# **Chapter 8: Ecology**

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## 8 Ecology

## 8.1 Executive Summary

- 8.1.1 This chapter considers the potential effects on important ecological features associated with the construction and operation (and decommissioning) of the Proposed Development.
- 8.1.2 The assessment is based on comprehensive baseline data, comprising specifically of targeted field surveys of important and legally protected ecological features identified during desk study and consultation feedback. It draws on pre-existing information, where appropriate, from other studies, survey data sources and is based on standard Environmental Impact Assessment (EIA) guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM) and NatureScot.
- 8.1.3 A suite of baseline ecology field surveys has been undertaken to inform the impact assessment, including for habitats and vegetation, badger, otter, pine marten, red squirrel, water vole, Scottish wildcat, bat activity, roosting bats and fisheries.
- 8.1.4 Baseline surveys have established that habitats within the site predominantly comprise a typical mix of upland types, with most of the ground being dominated by blanket bog and a mosaic of wet and dry heaths. The lower slopes consist of acid and marshy grassland and bracken, where livestock are grazed. The areas of highest elevations are covered in bryophyte/lichen heath, some semi-natural birch woodland and regen scrub is present around the site peripheries, with neighbouring commercial conifer plantations. Peatland of Possible National Interest was recorded within the site. Field surveys confirmed the presence of badger, pine marten, water vole and mountain hare within the site. Common pipistrelle, soprano pipistrelle, brown long-eared and *Myotis* bat species were recorded during the bat activity surveys.
- 8.1.5 The assessment identifies which of the ecological features and designated sites identified through the desk study and field surveys require consideration as important ecological features and receive a full impact assessment. The assessment covers the Proposed Development on its own as well as cumulatively with other relevant projects. Embedded mitigation and good practice measures, including (but not restricted to) pollution prevention controls, sediment management, sensitive techniques with regards to construction near water, water quality monitoring (pre-, during and post-construction), pre-construction protected species surveys, the presence of an Ecological Clerk of Works (EcoW) and licencing requirements (where applicable) would be implemented during construction and have been taken into account when undertaking the assessment, as is standard practice.
- 8.1.6 For all ecological features scoped in for detailed assessment, excluding peatland of possible national interest, following the application of the embedded mitigation, no significant adverse direct and/or indirect effects on ecological features are anticipated as a result of the Proposed Development.
- 8.1.7 In addition, information to inform a Habitats Regulations Appraisal (HRA) is also provided alongside the impact assessment (Section 8.15). This looks at the potential for likely significant effects (LSEs) on Ben Wyvis Special Areas of Conservation (SAC), Conon Islands SAC and Loch Ussie SAC. Screening for LSEs determined that an Appropriate Assessment by the competent authority would be required in relation to potential impacts on habitat and vegetation qualifying interests associated with Ben Wyvis SAC. However, with the adoption of standard mitigation measures, any impacts upon Ben Wyvis SAC are predicted to be avoided or minimised to a negligible level such that there would be no LSEs on the integrity of the SAC. Screening for LSEs for both Conon Islands SAC and Loch Ussie SAC concluded that works associated with the Proposed Development will not adversely impact the distribution of qualifying features within these SACs, and the potential for LSEs is screened out.
- 8.1.8 However, additional mitigation measures including habitat restoration, together with habitat creation and enhancement measures to be implemented under the Outline Nature Enhancement Management Plan (ONEMP), are expected to provide net beneficial effects associated with the Proposed Development in the long term and will leave biodiversity in a demonstrably better state than in the absence of the Proposed Development, consistent with Policy 3 of the NPF4.
- 8.1.9 Impacts on peatland of possible national interest have been predicted as resulting in an effect of **Moderate/Minor** adverse significance, which is considered Significant in the context of the EIA Regulations. With the adoption of the mitigation and enhancement measures, it is anticipated that a permanent, Low magnitude of impact would result in an effect of **Minor** beneficial significance on peatland habitats on-site, which is considered Not Significant in the context of the EIA Regulations.
- 8.1.10 Note, good practice measures will also be adopted as additional mitigation to reduce collision risk to foraging and commuting bat. During the operational phase of the Proposed Development, additional mitigation in the form of pitching the blades out of the wind ("feathering") to reduce rotation speeds below 2 revolutions per minute (rpm) while idling, will be implemented. Habitat enhancement opportunities detailed in the ONEMP will also be implemented to improve habitat conditions on-site for many ecological features.



## 8.2 Introduction

- 8.2.1 This chapter of the EIA Report assesses the potential for significant effects upon important ecological features in relation to the construction, operation (and decommissioning) of the Proposed Development.
- 8.2.2 The assessment has been informed by comprehensive baseline data, compiled through targeted ecological field surveys of important and legally protected ecological features identified from desk study, and consultation with nature conservation bodies. It draws on pre-existing information, where appropriate, from other studies, survey data sources, and is based on the Chartered Institute of Ecology and Environment Management (CIEEM) 'Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland' (CIEEM, 2018) and NatureScot's Environmental Impact Assessment Handbook (formerly Scottish Natural Heritage (SNH), 2018).
- 8.2.3 The specific objectives of the chapter are to:
  - describe the assessment methodology and significance criteria used in completing the impact assessment;
  - describe the ecological baseline conditions of the Proposed Development and associated Study Areas, to identify the important ecological features which will be the focus of this assessment;
  - evaluate the sensitivity of each ecological feature;
  - describe the potential impacts, including direct, indirect and cumulative impacts;
  - describe the mitigation measures proposed to avoid, reduce and offset potential significant adverse effects; and
  - assess the significance of residual effects remaining following the implementation of mitigation.
- 8.2.4 The assessment has been carried out by Avian Ecology Ltd. The lead author was Ms Catrin Scott MRes ACIEEM (Senior Ecologist), with support from Dr Colin Bonnington DPhil MSc BSc (Hons) FBNA FLS MRSB MCIEEM (Principal Ecologist). Ms Scott and Dr Bonnington have over six and 12 years' experience, respectively, in ecological consultancy. During this time, they have authored numerous ecology chapters for EIAs and reports to inform Habitats Regulations Appraisal (HRA) for numerous onshore wind energy developments in Scotland.
- 8.2.5 This chapter is supported by the following figures:
  - Figure 8.1: Statutory Designated Sites with Ecological Interest.
  - Figure 8.2a: Phase 1 Habitat Survey Plan (the site).
  - Figure 8.2b: Phase 1 Habitat Survey Plan (Off-site turning circle).
  - Figure 8.3: NVC Survey Plan.
  - Figure 8.4: Peatland Condition Assessment.
  - Figure 8.5: Protected Terrestrial Mammal Survey Results.
  - Figure 8.6: Bat Activity Survey Plan.
  - Figure 8.7a: Potential Roost Feature Plan (the site).
  - Figure 8.7b: Potential Roost Feature Plan (Off-site turning circle).
  - Figure 8.8: Fish Habitat Survey Plan.
  - Confidential Figure 8.9: Confidential Protected Terrestrial Mammal Survey Results.
  - Confidential Figure 8.10: Protected Terrestrial Mammal Desk Study Results (Sensitive).
  - Confidential Figure 8.11: Bat Desk Study Results (Sensitive).
- 8.2.6 The chapter should also be read in conjunction with the following Technical Appendices:
  - Technical Appendix 8.1: Habitat and Vegetation.
  - Technical Appendix 8.2: Terrestrial Mammals.
  - Technical Appendix 8.3: Bats.
  - Technical Appendix 8.4: Fisheries.
  - Technical Appendix 8.5: Outline Nature Enhancement Management Plan (ONEMP).

- 8.2.7 Figures and technical appendices, including those of other chapters, are referenced in the text where relevant.
- 8.2.8 This chapter complements Chapter 9: Ornithology and Chapter 10: Geology, Hydrogeology, Hydrology and Geology. Note that in the interests of concision, information contained in other chapters and appendices is not repeated in this chapter unless essential for understanding, and is instead cross referred to within this chapter.
- 8.2.9 A summary of species referred to in this chapter, including common names, scientific (Latin) names and relevant conservation status, are provided in **Technical Appendices 8.1 to 8.4**.
- 8.2.10 The site is defined by the red line site boundary shown on **Figures 8.1 to 8.9**.

## 8.3 Legislation, Policy and Guidelines

8.3.1 The scope of the assessment has been informed by key legislation, policy and guidance as set out below. Note that only items with specific relevance to ecology are listed below; general planning policy relevant to the Proposed Development are detailed in **Chapter 4: Policy Framework**.

#### Legislation

- 8.3.2 The following legislation has been taken into account as part of this ecology assessment:
  - The Conservation of Habitats and Species Regulations 2017, (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (collectively 'the Habitats Regulations').
  - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.
  - The Nature Conservation (Scotland) Act 2004.
  - The Protection of Badgers Act 1992 (as amended in Scotland).
  - The Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003.
  - The Wildlife and Countryside Act 1981 (as amended in Scotland).
  - The Wildlife and Natural Environment (Scotland) Act 2011.

#### **Planning Policy**

- 8.3.3 The following planning policy has been considered as part of this ecology assessment:
  - Highland-wide Local Development Plan (The Highland Council, 2012).
  - Highland Nature: Biodiversity Action Plan 2021-2026 (Highland Environment Forum, 2021).
  - Highland Statutorily Protected Species Supplementary Guidance (The Highland Council, 2013a).
  - The National Planning Framework 4 (Scottish Government, 2023); specifically 'Policy 3 Biodiversity', 'Policy 4 – Natural Places' and 'Policy 5 – Soils'.
  - Onshore Wind Policy Statement (Scottish Government, 2022).

#### Guidance

- 8.3.4 The following best practice guidelines and guidance have been reviewed and taken into account as part of this ecology assessment:
  - Trees, Woodlands & Development (The Highland Council (THC), 2013b).
  - Advising on peatland, carbon-rich soils and priority peatland habitats in development management (NatureScot, 2023).
  - Assessing the Cumulative Impact of Onshore Wind Energy Developments (SNH, 2012).
  - Bat Surveys for Professional Ecologists: Good Practice Guidelines 3<sup>rd</sup> edition (Collins, 2016).
  - Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (Collins, 2023).
  - Bat Surveys: Good Practice Guidelines 2<sup>nd</sup> edition (Hundt, 2012).
  - Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation (NatureScot, 2021).
  - Land Use Planning System Guidance Note 4: Planning Guidance on On-shore Windfarm Developments (Scottish Environment Protection Agency, 2017a).

- Land Use Planning System Guidance Note 31: Guidance on Assessing the Impacts of Groundwater Abstractions and Groundwater Dependant Terrestrial Ecosystems (Scottish Environmental Protection Agency, 2017b).
- Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018 (v1.3).
- Freshwater and diadromous fish and fisheries associated with onshore wind farm and transmission line developments: generic scoping guidelines (Marine Scotland Science, 2021).
- Pre-application guidance for onshore wind farms (NatureScot, 2024j).
- Good Practice During Wind Farm Construction (NatureScot, 2024k).
- Carbon and Peatland map (SNH, 2016).
- Scottish Biodiversity List (SBL) (NatureScot, 2020).
- Standing Advice for Planning Consultations:
  - Protected Species: Badger (NatureScot, 2024a);
  - Protected Species: Otter (NatureScot, 2024b);
  - Protected Species: Pine Marten (NatureScot, 2024c);
  - Protected Species: Red Squirrel (NatureScot, 2024d);
  - Protected Species: Water Vole (NatureScot, 2024e);
  - Protected Species: Wildcat (NatureScot, 2024f);
  - Protected Species: Bats (NatureScot, 2024g);
  - Protected Species: Mountain Hare (NatureScot, 2024h); and
  - Protected Species: Freshwater Pearl Mussel (NatureScot, 2024i).
- BS 42020: Biodiversity code of practice for biodiversity in planning and development (BSI, 2023).
- 8.3.5 Guidance followed with respect to survey methodologies is detailed in **Technical Appendices 8.1 to 8.4.**
- 8.3.6 Note, Section 3.3 of the Onshore Wind Policy Statement 2022 (OWPS) advised the Scottish Government's position on onshore wind development in areas of peat and carbon-rich soils. It noted that the onshore wind sector had made "remarkable advances over the past decade in mitigation and restoration solutions for peatland". It also stated an intention to convene an expert group to produce further guidance on this topic. NatureScot published its guidance "Advising on Peatland, Carbon-rich Soils and Priority Peatland Habitats in Development Management" in June 2023 (revised in November 2023). There was no consultation on this guidance.
- 8.3.7 In the Onshore Wind Sector Deal (October 2023) industry and the Scottish Government declared a collaborative action relating to peat and peatland. This restated the intention set out in the OWPS to convene an expert group and to produce guidance. This Peatland Expert Advisory Group (PEAG) has been formed, but its advice, which will be consulted upon has not yet been published.
- 8.3.8 Therefore, the NatureScot 2023 guidance is expected to be superseded in due course, and the new advice may materially alter the current expectation for compensation for lost peatland plus 10% enhancement. The approach taken in this chapter has been to have due regard to the June 2023 guidance, but to recognise that if, and when, the Proposed Development is consented, the amount of peatland to be enhanced will accord with the guidance applicable at that time.

## 8.4 Consultation

- 8.4.1 **Table 8.1** summarises the consultation responses received regarding ecology matters and provides information as to where and/or how these comments have been addressed in this assessment. Text in italics is the author's own and has been added to provide context.
- 8.4.2 Full details on the consultation responses can be reviewed in **Chapter 6: Scoping and Consultation**, including those who were consulted but did not provide responses.

#### Table 8.1 Consultation

Consultee and Date	Consultation Response	Applicant Response
NatureScot	<ul> <li>Recommended looking at available</li></ul>	<ul> <li>Publicly available documentation</li></ul>
24 October 2019	documentation for the previous Carn	for the previous Carn Gorm Wind
<i>Pre-Scoping</i>	Gorm Wind Farm.	Farm has been considered.



- Ben Wyvis National Nature Reserve	Effects on the NNR are
accordingly scoped in or out of further consideration. NatureScot acknowledge that no adverse impacts on the interests of the NNR are envisaged.	considered, and have been scoped out of detailed assessment, see <b>Table 8.10</b> .
<ul> <li>Confirmed that the proposed survey work and target species are appropriate.</li> </ul>	- Noted.
<ul> <li>Further comment would be provided at the formal scoping stage, and asked that as much detail is provided at that stage to ensure key ecological issues are scoped in for assessment.</li> </ul>	<ul> <li>Noted. See Scoping comments below.</li> </ul>
<ul> <li>Provided ecological records within 2 km of the site, extended to 10 km for bats.</li> </ul>	<ul> <li>Records have been considered in Technical Appendices 8.1 to 8.4, and in Section 8.6.</li> </ul>
<ul> <li>Any future application should consider the potential impacts of the development on deer welfare, habitats, road safety, neighbouring and other interests such as nearby protected areas.</li> </ul>	<ul> <li>Potential impacts of the Proposed Development on deer, including those resulting from deer dispersal, have been considered in this Chapter. Mitigation measures outlined within Section 8.7, would ensure the welfare of deer throughout construction.</li> </ul>
- There is potential for habitats such as blanket bog within Ben Wyvis Special Area of Conservation (SAC) to be affected by deer if they are displaced from the proposed development site.	<ul> <li>Potential impacts on habitats within Ben Wyvis SAC in relation to deer, if they were to be displaced by the Proposed Development, are considered within Section 8.9 and Section 8.15 (Information to Inform Habitats Regulation Appraisa).</li> </ul>
- Where significant impacts could result, a deer management statement should be provided to address the impacts, either as part of a Habitat Management Plan, a standalone document or modification of an existing Deer Management Plan.	<ul> <li>The monitoring of enhanced habitats within the site, over the course of the operational period of the Proposed Development will identify evidence of over-grazing by deer and whether any changes are required to the current deer management protocols onsite. The ONEMP includes summary information on monitoring protocols which would be finalised in a NEMP if the Proposed Development is consented.</li> <li>Wild deer are managed by the landowner. As such, there would be a commitment to liaise with the landowner to ensure that ongoing deer management activities take account of the construction and operation phases of the Proposed Development, with wild deer to be managed on-site as per the status quo.</li> <li>Any requirement for a Deer Management Statement (DMS) for the site would be discussed with the landowner, with a DMS potentially produced if the Proposed Development is consented. If the requirement for a DMS is identified (for example over-grazing is identified on-site</li> </ul>
	<ul> <li>consideration. NatureScot acknowledge that no adverse impacts on the interests of the NNR are envisaged.</li> <li>Confirmed that the proposed survey work and target species are appropriate.</li> <li>Further comment would be provided at the formal scoping stage, and asked that as much detail is provided at that stage to ensure key ecological issues are scoped in for assessment.</li> <li>Provided ecological records within 2 km of the site, extended to 10 km for bats.</li> <li>Any future application should consider the potential impacts of the development on deer welfare, habitats, road safety, neighbouring and other interests such as nearby protected areas.</li> <li>There is potential for habitats such as blanket bog within Ben Wyvis Special Area of Conservation (SAC) to be affected by deer if they are displaced from the proposed development site.</li> <li>Where significant impacts could result, a deer management statement should be provided to address the impacts, either as part of a Habitat Management Plan, a standalone document or modification of an existing Deer Management Plan.</li> </ul>



Consultee and Date	Consultation Response	Applicant Response
		<b>Technical Appendix 8.5</b> ), the DMS would be agreed in consultation with the landowner and adjacent interested parties (and NatureScot), to avoid adverse impacts on collaborative parties.
	<ul> <li>Any future application considers the potential for the proposed wind farm to affect people's enjoyment of Ben Wyvis NNR and the objectives of the NNR designation.</li> </ul>	<ul> <li>This chapter considered the effects of the Proposed Development on the ecological interest of the NNR, see Table 8.10.</li> </ul>
	<ul> <li>Terrestrial habitat surveys should include:         <ul> <li>Phase 1 survey for all terrestrial habitats likely to be affected by the development. This should include an appropriate area beyond the footprint of the development to assess more distant effects and to inform any redesign or micro-siting.</li> <li>NVC survey of habitats listed on Annex 1 of the EC Habitats Directive and UKBAP (UK Biodiversity Action Plan) Priority Habitats, accompanied by supporting quadrat information.</li> <li>Records of any rare and scarce plant species.</li> </ul> </li> </ul>	<ul> <li>These surveys have been undertaken; see Sections 8.1 and 8.6 for methodologies and results, respectively.</li> </ul>
	<ul> <li>Recommend appropriate surveys are undertaken and implement any necessary mitigation for protected species.</li> </ul>	<ul> <li>Appropriate ecological surveys have been undertaken, as detailed in Section 8.1, and mitigation is detailed in Section 8.7, including, but not limited to the implementation of species protection plans, pre-construction surveys, the presence of an ECoW and licencing requirements (where applicable), (to be secured via the Construction Environmental Management Plan (CEMP)).</li> </ul>
	<ul> <li>The developer has identified the Strathpeffer Wildcat Priority Area, reinforcing the requirement for dedicated survey work for this species.</li> </ul>	The presence of the Strathpeffer Wildcat Priority Area has been noted (see Section 8.6) and terrestrial mammal survey undertaken included searching for the presence or likely presence of Scottish wildcat ( <i>Felis silvestris</i> ), including the recording of any potential den sites (see Section 8.1 and Technical Appendix 8.2).
	<ul> <li>It is important that all survey work (for protected species in particular) also adequately covers the proposed access routes and appropriate buffers around these.</li> </ul>	- The ecological surveys covered the proposed access tracks within the site, together with the proposed Off-site turning circle (see Section 8.1 and Technical Appendices 8.1 to 8.3).
	<ul> <li>Where proposals are on peatland or carbon rich soils the following should be submitted to address the requirements of NPF4 Policy 5:         <ul> <li>an outline Habitat Management Plan (HMP).</li> <li>an outline Peat Management Plan (PMP).</li> </ul> </li> </ul>	<ul> <li>An ONEMP is included as Appendix 8.5, which addresses the requirements of NPF4 Policy 5.</li> <li>An Outline Peat Management Plan (OPMP) (Appendix 10.2) has been developed to manage</li> </ul>

