Agenda item	**3.1**
Report no	**PLN/045/18**

THE HIGHLAND COUNCIL

Committee: **North Planning Applications Committee**

Date: **20 June 2018 (Special Meeting)**

Report Title: **Supplementary Report:**

17/04601/FUL - Land 1700M NW Of Embo Community Centre, School Street, Embo

Report By: **Area Planning Manager – North**

1. Purpose/Executive Summary

1.1 Applicant: Coul Links Ltd

Description of development: 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

Ward: 4 - East Sutherland and Edderton

Category: Major

Reasons Referred to Committee: Deferral at NPAC meeting on 5th June to allow further comment from Scottish Environmental Protection Agency (SEPA) in responses received to further information.

All relevant matters have been taken into account when appraising this application. It is considered that the proposal does not accord with the principles and policies contained within the Development Plan and is unacceptable in terms of applicable material considerations.

2. Recommendation

2.2 Members are asked to agree the recommendation to refuse as set out in section 7 of the report

3. BACKGROUND

3.1 Members will recall that this application was presented to the North Planning Applications Committee on 5th June 2018. Prior to the meeting however, a representation on the application had been received from the 'Not Coul' group submitting further information with regards to ground water dependent ecosystems. The report presented by Not Coul suggested that wetlands may be more impacted by the development than concluded in the applicant's Environmental Statement. Such wetlands are within the remit of the Scottish Environmental Protection Agency (SEPA) to care for under the Water Framework Directive. In light of the information presented by Not Coul, further comments were sought from the applicant, SNH and SEPA. On Monday 4th June 2018 further information was provided by the applicant. Whilst SNH stated they did not have further comments to make, SEPA advised they were unable to fully consider all of the information provided and requested further time to review this information. The merits of the proposal were discussed by the Committee, however, they agreed to defer the application to allow time for SEPA to respond to the information presented by Not Coul and the applicant, prior to the determination of the application.

3.2 This report should be read alongside the Committee paper and plans presented for the NPAC meeting on 5th June 2018.

4. ASSESSMENT

4.1 Comments have now been received from SEPA. SEPA, has considered the Not Coul report as well as the applicant's responses and analysis undertaken by SNH previously (hole by hole analysis). In addition, SEPA has considered its previous reviews of the ES and its updated information. Through this consideration, SEPA have confirmed that in terms of wetlands within its remit, the previous position is maintained; that is, no objection to the application (and associated borehole and reservoir application) subject to the conditions detailed in its previous consultation response. As noted at the original Committee meeting, the further information has no bearing on the recommendation of refusal by the Planning Authority, as set out in Section 5.

4.2 For information, SEPA has also provided clarification on a question raised by Members at the 5th June Committee meeting, specifically what are the potential impacts on sensitive receptors within SEPA's remit should the development not go ahead, as follows:

During the Planning Committee we indicated that should the development not proceed we considered it likely that natural processes would continue on site. This is a complex site with many different habitats and natural processes, as detailed in SNH's advice, and we would defer to SNH's advice on the long-term management of the site. In terms of the wetlands on site, Members should note that wet dune slacks by their very nature have a seasonally highly variable water table with winter flooding and summer droughts sometimes in excess of 1m below the ground level. This fluctuating water table ensures that organic material (such as leaf debris), which would normally accumulate under permanently flooded and anaerobic conditions in a peat bog, oxidises during the drought phase of the wet dune and significant amounts

of organic material therefore do not accumulate. The highly fluctuating water table also dries out seedlings of tree species and then floods them during winter. The result is a habitat where generally only willow species can survive.

4.3 In addition to this, finalised Appropriate Assessments are included as an Appendix to this report (Appendix 1). These are required as the site is within sites designated for their natural heritage interests; the Dornoch Firth and Loch Fleet Special Protection Area and Moray Firth proposed Special Protection Area. The site's status as a SPA mean that the Habitat Regulations apply which triggers the need for an Appropriate Assessment. Although the Habitat Regulations do not apply to Ramsar sites, recent discussion in Scottish Parliament has reaffirmed the position of Scottish Planning Policy that Ramsar sites should be given the same protection as Natura Sites. As such, considerations of the effects on the integrity of the Dornoch Firth & Loch Fleet Ramsar site (as well as the Site of Special Scientific Interest) is also provided as an appendix (Appendix 2).

4.4 In terms of procedure please also note that, on the basis that SNH have objected, to the application, if Members are minded to recommend approval of the application it will be necessary to notify Scottish Ministers who have the opportunity to call the application in for their determination.

5. CONCLUSION

5.1 SEPA has responded to the further information submitted however this has not altered their advice. The recommendation, as outlined in the papers circulated for the 5th June meeting, is that the original recommendation of refusal remains unaltered as set out in section 7 below.

