Technical Appendix 6.6: Outline Species Protection Plan (SPP)

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Technical Appendix 6.6 Outline Species Protection Plan
14 October 2025
SLR Project No.: 413.V00595.00XM2

1.0 Introduction

SLR Consulting Limited (previously MacArthur Green[1]) has prepared this outline Species Protection Plan (SPP) on behalf of the Watchman Energy Park Ltd (the Applicant) to ensure all reasonable protection measures are undertaken with regard to protected species at the Watchman Energy Park (hereafter referred to as the 'Proposed Development').

The SPP is to be implemented during the construction and decommissioning phases of the Proposed Development, although it can also be used for guidance should the need arise for maintenance during the operational period.

The SPP will ensure the adequate preservation of protected species interests into all construction and decommissioning activities within the Proposed Development to safeguard the resident species and ensure compliance with the relevant nature conservation legislation (see **Annex A**).

The SPP will be a live document subject to review and updating and will assist staff in the protection of species during construction and decommissioning, under the guidance of the Ecological Clerks of Works (ECoW).

2.0 Background Information

Baseline habitat and protected species surveys, including associated desk studies, have been undertaken to inform the Environmental Impact Assessment (EIA) Report (EIAR) for the Proposed Development. Full details and results are reported within **Technical Appendices 6.2 to 6.5 (EIAR Volume 4)**. The SPP is designed to reflect the results of the surveys and the distinct ecology and distributions of protected species within the Site.

2.1 Native Species

Desk and field surveys have recorded the likely presence of the following protected or notable species within, or in the vicinity of, the Proposed Development:

- badger (*Meles meles*) - known to be present at nearby developments;
- bats ((common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), Leisler's (*Nyctalus leisleri),* Daubenton's (*Myotis daubentonii*), Natterer's (*Myotis nattereri*), and brown long-eared (*Plecotus auritus*)) – present on the Site, detected during automated activity surveys;
- fish - brown trout (*Salmo trutta*), minnow (*Phoxinus phoxinus*), brook lamprey (*Lampetra planeri*) and stone loach (*Barbatula barbatula*) present on the Site and recorded during fisheries surveys, and Vendace (*Coregonus albula*), known to be present in Daer Reservoir;
- mountain hare (*Lepus timidus*) - present on the Site, sighting during field surveys;
- otter (*Lutra lutra*) - numerous otter spraints were recorded along the Daer Water and its tributaries, Kirkhope Cleuch, Carsehope Burn and Meikle Burn, within are located within the Site;
- pine marten (*Martes martes*) – probable scats recorded on the Site during surveys;
- red squirrel (*Sciurus vulgaris*) – no signs recorded during surveys, but known to be in the wider area through desk study;

[1] Following acquisition, MacArthur Green became part of SLR Consulting Limited on 1 September 2025.

- reptiles (adder (*Vipera berus*) and common lizard (Zootoca vivipara) - common lizard sightings on the Site, adder presence in wider area identified through desk study; and
- water vole (*Arvicola amphibius*) – burrows and feeding signs recorded on the Site.

Habitat within the Site was considered unsuitable for great crested newt (GCN) (*Triturus cristatus*), beaver (*Castor fiber*) and wildcat (*Felis silvestris*).

2.1.1 Protected features

Field surveys recorded the following potential protected features:

- Bats; 21 trees or structures with suitability for roosting bats were recorded during field surveys (see **Technical Appendix 6.4, EIAR Volume 4** for full details). No further surveys have been undertaken to date to determine confirmation of roost presence, due to distance from infrastructure.
- Water vole; multiple burrows were recorded along watercourses in the south of the Site during the surveys.
- Reptiles; numerous features within the Site were recorded as offering suitability as potential hibernacula. Common lizard are known to be present on the Site.

2.2 Invasive Non-Native Species (INNS)

North American signal crayfish (*Pacifastiacus leniusculus*) were recorded during the baseline fishery surveys (**Technical Appendix 6.5, EIAR Volume 4**).

The species was recorded at all five sampling sites in 2024, and also during surveys in 2025, including Coom Burn, Calf Burn, Old Town Burn, Meikle Burn, Daer Water and Potrail Water; all sites, with the exception of Potrail Water, fall within the catchment of Daer Water downstream of Daer Reservoir.

The species was not recorded during surveys undertaken in 2023, which covered the southern portion of the Site in the catchment of Daer Reservoir and Daer Water upstream of the reservoir.