Consultee and Date	Consultation Response	Applicant Response
		excavation, handling, storage and reuse or reinstatement of peat and includes measures to minimise handling of peat and avoid removal from ecologically sensitive areas.
	<ul> <li>Impact on peat: development design in line with the mitigation hierarchy.</li> <li>In order to protect peatland and limit carbon emissions from carbon rich soils, the submission should demonstrate that proposals: <ul> <li>Avoid peatland in near natural condition, as this has the lowest greenhouse gas emissions of all peatland condition categories;</li> <li>Minimise the total area and volume of peat disturbance. Clearly demonstrate how the infrastructure layout design has targeted areas where carbon rich soils are absent or the shallowest peat reasonably practicable. Avoid peat &gt; 1 m depth;</li> <li>Minimise impact on local hydrology; and</li> <li>Include adequate peat probing information to inform the site layout and demonstrate that the above has been achieved.</li> </ul> </li> </ul>	<ul> <li>Potential impacts on peat and proposed mitigation measures are summarised in Chapter 10 and discussed in full in Technical Appendix 10.1 and Technical Appendix 10.2.</li> <li>Chapter 10 assess the potential effects of the Proposed Development on the water environment. Required mitigation measures and best practice that would be adopted are also presented in Chapter 10.</li> <li>The results of the site-specific peat depth probing are presented in Technical Appendix 10.2 and summarised in Chapter 10.</li> <li>Design evolution has aimed to minimise effects on peatland of possible interest (including some areas with features of near natural condition), see Section 8.7. Effects on these peatland habitats are discussed in Section 8.10. Furthermore, enhancement measures targeted to restore degraded peatland habitats as described in Technical Appendix 8.5.</li> </ul>
	<ul> <li>A habitat survey should be undertaken across the whole development site to assess impacts from the development, to help inform potential redesign or micrositing, and to identify potential areas for habitat restoration and enhancement. Surveys should cover an appropriate buffer to account for hydrological changes as well as any areas where access tracks/track upgrades and borrow pits may be proposed. Where Annex 1 or UKBAP Priority Habitats occur NatureScot recommend surveys to NVC level. Target notes should be used to identify the presence of any notable plants including any nationally rare/scarce species, and an assessment of habitat condition is also recommended.</li> <li>NatureScot advise that survey results are used to inform the design and layout process, so that the development avoids, where possible, sensitive habitats such as blanket bog. Where this is not possible, impacts should be minimised and suitable mitigation, restoration and/or compensation measures be proposed. Assessment should consider extent of habitat loss and damage, both direct and indirect, with suitable mitigation and/or restoration measures presented</li> </ul>	<ul> <li>A Phase 1 and NVC survey of all land on and within 250 m of the site has been undertaken, the methodologies and results of which are detailed in Technical Appendix 8.1. Target notes were used to record the presence of any notable plants including any nationally rare/scarce species. A Peatland Condition Assessment of all land on and within 250 m of the site has also been undertaken, the methodologies and results of which are detailed in Technical Appendix 8.1.</li> <li>The results of these surveys have been taken into account during design evolution, and where possible, sensitive habitats such as bog are avoided. Unavoidable impacts will be compensated. A proportion of the priority peatland on-site is likely to be required to be restored, to achieve a significant level of enhancement, and the specific amount will accord to the NatureScot guidance applicable at the time of consent (if the Proposed</li> </ul>

Consultee and Date	Consultation Response	Applicant Response
	in an Outline Habitat Management Plan and, where required, a Peat Management Plan.	Development is consented). Mitigation measures are outlined in Section 8.10, and enhancement measures are outlined in the ONEMP (Technical Appendix 8.5). – An OPMP (Appendix 10.2) has been developed to manage excavation, handling, storage and reuse or reinstatement of peat and includes measures to minimise handling of peat and
	- NatureScot recommend a full assessment of impacts to peatland habitats in line with peatland, carbon- rich soils and priority peatland habitats in development management (NatureScot, 2023).	<ul> <li>avoid removal from ecologically sensitive areas.</li> <li>Impacts to peatland habitats in line with the guidance document "Advising on peatland, carbonrich soils and priority peatland habitats in development management" (NatureScot, 2023) is included in Section 8.9.</li> </ul>
	<ul> <li>NPF4 Policy 5d requires that 'where development on peatland, carbon-rich soils or priority peatland is proposed, a detailed site specific assessment will be required'. In addition to NVC habitat survey information, NatureScot recommend an assessment of peatland condition is completed in line with NatureScot's undated Peatland</li> </ul>	<ul> <li>An assessment of peatland condition has been undertaken in line with this guidance (NatureScot, 2023), the results of which are included in Section 8.6 and Technical Appendix 8.2.</li> </ul>
	Guidance. - Where impacts cannot be avoided, NatureScot's current recommendation is that restoration to achieve offsetting (i.e. compensation rather than biodiversity enhancement) should be in the order of 1:10 (lost:restored).	– Unavoidable impacts will be compensated. A proportion of the priority peatland on-site is likely to be required to be restored, to achieve a significant level of enhancement, and the specific amount will accord to the NatureScot guidance applicable at the time of consent (if the Proposed Development is consented). Mitigation measures are autimed in Section 9.10 and
	<ul> <li>Policy 3 (Biodiversity) also applies to all development proposals, so any proposal affecting carbon-rich soils and peatlands must also take into account the requirements to conserve, restore and enhance biodiversity, including priority peatland habitats.</li> </ul>	<ul> <li>are outlined in Section 3.10, and enhancement measures are outlined in the ONEMP (Technical Appendix 8.5).</li> <li>The Proposed Development has taken into account the requirements to conserve, restore and enhance biodiversity, including priority peatland habitats, as detailed above.</li> </ul>
	<ul> <li>Development proposals on peat should also be supported by a site-specific and detailed peat survey and a Peat Landslide Hazard Risk Assessment (PLHRA).</li> </ul>	<ul> <li>A PLHRA is inlcuded as Technical Appendix 10.1.</li> </ul>
Ferintosh Community Council 20 July 2023 <i>Scoping</i>	<ul> <li>Proper environmental study should be conducted assessing the impact of the collective windfarms, existing and proposed projects, and not just individual studies.</li> </ul>	<ul> <li>Potential effects of the Proposed Development (alone) are considered in Sections 8.8 and 8.9, and cumulatively in Sections 8.12.</li> </ul>
RSPB Scotland 20 July 2023 <i>Scoping</i>	<ul> <li>New NatureScot guidance (NatureScot, 2023) is now available on development on priority peatland and outlines recommendations for compensation and enhancement in line with Policy 3 of NPF4. This should be taken account in the Habitat Management Plan (HMP).</li> </ul>	<ul> <li>Measures for compensation and enhancement in line with Policy 3 of NPF4 of priority peatland are detailed in Section 8.10. Enhancement measures to be investigated and adopted are accordingly provided in the ONEMP (Technical Appendix 8.5).</li> </ul>

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Consultee and Date	Consultation Response	Applicant Response
	<ul> <li>We strongly support the production of an outline HMP, including an indication of size of any areas to be restored. We would recommend consideration of actions such as maximising bog restoration to increase biodiversity and climate benefits, away from turbine locations. Any compensatory planting should be comprised of native species and be included within the HMP.</li> <li>The HMP must include a comprehensive monitoring programme for any habitat improvements.</li> </ul>	<ul> <li>The ONEMP includes details of the extent of peatland to be restored.</li> <li>Details of proposed native riparian tree planting is included in the ONEMP.</li> <li>The ONEMP includes details of a monitoring programme for proposed habitat improvement measures.</li> </ul>
NatureScot 21 July 2023 <i>Scoping</i>	- Ben Wyvis SAC (SSSI) - there is potential for upland habitats (e.g., blanket bog) to be affected by deer that might be displaced from the development area. Bog restoration work is in progress within this nearby protected area. NatureScot would welcome that this issue is duly considered within the EIA Report and assessed within a shadow HRA.	<ul> <li>The potential effects of deer displaced from the site as a result of the Proposed Development affecting Ben Wyvis SSSI/SAC have been scoped in (see Table 8.10).</li> <li>An assessment of potential effects of deer displaced from the site as a result of the Proposed Development affecting Ben Wyvis SAC are included in an Information to Inform Habitats Regulation Appraisal (Section 8.15).</li> </ul>
	Ben Wyvis National Nature Reserve (NNR) - NNR status is applied to land and water of acknowledged conservation significance, with nature being managed to agreed high standards. NNRs are managed primarily for nature and for the public to enjoy them. For Ben Wyvis NNR, this includes visitors being exposed to a special upland experience and that also includes enjoyment and appreciation of impressive landscapes.	<ul> <li>Ben Wyvis NNR is located 1.35 km north-east of the site, and although it does not have specific qualifying features, a mosaic of upland habitats are noted to be present, and mountain hare (<i>Lepus timidus</i>) are listed as possible mammals to see.</li> <li>Effects on habitats and mountain hare are considered within this Chapter, see Table 8.10 and the set of the set of</li></ul>
	<ul> <li>NatureScot recommends the EIA Report considers the potential for the proposed wind farm to affect people's enjoyment of this NNR and thus upon the objectives of NNR designation and its overall integrity. NatureScot suggest an assessment follows Landscape and Visual Impact Assessment (LVIA) methods. For the avoidance of doubt, potential impacts to this NNR should be scoped in.</li> </ul>	<ul> <li>Potential for the Proposed Development to affect people's enjoyment of this NNR, in terms of landscape and visual impacts, are considered in Chapter 7.</li> </ul>
	- NatureScot welcomes that an outline Habitat Management Plan (HMP) is going to be provided to help offset losses & impacts to peatland habitat from the development. Please note that NatureScot advise any area of peatland restoration should be at least 10x the scale of that impacted by the development.	An ONEMP is included as Appendix 8.5, which outlines prposed enhancement measures. A proportion of the priority peatland on-site is likely to be required to be restored, to achieve a significant level of enhancement, and the specific amount will accord to the NatureScot guidance applicable at the time of consent (if the Proposed Development is consented).
	- NatureScot welcomes that the developer has identified the Strathpeffer Wildcat Priority Area, reinforcing the requirement for dedicated survey work of this species in context to the wind farm and any associated access track works or upgrades.	<ul> <li>Noted, baseline terrestrial mammal surveys included searching for the presence or likely presence of Scottish wildcat within the site (including recording any potential den sites), which included the</li> </ul>



Consultee and Date	Consultation Response	Applicant Response
		proposed wind turbine locations and associated access tracks (see <b>Technical Appendix 8.2</b> and <b>Section 8.5</b> ).
	- NatureScot recommends that protected species surveys should be undertaken on pine marten, red squirrel and mountain hare.	<ul> <li>Baseline terrestrial mammal surveys included searching for the presence or likely presence of pine marten (<i>Martes martes</i>) and red squirrel (<i>Sciurus vulgaris</i>). Baseline extended Phase 1 habitat survey also included searching for the presence or likely presence of these species, including mountain hare. Mountain hare droppings and pine marten scat were recorded within the site.</li> </ul>
	<ul> <li>Question addressed to NatureScot: Do consultees agree with those ecology features which have been scoped out from the EIA? NatureScot Response: NatureScot recommend that the potential effects for deer to be displaced from the development boundary affecting Ben Wyvis SSI / SAC should be scoped in. For Ben Wyvis SAC, assessment should be provided within the shadow HRA.</li> <li>Perhaps, the only exception where operational effects on mammals should be scoped-in, would be if a wildcat breeding den was found in proximity of wind farm infrastructure.</li> </ul>	<ul> <li>The potential effects of deer displaced from the site as a result of the Proposed Development affecting Ben Wyvis SSSI/SAC have been scoped in (see Table 8.10). An assessment of potential effects on deer displaced from the site as a result of the Proposed Development affecting Ben Wyvis SAC are included in the an Information to Inform Habitats Regulation Appraisal (Section 8.15).</li> <li>Noted, no evidence of Scottish wildcat was recorded (including no potential den sites) during the baseline surveys (see Technical Appendix 8.2 and Table 8.9), as such, Scottish wildcat have been scoped out.</li> </ul>
The Highland Council (THC) 25 August 2023 <i>Scoping</i>	<ul> <li>Final route selection should avoid areas of Carbon Rich Soils, Deep Peat and Priority Peatland Habitat (CPP). The developer should undertake a specific peat assessment to inform the siting, design, or other mitigation in order to at least substantially overcome significant effects on CPP.</li> </ul>	<ul> <li>The presence of CPP has been regarded in design evolution, see Chapter 2, Site Description and Design Evolution for more details. An assessment of the potential impacts upon CPP is included in Chapter 10.</li> </ul>
	- The EIA Report should provide a baseline survey of the animals (mammals, reptiles, amphibians, etc.) interest on-site. It needs to be categorically established what species are present on the site, and where, before a future application is submitted.	<ul> <li>Surveys for terrestrial mammals, bats and fisheries interest on-site have been undertaken, see Sections 8.1 and 8.6 for methodologies and results, respectively.</li> <li>The data search with HBRG returned records of common toad, palmate newt, common frog, slow-worm, adder and common lizard from 2 km of the site. Common frog, palmate newt and common lizard were also recorded anecdotally within the site during the habitat survey.</li> <li>However, as per NatureScot guidance (2024j), there are some species that with standard mitigation are unlikely to experience significant effects as a result of the development of onshore wind farms (including</li> </ul>
		amphibians), and as such, do not require surveys to inform an EIA.

Consultee and Date	Consultation Response	Applicant Response
		Standard mitigation, as detailed in Section 8.7, to include the implementation of good practice construction measures, pollution prevention controls and the presence of an ECoW and licencing requirements (where applicable) (to be secured via the Outline CEMP (OCEMP), see Appendix 3.1), are considered appropriate to avoid any potentially significant adverse effects upon reptiles and amphibians. As such, baseline surveys for these species have not been undertaken.
		<ul> <li>These species would also benefit from the habitat enhancement measures to be adopted as part of the Proposed Development (see Technical Appendix 8.5: ONEMP).</li> </ul>
	- The EIA Report should provide an account of the habitats present on the site. It should identify rare and threatened habitats, and those protected by European or UK legislation, or identified in national or local Biodiversity Action Plans.	<ul> <li>Details of habitats present within the site are included in Section 8.6, and this also identifies any rare and threatened habitats, and those protected by European or UK legislation, or identified on the SBL.</li> </ul>
		<ul> <li>Details of habitats that may be directly or indirectly impacted by the Proposed Development are detailed in Section 8.9.</li> </ul>
	<ul> <li>Habitat enhancement and mitigation measures should be detailed, particularly in respect to blanket bog, in the contexts of both biodiversity conservation and the inherent risk of peat slide</li> </ul>	<ul> <li>Details of proposed habitat mitigation measures in the context of biodiversity conservation are detailed within Section 8.10.</li> </ul>
		<ul> <li>Details of proposed habitat enhancement measures in the context of biodiversity conservation are detailed within Technical Appendix 8.5: ONEMP.</li> </ul>
		<ul> <li>Inherent risk of peat slide is assessed within Chapter 10.</li> </ul>
	- Details of any habitat enhancement programmes (such as native-tree planting, stock exclusion, etc.) for the proposed site should be provided. It is expected that the EIA Report will address whether or not the development could assist or impede delivery of elements of relevant Biodiversity Action Plans.	<ul> <li>Details of proposed habitat enhancement programmes are detailed within Section 8.10 and Technical Appendix 8.5:</li> <li>ONEMP. How measures to be adopted benefit BAPs, inlcuding peatland, rivers (riparian habitats), woodland, birds, bats and invertebrates are addressed in the Technical Appendix 8.5.</li> </ul>
	<ul> <li>The Highland Council expect an up-to- date National Vegetation Classification (NVC) survey and a commitment to undertake peatland restoration on an area of increased size to that of the application site. The EIA Report should provide details of all direct, indirect, permanent, and temporary impacts to any bog habitat present on the site.</li> </ul>	<ul> <li>An NVC survey of the site was undertaken in August 2023, which is within the most recently available two-year survey window prior to submission, as per NatureScot guidance (2024).</li> <li>A commitment to undertake peatland restoration is detailed within Section 8.10 and Technical Appendix 8.5.</li> </ul>
		<ul> <li>Details of all direct, indirect, permanent, and temporary impacts to any bog habitat</li> </ul>



Consultee and Date	Consultation Response	Applicant Response
		present on the site is included in Section 8.9.
	<ul> <li>The EIA Report should address the likely impacts on the nature conservation interests of all the designated sites in the vicinity of the Proposed Development. It should provide proposals for any mitigation that is required to avoid these impacts or to reduce them to a level where they are not significant.</li> </ul>	<ul> <li>The likely impacts on the nature conservation interests of designated sites with ecological qualifying interest are addressed in this chapter (see Table 8.10 Table 8.10 and Section 8.9).</li> <li>Standard mitigation measures to be implemented are detailed in Section 8.7, and additional mitigation measures to be implemented are detailed in Section 8.15 (Information to Inform Habitats Regulation Appraisa).</li> </ul>
	<ul> <li>If wild deer are present or will use the site an assessment of the potential impact on deer will be required. This should address deer welfare, habitats, and other interests.</li> </ul>	<ul> <li>Potential impacts of the Proposed Development on deer have been considered in this chapter; measures outlined within Section 8.7, to include pre- construction surveys and having an ECoW on-site at appropriate stages of the Proposed Development, would ensure the welfare of deer throught construction.</li> <li>Potential impacts on habitats within Ben Wyvis SAC/SSSI resulting from deer displacement are considered within Section 8.9 and 8.15 (Information to Inform Habitats Regulation Apprice) (SAC ask)</li> </ul>
	- The EIA Report needs to address the aquatic interests within local watercourses, including downstream interests that may be affected by the development, for example increases in silt and sediment loads resulting from construction works; pollution risk/incidents during construction; obstruction to upstream and downstream migration both during and after construction; disturbance of spawning beds / timing of works; and other drainage issues.	<ul> <li>Appraisa) (SAC only).</li> <li>The aquatic interest within local watercourses have been addressed through a fish habitat survey of all watercourses on and within 100 m of the site (see Section 8.1).</li> <li>Potential impacts to aquatic interests within local watercourses, including downstream, are considered within Table 8.10 Table 8.10. Design measures include a minimum 50 m buffer around all mapped watercourses for turbine hardstanding and sensitive design of proposed watercourse crossings.</li> <li>It is considered that embedded mitigation and good practice to be implemented during construction and operational phases, will prevent significant impacts on aquatic interests of local watercourses, including those downstream. A Fish Monitoring Plan (FMP), including pre-, during- and post-construction fish monitoring would be produced (see Section 8.7).</li> </ul>

Consultee and Date	Consultation Response	Applicant Response
	<ul> <li>The EIA Report should evidence consultation input from the local fishery board(s) where relevant.</li> </ul>	<ul> <li>Cromarty Firth Fishery Board and Fisheries Management Scotland were consulted during the scoping stage, however did not provide a response (see Chapter 6).</li> </ul>
	- The EIA Report should include a map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems (GWDTE) and buffers; these habitats are easily damaged by insensitive drainage.	- The NVC survey (see <b>Technical</b> <b>Appendix 8.1 and Figure 8.3</b> ) identified habitats which were potentially GWDTE and, an assessment of the potential impacts upon these habitats is included in <b>Chapter 10</b> .
	<ul> <li>A draft or outline HMP and Species Protection Plan (SPP) should be produced as part of the EIA Report, including any proposals for mitigation and enhancement in relation to important habitats and species.</li> <li>Any compensatory planting plans should be carefully considered and included in the HMP.</li> <li>The HMP should include a comprehensive monitoring programme for all habitat improvements.</li> </ul>	<ul> <li>Details of proposed mitigation in relation to important habitats are detailed in Section 8.10.</li> <li>An ONEMP is included as Technical Appendix 8.5, which includes details of proposals for enhancement in relation to important habitats and species. The ONEMP includes details of a monitoring programme for proposed habitat improvement measures, as well as measures including native riparian tree planting.</li> </ul>
		<ul> <li>The CEMP would include SPPs post consent, which would be secured through a suitably worded planning condition.</li> </ul>
		<ul> <li>Requirements for compensatory planting are considered in Chapter 3: Description of the Development.</li> </ul>
	<ul> <li>Non-wind-farm proposals are scoped out of these assessments. Given that other electricity infrastructure is an integral part of the policies that might permit this development, the possible Spittal-Beauly link should be scoped-in to these assessments.</li> </ul>	The approach to scoping was set out in the scoping report and opinion, which did not include the possible Spittal-Beauly link (located approximately 1.5 km south of the Proposed Development); we consider NatureScot to have been satisfied with the approach to scoping, given there was no response on the contrary. As such, the possible Spittal-Beauly link has not been considered in the EIA Report. It was also agreed with THC that the proposed SSEN 400kV OHL between Spittal and Beauly will not be included in the cumulative assessment as the route has not yet been finalised.
NatureScot 15 August 2024 <i>Gatecheck</i>	<ul> <li>Content that the advice from scoping (see above) has been considered.</li> <li>At this stage, have no opportunity to comment on quality of work undertaken or study findings, and reserve this to when a full and detailed consideration of the impacts of the Proposed Development can be made as part of the EIA process.</li> </ul>	<ul> <li>Noted. This chapter provides a full and detailed consideration of the impacts of the Proposed Development on ecologcal features.</li> </ul>



## 8.5 Assessment Methodology and Significance Criteria

#### Scope of Assessment

- 8.5.1 The assessment presented within this chapter has been undertaken in accordance with CIEEM guidelines (CIEEM, 2018) and considers the following potential impacts upon designated sites and ecological features associated with construction, operation and decommissioning of the Proposed Development:
  - habitat loss/deterioration direct and indirect loss and deterioration of habitats;
  - mortality/injury direct or indirect loss of life or injury; and
  - disturbance/displacement of species disturbance and displacement of faunal species; loss, damage or disturbance to their breeding and/or resting places.
- 8.5.2 Potential effects upon ecological features are considered as a result of the Proposed Development alone and cumulatively with other developments which are the subject of a valid planning application (including those subject to appeal, but with relevant publicly available documentation), operational, under construction and consented wind farm developments with design information in the public domain. Developments close to the end of their operational life are included as part of the cumulative assessment to present a 'worst case scenario'.
- 8.5.3 CIEEM guidelines (2018) stipulate that it is not necessary to carry out a detailed assessment of impacts upon ecological features that are sufficiently widespread, unthreatened and resilient to impacts of the Proposed Development. As such, the assessment presented within this chapter considers effects upon designated sites and ecological features which are considered 'important' on the basis of baseline information, relevant guidance, literature, professional judgement of the authors and, where relevant, opinions of statutory advisory bodies provided through consultations in relation to the Proposed Development and, where relevant, other wind farm developments.
- 8.5.4 Where ecological features are not considered so important as to warrant a detailed assessment, or where it is clear they would not be significantly affected by the Proposed Development on the basis of baseline information, these are 'scoped out' (as agreed through the scoping report and opinion, see **Table 8.1** or as detailed in **Section 8.8**) of the assessment. Mitigation measures for impacts on such features may, however, still be outlined as appropriate to reduce and/or avoid any potentially adverse effects or to ensure legislative compliance. Where relevant, these ecological features may also be discussed qualitatively within the EIA Report and given consideration in site-wide recommendations for habitat enhancement.
- 8.5.5 The assessment is based on the Proposed Development described in **Chapter 3: Description of the Development**
- 8.5.6 Following the principle of proportionate EIA, design evolution and embedded mitigation are considered at the outset of the assessment, including standard best practice and construction management measures included within the OCEMP, see **Appendix 3.1**. Ecological features are 'scoped in' to the assessment where there is still considered to be the potential for significant effects on the identified feature arising from the Proposed Development after the application of embedded mitigation measures.
- 8.5.7 The scope of the assessment has been informed by consultation responses summarised in **Table 8.1**.