6. IMPLICATIONS

6.1 Resource – Not applicable

6.2 Legal –Not applicable

6.3 Community (Equality, Poverty and Rural) –Not applicable

6.4 Climate Change/Carbon Clever –Not applicable

6.5 Risk – Not applicable

6.6 Gaelic – Not applicable

7. RECOMMENDATION

Action required before decision issued	Y	
Notification to Scottish Ministers	Y	NB - Notification to Scottish Ministers is required in the event that members are minded to grant permission.
Notification to Historic Scotland	N	

Conclusion of Section 75 Agreement N

Revocation of previous permission N

Subject to the above, it is recommended the application be **refused** subject to the following reason for refusal:

1. The application is contrary to the provisions of the Highland-wide Local Development Plan Policies 28 (Sustainable Design) Policy 57 (Natural, Built and Cultural Heritage) as the proposed development would result in a significantly detrimental impact on the Loch Fleet Site of Scientific Interest and Loch Fleet Ramsar Site, designated for its sand dune habitat. In particular, the Coul Links support some of the best quality SSSI dune slack habitats in Scotland and the proposal, in its current format, will result in significant and permanent loss of sand dune habitat, particularly dune heath and dune slacks and impacts to other species which depend on it. Although mitigation is proposed the residual losses are extensive and likely to be permanent. In addition, the proposed development will create a high level of disruption to natural dune processes, such as dynamism, due to large dune areas becoming stabilised. It will also result in significant levels of habitat fragmentation, with the course infrastructure spread throughout the dune system. Furthermore, translocation of habitat is unlikely to be successful and therefore not an appropriate technique to safeguard a protected area of such natural environmental complexity and notable dune quality.

Designation:	Area Planning Manager - North
Author:	Gillian Webster
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Please refer to Committee Paper - 5 June 2018

Appendix 1: Finalised Appropriate Assessments

Dornoch Firth and Loch Fleet Special Protection Area

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 and;

Drilling of two boreholes and construction of water storage reservoir (maximum capacity 20000cu.m) for irrigation of (future) golf course

17/04601/FUL and 17/04404/FUL

CONSIDERATION OF PROPOSALS AFFECTING EUROPEAN SITES

The status of Dornoch Firth and Loch Fleet Special Protection Area (SPA) means that the requirements of the Conservation (Natural Habitats, & c.) Regulations 1994 as amended (the 'Habitats Regulations') or, for reserved matters the Conservation of Habitats and Species Regulations 2017 as amended apply.

This means that where the conclusion reached by the Council on a development proposal unconnected with the nature conservation management of a Natura 2000 site is that it is likely to have a significant effect on those sites, it must undertake an Appropriate Assessment of the implications for the conservation interests for which the areas have been designated. The need for Appropriate Assessment extends to plans or projects out with the boundary of the site in order to determine their implications for the interest protected within the site.

This means that the Council, as competent authority, has a duty to:

- Determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,

- Determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then

- Make an Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.

The competent authority can only agree to the proposal after having ascertained that it will not have an adverse effect on the integrity of the sites. If this is not the case and there are not alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.

Screening in Likely Significant Effects

It is evident that the proposal is not connected with or necessary to site management for conservation, hence further consideration is required. The proposed golf course has the potential to have a likely significant effect on the qualifying interests due to impacts arising from water treatment plant discharge into Loch Fleet, borehole abstraction for irrigation, increase in coastal recreation as well as through construction impacts. The Council is therefore required to undertake an appropriate assessment of the implications of the proposal on the SPA. The qualifying features which it is considered would be impacted are oystercatcher, bar-tailed godwit, culew (coastal), dunlin, waterfowl assemblage, teal and wigeon which are collectively referred to as non-breeding waterfowl and breeding osprey.

APPROPRIATE ASSESSMENT

While the responsibility to carry out the Appropriate Assessment rests with the Council, advice contained within Circular 6/1995 is that the assessment can be based on the information submitted from other agencies. In this case, the Appropriate Assessment is informed by information supplied by SNH, the applicant and various published information.

Appraisal Summary

In its initial response to the Council, SNH advised that the proposal is likely to have a significant effect on the qualifying interests of the SPA. Following the submission of additional information by the agent (including the submission of a Recreation and Access Management Plan), it is concluded that the proposal will not adversely affect the integrity of the Special Protection Area.

HIGHLAND COUNCIL APPRAISAL OF THE PROPOSAL

- The proposal is not directly connected with or necessary to site management for conservation;

- The proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; therefore;

- An Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives is provided below.