Records of grey squirrel (*Sciurus carolinensis*) were included in the desk study results.

3.0 Aims and Objectives of the Species Protection Plan

The aim of the SPP is to ensure all reasonable precautions are taken by the Applicant and its contractors to safeguard protected species from disturbance, injury and death and to protect any structure or place, which any such protected species uses for growth, breeding, resting, shelter or protection during the construction and decommissioning of the Proposed Development.

The aim of the SPP will be fulfilled by the Applicant adopting the following objectives throughout the construction and decommissioning of the Proposed Development:

a) Objective A - Implement a monitoring and protection plan for protected species;
b) Objective B – Follow an approved procedure if a protected feature is found;
c) Objective C – Ensure adequate education and awareness of site personnel; and
d) Objective D - Implement a biosecurity management plan to reduce the risk of spreading INNS.

Objective A addresses the monitoring procedure to be followed to ensure that the aim of this SPP is achieved.

Objective B covers the detailed procedure in the event of a protected species feature being discovered.

Objective C addresses the educational needs of appropriate personnel on the Site to further reduce the risk of an offence being committed.

Objective D addresses the management requirements for reducing the spread of INNS.

The procedures to be adopted that will fulfil these objectives are detailed in **Section 6**.

4.0 Responsibilities

The overall responsibility for ensuring that the planning conditions and the conditions of any licence granted are adhered to, in particular those conditions relating to protected species, will lie with the Applicant. The personnel responsible for the day-to-day implementation of the SPP are detailed in **Table 4-1**.

4.1 Role of the Ecological Clerks of Works

The ECoW will have the specific remit of monitoring compliance with the SPP during the construction and decommissioning phases and reporting any breaches to the Applicant's Construction Project Management Team.

The ECoW's role will involve direct monitoring of all activities on the Site to the extent the ECoW considers this to be required, and / or training of nominated personnel to carry these out in a manner likely to minimise the potential for impact on the protected species. The ECoW will also agree changes to construction operations to prevent breaches of the SPP.

Table 4-1 SPP Responsibilities

Task	Responsibility
Implementation of the SPP	The Applicant's Construction Project Management Team
Monitoring and review of the SPP	ECoW
Regular site monitoring for protected species and associated protected features, including, but not limited to; bats, reptiles, badger, otter, pine marten, water vole and plants listed on Annex II of (Council Directive 92/43/EEC) (the 'Habitats Directive')	ECoW or a suitably qualified ecological surveyor
On-going watching brief for the above	All site personnel

5.0 The Potential Impacts of Development

Impacts on protected species can result from the physical effects of construction such as soil stripping, road laying, turbine foundation construction and noise disturbance. These operations can adversely affect protected species in a number of ways including:

- abandonment of a holt / burrow /roost / den /sett / pond etc. due to disturbance;
- abandonment of dependant young due to disturbance;
- damage to or destruction of a protected feature or species;
- damage to navigation/commuting routes (i.e., ditches, burns, fence lines, hedgerows etc.);

- fragmentation of territories;
- damage to foraging areas (e.g., areas containing amphibians or fish in the case of otter);
- contamination of water affecting water quality;
- disturbance to a protected species that results in behaviour that adversely impacts their life stage;
- accidental injury or death to species by machinery, tools or vehicles; and
- causing the spread of an INNS.

6.0 Procedures for Protecting Protected Species

This section details the procedures to be followed to ensure all reasonable precautions have been adopted to protect species from disturbance, injury and death and to protect any structure or place that any such species uses for growth, breeding, resting, shelter or protection.

The level of disturbance free zones for each species is shown in **Table 6-1**. If other protected species are identified during pre-construction surveys or during construction, suitable buffer zones will be advised by the ECoW and agreed in consultation with NatureScot.

Table 6-1 Level of Protection and Recommended Disturbance Free Zones[2]

Species Feature	Level of Protection	Disturbance Free Zone (m)
Otter (holt, couch)	European	30/200[3]
Bat (roost)	European	30/200[4, 5, 6]
Badger (sett)	National	30/100[7]
Water vole (burrow)	National	10
Red squirrel (drey)	National	5/50[8]
Pine marten (den)	National	30/100[9]

[2] NatureScot (2025). Planning and Development: Protected Species. Available at: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-protected-species

[3] The disturbance zone would be 30 m unless a breeding/natal holt is identified, in such an instance the disturbance zone would be increased to 200 m.

