

Appendix 8.1

Desk Study and Legal Context



SPEN

**Glenmuckloch to
Glenglass
Reinforcement Project
Appendix 8.1 Ecological
Legislation Context and
Desk Study**

Final report
Prepared by LUC
January 2023

SPEN

Glenmuckloch to Glenglass Reinforcement Project
Appendix 8.1 Ecological Legislation Context and Desk Study

Project Number
 10191

Version	Status	Prepared	Checked	Approved	Date
1.	Draft for Comment	Helen Embleton	S. Jackson-Matthews	S. Jackson-Matthews	26.10.2022
2.	Final	H. Embleton	S. Jackson-Matthews	S. Jackson-Matthews	13.01.2023

Contents

Chapter 1	
Introduction	1

Chapter 2	
Method	2
Desk Study	2
Relevant Legislation	2

Chapter 3	
Desk Study	4
Designated Sites	4
Deep Peat and Carbon Rich Soils	4
Existing Protected and Notable Species Data	4

Chapter 1

Introduction

1.1 This Appendix sets out the legislative context that creates the mechanism for designated sites and protected species, which subsequently form the basis of an Ecological Impact Assessment (EclA) and Environmental Impact Assessment (EIA) of the proposed Glenmuckloch to Glenglass Reinforcement Project ('the GGRP'). The appendix also presents the findings of a desk study undertaken to inform the EclA.

1.1 This Appendix should read in conjunction with **Chapter 8: Ecology** of the Environmental Impact Assessment (EIA) Report and the following Appendices:

- **Appendix 8.2:** Habitats and Vegetation Survey Report;
- **Appendix 8.3:** Protected Species Survey Report; and
- **Appendix 8.4:** Badger Survey Report.

1.2 This Technical Appendix should be read in conjunction with the following figures:

- **Figure 8.1.1:** Ecology Survey Area; and
- **Figure 8.1.2:** Designated Area Map.

Chapter 2 Method

Desk Study

2.1 The purpose of the Desk Study is to identify features of ecological importance within defined buffers around the proposed development. Data collected via the Desk Study is subsequently used to inform the scope of the EclA and to supplement and guide field surveys and assessments.

2.2 **Table 2.1** lists the features targeted in the Desk Study, and the resources used to identify them. In order that the study was appropriately focussed, buffers were applied, and these are also shown in the table.

Table 2.1: Desk Study Targets

Ecological Feature	Comment	Desk Study Resource	Buffer from site boundary (km)
Statutory Designated Sites for Nature Conservation Purposes	To include: <ul style="list-style-type: none"> European Sites Sites of Special Scientific Interest (SSSIs) National Nature Reserves (NNRs) Local Nature Reserves (LNRs) 	NatureScot Site Link Website ¹ Multi-Agency Geographic Information for the Countryside (MAGIC) ² Scotland Environment Mapping Service ³	5km
Non-statutory Designated Sites for Nature Conservation Purposes	To include: <ul style="list-style-type: none"> Local Nature Conservation Sites (LNCS) Ancient/Long-established Woodland 	Dumfries and Galloway Local Development Plan 2 ⁴ Ancient Woodland Inventory ⁵ MAGIC ² Scotland Environment Mapping Service ³	2km
Existing records of deep peat and carbon rich soils	N/A	The Carbon and Peatland Map ⁶	2km
Existing Records of European Protected Species (EPS) and Nationally Protected Species	To include: <ul style="list-style-type: none"> All native EPS and Nationally protected species records, post 2000. 	National Biodiversity Network Atlas Scotland under a CC-BY licence ⁷	2km

2.3 Please note that due to the sensitive nature, badger data is included separately in Confidential Technical **Appendix 8.4**.

¹ <https://sitelink.nature.scot/home> (Accessed 10/10/22)

² Department for Environment, Food and Rural Affairs *et al* (n.d.) Multi-Agency Geographic Information for the Countryside [online]. Available at: <http://magic.defra.gov.uk> (Accessed 10/10/22)

³ Scottish Environment Protection Agency (n.d.) Scotland's Environment Map [online]. Available at: <https://map.environment.gov.scot/sewebmap/> (Accessed 10/10/22)

⁴ <https://www.dumgal.gov.uk/ldp2> (accessed 10/10/22)

South West Scotland Environmental Information Centre Data Request

2.4 Due to the known access issues and operational nature of the commercial plantation present, it was felt that there was a low likelihood of existing records being available for the Study Area, therefore South West Scotland Environmental Information Centre were not approached on this occasion to request existing records for protected species.

