, cuckoo, skylark, grasshopper warbler, starling, song thrush, spotted flycatcher, whinchat, linnet, twite, lesser redpoll and yellowhammer. In addition Coul Links is also used by a number of amber listed species including teal, oystercatcher, redshank, snipe, little tern, willow warbler, dunnock, meadow pipit, bullfinch and reed bunting. Most of the species are likely to lose habitat to golf course infrastructure and are likely to be affected by increased disturbance.

RSPB Scotland is particularly concerned that the Construction Management Statement (ES Supporting Document 10) indicates that clearing of the site and grubbing out of scrub would be undertaken in May and June, the height of the bird breeding season. This work would be likely to have a devastating impact on breeding passerines that nest within scrub and that are likely to lose nests, eggs and young.

---

<sup>32</sup> SNH (2011) Loch Fleet Site of Special Scientific Interest Site Management Statement Site code: 984

<sup>33</sup> Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708–746.

Although SNH in their response to this application (24/11/2017), imply that it would be possible to prevent disturbance to breeding birds during course operation through the implementation of an appropriate recreation and access management plan, RSPB Scotland believe that the intrusion of the course into dune habitats means that golf-related activities would cause extensive disturbance to breeding birds.

As discussed in relation to the SPA and Ramsar sites above, RSPB Scotland believe that the proposed development is likely to adversely impact on overwintering birds and we do not believe it is possible to mitigate for the damage to the dune habitats or the rare and scarce plants.

### *Current condition of the SSSI*

The condition of the SSSI breeding bird assemblage was assessed as “favourable declining” by SNH in 2008 with listed pressures of natural event and recreational disturbance<sup>34</sup>. In addition the sand dune habitat across the Loch Fleet SSSI (including Littleferry as well as Coul Links) was assessed as “unfavourable, unchanged” in 2014 with invasive species (thistles), under and over-grazing and recreational disturbance listed as on the pressures<sup>35</sup>. The 2011 Site Management Statement also notes the requirement to manage birch and willow scrub on Coul Links<sup>32</sup>. The condition of the vascular plant assemblage in 2012 was “favourable maintained”.

The Loch Fleet SSSI covers a wider area than Coul Links and the feature pressures listed by SNH<sup>35</sup> are not all relevant to Coul Links. In particular, recreational disturbance is very much greater at Littleferry. There are parts of the SSSI at Coul Links that would benefit from more grazing but there are a large number of roe deer present and the northwest of the site is grazed by cattle in winter. The applicant has highlighted the presence of “invasive species”: bracken, gorse, rosebay willow herb and willow/birch, but there are no highly invasive non-natives such as Japanese knotweed, Himalayan Balsam or rhododendron. Bracken covers approximately 1% of the application site, rosebay willow herb considerably less and thistles are scattered through a small area of the grazed grassland at the north of the application site. Both gorse and birch are part of natural succession and only a modest area of Coul Links is currently affected. The applicant has estimated that semi-natural broadleaved woodland currently covers about 11 ha within the red line boundary (ES Appendix B.2 p9-10), but only about half of this is within the SSSI component (Appendix B.7 p5-6). The benefits of the applicant’s commitment to control “invasive species” within the red line boundary of the proposed development (ES Section 5.7.1.1), are likely to be hugely outweighed by the damage caused to the vascular plant assemblage (not fully assessed by the applicant), the loss of dune heath habitat (see discussion of dune heath translocation in Annex 2 below) and increased disturbance of breeding and overwintering birds as discussed above. SNH’s response (24/11/2017) also concluded that any conservation benefits arising from the proposed development are outweighed by the damage to protected sites.

---

<sup>34</sup> [https://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa\\_code=984](https://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=984)

<sup>35</sup> [http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa\\_code=984#featurePressures](http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=984#featurePressures)

## **Annex 2: Other issues with the EIA**

### **Scoping**

Given the likely significant impact of the proposed development on protected sites, RSPB Scotland is disappointed that the applicant did not involve us in the EIA scoping exercise despite the approaches we made to them. In addition RSPB Scotland's response to the first set of public consultation events does not appear to have been taken into account in the EIA.

### **Extent of the Environmental Assessment**

The applicant has submitted separately an application for a reservoir including permission to extract groundwater to supply it and feed the golf course irrigation system (Planning reference: 17/04404). RSPB Scotland has provided comments to Highland Council on this application as we believe it is likely that the proposed extraction could cause significant damage to the dune slack habitats through a lowering of the water table.