#### Study Area

- 8.5.8 Study areas, within which baseline information in relation to ecological features have been obtained, comprise the site and areas out to 10 km from the site for specific species.
- 8.5.9 The locations of statutory designated sites for nature conservation with ecological qualifying interests have also been identified within 10 km of the site (**Figure 8.1**).
- 8.5.10 The study areas used have appropriately covered the areas within the site with Proposed Development infrastructure, as well as adjacent habitats, as required.
- 8.5.11 Full details of study areas adopted for desk study and field surveys are provided in **Technical Appendices** 8.1 to 8.4 and illustrated on Figures 8.1 to 8.9.

#### Desk Study

- 8.5.12 A desk study review of existing ecological information was undertaken to:
  - identify the location of designated sites for nature conservation cited for ecological interest, within 10 km from the site boundary for statutory sites, and 2 km from the site boundary for non-statutory sites;
  - identify existing records of protected and/or notable species and habitats within 2 km of the site;
  - identify any factor or features that may influence the potential for impacts on ecological features as a result of the Proposed Development;



- inform the requirement for further detailed survey; and
- provide context for assessment.
- 8.5.13 The following key sources were consulted:
  - Cromarty Fisheries Management Plan (2024-2028) (Cromarty Firth District Salmon Fisheries Board, 2023)<sup>i</sup>;
  - Freshwater pearl mussel information web page (JNCC, 2022);
  - Highland Biological Recording Group (HBRG);
  - SNH Carbon and Peatland Map (2016);
  - NatureScot Open Data Geoportal;
  - NatureScot Sitelink;
  - Saving Scotland's Red Squirrels website;
  - SEPA River Basin Management Plan (SEPA, 2021);
  - Scotland's Environment Map (Scottish Government); and
  - UK Habitats Directive Article 17 Report (JNCC, 2019).
- 8.5.14 Additional peer-reviewed literature and industry guidance are referred to where relevant.
- 8.5.15 Details and results of the desk study undertaken are provided in **Technical Appendices 8.1** to **8.4**.

#### **Field Surveys**

- 8.5.16 Detailed knowledge of habitats and vegetation and the presence or likely presence of protected and notable faunal species on or surrounding the site have been derived from field surveys.
- 8.5.17 The following field surveys have been completed:
  - Extended Phase 1 habitat survey;
  - National Vegetation Classification (NVC) survey;
  - Peatland condition assessment;
  - Terrestrial mammal surveys;
  - Bat habitat suitability appraisal;
  - Bat activity surveys ground level automated monitoring;
  - Preliminary (bat) roost assessment; and
  - Fish habitat survey.
- 8.5.18 **Table 8.2** provides a summary of field survey methodologies followed. Full details are provided in **Technical Appendices 8.1 to 8.4**.
- 8.5.19 All field surveys have been undertaken within the most recently available two-year survey window prior to submission, as per NatureScot guidance (2024).

Table 8.2 – Field survey methodologies

Ecological	Survey Type	Methodology
Feature		
Habitats and Vegetation	<ul> <li>Extended Phase 1 Habitat Survey</li> <li>National Vegetation Classification (NVC) Survey</li> <li>Peatland Condition Assessment</li> </ul>	An Extended Phase 1 Habitat Survey and an NVC Survey of all land on, and within 250 m of, the site was undertaken in August 2023. An Extended Phase 1 Habitat Survey of the Off-site turning circle was undertaken in July 2024. The Phase 1 surveys were undertaken in accordance with the UK industry standard Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology (JNCC, 2010), extended to include the additional recording of specific features indicating the presence, or likely presence, of protected or notable species. The NVC surveys followed the guiding principles detailed in the National Vegetation Classification: Users' handbook (Rodwell, 2006). A Peatland Condition Assessment of all land on, and within 250 m of, the site defined as priority peatland, as per guidance from NatureScot (2023), which in this case constituted M15 wet heath, M17 and M19 blanket bog, and M20 and M25 mire was undertaken in July 2024. At the same time, these areas were checked to confirm, or otherwise update, the previous NVC community identifications. The Peatland condition assessment was undertaken in accordance with the publication "Advising on peatland, carbon-rich soils and priority peatland habitats in development management" (NatureScot, 2023), which was adapted from the



Ecological Feature	Survey Type	Methodology
		Common Standards Monitoring Guidance for Upland Habitats, published by the JNCC (2009) and used by NatureScot for monitoring SSSIs. Full details are provided in <b>Appendix 8.1</b> .
Terrestrial mammals	<ul> <li>Terrestrial mammals surveys</li> <li>Extended Phase 1 Habitat Survey</li> </ul>	Targeted surveys for terrestrial mammals were undertaken between June and September 2023, using walkover surveys. Target species for survey were badger ( <i>Meles meles</i> ), otter ( <i>Lutra lutra</i> ), pine marten, red squirrel, water vole ( <i>Arvicola amphibius</i> ) and Scottish wildcat. The study area comprised all suitable habitats for the target species within the site and out to at least 50 m for red squirrel and water vole, 100 m for badger, 200 m for otter, 250 m for pine marten, and 500 m for Scottish wildcat, as access allowed. Surveys have been undertaken in accordance with NatureScot guidance (NatureScot, 2024a-2024f) and industry standard guidance, as detailed in <b>Appendix 8.2</b> . In addition to the above, the extended Phase 1 Habitat Survey of the site in August 2023 and of the Off-site turning circle in July 2024 were extended to include the additional recording of specific features indicating the presence, or likely presence, of protected or notable species (including mountain hare).
Bats	– Bat Habitat	Bat Habitat Appraisal
	<ul> <li>Bat Habitat</li> <li>Appraisal</li> <li>Preliminary Roost</li> <li>Assessment</li> <li>Bat Activity</li> <li>Survey</li> </ul>	Habitats present within the site were appraised for their potential to support bats in terms of both foraging and commuting opportunities in accordance with Bat Conservation Trust guidance (Collins, 2016; applicable at the time of survey, and later updated in accordance with Collins, 2023). A Habitat Suitability Appraisal (HSA) was undertaken through a review of aerial imagery and OS mapping, and further informed by ground truthing of habitats present during an extended Phase 1 Habitat Survey which took place in August 2023. <u>Preliminary Roost Assessment</u> Structures and trees with the potential to support maternity roosts and significant hibernation or swarming sites within the site (and therefore within at least 200 m plus rotor radius of the proposed turbine locations) were identified via ground truthing, undertaken during an extended Phase 1 Habitat Survey which took place in August 2023 (in accordance within NatureScot, 2021). Trees present within the Off-site turning circle were assessed for their potential to support roosting bats in July 2024, in line with Collins (2023).
		Bat Activity Survey Bat activity Survey were undertaken in 2023 in accordance with NatureScot guidance (2021) comprising the use of twelve automated monitoring stations. Monitoring stations were located at or within relative proximity to proposed turbine locations at the time of survey. Twelve bat statics were used which exceeds the number required in accordance with NatureScot guidance (2021) for a nine turbine scheme. NatureScot guidance (2021) advises a minimum of ten consecutive monitoring nights for each activity period (spring, summer and autumn); this has been met or exceeded for all monitoring stations across all three seasons, with the exception of two monitoring stations in the summer season, and a single monitoring station in autumn. Bat activity levels for high collision risk species (i.e., <i>Pipistrellus</i> and <i>Nyctalus</i> species) was assessed using similar principles as the Ecobat assessment tool. Full details are provided in <b>Appendix 8.4</b> .
Fish	<ul> <li>Fish Habitat Survey</li> </ul>	A fish habitat survey was completed of all watercourses on, and within 100 m of, the site in December 2023, in order to identify any areas of critical fish habitat (i.e. spawning, nursery areas, juvenile and adult holding areas). Watercourses were then classified based on the Scottish Fisheries Co-ordination Centre's Habitat Surveys Training Course Manual (SFCC, 2007). Full details are provided in Technical <b>Appendix 8.5</b> .

Field Survey Personnel

- 8.5.20 All field surveys were completed by experienced, reputable and professional ecologists, fully conversant in established ecology survey methodologies for proposed wind developments.
- 8.5.21 Details of field surveyors are provided in **Technical Appendices 8.1** to **8.4**.

#### Other Species

- 8.5.22 As per NatureScot guidance (2024j), there are some species that with standard mitigation are unlikely to experience significant effects as a result of the development of onshore wind farms (e.g. invertebrates and amphibians), and as such, do not require surveys to inform an EIA.
- 8.5.23 On this basis, baseline surveys for invertebrates, reptiles and amphibians have not been undertaken to inform the design and assessment of the Proposed Development. Mitigation measures to avoid or otherwise reduce adverse effects and ensure legislative compliance (where applicable) have however been outlined.



#### Assessment of Potential Effect Significance

- 8.5.24 The assessment has been undertaken in accordance with CIEEM guidelines (2018) and includes the following stages:
  - determination and evaluation of important ecological features;
  - identification and characterisation of impacts;
  - · assessment of the significance of effects prior to mitigation measures;
  - outline of mitigating measures to avoid and reduce significant impacts;
  - assessment of the significance of any residual effects after the application such measures; and
  - identification of appropriate compensation measures to offset significant residual effects.

#### Criteria for Assessing the Sensitivity of Ecological Features

- 8.5.25 Relevant European, national and local guidance from governments and specialist organisations has been referred to in order to determine the sensitivity (or importance) of ecological features. Reference has also been made to NatureScot guidance on key ecological features when considering the development of onshore wind farms in Scotland (NatureScot, 2022).
- 8.5.26 In addition, sensitivity has also been determined using professional judgement and taking account of the results of baseline field and desk study findings and the functional role of features within the context of the geographical area.
- 8.5.27 It should be noted that sensitivity, or importance, does not necessarily relate to the level of legal protection that a feature receives, and ecological features may be important for a variety of reasons, such as their connectivity to a designated site, rarity, or the geographical location of species relative to their known range.
- 8.5.28 For the purposes of this assessment, the sensitivity or importance of an ecological feature is considered in the context of a defined geographical area, ranging from International to Local, as detailed in **Table 8.3**.

Sensitivity / Geographical Scale of Importance	Definition
High – International / National	An internationally or nationally designated site (i.e., SAC, Ramsar site or candidate site (e.g., cSAC) and/or SSSI).
	Large areas of priority habitat listed under Annex 1 of the Habitats Directive, and smaller areas of such a habitat that are essential to maintain the viability of that ecological resource. Or significant extents of a priority habitat identified in the SBL, or smaller areas which are essential to maintain the viability of that ecological resource.
	A regularly occurring, nationally or regionally significant population of any internationally or nationally important species, listed under Annex 2 or Annex 4 of the Habitats Directive, or Schedule 1 or Schedule 5 of the Wildlife and Countryside Act, or a SBL priority species.
Medium - Regional	Viable areas of key semi-natural habitat identified in the UKBAP.
	A regularly occurring, locally significant population of any nationally important species listed on the SBL, and species listed under Schedule 5 of the Wildlife and Countryside Act or Annex 2 or Annex 4 of the Habitats Directive.
	Sites which exceed the local authority-level designations but fall short of SSSI selection guidelines, including extensive areas of semi-natural woodland.
Low – Local	Other species of local conservation. Areas of habitat or species considered to appreciably enrich the ecological resource within the local context (e.g., species-rich flushes or hedgerows).
	All other species and habitats that are widespread and common and which are not present in locally, regionally or nationally important numbers, or habitats which are considered to be of poor ecological value.
Very Low - Site	Areas of habitat or species considered of value up to the site only level. Note, these features are not considered in this assessment.

Table 8.3 Sensitivity / geographic scale of ecological feature of importance



#### Criteria for Assessing the Magnitude of Impacts

- 8.5.29 Once identified, potential impacts are described making reference to the following characteristics as appropriate:
  - beneficial or adverse;
  - extent;
  - magnitude;
  - duration;
  - timing;
  - frequency; and
  - reversibility.
- 8.5.30 The assessment only makes reference to those characteristics relevant to understanding the nature of an impact and determining the significance of the resulting effect. For the purposes of this assessment the temporal nature of potential effects are described as follows:
  - negligible: of inconsequential duration;
  - short-term: for 1-5 years;
  - medium-term: for 5-10 years;
  - long-term: for 10-50 years; and
  - permanent: >50 years.

#### 8.5.31 The criteria used to determine the magnitude of impacts are set out in **Table 8.4**.

#### Table 8.4 – Impact magnitude

Magnitude	Definition
Very High	The impact (either on its own or cumulatively with other proposals) may result in the permanent total or almost complete loss of a designated site and/or species/habitat status or productivity. Or alternatively notable gains in the designated site and/or species/habitat status or productivity.
High	The impact (either on its own or cumulatively with other proposals) may adversely, or beneficially, affect the conservation status of a designated site and/or species population, in terms of the coherence of its ecological structure and function (integrity), across its whole area, that enables it to sustain the habitat, complex of habitats and/or the population levels of species of interest.
Medium	The impact (either on its own or cumulatively with other proposals) would not adversely, or beneficially, affect the conservation status of a designated site and/or species in the long-term, but some element of the functioning might be affected, and impacts could potentially affect its ability to sustain some part of itself in the short to medium-term.
Low	Neither the above or below applies, but some observable adverse, or beneficial, impact is evident on a short-term basis or affects the extent of a habitat/species abundance in the local area.
Negligible	A very slight (indiscernible) reduction, or increase, in a habitat/species status or productivity and/or no observable effect.

Criteria for Assessing Effect Significance

- 8.5.32 For the purposes of assessment, significant effects are identified as those which encompass impacts on the structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).
- 8.5.33 Such effects are identified by considering the sensitivity of a receptor, the magnitude of the impact and applying professional judgement based on best available evidence, to identify whether the integrity of a receptor will be affected.
- 8.5.34 The term 'integrity' is used here to refer to the maintenance of the conservation status of a population of a species or habitat at a specific location or geographical scale.
- 8.5.35 For the purposes of this assessment, significant effects are primarily expressed with reference to an appropriate geographical scale.
- 8.5.36 In cases of reasonable doubt, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect has been assumed as a precautionary approach. Where uncertainty exists, this is acknowledged.

- 8.5.37 Where the assessment proposes measures to mitigate potentially significant adverse effects on important ecological features, a further assessment of residual effects, taking into account such measures, has been undertaken.
- 8.5.38 CIEEM guidelines (2018) do not recommend the sole use of a matrix table as commonly set out in EIA Report chapters to determine 'significant' and 'non-significant' effects. For the purposes of the assessment presented in this chapter, **Table 8.5** sets out adapted CIEEM terminology and equivalent in the context of the EIA Regulations.
- 8.5.39 For the purpose of this assessment '**Major**' and '**Moderate**' effects alone (or **Major/Moderate** effects) are considered significant in the context of the EIA Regulations.

Table 8.5 – Effect (EIA Significance)

Sensitivity	Impact Magnitude				
	Very High	High	Medium	Low	Negligible
High	Major	Major/Moderate	Moderate/Minor	Minor	Negligible
Medium	Major/Moderate	Moderate	Minor	Minor/Negligible	Negligible
Low	Moderate/Minor	Minor	Minor	Minor/Negligible	Negligible

8.5.40 CIEEM guidelines (2018) note that "A significant effect does not necessarily equate to an effect so severe that consent for the project should be refused planning permission. For example, many projects with significant negative ecological effects have been lawfully permitted following EIA procedures."

#### **Requirements for Mitigation**

- 8.5.41 A mitigation hierarchy has been proposed to avoid, mitigate and compensate for potential adverse effects on ecological features as a result of the Proposed Development:
  - 'avoidance' is used where a potential impact has been avoided from occuring e.g., through changes in Proposed Development design;
  - 'mitigation' is used to refer to measures to reduce a specific adverse effect in situ;
  - 'compensation' describes measures taken to offset residual effects, i.e., where mitigation in situ is not possible or sufficient; and
  - 'enhancement' is the provision of new benefits for biodiversity that are additional to those provided as part of mitigation or compensation measures, although they can be complementary.

#### Assessment of Residual Effect Significance

8.5.42 Where the ecological assessment proposes measures to mitigate adverse effects on ecological features, a further assessment of residual effects, taking into account any mitigation recommended, will be undertaken.

#### Cumulative Assessment

- 8.5.43 Potentially significant cumulative effects can result from individually insignificant but collectively significant, or interacting, effects taking place over a period of time or concentrated in a location.
- 8.5.44 For aquatic features, potential cumulative effects are likely to be significant only for other developments located relatively close (i.e., within 2 km) and within the same hydrological sub-catchments.
- 8.5.45 Potentially significant cumulative effects are only likely where other developments are located within the regular range of more mobile species (e.g., bats). Cumulative effects have therefore been assessed with reference to NatureScot guidance (2021), for a study area within 10 km of the Proposed Development.
- 8.5.46 The cumulative assessment includes consideration of:
  - existing wind farm developments, either operational or under construction;
  - approved wind farm developments, awaiting implementation; and
  - wind farm applications in planning, within the planning process with a valid planning application and sufficient information (including design information) in the public domain to allow a meaningful assessment.
- 8.5.47 No major non-wind developments are considered in the assessment given no such development was identified by the Applicant or NatureScot during scoping (see consultation points in **Table 8.1**) as requiring consideration.
- 8.5.48 Those developments which have been withdrawn and/or refused are not considered, unless an appeal is currently in progress and information is available.



8.5.49 Whilst single or small-scale wind turbine developments (three turbines or less) may contribute to cumulative effects, these have been scoped out of assessment, in line with NatureScot guidance (SNH, 2012), as applications for such developments do not generally consider the potential for impacts upon ecological features in sufficient detail so as to enable meaningful assessment, and information is often not readily available for small-scale developments.

#### **Enhancement Opportunities**

8.5.50 As a fundamental aspect of the Proposed Development, habitat enhancement opportunities on-site are investigated. Policy 3 of NPF4 requires that developments will contribute to the enhancement of biodiversity, and this could include restoring degraded habitats and strengthening nature networks and connections between them. Enhancement measures to be investigated and adopted are accordingly provided in the ONEMP (**Technical Appendix 8.5**).

#### Limitations to Assessment

- 8.5.51 Limitations are discussed in full within **Technical Appendices 8.1** to **8.4**.
- 8.5.52 The HBRG data search did not include the Off-site turning circle as it was not included in the search area. The Off-site turning circle is approximately 4.7 km north of the site and therefore data returned by the HBRG fully excluded records within 2 km of the Off-site turning circle. Given the limited extent of the habitats present, the unremarkable habitats present in terms of ecological value (mainly grazed grassland), and because field surveys were undertaken of the Off-site turning circle, omission of the area from the desk study is not considered a substantive constraint.
- 8.5.53 The data search with the Highland Biological Recording Group was gathered based on an original (reduced) site boundary. The data search was undertaken of the original site boundary plus a 2 km buffer; as such, the search area covers the currently application boundary plus at least a 1 km buffer. Furthermore, the field surveyed covered the current application boundary plus appropriate survey buffers. As such, the desk study and field survey results are considered robust and have identified records of relevant mammal species that may be present at the locality to supplement the field surveys.
- 8.5.54 Regarding automated static ground surveys; following subsequent changes to the Proposed Development (i.e., number of turbines and proposed locations) monitoring station locations are not exact, but still representative of the Proposed Development area, and characteristic of both habitats and bat activity found in association. The static detector at Monitoring Station 2 failed during the summer (July) recording period; however, the Proposed Development comprises nine turbines, and 12 detectors were deployed, so data was collected from locations in excess of the required number, in accordance with NatureScot guidance (2021). As such, the relevance of failures on overall risk assessments is reduced. The minimum survey effort (i.e., 10 days of consecutive days per detector, per season) was not reached for one of the monitoring stations during both the summer and autumn recording periods. Whilst this is below the recommended survey effort for these detectors were deployed than required by guidance, and so the required number of nights was achieved for an appropriate number of sampling locations. Overall, any limitations to the overall survey effort are not thought to represent a substantive constraint relative to the baseline data collected, which is considered sufficient to achieve the objectives of the study.
- 8.5.55 In accordance with NatureScot guidance (2021), it is advised that Ecobat should be used to provide an objective interpretation of the relative importance of bat activity levels recorded within a site. However, at present the Ecobat tool remains in the early stages of its re-distribution following a period of essential maintenance, which continues to require resolution from the Ecobat team at the Mammal Society. As such, an in-house approach has been utilised to assess bat activity, although references to Ecobat outputs included within an accompanying report have been made where applicable (see Technical Appendix 8.3).
- 8.5.56 During the fish habitat survey, although water levels were elevated following recent rains, it is considered that a robust assessment of the suitability and value of the site watercourses for fish fauna was conducted. The survey is therefore considered not to be subject to any substantial limitations.
- 8.5.57 Overall, no substantive limitations to the survey data in establishing an accurate reflection of the levels of target species activity and distributions, and habitats, within adopted study areas, and particularly the site, are identified.



## 8.6 Baseline Conditions

#### **Current Baseline**

- 8.6.1 This section provides a summary of baseline ecological conditions in relation to:
  - · Designated sites of nature conservation with ecological interests;
  - Habitats and vegetation;
  - Protected and notable species;
    - Terrestrial mammals;
    - Bats; and
    - Fisheries.
- 8.6.2 Full details are provided within **Technical Appendices 8.1** to **8.4**.

