

Hearing Statement of Benjamin Kite on Ecological Matters on Behalf of the British Lichen Society

Public Inquiry in Relation to the Application for Consent for Pumped Hydro Storage Scheme at Loch Kemp, Highland Council

Scottish Government Planning and Environmental Appeals Division
Case PS-270-2

Scottish Government Energy Consents Unit Application Number:
ECU00003398

Prepared on behalf of

The British Lichen Society

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1. INTRODUCTION AND CONTEXT

Qualifications and Experience of the Author

- 1.1 I am Benjamin Kite, Director at Ecological Planning & Research Ltd (EPR), Consulting Ecologists based in Winchester, Hampshire, England. I hold the degrees of Bachelor of Science with Honours in Biology from the University of Wales, Aberystwyth, and Master of Science in Environmental Assessment and Management from Oxford Brookes University.
- 1.2 I am a Chartered Ecologist (CEcol), full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and Practitioner Member of the Institute of Sustainability and Environmental Professionals (PISEP).
- 1.3 I am currently the elected Chair of CIEEM's Strategic Policy Panel (SPP) having previously sat as a member for several years. The SPP is a sub-committee of the CIEEM Governing Board that provides strategic oversight of the Institute's policy positions. Through my work with the SPP I helped to establish the All-Party Parliamentary Group (APPG) for Nature (which has since merged with the APPG for the Environment), a group of Parliamentarians from both the House of Commons and House of Lords, that collectively discuss environmental policy, seek cross-party consensus on environmental issues and advocate for positive change.
- 1.4 I have appeared twice as an Expert Witness to give evidence to Inquiries held by the House of Lord's Land Use and Built Environment Select Committees, and my evidence was cited in the two House of Lord's Reports that resulted from these Inquiries; *Making the Most of England's Land* (2022) and *The Impact of Environmental Regulations on Development* (2023). I have also given evidence to an Inquiry held by the House of Commons Environmental Audit Committee and was cited multiple times in the resulting report entitled *Environmental Sustainability and Housing Growth* (2025).
- 1.5 I have also given evidence as expert witness on ecological issues to multiple Public Inquiries into planning appeals in England, including cases that related to impacts on ancient woodland and International/European designated sites for nature conservation – subjects in which I have a particular expertise and knowledge.
- 1.6 I have worked in environmental consultancy for over 20 years (since 2005), initially as an Environmental Planner for a firm of planning consultants based at Hook in Hampshire, England, before joining EPR as an Ecologist in 2008.
- 1.7 My current work at EPR involves overseeing the ecological advice and support provided to some of the largest development projects in the UK, including individual residential developments comprising several thousand new homes and related infrastructure, commercial and energy generation projects (including biomass and renewables), one of the largest proposed sand and

gravel extraction projects in the UK, and several landscape-scale nature conservation projects including floodplain hay meadow and heathland restoration.

- 1.8 The main assessment processes that I work within are Ecological Impact Assessment (EcIA) and Environmental Impact Assessment (EIA), Habitats Regulations Assessment (HRA), Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA).
- 1.9 I was a member of the expert stakeholder group that advised Natural England (NE) on the revision of their 'Standing Guidance on Ancient Woodland' in 2018, and in recent years I have been commissioned by both NE and the UK's Joint Nature Conservation Committee (JNCC) to co-author new national guidance on the assessment of projects that impact on the habitats of designated nature conservation sites due to air pollution. I was also invited to be a guest contributor on biodiversity and air pollution to ISEP's recent guidance for the treatment of soils in EIA.
- 1.10 Finally, I carry out a range of other types of ecological survey and assessment work. I am a holder of NE survey licences for Sand Lizard and Smooth Snake and hold survey class licence registration for Hazel Dormouse in all Counties of England.
- 1.11 For transparency, it is important to note for the benefit of the Reporter and the Inquiry, that whilst I have a good professional understanding and knowledge of the habitats affected by the Proposed Development, and broadly of the lichen communities that inhabit them, I do not specialise in lichens (i.e. I am an ecologist, rather than a specialist lichenologist). Consequently, where I refer in my evidence to details relating to the lichen species that are present around the site of the Proposed Development, I have relied on information provided to me by the following individuals:
 - **Neil Sanderson** BSc (Hons) MSc – Currently Joint Conservation Officer of the British Lichen Society and past President of the Society. Neil Sanderson has worked as an ecologist - specialising in botany and lichenology - for over 40 years and is still ongoing. This work has involved extensive fieldwork throughout the UK and Ireland. Neil's area of expertise includes an understanding of the ecology and history of ancient pasture woodland habitats as well as heathland habitats. Neil's work in Scotland has included numerous surveys of pasture woodland habitats, site condition assessments, monitoring, interpretations of the landscape and ecological history of habitats, recording the distribution of species, training, and advisory work. Neil is regarded widely as one of Britain's foremost lichenologists who has also worked with international lichenologists specialising in the lichens of pasture woodlands. He contributes to peer-reviewed academic studies published in various journals. He is on the editorial board overseeing the revisions to Lichen Flora of Great Britain and Ireland as well as a contributing author to various chapters within the Flora.
 - **Andrew Cross** BSc (Hons) MSc MCIEEM – is EPR's lead botanist and is a highly experienced lichenologist, as well as the current Chair of the Trustees of the British Lichen Society. He has been working as an ecologist for over 25 years. In Scotland, Andrew has surveyed pasture woodlands for their lichen assemblages and conducted condition and monitoring assessments.
- 1.12 I have been briefed on the information that has been provided to me, and which has informed my evidence, sufficiently to be able to understand it. The intention is that I will be the primary

witness giving evidence on behalf of the British Lichen Society (BLS). If, however, I cannot adequately answer any detailed questions on the lichen species affected by the Proposed Development directly during the Inquiry Hearing, Neil Sanderson and Andrew Cross will both be available to assist and can contribute. Alternatively, I would be happy to take any queries away, obtain the answers and submit any required clarification by way of further technical notes as may be requested or required by the Reporter.

Scope of Evidence and Instruction

- 1.13 It is rare for the British Lichen Society (BLS) to intervene and make representations in respect of any planning applications. Further, the BLS accepts the desirability 'in principle' of delivering projects that increase the UK's capacity for renewable energy generation and for balancing the grid in order to enable more such projects to come forward.
- 1.14 However, it is the view of the BLS that such projects cannot come at any cost to the natural environment in the area that hosts them.
- 1.15 In this case, the BLS is of the opinion that if the Proposed Development, if consented without substantial changes, would cause serious and irreversible harm to an Internationally important nature conservation site and the globally important lichen assemblage that it supports. The BLS therefore objects to the proposals as they currently stand, and for the avoidance of doubt I agree with this position.
- 1.16 The BLS began to become concerned about the Proposed Development in late 2023. By the time the Scottish Government's Energy Consents Unit (ECU) were consulting upon the details of the planning application, it had become apparent to the BLS that intervention was warranted if the abovementioned harm was to have any prospect of being avoided.
- 1.17 With this in mind, the BLS commissioned my company, Ecological Planning & Research Ltd (EPR), in early 2024, to:
1. Review the details of the planning application;
 2. Advise the BLS on whether – and to what extent - we shared the concerns of the BLS; and
 3. To prepare a Technical Note (TN) outlining our concerns, for the BLS to be able to submit to inform any representations that they might wish to make in response to the (at that time) ongoing consultation on the Proposed Development.
- 1.18 Having completed steps 1 and 2 above, it was established that both I and my colleagues at EPR shared the concerns expressed by the BLS. We also had additional concerns regarding shortcomings in the technical work carried out, and the processes that have been followed, by the team engaged by Stratera Energy Limited ('the Applicant') to undertake the assessment of the negative impacts of the proposals upon ecological receptors. In particular, our concerns focused on the Internationally important lichen assemblage associated with the ancient woodland at Ness Woods Special Area of Conservation (SAC) and, in addition to this, the Nationally important lichen assemblage supported on the rocky shores of Loch Kemp and its surrounding heathland.

- 1.19 EPR subsequently produced the requested TN, which was dated 22 February 2024 and submitted to the ECU. The note was authored by myself and a colleague, Andrew Cross, and for convenience is included as **Appendix 1** (foundation document [005.018](#)) to this Hearing Statement.
- 1.20 For brevity and to avoid unnecessary duplication, I will not repeat at length or in detail the concerns and other technical matters already set out in our earlier TN in **Appendix 1** (foundation document [005.018](#)), which should instead be read in conjunction with this Hearing Statement, along with our earlier submission entitled '*Response to Highland Council's Inquiry Statement and NatureScot's Final Consultation Response*' (dated 28 January 2026)(foundation document [015.005](#)).
- 1.21 This Hearing Statement therefore will:
1. Summarise briefly the key concerns already raised by myself and the team at EPR on behalf of the BLS;
 2. Address the extent to which material submitted to the Inquiry after those concerns were raised addresses (or does not address) these concerns; and
 3. Provides advice to the Reporter on the correct interpretation of nature conservation related legislation and policy, in view of the above.

Structure of This Hearing Statement

- 1.22 To achieve the above, my Hearing Statement is structured as follows:
- In **Section 2** I have addressed the failure of the Applicant and their technical team to adequately consider alternative layouts for the Proposed Development that would have substantially reduced the scope for significant negative effects on Ness Woods SAC and the internationally important lichen assemblage that it supports. I also summarise some key shortcomings in the data that has helped to compound these failures.
 - In **Section 3**, I have outlined how the compensatory measures proposed to be delivered in conjunction with the Proposed Development, intended to offset the damage that it will cause to both Ness Woods SAC and the Nationally important lichen assemblage on the shores of Loch Kemp, fall significantly short of what is required.
 - In **Section 4**, I address and comment upon other matters that I believe to be of relevance to the determination of the application, including the effects of the proposals on important lichen assemblages outside of the SAC, and the evidence that has been submitted to the Inquiry by Buglife Scotland, to the extent that this falls within my expertise to do so.
 - In **Section 5**, I provide advice to the Reporter on the correct application of nature conservation related legislation and policy, in light of my findings as set out in the preceding sections of the Hearing Statement.
- 1.23 In the interests of avoiding unnecessary duplication, I have not re-stated in this Hearing Statement information previously provided on the relative importance of the lichen assemblages present at Ness Woods SAC and Loch Kemp. This can be found in Section 2 of our original TN

(see **Appendix 1** (foundation document [005.018](#))) and in our response note of 28 January 2026 (foundation document [015.005](#)).

Declaration

- 1.24 The evidence that I have prepared and provide for this Public Inquiry (PS-270-2) in this statement is true and has been prepared and is given in accordance with the guidance of my professional institutions, the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Institute of Sustainability and Environmental Professionals (ISEP). I confirm that the opinions expressed are my true and professional opinions.

2. INADEQUATE ASSESSMENT OF ‘ALTERNATIVES’

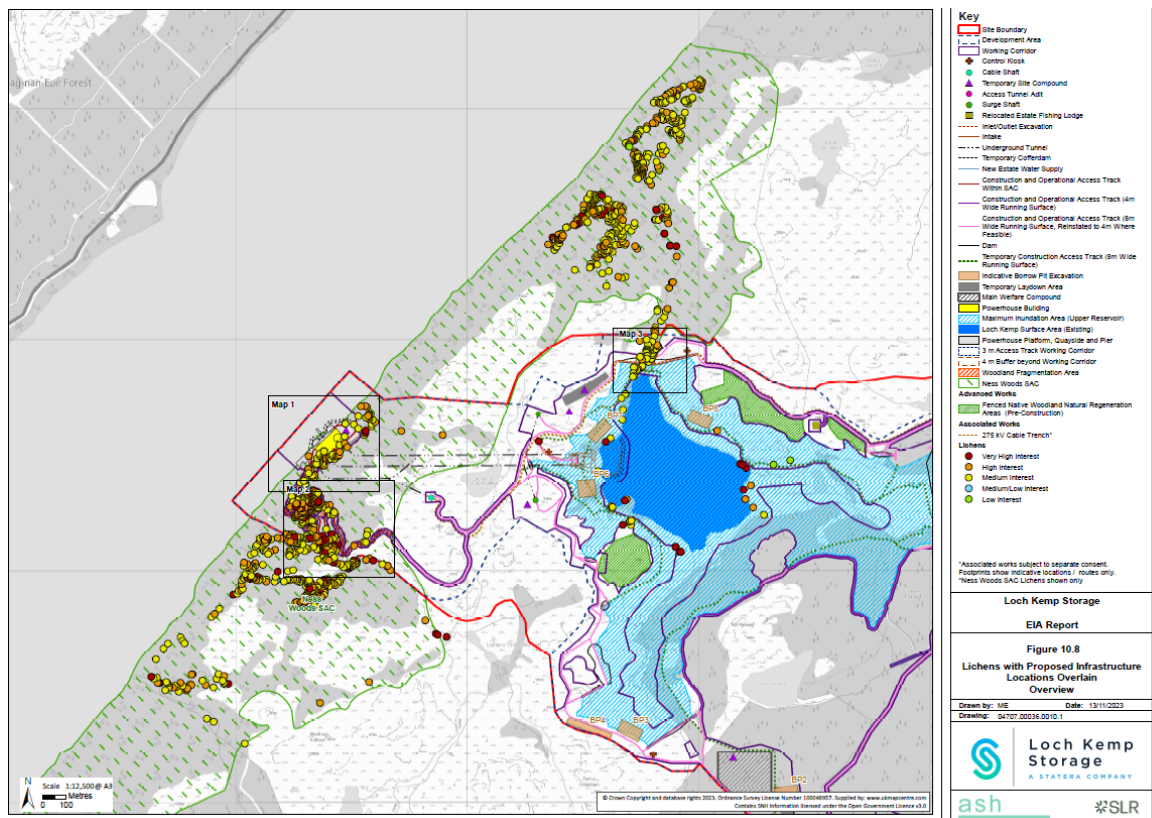
Conflation of Habitat Type Area with Relative Importance and Quality