[4] The disturbance zone would generally be 30 m; turbines should be over 200 m plus rotor radius of key features such as maternity roosts or significant hibernation and/or swarming sites.

[5] NatureScot (2021). Bats and onshore wind turbines - survey, assessment and mitigation. Available at: https://www.nature.scot/doc/bats-and-onshore-wind-turbines-survey-assessment-and-mitigation

[6] Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. CIEEM, Ampfield.

[7] Disturbance is defined by NatureScot as any new procedure that approaches within a minimum of 30 m of a sett margin. For piling or blasting activities, this buffer zone is extended to 100 m.

[8] The disturbance zone would be 5 m or one tree's distance (whichever is less) unless a breeding drey is identified; in such instances the disturbance zone would be increased to 50 m during the red squirrel breeding season (February to September inclusive) .

[9] 100 m applied if breeding.

Species Feature	Level of Protection	Disturbance Free Zone (m)
Mountain hare (leverets)	National	n/a[10]
Reptiles (hibernacula)	National	n/a[11]

6.1 Objective A – Monitoring and Protection Plan

6.1.1 Monitoring Plan

It will be the duty of the ECoW to check the status of the protected species and any associated protected features immediately prior to construction activity progressing across the Site and to continue spot checks during construction for any new protected species features in the vicinity of the construction works.

Where construction work is staggered across the Site, any watercourses within the vicinity of the works due to be carried out should be monitored and checked immediately prior to the commencement of works. This should occur during each phase of construction.

If it is not possible to determine the status of features during ECoW checks, further monitoring by use of camera traps may be required.

Guidelines detailing the monitoring of protected species and associated protected features by the ECoW or suitably qualified ecological surveyor are described below.

6.1.1.1 Potential Protected Features

a) European Protected Species (otter and bats) and Nationally Protected Species (badger, red squirrel, mountain hare, pine marten, water vole and reptiles):

Further checks of potential features will be completed during construction and all potential protected features will be clearly demarcated.

i. if the status of the potential protected feature remains unoccupied, construction may occur in the area, but not damaging the potential feature under close supervision by the ECoW[12]; or

ii. if the status of the feature changes to occupied then the undernoted procedure for occupied sites will be followed. The ECoW will be responsible for this survey work as required.

6.1.1.2 Occupied Features of Importance

a) European Protected Species (otter and bats)

Where an occupied feature exists within the Site or disturbance free zone, and the infrastructure cannot be micro sited away:

[10] Due to their agility, the risk of harming well-grown young and adult hares is considered very low; however, if very young leverets are found that are only a few days old, and still being suckled and unable or reluctant to move, an appropriate disturbance exclusion zone would be demarcated (NatureScot, 2025).

[11] Due to the more limited nature of their protection and their ability to avoid machinery etc. during their active phase, no specified disturbance zone for reptiles is given; however, if a hibernaculum is discovered, an appropriate disturbance exclusion zone would be demarcated.

[12] If the infrastructure cannot be microsited away from the potential feature, the monitoring and checks by the ECoW would be used to assess the likelihood of current use, with appropriate species-specific monitoring undertaken as required. For badger, if it is proven the potential feature is not in use, or has not been in recent use, then it would not be considered a protected feature, and could be sensitively destroyed under supervision of the ECoW.

i. a licence to disturb will be applied for to NatureScot; or

ii. a licence to damage or destroy will be applied for to NatureScot if there are no reasonable alternatives.

b) National Protected Species (badger, water vole, red squirrel, pine marten, mountain hare and reptiles)

i. Where an active badger sett exists within the Site or disturbance zone, and the infrastructure cannot be microsited away, it may be necessary to undertake a relocation exercise. This is a licensed activity which will require prior authorisation from NatureScot. Guidance for this process has been produced by NatureScot[2], who should be consulted throughout.

ii. Where a water vole burrow, red squirrel drey or pine marten den or mountain hare form exists within the Site or disturbance zone, and the infrastructure cannot be microsited away, the Applicant will discuss any licensing requirements and appropriate mitigation with NatureScot.

iii. Where reptiles are found to be occupying any infrastructure during their hibernacula period and the infrastructure cannot be microsited away, the Applicant will discuss appropriate mitigation with NatureScot. Reptiles are capable of actively avoiding disturbances during their active phase.