The impacts on the Special Protection Area are considered in terms of the different components of the development which may impact on the qualifying interests, as follows:

Borehole Water Abstraction

- Borehole water abstraction is proposed in order to irrigate the site. The proposal has the potential to have a significant effect on SPA teal and wigeon as a result of less water being in the dune slacks within the site during winter months. Water abstraction is regulated by the Scottish Environment Protection Agency (SEPA) under the Controlled Activities Regulations (CAR), and is considered to be highly unlikely that the proposed borehole abstraction will have a significant detrimental effect on the availability of ground water to the dune slack. This is due to the CAR regime being able to ensure the volume of water abstraction from the boreholes will not exceed critical limits in order to avoid adverse impacts to site integrity through effects on the dune slack habitat supporting SPA teal and wigeon.
- This can be further managed through the production of a Water Management Contingency Plan by the applicant in order to outline an alternative water source should abstraction need to be halted to avoid adverse impacts. Based on the information presented to date, it is concluded that the borehole water abstraction will not adversely affect the integrity of the SPA.

Waste Water Treatment Plant outflow

- This element of the proposed development is likely to have significant effect on the following qualifying interests of the SPA - teal, wigeon, oystercatcher, bar-tailed godwit, curlew, dunlin, redshank & >20,000 waterfowl assemblage.
- Based on the information presented with the application the level of nutrients being discharged into Loch Fleet will be low. This is a result of low effluent volume, combined with good levels of dilution within the discharge burn, as well as additional dilution within the tidal waters of Skelbo Bay. As a result any impacts to the marine invertebrate forage for these birds will be of a very low scale. As such it can be concluded that the installation of a waste water treatment plant with outflow to Loch Fleet will not adversely affect the integrity of the site.
- This proposal is also likely to cause some disturbance and displacement to inland foraging geese and curlew. However, the construction works are likely to be temporary, indicating that disturbance levels will subside. These species are likely to continue to use other suitable agricultural fields for feeding in proximity of this SPA. As such it can be concluded that the proposal will not adversely affect the integrity of the site in terms of impacts on greylag geese and curlew (including pink-footed geese linked to non-breeding assemblage)

Coastal Recreation

- It is likely that coastal recreation arising from the development will have a significant effect on the following interests of the SPA; oystercatcher, bar-tailed godwit, curlew (coastal), dunlin, redshank & >20,000 waterfowl assemblage.
- The mitigation measures within the Recreation & Access Management Plan (RAMP) will help to reduce disturbance events to waterfowl during the winter period. In addition, review meetings will take place to assess the level of disturbance to waterfowl and a fall-back process has been identified to prevent disturbance events from causing changes to bird distribution. As such it can be concluded that the proposal will not adversely affect the integrity of the site in terms of impact on oystercatcher, bar-tailed godwit, curlew (coastal), dunlin, redshank and waterfowl assemblage.
- As noted above this proposal is likely to cause some disturbance and displacement to inland foraging geese and curlew, also due to recreational access. However, the construction works are likely to be temporary, indicating that disturbance levels will subside. These species are likely to continue to use other suitable agricultural fields for feeding in proximity of this SPA. As such it can be concluded that the proposal will not adversely affect the integrity of the site in terms of impacts on greylag geese and curlew (including pink-footed geese linked to non-breeding assemblage).
- The proposal is also likely to have a significant effect on teal and wigeon using flooded areas of dune slack through disturbance as a result of increased numbers of people using the site. However, this can be mitigated through a condition attached to any consent, as follows:

From December to March (inclusive), green-keeping operations on holes 10-18 must only take place between one hour after sunrise and one hour before sunset

Moray Firth pSPA

APPROPRIATE ASSESSMENT

While the responsibility to carry out the Appropriate Assessment rests with the Council, advice contained within Circular 6/1995 is that the assessment can be based on the information submitted from other agencies. In this case, the Appropriate Assessment is informed by information supplied by SNH, the applicant and various published information as referenced.

Appraisal Summary

In its initial response to the Council, SNH advised that the proposal is likely to have a significant effect on the qualifying interests of this proposed pSpecial Protection Area (pSPA), specifically eider. Following the submission of additional information by the agent (including the submission of a Recreation and Access Management Plan), it is concluded that the proposal will not aversely affect the integrity of the pSPA .

HIGHLAND COUNCIL APPRAISAL OF THE PROPOSAL

- The proposal is not directly connected with or necessary to site management for conservation;

- The proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; therefore;

- An Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives is provided below.

The competent authority can only agree to the proposal after having ascertained that it will not have an adverse effect on the integrity of the sites (AESI). If this is not the case and there are not alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.