- 2.1 As outlined in Section 3 of our original TN (**Appendix 1** (foundation document [005.018](#))), the ecological information presented alongside the Proposed Development expresses the scale of the adverse effect on Ness Woods SAC in terms of the percentage of the entire qualifying woodland habitat types within the SAC that are being lost.
- 2.2 This information is certainly important in terms of understanding the overall loss of an SAC qualifying habitat type. However, there is a problem with using this approach in isolation, where the Internationally important lichen assemblage is concerned. This is because the survey evidence shows that the distribution of important lichen populations is far from being uniformly distributed across the SAC or even its qualifying woodland habitat types. This is likely to be the case because the lichens in question here require a very narrow and exacting range of biophysical conditions that will not be presented across much of the SAC.
- 2.3 Whilst therefore there may be a relatively low percentage of a particular qualifying woodland habitat type being lost across the SAC, it does not follow that the loss of the Internationally important lichen assemblage contained within it is proportionate or directly correlated with the percentage loss of the habitat. In the case of Ness Woods SAC, the lichen assemblage shows a patchy and uneven distribution, and the Proposed Development causes the loss of what appears to be the single largest aggregation of important lichen species. This means that a much larger percentage of the lichen assemblage will be destroyed than is suggested by total habitat loss figures. If the core areas of lichen habitat are removed, the survival of individual species may be put at risk.
- 2.4 Ness Woods SAC is comprised of three separate component Sites of Special Scientific Interest (SSSIs). Despite being a ‘constitutive characteristic’ of the SAC and an inherent component of a qualifying Habitats Directive Annex 1 Habitat type that should be considered as part of any Habitats Regulations Assessment (HRA), there is no comparative data provided by the Applicant that enables the relative importance of the affected SSSI area to be compared to those two SSSI areas that will remain unaffected.
- 2.5 The two SSSI areas that are not affected by the proposals, to the north at Inverfarigaig - along the River Farigaig - and along the River Tarff to the South of Fort Augustus, are markedly different to the SSSI area spread along the southern banks of Loch Ness, that will be impacted

by the Proposed Development. It follows therefore that biophysical conditions in these other SSSI areas are likely to be very different, and by extension the lichen assemblage is also likely to be very different. No lichen survey data has been provided for these areas.

2.6 The terrestrial lichen survey information that *has* been provided with the Application (foundation documents [001.124](#), [001.125](#), [001.126](#), [001.127](#)) is limited to the affected SSSI component, and in fact suggests that the part of this SSSI area that is to be lost to the proposals (or fragmented and irreversibly altered in terms of prevailing biophysical conditions) supports a significantly denser and richer part of the SAC lichen assemblage than those other parts that are being retained. This can be seen on **Figure 2.1 below** – red and orange dots represent ‘very high’ and ‘high’ interest for lichens respectively. The proposed operations access track (marked in purple) passes directly through what appears to be the single largest aggregation of lichen interest in this part of the SAC).

Figure 2.1: Image of Figure 10.8 of the Environmental Statement that Accompanied the Proposals (foundation document [001.057](#))



NB: The area in the middle of the SAC area to the northwest of Loch Kemp is comprised of more recently developed woodland that is not suitable for supporting the important assemblage of lichens.

2.7 In short therefore, the information submitted with the Proposed Development indicates that the proposals will cause the loss of the majority, and damage to the remainder, of the most important area for lichens in the part of the SAC that has been surveyed. There is no information made available to provide any comfort to Scottish Ministers that similarly important alternative populations of the rare and important lichens supported by the SAC exist in the other two SSSI areas that comprise the SAC, nor to indicate how large or diverse these may be.

- 2.8 The absence in baseline survey information to inform the assessment appears contrary to case law (CJEU judgement in joined cases C-387/15 and C-388/15 ‘*Orleans and Others*’ and Case C-404/09 ‘*Commission v Spain*’)¹ from the Court of Justice of the European Union (CJEU) outlined in **Appendix 1** (foundation document [005.018](#)). The Applicant has not in my view provided sufficient information to enable the Scottish Ministers as competent authority under The Habitats Regulations to be able to understand exactly what proportion of the Internationally important lichen assemblage of the SAC will be lost or damaged.

Premature Discounting of Alternative Project Layouts

- 2.9 As set out in more detail in Section 3 of our TN (**Appendix 1**) (foundation document [005.018](#)), information submitted with the application states that the preferred route for the Operations Access Track was determined following an appraisal that was undertaken in January 2022 (see paragraphs 2.6.26 and 2.6.27 of ES Chapter 2 – foundation document [001.008](#)). By contrast, the terrestrial lichen survey work upon which the assessment of the proposals is based (foundation documents [001.124](#), [001.125](#), [001.126](#), [001.127](#)) was collected in April and May 2022.
- 2.10 These timescales presented in the application documentation therefore make it clear that the Applicant was not in possession of crucial information about the distribution of the internationally important lichen assemblage associated with Ness Woods SAC until **after** the route for the new Operations Access Track was decided.
- 2.11 This is a critical shortcoming in the approach that has been taken to the formulation of the proposals, as it seems certain that, had the selection of the Operations Access Track alignment waited until the lichen survey data had been collected, it would have been possible to choose an alignment for the track that caused significantly less damage to the Internationally important lichen assemblage.
- 2.12 I have already set out in Section 4 of **Appendix 1** (foundation document [005.018](#)), how only a cursory investigation of historic maps and desktop data enabled EPR to identify a large part of Ness Woods SAC, around Creag a’ Ghiubhais, which is derived from more recently developed woodland that is not suitable for supporting the important lichens at issue here. This is supported by the Applicant’s own lichen survey, which did not investigate this area owing to it having ‘much more limited potential’ for the habitat types that support the lichen interest (see the final paragraph on page 9, Section 3.3 of the Lichen Survey Report – foundation document [001.124](#)).
- 2.13 I have already provided from paragraphs 4.30 *et seq* of **Appendix 1** (foundation document [005.018](#)), reference to CJEU Case Law (Case C-239/04 *Commission v Portugal* (2006)) that in my view makes it clear that in considering alternative options for a project, a competent authority acting under the Habitats Regulations must necessarily be able to rule out the availability of

¹ For convenience I have already ensured that the relevant text extracts of any case law to which I refer in my Hearing Statement are provided in EPR’s original TN (**Appendix 1** or foundation document [005.018](#)), however, if required by the Reporter I can provide the full written judgements for each case and any accompanying opinions from the CJEU Advocate General.

solutions that cause less or no harm to a SAC. It is not sufficient to assert simply that those other solutions might 'present certain difficulties' such as (for example) increased cost.

- 2.14 Further to this, however, the European Commission produced a document entitled 'Managing Natura 2000 Sites' (2019) which provides guidance on the correct interpretation of Article 6 of the European Habitats Directive (92/43/EEC) that is transposed into domestic law via the Habitats Regulations. It states the following at Section 5.3.1 on pages 54 and 55:

"In line with the need to prevent undesired impairment to the Natura 2000 network, **the thorough revision and/or withdrawal of a proposed plan or project should be considered when negative effects on the integrity of a site have been identified**....."*

*Subsequently, the competent authorities should examine the possibility of resorting to alternative solutions which better respect the integrity of the site in question. **All feasible alternatives that meet the plan or project aims, in particular, their relative performance with regard to the site's conservation objectives, integrity and contribution to the overall coherence of the Natura 2000 network have to be analysed, taking also into account their proportionality in terms of cost. They might involve alternative locations or routes,** different scales or designs of development, or alternative processes.*

*As concerns the economic cost of the steps that may be considered in the review of alternatives, it cannot be the sole determining factor in the choice of alternative solutions (C-399/14, paragraph 77). In other words, **a project proponent cannot claim that alternatives have not been examined because they would cost too much.***

*In line with the principle of subsidiarity, it is for the competent national authorities to assess the relative impact of these alternative solutions on the site concerned. It should be stressed that the reference parameters for such comparisons deal with aspects concerning the conservation and the maintenance of the integrity of the site and of its ecological functions. **In this phase, therefore, other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria.***

***The absence of alternatives must be demonstrated,** before proceeding with the examination of whether the plan or project is necessary for imperative reasons of public interest (Court ruling in Castro Verde case C-239/04 paragraphs 36–39)."*

[My emphasis]

*Now incorporated into the UK National Sites Network.

- 2.15 My view is that the above guidance – which originates from the source of the Habitats Directive itself – is emphatically clear that it is necessary for a competent authority discharging their obligations under the Habitats Directive (and by extension the Habitats Regulations) to satisfy itself that there are no alternative solutions to achieving the objectives of the plan or project that would result in less harm or no harm to an SAC. It is not sufficient to simply assert that alternative options are not feasible due to other reasons (for example cost) – this must be demonstrated.

Case for Derogation

- 2.16 Subsequent to the production of EPR's original TN in **Appendix 1** (foundation document [005.018](#)), the Applicant submitted to the ECU a document entitled *Loch Kemp Storage: Case for Derogation* (Royal HaskoningDHV, 23 February 2025)(foundation document [003.005](#)), referred to in the foundation documents list as the 'Updated Case for Derogation'. This document supplements the original information submitted in support of the Proposed Development, and addressed what are referred to as the 'derogation tests' under the Habitats Regulations, through which (if passed) a Proposed Development may be consented despite causing an adverse effect on the integrity of an SAC.
- 2.17 I make no specific criticism of those parts of the document that relate to there being 'Imperative Overriding Public Interest' (IROPI) for permitting the project to proceed (encompassed by Section 3 of that document).
- 2.18 I do however believe that the reasoning outlined in Section 2 (entitled 'Assessment of Alternative Solutions') is flawed, and set out my reasoning for this below.

The 'Potential for Harm'

- 2.19 My first criticism of the 'Updated Case for Derogation' (foundation document [003.005](#)) is that, for the reasons that I have outlined already above (concerning the understatement of the damage to the Internationally important lichen assemblage), the evaluated 'potential for harm' that has informed the document has been understated.
- 2.20 Paragraphs 1.2.1, 1.2.2 and 2.4.1 of the 'Updated Case for Derogation' document (foundation document [003.005](#)) confirm that the information that has informed the document's assessment of the 'potential for harm' is the previous HRA Reports prepared by SLR Consulting Ltd and Gavia Environmental Ltd on behalf of the Developer (Foundation documents [001.005](#)), in which document it states "*The Proposed Development is described in full, along with the qualifying features of the Ness Woods SAC...*". In this respect, it should be noted that the referenced documents do not, as I have already explained, provide reliable assessment of the harm that will be done to the SAC's lichen interest (which is one of the SAC's key 'constitutive characteristics' that should be taken into account), because no information is provided to offer any comfort that the retained parts of the SAC support equivalent or even adequately important areas of lichen interest.
- 2.21 To address the requirement under the Habitats Regulations for alternatives to the plan or project to be considered, the report authors have designed their own 5-step methodology (see para 2.2.3) that is stated to be derived from the guidance and case law listed at paragraph 2.2.1.
- 2.22 Exactly *how* the specified list of guidance and case law has led to the proposed 5-step process is not explained, but in any case, step 2 of this self-designed process requires the assessor to 'Identify the potential 'harm' to Ness Woods SAC. This evaluation of harm also then informs step 5 of the process, which examines whether any 'feasible' alternatives would have what is referred to as a 'lesser effect' on the Ness Woods SAC.
- 2.23 To the extent that the Reporter may agree with me therefore that harm to the lichen interest of the SAC is not adequately described and assessed in the referenced SLR Consulting Ltd and Gavia Environmental Ltd documents, the relevant parts of the Royal HaskoningDHV 'Updated Case for Derogation' report (foundation document [003.005](#)) are similarly undermined.