6.1.2 Protection Plan

In addition to the mitigation measures detailed above, further general steps should be implemented to increase the protection levels and reduce general disturbance from the Proposed Development:

- Covering / securing all excavations and piping. If this is not possible then a means of escape must be provided for any animal that could fall in e.g., a ramp with a gradient of 45º or shallower.
- Any temporarily exposed open pipe system should be capped in such a way as to prevent mammals gaining access, as may happen when contractors are offsite. If such pipes are left for an extended time, periodic checks will be carried out to ensure that the pipe is inaccessible to animals.
- All excavations will be checked at the start of works and prior to the commencement of any works activities to ensure otter and badger are not present or have become trapped overnight. A responsible individual will be tasked with carrying out these checks. Documentary evidence will be completed for each check.
- Nighttime working will be minimised to reduce disturbance to nocturnal and crepuscular fauna. Where this is not possible, security lighting used in the construction compound and those areas where lighting is absolutely necessary to ensure safe working conditions will be angled downwards to reduce light spillage into adjacent areas. Lighting outwith the construction compound will be switched off when no works are being undertaken. Other required lighting will be directed to where it is needed and away from sensitive features (including setts, treelines, watercourses / riparian habitats, mammal paths, etc.) to minimise light disturbance.
- All works will be undertaken in line with pollution prevention measures outlined in a detailed Construction Environment Management Plan (CEMP).
- Works in the vicinity of watercourses (within 50 m) should commence one hour after sunrise and cease no later than one hour before sunset;

- Instream works at watercourse crossings in relevant sensitive watercourses (i.e., where there are spawning fish/ spawning gravels / redds in the vicinity of the instream works area) will not be conducted during the salmonid spawning/incubation period from October to May, inclusive, without prior survey and written approval from SEPA and / or the local Fisheries Trust[13];
- An appropriate speed limit (of circa 15 mph to 20 mph) for all vehicles on the Site, and vehicle movements will be kept to pre-determined routes wherever possible.
- Watercourse crossings will be designed to allow the passage of small mammals on the Site, where appropriate.
- Vegetation within 50 m of all watercourses should be left undisturbed, except in areas of construction of watercourse crossings and access roads leading to crossings as well as construction associated activities (such as drainage and mitigation).
- Chemicals will not be stored within 100 m of a sett, holt, couch, den or within 10 m of hibernacula, or other protected feature, or along mammal paths. All paints, chemicals and sealants used during the construction process will be removed from the working area at the end of each working day. Open tins or other containers will not be left at the works areas but will be stored in a suitable container at the construction compound.
- Any areas for location of wind turbines and infrastructure will be subject to inspection by an experienced ECoW immediately prior to any works. The ECoW will monitor the Proposed Development so that *in situ* materials associated with works will not incidentally create reptile refuges, e.g., piles of cut vegetation. Materials will be removed from Site if advised by the ECoW.
- Mountain hare is known to be present on-site; any initial groundworks or vehicular activity over uncleared ground during the breeding season (March to October, inclusive) must be preceded by a sweep survey for young hares in line with NatureScot guidance[14]. This pre-construction search must take place in all areas that will be affected by earth-moving/ground clearance operations and must be undertaken immediately ahead of the machinery coming on-site. There must be no delay between the search and any subsequent works or vehicular activity.

6.2 Objective B – Procedure if Protected Feature is Found

6.2.1 Procedure if previously unrecorded protected feature or species found <u>in advance of</u> construction or decommissioning activity

If an active feature or protected species is found by the ECoW during monitoring, which will be undertaken in advance of construction activity progressing across the Site, the following text outlines the procedure to be followed.

- If Obstruction, Damage or Destruction (ODD) to a protected species is likely, a location specific ODD risk assessment will be completed. This will consider all potential mitigation measures to avoid ODD. This may include micrositing of

[13] The likelihood of spawning fish / redds in any watercourse would be determined by the ECoW or suitably qualified ecologist in advance of construction works.

[14] NatureScot (2024). Standing advice for planning consultations - Mountain Hare. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-mountain-hare

infrastructure away from the location and outwith the disturbance zone and the demarcation of the protected site.

- If Disturbance is likely, a location specific Disturbance Risk Assessment will be completed. This should firstly consider revision to the disturbance zone as a result of the site-specific topography and habitat quality (e.g., if a ridge lies between activity and a holt then the disturbance zone may be reduced). Also, other measures which could reduce disturbance to an acceptable level should be considered (including micrositing and the demarcation of the protected site).
- The Disturbance or ODD risk assessments will be submitted to NatureScot for consideration.
- If it is not possible to microsite and, in consideration of the risk assessment, NatureScot determines that ODD and / or significant levels of Disturbance is likely to occur, the procedures described in Objective A will be adopted for unoccupied and occupied features. If there is uncertainty over whether the feature is occupied a precautionary approach will be adopted and occupancy will be assumed.