The impacts on the Special Protection Area are considered in terms of the different components of the development which may impact on the qualifying interests, as follows:

- The only qualifying interests that would be impacted upon as a result of the proposal are eider. The proposal will not result in any significant effects either directly or indirectly on other qualifying interests, long-tailed duck, goldeneye, red-breasted merganser and shag. This is because the proposal is unlikely to have adverse impacts on marine animal prey for these birds. This is due to the high dilution rates within Loch Fleet and all other pSPA species feed further offshore and are unlikely to be affected.

- With regard to eider specifically, the mitigation measures within the Recreation & Access Management Plan (RAMP) will help to reduce disturbance events to waterfowl during the winter period. Review meetings will also take place to assess the level of disturbance events to waterfowl. Therefore, changes to the RAMP may be required; especially during the initial stages of the proposal. A fall-back process has been identified to prevent disturbance events from causing changes to bird distribution. The RAMP mitigation measures should be implemented in advance of construction taking place, if the proposal receives consent.

Appendix 2: Consideration of impacts on the Dornoch Firth & Loch Fleet Ramsar Site and Site of Special Scientific Interest

Following recent clarification from Scottish Parliament regarding Scottish Planning Policy, it is reaffirmed that Ramsar sites should have the same level of protection as Natura sites. As such, although the Habitats Regulations do not specifically apply to Ramsar sites, given the position of SPP to afford such sites the same protection as Natura sites it is considered appropriate for detailed consideration to be given to any potential impacts arising from the proposed development. In this instance, both the Ramar and Site of Special Scientific Interest both relate to wetlands and wetlands habitat, it is appropriate to ascertain the impacts on both the Dornoch Firth and Loch Fleet Ramsar Site and Site of Special Scientific Interest. These considerations are informed by SNH's Site Integrity Assessment.

SNH's website advises that 'Ramsar sites are protected through measures to protect and enhance Natura Sites (and SSSIs, where relevant) that they overlap with'. For completeness, the following evaluation highlights the likely impacts of the proposal.

Summary

In its initial response to the Council, SNH advised that the proposal is likely to have significantly adverse effects on this SSSI and Ramsar site, specifically the sand dune habitat. The management objective for sand dune within the Site Management Statement (SNH) is *'to restore the condition of the sand dune habitat'*. The proposal will result in significant permanent loss of sand dune habitat, especially dune heath and dune slacks and impacts to species which depend upon it. The finalised consultation response maintains the position that the proposal would have a significantly detrimental affect on the SSSI and Ramsar site with regards sand dune habitat. These are considered below:

Magnitude of direct impacts to sand dune habitats

The Environmental Impact Assessment (EIA) presented with the application does not appear to present the data on direct impacts of the course in context of the SSSI boundary. Therefore, an assessment of this has been made (by SNH) which is informed by using a digital layout of the course overlaying the developer's NVC habitat survey. The results using this approach indicate much higher impacts to sand dune habitats than those presented within the EIA and are shown in the table below.

Table showing habitat impacts presented within the EIA compared to assessments undertaken by us using the developers' data

Habitat	Area affected in EIA Report (ha.)	Area affected from our assessment (ha.)
Dune heath	4.47	8.5

Dune grassland (fixed dune)	2.51	4.8
Open dune (semi-fixed dune)	0.74	0.91
Dune slack	0.27	2.20

Effects on dune slack & hydrology

Coul Links supports some of the best quality SSSI dune slack habitats in Scotland. The water table and water chemistry of Coul Links are very important as they influence the sand dune vegetation communities which they support, especially the dune slacks.

Fertiliser, herbicide or pesticide could be washed towards or even into a dune slack, potentially damaging these dune habitats. It is noted within the EIA that leaching of fertiliser may reach 100% in sandy habitats, suggesting that nitrogen is likely to reach the water table, which could cause vegetation changes to dune slack habitats.

Advice received from the Sports Turf Research Institute (STRI) also suggests that it is standard practice to irrigate at a level lower than losses to evapotranspiration. If the management does involve irrigation at a level below the loss to evapotranspiration, it is highly likely that the water table will fall below its natural level, with adverse impacts on the dune slacks.

Effects on dune grasslands

The dune grassland on Coul Links is especially diverse and rich, reflecting the national importance of this sand dune habitat. The proposal will result in adverse impacts to dune grassland through habitat loss. The use of chemicals is also likely to have impacts, potentially changing these dune grassland communities through time.

Effects on notable species supported by SSSI sand dune habitat - Fonseca's seed fly (Botanophila fonsecai)

This rare fly is restricted globally to sand dune habitats, in proximity to Dornoch and Embo, and features on the Scottish Biodiversity List as requiring conservation action. The EIA shows that Coul Links supports a population of the fly.