- 2.24 The fact that the previously misguided approach of drawing false equivalence between area of habitat affected and the relative quality and importance of the areas affected for SAC features has been carried forward into the 'Updated Case for Derogation' report (foundation document [003.005](#)) is confirmed at para 2.4.4, which states that a 'worst case' prediction is that 'up to 5.42ha of qualifying woodland habitat' will be lost.
- 2.25 Paragraphs 2.4.6 to 2.4.10 proceed to quantify the relative loss of habitat types and the number of individual trees "...and their lichen and bryophyte assemblages", but no attempt is made to quantify what proportion of the lichen assemblage is actually being lost or damaged, or to compare this to what is being retained.
- 2.26 Paragraph 2.4.11 states, at the final bullet point on page 11, that:
- "Multiple access track route options have been considered to try to reduce land take within the qualifying woodland habitat and minimise tree loss, as well as impacts on bryophyte and lichen communities, as far as possible.."*
- 2.27 I can find no evidence for the above statement in respect of its potential applicability to the Internationally important lichen assemblage of Ness Woods SAC. As I have already highlighted above in my paragraphs 2.9 to 2.10, information provided in the Environmental Statement confirms that the final access track option was chosen on the basis of a site appraisal that was carried out prior to the collection of any lichen survey data. There is no evidence that I can find to indicate that the choice of operation access track alignment was influenced in any way by concerns for the preservation of the lichen assemblage.
- 2.28 Paragraphs 2.4.14 and 2.4.15 summarise what is said to be the 'residual potential for harm' without mentioning lichens even once.
- 2.29 At paragraph 2.5.3, page 14, there is a list of 'alternative designs' that have supposedly been considered with a view to further reducing negative effects on the Ness Woods SAC. The potential benefits of all of these 'alternatives' are described in terms of reduced SAC land take, and there is no indication that the differences in relative importance of land within the SAC to maintaining its constitutive characteristics have been considered, beyond broad habitat type (there is no mention, for example, of the potential for there to be reduced impacts on the lichen assemblage).
- 2.30 Of the 'alternative designs' listed on page 14, it is not wholly clear which of the listed options might have avoided or reduced impacts on the most important parts of the SAC for lichens, but the following option at bullet point 6 (which is not shown on any map or figure as within the Updated Case for Derogation Report far as I can see) would appear to be an option that might enable the most important areas of the SAC for lichens to be avoided:
- "Adopting a route for the track to the north of the powerhouse to minimise hairpins"*
- 2.31 If I have understood this 'alternative design' correctly (which is later listed as alternative design number 6), then this would involve creating a new track within the SAC that proceeds northwards from the powerhouse before turning eastward through the Creag a' Ghiubhais area of the SAC (which as indicated above is very likely to lack the important lichen communities that are so important for the SAC).

2.32 Proceeding on the assumption that my understanding of the above alternative design option is correct, it is subsequently confirmed in Table 2-4 of the Updated Case for Derogation Report that this alternative design would meet the objectives of the project, and so it is taken forward to ‘step 4’ of the report author’s self-designed assessment process (‘Consider whether any short listed potential alternative options are ‘feasible’ alternative solutions (i.e. legally, technically and financially feasible)).

2.33 At paragraph 2.6.2 of the Updated Case for Derogation Report, the assessment of which alternative options are ‘feasible’ begins, and the following statement is made:

“Defra (2021) states that an alternative solution is acceptable if it is financially, legally, and technically feasible. Conversely, an alternative solution is not acceptable if it is not financially, legally, or technically feasible. An alternative should not be ruled out simply because it would cause greater inconvenience or cost, however, there will be a point where an alternative is so expensive or technically or legally difficult that it would be unreasonable to consider it a feasible alternative.”

2.34 This is however subject to the following caveat at para 2.6.3:

“Definitions for financial, legal, and technical feasibility are provided below. It is important to note, however, that environmental feasibility (i.e., whether an alternative would have a lesser effect on the integrity of a European site) is not considered as part of this step.”

2.35 Alternative design number 6 (‘Use route to north of the powerhouse to minimise hairpins) is then addressed at paras 2.6.17 and 2.6.18. These state:

“Use of an alternative track route to the north, which reduced the number of hairpins, was assessed (the potential to reduce the harm to the SAC by 0.6ha was envisaged). However, in terms of technical feasibility, the extent of the earthworks required would be prohibitive due to the extremely steep terrain, to the point where this option was not considered to be constructable / technically feasible.

Moreover, on further examination it was determined that the earthworks associated with the required cut and fill were likely to have a large footprint in the SAC, meaning that any reduction in the footprint of the Proposed Development in the SAC would not be realised. That is, the use of route to the north of the powerhouse would require a bridge crossing the outflow of the Allt an t-Sluichd watercourse into Loch Ness, which would require significant additional earthworks within the SAC.”

2.36 In the first instance, I can find no information provided anywhere in the submitted documents that confirms that there was any meaningful attempt to explore what would be required to construct this route option. There are (for example) no route plans, cost forecasts or cross-sectional drawings that I can find, that might have meaningfully led to a justified rejection of this option. The only evidence that I can find to indicate that this route option was even considered, is a single red line on a plan – if ‘option 6’ shown on Plate 2.3 from Environmental Statement (ES) Chapter 2 (Design Evolution and Alternatives)(foundation document [001.008](#)) is the same as ‘option 6’ in the Updated Case for Derogation Report. As mentioned already, this crude red line on one single map is stated to have been rejected as an option following an appraisal that occurred very early on in the project conception in January 2022 (see paragraphs 2.6.26 and

- 2.6.27 of ES Chapter 2 – foundation document [001.008](#)), prior to any meaningful ecological information being available pertaining to lichens.
- 2.37 In my view paragraphs 2.6.17 and 2.6.18 above of the Updated Case for Derogation Report that dismiss this route option as not being feasible amount to no more than an assertion that this option would not work – there is no actual evidence provided to confirm that this is the case, to enable Scottish Ministers acting as competent authority under the Habitats Regulations to be confident in ruling out this potential option as being not feasible. Indeed, the language used in the Updated Case for Derogation Report itself seems decidedly uncertain about what building this route option would actually entail, as it states that the option is “...**likely** to have a large footprint in the SAC...” [my emphasis].
- 2.38 Notwithstanding this, the text used here in the Updated Case for Derogation Report again conflates and confuses total SAC area lost with relative quality and importance of SAC area lost (for example, the larger footprint of a route alignment to the north of the powerhouse would certainly avoid much of the truly ancient woodland and most of the identified important areas of lichen interest).
- 2.39 In relation to the other route options presented, option 5 (covered at paras 2.6.15 and 2.6.16 of the Updated Case for Derogation Report and entitled ‘Alter the track alignment to maximise grassland take’) may be synonymous with option 5 shown on Plate 2.3 of Chapter 2 of the ES (foundation document [001.008](#)). If so, then this route option would also avoid most (but not all) of the ancient woodland and areas of important lichen interest, by cutting across open habitats directly between Loch Kemp and the proposed powerhouse.
- 2.40 If this is correct, option 5 is dismissed following similar un-evidenced assertions of “...*challenges associated with its constructability.*”, with no hint of what these challenges might have been, or any evidence presented to indicate that attempts were made to overcome them.
- 2.41 In my view the justification for ruling out these two route options in particular are crying out for further explanation, and I do not believe that Scottish Ministers are currently in possession of sufficient information to be able to discharge their responsibilities under the Habitats Regulations of being able to conclude that the absence of alternative solutions has been **demonstrated**, as opposed to asserted.
- 2.42 In relation to this, as noted in our submission of 28 January 2026 (foundation document [015.005](#)), NatureScot has advised that it is “...*not within NS’s remit.*” to comment on the first two limbs of the derogation case (i.e. including whether there are alternative solutions to achieving the objectives of the project that cause less or no harm to the SAC. This means therefore that this important aspect of the assessment of the proposals, and one that is mandated in law, has not yet effectively been prosecuted by any independent regulator or expert stakeholder.

3. INADEQUATE COMPENSATION MEASURES FOR ADVERSE EFFECTS ON THE INTEGRITY OF NESS WOODS SAC

3.1 As already set out in our original TN (**Appendix 1** (foundation document [005.018](#))) and our submission of 28 January 2026 (foundation document [015.005](#)) on behalf of the BLS, I do not consider that adequate compensation measures have yet been put forward to address any adverse effect on the integrity of Ness Woods SAC, should the proposals be consented.

3.2 I will not duplicate points already made in previous submissions, including in particular:

- The fact that the adequacy of compensation cannot be satisfactorily judged where the predicted damage to the SAC has not been ‘precisely identified’; and
- The inherent difficulty in providing compensation for the loss of an ‘irreplaceable’ habitat such as ancient woodland (the importance of which is primarily derived from its great antiquity - see our response of 28 January 2026 (foundation document [015.005](#))),

3.3 I am content to let my opinions on the above matters remain as previously expressed, though reserve the right to respond to any rebuttal made in this respect.

3.4 Notwithstanding this, I offer below for clarity some further explanation on the key principle that motivates my main concerns on the approach that has been taken toward the provision of compensation for damage to Ness Woods SAC – that of at least some of the measures proposed as compensation not actually being anything of the sort.

Offering Adequate Management of the SAC as ‘Compensation’

3.5 Fundamentally, the Applicant appears to be (at least in part) offering up as ‘compensation’ actions which should ordinarily be expected as part of the normal management and good stewardship of an SAC. This information is contained within the document entitled *Technical Report to Inform Updated Ness Woods SAC Compensation Package* (SLR, 5 February 2025)(the ‘Compensation Report’)(foundation document [003.004](#)) and is referred to as the ‘adaptive management’ of 234.76ha of the Ness Woods SAC to improve its condition from ‘unfavourable’ to ‘unfavourable recovering and, in due course, to favourable’.

3.6 The Habitats Directive (Directive 92/43/EEC), from which the Habitats Regulations are derived, very carefully separates out the distinct and separate responsibilities placed on Member States pertaining to the designation and care of Internationally important sites such as SACs in Article 6 of the Directive. It does this as follows [my emphases]:

- Article 6(1) states:

*“For special areas of conservation, **Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites.**”*

- Article 6(2) states:

“Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive”

- Article 6(3) states:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.....”

- Article 6(4) states:

*“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the **Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected...**”*

3.7 To summarise the above insofar as it is relevant to the Proposed Development:

- Article 6(1) requires Member States to ‘establish’ the **management** that is needed to meet the ecological requirements of an SAC.
- Article 6(2) requires Member States to take action to **prevent the deterioration** of SACs due to existing sources of pressure, and
- Article 6 (3) then requires any new projects that may affect an SAC to be assessed to determine whether they would adversely affect the integrity of an SAC, and if so
- Article 6(4) then requires, if the project must in any case be consented, that appropriate **compensation** is provided.

3.8 The compensation package advanced by the Applicant proposes the adjustment of management of SAC areas to improve the condition of the qualifying woodland habitat types within the SAC. In so doing, the Applicant is in my view offering to provide under Article 6(4), the management measures that should already be provided under Article 6(1) and therefore eliding two separate and distinct requirements.

3.9 In my view, this approach risks undermining the purpose of the Habitats Directive. If it was to be accepted, it would create a perverse incentive for SAC owners to neglect the positive management of their SACs, in order to gain the benefit of then being able to offer improved management in future, in exchange for being permitted to develop within the SAC in a manner that harms or destroys part of it.

3.10 The European Commission guidance document entitled *Managing Natura 2000* (2019), appears to offer support for my concerns in this respect, as it states on page 58 that:

“Compensatory measures should be additional to the actions that are normal practice under the Habitats and Birds Directives or obligations laid down in EU law. For example,

the implementation of conservation measures under Article 6(1), or the proposal/designation of a new area already inventoried as being of Community importance, constitute 'normal' measures for a Member State. Thus, compensatory measures should go beyond the normal/standard measures required for the designation, protection and management of Natura 2000 sites."

- 3.11 In my view, the very fact that the measures proposed by SLR in the Compensation Report (foundation document [003.004](#)) are needed to change the condition of the SAC woodlands from 'unfavourable' to 'unfavourable recovering' strongly suggest that they should have been required in any event under Article 6(1) of the Directive, and are not 'additional' forms of compensation.

Lack of Understanding of Required Management of Ness Woods SAC

- 3.12 Notwithstanding the above concerns about the extent to which changes in proposed management of SAC woodlands can be properly described as 'compensation', having liaised with the BLS, I share their concerns that the Applicant may not have an adequate grasp of what might constitute appropriate management for Ness Woods SAC.
- 3.13 I do not dispute (and based on the evidence agree with) the conclusion that grazing pressures within Ness Woods SAC are too high, and that the conservation status of both the woodlands and the lichen assemblage that they support could be improved if grazing pressure were reduced. However, the applicant's proposals for management somewhat worryingly refer to the "cessation of grazing". Unhelpfully, NatureScot in their consultation responses (foundation documents [004.014](#), [004.013](#) and [009.001](#)) appear not to have given any advice on the appropriate management of Ness Woods SAC beyond the need to control Red Deer.
- 3.14 It is very important to appreciate the nature of the woods at Ness Woods SAC as historically grazed woodlands, likely with the grazing as the primary value of the woodlands for much of their existence (see Smout, C. T., MacDonald, A. R. & Watson, F. (2005) *A History of the Native Woodlands of Scotland 1500 – 1920*. Edinburgh: Edinburgh University Press). The importance of maintaining *appropriate* levels of grazing in woods like Ness Woods SAC is now well recognised and has been incorporated into advice provided by (for example) the Alliance for Scotland's Rainforest – see here: <https://savingscotlandsrainforest.org.uk/guidance/grazing> (a word version of relevant text can be provided if required).
- 3.15 The issue negatively affecting Ness Woods SAC now is not necessarily likely to be grazing *per se*, but too much grazing by a less suitable animal (Red Deer) for too long. For much of its history, Ness Woods SAC would have only been grazed by Red Deer in low numbers, but would have been subject to seasonal grazing by controlled domestic stock (cattle). In my view, any future management regime should be informed by this essential requirement.
- 3.16 Neil Sanderson of the BLS, who has been commissioned to do many Site Condition Monitoring surveys in Scotland, has informed me of his view that whilst the Woodland Herbivore Impact Assessment (WHIA) is a standard method of assessing herbivore impact that is used in Scotland, it does tend to be operated on the basis that any visible impact of herbivores is bad. Its application therefore can make it a bit problematic for use in historic pasture woodland systems such as Ness Woods SAC, where a lack of any visible herbivore impact would be very bad and usually results in serious short term but irrevocable damage to the lichen assemblage and other light demanding biodiversity. In contrast, over-grazing is a long-term threat due to the

potential for non-replacement of trees, but it is not the immediate threat that under grazing is. The differing time scales of the threats of under and over grazing to the old growth dependant lichen assemblage is not reflected in the nuances of the WHIA, which requires different interpretations depending on the actual land use: commercial forestry is not the same as old growth pasture woodland.