#### **Designated Sites for Nature Conservation**

- 8.6.3 This section should be read with reference to **Figure 8.1.** Statutory and non-statutory sites designated for ornithological features are addressed separately in **Chapter 9: Ornithology.**
- 8.6.4 The distances provided in **Table 8.6** Table 8.6 are from the site boundary to the designated site boundary at their nearest points.

Statutory Designated Sites for Nature Conservation

- 8.6.5 **Table 8.6** provides a summary of statutory designated sites for nature conservation with ecological qualifying interests located within 10 km of the site.
- 8.6.6 In review of the NatureScot Sitelink website, the site does not form a part of any internationally or nationally designated site for nature conservation with ecological qualifying interests.

Table 8.6 – Statutory ecological designated sites

Designated Site	Distance at closest point and orientation from site boundary	Qualifying Features
Ben Wyvis SSSI	1.35 km, north-east	<ul> <li>Blanket Bog.</li> <li>Upland assemblage.</li> <li>Dystrophic and oligotrophic lochs</li> <li>Vascular plant assemblage</li> </ul>
Ben Wyvis SAC	1.35 km, north-east	<ul> <li>Acidic scree.</li> <li>Alpine and subalpine heaths.</li> <li>Blanket bog.</li> <li>Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.</li> <li>Dry heaths.</li> <li>Montane acid grasslands.</li> <li>Plants in crevices on acid rocks.</li> <li>Tall herb communities.</li> </ul>
Ben Wyvis NNR	1.35 km, north-east	<ul> <li>No specific qualifying features, but a mosaic of upland habitats are noted to be present, and mountain hare are listed as possible mammals to see.</li> </ul>
Lower River Conon SSSI	5.94 km, south-east	<ul> <li>Open water transition fen (includes swamp).</li> <li>Saltmarsh.</li> <li>Wet woodland.</li> </ul>
Conon Islands SAC	5.94 km, south-east	<ul> <li>Alder woodland on floodplains.</li> </ul>
Loch Ussie SSSI	6.64 km, south-east	<ul> <li>Oligo-mesotrophic loch.</li> <li>Upland oak woodland.</li> </ul>
Loch Ussie SAC	6.64 km, south-east	<ul> <li>Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.</li> </ul>
Allt nan Caorach SSSI	9.02 km, north-east	<ul> <li>Subalpine dry heath.</li> <li>Upland birch woodland.</li> </ul>

Non-statutory Designated Sites for Nature Conservation

8.6.7 Consultation with HBRG indicated that the site does not form part of any non-statutory designated site for nature conservation and no such sites are located within 2 km of the site.



- 8.6.8 A review of NatureScot's Open Data Geoportal identified that part of the site is located within the Transitional Zone of the Wester Ross Biosphere Reserve, which is recognised as an internationally world class environment for people and nature. The Wester Ross Biosphere Reserve, which overlaps with the north-western area of the site, is known to include mountains, forests, waterfalls, seascapes and lochs and support otter, pine marten and red squirrel.
- 8.6.9 A review of NatureScot's Open Data Geoportal and Littlewood *et al.* (2014) also identified that the majority of the site is also located within the Strathpeffer Scottish wildcat priority area.

#### Priority Habitats

- 8.6.10 No information on priority habitats was returned by the HBRG data search.
- 8.6.11 An area of long-established (of plantation origin) woodland, as listed on Scotland's Environment Map (ancient woodland inventory), is present within the site; this area of woodland overlaps with a small area of the site, towards the south-west.

#### Field Surveys

Habitats and Vegetation

- 8.6.12 A summary of habitats recorded within the site is summarised below and in **Tables 8.7 and 8.8**.
- 8.6.13 A summary of habitats recorded within the Off-site turning circle is also summarised below.
- 8.6.14 Habitats are discussed with reference to both the extended Phase 1 habitat survey and NVC survey results.
- 8.6.15 Detailed survey results are provided in **Technical Appendix 8.1** and illustrated on **Figure 8.2a-b** to **8.3**. The site
  - I he site
- 8.6.16 The habitats within the site (see **Figures 8.2a** and **8.3**) are dominated by a typical mix of upland types, with most of the ground being dominated by blanket bog and a mosaic of wet and dry heaths. The lower slopes consist of acid and marshy grassland and bracken, where livestock are grazed. The areas of highest elevations are covered in bryophyte/lichen heath, there is some semi-natural birch woodland and regen scrub around the site peripheries, with commercial conifer plantations in the buffer. There are also four mid-sized lochs in the centre of the site. A summary of habitat types and approximate areas is provided in **Table 8.7**.
- 8.6.17 The surveys did not find any plant species that are listed under Schedule 8 of the Wildlife and Countryside Act 1981, or on the SBL, as having special protected status.
- 8.6.18 The peatland condition survey noted dwarf birch growing on some of the higher altitude blanket bog, which is a species listed as 'scarce' in Great Britain (BSBI, 2009).
- 8.6.19 The surveys found some rhododendron that has begun to self-generate on parts of the bog surface on the site. This species is an invasive, non-native species listed under Schedule 9 of the Wildlife and Countryside Act 1981.
- 8.6.20 NVC communities identified through the NVC survey present on-site are summarised in **Table 8.8** along with corresponding Habitats Directive (92/43/EEC) Annex 1 Habitat types, SBL priority habitat type, Priority Peatland Status and potential GWDTE status in accordance with SEPA guidance (2017b) and NatureScot NVC / EUNIS / Annex 1 correspondence tables (2017). NVC communities inconsequential in extent (i.e. very localised) are not included in **Table 8.8**.
- 8.6.21 The survey identified 18 instances of priority peatland communities within the site where their condition indicates blanket bog where any impacts from the Proposed Development would likely be of possible national interest. These were:
  - Three areas of M17 blanket bog, located approximately at the centre of the site; and
  - Fifteen areas of M19 blanket bog, including three areas of montane bog.
- 8.6.22 A further four areas of M15b and three areas of M15c wet heath were found to be in good condition, with comparatively few signs of disturbance or modification, but have not been included as of possible national interest because they have a shallower peat layer (<50cm) at the surface<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Thus, are only classified as 'peaty' not 'peat', as per NatureScot (2023) guidance.

# Table 8.7 Summary of baseline habitats including approximate area and relative percentage coverage within the site

Phase 1 Habitat Type	Extent (ha)	Relative Cover (%)
A1.1.1 Semi-natural broadleaved woodland	4.453	0.446
A1.1.1/C1/D1 Semi-natural broadleaved woodland/Bracken/Dry dwarf shrub heath	0.639	0.064
A1.2.2 Coniferous plantation woodland	1.993	0.2
A2/B1.1/C1 Scrub/Unimproved acid grassland/Bracken	16.020	1.605
A2/D1/D2/E1.6.1 Scrub/Dry dwarf shrub heath/Wet dwarf shrub heath/Blanket bog	22.415	2.245
A4/C1/B1.1/D1 Recently felled woodland/Bracken/Unimproved acid grassland/Dry dwarf shrub heath	0.155	0.016
B1.1/B5/C1 Unimproved acid grassland/Marshy grassland/Bracken	8.560	0.858
B1.1/C1 Unimproved acid grassland/Bracken	14.925	1.495
B1.1/C1/D2 Unimproved acid grassland/Bracken/Wet dwarf shrub heath	54.057	5.415
B1.1/D1/D2 Unimproved acid grassland/Dry dwarf shrub heath/Wet dwarf shrub heath	55.727	5.583
B1.1/D1/D2/E1.6.1 Unimproved acid grassland/Dry dwarf shrub heath/Wet dwarf shrub heath/Blanket bog	1.565	0.157
C1 Bracken	1.444	0.145
C1/D1 Bracken/Dry dwarf shrub heath	4.069	0.408
C1/D1/D2 Bracken/Dry dwarf shrub heath/Wet dwarf shrub heath	216.444	21.683
C1/D2 Bracken/Wet dwarf shrub heath	7.240	0.725
D1 Dry dwarf shrub heath	0.297	0.03
D1/D2 Dry dwarf shrub heath/Wet dwarf shrub heath	55.628	5.573
D1/D2/E1.6.1 Dry dwarf shrub heath/Wet dwarf shrub heath/Blanket bog	5.758	0.577
D2 Wet dwarf shrub heath	88.449	8.861
D2/D3 Wet dwarf shrub heath/Lichen/bryophyte heath	1.078	0.108
D2/D3/E1.6.1 Wet dwarf shrub heath/Lichen/bryophyte heath/Blanket bog	14.961	1.499
D2/E1.6.1 Wet dwarf shrub heath/Blanket bog	278.015	27.851
D2/E2.1/E1.6.1 Wet dwarf shrub heath/acid/neutral flush/Blanket bog	43.862	4.394
D3 Lichen/bryophyte heath	11.273	1.129
D3/E1.6.1 Lichen/bryophyte heath/blanket bog	0.005	0.001
D5 Dry heath/acid grassland mosaic	5.639	0.565
D6 Wet heath/acid grassland mosaic	2.583	0.259
E1.6.1 Blanket bog	69.019	6.914
E2.1 Acid/neutral flush	0.392	0.039
G1 Standing water	7.771	0.778
G1/F1 Standing water/Swamp	0.636	0.064
J3.1 Built up area	0.220	0.022
Road	0.009	0.001
Track	2.932	0.294
Total	998.233	100

Table 8.8 - Summary of the recorded plant communities and sub-communities within the site with relevant conservation designations and/or potential groundwater dependence.

Phase 1 Habitat	NVC Community	NVC Sub- Community	Annex 1 Habitat	Scottish Biodiversity List	Priority Peatland Status*	Potential Groundwater Dependence**
A1.1.1	W4 Betula	-	-	Upland	-	High
Broadleaved	pubescens -			birchwoods		
woodland -	Molinia caerulea					
semi-natural	woodland					



## CARN FEARNA WIND FARM

Phase 1	NVC Community	NVC Sub-	Annex 1	Scottish	Priority	Potential
Habitat		Community	Habitat	List	Status*	Dependence**
B5 Marshy	M23 Juncus	M23b Juncus	-	-	-	High
grassianu	palustre rush	community				
D1 Dry booth	pasture		4020	Unland		
D1 Dry neath	vulgaris - Erica	-	4030 European	heathland	-	-
	cinerea heath		dry heaths			
	H12 Calluna vulgaris -	H12a Calluna vulgaris sub-	4030 European	Upland heathland	-	-
	Vaccinium	community	dry heaths			
	myrtillus heath		4060 Alpine	Unland	-	-
	vulgaris -		and Boreal	heathland		
	Arctosaphylos alpinus beath		heaths			
D2 Wet heath	M15 Tricophorum	M15b Typical	4010	Upland	Unlikely to raise	Moderate
	germanicum - Erica tetralix wet	sub-	Northern Atlantic wet	heathland	issues of national	
	heath	community	heaths with		Interest	
		M150	Erica tetralix	Lipland	Liplikoly to roigo	Modorato
		Cladonia	Northern	heathland	issues of national	Moderate
		sub-	Atlantic wet		interest	
		community	Erica tetralix			
D5 Dry heath	H12 Calluna	H12a Calluna	4030	Upland	-	-
grassland	Vulgaris - Vaccinium	community	dry heaths	neathland		
-	myrtillus heath /	U4a typical	-	-	-	-
	Agrostis capillaris	sub- community				
Do Western	grassland		1010			
/ acid	M15 Tricophorum germanicum -	M15b Typical sub-	4010 Northern	Upland heathland	Unlikely to raise	Moderate
grassland	Erica tetralix wet	community	Atlantic wet		interest	
	heath / U4 Festuca ovina -		heaths with Frica tetralix			
	Agrostis capillaris	U4a typical	-	-	-	-
	grassland	sub- community				
F161	M17 Tricophorum	-	7130	Blanket bogs	Impacts have the	-
Blanket bog	germanicum -		Blanket	Diamiter bogo	potential to raise	
	Eriophorum vaginatum mire		bogs		issues of national	
	M19 Calluna	(M19a <i>Erica</i>	7130	Blanket bogs	Sub 600m:	-
	vulgaris - Friophorum	tetralix sub-	Blanket		Impacts have the	
	vaginatum mire	community)	bogs		issues of national	
					interest.	
					peatland which	
					should be	
E1.7 Wet	U20 Eriophorum	-	-	-	Unlikely to raise	-
modified bog	vaginatum blanket				issues of national	
	M25 Molinia	-	-	-	Unlikely to raise	-
	caerulea -				issues of national	
	Potentilla erecta mire				interest	
E2.1 Flush -	M6 Carex echinata	M6c Juncus	-	Upland	-	High
acid	- Sphagnum fallax mire	<i>ettusu</i> s sub- communitv		flushes, fens, and swamps		
F1 Swamp	S9 Carex rostrata	S9a Carex	-	Upland	-	-
	swamp	<i>rostrata</i> sub- community		flushes, fens, and swamps		
G1.4 Standing	-	-	3160	Oligotrophic	-	-
water – dystrophic			Natural dystrophic	and dystrophic		
			lakes and	lakes		
			ponds		1	



Phase 1 Habitat	NVC Community	NVC Sub- Community	Annex 1 Habitat	Scottish Biodiversity List	Priority Peatland Status*	Potential Groundwater Dependence**
G2(.4) Running water (- dystrophic)	-	-	-	Rivers	-	-

\* As per guidance from NatureScot (2023). Based on the vegetation communities present and further informed by the results of the peatland condition assessment survey.

\*\* As listed in Appendix 4 of SEPA (2017b) LUPS Guidance Note 31. The categorisation of groundwater dependent terrestrial ecosystems is preliminary and is based on vegetation communities present. Confirmed categorisation is based on subsequent formal hydrological assessment.

The Off-Site Turning Circle

- 8.6.23 The Off-site turning circle is located on relatively flat ground approximately 4.7 km north of the site (at central OS grid reference NH39926936); see **Figure 8.2b** for a visual representation of its location relative to the site. Black Water River runs along the western and southern boundaries, and the A835 runs along the north boundary of the Off-site turning circle. Surrounding the Off-site turning circle, topography rises relatively steeply towards the upland and mountainous areas typical of the region, the lower slopes of which contain a mix of semi-natural broad-leaved and conifer plantation woodland. Directly to the east of the Off-site turning circle is a farm and hotel, with outbuildings and car parking areas. The Off-site turning circle itself consists of a large field of improved grassland (see **Figure 8.2b**) used for grazing. The field boundaries primarily consist of thin strips of semi-improved grasslands, ranging from somewhat acidic to neutral in character, as well as damper patches of rush. A few scattered trees (beech and *Prunus* sp.) are present at the corners of the field. To the west and south of the field, semi-natural deciduous woodland fringes Black Water River.
- 8.6.24 No protected plant species on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) or nonnative plant species on Schedule 9 of the Act were found within the Off-site turning circle.

Peatlands

- 8.6.25 The Carbon and Peatland Map (SNH, 2016) was consulted to determine likely peatland habitat classes present at the site. The Carbon and Peatland map has been developed as "a high-level planning tool to promote consistency and clarity in the preparation of spatial frameworks by planning authorities". It identifies potential areas of "nationally important carbon-rich soils, deep peat and priority peatland habitat". Class 1 peatlands are "likely to be of high conservation value" and Class 2 "of potentially high conservation value and restoration potential". Class 1 and Class 2 peatlands are considered to be nationally important under Scottish Planning Policy. It is recognised that this definition is not purely for nature conservation and so not directly applicable to evaluating purely the Nature Conservation Value of a peatland.
- 8.6.26 Priority peatland habitats are defined by NatureScot as *"land covered by peat-forming vegetation or vegetation associated with peat formation"* which is considered to be comparable to the definition of Annex 1 'active' bog habitats.
- 8.6.27 The Carbon and Peatland Map (2016) identifies that a large proportion of the site is located within Class 1 priority peatland, particularly towards the centre of the site. Two distinct areas of Class 2 priority peatland are also present across the site, located towards the north and south-west of the site.
- 8.6.28 A small area of Class 3 peatland is located along the northern boundary of the site. Class 3 peatland is described in The Carbon and Peatland Map (SNH, 2016) as: *"Dominant vegetation cover is not priority peatland habitat but is associated with wet and acidic type. Occasional peatland habitats can be found. Most soils are carbon-rich soils, with some areas of deep peat".*
- 8.6.29 A small area of Class 4 peatland is located along the southern boundary of the site. Class 4 is described in The Carbon and Peatland Map (SNH, 2016) as: "area unlikely to be associated with peatland habitats or wet and acidic type. Area unlikely to include carbon-rich soils".
- 8.6.30 Large areas of Class 5 peat soil are present across the site. Class 5 is described in The Carbon and Peatland Map (SNH, 2016) as "Soil information takes precedence over vegetation data. No peatland habitat recorded. May also include areas of bare soil. Soils are carbon-rich and deep peat".
- 8.6.31 The remainder of the site is identified as Class 0 (mineral soil no peat) and Class -2 (non-soils (waterbodies)).
- 8.6.32 The Off-site turning circle is mostly identified as Class 5 peat soil. A small area of Class 1 peatland is located along its western boundary, to the west of the tributary to the Back Water River.
- 8.6.33 As the Carbon and Peatland Map is a high-level tool, peat depth surveys (as detailed in **Chapter 10**: **Geology, Hydrogeology, Hydrology and Soils**) and detailed extended Phase 1 habitat and NVC surveys have also been carried out of the site to inform the detailed site assessment on peatland. Information derived from site-specific surveys is considered to be the most accurate and is subsequently the most



appropriate dataset for use in the assessment. As detailed within **Chapter 10**, a Phase 1 peat probing exercise was completed in 2013 in support of the previous Carn Gorm Wind Farm planning application. An additional peat probing and condition assessment was undertaken as part of the baseline assessment. In summary, the site investigation has confirmed:

- The peat was found to vary across the Proposed Development in terms of thickness and coverage. Deeper peat was generally encountered in flatter, lower gradient areas of the Proposed Development. The maximum depth of recorded peat was 4.8 mbgl, recorded adjacent to Loch na Guailne in the south of the Proposed Development.
- Approximately 83 % of all peat probes recorded a peat depth of less than 1 m (approximately 61 % recorded no peat or a peat depth of less than 0.5 m).
- 8.6.34 This chapter includes an assessment of priority habitats. For clarity, for the purposes of the impact assessment within this chapter, priority habitats have been defined with reference to Annex 1 of the Habitats Directive, SBL priority habitats and potential GWDTE. **Chapter 10** provides a more detailed assessment of the effects of the Proposed Development on the peatland on-site.
- 8.6.35 See also Chapter 2 Site Description & Design Evolution and Chapter 16 Other Considerations for information on peatlands.

Terrestrial Mammals (excluding bats)

8.6.36 Baseline terrestrial mammal conditions are summarised in **Table 8.9**. Full details are provided in **Technical Appendix 8.2**, **Figure 8.5** and **Confidential Figure 8.9**, with desk study results provided in **Confidential Figure 8.10**.

Table 8.9 - Summary of terrestrial mammal survey results

Terrestrial	Summary of Survey Results
Mammal Species	
Badger	HBRG returned 27 records of badger within 2 km of the site since 2013 (see <b>Confidential Figure 8.10</b> ). A single potential badger sett was recorded during the surveys (see <b>Confidential Figure 8.9</b> ), as well as a fresh latrine towards the north-east of the site, adjacent to the proposed access track. Some areas of habitat in the badger mammal survey area, such as neighbouring woodlands, watercourse banksides and farmland, are considered suitable for badger, with foraging, commuting and sett creation opportunities available.
Otter	HBRG returned no records of otter within 2 km of the site since 2013. No otter holts or other signs of species presence were recorded during the surveys. Watercourses within the otter survey area were typically considered to provide highly suitable foraging and commuting opportunities for otter, with habitat suitable for holt creation and/or resting places/couches also likely to be present within woodland habitats surrounding the site (at the western and southern site boundaries). On-site lochs and watercourses (such as Allt an Torra-bheithe and Allt Fearna) were also considered to provide suitable otter commuting (potentially foraging) habitat.
Pine marten	HBRG returned 8 records of pine marten within 2 km of the site since 2013 (see <b>Confidential Figure 8.10</b> ). Evidence of pine marten, recorded during surveys, consisted of two scats recorded within the pine marten survey area; along a stone wall (located towards the north-west of the site, adjacent to Allt Abhagaith) and the Allt Fearna watercourse. Woodlands neighbouring the site are considered to be potentially suitable habitats for foraging, commuting, resting and breeding pine marten. The woodlands bordering the site boundary were inaccessible during the surveys, but were appraised from within the site.
Red squirrel	HBRG returned 26 records of red squirrel within 2 km of the site since 2013 (see <b>Confidential Figure 8.10</b> ). A review of the Saving Scotland's Red Squirrels website identified no records of red squirrel within the site since 2013. However, records were frequently returned from woodland habitats neighbouring the site between 2013-2024. Woodlands with red squirrel records were identified directly west, south and south-east of the site. Woodland located towards the north-western corner of the site, adjacent to the existing access track, may be suitable for use by red squirrel. However, habitats within the remainder of the site are suboptimal for use by this species.
Water vole	HBRG returned 2 records of water vole within 2 km of the site since 2013 (see <b>Confidential Figure 8.10</b> ). Evidence of water vole recorded during surveys within the water vole survey area consisted of five latrines found within site (see <b>Figure 8.5</b> ). Two of these latrines were identified in the September mammal survey along the Allt Calltuinne that flows from Loch na Gearra. Three latrines were identified during the extended Phase 1 habitat survey. Of these, two were located along a watercourse that flows into Loch a Bhealaich, with the third located along a watercourse flowing into Loch na Guailne. Water vole therefore are confirmed as using watercourses within the site.
Scottish wildcat	HBRG returned no records of Scottish wildcat within 2 km of the site since 2013. The majority of the site is located within the Strathpeffer Scottish wildcat priority area. No evidence of the presence of Scottish wildcat was recorded during the surveys. The site comprises habitat that may be suitable for the species, at least for foraging, but no potential den sites were identified within the site.