It is unclear why this application was made separately as it is clearly 'inextricably linked' to the main application and should be considered as such, especially as it is our understanding that the reservoir and abstraction would not be required unless the golf course was going ahead. The reservoir is included in the project description in the ES (sections 2.3.5, 2.5.4) but its impacts have not been fully assessed. Although submitted separately this application must be considered at the same time as the main application including all possible effects both may have on the designated sites and their species. To do otherwise would lead to an inadequate consideration of all possible effects and therefore an incomplete ES.

European Commission Guidance<sup>36</sup> requires consideration of the 'whole project' by the EIA and it is clear that the EIA regulations include 'golf courses and associated developments'. In our view, approval of the associated reservoir works before undertaking the EIA for the golf course would constitute a breach of the EIA Directive:

*'where the main project requires an EIA, the approval and/or physical execution of the associated works prior to the undertaking of an EIA would constitute a breach of the EIA Directive'<sup>37</sup>.*

### **Bird surveys (ES Annex A, Appendices A1, A2, A3)**

#### *General comment on surveys*

Given the proposed development's location largely within an SPA/SSSI/Ramsar site, RSPB Scotland is disappointed that the applicant only undertook surveys over a single winter and single breeding season – much less than would be required for other types of development, even in less sensitive locations<sup>38</sup>. This is particularly relevant as

---

<sup>36</sup> [http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_EIA\\_report\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf)

<sup>37</sup> <http://ec.europa.eu/environment/eia/pdf/Note%20-%20Interpretation%20of%20Directive%2085-337-EEC.pdf>

<sup>38</sup> SNH (2014) Recommended bird survey methods to inform impact assessment of onshore wind farms. <https://www.snh.scot/sites/default/files/2017-09/Guidance%20note%20->

during the winter the surveys were undertaken (2015-16), the dune slacks did not flood until January, whereas the dune slacks were extensively flooded in November 2017 and holding a large number of wigeon and teal. This questions how representative the surveys are as to the use of the dune slack habitat by SPA qualifying species. We are also concerned that few details of survey coverage are provided and suspect that there may be substantial gaps as well as issues with timings that may have led to a significant under-estimate of the year round importance of Coul Links to birds including qualifying interests of the designated sites.

### *Wintering bird surveys*

The surveys did not cover the relevant period for wintering birds. Migratory species return to and pass through the designated sites from mid-August onwards whereas the first survey was not conducted until the end of October. The final survey was undertaken at the end of March, well before birds start to move north.

In addition, we are concerned that the survey work did not follow best practice survey guidance<sup>39</sup>. The walkover methodology is likely to have resulted in birds being under recorded due to disturbance and surveyors walking through the links would not necessarily see birds moving in or out of the links in response to a rising or falling tide, changing weather or disturbance elsewhere in the SPA. The walkover routes have not been provided so it is unclear how much of the application site was included. In particular, it is unclear whether the surveys included the fields in the southwest of the redline boundary that provide winter foraging opportunities for qualifying species of the SPA and Ramsar site.

Although some vantage point (VP) surveys were undertaken, we are extremely concerned about their effectiveness. No VP locations or viewsheds have been provided and it is unclear how many hours of VP surveys were undertaken for different parts of the site. Although the applicant has provided information about the high tide time, it is unclear if this is relevant to Embo and no information is provided on the sunrise and sunset times. The light levels during some surveys may have been very low. Given that Coul Links would be anticipated to be a high tide and/or bad weather refuge for many of the qualifying interests of the SPA, we are concerned that few surveys were conducted within 2 hours of high tide, when birds would be most likely to be present and none were conducted during severe weather (as far as we know).

### *Breeding bird surveys*

RSPB Scotland would like clarification of the area included in the breeding bird surveys. We are concerned that there were a range of passerines breeding on the site in 2017 that were not recorded by the applicant's surveys in 2016. In addition, the timing of the breeding bird surveys was not ideal and did not conform to the methodology referred to by the applicant<sup>26</sup> or British Trust for Ornithology (BTO) guidance<sup>40</sup>.

---

[%20Recommended%20bird%20survey%20methods%20to%20inform%20impact%20assessment%20of%20onshore%20windfarms.pdf](#)

<sup>39</sup> Gilbert G, Gibbons DW and Evans J (1998). Bird Monitoring Methods: A manual of techniques for key UK species. RSPB, Bedfordshire.

<sup>40</sup> [https://www.bto.org/sites/default/files/bbs\\_instructions\\_0.pdf](https://www.bto.org/sites/default/files/bbs_instructions_0.pdf)

### *Impacts on red and amber listed species*

RSPB Scotland does not believe that the applicant has properly assessed the effects of habitat change on the large numbers of seed eating and insectivorous birds that forage across Coul Links and along the top of the adjacent beach including linnet, twite, redpoll, meadow pipit, skylark, various warbler species, whinchat, wagtails, martins, ringed plover and sanderling.