6.2.2 Procedure if previously unrecorded protected feature or species found during construction or decommissioning

In the event of any Site personnel discovering an unrecorded protected feature or protected species, the following procedure must be followed:

- work should stop immediately within the specified disturbance zone;
- the ECoW will be contacted;
- the location will be checked by the ECoW to determine the nature of the new find; and
- if the protected species or feature is confirmed then the procedure detailed in Objective A above will be followed.

6.3 Objective C – Education and Awareness

The Applicant will provide the necessary education and awareness as part of a Site induction provided to all Site personnel with regard to the protection of protected species that are or could be present on the Site, in particular the actions that should be taken if protected species are seen on Site. All Site personnel (including contractors and sub-contractors) will be informed of the objectives of the SPP to ensure they are aware of any species present on the Site.

This information will include as a minimum:

- the requirements and use of the SPP;
- identification of protected species and features;
- key risk activities and sensitive areas;
- Site personnel responsible for dealing with protected species; and
- to raise awareness of INNS to all Site personnel; notably, ensure they are aware of the Biosecurity Management Plan with regards to American signal crayfish (see **Objective D**).

If the Applicant identifies any person found on the Site considered to be inadequately trained, or to be disregarding the terms of the SPP, the Applicant will immediately expel them from the Site until such time that it is considered appropriate for them to be allowed to

return. In general, such persons will need to undertake retraining in the use and application of the SPP to ensure the impact on protected species is minimised. Species-specific Toolbox Talk handouts will be provided by the ECoW as required.

6.4 Objective D – Implement a Biosecurity Management Plan to Reduce the Risk of Spreading INNS

American signal crayfish are an invasive North American species of freshwater crustaceans which were introduced to the UK in the 1960's. American signal crayfish predate on native freshwater invertebrates, plants, fish, fish eggs and amphibians. They are known to burrow into riverbanks which results in bank collapses and erosion.

American signal crayfish were introduced to a site in the upper Clyde in the 1990s and escaped to form what is now the largest feral population of this invasive species in Scotland.

American signal crayfish have been recorded within watercourses in the north of the site (Coom Burn, Calf Burn, Old Town Burn, Meikle Burn, Daer Water (downstream of the reservoir) and Potrail Water), but not in the south of the site (Kirkhope Cleuch, Rodger Cleuch, Carsehope Burn, Howe Cleuch, Shiel Cleuch, Daer Water (upstream of the reservoir)). The watercourses where American signal crayfish are currently absent feed directly into the Daer Reservoir, where there is a population of the rarest freshwater fish in Britain, vendace.

Extreme caution should be taken to avoid the onward transfer of invasive American signal crayfish on personnel or machinery following any instream engineering works. It is extremely important that biosecurity protocols are followed to ensure American signal crayfish are not spread from the watercourses where they are currently present and introduced to watercourses where they are currently absent.

6.4.1 Legislation

In Scotland, all non-native species are covered by Section 14 of the Wildlife and Countryside Act 1981 which makes it illegal to spread, or allow the release of, American signal crayfish.

6.4.2 Biosecurity

To avoid the spread during the construction phase and ensure compliance with legislation[15], the biosecurity protocol within the Construction Environmental Management Plan (CEMP) should be adhered to.

This will highlight the management strategies included in SEPA guidance[16] and NetRegs[17] to prevent the introduction and spread of American signal crayfish. This includes disinfecting and controlling the movement of water and equipment between waterbodies.

Specifically, during construction the following should be adhered to:

[15] Scottish Government (2012). Non-native species code of practice: Made by the Scottish Ministers under Section 14C of the Wildlife and Countryside Act 1981 (2012). Edinburgh: Scottish Government.