This habitat may also support Ramsar wetland invertebrates. As so little is known about this fly, the level of disturbance that would be considered tolerable cannot be estimated. The disturbance resulting from the creation of fairways and greens and the subsequent long-term stabilisation of the dunes will very likely damage parts of the species' habitat, with additional impacts arising from use of herbicides and insecticides.

The developer's intention to promote further research on this fly is therefore welcome. The only mitigation proposed which is likely to benefit to Fonseca's seed fly is the retention of large areas supporting *Compositae* flowers (e.g. sow-thistle and black knapweed, etc.). Therefore, it is recommended that this is taken forward as mitigation should the proposal receive planning permission:

Ensure large and important areas of Compositae flowers are retained throughout Coul Links for Fonseca's seed fly.

Previous surveys found the species in significantly greater numbers than the latest survey. This factor is likely to reduce the resilience of the population to such a proposal. Like most endemic species, this fly is intrinsically at risk of extinction.

Effects on notable species supported by SSSI sand dune habitat - Green felt-lichen (Peltigera malacea)

This lichen features on the Scottish Biodiversity List as requiring conservation action and was recently discovered at Coul Links on a survey visit with lower plant specialist from SNH. An extensive population of this lichen were discovered within the footprint of hole 4 and five colonies outwith, but in close proximity to the fairway. Based on only a brief survey visit, Coul Links supports around 10% of the UK green felt-lichen population.

Success of translocation is uncertain and unlikely to be viable in the long-term. Green felt-lichen depends on intermediate levels of disturbance (i.e. rabbit scraping) to maintain areas that are not dominated by other large plants. However, the impact of this development is likely to be stabilising and therefore negative.

As fairways will be fertilised, and greens and tees will be treated long-term, there is a risk of additional impact if the fertiliser were to leach into the surrounding vegetation. Use of fungicides also has potential for adverse impacts.

Effects on notable species supported by SSSI sand dune habitat – grassland fungi

A survey in 2003 found part of Coul Links to support a diverse range of waxcap grassland fungi. This area was identified as an Important Fungus Area (IFA) which qualified for national importance at that time, with more than 12 species of waxcaps recorded.

Diverse communities of fungi are strongly associated with grassland that has been relatively undisturbed and avoided applications of fertiliser. Fungicides will also have adverse effects on grassland fungi. The proposal will result in the loss of grassland fungi and potential negative impacts outwith the course footprint due to potential drift and leaching of fertiliser and fungicides. The proposal will affect approximately a third of the previously identified IFA.

Translocation of dune heath

Habitat translocation is an important element of the developer's strategy to make good losses from the footprint of the golf course. Research indicates that the long-term success of habitat translocation, as proposed for dune heath, is uncertain. Recent research shows that the factors governing the success of translocation are poorly understood and that we should expect a high failure rate from this approach.

Long-term course management, coastal geomorphology and climate change

Sand dune is a dynamic habitat so it is important to consider how long-term management of the course might affect the SSSI, especially in the context of climate change. Some tees and greens are located close to the dune edge and are therefore at risk from coastal erosion. Should coastal defences be used to protect parts of the golf course they would likely result in further adverse impacts to the sand dune through the introduction of structures affecting natural processes. Therefore, the following mitigation measures to reduce impacts should the proposal receive planning permission are recommended:

- The Coul Links coastline should remain free from future coastal defences proposed to protect golf course assets.
- A Coastal Retreat Plan should identify strategies and alternative layouts to inform future course management if parts of the course become adversely affected by coastal processes.

Borehole water abstraction component – sand dune (Ramsar & SSSI), wetland invertebrates & Baltic rush[1] (both Ramsar)

The position on these interests is covered by the Appropriate Assessments undertaken for the SPA designation, as all these interests (including SPA/Ramsar teal and wigeon) are dependent on the groundwater level within the dune slacks.

Golf course construction & management - sand dune (Ramsar & SSSI), wetland invertebrates & Baltic rush (both Ramsar)

Further information has been provided on the level and type of fertiliser to be added during the establishment phase in years 1 and 2. This will be at a time when the soil will be at maximum porosity and irrigation rates at their highest, so there is a high risk of contamination of the water table at levels greatly exceeding the threshold values for nearby dune slacks.

A further source of nutrient enrichment is the irrigated water from the aquifer which has a higher nitrate (and pH) value than the surrounding water table within the dunes. Its nitrate content is double that set as the good practice threshold value by the UK Technical Advisory Group on the Water Framework Directive. These adverse effects are likely to alter sand dune habitats, resulting in permanent habitat change/loss.

The applicant is willing to address concerns about nitrate and pH levels of abstracted water to be used for irrigation, but the effectiveness of this as mitigation is questioned, as larger quantities of nitrate will be applied to the golf course as fertiliser.