Terrestrial Mammal Species	Summary of Survey Results
Mountain hare	A mountain hare was recorded north of Carn Loch an Tuirc in June 2023, with multiple sightings recorded across the site in September 2023. Mountain hare droppings were recorded across the site during both terrestrial mammal surveys.

8.6.37 Evidence of deer presence (in the form of droppings) was also recorded across the site during the baseline surveys.

Bats

8.6.38 Full details of bat survey results are provided in **Technical Appendix 8.3**, **Figures 8.6** and **8.7a-b**, with desk study results provided in **Confidential Figure 8.11**.

Desk Study

- 8.6.39 The Proposed Development is not located within 10 km of any national or internationally designated sites for nature conservation with bat qualifying interests.
- 8.6.40 HBRG returned 113 records of bats from within 10 km of the site (dated 2013-2023), accounting for four confirmed species (brown long-eared, common pipistrelle, Daubenton's and soprano pipistrelle) together with the *Pipistrellus* and *Nyctalus* genus.
- 8.6.41 Of these, eight records related to roosting bats; two of which related to a *Pipistrellus* and brown long-eared bat roost within 2 km of the site, and a further six records relating to common pipistrelle, soprano pipistrelle and brown long-eared bat roosts, in the wider area, out to 10 km from the site.
- 8.6.42 In review of the UK Habitats Directive Article 17 Report 'Habitats Directive Report 2019: Species Conservation Status Assessments 2019' (JNCC 2019), the site is located within the known UK distribution range of common pipistrelle, soprano pipistrelle, Daubenton's, Natterer's and brown long-eared bat. The site is not within the typical range published for *Nyctalus* bat species, although recent and historic records for these species were returned through the desk study (although in small numbers). The site is also located within close proximity to a regional area of established distribution for Natterer's bat, which if present, could represent a population at the edge of the species' distribution range.

#### Bat Habitat Suitability Appraisal

- 8.6.43 When considering the full extent of the site, substantial foraging and commuting opportunities for bats are limited to localised resources which are proportionally minor in both their extent and distribution (e.g., marginal woodland and scrub habitats, and open habitat found directly adjacent). In contrast, the majority of the site comprises open habitat, and whilst foraging and commuting potential is not negligible, resources here are largely isolated, exposed and located at increased elevation, lacking any substantial commuting features which might provide sheltered flightpaths to features of interest (e.g., standing water bodies and streams). Overall, the site itself is considered to be of **Low** habitat suitability to bats in reference to both Bat Conservation Trust (BCT) guidance (Collins, 2023) and NatureScot (2021) habitat descriptions relative to suitability and risk, respectively. The majority of the site is isolated from the wider landscape, lacking any prominent commuting features to central areas, with the opportunities within being largely exposed and unlikely to be utilised extensively by local bat populations.
- 8.6.44 In line with the definition outlined within BCT guidelines (Collins, 2023), the Off-site turning circle is considered to be of **Moderate** habitat suitability to bats, with open habitat present being a relatively poor habitat resource in its majority, but with edge and closed foraging and commuting habitat provided by both woodland and riparian features being of higher value, in addition to being well connected to resources within the local landscape.

#### Preliminary Roost Assessment

- 8.6.45 A series of domestic buildings located towards the north-west of the site were noted for having potential bat roosting features (see **Figure 8.7a**). These buildings are located greater than 200 m plus rotor radius from the proposed turbine locations and over 100 m from the proposed access track.
- 8.6.46 Within the Off-site turning circle, a stand of mature beech trees (T1; **Figure 8.7b**) and an adjacent stand of beech, sycamore and birch trees (T2; **Figure 8.7b**) were noted for having potential bat roosting features.

#### Bat Activity Survey

8.6.47 Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*) and *Myotis* species were recorded during the bat activity surveys. Of these, common pipistrelle and soprano pipistrelle are high collision risk (HCR) species, in accordance with NatureScot (2021).



- 8.6.48 The site is not within the published usual range of *Myotis* species, however, *Myotis* species were recorded during the bat activity surveys and therefore, it is considered that one or more of this genus are present at the locality.
- 8.6.49 Soprano pipistrelle was the most abundantly recorded species, accounting for 31.77 % of total calls recorded. However, brown long-eared was the most frequently recorded species, recorded on 50 % of the sampled nights.
- 8.6.50 Soprano pipistrelle represented 31.77 % of total call registrations and was recorded on 33.3 % of sampled nights. This species represented a median BAI (passes per hour) of 0.26 (excluding absences).
- 8.6.51 *Myotis* species represented 30.73 % of total call registrations and was recorded on 44.4 % of sampled nights.
- 8.6.52 Common pipistrelle represented 17.19 % of total call registrations and was recorded on 22.2 % of sampled nights. This species represented a median BAI of 0.19 (excluding absences).
- 8.6.53 Brown long-eared represented 20.31 % of total call registrations and was recorded on 50.0 % of sampled nights.
- 8.6.54 Based on analysis of the bat activity survey results, it is possible that soprano pipistrelle, brown long-eared and *Myotis* species roosts may be present within close proximity to the site.
- 8.6.55 As detailed within Section 4 of **Technical Appendix 8.3**, the site has been assessed as having an 'Initial Site Risk' of 2, representing a Low Site Risk:
  - The site 'Habitat Risk' is classified as Low.
  - The site 'Project Size' is classified as being Medium.
- 8.6.56 In summary, per monitoring station location the 'Overall Risk Assessment' equates to 'Low Risk' when considering median activity percentile for both common and soprano pipistrelles. When considering maximum activity percentiles, Overall Risk Assessment ranged from 'Low Risk' to 'Medium Risk', but most frequently equates to 'Low Risk' relative to both common and soprano pipistrelle. Per recording period, the Overall Risk Assessment equates to 'Low Risk' when considering median activity percentiles for both common and soprano pipistrelle. Per recording period, the Overall Risk Assessment equates to 'Low Risk' when considering median activity percentiles for both common and soprano pipistrelle. When considering maximum activity percentiles, common pipistrelle also uniformly equates to 'Low Risk'. However, soprano pipistrelle ranged from 'Low Risk' to 'Medium Risk'; but most frequently equating to 'Low Risk'. On this basis, the Stage 2 overall risk assessment concludes that there is a Low/Medium likelihood of the Proposed Development resulting in significant impact on bat species populations.
- 8.6.57 Myotis species and brown long-eared bat are not considered further given they are not HCR species.

Fisheries

8.6.58 This section should be read with reference to **Technical Appendix 8.4** and **Figure 8.8**.

Desk Study

- 8.6.59 The Proposed Development is not located within 10 km of any national or internationally designated sites for nature conservation with fish qualifying interests.
- 8.6.60 HBRG returned no fish species records within 2 km of the Site.
- 8.6.61 The Black Water River (part of the River Conon catchment) is currently classified (as part of SEPA's River Basin Management Plan (SEPA (2021)) as having good overall ecological status and high access for fish migration. The Black Water River runs along the western and southern boundaries of the Off-site turning circle. At its closest point, the Black Water River is located along the north-western boundary of the site, adjacent to the entrance of the access track; it then flows south and east around the site getting further away from the site.
- 8.6.62 A review of the Cromarty Fisheries Management Plan revealed that the Black Water River supports Atlantic salmon (*Salmo salar*), sea trout (*Salmo trutta*), brown trout (*Salmo trutta*), eel (*Anguilla anguilla*), rainbow trout (*Oncorhynchus mykiss*), minnow (*Phoxinus phoxinus*) and pike (*Esox lucius*). The River Conon itself supports eel, pike, three-spined stickleback (*Gasterosteus aculaeatus*), rainbow trout, flounder (*Platichthys flesus*), ten-spined stickleback (*Pungitius pungitius*), Atlantic salmon, sea trout, brown trout, perch (*Perca fluvialis*), sea lamprey (*Petromyzon marinus*), river lamprey (*Lampetra fluviatilis*), brook lamprey (*Lampetra planeri*) and minnow. The catchment is not stated to include freshwater pearl mussel (FWPM; *Margaritifera margaritifera*).



#### Fish Habitat Survey

- 8.6.63 The watercourses within the site all drain into the Black Water River, which is part of the River Conon catchment. The following watercourses were assessed to be suitable for supporting small numbers of both migratory and non-migratory fish fauna: Allt Cnoc nan Cleireach and tributaries (sample points 1-4; see **Figure 8.8**), Allt Abhagaith (sample point 6), Allt an Torra-bheithe (sample point 7), Allt na Goibhle (sample point 9), Allt an Achaidh Mhoir (sample point 11), Allt Fionnaidh (sample point 12). Black Water River (sample point 22) was assessed to be suitable for larger numbers of migratory and non-migratory fish, including salmonid species of a range of age classes. A number of these watercourses are within close proximity to the access track of the Proposed Development, some of which are along watercourses with proposed new watercourse crossings (Allt Fionnaidh Allt Abhagaith and Allt na Goibhle).
- 8.6.64 The following watercourses were assessed to be not suitable for fish fauna: Allt a' Mhuilinn (sample point 5; see **Figure 8.8**), tributary of Allt Abhagaith (sample point 21), Allt Brocaig (sample point 8), tributary of Allt na Goibhle (sample point 10), tributary of Allt Fionnaidh (sample points 13-16) and unnamed tributary watercourses (sample points 17-21; a headwater of Allt Gleann Sgathaich, unnamed tributaries of Loch a' Bhealaich and tributary of Allt Fearna).

#### Other Species

- 8.6.65 The data search with HBRG returned records of common toad, palmate newt, common frog, slow-worm, adder and common lizard from 2 km of the site.
- 8.6.66 Common frog, palmate newt and common lizard were also recorded anecdotally within the site during the extended Phase 1 habitat survey.

#### Future Baseline in Absence of Proposed Development

- 8.6.67 In the absence of the Proposed Development, or assuming a gap between baseline surveys and the commencement of the Proposed Development construction, changes in baseline ecology conditions (i.e. distributions and populations) are most likely to result from habitat modifications within or surrounding the site due to land management practices, principally, grazing (by livestock and deer) and to a lesser extent, forestry works.
- 8.6.68 In the absence of the Proposed Development, the habitats within the site are considered to largely remain under the existing management regime. This comprises grazing by livestock and deer.
- 8.6.69 Commercial forestry operations within nearby plantation forestry, such as felling, may also alter the distribution of ecological species recorded during baseline surveys; however, it is highly unlikely this would be in such a way as to substantially alter the baseline reported here.
- 8.6.70 The site is not subject to any other development pressures or management which would affect the habitats or ecological species in such a way that the present baseline conditions presented here would become substantively different.
- 8.6.71 Whilst short-term and small-scale variability in populations and distributions may occur, and revisions to conservation statuses and designations are possible, such changes would be unlikely to qualitatively alter the conclusion of the assessment presented in this chapter and have been accounted for through the application of a precautionary approach and appropriate mitigation.
- 8.6.72 Increased summer and winter temperatures and higher average precipitation rates in summer and winter, predicted by climate change, are likely to result in an extended growing/breeding season with earlier in the year vegetation growth and breeding activity of key species. Increased rainfall is likely to result in greater vegetation growth, although for some botanical species it may have adverse effects (through water-logging). Higher rates of juvenile mortality for key species may be expected as a result of higher rates of rainfall. The bat activity season is likely to be extended by the higher seasonal temperatures, but conversely higher rates of rainfall are likely to adversely affect foraging activity.
- 8.6.73 The opposing potential effects of climatic change on ecology features makes predicting future likely outcomes difficult. However, the potential effects on ecology features detailed in this chapter are not predicted to substantively change in relation to climate change over the next 50 years.

## 8.7 Standard Mitigation

8.7.1 The Proposed Development has been subject to a number of design iterations and evolution in response to constraints identified as part of the baseline studies, intended to reduce environmental effects (see Chapter 2: Site Description and Design Evolution and Chapter 10: Geology, Hydrogeology, Hydrology and Soils for further details).



- 8.7.2 In accordance with the mitigation hierarchy, the following design considerations have been incorporated to avoid and minimise adverse effects upon ecological features:
  - The Proposed Development infrastructure has been designed to minimise the requirement for landtake, impacts on areas of deeper peat, priority peatland of possible national interest (which includes some areas with features of near natural condition) and the number of watercourse crossings, reducing the loss of moorland habitats and potentially sensitive fish habitats.
  - The Proposed Development largely avoids direct impacts on watercourses, however there are 11 new vehicular watercourse crossings required. Any new and upgraded crossing will be sensitively designed to allow the continued movement of water and wildlife within the watercourse. Furthermore, the retention and reinstatement of original substrates (where possible) will be undertaken, and new/upgraded culverts will not have any perched/hanging outlets. See **Chapter 10: Geology**, **Hydrogeology**, **Hydrology and Soils** for further details.
  - The layout of on-site access tracks has been designed to be as limited in length as possible and, where available, the access tracks have followed existing tracks to minimise land take.
  - A minimum 50 m buffer has been included around all mapped watercourses for the Proposed Development infrastructure; with the exception of the access tracks. The length of access track within 50 m of mapped watercourses has been minimised as part of the Proposed Development design. Works within 50 m of watercourses will be limited to the creation of 11 new crossings and the creation of new access tracks.
  - Where the access track does cross watercourses, where possible, the track has been aligned to cross watercourses at around 90 degrees (perpendicular) to the direction of flow. This minimises disturbance during construction and operation in the vicinity of watercourses and ensures separation from the watercourse buffer zones as much as possible.
  - The layout of the Proposed Development has adopted a minimum 50 m<sup>2</sup> 'stand-off' distance from bat habitat features and turbine blade tips in accordance with NatureScot guidance (2021). A distance of 54.77 m between T1 – T4 & T8 and watercourses/waterbodies, and 85.79 between T5 – T7 & T9<sup>3</sup> and watercourses/waterbodieshas been achieved, in accordance with NatureScot guidance (2021).
  - A minimum 50 m buffer (from blade tip) from all trees/structures with bat roost potential has been maintained, in the event bat roost establishment may occur between baseline surveys and the commencement of operation and because woodland edges may act as a commuting/foraging corridor for bats.
  - A minimum 30 m buffer between turbine locations, track and infrastructure, and 100 m buffer between borrow pit locations, and the potential badger setts has been included in accordance with current good practice mitigation outlined in NatureScot guidance (2020).
  - Although no water vole burrows were recorded on site during field surveys, a minimum 10 m buffer between the Proposed Development and the water vole latrines has been included; and,
  - A minimum 50 m buffer between proposed working areas and waterbodies has been included to protect waterbodies on-site.

#### Embedded Mitigation Measures

- 8.7.3 Full details of construction phase mitigation measures for the Proposed Development will be contained within a CEMP, and an OCEMP has been prepared which provides the structure for the CEMP (see **Technical Appendix 3.1**). The final CEMP (produced to discharge planning condition) will include all good practice construction measures, pollution prevention controls, dust suppression and prevention measures, sediment management and sensitive techniques with regards to construction in peatlands and in/near watercourses, to be implemented over the course of the construction of the Proposed Development in line with current industry and statutory guidance. The CEMP will include information on water quality monitoring during the construction phase of the Proposed Development. The CEMP will also include a commitment to not undertake nocturnal works using artificial lighting, which could otherwise adversely affect foraging/commuting bats.
- 8.7.4 Safe methods for on-site concrete batching and lorry washout will be included in the CEMP, to consider both airborne and waterborne paths of impact.
- 8.7.5 Pollution management best practices for re-fuelling, bunding and storing fuel, oil or hazardous substances, careful storage of chemical, fuel and oil, as well as spillage incident protocols, will be included in the CEMP. Re-fuelling will only take place at a distance of more than 50 m from watercourses. Appropriate bunding will also be used around re-fuelling and chemical storage areas, preventing any fuel or chemical leaks

<sup>&</sup>lt;sup>2</sup> Micrositing will take these required buffers into account.

<sup>&</sup>lt;sup>3</sup> The difference in buffer distance is due to the difference in turbine specification proposed, as detailed in Chapter 3.

from contaminating the capping layer stone or being washed into the receiving water environment. The protocols to be adopted in the event of a fuel spillage or similar incident within the compound area will be contained in the CEMP and will include the requirement for all on site vehicles to carry spill kits.

- 8.7.6 Good practice measures to protect retained habitats during the construction works will also be implemented, including the sensitive demarcation of working areas, to be overseen by an ECoW.
- 8.7.7 The CEMP will include Habitat Specific Protection Plans (HSPPs) detailing good practice measures for construction works within Annex 1, SBL or potential GWDTE habitats. HSPPs will detail measures required to manage construction works within these sensitive habitats and include habitat reinstatement measures.
- 8.7.8 To minimise damage or alteration in pH from leaching of cement or other alkaline building materials into sensitive wet acidic habitats (blanket bog, valley mire and acid grassland), where groundwater is encountered in the excavation for the turbine bases, the excavation will be lined with an impermeable membrane to prevent seepage of cementitious material into the sub-soil.
- 8.7.9 A OPMP (**Appendix 10.2**) has been developed to manage excavation, handling, storage and reuse or reinstatement of peat and includes measures to minimise handling of peat and avoid removal from ecologically sensitive areas.
- 8.7.10 Good practice pollution prevention measures during works are discussed further in **Chapter 3.** Measures to prevent hydrological impacts are set out, which will prevent impacts such as contamination to the rivers and streams within the site as well as downstream rivers and designated sites to which they connect.
- 8.7.11 Good practice measures to prevent harm to faunal species will also include SPPs (see Pre-construction Surveys, below) and the careful storage of potentially dangerous substances or materials within construction compounds. Excavations will either be temporarily covered outside working hours or, if excavations are left open, boards will be positioned so that any animal can escape. On-site speed limits will also be adhered to.
- 8.7.12 Good practice habitat reinstatement measures will also be adopted and implemented in areas subject to disturbance during construction works, as soon as it is practical to do so. Further details of habitat reinstatement measures to be implemented will be provided within the CEMP, and details on habitat enhancement measures are provided within the oNEMP (see **Technical Appendix 8.5**).
- 8.7.13 A FMP will also be implemented to record pre-, during and post- construction fish populations in watercourses on and adjoining the site.
- 8.7.14 Measures to protect fish during construction of watercourse crossings will be included in the CEMP.

#### Pre-construction Surveys

- 8.7.15 There is potential for a change in the distribution of protected terrestrial mammal species within the site between the completion of baseline surveys presented in this chapter and the commencement of construction activities for the Proposed Development. Pre-construction surveys for protected terrestrial mammals including badger, otter, pine marten, red squirrel, water vole and Scottish wildcat will be undertaken within a defined period prior to the commencement of construction works and as set out within the OCEMP (Technical Appendix 3.1).
- 8.7.16 This will cover all areas within 250 m of the Proposed Development and associated working areas, following guidance applicable at the time of survey.
- 8.7.17 The results of the pre-construction surveys will inform the need for further mitigation (if required) in respect of sensitive working practices, SPPs and/or the requirement to consult with NatureScot in relation to any protected species licensing.

#### Ecological Clerk of Works

- 8.7.18 A suitably qualified ECoW will be employed for the duration of the construction and reinstatement periods, to ensure ecological interests are safeguarded, although this may not necessarily be a full-time role throughout. The role of the ECoW related to ecological work will include the following tasks:
  - provide briefings and information to all staff on-site, so staff are aware of the ecological sensitivities within the site and the legal implications of not complying with agreed working practices;
  - agree and monitor measures designed to minimise damage to retained habitats;
  - undertake pre-construction surveys and advise on ecological issues and working restrictions where required;
  - complete site-supervision works as required, in relation to sensitive habitats and protected species;
  - report to THC any material breaches of the CEMP (if encountered); and
  - oversee restoration of working areas following construction.



#### **Operational Period**

- 8.7.19 Direct effects for sensitive ecological features (such as habitat loss and disturbance; see **Table 8.10**) are not anticipated to occur during the operational period of the Proposed Development with good practice measures in place, including pollution prevention controls and operational vehicles keeping to defined access tracks. The on-site speed limit of 15 mph will also be adhered to, to reduce the risk of direct collision between wildlife and vehicular traffic. These measures will be set out in an Operational Management Plan (OMP).
- 8.7.20 During the operation of the Proposed Development, maintenance visits will be infrequent and unlikely to result in disturbance to ecological features.

#### Nature Enhancement Management Plan

- 8.7.21 The ONEMP (see **Appendix 8.5**) includes restoration measures of the most sensitive habitats within the site (including peatland), and subsequent monitoring which will measure the effectiveness of restoration works, with restoration works adaptable in response to monitoring outcomes. Restoration works will benefit ecological species (such as terrestrial mammals, foraging/commuting bats, fish and plants) present on, and close to, the site. Such enhancement measures will accord to the applicable NatureScot guidance, at the time of consent (if the Proposed Development is consented). The ONEMP will be finalised into a NEMP post-consent.
- 8.7.22 The ONEMP accords with NPF4 with regards to biodiversity enhancement (Policy 3), peatland restoration (Policy 5) and woodland enhancement (through riparian native tree planting; Policy 6).

#### **Decommissioning Restoration and Aftercare Strategy**

8.7.23 At the point of decommissioning, a Decommissioning Restoration and Aftercare Strategy (DRAS) will be developed through consultation with THC, NatureScot and other relevant consultees in line with relevant legislation and guidance at that point in time. The DRAS will detail those measures to be adopted to ensure the protection of key ecological features during decommissioning. These measures will typically mirror the measures adhered to in the CEMP and will include pollution prevention protocols and pre-decommissioning surveys.