4. OTHER CONCERNS

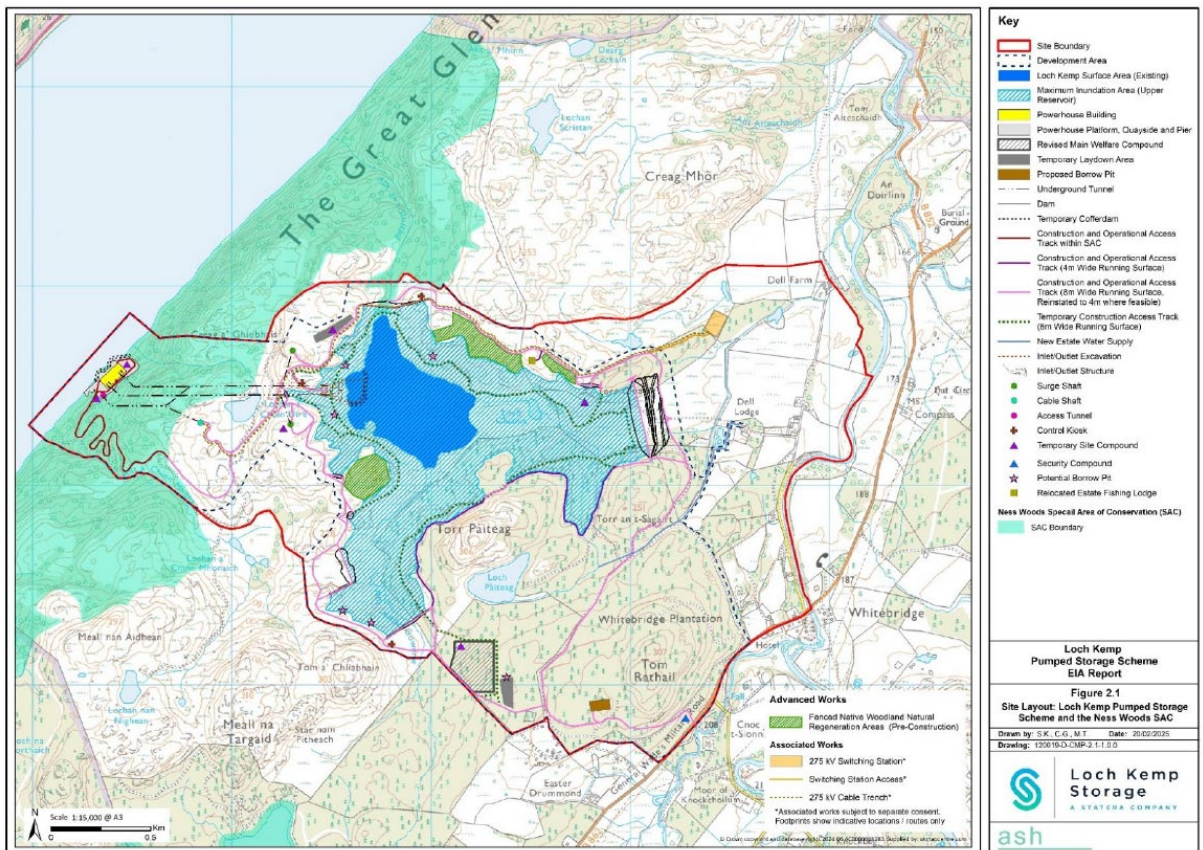
The Non-SAC but Nationally Important Lichen Assemblage Associated with Loch Kemp

4.1 As outlined in Section 6 of our original TN (**Appendix 1** (foundation document [005.018](#))), outside of the Ness Woods SAC, the lichen survey work undertaken by the Applicant identified two separate and distinct assemblages of lichens around Loch Kemp that were judged to be of National importance (i.e. of a level that would justify designation as a SSSI, albeit that they have hitherto lain unrecognised). These were:

- The community of epilithic lichens living on boulders and stones around the rocky shore of Loch Kemp; and
- The community of terricolous lichens living in the heathland habitats around Loch Kemp

4.2 As a result of water levels being raised in Loch Kemp as part of the scheme, both of these lichen communities will be lost under water, as they occur within the anticipated inundation zone (shown on the extract from the ES provided below as **Figure 4.1**):

Figure 4.1: Extract of Figure 2.1 from the Updated Derogation Report (foundation document [003.005](#)), showing the Maximum Extent of Inundation



- 4.3 As I mentioned in our original TN (**Appendix 1** (foundation document [005.018](#))), the proposed compensation for these two certain, permanent, negative impacts of National significance, are far from refined, and by the admission of the Applicant's own lichenologist, are highly speculative and come with a very high level of uncertainty.
- 4.4 I only raise this again now because, having reviewed the additional material that has been submitted to the Inquiry since our original submission in February 2024 (i.e. foundation documents 002.001 to 003.005), I cannot see anywhere that any attempt has been made to improve upon this position by way of any development or refinement of the previously outlined compensation 'suggestions' for these two Nationally important lichen communities that lay outside of the SAC.
- 4.5 In my view, unless both firmer evidence-based proposals for compensation of these losses is both brought forward and secured through an appropriate legal agreement, no weight can be attached to the proposed compensation for the loss of these features, and the negative impacts on the non-SAC lichen assemblages of National importance should be weighed in the planning balance against the proposals on this basis.

Buglife Scotland's Representations Dated 27 January 2026

- 4.6 For the benefit of the Reporter, I have read the representations of Buglife Scotland submitted to the Inquiry in the form of a letter dated 27 January 2026.
- 4.7 The first two sections of this letter (entitled 'River Murrison SAC' and 'Reduced Productivity in Loch Ness') contain subject matter that is beyond my own technical expertise, and I therefore do not comment upon this material herein, aside to say that I can if required seek the opinions from a specialist colleague in EPR.
- 4.8 With respect to the remainder of the letter, from the title 'Ness Woods Special Area of Conservation' onwards, I can confirm that I have read the statements made by Buglife and am in agreement with them.
- 4.9 This is particularly true in respect of the comments made by Buglife, which echo our submission of 28 January 2026 (foundation document [015.005](#)) in highlighting that new habitat creation cannot replicate the resource that is being lost, which is ancient woodland and veteran trees that derive from long ecological continuity and whose constituent parts take decades or even centuries to develop the unique conditions that enable them to support their biodiversity – including both the Internationally important lichen assemblage that is characterised in **Appendix 1** (foundation document [005.018](#)), and other species such as the specialist invertebrates listed by Buglife.
- 4.10 I share the view apparently being communicated by Buglife in this letter, that NatureScot's conclusion that the compensation package offered by the Applicant will be sufficient to offset the proposal's impact on conservation objectives 2a (which relates to the extent and distribution of the two qualifying SAC woodland habitats) and 2c (which relates to the distribution and viability of typical species of the habitat – i.e. including assemblages of rare lichens) which is detailed in Annex B, pages 18 and 19 of the NatureScot Letter – foundation document [009.001](#)), is deeply flawed. In reaching this conclusion, NatureScot appear to have disregarded both the attributes of an ancient woodland that cannot reliably be reproduced, the very narrow range of conditions needed by the rare lichens and other similarly specialist species (which explains why

they do not occur everywhere within the SAC). In my view, NatureScot's assumption that creating more new woodland than is being lost (even on a 1:10 ratio) cannot in my view overcome the unavoidable reality that the newly created woodland is highly unlikely to provide the conditions required to support the specialist species that are being lost in some considerable quantum. I believe NatureScot has misdirected itself in accepting the principle of evaluating the proposed compensation offering on the basis of overall net 'area' of habitat being provided, and in accepting improved management of existing SAC habitat areas as an acceptable form of compensation.

Statement of Common Ground Between the Applicant and Highland Council

- 4.11 Finally before summarising my conclusions, I would like to comment upon the document entitled "PS-270-2 – Loch Kemp Storage Electricity Generation Station Statement of Agreed Matters – Terrestrial Ecology" (Burgess Salmon, undated but obtained from the NCU website on 26 January 2026)(foundation document [016.003](#)).
- 4.12 This document records matters pertaining to terrestrial ecology upon which the Applicant and Highland Council are supposedly in agreement. I do not seek to comment on the matters contained therein exhaustively, but wish to highlight that at paragraph 3.9, this document states:
- "With the exception of impacts on ancient woodland, which is commented on below, there is no disagreement between the Parties. The Parties are agreed that:*
- (a) The assessment undertaken within the EIAR and Shadow Habitats Regulations Appraisal was appropriate in scope and content.*
- (b) It has been demonstrated that potential impacts on other terrestrial ecology receptors (including potential impacts on protected/notable species and potential impacts on lichens outside the Ness Woods SAC) have been mitigated and compensated for, and enhancement measures proposed, such that the potential impacts are acceptable in policy terms."*
- 4.13 I have already outlined above what I believe to be the flaws in the HRA process that has been carried out, insofar as these are related to the adequacy of the assessment of alternatives and compensation, which relates primarily to the ancient woodland elements of Ness Woods SAC that form its key qualifying habitats.
- 4.14 To the extent therefore that the documents referred to in paragraph 3.9 a) of the Statement of Agreed Matters (above) can be said to be 'appropriate in scope and content' therefore, I do not think that this remark can be taken to mean that Highland Council have no objection in respect of the impacts on the SAC qualifying features of the site or the compensation measures proposed in response to this. I think this is worth clarifying, as paragraph 3.10 of the Statement of Agreed Matters, which ostensibly frames the ancient woodland matters about which there is continued disagreement, does not explicitly refer to the objections clearly expressed by Highland Council in their Inquiry Statement of 28 January (foundation document [009.010](#)).
- 4.15 In respect of paragraph 3.9 b) of the Statement of Agreed Matters, the statement that impacts on lichens outside of Ness Woods SAC have been 'mitigated and compensated for' is surprising because, as was pointed out in our original TN (**Appendix 1**) (foundation document [005.018](#)), not even the Applicant's own submitted material claims any confidence that this is the case –

proposing as it does further 'investigation into the feasibility' of translocating these lichens, and an acknowledgement that this 'may not be feasible for many of them'.

- 4.16 For the avoidance of doubt, I am not aware of anything in the submitted documentation that would enable a rational basis to be reached for concluding that impacts on the Nationally important lichen assemblage around Loch Kemp have been adequately addressed.

5. CONCLUSIONS

Conclusions under the Habitats Regulations in respect of Ness Woods SAC

5.1 With reference to the stages of the HRA process outlined in the European Commission guidance document entitled *Assessment of Plans and Projects in Relation to Natura 2000 Sites – Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (2021)*, I have summarised my conclusions below for the convenience of the Reporter:

- Insofar as the ‘Screening’ stage of the HRA process is concerned (Stage 1 of the HRA process) I believe it is undisputed that the Proposed Development is likely to have a significant effect on the Ness Woods SAC.
- Because of this, the Scottish Government as ‘competent authority’ under the Habitats Regulations must proceed to undertake an ‘Appropriate Assessment’ (AA) of the proposals (Stage 2 of the HRA process).
- It is I believe it is also undisputed that the Proposed Development will cause an adverse effect on the integrity of the Ness Woods SAC, and consequently, the Proposed Development does not pass an AA.
- In order therefore for the Proposed Development to be consented despite failing to pass an AA, the Scottish Government must be able to conclude that there are no feasible alternatives to achieving the objectives to the Proposed Development that are also less harmful to the SAC (Stage 3, Step 1 of the HRA process), and that there are Imperative Reasons of Overriding Public Interest (IROPI) for allowing the project to proceed (Stage 3, Step 2 of the HRA Process).
- I make no comment on the IROPI merits of this scheme, but I cannot see that sufficient information and evidence has been submitted in conjunction with the planning application or laid before the Inquiry to enable the Scottish Government to safely reach the view that there are no feasible alternatives to achieving the objectives of the Proposed Development that would cause less harm to the SAC.
- The submitted evidence in fact shows, in my view, that alternative route alignments for the Operation Access Track, that would have avoided the destruction of what is likely to be the most important aggregation of the Internationally important lichens within the SAC, were summarily dismissed at an early stage of the conceptual development of the proposals and prior to the relevant ecological information on important lichen distribution actually becoming available.
- Since these alternative route alignments were rejected, it appears that only un-evidenced assertions have been put forward to attempt to explain why they are not feasible. These assertions are not consistent with my understanding of the level of confidence that is needed to justify the destruction of what is an inherent part of the qualifying features of an Internationally important designated site. For the avoidance of doubt, the lichen assemblage that, based on the best available evidence stands to be largely destroyed if the proposals are consented, is a key ‘constitutive characteristic’ of the qualifying habitat types for which the SAC was designated.