Drainage works will be carried out during construction and for long-term maintenance of the playing surface. The installation of new drains and the re-contouring and re-grading of adjacent dunes both have the potential to interrupt or divert hydrological pathways to the dune slacks. As such, new drains should avoid entering dune slack habitats.

Recent information also indicates that Baltic rush, part of a Ramsar interest feature, is present at Coul Links and is likely to be impacted by the development, for example on hole 13. The proposal is likely to result in a reduction of this species within the Ramsar Site, but there is no evidence to what extent. Records held by SNH currently show that the Ramsar site wetland invertebrate interest is present in sand dune habitats on the Morrich More SSSI component of this Ramsar site. Whilst this feature is not known to be present at Coul Links, the dune slacks in which it could be found are likely to be adversely impacted by this proposal.

- ***Waste Water Treatment Plant outflow component - Eelgrass (Ramsar & SSSI), sand/mud flats (Ramsar & SSSI), saltmarsh (Ramsar &SSSI) and vascular plant assemblage (SSSI –Seaside centaury)***

As noted during the Appropriate Assessment for the designated SPA, the level of nutrients being discharged into Loch Fleet will be very low. This is a result of low effluent volume, combined with good levels of dilution within the discharge burn, as well as additional dilution within the tidal waters of Skelbo Bay. As a result, it is considered that any impacts to these features will be of a very low scale.

Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

Our ref: PCS/159500
Your ref: 17/04601/FUL and 17/04404/FUL

If telephoning ask for:
Jim Mackay

13 June 2018

Gillian Webster
The Highland Council
Drummuie
Golspie
KW10 6TA

By email only to: epc@highland.gov.uk

Dear Ms Webster

Town and Country Planning (Scotland) Acts
The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017
Planning applications: 17/04601/FUL and 17/04404/FUL
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 and Drilling of two boreholes and construction of water storage reservoir (maximum capacity 20000cu.m) for irrigation of (future) golf course
Land 1700M NW of Embo Community Centre, School Street, Embo and Land 860M south of Coul Farmhouse, Skelbo, Dornoch

Response to additional information provided by Not Coul, SNH and the applicant

Thank you for inviting SEPA to attend Planning Committee on 5 June 2018.

As expressed in our disclaimer on our previous responses, we are reliant on the accuracy and completeness of the information supplied to us and when further information is brought to our attention then we will take that into account. For the avoidance of doubt, our remit is to provide advice based on the information provided. It is not our responsibility to validate the submitted information.

SEPA has now had the time to evaluate additional information as provided by Not Coul ("Further Objection by Not Coul dated 21 May 2018"), SNH ("Hole-by hole analysis of vegetation and translocation" dated 10 November 2017) and the applicant (email of 4 June 2018 with attachments, and email of 10 June 2018 with attachments).

On most natural heritage matters SEPA defers to SNH as the lead authority. However, SEPA has a specific duty under the Water Framework Directive to protect wetlands.

The Not Coul report suggests that wetlands may be more impacted by the development than concluded in the Environmental Statement (ES) and its updated information. The applicant's responses confirm that they remain confident in their original assessment. Whilst considering this information SNH also provided us with their own hole by hole analysis which they used to inform their assessment of the impact on the proposals upon the designated sites.

We have therefore considered the Not Coul report, the applicant's responses, the SNH hole by hole analysis, our previous reviews of the ES alongside the ES itself and its updated information. Through this we can confirm that in terms of wetlands within our remit, we maintain our previous planning position which is no objection to these planning applications provided that planning **conditions** relating to waste water drainage and the Schedule of Mitigation are applied.

Further technical comments on the matters raised in the Not Coul report and a query raised by Members at Planning Committee on 5 June 2018 can be found in Appendix 1.

For the avoidance of doubt, SEPA's position is on the specific wetlands outside the Loch Fleet Site of Special Scientific Interest (SSSI) and Dornoch Firth & Loch Fleet Ramsar designation. SNH has already advised you of its assessment of the impact upon these areas in its response dated 25 May 2018. We defer to SNH on these aspects.

If you have any queries relating to this letter, please contact me by e-mail at planning.dingwall@sepa.org.uk.

Yours sincerely

Jim Mackay
Planning Manager (North)
Planning Service

[redacted]

Appendix 1: Technical comments

The Not Coul report, the applicant's response and the SNH hole by hole analysis also contain references to qualifying features of Dornoch Firth & Loch Fleet Special Protection Area and Ramsar Site and Loch Fleet Site of Special Scientific Interest.

For the avoidance of doubt, our comments below are limited to matters within our remit as set out in the land use planning working arrangements between SEPA and SNH (available from www.sepa.org.uk/environment/land/planning/advice-for-key-agencies/).