## 8.8 Features Brought Forward for Assessment

- 8.8.1 The results of the desk study and field surveys were used to inform the identification of important ecological features within and around the site to be brought forward for assessment. Features which are unlikely to be affected, or which are considered sufficiently widespread, unthreatened or resilient to impacts from the Proposed Development, and hence would remain viable and sustainable, have not been subject to a detailed assessment and have been 'scoped-out'.
- 8.8.2 Mitigation measures for 'scoped-out' features, are however outlined as appropriate to ensure legislative compliance.
- 8.8.3 A summary of identified important ecological features in the study area relevant to the Proposed Development is provided in **Table 8.10** which details whether each feature is scoped in or out of the assessment. The level of importance assigned to each feature is based upon baseline survey results and professional judgement. Only Important Ecological Features (IEFs) identified during baseline information gathering are considered in **Table 8.10**.

IEF	Sensitivity	Scoped In or Out?	Justification
Ben Wyvis SSSI and SAC	High / International (SAC) / National (SSSI)	In	<ul> <li>These designated sites are located approximately 1.35 km north-east of the site and are designated for the presence of static habitat and plant interests.</li> <li>As assessed during the Fish Habitat Survey (Technical Appendix 8.4), the watercourses within the site all drain into the Black Water River, which is located to the west and south-west of the site (and thus watercourses on-site flow away/from Ben Wyvis SSSI and SAC, which are situated to the north-east). A review of OS maps identifies that a ridge, comprising a series of peaks (including Carn Gorm) is located along the north-eastern boundary of the site, therefore separating the location of the Proposed Development from the SSSI and SAC. As such, there is no evidence of hydrological connectivity between the site and the SSSI and SAC, and no prospect of hydrological flow from the site into the SSI or SAC.</li> <li>Embedded mitigation and good practice measures, including (mitigation and good practice measures).</li> </ul>
			prevention controls, sediment management and sensitive

Table 8.10 - Summary of sensitive/important ecological feature sensitivity



IEF	Sensitivity	Scoped In or Out?	Justification		
			techniques with regards to construction near water, water quality monitoring (pre, during and post-construction), pre-construction surveys and the presence of an ECoW, will be implemented during construction (to be secured via the CEMP, see <b>Appendix</b> <b>3.1</b> ). These measures would protect the habitats present within the site (including watercourses). However, as noted above, the watercourses on-site are not hydrologically linked to the SAC or SSSI so effects on the designated sites through hydrological pathways are not anticipated.		
			<ul> <li>Through consultation, NatureScot recommended that the potential effects for deer to be displaced from the site affecting Ben Wyvis SSSI/SAC should be scoped in.</li> </ul>		
			- The Proposed Development will result in modest amounts of loss of open upland, moorland habitat with limited removal of notable areas of forestry/woodland, and thus the habitats offering shelter to deer within the site will largely be retained.		
			As requested through consultation however, potential effects on the habitat and plant interests of Ben Wyvis (SSSI and SAC) in relation to deer displacement from the site are are scoped into detailed assessment.		
Ben Wyvis NNR	High / National	Out	<ul> <li>Ben Wyvis NNR is located 1.35 km north-east of the site, and although it does not have specific qualifying features, a mosaic of upland habitats are noted to be present, and mountain hare is listed as a possible mammal to see.</li> </ul>		
			- As assessed during the Fish Habitat Survey (Technical Appendix 8.4), the watercourses within the site all drain into the Black Water River, which is located to the west and south-west of the site (and thus watercourses on-site flow away/from Ben Wyvis NNR, which is situated to the north-east). A review of OS maps identifies that a ridge, comprising a series of peaks (including Carn Gorm) is located along the north-eastern boundary of the site, therefore separating the location of the Proposed Development from the NNR. As such, there is no evidence of hydrological connectivity between the site and the NNR, and no prospect of hydrological flow from the site into the NNR.		
			<ul> <li>Embedded mitigation and good practice measures, including (but not restricted to) drainage management, pollution prevention controls, sediment management and sensitive techniques with regards to construction near water, water quality monitoring (pre, during and post-construction), pre-construction surveys and the presence of an ECoW, will be implemented during construction (to be secured via the CEMP, see Appendix 3.1). These measures would protect the habitats present within the site (including watercourses). However, as noted above, the watercourses on-site are not hydrologically linked to the NNR so effects on the designated sites through hydrological pathways are not anticipated.</li> </ul>		
			<ul> <li>Effects on habitats and mountain hare are considered seperately (see below).</li> <li>Betantial for the Branced Development to effect people's</li> </ul>		
			Potential for the Proposed Development to affect people's enjoyment of this NNR, in terms of landscape and visual impacts, are considered in <b>Chapter 7</b> .		
			effects are scoped out of detailed assessment.		
Lower River Conon SSSI, Conon Islands SAC, Loch Ussie SSSI, Loch Ussie SAC, Allt nan Caorach SSSI	High / International (SAC) / National (SSSI)	Out	<ul> <li>These designated sites are located at least 5.9 km from the site at their closest point, and are designated for the presence of static habitat interests.</li> <li>The site is hydrologically connected to Lower River Conon SSSI and Conon Islands SAC. However, the tributory to River Conon, which connects the site to these designated sites, travels through forestry and adjacent to road networks and a railway beore reaching the designated sites. The Porposed Development is unlikely to result in a significant increase in pollution within these designated sites, considering the existing presence of commercial forestry activity, railway and roads.</li> </ul>		
			<ul> <li>Embedded mitigation and good practice measures will be implemented under the CEMP, including (but not restricted to)</li> </ul>		



IEF	Sensitivity	Scoped In or Out?	Justification		
			pollution and siltation protection measures, water quality monitoring (pre, during and post-construction) and the presence of an ECoW during construction.		
			– Although the site is hydrologically connected to Lower River Conon SSSI and Conon Islands SAC, on account of spatial separation, embedded mitigation and sensitively located and designed infrastructure, no effects upon the ecological qualifying features of these designated sites are anticipated. Effects on these sites are therefore scoped out of detailed assessment.		
			<ul> <li>The site is not hydrologically connected to Loch Ussie SSSI, Loch Ussie SAC nor Allt nan Caorach SSSI. As such, on account of spatial separation, embedded mitigation and lack of hydrological connectivity, no effects upon the ecological qualifying features of these designated sites are anticipated.</li> <li>Effects on these sites are therefore scoped out of detailed assessment.</li> </ul>		
Wester Ross Biosphere Reserve	High / National	Out	– Part of the site is located within the Transitional Zone of the Wester Ross Biosphere Reserve. The site is, however, located approximately 37 km away from the nearest core zone of this Biosphere Reserve. Biosphere reserve designations help to promote the integrated and sustainable management of an area; these reserves are not designated for specific ecological features.		
			Embedded mitigation and good practice measures will be implemented under the CEMP, including (but not restricted to) pollution and siltation protection measures, water quality monitoring (pre, during and post-construction), pre-construction survey and the presence of an ECoW during construction.		
			<ul> <li>On account of spatial separation between the site and the core zone, embedded mitigation and sensitively located and designed infrastructure, no effect upon this Biosphere Reserve is anticipated.</li> </ul>		
			Effects on this site are therefore scoped out of detailed assessment.		
Ancient Woodland	Medium / Regional	Out	– An area of long-established (of plantation origin) woodland, as listed on Scotland's Environment Map (ancient woodland inventory), is present within the site. This area of woodland overlaps with a small area of the site, towards the south-west, and extends north parallel to the site's western boundary. This area of woodland is located approximately 0.3 km away from the Proposed Development's infrastructure at its closest point.		
			- The 0.3 km distance between the area of long-established (of plantation origin) woodland and Proposed Development infrastructure thus exceeds the documented suggested buffer from the boundary of the woodland to avoid root damage, which is 15 m (as detailed in Government Guidance (Ancient woodland, ancient trees and veteran trees: advice for making planning decisions; 2022)).		
			<ul> <li>Embedded mitigation, including pollution prevention control, would be undertaken, in accordance with the CEMP, as detailed in Section 8.8.</li> </ul>		
			detailed assessment.		
potential GWDTE habitats	(priority peatland)	In – Construction phase only	<ul> <li>These habitats are included on Annex 1 of the Habitats Directive, are potentially GWDTE and/or listed on the SBL.</li> </ul>		
	Medium /Regional (other listed habitats)		<ul> <li>Habitat loss as a result of the Proposed Development has been minimised through a sensitive and iterative design process, however direct land-take resulting in the loss of some Annex 1/GWDTE/SBL habitat types will be unavoidable. Additionally, temporary habitat losses are also anticipated to occur during the construction phase of the Proposed Development.</li> </ul>		
			<ul> <li>The potential for indirect effects on adjoining/nearby habitats through local changes to hydrology is also considered within the assessment.</li> </ul>		
			<ul> <li>On account of embedded mitigation, including (but not restricted to), the implementation of good practice construction measures,</li> </ul>		

IEF	Sensitivity	Scoped In or Out?	Justification			
			pollution prevention controls, sediment management and sensitive techniques with regards to construction near water (to be secured via the CEMP, see <b>Appendix 3.1</b> ), and similar measures to be implemented during operation (to be secured via an OMP), there is no route to impacts from dust, pollution and run-off to habitats likely to lead to significant adverse effects upon these habitats.			
			As such, indirect effects with the exception of potential drying effects to hydrologically dependant habitats (i.e. blanket and modified bog, wet dwarf shrub heath and flush) are scoped out of detailed assessment.			
			<ul> <li>Direct effects on habitats are not anticipated to occur during the operational phase, due to the implementation of embedded mitigation, including (but not restricted to) pollution prevention controls and operational vehicles keeping to defined access tracks.</li> </ul>			
			Such direct effects during operation are therefore scoped out of detailed assessment.			
			<ul> <li>As such, effects upon Annex 1, SBL or potential GWDTE habitats through habitat loss only during the construction stage is scoped into detailed assessment.</li> </ul>			
			<ul> <li>Habitats within the Site which are Annex 1, SBL or potential GWDTE habitats, but not subject to direct or indirect effects of the Proposed Development by virtue of distance from the Proposed Development are scoped out of detailed assessment.</li> </ul>			
All other habitats and vegetation	Low / Local	Out	<ul> <li>Habitats and vegetation communities which are not listed in Annex 1 (of the Habitats Directive) or the SBL, or which are considered of low groundwater dependency, are scoped out of detailed assessment.</li> </ul>			
Badger Otter Pine marten Red squirrel Water vole Scottish wildcat Mountain hare	Low / Local	Out	<ul> <li>These features are considered to be generally common and widespread (with some not sensitive to wind farm developments, including amphibians; see NatureScot, 2024j) and/or were recorded very infrequently or in numbers of very low importance during the baseline studies, in that the potential for significant adverse effects from the Proposed Development on these species at a population level is considered inconsequential.</li> <li>Eurthermore, embedded mitigation, including (but not restricted)</li> </ul>			
			to), the implementation of good practice construction measures, pollution prevention controls, sediment management, sensitive techniques with regards to construction near water, pre- construction surveys, SPPs (where required), the presence of an ECoW and licencing requirements (where applicable), (to be secured via the CEMP, see <b>Appendix 8.8)</b> , are considered appropriate to avoid any potentially significant adverse effects upon badger, otter, pine marten, red squirrel, water vole, Scottish wildcat and mountain hare.			
			<ul> <li>On consideration of the desk study and field survey results, the extent and nature of the Proposed Development, and embedded mitigation (as detailed above), there is no route to impacts likely to lead to significant adverse effects upon these features.</li> </ul>			
			As such, effects on these terrestrial mammals are scoped out of detailed assessment.			
Deer	Low/ Local	Out	<ul> <li>The Proposed Development will result in the loss of open upland, moorland habitat with limited removal of forestry/woodland and thus the habitats offering shelter to deer within the site will largely be retained.</li> </ul>			
			– Any requirement for wild deer management is assumed to be undertaken by the landowner (noting <b>Technical Appendix 8.5</b> considers deer management further). As such, there would be a commitment on the Applicant to liaise with the landowner to ensure that ongoing deer management activities take account of the construction and operation phases of the Proposed Development, with wild deer to be managed on-site as per the status quo. Any requirement for a Deer Management Statement (DMS) for the site would be discussed with the landowner. If the requirement for a DMS is identified (for example over-grazing is identified on-site during the habitat monitoring, see <b>Technical</b>			



IEF	Sensitivity	Scoped In or Out?	Justification		
			Appendix 8.5), the DMS would be agreed in consultation with the landowner and adjacent interested parties, to avoid adverse impacts on collaborative parties.		
			<ul> <li>The potential for upland habitats (e.g., blanket bog) to be affected by deer that might be displaced from the Proposed Development are considered with respect to the Ben Wyvis SSSI and SAC.</li> </ul>		
			Embedded mitigation, including pre-construction surveys and the presence of an ECoW (to be secured via the CEMP, see Appendix 8.8) are considered appropriate to avoid any potentially significant adverse effects upon deer, including on deer welfare. Some temporary, open excavations may be created as part of the Proposed Development within suitable foraging areas. As detailed in Section 8.7, these excavations should be covered outside work hours to ensure that no animal, including deer, fall in. If excavations are left open, boards will be positioned so that any animal can escape. These measures would be secured via the CEMP. The potential for deer collision with plant machinery or vehicles within the site as part of construction works would also be avoided through adherence to on-site speed limits which will be detailed in a future CEMP.		
			The potential for the displacement of deer onto adjacent roads is considered to be limited, with the direction of deer displacement reasonably expected to occur into adjacent available woodland cover to the west and south. No anticipated change to existing deer numbers crossing the local road network and potential for Deer Vehicle Collisions (DVCs) is therefore anticipated. But note, any requirement for a DMS will be guided by monitoring as part of the NEMP (if the Proposed Development is consented).		
			- The Proposed Development does not include the erection of any temporary or permanent deer fencing to exclude deer from the site. Local deer populations would therefore continue to be able to move freely within the site and around the Proposed Development infrastructure following the completion of construction works. Given the extensive availability of suitable open habitats within the immediate and wider surrounding area available for deer, grazing resources for deer populations within the site and local area, would not be adversely affected by the Proposed Development.		
			<ul> <li>During operation, the potential for deer collision with plant machinery or vehicles within the site as part of operational maintenance works would be avoided through adherence to on- site speed limits, to be secured via the OMP.</li> </ul>		
			<ul> <li>On account of embedded mitigation (as detailed above), there is no route to impacts likely to lead to significant adverse effects directly upon deer.</li> </ul>		
			As such, effects on deer are scoped out of detailed assessment.		
Bats - roosting	Low / Local	Out	<ul> <li>All bat species are protected under the Conservation (Natural Habitats &amp;c.) Regulations 1994 (as amended), the Wildlife and Countryside Act 1981 (as amended) and the Nature Conservation (Scotland) Act 2004 (as amended). They are also SBL priority species.</li> </ul>		
			<ul> <li>No trees or structures with the potential to support maternity roosts and/or significant swarming or hibernation roosts were identified within 200 m plus rotor radius of the Proposed Development turbines.</li> </ul>		
			Therefore effects on roosting bats are scoped out of detailed assessment.		
Bats - foraging/commuting	Low / Local	In - Construction and Operational phases	- The Stage 2 overall risk assessment concludes that there is a Low/Medium likelihood of the Proposed Development resulting in significant impact on bat species populations. <i>Myotis</i> species and brown long-eared bat are not considered further given they are not HCR species (see <b>Technical Appendix 8.4</b> ).		
			<ul> <li>I he nature of potential impacts on foraging and commuting bats relate to the construction phase (loss of foraging habitat) and the operational phase (loss of foraging habitat; death or physical</li> </ul>		

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IEF	Sensitivity	Scoped In or Out?	Justification
			injury via collision or barotrauma; and, displacement of individuals or populations from the area).
			As such, effects on commuting and foraging bats are scoped into detailed assessment.
Fisheries	Low / Local	Out	The following measures, as detailed in Section 8.7, are considered appropriate to avoid any potentially significant adverse effects upon fish populations. A minimum 50 m buffer has been included around all mapped watercourses for the Proposed Development infrastructure; with the exception of the access tracks. The length of access track within 50 m of mapped watercourses has been minimised as part of the sensitive Proposed Development design and where the access track does cross watercourses, where possible, the track has been aligned at around 90 degrees (perpendicular) to the direction of flow. These design measures have minimised the potential for effects on fisheries.
			– Location specific good practice measures, as detailed within Chapter 10 Geology, Hydrology, Hydrogeology and Peat, will form part of the final CEMP and would be used to minimise the potential for erosion and sedimentation, which will minimise the potential effects on fifheries.
			- Embedded mitigation and good practice measures, including (but not restricted to), pollution prevention controls, sediment management and sensitive techniques with regards to construction near water, water quality monitoring (pre, during and post-construction) and the presence of an ECoW will be implemented during construction (to be secured via the CEMP, see Appendix 3.1).
			– A FMP, including provision for pre, during- and post-construction fish monitoring, will be produced. Measures to protect aquatic features including fish during construction of watercourse crossings will be included in the CEMP. The design of new and upgraded watercourse crossings will be sensitively designed to allow the continued flow of water and wildlife within the watercourses, with effects on banks of watercourses minimised through crossing design and best practice measures (to be secured via the CEMP, see <b>Appendix 3.1</b> ).
			<ul> <li>Considering these measures, there is no route to impacts likely to lead to significant adverse effects upon fisheries.</li> </ul>
			As such effects on fish are scoped out of detailed assessment.

## 8.9 Potential Effects

- 8.9.1 This section identifies the potential effects in relation to potential deer displacement/encroachment upon Ben Wyvis (SSSI and SAC), habitats (Annex 1, SBL or potential GWDTE habitats) and bats (foraging/commuting) as a result of the Proposed Development alone.
- 8.9.2 The Proposed Development has been assessed for an operational life of 50 years.

#### Construction

- 8.9.3 Potential construction phase impacts on ecological features associated with the Proposed Development are considered to relate to:
  - direct land take (habitat loss) to accommodate the Proposed Development;
  - indirect habitat loss to account for potential changes in habitat vegetation structure (and hydrological linkage) due to drying effects as a result of construction works;
  - temporary disturbance and land take for laydown areas and construction compounds;
  - disturbance to, fragmentation or severance of connecting habitat or potential commuting routes within, and adjacent to, the site; and
  - disturbance and pollution (indirect effects such as noise and vibration, dust, pollution from surface water run-off) resulting from site clearance and construction, plant and vehicles movements, and site workers' activities.



8.9.4 Potential effects are assessed on the assumption that embedded mitigation measures, as detailed in **Section 8.8** and within **Chapters 3 and 10** are implemented.

#### Ben Wyvis (SSSI and SAC)

- 8.9.5 These designated sites are located approximately 1.35 km north-east of the site and are designated for the presence of static habitat and plant interests.
- 8.9.6 During construction works, deer have the potential to be displaced from parts of the site due to noise and the presence of people/equipment on site depending upon the location of works. This may reasonably result in the temporary/short-term relocation of some grazing activities to other parts of the site away from construction areas, or deer seeking shelter and grazing opportunities in habitats beyond the site. The redistribution of deer within the site as a result of construction works, may however result in additional temporary and periodic grazing pressures within alternative habitats within and adjacent to the site, including within Ben Wyvis SSSI and SAC. Any relocated deer are likely to return to the site once construction works are complete, as such, any displacement of deer during the construction stage would likely be for only a short period of time, and only temporary in nature.
- 8.9.7 The Proposed Development would result in the loss of open upland, moorland habitat with very limited removal of forestry/woodland (woodland loss totalling approximately up to 1.2ha, of the 7.1 ha currently present on site) and thus the habitats offering shelter to deer within the site would be largely retained. As the Proposed Development would not result in the removal of notable areas of forestry/woodland, there would be no significant increase in the area of open land within the site, as such, the Proposed Development is unlikely to result in the dispersal of deer out of the site, and into adjacent land, including Ben Wyvis SSSI and SAC. The availability of suitable sheltering habitats within the immediate and wider surrounding area, available for deer, is also extensive.
- 8.9.8 Any requirement for wild deer management is assumed to be undertaken by the landowner. As such, there would be a commitment on the Applicant to liaise with the landowner to ensure that ongoing deer management activities take account of the construction and operation phases of the Proposed Development, with wild deer to be managed on-site as per the status quo. The requirement for a DMS for the site would be discussed with the landowner. If the requirement for a DMS is identified through habitat monitoring (see **Appendix 8.5: ONEMP**), the DMS would be agreed in consultation with the landowner and adjacent interested parties, to avoid adverse impacts on collaborative parties.
- 8.9.9 Impacts on Ben Wyvis SSSI and SAC are therefore predicted to be no more than short-term, Low magnitude, resulting in an effect of **Minor** adverse significance which is considered Not Significant in the context of the EIA Regulations.
- 8.9.10 No other ecological effects upon Ben Wyvis SSSI and SAC are anticipated as a result of the Proposed Development (see **Table 8.10** for rationale).