Relevant Legislation

2.5 The protections afforded to ecological features in Scotland are enshrined in the following⁸:

- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1991 (WCA);
- The Nature Conservation (Scotland) Act 2004;
- The Protection of Badgers Act 1992;
- The Water Environment and Water Services (Scotland) Act 2003 (WEWS); and
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011.

2.6 A brief summary of the abovementioned legislation is provided below, with specific reference to development management.

2.7 It should be noted that protections offered to ecological features through national or local planning policy are not discussed in this section, nor are protections specifically offered to avian features (which are discussed in **Chapter 9: Ornithology** of the EIA Report. The protections offered to ecological and avian features through national and local planning policy are addressed in **Chapter 5: Planning Policy Context**.

The Conservation of Habitats and Species Regulations 2017

2.8 The Conservation of Habitats and Species Regulations 2017 ("Regulations") apply the European Habitats Directive (Directive 92/42/EEC) to electricity projects⁹ in Scotland. The Regulations provide the highest level of legal protection available to ecological features and make provisions for the following protected sites.

European Sites

2.9 The term 'European site' is being used to refer to what were previously known as 'Natura' sites. These sites were originally designated as part of the 'Natura 2000' network, a Europe-wide system of sites designated for their ecological value. Sites are either designated as Special Areas of Conservation (SACs), the qualifying features for which are normally internationally important habitats or species assemblages, or Special Protection Areas (SPAs), which qualify for their assemblages of birds. As noted above, protections offered to avian features are discussed in **Chapter 9: Ornithology**.

2.10 SACs and SPAs receive considerable protection through the Regulations and these protections are normally reflected in national and local planning policy. Where a development is likely to have a significant effect on a SAC or SPA (either alone or in combination), an assessment process (Habitat Regulations Assessment) must first be undertaken.

2.11 Ramsar sites, which support internationally important wetland habitats, are listed under the Convention on Wetlands of International Importance as 'Waterfowl Habitat' (Ramsar Convention, 1971). In Scotland, the protections are afforded to Ramsar sites

⁵ <https://map.environment.gov.scot/sewebmap/> (accessed 10/10/22)

⁶ <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/soils/carbon-and-peatland-2016-map> (accessed 10/10/22)

⁷ www.nbnatlas.org (accessed 10/10/22)

⁸ References to all legislation relate to legislation as amended and in force at the time of writing of this chapter

⁹ Including amongst others projects subject to consent in terms of section 37 of the Electricity Act 1989 and deemed planning permission in terms of section 57 of the Town and Country Planning (Scotland) Act 1997

through co-designation with Natura sites and/or Sites of Special Scientific Interest (SSSI). Where Ramsar interests coincide with Natura qualifying interests protected under an SPA or an SAC, as the case may be, the interests are thereby given the same level of (legal) protection as Natura sites. Where Ramsar interests are not the same as Natura qualifying interests but instead match SSSI features, these receive protection under the SSSI regime.

2.12 In order that likely effects on the European sites can be fully understood, it is important that they are considered fully in EclA desk studies.

2.13 There is no change to the protection of SACs or SPAs as a result of the United Kingdom's exit from the European Union, and the requirements of the Regulations (which transposed the EU Directives into national law) continue to be relevant to the management of European sites.

European Protected Species (EPS)

2.14 The Regulations afford wide-ranging protections to a list of species considered to be of international conservation importance. A species is normally considered important where it plays an important role in wider ecosystems and has historically suffered significant population decline. With regard to EPS, it is an offence to:

- capture, injure or kill such an animal;
- harass an animal or group of animals;
- disturb an animal while it is occupying structure or place used for shelter or protection;
- disturb an animal while it is rearing or otherwise caring for its young;
- obstruct access to a breeding site or resting place, or otherwise deny an animal use of a breeding site or resting place;
- disturb an animal in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- disturb an animal in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young;
- disturb an animal while it is migrating or hibernating;
- take or destroy its eggs (in Scotland, this is relevant only to the great crested newt and natterjack toad); and
- disturb any cetacean (dolphin, porpoise or whale).

2.15 There is no change to the protection of EPS as a result of the United Kingdom's exit from the European Union.

The Wildlife and Countryside Act 1991

2.16 The Wildlife and Countryside Act 1991 (WCA) is domestic legislation that regulates the management of invasive species and provides protections for species of national conservation importance. Important features of the legislation in relation to protected species are set out below.

Protected Species

2.17 Under the WCA, species considered to be of national conservation importance receive legal protections, often very similar to the protections available to EPS. For this reason, it is important that EclA desk studies identify existing records of WCA protected species.