1. Habitat extents

1.1 The Not Coul Report suggests that wetlands may be more abundant than shown by the ES and its updated information and may be significantly impacted by the development.

1.2 The applicant's ES and its updated information concludes that wetlands that fall within SEPA's remit are generally outwith the development footprint, are not significantly impacted and that there would be adequate space to implement mitigation measures to protect the remaining wetlands.

1.3 The discrepancies between the findings of the Not Coul Report transect surveys and the survey submitted by the developer appear to be largely due to a difference in resolution. The mapping within the applicant's ES and its updated information has made greater use of mosaic polygons (i.e. lumping together small areas of different habitats) whereas Not Coul surveyed to a greater level of detail, or in other words, to a finer spatial resolution.

1.4 The SNH hole by hole analysis shows that there is a difference in extent and, in a few incidences, of type of National Vegetation Community identified in the Sand Dune Vegetation Survey of Scotland (The Sand Dune Vegetation Survey of Scotland 2012 (SDVSS) is a digitised version of surveys completed by Dr Tom Dargie between 1994-2000 https://gateway.snh.gov.uk/natural-spaces/dataset.jsp?dsid=SDVSS) and the applicant's 2017 habitat survey.

1.5 We agree with SNH's assessment of this in their hole-by-hole analysis and note their conclusions. However, in terms of our remit, which is much narrower in relation to natural heritage than SNH's, the magnitude of this difference is small and relates mostly to the proportion between different dune habitats around proposed holes within the SSSI. The magnitude of change that is noted outside the SSSI does not result in a changed understanding of those areas that are water dependent and thus does not result in material changes to the scale of the impact of the proposed development outside the SSSI. We therefore maintain our position on the impact of the development outside the SSSI.

1.6 In particular, Not Coul have highlighted the presence of an important Annex 1 habitat H3110 (Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) at Hole 13. We understand that this has been recorded in Scotland in only one Special Area of Conservation as a notified feature and that the number of these habitats in Scotland is likely to be low. SNH have confirmed to us that the habitat H3110 is part of the Coul Links SSSI citation under 'wet dune slacks and winter lochs'. SNH have already advised you on the impact of the proposals upon the SSSI in their response dated 25 May 2018 and we note their advice on the impact on this Annex 1 habitat.

1.7 Should the development gain consent, the finding of this habitat confirms the complexity of the site and supports the requirement for the Ecological Clerk of Works to carry out further survey work and micro siting as set out in the proposed Schedule of Mitigation..

1.8 Not Coul suggests that where the ES and its updated information determines that wetlands are surface water fed they are actually groundwater fed. We advise that wetlands, especially in Scotland, are usually fed by a variety of water sources (rain, surface and groundwater). The wet dune habitats within the site are likely to be fed by a mixture of ground and surface water. It is interesting to note that the Annex 1 Habitat H3110, which is likely fed by groundwater, is characterised as oligotrophic and mineral poor. We also know that the underlying groundwater resource is nitrate enriched and due to its nature not mineral poor and it is thus unlikely that this is the major source of water that feeds this Annex 1 habitat. Nutrient and mineral enriched groundwater would change the character of the wet dune slacks and the ecological evidence therefore indicates that groundwater is not the only and, in some cases, not the dominant source of water for wetland features on the surface. We therefore maintain our previous advice on the nature of wetlands within our remit.

2. Conceptual model of groundwater

2.1 Annex 4 (Sections 18 and 82) of the Not Coul report raises concerns about the applicant's conceptual model of groundwater. We consider that these concerns arise from a misunderstanding of the background to this model. The conceptual model presented by the applicant was requested by us to inform our knowledge of the hydrogeology of the site specifically in reference to the proposed groundwater abstraction from Borehole 1 and Borehole 2. As such this conceptual model uses the monitoring data available from four installed boreholes and pertains to the south of the development area.

2.2 Annex 4 (Section 89) of the Not Coul report refers to Section 5.5 of our response to Highland Council dated 23 March 2018 which stated "*Based on the information submitted to date, we consider that the proposed borehole abstractions are likely to be consentable under CAR but will be subject to a quantitative assessment of the groundwater depletion on the downgradient wetland, long term monitoring at MW1 and MW2 (and possibly other monitoring wells if needed), monitoring review and possible limitation to abstraction rates under CAR. We therefore remove our objection on this matter but we advise that it would be in the applicant's best interests to put a contingency plan in place as, should the longer term monitoring demonstrate a groundwater depletion on the downgradient wetland system, SEPA will be obliged to reduce the permitted abstraction rate under CAR. For example, should the permitted abstraction rate be reduced then it may be that alternate water supplies options are limited and the establishment of the golf course will take longer. The applicant should plan for these uncertainties. For the avoidance of doubt, the monitoring schedule will be agreed with us as part of the CAR determination process*." Our advice remains unchanged in light of the Not Coul report.