[16] SEPA (2025). Biosecurity and Management of Invasive Non-Native Species on Construction Sites. Available at: https://www.sepa.org.uk/environment/biodiversity/invasive-non-native-species/

[17] NetRegs (2025). Freshwater Aquatic Invasive Non-Native Species. Available at: https://www.netregs.org.uk/environmental-topics/water/more-ways-to-prevent-water-pollution/freshwater-aquatic-invasive-non-native-species/

- Boundaries should be clearly marked with appropriate signage for the catchment of water into watercourses where American signal crayfish are present versus those watercourses where American signal crayfish are absent.
- Separate plant should be used for operations in one catchment or another, or plant washed down if moved between these catchments.
- A drive through wheel wash should be set up at key sites to prevent potential spread between catchments.

6.4.2.1 Equipment / machinery (taken from SEPA guidance)[16]

To maintain good site hygiene when dealing with any non-native species:

- *Where contaminated soil, materials or water are located, signage should be erected to indicate them.*
- *Personnel working on or between sites should ensure their clothing and footwear are cleaned where appropriate to prevent spread.*
- *Tracked vehicles should not be used within the area of infestation.*
- *All vehicles leaving the infested area must be thoroughly pressure-washed in a designated wash-down area before being used for other work.*
- *Where cross-contamination is possible (i.e. from one site to another), consider designating vehicles or machinery to specific sites where possible to prevent spread.*
- *Material/water left after vehicles have been pressure-washed must be contained, collected and disposed of appropriately.*
- *All wash facilities including waste water from washing vehicles, equipment or personnel should be managed in a responsible way so as not to not cause harm to the environment.*

6.4.2.2 Use and movement of water (taken from SEPA guidance)[16]

Use of water and / or crossing of water

If using water on your site for construction purposes or to wash vehicles or equipment, you should ensure that the source of that water will not inadvertently act as a vector for the transportation of non-native species to/from your site or elsewhere.

If you abstract or store any surface or ground water on your site for any reason you must gain appropriate authorisation from SEPA. Disposal of contaminated wash water, including all silt and other solids (e.g. plant fragments), must also be dealt with in a responsible manner to avoid pollution and to prevent the spread of any non-native species that may be present. For further information see Netregs (Pollution Prevention Guidance 5 - Works and maintenance in or near water, and Invasive Plants pages), and/or seek advice from SEPA.

Contamination of vehicles or machinery

Where non-native species are known to be within or close to your site, you should take care not to facilitate the transportation of plant seeds or fragments, animals or eggs on machinery, vehicles or by foot, from one site/river catchment to another. This may require the need for an exclusion zone and/or the use of designated machinery/ equipment on key sites to prevent movement from one site or river catchment to another.

You should inspect vehicles before moving them from site to site or off site, and provide wash facilities suitable for the machinery you have, if needed, e.g. a drive through bath or

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footbaths. You should pay particular attention to caterpillar tracks and where trucks and dumpers are stowed.

ANNEX A Legal Protection

A full list of protected species and the associated legislation can be found on the NatureScot website[18]. The following provides a summary of legal protection; the actual legislation should be consulted for the definitive list of offences.

A.1 Bats and Otter

All bat species and otter receive protection in Scotland under the Conservation (Natural Habitats, &c.) Regulations (1994) (the "Habitats Regulations"), being classified as European protected species of animals[19].

For European protected species, NatureScot guidance[20] sets out that it is an offence to deliberately or recklessly:

- capture, injure or kill an animal;
- harass an animal or group of animals;
- disturb an animal while it is occupying a 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 an animal's eggs (GCN); or
- damage or destroy a breeding site or resting place of such an animal (these sites and places are protected even when the animal is not present)[21].

Regulation 44(2)(e) of the Habitats Regulations allows a licence to be granted for activities ordinarily prohibited, where that purpose is:

> *"Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment."*

[18] NatureScot (2022). Table of all of Scotland's Protected Species. Online: https://www.nature.scot/doc/table-all-scotlands-protected-species.

[19] Schedule 2.

[20] NatureScot. (2025). European protected species. Online: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species/legal-framework/habitats-directive-and-habitats-regulations/european-protected

[21] Note that this is a summary of offences. Refer to Regulations 39 and 40 of the Habitats Regulations for legislative context.

A.2 Mountain Hare, Pine Marten and Red Squirrel

Mountain hare, pine marten and red squirrel and are protected in Scotland under the Wildlife and Countryside Act 1981[22].

Under Sections 9(1) and 9(2) of the 1981 Act, it is an offence to intentionally or recklessly kill, injure or take such an animal, or be in possession or control of such an animal (whether live or dead).[23]

Under Section 9(4)(a) and (b), it is an offence to intentionally or recklessly:

- damage or destroy, or obstruct access to, any structure or place which any wild animal included in Schedule 5[24] uses for shelter or protection; or
- disturb any such animal while it is occupying a structure or place which it uses for that purpose.