- Should the Reporter take the view that I am mistaken and decide to recommend that the proposals be consented, Stage 3, Step 3 of the HRA process ('Identification, assessment and adoption of compensatory measures') requires that all necessary compensatory measures are put in place to ensure the 'overall coherence' of Natura 2000 is maintained.
- There are in my view serious flaws in the approach that has been taken by the Applicant to the provision of compensation. These include:
 - Reliance on the implementation of conservation management measures that should already be required to be delivered, and which if accepted risk undermining the purpose of the Habitats Regulations; and
 - A misguided approach to formulating compensation that has conflated the total area of SAC / SAC qualifying habitats being lost, with the relative importance of those different areas of habitats. The effect of this is to under-represent – perhaps very significantly - the importance of the destroyed and damaged areas in respect of the fact that they support a disproportionately large part of the Internationally important lichen assemblage; and
 - A failure to recognise that the specific elements of the destroyed qualifying SAC woodland habitats that are required to support the important ecological interest is inseparably linked to the ancientness of these habitats and other location-specific factors, and therefore cannot be replaced in practice, at least within a human lifespan.
- For these reasons, even if the Reporter takes the view that there are no feasible alternative options to the current approaches taken by the Proposed Development that would cause less harm to the SAC, my view is that the compensation measures proposed cannot be relied upon to maintain 'overall coherence' of this element of the protected sites network. As explained in our original submission (**Appendix 1**), the lichen assemblage that is present here is globally unique, Internationally important and wholly reliant on a narrow range of biophysical conditions that cannot be reliably replicated.

5.2 For the above reasons, I take the view that the Proposals cannot currently be consented in accordance with the requirements of the Habitats Regulations.

Conclusions in Respect of the Nationally Important Lichen Assemblage

5.3 In respect of the Nationally important lichen assemblage that occurs on boulders and in heathland around Loch Kemp but outside of Ness Woods SAC, my conclusions are that:

- This important and only recently recognised natural asset of National importance for nature conservation will be wholly destroyed by the Proposed Development
- There are to my knowledge no firm proposals for compensating for this loss, and the speculative compensation 'options' outlined in the application material are themselves candid about the unavoidably high risk of compensation failure.

National Policy

5.4 Policy 3 of the National Planning Framework 4 (NPF4)(foundation document [012.001](#)) for Scotland states [My emphasis]:

a) Development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible.

b) Development proposals for national or major development, or for development that requires an Environmental Impact Assessment will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. This will include future management. To inform this, best practice assessment methods should be used. Proposals within these categories will demonstrate how they have met all of the following criteria:

i. the proposal is based on an understanding of the existing characteristics of the site and its local, regional and national ecological context prior to development, including the presence of any irreplaceable habitats;

ii. wherever feasible, nature-based solutions have been integrated and made best use of;

iii. an assessment of potential negative effects which should be fully mitigated in line with the mitigation hierarchy prior to identifying enhancements;

iv. significant biodiversity enhancements are provided, in addition to any proposed mitigation. This should include nature networks, linking to and strengthening habitat connectivity within and beyond the development, secured within a reasonable timescale and with reasonable certainty. Management arrangements for their long-term retention and monitoring should be included, wherever appropriate; and

v. local community benefits of the biodiversity and/or nature networks have been considered.

c) Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity, in accordance with national and local guidance. Measures should be proportionate to the nature and scale of development. Applications for individual householder development, or which fall within scope of (b) above, are excluded from this requirement.

d) Any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the need to reverse biodiversity loss, safeguard the ecosystem services that the natural

environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

- 5.5 My view is that both in relation to the harm that will be caused to Ness Woods SAC and to the Nationally important lichen assemblages that occur outside of the SAC that will be destroyed, the Proposed Development fails to accord with this policy in terms of the required outcome.
- 5.6 Additionally, in my view the Proposed Development also fails to meet the requirements of part b) i) of Policy 3, by failing to provide information that enables the scale of loss of the Internationally important lichen assemblage to be fully understood at local, regional or National level, and in failing to acknowledge or address the loss of irreplaceable ancient woodland.
- 5.7 It is also notable that the majority of the concerns and objections I set out below appear capable of being overcome through revisions to the Proposals (or at least evidence has not been provided to demonstrate that this is not the case).
- 5.8 In summary therefore, my submission to the Reporter is that he should recommend to the Scottish Ministers that permission for the Proposed Development is refused for the above reasons.

Appendix 1

British Lichen Society Objection Dated 22 February 2024

Loch Kemp Storage - Scottish Government Energy Consents Unit Application Number: ECU00003398

Review of Habitats Regulations Assessment (HRA) Matters

1. INTRODUCTION

- 1.1 Ecological Planning & Research Ltd (EPR) were commissioned by the British Lichen Society (BLS) to review proposals by Statera Energy Limited for a 600MW pumped storage scheme referred to as 'Loch Kemp Storage', in relation to the implications that arise from them under the Habitats Regulations (discussed further below). The scheme was submitted to the Scottish Government Energy Consents Unit on 20 November 2023 under application number ECU00003398.
- 1.2 The proposals are for the creation of a water storage facility through the expansion of Loch Kemp, located on the high ground on the southern side of Loch Ness, Scotland, together with the construction of a new access road from Loch Kemp to Loch Ness that is proposed to pass through Ness Woods Special Area of Conservation (SAC), a 'European Site'.
- 1.3 The Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "1994 Habitats Regulations") apply to European Sites. Where reserved matters (within the meaning of Schedule 5 of the Scotland Act 1998) are concerned, certain provisions of the Conservation of Habitats and Species Regulations 2017 (the "2017 Regulations") apply instead. Both sets of regulations require an equivalent process in relation to the assessment of plans and projects with the potential to affect European sites. For convenience, in this Review both sets of Regulations are therefore collectively referred to as the 'Habitats Regulations'.
- 1.4 The Habitats Regulations originally transposed European Directive 92/43/EEC *on the conservation of natural habitats and of wild fauna and flora* (the 'Habitats Directive'), and at the time of writing must still be interpreted in light of the requirements of the Habitats Directive and relevant case law from the Court of Justice of the European Union (CJEU), the UK's exit from the European Union notwithstanding.
- 1.5 The BLS is seriously concerned about the impact of the proposals upon an Internationally important and likely irreplaceable assemblage of lichens that is present within the Ness Woods SAC and will be subject to significant negative effects caused by the proposal.
- 1.6 Additionally, the BLS has misgivings about the way in which the proposals appear to have failed to investigate readily apparent opportunities for avoiding or reducing the damage to the lichen assemblage that will be caused by the scheme, or otherwise have failed to provide any justifiable explanation as to why such opportunities have not been taken forward. Finally, the BLS does not consider that the proposals for compensation are adequate in relation to the damage that will be caused to the lichen assemblage.

- 1.7 As a result of the above, EPR has been asked by BLS to review the ecological information submitted in conjunction with the planning application pertaining to the potential effects of the proposals upon the lichen assemblage, to provide advice on whether these concerns are justified, and if so the implications that arise in relation to the application of the Habitats Regulations to the planning application.

2. THE IMPORTANCE OF THE LICHEN ASSEMBLAGE

Relationship to the SAC Qualifying Features

- 2.1 Ness Woods SAC is approximately 850ha in extent and encompasses the areas of three separate Sites of Special Scientific Interest (SSSIs). Of particular relevance to this review are the two Habitats Directive Annex 1 Habitats that form the qualifying features of the SAC:
- 9180 **Tilio-Acerion* forests of slopes, screes and ravines (an Annex 1 Priority Habitat) which is the Annex I habitat that is the primary reason for selection of the Ness Woods SAC site; and
 - 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles' which is the Annex I habitat present as a qualifying feature, but not a primary reason for selection of the Ness Woods SAC.
- 2.2 As is conceded at paragraph 1.3.1 of the *Loch Kemp Storage: Shadow Habitats Regulations Appraisal (HRA) Report (Stage 1 and 2)* (SLR, November 2023), the lichen assemblage that will be impacted by the proposals is comprised of species that form typical/characteristic species of the '9180: *Tilio-Acerion* forests of slopes, screes and ravines' Habitats Directive Annex 1 habitat type that is both the primary reason for the designation of this SAC and also a **'Priority' Habitat under the Habitats Directive**.

The Ecological Importance of the Lichen Assemblage in its own Right

- 2.3 Notwithstanding the fact that the lichen assemblage forms an integral component characteristic of the Annex 1 Priority Habitat for which the SAC was designated, it is also of international nature conservation importance in its own right.
- 2.4 The lichen survey recorded over 80 taxa (lichens and associated parasites) of conservation interest; substantial populations of species of conservation importance; and lichen communities of high nature conservation interest.
- 2.5 The Ness Woods SAC is in an area where three main woodland types meet: boreal woodland; southern oceanic woodland; and lowland rainforest. Certain lichen species are used as indicator species to assess the quality of these woodland types based on published criteria (Sanderson et al., 2018). The boreal and southern oceanic woodlands had remarkably high numbers of indicator species marking these two woodlands as being of exceptional quality for their lichens. The habitats of these woodlands that are of prime importance are, respectively, the old birchwoods and the hazel stands.
- 2.6 The lowland rainforest is here on the edge of its range but still had enough indicator species for it to be a high-quality example of this woodland type.

- 2.7 A terrestrial lichen survey within a selected area (primarily the proposed development parcel) of the Ness Woods SAC was commissioned by the Applicant. The survey was commissioned for 2022. The survey was conducted by consultant lichenologist Andy Acton and carried out in April/May 2022. A full report of the lichen survey is given in the ES Volume 4 Appendix 10.3 and provides a description of the importance of the lichens in the survey area. This states:

*“The birchwoods and old growth hazels (and associated trees/shrubs of other species) both support **old growth lichen communities of SSSI quality and are of national significance. The old-growth hazel habitat is of international significance for lichens.** The site supports a large number of lichen taxa that are rare/threatened in a UK and/or European context. Most of these taxa are strongly associated with veteran hazel but several were recorded on other veteran trees/shrub species including birch, ash, aspen and rowan.”*

[Extract from Executive Summary of the Lichen Survey Report – our emphasis]

- 2.8 A summary of the importance of the lichens in the area of the SAC surveyed is given in the Shadow HRA (SLR, November 2023) from section 10.6.21 to 10.6.28. The HRA concluded their summary of the importance of the lichens in the survey area as:

*“Overall, the birchwoods and old growth hazels (and associated trees/shrubs of other species) support **old growth lichen communities meeting SSSI quality, and are evaluated as of national value. The lichen assemblage specifically on the old-growth hazel habitat is assessed as being of international value.**”*

[Paragraph 10.6.28 HRA – Our emphasis]

- 2.9 Further important context on the ecological importance of the lichen assemblage is summarised below using extracts taken from paragraphs 10.6.23 to 10.6.26 of the Shadow HRA (SLR, November 2023):

*“**The Site supports a large number of lichen taxa that are rare/threatened in a UK and/or European context.** Most of these taxa are strongly associated with veteran hazel but several were recorded on other veteran trees/shrub species including birch, rowan, ash, aspen, oak and alder.*

The old growth Lobarion pulmonariae (Lobarion) community of more base-rich bark was present and locally very well-developed on veteran hazel, ash, rowan and an ancient stand of layering cherry. The Lobarion community included hyperoceanic elements more typical of the lichen-rich woods in western Scotland. The high quality of the Lobarion is reflected in the presence of fertile specimens of several species that are often not fertile in suboptimal habitats and several lichenicolous fungi.

The Graphidion scriptae (Graphidion) community was recorded on smooth bark. The acid bark community was very well developed on old/veteran birch with many old growth species.

*The woodland habitats for lichens have been assessed using the Boreal Woodland Index (BWI), the Sub-oceanic Woodland Index (SWI) and the ‘Pinhead’ Index of Sanderson et al. (2018). **The Site easily exceeds the threshold for SSSI quality based on its BWI score, with 31 BWI species recorded, exceeding the 15 BWI species threshold.** Three*

Upland Rainforest Index species were also recorded, indicating the importance of the boreal woods. **Thirty-two SWI species were recorded, which exceeds the SSSI quality threshold of 20 species.**

The Site falls just below the 10 species SSSI threshold for the 'Pinhead' Index, with nine species recorded. To put the Site into context of more western woods in the Scottish temperate rainforest zone, the Site supports 23 species on the Lowland Rainforest Index (the threshold for SSSI status is 25).