2.3 Annex 4 (Sections 83, 86 and 90) of the Not Coul report highlights the absence of site specific data on the variability of the water table across the site. We confirm that we are unaware of site specific factual data on groundwater levels across the whole site as we have only received site specific data in relation to the proposed water abstractions. Generally, we seek site specific groundwater data when it needs to be determined if a wetland is groundwater or surface water fed. The information to date demonstrates that wetlands within our remit are generally avoided by the development with minor direct habitat loss of some wetlands that we know are groundwater fed due to their habitat type. Therefore we have no cause to seek site specific groundwater data across the site.

2.4 For the avoidance of doubt, the Applicant's Response refers to a "…expert peer review by SEPA" of hydrological study. We have not carried out a peer review but have evaluated the ES and supporting assessments as per normal planning processes.

3. Use of borehole abstraction for irrigation

3.1 Annex 4 Sections 21 and 78 of the Not Coul report raises concerns about the use of the water from the borehole abstractions for irrigation due to the risk of nitrates to wetlands. Nitrate concentration in groundwater from the bedrock aquifer at the site (max. 27mg/l) is higher than the wetland Water Framework Directive UK Technical Advisory Group recommended threshold of 13mg/l. SEPA uses this threshold in its characterisation and classification of ground water fed wetlands. Any water used for irrigation needs to be below this threshold to be in accordance with Table 2 of The Scotland River Basin District (Standards) Directions 2014. This is confirmed within the proposed Schedule of Mitigation.

3.2 Annex 4 Section 80 of the Not Coul report raises concerns about the ability to dilute the irrigation water to reduce the nitrogen content. We advise that dilution is not the only available option to reduce the nitrogen concentration in water. Water treatment is a possible option as suggested by the applicant. It is understood that groundwater pumped from the two boreholes is to be stored in a large reservoir where treatment can be applied before use in the irrigation process. It is expected that most of the irrigation water will be utilised by the vegetation of the golf course greens with a small proportion percolating through the ground before it reaches the water table and any associated wetlands.

4. Contaminated land

4.1 SEPA notes the references to contaminated land in the submission by Not Coul dated 21 May 2018. For clarification, the identification of historic unlicensed landfills and other potentially contaminative uses is the responsibility of the local authority. In a planning context, in accordance with SEPA Guidance Note "LUPS-GU3 Planning guidance on land subject to contamination issues", SEPA does not directly engage with the planning authority on historic contaminative use matters.

4.2 As stated in Section 2.2 of "LUPS-GU3" "*For other contaminated land issues, it is the responsibility of the relevant Council contaminated land officers to take a lead on commenting on development plans and planning applications, with SEPA's own contaminated land specialists providing input directly to the local authority contaminated land officers in relation to impacts upon the water environment. SEPA have prepared standing guidance to local authorities outlining SEPA's roles and responsibilities on contaminated land within the planning process.*"

4.3 Our standing advice can be found in SEPA Guidance Note "LUPS-GU8 SEPA standing advice for planning authorities and developers on development management consultations". If it were determined that historic unlicensed landfills or other potentially contaminative uses were present, and could potentially affect groundwater fed wetlands, then we would expect that to be addressed as part of the EIA process. However as stated above, the identification of historic unlicensed landfills and other potentially contaminative uses is the responsibility of the local authority.

5. Impact upon sensitive receptors should the development not proceed

5.1 During the Planning Committee on 5 June 2018, Members sought our advice on the impacts upon sensitive receptors within our remit should the development not proceed. Without the presence of an ecologist we were unable to answer this query in full at the time but have since consulted our specialists take this opportunity to provide this advice now, as set out in the following paragraph.

5.2 During the Planning Committee we indicated that should the development not proceed we considered it likely that natural processes would continue on site. This is a complex site with many different habitats and natural processes, as detailed in SNH's advice, and we would defer to SNH's advice on the long-term management of the site. In terms of the wetlands on site, Members should note that wet dune slacks by their very nature have a seasonally highly variable water table with winter flooding and summer droughts sometimes in excess of 1m below the ground level. This fluctuating water table ensures that organic material (such as leaf debris), which would normally accumulate under permanently flooded and anaerobic conditions in a peat bog, oxidises during the drought phase of the wet dune and significant amounts of organic material therefore do not accumulate. The highly fluctuating water table also dries out seedlings of tree species and then floods them during winter. The result is a habitat where generally only willow species can survive.