Further, Section 9(5) sets out that it is an offence to:

- sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal; or
- publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

A.3 Water Vole

Water vole is protected in Scotland under Sections 9(4) and 10 of the Wildlife and Countryside Act 1981.

Under Section 9(4)(a) and (b) of the Wildlife and Countryside Act 1981, it is an offence to intentionally or recklessly:

- damage or destroy, or obstruct access to, any structure or place which any wild animal included in Schedule 5[25] uses for shelter or protection; or
- disturb any such animal while it is occupying a structure or place which it uses for that purpose.

Section 10(3)(c) provides for exceptions under Section 9, such that a person shall not be guilty of an offence where that person shows:

- that each of the conditions specified in subsection (3A) was satisfied in relation to the carrying out of the unlawful act; or
- that the unlawful act was carried out in relation to an animal bred and, at the time the act was carried out, lawfully held in captivity.

Subsection (3A) states those conditions referred to in Section 10(3)(c) are:

a) That the unlawful act was the incidental result of a lawful operation or other activity;

b) That the person who carried out the lawful operation or other activity:

[22] Schedule 5.

[23] See exceptions under Section 9(3).

[24] Animals which are protected under Section 9 of the Wildlife and Countryside Act 1981.

[25] Animals which are protected under Section 9 of the Wildlife and Countryside Act 1981.

i. took reasonable precautions for the purpose of avoiding carrying out the unlawful act; or

ii. did not foresee, and could not reasonably have foreseen, that the unlawful act will be an incidental result of the carrying out of the lawful operation or other activity; and

c) That the person who carried out the unlawful act took, immediately upon the consequence of that act becoming apparent to the person, such steps as were reasonably practicable in the circumstances to minimise the damage or disturbance to the wild animal, or the damage or obstruction to the structure or place, in relation to which the unlawful act was carried out.

A.4 Badger

Badger is protected in Scotland under the Protection of Badgers Act 1992 (the "Badgers Act").

Under Section 1(1) of the Badgers Act, "*a person is guilty of an offence if, except as permitted by or under this Act, he wilfully kills, injures or takes, or attempts to kill, injure or take, a badger*."

Where it can reasonably be concluded that a person had been attempting to kill, injure or take a badger, then it will be presumed that that person had been attempting to do so, unless it can be proven otherwise[26].

Under Section 1(3), unless authorised under the Badgers Act, a person is guilty of an offence where "*he has in his possession or under his control any dead badger or any part of, or anything derived from, a dead badger*."

Under Section 3(1), unless authorised under the Badgers Act, it is an offence to interfere with a badger set*. The following actions are described as interference:

- damaging a badger sett or any part of it;
- destroying a badger sett;
- obstructing access to, or any entrance of, a badger sett;
- causing a dog to enter a badger sett; or
- disturbing a badger when it is occupying a badger sett,
- intending to do any of those things or being reckless as to whether his actions will have any of those consequences.

It is also an offence if a person knowingly causes or permits any of the above actions to be carried out[27].

**Note: A badger sett is defined under the Badgers Act as any structure or place which displays signs of current use by a badger.*[28]

[26] Section 1(2) of the Badgers Act.
[27] Section 3(2).
[28] Section 14.

A.5 Reptiles

The three native species of reptile to Scotland, adder, slow worm and viviparous lizard, are protected under Section 9(1) (insofar as the action relates to killing or injuring the animal), and Section 9(5) of the Wildlife and Countryside Act 1981.

Under Section 9(5), it is an offence to:

- sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal.
- publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

Section 10(3)(c) provides for exceptions under Section 9, such that a person shall not be guilty of an offence where that person shows:

- that each of the conditions specified in subsection (3A) was satisfied in relation to the carrying out of the unlawful act; or
- that the unlawful act was carried out in relation to an animal bred and, at the time the act was carried out, lawfully held in captivity.

Subsection (3A) states those conditions referred to in Section 10(3)(c) are:

a) That the unlawful act was the incidental result of a lawful operation or other activity;

b) That the person who carried out the lawful operation or other activity:

i. took reasonable precautions for the purpose of avoiding carrying out the unlawful act; or;

ii. did not foresee, and could not reasonably have foreseen, that the unlawful act will be an incidental result of the carrying out of the lawful operation or other activity; and

c) That the person who carried out the unlawful act took, immediately upon the consequence of that act becoming apparent to the person, such steps as were reasonably practicable in the circumstances to minimise the damage or disturbance to the wild animal, or the damage or obstruction to the structure or place, in relation to which the unlawful act was carried out.