The Site therefore meets SSSI quality for lichens of birchwoods and hazel stands, based on multiple criteria. The Site is particularly important because it supports old woodland species that are scarce and threatened in this region of Scotland especially oceanic/hyperoceanic species at the edge of their range, and the best hazel stands support viable populations of a number of them, including *Pachyphiale fagicola*, *Arthonia sampaiana*, *Nevesia sampaiana* and *Parmeliella testacea*; the outstanding populations of the latter two species also meet the requirements to qualify the Site for SSSI status.

[Our emphasis]

Individual Species of Conservation Importance

- 2.10 Of the 80 or more lichen species of conservation interest recorded in the survey area. Not all are in the impact zones of the proposed development, but they do tell of the exceptional conservation interest of the old woodlands in this area of the Ness Woods SAC.
- 2.11 Two of these lichen species, **which do have part of their population in the impact zones**, are of particular importance and are described below:
- 2.12 The first is *Nevesia sampaiana* where **its population in the survey area is the second largest in Britain**. This species is scarce in Europe outside of Britain and it is considered to be a species for which Britain has an International Responsibility (Sanderson et al., 2018¹) for conserving. The size of the population in the survey area in Ness Woods SAC is of national and international significance. Even so, *Nevesia sampaiana* is in decline in Britain and has been put on the Red List for lichens as Near Threatened.
- 2.13 The population of the *Nevesia sampaiana* is so extensive and in such good condition that it supports **the largest population (in the world as far as known)** of its obligate parasite (i.e. **a parasite that can only grow on *Nevesia sampaiana***).
- 2.14 The second species is *Parmeliella testacea*, also in the 'International Responsibility' category, which has a population in the survey area described as 'outstanding' in the Lichen Survey report and is of national and international importance. Like *N. sampaiana*, *P. testacea* is declining in Britain and also listed as Near Threatened.

¹ Sanderson, N. A., Wilkins, T.C., Bosanquet, S.D.S and Genney, D.R. 2018. Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 13 Lichens and associated microfungi. Joint Nature Conservation Committee, Peterborough

- 2.15 Six other species on the Red List for lichens are in or near the Proposed Development. In addition to these Red Listed species, many other notable species are likely to be impacted by the Proposed Development including Nationally Rare, Nationally Scarce, Biodiversity action Plan (BAP) and Scottish Biodiversity List species.

Lichen Communities

- 2.16 The lichens form various communities in the various types of woodland and some of these communities are of high nature conservation interest both for the intrinsic value of the community as well as the species that make up the community. Lichen communities of particular interest recorded in the survey area are:

- Old-growth, base-rich bark with the Lungwort community (the '*Lobarion*');
- The smooth bark community (the '*Graphidion*');
- The acid bark community of old/veteran birches; and
- The Pinhead community.

- 2.17 "The old growth '*Lobarion*' community of more base rich bark was present and locally very well-developed on veteran hazel, ash, rowan and an ancient stand of layering cherry. The high quality of the *Lobarion* is reflected in the presence of fertile specimens of several species that are often not fertile in suboptimal habitats and several lichenicolous fungi." [Extracted from the Lichen Survey report].

- 2.18 A diverse smooth bark '*Graphidion*' community was recorded that included old growth species, species typical of hyperoceanic conditions. The smooth bark community here is a species-rich example.

- 2.19 The acid bark community was very well developed on old/veteran birch and is a good, diverse example of this community. Particularly notable were old growth species, some of them fertile, which is not common.

- 2.20 The pinhead community is one of dry, rough bark of old birch and which is sheltered from direct rainfall. The pinhead community is well developed here and includes a diverse species assemblage.

- 2.21 The presence of this number of lichen communities and their quality is an indication of the rich diversity of the woodland in this part of the Ness Woods SAC.

Old-growth Hazel

- 2.22 Many lichens species of conservation interest are associated with the old growth hazels including the internationally important populations of *Nevesia sampaiana*, its parasite *Arthonia sampaianae*, and *Parmeliella testacea*. The hazels are also the key species for the important *Lobarion* and *Graphidion* communities. The old growth stands here are of exceptional quality and are a critically important and fundamental part of the 9180 Tilio-Acerion forests of slopes, screes and ravines habitat. They have been assessed as being of international importance.

Old Birch

- 2.23 The old birch woods have species of conservation interest and are the key species for the acid bark and pinhead communities, both of which are well developed, diverse examples of each community. The old birch here was assessed as being of national importance for the lichen species and communities that it supports.

3. COMMENTS ON THE APPROPRIATE ASSESSMENT AND THE ASSESSMENT OF THE ADVERSE IMPACTS OF THE SCHEME UPON SAC SITE INTEGRITY

The Reported Scale of the Adverse Effect on Site Integrity

- 3.1 The *Shadow Habitats Regulations Appraisal (HRA) Report (Stage 1 and 2)* (SLR, November 2023) concludes that the proposal would result in a **permanent** 'adverse effect on the integrity' of the Ness Woods SAC even after the application of impact avoidance and mitigation measures.
- 3.2 Whilst we concur with this overall conclusion, our view is that the Shadow HRA Report (SLR, 2023), which is also reflected in Environmental Statement (ES) Chapter 10 (Terrestrial Ecology) may significantly understate the scale of the adverse effect on SAC site integrity.
- 3.3 We have reached this conclusion because the Shadow HRA bases its assessment on the percentage (%) of the total of each of the two Habitats Directive Annex 1 qualifying habitat types that will be caused to be lost by the proposal. It does not, however, take into account the relative distribution or split in quality of the characteristic features, species and 'constitutive characteristics' of the SAC qualifying habitats as between those areas being lost and those areas being retained, when making this assessment.
- 3.4 The shortcoming in focusing only on total % area of each habitat type being lost (as opposed to the relative quality and importance of the areas being damaged or destroyed versus those being retained) is that it does not enable a decision-maker to understand whether or not the proposals are disproportionately destroying or damaging those areas that support a higher quality or density of the 'constitutive characteristics' or typical/characteristic features or species of the SAC qualifying habitats (in particular the Habitats Directive Priority Habitat).
- 3.5 For an example of the flawed 'area-percentage-based' approach that has been taken, ES Chapter 10 states at paragraphs 10.8.28 and 10.8.29 that:

*“Overall, the direct loss of up to 0.60 ha, and the indirect effect of habitat change via fragmentation of 0.13 ha of ‘Tilio-Acerion forests of slopes, screes and ravines’ including the associated bryophyte and lichen interest, is assessed as constituting an adverse effect upon this woodland qualifying interest, which is significant at an international level. This is based on the fact that although the extent of loss and fragmentation is small, **it represents up to 2.90% of the total habitat type within Ness Woods SAC**, which given that this habitat type is very restricted in its distribution within Ness Woods SAC, and given that it is the primary reason for selection, is considered significant.”*

“For the qualifying interest habitat ‘Old sessile oak woods with Ilex and Blechnum in the British Isles’, the (up to) 4.96 ha of direct habitat loss, and 1.04 ha of habitat change via

*fragmentation, represents **(up to) 1.12% of the total habitat type within Ness Woods SAC**. Given the extent of the loss and fragmentation, and its status as qualifying interest habitat for the SAC, and given the loss or potential loss (via fragmentation) of bryophytes and high and very high conservation value lichens forming an important component of the qualifying woodland interest, the habitat loss is assessed to constitute an adverse effect which is significant at an international level.”*

[Our emphasis]

The Actual Adverse Effect on SAC Site Integrity

- 3.6 The Ness Woods SAC is composed of three separate SSSI areas each separate from the other. There appears to be no information presented in the ES or any of its associated documents regarding the distribution of the two Habitats Directive Annex 1 habitats throughout the SAC and in the other SSSI components.
- 3.7 Additionally, however, the internationally and nationally important lichen species and communities/assemblages that form inherent components of these Annex 1 habitats will not be present in all areas of the Annex 1 habitats wherever they occur.
- 3.8 The lichen assemblage is in fact dependent on a number of biophysical factors including long ecological continuity of the woodland (i.e. they will need to have an element of ‘old-growth’ woodland), appropriate microclimate (for example temperature, humidity etc), aspect and historical management (there will be significant differences in lichen species in a given Annex 1 habitat depending on whether that habitat has been managed by coppicing or as a pasture woodland).
- 3.9 Based on the information provided with the planning application, we cannot know whether the internationally important lichen assemblage on old-growth hazel woodland or the nationally important lichen assemblage present in the birchwoods and old growth hazels (and associated trees/shrubs of other species) identified within the survey area for the proposed development is actually present in other parts of the Ness Woods SAC at all, or to the same or a lesser degree.
- 3.10 Furthermore, we do not know from the information that has been presented how much of the total SAC resource of either the Internationally or Nationally important lichen assemblage is actually located within the area that will be damaged or destroyed by the proposed development.
- 3.11 For reasons that will be outlined below under **Section 5** of this Review (*The Assessment of Alternatives*), the information provided with the planning application in fact indicates not only that other parts of the Ness Woods SAC do not support lichen assemblages of equivalent importance, but that alternatives for the layout and design of the proposals that might have avoided those areas that are important were summarily rejected as alternative options for the proposals without proper consideration.

- 3.12 In relation to the above, the CJEU concluded in Case C-258/11 *Peter Sweetman and Others* (2013), that:

*46 Consequently, if, after an appropriate assessment of a plan or project's implications for a site, carried out on the basis of the first sentence of Article 6(3) of the Habitats Directive, the competent national authority concludes that that plan or project **will lead to the lasting and irreparable loss of the whole or part of a priority natural habitat type** whose conservation was the objective that justified the designation of the site concerned as an SCI, the view should be taken that such a plan or project will adversely affect the integrity of that site.*

*Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that a plan or project not directly connected with or necessary to the management of a site **will adversely affect the integrity of that site if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat** whose conservation was the objective justifying the designation of the site in the list of sites of Community importance, in accordance with the directive. **The precautionary principle should be applied for the purposes of that appraisal.**"*

- 3.13 Whilst in relation to the above it is of course the case that the Shadow HRA Report does reach the conclusion that the proposals will have an adverse effect on the integrity of the Ness Woods SAC, it should be noted that the following is also true:

1. The Internationally and Nationally important lichen assemblages that would be damaged and at least partially destroyed by the proposals do in fact represent 'constitutive characteristics' of a priority natural habitat type.
2. It is not known what percentage of the total SAC resource (or indeed the resource of the entire Natura 2000 network of all European sites) is represented by the Internationally and Nationally important lichen assemblages that have been identified within the areas that are to be damaged and destroyed. Given this *lacunae* in the information provided by the Shadow HRA (SLR, 2023), the precautionary principle should be applied, and it should be assumed that the important assemblages of lichens may not occur outside of the survey area unless it can be demonstrated otherwise.
3. The proposals will cause the 'lasting and irreparable loss' of that part of the priority natural habitat type that is represented by the lichen communities that form part of their constitutive characteristics (and by extension therefore prevent their 'lasting preservation'). The loss will be 'irreparable', not only because it will be impossible to restore the lichen communities to the areas lost/impacted, but because it is also likely to be impossible to re-create those lichen assemblages elsewhere in any reasonable timescale measured in terms of a human lifespan, as the lichen species in question require old growth (i.e. ancient) woodland, in addition to a very narrow range of other biophysical and chemical conditions (as alluded to above) that may not exist in any compensation site.

- 3.14 In relation to point 2 above, paragraph 50 of the CJEU judgement in joined cases C-387/15 and C-388/15 ‘Orleans and Others’ states:

*“...the Court’s case-law emphasises the fact that **the assessment carried out under Article 6(3) of the Habitats Directive [an ‘Appropriate Assessment’] may not have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned**”*

- 3.15 Notwithstanding therefore the fact that the Shadow HRA Report (SLR, 2023) has reached the conclusion that there will be an adverse effect on the integrity of the Ness Woods SAC, the fact that the survey data that has informed the assessment of that adverse effect is not complete means that any Appropriate Assessment based upon it cannot in our view reach accurate conclusions regarding the scale of the adverse effects of the works proposed on the protected site concerned.
- 3.16 This observation is important, since the tests that must be carried out under Article 6(4) of the Habitats Directive, in the event that an Appropriate Assessment concludes that there will be an adverse effect on the integrity of a European Site, both necessarily require this information. This is discussed further below.