### **Ecological assessment**

Our partner organisations will comment in more detail on this aspect of the ES. RSPB Scotland, however, believes that the scope of the ecological assessment was too narrow and the habitat surveys maps are difficult to interpret. For example, similar solid greens are used to represent both golf course elements and some habitats (Appendix B.7 p5-6). Similarly, the use of coloured base maps is confusing. The map of Functional Wetland Typography (Appendix B.7 p7), for example, appears to show mire all the way down the coastal edge of the links, but this is more probably the sand shown on the base map.

Coul Links has an extremely rich floral diversity but the ES acknowledges that no attempt was made to fully assess the site's flora (P7 of ES Appendix B2). The investigations of fungi and lichen on the site were even more limited with only waxcap fungi and a single species of lichen being considered. Similarly the applicant has not investigated the rich diversity of invertebrates and limited their investigations to Fonseca's seed fly. Given the rarity of undisturbed dune habitats, we believe that there is likely to be a nationally important assemblage of specialist dune invertebrate species present. The partial approach that the applicant has taken to the ecological assessment has led to the biodiversity importance of the application site being substantially under-estimated in the ES.

The Bat Survey Report (ES Appendix B.4) indicates that surveys were not undertaken across the calendar period required by the Bat Conservation Trust's recommended methodology<sup>41</sup> and that further bat surveys will be required in order to develop an appropriate mitigation plan. We note that SNH (24/11/2017) have indicated that the proposed development should not be permitted in advance of having additional bat survey information and further advice from SNH in relation to appropriate mitigation.

Roe deer are not specially protected and thus not considered in the ES. However, given the large number of deer using the application site, it would be appropriate to consider the impacts on dune vegetation if large areas of grazing are lost.

### **Proposed heath translocation**

The applicant plans to transplant heath from greens and fairways associated with holes 2, 3, 4 and 5 to elsewhere within the application site. The receptor areas shown in the translocation plan (ES Annex B, Supporting document 1) include areas within

---

<sup>41</sup> Collins J (2016) Bat surveys for professional ecologists. Best Practice Guidelines. 3rd Edition. Bat Conservation Trust

the felled plantation (R5 and R6) that were flooded in the winter of 2016-17 and woodland in the north of the site (R1 and R2) which has replaced former ponds. The applicant plans to reduce the fertility of receptor areas by removing surface soil which will make receptor areas even lower and damper. The transplanted heath will be dressed with sand from an unspecified source thus risking the introduction of alien species.

There has been no consideration of the survival of the whole heath assemblage – plant species, fungi, lichen and invertebrates. The case studies referred to by the applicant do not provide any information about the plant assemblages before and after translocation. The Carnoustie case study involved matching donor and receptor areas for topography and hydrology which is not proposed at Coul Links and the Portrush case study involved dune grassland not dune heath (ES Supporting Document 1). RSPB Scotland does not believe that it is likely that heath will establish in low lying areas on Coul Links or that transplanting heather equates to heath relocation as it is likely that many species will be lost. In an experimental study of heath translocation in Dorset, underlying differences in soil hydrology between the donor site and that of the restoration site led to a gradual change in the plant species present<sup>42</sup>. An earlier review of a number of habitat translocations within the UK found that the translocation does not preserve invertebrate populations and leads to a change in the invertebrate assemblage<sup>43</sup>.

The UK Joint Nature Conservation Committee has stated that the statutory conservation agencies will continue to make the strongest possible case against translocating habitats from within SSSIs<sup>31</sup>. The agencies provide a number of reasons for the presumption against habitat translocation including habitat fragility and the timescale that they take to form, differences in the physical conditions at the new location and the dependence of species on mosaics of habitats that are difficult or impossible to move in combination with each other.

## Hydrology

RSPB Scotland are extremely concerned that the impacts of the proposed development on dune hydrology have not been properly assessed. We have objected to the proposal to extract groundwater to supply a reservoir to feed the golf course irrigation system (Planning reference: 17/04404) and provided comments to Highland Council. We think that it is likely that the proposed extraction could cause significant damage to the dune slack habitats through a lowering of the water table. We note that the Groundwater Investigation Report (ES Appendix C.3) that was originally provided with the application is unfinished and incomplete. The Groundwater Investigation report subsequently provided as an Addendum to the ES does not fully describe the hydrology of the SSSI. It is not possible to assess whether the monitor wells were appropriately located to be able to detect potential impacts on sensitive habitats within the SSSI. Given the importance of surface water at the site, we are disappointed that the developer has not recorded daily precipitation at the site and its relationship with flooded dune habitats.