#### Habitats and Vegetation

#### Habitat Loss

- 8.9.11 There are two main ways by which habitats and vegetation may be affected by habitat loss as a result of the construction phase of the Proposed Development:
  - direct loss the loss of habitats and vegetation under the footprint of the Proposed Development; and
  - indirect loss calculated for Annex 1, SBL and/or potential GWDTE habitats which are located within 10 m of direct habitat loss areas, to account for potential changes in habitat vegetation structure due to drying effects as a result of construction works.
- 8.9.12 For the purposes of assessment, a precautionary approach has been taken which assumes that direct habitat loss and indirect loss of Annex 1, SBL and/or potential GWDTE habitats represents a permanent, irreversible adverse effect. In practice, some areas indirectly affected may be able to be restored i.e., during habitat reinstatement following construction in accordance with the OCEMP (Technical Appendix 3.1). Consideration is also given to those habitats temporarily affected, although it is considered that these will be reinstated.
- 8.9.13 **Table 8.11** details the estimated direct and indirect permanent and temporary habitat losses as a result of the construction of the Proposed Development on Annex 1, SBL and/or potential GWDTE habitats. Many areas of the site comprise a mix of habitats which are too complex to separate into defined habitat types. As such, habitats have been grouped into the following categories; peatland (separated into 'Peatland of Possible National Interest' and 'Peatland not of Possible National Interest', in accordance with NatureScot, 2023), heath, marshy grassland, and woodland. The habitat type categories comprise both habitat mosaic and pristine examples of these habitats recorded within the site. Within **Table 8.11**, temporary loss relates to temporary habitat removal required for the temporary construction compounds, temporary substation compound, and borrow pits; which will be fully reinstated back to those respective habitats after the construction phase. The permanent habitat loss relates to all other infrastructure associated with the Proposed Development.



8.9.14 Total permanent direct land take for the Proposed Development will be up to 31.9 ha of which 24.667 ha are accounted for in **Table 8.11**. Total temporary direct land take for the Proposed Development will be up to 1 ha, of which 0.756 ha are accounted for in **Table 8.11**. The remaining habitats are not Annex 1, SBL and/or potential GWDTE habitats so have been scoped out of this assessment. Potential indirect losses of protected and notable habitats within 10 m of the Proposed Development are of a greater extent as compared to direct losses (see **Table 8.11**), though are less certain to take place.

Table 8.11 - Summary of habitat losses on scoped in habitats

Habitat Type	NVC	Total Area	Habitat Los	Relative Coverage Lost (%)			
Category	community/sub- community	Within Site (ha)	Direct	Indirect (out to 10 m)	Total (Direct plus indirect out to 10 m)		
Permanent Loss							
Peatland of Possible National Interest	M17/M19	333.462	10.722	14.038	24.760	3.22 (direct) 4.21 (indirect) 7.43 (total)	
Peatland not of national interest	M17/M19	112.008	5.416	3.529	8.945	4.84 (direct) 3.15 (indirect) 7.99 (total)	
Heath	H10 H12a M15	481.341	8.219	7.378	15.597	1.71 (direct) 1.53 (indirect) 3.24 (total)	
Marshy Grassland	M23b	8.56	0.189	0.631	0.820	2.21 (direct) 7.37 (indirect) 9.58 (total)	
Woodland	W4	5.092	0.121	0.393	0.514	2.38 (direct) 7.72 (indirect) 10.1 (total)	
Temporary Lo	ss						
Heath	H12a H15	481.341	0.212	0.07	0.282	0.04 (direct) 0.01 (indirect) 0.05 (total)	
Peatland of Possible National Interest	M17 M19	333.462	0.544	0.317	0.861	0.16 (direct) 0.10 (indirect) 0.26 (total)	

Peatland

- 8.9.15 The Proposed Development is predicted to result in the permanent direct and indirect loss of 24.760 ha of Peatland of Possible National Interest, which represents 7.43 % of the peatland of possible national interest present within the site. Note, some (five) of the peatland areas of possible national interest has features indicative of near natural condition, and these areas are listed in **Technical Appendix 8.1**. However, for these peatland areas identified as having some near natural features, the instance of these also having some areas indicative of modification and/or degradation were not precluded. It is considered that effects on peatland habitat in relation to peatlands of possible national interest will appropriately regard peatland with features of near natural condition. Of the Peatland of Possible National Interest to be lost only 3.22 ha will be directly lost, with the remainder (4.21 ha) to be indirectly lost and potentially able to be reinstated. The Proposed Development is also predicted to result in the permanent direct and indirect loss of 8.945 ha of peatland not of national interest, which represents 7.99 % of peatland not of national interest present within the site. Of the 7.99 % loss, only 4.84 % is to be lost directly.
- 8.9.16 The permanent direct and indirect loss of peatland of possible national interest (high sensitivity) is therefore predicted to be of no more than Medium magnitude, resulting in an effect of **Moderate/Minor** adverse significance, which is precautionarily considered Significant in the context of the EIA Regulations.
- 8.9.17 The permanent direct and indirect loss of peatland not of national interest (medium sensitivity) is predicted to be of no more than Medium magnitude, resulting in an effect of **Minor** adverse significance, which is considered Not Significant in the context of the EIA Regulations.



8.9.18 There is up to 270.59 ha of peatland identified as potentially restorable on-site. Measures are proposed as additional mitigation (see **Section 8.10**) to compensate for the loss of peatland of possible national interest. Together with enhancement measures proposed (see **Technical Appendix 8.5**), this would provide a net increase in the extent and quality of peatland habitats within the site and provide a beneficial effect over the lifetime of the Proposed Development.

#### Other notable habitats

- 8.9.19 The Proposed Development is predicted to result in the permanent direct and indirect loss of 15.597 ha of heath, which represents 3.24 % of the heath habitat present within the site. As such, loss associated with the Proposed Development is considered likely to be undetectable above site level.
- 8.9.20 The Proposed Development is predicted to result in the permanent direct and indirect loss of 0.820 ha of marshy grassland, which represents 9.58 % of the marshy grassland habitat within the site. This habitat type was recorded within a mosaic habitat comprising Unimproved acid grassland/Marshy grassland/Bracken (NVC U4a/M23b/U20). Furthermore, the majority of this loss would be in relation to access track works. As such, in reality, the indirect loss of marshy grassland is likely to be much reduced than the precautionarily predicted 7.37 % indirect loss.
- 8.9.21 The Proposed Development is predicted to result in the permanent direct and indirect loss of 0.514 ha of woodland, which represents 10.1 % of the woodland habitat within the site.; The majority of this loss would be in relation to access track works; as such, in reality, the indirect loss of woodland is likely to be much reduced than the precautionarily predicted 7.72 % indirect loss.
- 8.9.22 The permanent direct and indirect loss of other notable habitats (heath, marshy grassland and woodland; medium sensitivity) are therefore predicted to be no more than Low magnitude, resulting in an effect of **Minor** adverse significance, which is considered Not Significant in the context of the EIA Regulations.
- 8.9.23 For purpose of this assessment, potential for impacts on GWDTEs are not discussed in detail herein, and are discussed separately in **Chapter 10: Geology, Hydrogeology, Hydrology and Soils.**

#### Bats (foraging/commuting)

- 8.9.24 The construction of the Proposed Development would result in the permanent and temporary loss of habitats which are typically of low foraging and commuting value to bats. The Proposed Development therefore has the potential to result in the loss of, or damage to, commuting or foraging habitat and displacement of individuals or populations from the area (see NatureScot, 2021). Baseline activity surveys recorded activity of soprano pipistrelle, *Myotis* species and brown long-eared bat on-site, with the majority of activity relating to soprano pipistrelle and *Myotis* species. Baseline surveys have also demonstrated an Overall Risk Assessment of "Low/Medium Site Risk", for high collision risk species recorded (common and soprano pipistrelle).
- 8.9.25 Overall, the site is appraised as having low suitability for bats (in accordance with Collins, 2023),
- 8.9.26 The baseline surveys revealed activity of soprano pipistrelle, *Myotis* species and brown long-eared bat onsite within the established emergence time for these species (as detailed in **Technical Appendix 8.3**). Therefore, it is likely there are roosts for these species in the local area (but note no potential maternity or hibernation/swarming sites were identified within 200 m plus rotor radius of the Proposed Development turbines).
- 8.9.27 Noise, lighting and dust generation during the construction period could potentially result in disturbance and reduced foraging opportunities for bats, particularly if night-time work is undertaken. Extensive night-time working is not anticipated during the core bat activity period, April to September, due to available daytime working hours.
- 8.9.28 Given the largely suboptimal foraging/commuting habitat for bats on-site and the adoption of embedded mitigation (bat buffers from key bat features, no nocturnal works using artificial lighting, and dust suppression and prevention measures, see **Section 8.7**) impacts of bat displacement/disturbance during construction are predicted to be of no more than a short-term, Low magnitude, resulting in an effect of **Minor** adverse significance, which is considered Not Significant in the context of the EIA Regulations.

#### Operation

- 8.9.29 Operational effects are defined as effects occurring during the operation of the Proposed Development. Operational effects generally relate to disturbance of adjacent habitats or species, on either a temporary or permanent basis. Some effects may reduce with habituation or remain for the lifetime of the Proposed Development.
- 8.9.30 During the operational phase, with the application of good practice measures relating to wind farm operation and maintenance activities, it is considered that potential adverse impacts are restricted to the risk of collision mortality for common and soprano pipistrelle bats. Direct adverse effects for other sensitive ecological features (such as habitat loss and disturbance) are not anticipated to occur during the operational period.



8.9.31 Potential for impacts on surface water, groundwater, peat and GWDTEs are discussed separately in Chapter 10: Geology, Hydrogeology, Hydrology and Soils.

#### Ben Wyvis (SSSI and SAC)

- 8.9.32 During operation of the Proposed Development, on-going maintenance of the access tracks and routine maintenance of the turbines would be undertaken.
- 8.9.33 Research suggests that deer are not particularly disturbed by the presence of operational wind turbines (Helldin *et al.*, 2012 and Reksten, 2016) but do have the potential to be temporarily displaced during operational maintenance works. During operational maintenance works, deer have the potential to be displaced from parts of the site depending upon the location of works. This may reasonably result in the temporary/short-term relocation of some grazing activities to other parts of the site away from maintenance areas, or deer seeking shelter and grazing opportunities in habitats beyond the site, including within Ben Wyvis (SSSI and SAC). The re-distribution of deer within the site as a result of maintenance works, may however result in additional temporary and periodic grazing pressures within alternative habitats within and adjacent to the site. Any relocated deer are likely to return to the site once operational maintenance works are complete, as such, any displacement of deer during the operational stage would likely be for only a short period of time, and only temporary in nature.
- 8.9.34 Impacts on Ben Wyvis SSSI and SAC are therefore considered to be no more than Negligible magnitude, resulting in an effect of **Negligible** adverse significance which is considered Not Significant in the context of the EIA Regulations.

#### Bats (foraging/commuting)

- 8.9.35 Operational turbines can affect bats in a number of ways, although the main concerns to species populations relates to collision mortality, barotrauma (i.e. injury caused by a change in air pressure) and other injuries resulting from collision with, or flying in very close proximity to moving turbines (NatureScot, 2021).
- 8.9.36 The assessment of operational effects is restricted to common and soprano pipistrelle only, as they are categorised as HCR species in relation to wind turbine developments.
- 8.9.37 The assessment of potential effects upon bats resulting from the operation of the Proposed Development's turbines has been based on the two-stage methodology set out in NatureScot guidance (2021). Full details are presented in **Technical Appendix 8.3.**
- 8.9.38 In accordance with NatureScot guidance (2021) a Stage 1 'Initial Site Risk Assessment' of the potential risk level of the Proposed Development site has been undertaken based on a consideration of the Site's habitats and development-related features. This concludes that the Site is assessed as having an overall 'Site Risk' of 2, which represents a Low/Lowest Site Risk.
- 8.9.39 Stage 2 'Overall Risk Assessment' of the two-stage process detailed within NatureScot guidance (2021) has then subsequently been completed to provide an overall assessment of risk to bat species, by considering the conclusions of Stage 1 in relation to relative levels of bat activity tool and considering the vulnerability of species recorded, at the population level.
- 8.9.40 In accordance with NatureScot guidance (2021), Stage 2 has been carried out separately for all HCR species recorded during baseline bat activity surveys, and which includes the following species:
  - soprano pipistrelle; and
  - common pipistrelle.
- 8.9.41 The calculated Stage 2 'Overall Risk Assessment' per species, both temporally and spatially is presented in **Technical Appendix 8.3**.
- 8.9.42 The Stage 2 overall risk assessment concludes that there is a Low/Medium likelihood of the Proposed Development resulting in significant impact on bat species populations (see **Section 8.6** for detailed results).
- 8.9.43 The risk of operational mortality to bats is generally acknowledged to be lowest at locations with low bat activity. Additionally, the availability of suitable foraging habitats within 1.5 km of proposed turbine locations, such as watercourses, waterbodies and woodland, is suggested to have a protective effect on bat species, with bats more likely to use these high value foraging habitats (and other suitable linear features) than be attracted to the turbines (Mathews *et al.*, 2016).
- 8.9.44 No maternity roosts and/or significant swarming or hibernation roosts for any bat species were confirmed within the site, and no potential for these to be present was identified.
- 8.9.45 NatureScot guidance (2021) advises that to reduce potential impacts upon bats resulting from operational wind turbine development, a 50 m 'stand-off' distance should be maintained around bat habitat features, into which no part of the turbine intrudes. The guidance provides a formula for calculating this 'stand-off' distance.



8.9.46 The layout of the Proposed Development has adopted a minimum a 50 m 'stand-off' (from blade tip) distance between all proposed turbine locations and bat habitat features (including woodland, watercourses and waterbodies) to reduce potential impacts on bats in accordance with NatureScot guidance (2021), see **Table 8.12**.

Turbine	Approx. Hub Height (m)	Approx. Blade Length (m)	Nearest Bat Habitat Feature (height, m)*	Required Distance to achieve 50 m 'stand-off' (m)	50 m 'stand- off' distance met?	Standoff distance
1	119	81	Watercourse (0 m)	54.77	Yes	130
2	119	81	Watercourse/waterbody (0 m)	54.77	Yes	230
3	119	81	Watercourse/waterbody (0 m)	54.77	Yes	115
4	119	81	Watercourse (0 m)	54.77	Yes	95
5	99	81	Watercourse (0 m)	85.79	Yes	105
6	99	81	Watercourse/waterbody (0 m)	85.79	Yes	255
7	99	81	Watercourse/waterbody (0 m)	85.79	Yes	215
8	119	81	Watercourse/waterbody (0 m)	54.77	Yes	195
9	99	81	Watercourse (0 m)	85.79	Yes	290

Table 8.12 - Summary of turbine bat habitat stand-off distances

- 8.9.47 Based on activity levels recorded and subsequent analysis as outlined, mortality or injury levels for bat species are considered to be low. The Proposed Development is not considered to represent a site of concern for bat collision risk following the approach set out in the bats and wind farm guidance (NatureScot, 2021). It is, however, acknowledged that low risk sites can still result in bat casualties, but for which embedded 'stand-off' distances from habitat features in accordance with NatureScot guidance (2021) is considered adequate mitigation to avoid potentially significant operational mortality risks to bat populations at most low-risk locations.
- 8.9.48 A 50 m buffer between the blade tip and bat habitat features (including watercourses and waterbodies) will ensure appropriate mitigation requirements for all bat species in accordance with NatureScot guidance (2021) are implemented as part of the Proposed Development. With these measures in place, impacts of bat collision risk mortality are subsequently considered to be of no more than a permanent, Low magnitude, resulting in an effect of **Minor** adverse significance which is considered Not Significant in the context of the EIA Regulations.
- 8.9.49 Given the overall low suitability of the habitats which would be lost as a result of the Proposed Development, and the presence of woodland, watercourses and open water in the wider area which offer higher suitability habitat, loss and damage to bat foraging or commuting habitat as a result of the Proposed Development is considered to be inconsequential at a population level and are subsequently considered to represent permanent, Negligible magnitude impacts, resulting in an effect of **Negligible** adverse significance, which is considered Not Significant in the context of the EIA Regulations.
- 8.9.50 Based on the lack of trees/structures considered suitable to support maternity roosts and/or significant swarming or hibernation roosts within at least 200 m plus rotor radius of the Proposed Development turbines, activity levels recorded and subsequent analysis as outlined, displacement levels are likely to be low and are subsequently considered to represent permanent, Negligible magnitude impacts, resulting in an effect of **Negligible** adverse significance which is considered Not Significant in the context of the EIA Regulations.

#### Decommissioning

- 8.9.51 Decommissioning phase impacts are considered to result in no greater scope and significance of effects upon ecological features than those which would occur during the construction phase, albeit occurring over a shorter timescale.
- 8.9.52 The future presence of ecological features at the time of decommissioning (50 years) is unknown and cannot be reasonably assumed with any certainty.
- 8.9.53 As such, decommissioning phase effects upon ecological features are not considered explicitly within this assessment. However, providing the implementation of good practice measures such as those outlined in **Section 8.7**, are included (and presented in a DEMP at the point of decommissioning), it is unlikely that significant effects upon important ecological features would occur.



## 8.10 Additional Mitigation and Enhancement

#### Mitigation

- 8.10.1 Embedded mitigation and good practice measures are detailed in **Section 8.7**, as well as in the OCEMP (**Technical Appendix 3.1**).
- 8.10.2 As significant effects for the loss of peatland (of potential national interest) are predicted, the below additional mitigation measures are proposed, with consideration given to current NatureScot guidance (2023). The 2023 guidance is expected to be superseded in due course, and the new advice may materially alter the current expectation for compensation/mitigation for loss of peatland habitat. Accordingly, the mitigation proposed is indicative and would accord with the NatureScot guidance applicable at the time of consent (if the Proposed Development is consented).
- 8.10.3 Some areas of the M17 and M19 are considered likely to be peatland of possible national interest, while other areas of M17 and M19 are considered not of National Interest. M15 are communities that are unlikely to raise issues of national interest as they are almost always a replacement for the original bog vegetation following unfavourable management such as burning on too short a rotation followed by heavy grazing.
- 8.10.4 In summary, 24.76 ha of peatland of possible national interest may be permanently lost as a result of the Proposed Development; 10.722 ha direct and 14.038 ha indirect resulting from the wind turbine infrastructure.
- 8.10.5 Up to 270.59 ha of peatland on-site has been identified for restoration as compensation (and enhancement); hereafter referred to as Peatland Restoration Search Areas, as detailed in **Technical Appendix 8.5**. Peatland restoration areas that have been identified as potentially suitable for restoration include areas which have been subject to some level of unfavourable management, such as through the creation of drains, together with areas subject to encroachment by scrub/conifer saplings, and erosion and/or hagging. Further details of the Peatland Restoration Search Areas are included in **Technical Appendix 8.5**.
- 8.10.6 The amount of priority peatland of possible national interest to be directly lost is 10.722 ha; 24.76 ha is considered worst-case scenario and precautionary and the area of genuine priority peatland to be lost is therefore considered to be lower than this.
- 8.10.7 The amount of the 270.59 ha peatland restored will accord with applicable NatureScot guidance at the time if the Proposed Development is consented.
- 8.10.8 Although no significant effects on foraging/commuting bats are predicted, good practice measures will be adopted to reduce unnecessary risk to foraging and commuting bats. During the operational phase of the Proposed Development, additional mitigation in the form of pitching the blades out of the wind ("feathering") to reduce rotation speeds below 2 revolutions per minute (rpm) while idling, as detailed in NatureScot guidance (2021) would be implemented. The reduction in speed resulting from feathering compared with normal idling can reduce bat fatality rates by up to 50 % (NatureScot guidance, 2021). Feathering would therefore be implemented using automated Supervisory Control and Data Acquisition (SCADA) data for the lifetime of the Proposed Development.

#### Enhancement

- 8.10.9 An ONEMP for the Proposed Development has been provided as **Technical Appendix 8.5** and **Figure 8.12** and details outline habitat enhancement principles to be implemented as part of the Proposed Development.
- 8.10.10 The detailed NEMP would be agreed in consultation with NatureScot and THC and implemented as approved in accordance with a suitably worded condition. In summary, measures are to include peat restoration within the site, the enhancement of riparian habitats, improving opportunities for nesting birds and roosting bats, improving habitats on-site for invertebrates, and enhancing and increasing native tree cover.
- 8.10.11 A proportion of the peatland of possible national interest on-site is likely to be required to be restored, to achieve a significant level of enhancement, and the specific amount will accord to the NatureScot guidance applicable at the time of consent (if the Proposed Development is consented). Based on the current NatureScot guidance (2023), a further 10 % of the baseline amount of priority peatland would be required to be restored to achieve the required enhancement. Accordingly, with 333.46 ha of peatland within the site considered as of 'possible national interest', based on current guidance, up to 33 ha of degraded peatland would be required to be restored to deliver enhancement. This would be deliverable given the combined extent of the Peatland Restoration Search Areas totals up to 270.59 ha (even with the requirements for mitigation as discussed above under mitigation). Note, the amount of 33 ha of peatland required to be restored to achieve appropriate enhancement included in ONEMP is indicative and the specific amount of peatland to be restored would accord with the applicable NatureScot guidance at the time of any consent.



8.10.12 Enhancement measures, provided as part of the ONEMP, would remain in place throughout the operational phase, subject to periodic review in accordance with any emerging best practice management advice. It is envisaged that proposed enhancement measures would start to provide benefits after a period of around five to 10 years, with peatland restoration measures (such as rewetting) reported as bringing back/increasing the abundance of peat-forming vegetation during this time period (see Cris *et al.* 2011).

#### Summary

8.10.13 Mitigation measures, together with habitat creation and enhancement measures to be implemented under the ONEMP, are expected to provide net beneficial effects associated with the Proposed Development longer term, and will leave biodiversity in a demonstrably better state than in the absence of the Proposed Development, consistent with Policy 3 of the NPF4.

## 8.11 Residual Effects

8.11.1 No significant residual adverse effects are predicted to occur upon any important ecological feature as a result of the construction or operation of the Proposed Development, either alone or cumulatively with other developments. With the adoption of the mitigation and enhancement measures, it is anticipated that a permanent, Low magnitude of impact would result in an effect of **Minor** beneficial significance on peatland habitats on-site, which is considered Not Significant in the context of the EIA Regulations.