4. THE ASSESSMENT OF ALTERNATIVE SOLUTIONS

- 4.1 The Habitats Directive and Regulations require that where an ‘Appropriate Assessment’ reaches the conclusion that there will be an adverse effect on the integrity of a European Site (as is the case with Ness Woods SAC in respect of the proposals), the competent authority (in this case the Scottish Government) can consent to the proposals **only if there is an absence of alternative solutions** (the ‘alternatives’ test), and if there are ‘imperative reasons of overriding public interest’ (the ‘IROPI’ test) that mean that the project must nevertheless be carried out.
- 4.2 Additionally, as the Ness Woods SAC contains a Habitats Directive Priority Habitat type, the only IROPI justifications that may be considered relate to human health or public safety, or to beneficial consequences of primary importance for the environment, or other reasons having regard to the opinions sought from Scottish Ministers.
- 4.3 The concerns identified by this Review relate mainly (but not solely) to the approach taken by the proposals to the ‘alternatives test’, and the information related to this is provided by the applicant in the *Derogation Report* (Royal HaskoningDHV, 20 November 2023).
- 4.4 Taking into account the shortcomings and of, and lacunae in, the Appropriate Assessment, as detailed above in **Section 3** of this Review, paragraph 36 of CJEU Case C-521/12 *T.C. ‘Briels and Others’* states the following of particular relevance:

“Knowledge of those implications [of the plan or project for the European Site] in the light of the conservation objectives relating to the site concerned is a necessary prerequisite for application of Article 6(4) since, in the absence thereof, no condition for application of that derogating provision can be assessed. The assessment of any imperative reasons of

*overriding public interest **and that of the existence of less harmful alternatives require a weighing up against the damage caused to the site** by the plan or project under consideration. In addition, **in order to determine the nature of any compensatory measures, the damage to the site must be precisely identified** (Case C-404/09 *Commission v Spain* EU:C:2011:768, paragraph 109).*

[Our emphasis]

- 4.5 The above case also closely aligns with that of an earlier case (C-304/05 *Commission v Italy*).
- 4.6 It follows from the above that, because the Appropriate Assessment has failed to identify the scale of the adverse impact on a key constitutive feature of the Priority Annex 1 habitat type for which the SAC was designated, it is not possible either to ‘weigh’ the IROPI of the proposals against the scale of harm that will be done, nor indeed to satisfactorily demonstrate that there were no other alternatives for achieving the objectives of the plan or project that were either not harmful or less harmful.
- 4.7 In the latter case, it seems clear that some of the alternative layouts and designs for the proposed development were discounted from consideration prior to and in some cases without obtaining the ecological survey data that was needed to establish the least harmful approach. We provide further detail on this below.

The Alternatives That Have Not Been Adequately Considered

Alternative Locations

- 4.8 Whilst our concerns do not relate primarily to the assessment of alternative locations, it does seem surprising that, as stated in Table 2-4 of the *Derogation Report* (Royal HaskoningDHV, November 2023) meeting the demand for pumped electricity storage would require “...*all viable locations to be developed*”. The *Derogation Report* appears to rely in this respect on the assertion that only already proposed sites can be brought forward in time to meet the identified need, and there does not appear to be any evidence provided to explain what efforts have been made to identify new sites that might be less constrained.

Alternative Designs

- 4.9 Our review has identified that, at least in some respects, the proposals have summarily rejected alternative options for design and layout that would have been very likely to reduce the degree of harm caused by the proposals to the SAC, and that this was done prior to, and in some cases in the absence of, the necessary survey data being available to inform that decision.
- 4.10 Early-stage investigations within the Dell Estate included Phase 1 habitat mapping, National Vegetation Classification (NVC) mapping and a bryophyte walkover survey. All these were done in the summer of 2021 (para 10.5.2 ES Report Vol 1 Chapter 10). **No early-stage lichen survey was carried out as part of the preliminary investigations.**
- 4.11 The documents submitted in conjunction with the application show that 6 access track options were prepared and decided upon without even preliminary lichen survey data. The detailed lichen survey was commissioned after the track options had been decided.

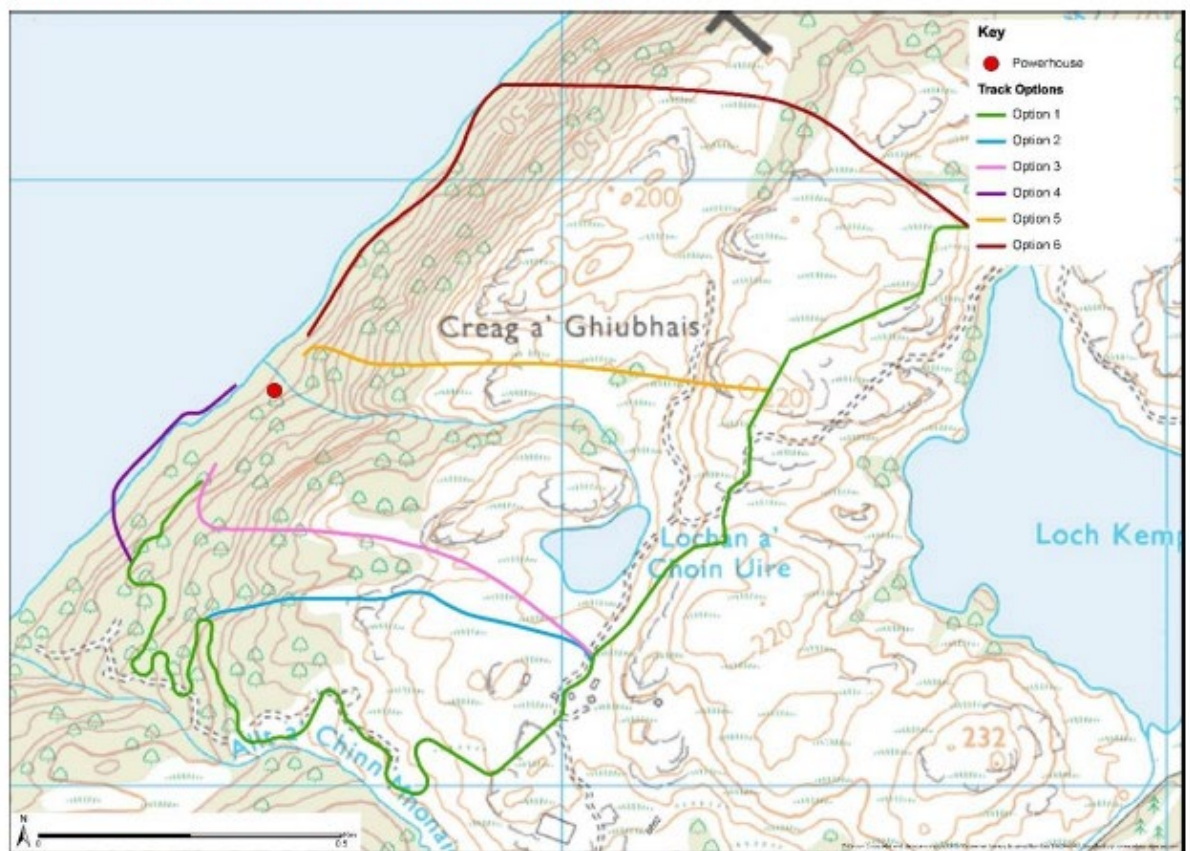
- 4.12 ES Chapter 2 (Design Evolution and Alternatives) identifies a number of possible options for an access track from the upper area at Loch Kemp to the shores of Loch Ness (see paras 2.6.26 to 2.6.28 and including Plate 2.3). Paragraph 2.6.26 states:

*“An appraisal was undertaken **in January 2022** to determine the preferred access track route to the preferred powerhouse site from the upper reservoir works. This appraisal was informed by desk studies and site visits undertaken by the project engineers and the project ecologist. Six track options were considered, as illustrated on Plate 2.3: Access Track Options to Lower Reservoir Works. “*

[Our emphasis]

- 4.13 Plate 2.3 is then shown as follows:

Plate 2.3: Access Track Options to Lower Reservoir



- 4.14 Paragraph 2.6.27 then states:

“Following the appraisal of the six access track options leading to the preferred powerhouse site, Track Option 1 was identified as the preferred track option and was taken forward post scoping.”

- 4.15 The Lichen Survey Report (Acton A, 2022) presented as Appendix 10.3 of the ES ‘*Terrestrial Lichen Survey Report*’ states on page 8 (Section 3.1) that the lichen survey work took place in April and May 2022. It is therefore clear that the decision on which access track route option to prefer was made prior to the applicant being in possession of the crucial information on the

distribution of the Internationally and Nationally important lichen assemblage that was necessary in order to enable a less harmful route to be selected.

How the Absence of the Lichen Survey Data Prevented a Less Harmful Alternative Being Chosen

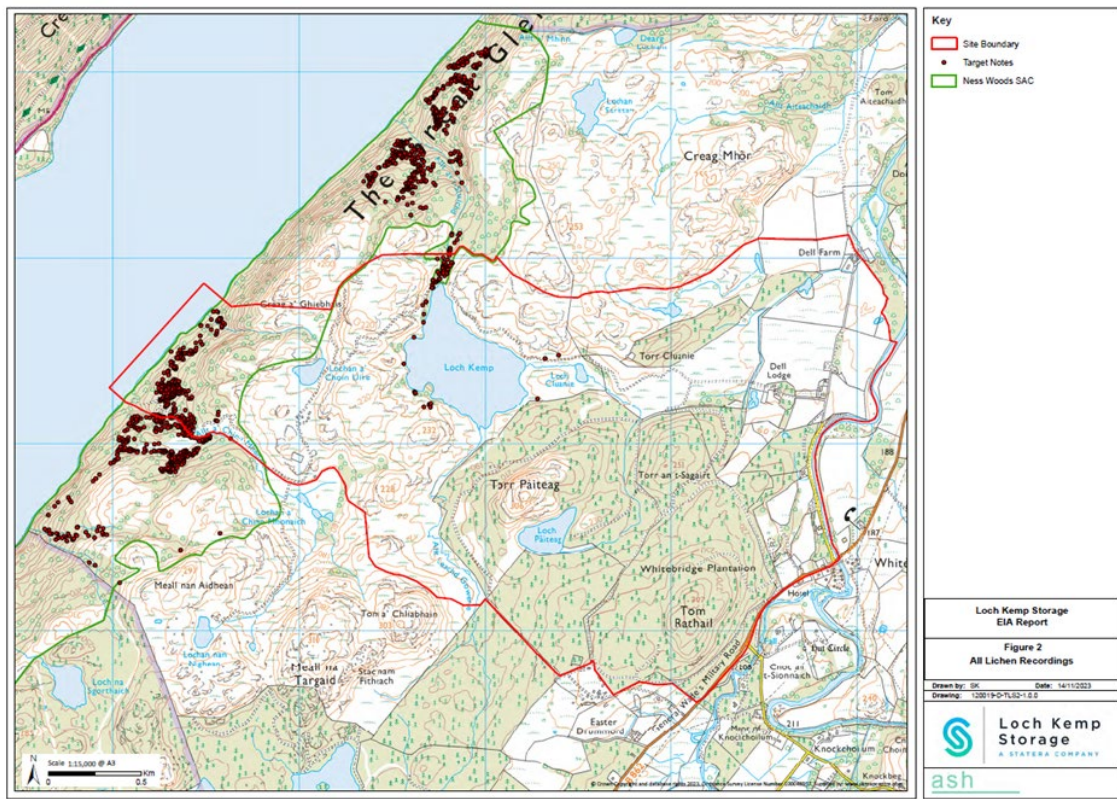
- 4.16 It is clear from the above that Track Option 1 was selected without the benefit of the decision having been informed about the distribution of important lichen flora.
- 4.17 Importantly, as already alluded to above, the composition and age of the Annex 1 woodland types are not uniform throughout the area of the Ness Woods SAC. Each area will have its own character depending on, amongst others, physical features (geology, hydrology, aspect etc), landscape history (ecological continuity etc) and land management.
- 4.18 An example of the variation in the woodlands within the SAC can be seen within the Dell Estate. The first edition 6 inches to the mile Ordnance Survey (OS) map (published 1874) covering the area of the Dell Estate (see **Figure 1** below) shows that there are two distinctive types of woodland in this part of the SAC.

Figure 1: Extract from the first edition (published 1874) of the 6 inches to the mile Ordnance Survey covering the proposed development area and adjacent land in part of Ness Woods SAC. Reproduced with the permission of the National Library of Scotland



- 4.19 One woodland type is shown on the OS a 'broadleaved woodland' (the woodland areas depicted associated with Allt a' Chinn Mhonaich, the lower area of water course from Lochan a' Choin Ure, and the areas associated with Allt Slochdach) and the other is the 'scattered trees over rough grazing' (on the slopes west of Creag a' Ghiubhais).
- 4.20 The areas shown as 'broad-leaved woodland' on the 1874 OS map were surveyed for lichens as part of the Lichen Survey (Acton A, 2022), and this was presented in Appendix 10.3 of the ES 'Terrestrial Lichen Survey Report'. These areas were found to be old-growth woodland with veteran trees and to have exceptionally important lichen species, populations, and communities. As explained above however this information was not available at the time Track Options 2-6 were removed from further consideration.
- 4.21 By contrast, there is no lichen survey data presented in the ES collected from the 'scattered trees over rough grazing' area located to the west of Creag a' Ghiubhais, and therefore no detailed survey information to say what type of woodland is present today and to enable it to be compared to the 'broad-leaved woodland' type.
- 4.22 In fact, the Lichen Survey Report states on page 9 (Section 3.3 – final paragraph) that:
- "The steep slopes below Creag a' Ghiubhais were examined at a distance and were steep, heathery slopes dominated by birch. The main stands of hazel were veteran pasture hazels on richer soil accumulations (often associated with bracken slopes). On the basis of experience of other steep birch-dominated slopes elsewhere on site, **it was judged that there was much more limited potential for old growth hazel stands on these more acidic slopes below Creag a' Ghiubhais and so they were not visited.**"*
- 4.23 The absence of any lichen survey data for this area is shown on **Figure 2** below taken from the Lichen Survey Report (Acton, 2022). **Figure 2** also shows that the chosen track option (Track Option 1) **bisects straight through one of the densest aggregations of important Lichens recorded during the survey work.**
- 4.24 The potential damage to lichens therefore includes direct loss as well as alterations in humidity and levels, all of which are accepted as threats to the lichen assemblage in the Shadow HRA Report (SLR, November 2022).