---

<sup>42</sup> Pywell RF, Meek WR, Webb NR, Putwain PD, Bullock JM (2011) Long-term heathland restoration on former grassland: The results of a 17-year experiment. *Biological Conservation*, 144, 1602-1609

<sup>43</sup> Bullock JM (1998) Community translocation in Britain: Setting objectives and measuring consequences. *Biological Conservation*, 84, 199-214

## **Coastal erosion**

RSPB Scotland is concerned that the proposed layout of the golf course appears to ignore the outcomes of the coastal erosion study (ES Appendix 11) which recommends a greater set back distance from the coast. The report also highlights that a more comprehensive study of coastal erosion is required to take account of climate change and to provide more detail on the future coastal engineering required. This detailed assessment is required to be able to determine the long-term implications for the SPA, Ramsar site and the SSSI.

## **Biodiversity net gain report**

RSPB Scotland believe that the Biodiversity Net Gain report (ES Supporting document 9) is misleading and remain of the opinion that the proposed development is likely to lead to a significant net loss of biodiversity. The site could be improved without the proposed development and the issues identified by applicant would be more appropriately addressed by a management agreement with SNH.

The Biodiversity Net Gain report outlines various intentions that are discussed below.

### *Cessation of winter shooting of SPA wildfowl at Coul Links*

As noted above, RSPB Scotland does not believe that any reduction in levels of disturbance to overwintering birds as a result of the cessation of winter shooting will outweigh an increase in disturbance from other sources.

### *Remediation, control and long-term management of invasive plant species at Coul Links*

There are no issues with invasive non-native plant species such as Japanese knotweed. There are some native species that could become problematic if satisfactory management of the site cannot be achieved through a management agreement between the landowner and SNH. While there is a case for increasing grazing to reduce the further spread of scrub and thistles, grubbing up scrub to create a golf course does not represent a biodiversity benefit. The areas of rosebay willow herb are small and could be readily controlled without construction of the golf course.

### *Favourable conservation management of Coul links SSSI, plus purchase and conservation management of land immediate adjacent to SSSI*

RSPB Scotland does not agree that the management objectives for the Loch Fleet SSSI will be met as part of golf course construction or that the purchase of a small area of additional land will offset the adverse impacts on the SSSI. The proposed development is likely to have a profound impact on dune habitats that extends well beyond the footprint of the proposed course infrastructure. The applicant has not explained how rare plant species will be protected and preserved. RSPB Scotland believe that there will be a reduction in the numbers and species of breeding birds and that it will be not be possible to mitigate against the habitat fragmentation and

increased disturbance. Similarly we do not believe that the golf course will contribute to the maintenance of non-breeding waterfowl populations.

#### *Dune heath expansion at Coul Links*

As discussed above the proposed heath translocation is unlikely to be successful and will not preserve the existing heath floral and invertebrate assemblages.

#### *Habitat restoration of felled conifer plantation area at Coul Links*

The felled conifer plantation is reverting to a mix of dune heath and dune slack habitats without any active intervention. The proposal to restore it to a heath habitat takes no account of the large areas of winter flooding.

#### *Enhanced understanding of Fonseca's seed-fly ecology*

Research into Fonseca's seed fly could only be of value in conserving the fly if it were undertaken in advance of the proposed development.

#### *Community engagement and public awareness*

RSPB Scotland agree that increased public awareness of the natural heritage importance of Coul Links would be beneficial. However, the applicant implies that the proposed links are currently overrun with all terrain vehicle (ATV) activity, litter and dog walkers. The reality is that a small part of Coul Links is accessed by dog walkers, there is occasional ATV activity on the beach and the sandflats and sometimes pieces of litter can be found. Disturbance is an issue for nesting terns at the mouth of the Fleet but this could be addressed if some seasonal signage was erected. This has been effective elsewhere around the Moray Firth. The other human behavioural issues could also be addressed in the absence of the proposed development.

### **Environmental Management Plan**

The applicant has also provided a generic Environmental Management Plan (ES Supporting document 2) prepared for another site (or sites) and contains much that is irrelevant to Coul Links such as reference to nightjar, woodlark, Dartford warbler and the Environment Agency.

The document is entirely aspirational: the Ecological Clerk of Works will have no control over the construction programme, workers will be "expected" rather than "required" to follow procedures, there is no proposed audit system or commitment to work to a recognised environmental management standard and there are huge gaps in scope, for example, in the discussion of waste management.

The Environmental Management Plan contains proposals for a reed bed and an anaerobic digester which are not cross referenced elsewhere in the planning application documents or assessed in the ES. It is proposed that the anaerobic digester could support a combined heat and power (CHP) plant. This would be expected to require a large volume of waste organic matter, probably partly from offsite sources, in order to be economically viable.