## 8.12 Cumulative Assessment

- 8.12.1 This section considers the potential effects of the Proposed Development upon IEFs in combination with other wind farm developments in accordance with NatureScot guidance (NatureScot guidance (2021)). The assessment considers operational, consented (including under construction) and in application wind farms for bats, habitat loss and the potential effects in relation to potential deer displacement/encroachment upon Ben Wyvis (SSSI and SAC) only and within 10 km of the Proposed Development.
- 8.12.2 There are three operational wind farms within 10 km of the Proposed Development:
  - Corriemoillie located approximately 8 km away from the Proposed Development, comprising 17 turbines;
  - Fairburn located approximately 9 km away from the Proposed Development, comprising 20 turbines; and
  - Lochluichart and extension located approximately 9 km away from the Proposed Development, comprising 23 turbines.
- 8.12.3 There are two consented wind farms within 10 km of the Proposed Development:
  - Kirkan located approximately 7 km away from the Proposed Development, comprising 17 turbines; and
  - Lochluichart Extension II located approximately 10 km away from the Proposed Development, comprising 5 turbines.
- 8.12.4 There is a single application for a wind farm within 10 km of the Proposed Development:
  - Abhainn Dubh located approximately 9.5 km away from the Proposed Development, comprising 9 turbines (reduced from 13 turbines).

#### Construction

- 8.12.5 Cumulative construction related effects are considered in relation to bats, habitat loss and the potential effects in relation to potential deer displacement/encroachment upon Ben Wyvis (SSSI and SAC).
- 8.12.6 Construction cumulative effects are considered for those other wind farms that may have construction phases that coincide with those of the Proposed Development. All are spatially separated from the site (located over 7 km away) and include Kirkan (7 km away), Lochluichart Extension II (10 km away), and Abhainn Dubh (9.5 km away).
- 8.12.7 The potential for construction related adverse cumulative effects on bats are considered highly unlikely to occur in recognition of the implementation of the 50 m buffer between the blade tip and bat habitat features (including woodland, watercourses and waterbodies), which is a key component in the design of the Proposed Development. Furthermore, no potential bat roost features were identified within 200 m plus rotor radius of the proposed turbines. Adverse effects on bats during construction are considered unlikely such that the Proposed Development is not anticipated to contribute to cumulative effects. Furthermore, cumulative impacts of all wind farms being developed at once are not anticipated to have a significant effect on bats due to the spatial separation between the Proposed Development and the other wind farm projects, such that it is likely to be different populations located in proximity to the Site compared to those



populations in proximity to the other wind farm projects. As such, bats are therefore not considered further in this section.

- 8.12.8 Due to the spatial separation between the site and the other wind farm projects, and the therefore lack physical connection, no cumulative impacts on peat habitats are anticipated. Habitat mitigation measures detailed above, and enhancement measures proposed under the ONEMP (see **Technical Appendix 8.5** and **Figure 8.12**) would restore notable habitats (peatland) on-site, and result in the increase in the extent of this habitat on-site. As such, no potential for significant adverse cumulative construction habitat loss effects are anticipated (in fact for the Proposed Development, with the adoption of mitigation and enhancement measures on peatland habitats, are considered to be minor beneficial). No cumulative effects are anticipated due to habitat loss; habitat loss is therefore not considered further within this section.
- 8.12.9 Due to the spatial separation between the site and the proposed Kirkan, Lochluichart Extension II and Abhainn Dubh projects, the potential for construction adverse cumulative effects on Ben Wyvis SSSI and SAC due to the displacement of deer are considered to be highly unlikely. No cumulative effects are anticipated in relation to potential deer displacement/encroachment upon Ben Wyvis SSSI and SAC; Ben Wyvis SSSI and SAC are therefore not considered further within this section

#### Operation

- 8.12.10 Cumulative operational effects are considered in relation to bats and the potential effects in relation to potential deer displacement/encroachment upon Ben Wyvis (SSSI and SAC).
- 8.12.11 Cumulative operational effects are considered in relation to those other wind farms within 10 km of the Proposed Development.
- 8.12.12 Bat collision impacts have been minimised through the sensitive and considered design of the Proposed Development and by the implementation of standard good practice measures regarding buffer distances of turbines from bat habitat features (including woodland, watercourses and waterbodies woodland) in order to minimise the potential for impacts on commuting and foraging bats and therefore the likelihood of cumulative impacts. Further precautionary mitigation in the form of pitching the blades out of the wind ("feathering") to reduce rotation speeds below 2 rpm while idling, as detailed in NatureScot (2021) would be implemented.
- 8.12.13 A review of publicly available information on consented wind farms and wind farms under construction within 10 km of the site has confirmed that good practice measures regarding buffer distances of turbines from suitable foraging and commuting habitats (such as woodland edge and watercourses) are proposed for the following projects: Kirkan, Lochluichart Extension II and Abhainn Dubh.
- 8.12.14 The implementation at other wind farm sites of standard good practice measures regarding buffer distances to minimise impacts on commuting and foraging bats, further minimises the likelihood of cumulative impacts. Cumulative impacts on bats are predicted to be no more than a long-term, Low magnitude, resulting in an effect of **Minor** adverse significance, which is considered Not Significant in the context of the EIA Regulations.
- 8.12.15 Due to the spatial separation between the site and other wind farms within 10 km of the Proposed Development, the potential for operational adverse cumulative effects on Ben Wyvis SSSI and SAC due to the displacement of deer are considered to be highly unlikely. No cumulative effects are anticipated in relation to potential deer displacement/encroachment upon Ben Wyvis SSSI and SAC; Ben Wyvis SSSI and SAC are therefore not considered further within this section

## 8.13 Monitoring

- 8.13.1 Monitoring would be undertaken during construction in accordance with the CEMP (see the OCEMP in **Appendix 3.1**) in relation to pollution prevention measures and also fish and water quality monitoring (see details in **Section 8.7**).
- 8.13.2 The fish (and water quality) monitoring plan would also be established and incorporated into the CEMP. The aim of the monitoring plan would be to review and where necessary, update baseline conditions prior to construction works commencing and to continue throughout the construction and operational phases to confirm that the mitigation measures with respect to fish populations, water quality, sedimentation and maintenance of potential fish passages are performing.
- 8.13.3 The ONEMP (see **Technical Appendix 8.5**) includes summary information on monitoring protocols to be undertaken during the operational phase of the Proposed Development, which would be finalised in a NEMP if the Proposed Development is consented. The monitoring protocols would include details of checks of the habitat mitigation (peatland compensation) and habitat enhancement measures, and details of response and remediation measures in the event mitigation/enhancement measures are found not to be performing.



8.13.4 Furthermore, the monitoring protocols would include details of checks for grazing pressures from deer. The requirement for a DMS for the site would be discussed with the landowner. If the requirement for a DMS is identified, the DMS would be agreed in consultation with the landowner and adjacent interested parties, to avoid adverse impacts on collaborative parties.

## 8.14 Summary

8.14.1 A summary of potential effects is provided in **Table 8.13** Table 8.13 . Note, potential effects during the decommissioning phase are comparable to those identified during the construction phase and are not specifically listed in **Table 8.13**.

Feature and Potential Effect	Pre-Secondary Mitigation Effect	Mitigation	How Implemented	Residual Effect
Construction				
Ben Wyvis SSSI and SAC - Disturbance, Habitat Loss	Minor adverse, Not Significant.	Not required; standard mitigation.	– CEMP	<ul> <li>Minor adverse, Not Significant.</li> </ul>
Annex 1, SBL or potential GWDTE habitats (Peatland of Potential National Interest) – Habitat Loss	Moderate/Minor adverse, Significant	Up to 270.59 ha of peatland has been identified as potentially suitable for restoration. The exact amount of peatland to be restored will accord with NatureScot guidance applicable at the time of any consent.	<ul> <li>Restoration protocol will be implemented as additional mitigation, and will be a condition of any consent.</li> <li>Enhancement measures (detailed in the NEMP) will also restore peatland on- site, and this is considered addictive to the compensation to be implemented.</li> </ul>	<ul> <li>Minor beneficial, Not Significant.</li> </ul>
Other notable habitats (peatland not of potential national interest, heath, marshy grassland and woodland) – Habitat Loss	Minor adverse, Not Significant	Not required; standard mitigation.	– CEMP	<ul> <li>Minor adverse, Not Significant</li> </ul>
Bats – Displacement/ Disturbance, Habitat Loss	Minor adverse, Not Significant	Not required; standard mitigation.	– n/a	<ul> <li>Minor adverse, Not Significant.</li> </ul>
Operation				
Ben Wyvis SSSI and SAC	Negligible adverse, Not Significant.	Not required; standard mitigation.	– OMP	<ul> <li>Negligible adverse, Not Significant.</li> </ul>
Bats – Displacement/ Disturbance, Collision Risk	Minor adverse, Not Significant.	Not required; standard mitigation. Although feathering of blades to reduce rotation speeds below 2 rpm while idling.	<ul> <li>Through scheme design of Proposed Development</li> </ul>	<ul> <li>Minor adverse, Not Significant.</li> </ul>
Cumulative Construct	ion			I
Ben Wyvis SSSI and SAC	Negligible, Not Significant.	Not required.	– n/a	<ul> <li>Negligible,</li> <li>Not</li> <li>Significant.</li> </ul>
Annex 1, SBL or potential GWDTE habitats	Negligible, Not Significant.	Not required.	– n/a	<ul> <li>Negligible, Not Significant.</li> </ul>
Bats	Negligible, Not Significant.	Not required.	– n/a	<ul> <li>Negligible, Not Significant.</li> </ul>

Table 8.13 - Summary of residual effects



Feature and Potential Effect	Pre-Secondary Mitigation Effect	Mitigation	How Implemented	Residual Effect
Cumulative Operation				
Ben Wyvis SSSI and SAC	Negligible, Not Significant.	Not required.	– n/a	<ul> <li>Negligible,</li> <li>Not</li> <li>Significant.</li> </ul>
Bats	Negligible, Not Significant.	Not required.	– n/a	<ul> <li>Negligible, Not Significant.</li> </ul>

## 8.15 Information to Inform Habitats Regulations Appraisal

## **Screening for Likely Significant Effects**

#### Ben Wyvis SAC

- 8.15.1 This section summarises information relating to the potential for likely significant effects (LSEs) upon ecological qualifying features of the Ben Wyvis SAC as a result of the construction and operation of the Proposed Development.
- 8.15.2 Ben Wyvis SAC is located 1.35 km north-east of the site.
- 8.15.3 Ben Wyvis SAC is designated for the following qualifying interests:
  - Acidic scree.
  - Alpine and subalpine heaths.
  - Blanket bog.
  - Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.
  - Dry heaths.
  - Montane acid grasslands.
  - Plants in crevices on acid rocks.
  - Tall herb communities.
- 8.15.4 The Overarching Conservation Objectives for all habitat features of the Ben Wyvis SAC are:
  - To ensure that the qualifying features of Ben Wyvis SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
  - To ensure that the integrity of Ben Wyvis SAC is restored by meeting objectives 2a, 2b and 2c for each qualifying feature.
- 8.15.5 The Conservation Objectives for habitats are:
  - 2a. Maintain the extent and distribution of the habitat within the site.
  - 2b. Maintain or Restore the structure, function and supporting processes of the habitat.
  - 2c. Maintain or Restore the distribution and viability of typical species of the habitat.
- 8.15.6 As assessed during the Fish Habitat Survey (**Technical Appendix 8.4**), the watercourses within the site all drain into the Black Water River, which is located to the west and south-west of the site (and thus watercourses on-site flow away/from Ben Wyvis SSSI and SAC, which are situated to the north-east). A review of OS maps identifies that a ridge, comprising a series of peaks (including Carn Gorm) is located along the north-eastern boundary of the site, therefore separating the location of the Proposed Development from the SAC. As such, there is no evidence of hydrological connectivity between the site and the SAC, and no prospect of hydrological flow from the site into the SSSI or SAC.
- 8.15.7 During construction works, deer have the potential to be displaced from parts of the site depending upon the location of works, together with being displaced from areas in proximity to the access track due to vehicle movements. This may reasonably result in the temporary/short-term relocation of some grazing activities to other parts of the site away from construction areas, or deer seeking shelter and grazing opportunities in habitats beyond the site. The re-distribution of deer within the site as a result of construction works, may result in additional temporary and periodic grazing pressures within alternative habitats within and adjacent to the site, including within Ben Wyvis SAC.
- 8.15.8 Evidence of deer presence (in the form of droppings) was recorded across the site during the baseline surveys. The Proposed Development would result in the loss of open upland, moorland habitat with very



limited removal of forestry/woodland (woodland loss totalling approximately 0.5 ha, of the 7.1 ha currently present on site) and thus the habitats offering shelter to deer within the site would be largely retained. As the Proposed Development would not result in the removal of notable areas of forestry/woodland, there would be no significant increase in the area of open land within the site, as such, the Proposed Development is unlikely to result in the dispersal of deer out of the Site, and into adjacent land, including Ben Wyvis SAC. The availability of suitable sheltering habitats within the immediate and wider surrounding area, available for deer, is also extensive.

- 8.15.9 During operation of the Proposed Development, on-going maintenance of the access tracks and routine maintenance of the turbines would be undertaken. Research suggests that deer are not particularly disturbed by the presence of operational wind turbines (Helldin *et al.*, 2012 and Reksten, 2016) but do have the potential to be temporarily displaced during operational maintenance works. During operational maintenance works, deer have the potential to be displaced from parts of the site depending upon the location of works. This may reasonably result in the temporary/short-term relocation of some grazing activities to other parts of the site away from maintenance areas, or deer seeking shelter and grazing opportunities in habitats beyond the site, including within Ben Wyvis SAC. The re-distribution of deer within the site as a result of maintenance works may therefore result in additional temporary and periodic grazing pressures within alternative habitats within and adjacent to the site. The following qualifying features of Ben Wyvis SAC may be adversely affected by increased grazing pressure: alpine and subalpine heaths; blanket bog; dry heaths; montane acid grasslands, plants in crevices on acid rocks, and tall herb communities. This may adversely affect the integrity of the site, with regard to the conservation objectives.
- 8.15.10 LSEs from the construction and operation of the Proposed Development cannot be ruled out for Ben Wyvis SAC in the absence of mitigation. Accordingly, information to inform an Appropriate Assessment (AA) has been provided below.

Conon Islands SAC and Loch Ussie SAC

- 8.15.11 This section summarises information relating to the potential for LSEs upon ecological qualifying features of the Conon Islands SAC and Loch Ussie SAC as a result of the construction and operation of the Proposed Development.
- 8.15.12 Conon Islands SAC is located 5.94 km south-east of the site and Loch Ussie SAC is located 6.64 km, south-east.
- 8.15.13 Conon Islands SAC is designated for the following qualifying interests:
  - Alder woodland on floodplains.
- 8.15.14 The Overarching Conservation Objectives for Conon Islands SAC are:
  - To ensure that the qualifying feature of Conon Islands SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status.
  - To ensure that the integrity of Conon Islands SAC is restored by meeting objectives 2a, 2b and 2c for the qualifying feature.
- 8.15.15 The Conservation Objectives for alder woodland on floodplains are:
  - 2a. Maintain the extent and distribution of the habitat within the site.
  - 2b. Restore the structure, function and supporting processes of the habitat.
  - 2c. Restore the distribution and viability of typical species of the habitat.
- 8.15.16 Loch Ussie SAC is designated for the following qualifying interests:
  - Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.
- 8.15.17 The Overarching Conservation Objectives for Loch Ussie SAC are:
  - To ensure that the qualifying feature of Loch Ussie SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status.
  - To ensure that the integrity of Loch Ussie SAC is restored by meeting objectives 2a, 2b and 2c for the qualifying feature.
- 8.15.18 The Conservation Objectives for clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels are:
  - 2a. Maintain the extent and distribution of the clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels habitat within the site.
  - 2b. Restore the structure, function and supporting processes of the clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels habitat.



- 2c. Maintain the distribution and viability of typical species of the clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels habitat.
- 8.15.19 The site is hydrologically connected to Conon Islands SAC. However, the Black Water (tributary to River Conon, which connects the site (via Loch Garve) to Conon Islands SAC) travels through forestry and adjacent to road networks and a railway before reaching Conon Islands SAC. The Proposed Development is unlikely to result in a significant increase in pollution within Conon Islands SAC, considering the existing presence of commercial forestry activity, railway and roads. Additional pollution resulting from the construction and operation of the Proposed Development is therefore nugatory. Construction and operational works associated with the Proposed Development will, therefore, not adversely impact the distribution of qualifying features within the Conon Islands SAC, and the potential for LSEs is screened out.
- 8.15.20 The site is not hydrologically connected to Loch Ussie SAC. As such, on account of spatial separation, and lack of hydrological connectivity, construction and operational works associated with the Proposed Development will not adversely impact upon the distribution of qualifying features within Loch Ussie SAC, and the potential for LSEs is screened out.

#### Information to Inform an Appropriate Assessment

- 8.15.21 In the absence of mitigation, the potential for LSEs is identified for Ben Wyvis SAC as a result of construction and operation of the Proposed Development.
- 8.15.22 This section therefore considers the potential for adverse effects upon the integrity of the Ben Wyvis SAC in view of the Site's conservation objectives and on the basis of mitigation measures.

Construction Environmental Management Plan (CEMP)

- 8.15.23 A CEMP would be prepared for the Proposed Development, to be approved by THC. The CEMP would be finalised and implemented by way of a suitably worded planning condition, although an OCEMP is provided within **Technical Appendix 3.1**.
- 8.15.24 The CEMP, once finalised, would include all standard measures to ensure the Proposed Development is constructed in accordance with industry good practice applicable at the time of commencement.
- 8.15.25 With specific reference to the protection of habitat features during the construction and operation of the Proposed Development, the CEMP would include all good practice construction measures, pollution prevention controls and monitoring to be implemented over the course of the construction or operation of the Proposed Development in line with current industry and statutory guidance. However, as noted above, the watercourses on-site are not hydrologically linked to the SAC so effects on this designated site through hydrological pathways is not anticipated.
- 8.15.26 Good practice construction measures to be provided within the CEMP include:
  - measures in relation to pollution risk, sediment management, dust suppression and prevention measures and sensitive techniques with regard to construction near watercourses;
  - water quality monitoring during the construction phase of the Proposed Development;
  - · safe methods for on-site concrete batching and lorry washout;
  - pollution management best practices for re-fuelling, bunding and storing fuel, oil or hazardous substances, careful storage of chemical, fuel and oil, as well as spillage incident protocols. Re-fuelling will only take place at a distance of more than 50 m from watercourses. Appropriate bunding will also be used around re-fuelling and chemical storage areas, preventing any fuel or chemical leaks from contaminating the capping layer stone or being washed into the receiving water environment;
  - protocols to be adopted in the event of a fuel spillage or similar incident within the compound area, and the requirement for all on site vehicles to carry spill kits; and
  - excavations will either be temporarily covered outside working hours to ensure that no animal, including deer, fall in. Or, if excavations are left open, boards will be positioned so that any animal can escape. On-site speed limits will also be adhered to.

#### Deer Management Statement

8.15.27 Any requirement for wild deer management is assumed to be undertaken by the landowner. As such, there would be a commitment on the Applicant to liaise with the landowner to ensure that ongoing deer management activities take account of the construction and operational phases of the Proposed Development, with wild deer to be managed on-site as per the status quo. The requirement for a DMS for the site would be discussed with the landowner. If the requirement for a DMS is identified through habitat monitoring (see Appendix 8.5: ONEMP), the DMS would be agreed in consultation with the landowner and adjacent interested parties, to maintain deer populations on-site and in the wider area (including the



Ben Wyvis SAC) at an optimal, sustainable level, ensuring adverse effects on habitats therein, are not increased above current baseline levels.

8.15.28 Note, the Applicant would accept a Planning Condition to produce a DMS, if the Proposed Development is consented, to ensure deer management is maintained at a sustainable level to avoid any potential increased adverse effects on qualifying features of the Ben Wyvis SAC.

Summary

8.15.29 With the adoption of the above mitigation measures, any impacts upon the habitats within Ben Wyvis SAC as a result of deer displacement are predicted to be avoided or minimised to a negligible level such that there would be no LSEs on the integrity of the SAC.

#### In Combination Impacts

- 8.15.30 LSEs from the construction and operation of the Proposed Development cannot be ruled out for Ben Wyvis SAC in the absence of mitigation. However, with the application of the above mitigation measures (CEMP and deer management statement), any impacts upon the habitats within Ben Wyvis SAC as a result of deer displacement are predicted to be avoided or minimised to a negligible level such that there would be no LSEs on the integrity of the SAC.
- 8.15.31 Due to the spatial separation between the site and the proposed Kirkan, Lochluichart Extension II and Abhainn Dubh projects (as detailed within Section 8.12), the potential for construction or operational adverse cumulative effects on Ben Wyvis SAC due to the displacement of deer are considered to be highly unlikely. No cumulative effects are anticipated in relation to potential deer displacement/encroachment upon Ben Wyvis SAC.
- 8.15.32 As LSEs on the qualifying features of the Ben Wyvis SAC from the Proposed Development can be avoided/minimised to a negligible level through mitigation, it can be concluded that there would be no measurable adverse effects from the Proposed Development which would contribute cumulatively to those associated with other developments in the nearby and wider surrounding area which, when considered in combination, could result in adverse effects on the integrity of these designated sites.

#### Conclusion

8.15.33 Information to inform an AA has been provided. This has concluded that with the adoption of the above mitigation measures, the Proposed Development would have no adverse effect on site integrity of Ben Wyvis SAC, either on its own or in combination with other projects.

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