Figure 2: Figure 2 from Lichen Report in ES Volume 4 Appendix 10.3. This map shows the lichen survey target notes and the proposed development area. No lichen survey appears to have been carried out in the area west of Craig a' Ghiubhais.



- 4.25 What is certain is that whatever woodland habitat is present today in the 'scattered trees over rough grazing' will be quite different to the old-growth woodlands that make up the adjacent 'broad-leaved woodland' areas that are so important for terrestrial lichens.
- 4.26 It seems likely that any woodland in the 'scattered trees over rough grazing' area as it was in 1874 will be a recent woodland with a few scattered old trees depending on how many have survived from those shown on the 6 inch OS map. **This area is likely to have a substantially different assemblage of lichen species to that in the old-growth woodlands.**

Why the Premature Dismissal of Alternative Track Options Matters

- 4.27 It is clear from the above that Track Option 1 was chosen before any Lichen Survey data was available to indicate how harmful this route was likely to be to the important lichen assemblages.
- 4.28 Additionally, not only was lichen survey data not available at the time the other Track Options were discounted, it is still not available for the area west of Craig a' Ghiubhais, which only a cursory inspection of historic Ordnance Survey maps has demonstrated is likely to be considerably less sensitive in terms of the important old-growth lichens that it supports.
- 4.29 Finally, the absence of lichen survey data from other large parts of the SAC (including the other two component SSSIs) means that it cannot be established what proportion of the important lichen assemblages hosted by the SAC are in fact present in those parts of the SAC proposed to be damaged or destroyed.

4.30 In relation to the above points, there are direct parallels to be drawn with the development proposals in CJEU Case C-239/04 *Commission v Portugal* (2006)

4.31 This case concerned the routing of a new motorway linking Lisbon and the Algarve region of Portugal. In bringing the case, the European Commission took the view that:

*“Having found that the Portuguese authorities **had not explained why alternative routes situated outside both the Castro Verde SPA and the residential zones of Alcarias, Conceição, Aivados and Estação de Ourique had not been considered...**”*

And therefore the Commission had taken:

“...the view that the Portuguese Republic had failed to fulfil its obligations under Article6(4) of the Habitats Directive...” [To establish that there were no alternatives to achieving the objectives of the plan or project]

[Paragraph 14 of the judgement] [Our emphasis]

4.32 The CJEU ruled in favour of the European Commission, and determined that as a result of Portugal’s failure to study the alternatives referred to by the Commission:

“...it cannot be ruled out immediately that such solutions were capable of amounting to alternative solutions within the meaning of Article6(4) of the Habitats Directive, even if they were, as asserted by the Portuguese Republic, liable to present certain difficulties.”

[Paragraph 38]

And that, consequently:

...without having demonstrated the absence of alternative solutions for the route concerned, the Portuguese Republic has failed to fulfil its obligations under Article6(4) of the Habitats Directive.

[Paragraph 40]

4.33 In the case of the Loch Kemp proposals, even only the most basic examination of historic maps has identified an area of the SAC which is likely to be less important in supporting the important assemblages of lichens that form part of the Priority Annex 1 habitat type of the SAC. The submitted documents explain that potential routes through this area were summarily dismissed in advance of any detailed survey data being available.

4.34 With reference to the *Commission v Portugal* case mentioned above, the submitted documents do not even appear to contain an ‘assertion’ that the discounted route options would present any difficulties, or indeed any justification for why those discounted routes are not feasible/viable in practice (paragraph 2.6.27 of ES Chapter 2 simply states that Track Option 1 was ‘preferred’).

4.35 It does therefore seem that the premature and inadequately informed selection of Track Option 1 does not comply with the requirements of Article 6(4) of the Habitats Directive for there to be no less harmful alternatives to achieving the objectives of the plan or project.

- 4.36 This apparent lack of basic evidence-led decision-making also leaves open to question how other alternatives have been addressed (or not addressed). For example, **it is not clear how decisions about the location of the power house or maximum new depth of Loch Kemp have been influenced by the lichen survey data in any meaningful way.**

5. THE ADEQUACY OF COMPENSATORY MEASURES

- 5.1 As already detailed above, paragraph 36 of CJEU Case C-521/12 T.C. *'Briels and Others'* states the following of particular relevance:

"...in order to determine the nature of any compensatory measures, the damage to the site must be precisely identified"

- 5.2 For the reasons given above, including that the submitted information has not sought to quantify the proportionate loss of the lichen assemblage relative to the remaining un-impacted areas of the SAC, it cannot be said that the damage to the site has been 'precisely identified'.

- 5.3 Article 6(4) of the Habitats Directive and the equivalent provisions in the Habitats Regulations further requires that compensation measures should:

"...ensure that the overall coherence of Natura 2000 is protected".

[NB: Natura 2000 sites are now integrated into the National Sites Network]

- 5.4 Given that the loss of the lichen community as a proportion of the total resource of similar communities supported elsewhere in the Natura 2000 network of protected sites is not known, it is difficult to see how it can be established that the 'overall coherence' of the network can be said to be maintained. Furthermore, as described in **Section 2** of this Review, the lichen assemblage here may be so important as to be unique, with both the lichen assemblage itself and its habitat requiring perhaps many centuries to develop, and therefore in practice being 'irreplaceable. It does not seem possible therefore to provide compensation that would achieve the requirement laid out above.

- 5.5 The Compensation Proposed to address the Residual Impacts is set out in ES Volume 1 Chapter 10.9 (Additional Mitigation, Compensation and Enhancement). Paragraph 10.9.2 states:

"To compensate for the significant residual effects upon Ness Woods SAC, a Compensation Package would be delivered, as detailed in the Ness Woods SAC Derogation Report, which has been developed in close consultation with NatureScot. A summary of the Ness Woods Compensation Package is provided in the following section and shown in Volume 2, Figure 10.11: Overview of Ness Woods SAC Compensation Measures."

- 5.6 A description of the Compensation measures for the Annex 1 habitats are set out in Paragraphs 10.9.3. This includes:

“The full extent of retained Ness Woods SAC habitat that lies within the Dell Estate would be restored and managed to improve its condition from unfavourable to favourable....An adaptive management approach would be adopted....

.....The same woodland adaptive management approach, as described above, would also be undertaken within areas of woodland which are outside of, but adjacent to, Ness Woods SAC, totalling 8.08 ha....”

- 5.7 Paragraph 10.9.4 then states that:

“These compensation measures have been designed to compensate for the adverse effects upon the conservation objectives of the woodland qualifying features, to ensure the coherence of the national site network, as detailed further in the separate Shadow HRA Report and Derogation Report.

The Compensatory Measures would maintain the extent and distribution of the qualifying woodland habitats within the site; would restore the structure, function and supporting processes of the qualifying woodland habitats; and would restore the distribution and viability of the typical species of the qualifying woodland habitats. ...etc etc”.

- 5.8 In our view, the above proposed compensation measures, certainly insofar as they relate to proposals to improve the management of Annex 1 habitats within the SAC, are **not ‘compensation’**. It is acknowledged that the two Annex 1 qualifying habitats of the SAC are currently assessed as being in ‘unfavourable’ condition, however, Article 6(1) of the Habitats Directive states that:

“For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites”.

- 5.9 In short therefore, there is already an obligation for the Annex 1 habitats of the SAC to be subject to the favourable management that is required to restore their favourable conservation status. Offering interventions that are in any case already required is not therefore ‘compensation’ and would frustrate both the aims and the spirit of the Habitats Directive and its transposing Regulations by enabling the proponents of plans and projects to exploit the poor condition of an SAC habitat to attempt to justify a development proposal.

- 5.10 Additionally, whilst browsing relief is required (and proposed as part of the compensation) this has the potential to stress the lichen assemblages as a result of increasing shade (although they may recover later if well managed). This would however risk causing an additional impact that would act in combination to the adverse effect that is already assessed as being significant at the International level.

6. EFFECTS ON NON-SAC LICHEN FEATURES

6.1 Paragraphs 10.8.82 and 10.8.83 state:

“The lichen assemblage on the rocky shores of Loch Kemp is assessed as having national value. The flooding of the rock habitat around Loch Kemp will subject the existing freshwater and non- freshwater lichen species to a rapid filling and emptying regime to a maximum depth of 28 m above the current conditions. Such changes are expected to destroy these lichen communities which currently experience occasional and often slow changes in water levels of tens of centimetres only. Large draw down zones in lakes and reservoirs do not support diverse freshwater lichen assemblages due to the rapidly changing conditions which the lichens cannot adapt to 118,119. The loss of this rocky shore lichen assemblage, including the survey area-level extinction of two Near Threatened or Nationally Scarce lichen species that were not recorded in any other locations at the Site or surrounding lochs and lochans surveyed (Porina interjungens (Near Threatened) and Polychidium muscicola (Nationally Scarce)), is assessed as constituting a permanent adverse effect, which is significant at the national level.

The heathland habitat in the proposed inundation zone around Loch Kemp was also assessed as being of national value for lichens. This habitat would be permanently lost, as frequent inundation is expected to kill off the existing flora. Loss of the heathland lichen assemblage within the inundation zone is assessed as constituting a permanent adverse effect, which is significant at the national level.”

[Our emphasis]

6.2 In addition to the impacts on the lichen assemblages that are inherent part of the qualifying features of Ness Woods SAC therefore, the proposals also contemplate the destruction of two additional lichen communities of at least National importance (i.e. of SSSI level importance).

- 6.3 The mitigation proposed for this is set out on page 109 of ES Chapter 10 (para 10.9.6), as follows:

“An investigation into the feasibility of translocating Loch Kemp rocky shore and surrounding moorland lichens would be undertaken by an appropriately experienced lichenologist. Uncertainty exists over the likely success and feasibility of lichen translocation in this situation. Lichen translocation using a range of methods is known to be successful in some situations, although extensive research is lacking. **Translocation of the Loch Kemp rocky shore lichens of high value may not be feasible for many of them, as some are attached to large outcrops which would be difficult to remove pieces of suitable sizes.** It may be feasible to translocate the smaller boulders, supporting *Porina interjungens*. Translocation to rocky shore locations within the surrounding lochs (such as Lochan a Choin Uire, Loch Paiteag, Lochan a Mhonaich, Lochan nan Nighean and Lochan Scristan) **may be feasible**, if the microclimatic conditions are suitable. Translocation of the moorland lichens of high value is likely to have higher feasibility, which could be removed as plugs and ‘plugged in’ to similar retained heathland within the wider Site, if the microclimatic conditions are suitable. **Where deemed feasible, lichen translocation would be attempted, with the methodology, implementation and monitoring overseen by an appropriately experienced lichenologist.**”

[Our emphasis]

- 6.4 In our view, no weight can be attached to any presumption that the above proposed mitigation might be successful. In addition to the acknowledged high levels of uncertainty and the absence of any firm commitment to actually attempt any translocation, it cannot be presumed that the lichen communities concerned will be safeguarded. Additionally, if suitable conditions existed at receptor sites for these rare lichens, they would already be expected to be present. The proposals therefore can be expected to cause the permanent loss of these Nationally importance assemblages, and in addition reduce the already narrow range of locations where they might be found (thus contracting the overall range and distribution of these species).

7. CONCLUSIONS

- 7.1 For the reasons set out above, we consider that the proposals in their current form do not comply with the requirements of Article 6(4) of the Habitats Directive, and by extension those parts of the Habitats Regulations that transpose them into domestic legislation.
- 7.2 Whilst the lichen survey data for those areas that were subject to survey is of good quality, the extent of the survey area is insufficient to enable the scale of losses to the SAC constitutive characteristics and typical/characteristic species resulting from the destruction in the lichen communities intimately associated with the SAC Annex 1 habitats cannot be accurately evaluated.
- 7.3 Furthermore, it appears clear that the ecological survey information pertaining to these Internationally and Nationally important lichen assemblages played no part in the assessment of alternatives to achieving the objectives of the plan or project. As a result, it is very likely that opportunities for reducing the harm to the SAC and its qualifying features have been overlooked (evidence of at least one such significant missed opportunity is presented above).
- 7.4 Further, the proposed compensation for losses of SAC features is heavily reliant on delivering measures that are in fact already required to be delivered.
- 7.5 In addition, at least two Nationally important lichen assemblages located outside of the SAC boundary will be destroyed, and there can in our view be no confidence placed in the proposed mitigation, which carries with it both a high risk of failure and a lack of any firm commitment to be implemented.
- 7.6 Overall, the proposals appear to represent one of the most significant single-project threats to the British Lichen flora of which we are currently aware.

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