The Nature Conservation (Scotland) Act 2004

2.18 The Nature Conservation (Scotland) Act 2004 (2004 Act) Act details measures designed to conserve biodiversity and to protect and enhance the biological and geological natural heritage of Scotland. The 2004 Act details the arrangements for the establishment and protection of Special Site of Scientific Interest's (SSSI) and replaces much of part II of the WCA. Section 12 of the 2004 Act imposes a duty on the exercise by a public body or office-holder of any function on, or so far as affecting, any land which is or forms part of a SSSI to further the conservation and enhancement of the features specified in the SSSI notification.

Sites of Special Scientific Interest (SSSI)

2.19 The SSSI network in the UK extends to a system of sites designated for their national conservation value. Sites are designated for their biodiversity, habitats or species assemblages. Any development proposals which affect a site designated as a SSSI will require to be considered in terms of the duty under section 12 of the 2004 Act as well as having regard to any policy tests.

2.20 Subject to certain exceptions, SSSI consent is required for development within a SSSI. SSSI consent will often necessitate extensive mitigation or compensation. For this reason, it is important that EclA desk studies identify SSSIs that may be affected by the development.

The Protection of Badgers Act 1992

2.21 Although badgers are not rare in Scotland, they continue to receive protection due to the high levels of persecution they suffer. Badgers and their setts receive protection against killing, disturbance and destruction and, therefore, knowledge of existing records is of importance to EclA desk studies.

Chapter 3 Desk Study

Designated Sites

3.1 Sites designated for nature conservation purposes within the buffers described above are presented in **Figure 8.2** of the main EIA Report and summarised in **Table 3.1**. No non-statutory designations for nature conservation were present within 5km of the Site. Ornithology interests are further considered within **Chapter 9: Ornithology**.

Table 3.1: Statutory Designated Sites for Nature Conservation within 5km and Associated Connections

Designation	Site Name	Qualifying interests / Features listed	Distance of Designated Sites from GGRP (at closest point) and Connection(s) associated with designation
Special Protection Area (SPA)	Muirkirk and North Lowther SPA	The Site supports the following Annex 1 species: Hen harrier <i>Circus cyaneus</i> , Golden plover <i>Pluvialis apricaria</i> , Merlin <i>Falco columbarius</i> , Peregrine <i>Falco peregrinus</i> and Short-eared owl <i>Asio flammeus</i> .	Approximately 1.7km to the north east and 1.7km to the north west.
Site of Special Scientific Interest (SSSI)	North Lowther Uplands SSSI	The site is notified for its assemblage of: upland habitats (including blanket bog, wet and dry heath and acid grassland); and breeding bird assemblage.	Approximately 1.7km to the north east
Site of Special Scientific Interest (SSSI)	Muirkirk Uplands SSSI	The site is notified for its upland assemblage, blanket bog and breeding birds including hen harrier and short-eared owl.	Approximately 1.7km to the north west

Deep Peat and Carbon Rich Soils

3.2 The Desk Study identified areas of Class 3 and 5 peat in the central section of the route and a small area of Class 1 peat to the south of the Study Area, suggesting the potential presence¹⁰ of nationally important peat deposits and priority habitat. However, the majority of the land within the Study Area is underlain with non-peatland soils. The majority of the substrates are found to be of mineral soil and therefore not of conservation value. Where areas of Class 3 or 5 designation overlapped with the Phase 1 habitat surveys, consideration was given to the true ecological value of their habitats. Detailed habitat survey results are presented in **Technical Appendix 8.2: Phase 1 Habitat and NVC Survey** and full details of the peat across the Study Area are provided in **Chapter 7: Geology, Hydrology, Hydrogeology, Water Resources and Peat**.

Existing Protected and Notable Species Data

3.3 A search of species records (post year 2000) identified several EPS and species listed under the WCA to be present within 2km of the GGRP. Table Records for the following species were identified.

Table 3.2: Protected and Notable Species Recorded (post 2000) within 2km of the Development

Species	Scientific Name	Number of Records	Most Recent Record
Bat species			
■ Pipistrelle species.	■ <i>Pipistrellus spp.</i>	2	2006
■ Common pipistrelle	■ <i>Pipistrellus pipistrellus</i>	1	2016
■ Soprano pipistrelle	■ <i>Pipistrellus pygmaeus</i>	1	2016
Red squirrel	<i>Sciurus vulgaris</i>	4	2014

3.4 Only historical records (1991) of Otter were identified during the desk study. There were no records of the following species within 2km of the Study Area:

- Pine marten *Martes martes*.
- Reptile: adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*;
- Water vole *Arvicola amphibus*.

3.5 This data was used in part to help inform both the desk study as well as identify locations across the survey area where targeted surveys should be conducted. Full details of this are provided in **Appendix 8.3: Protected Species Survey**.

¹⁰ Note that classifications within this data set are often broad. The true value of these classifications, as they relate to ecological features, should be determined by field surveys.