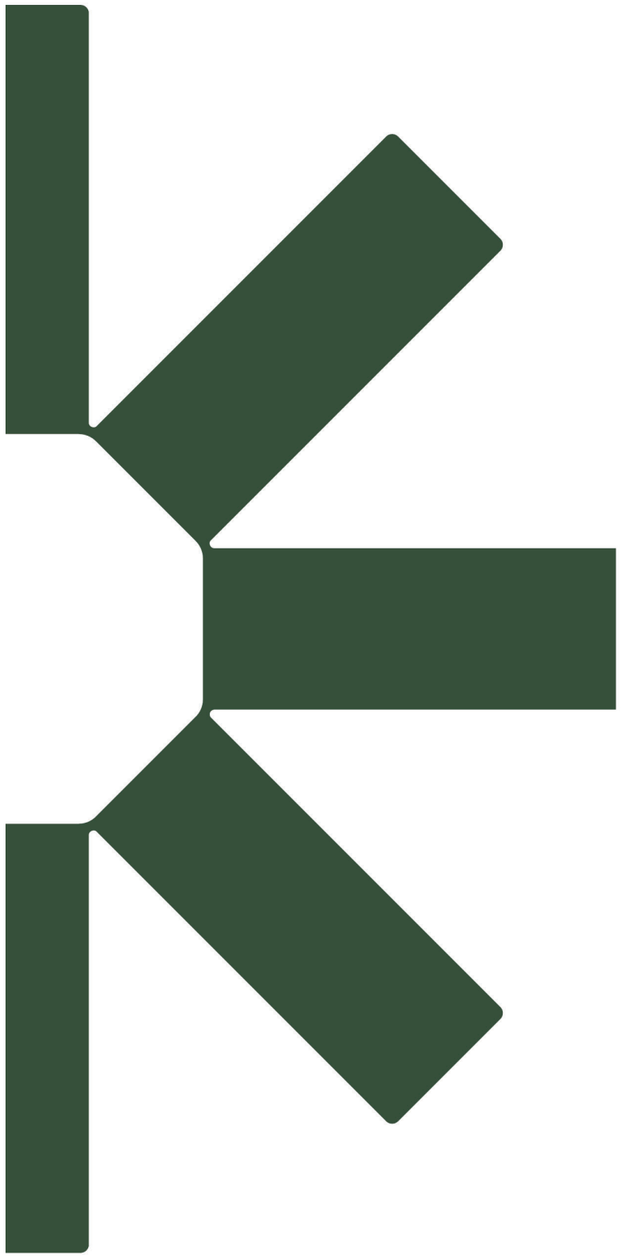
A.6 Other Protected Species

Signal Crayfish

In Scotland, all non-native species are covered by Section 14 of the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2011).

The Act makes it an offence to:

- release or allow to escape from captivity any animal to a place outwith its native range; and/or
- cause any animal outwith the control of any person to be at place outwith its native range.



Making Sustainability Happen

Technical Appendix 6.7: Outline Biodiversity Enhancement Management Plan

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1.0 Introduction

This Outline Biodiversity Enhancement Management Plan (OBEMP) has been prepared to accompany the proposed Watchman Energy Park (hereafter referred to as the 'Proposed Development') Environmental Impact Assessment (EIA) Report (EIAR).

It describes habitat restoration and species conservation management measures that are proposed as part of the Proposed Development, to restore degraded habitats and create and strengthen nature networks.

The measures detailed within this OBEMP would aim to achieve significant biodiversity enhancement as a direct result of the Proposed Development over its operational lifetime, in line with objectives outlined in National Planning Framework 4 (NPF4) Policy 3[1].

The OBEMP should be read with reference to **Figure 6.14 (EIAR Volume 3a).**

1.1 Target Habitats and Species

The management recommendations within this OBEMP are informed by the findings of baseline ecological and ornithological studies and the conclusions of assessment upon Important Ecological Features (IEFs) and Important Ornithological Features (IOFs), set out within **Chapter 6: Ecology and Chapter 7: Ornithology (EIAR Volume 2)**, along with the aims of the fourth South Lanarkshire Biodiversity Strategy 2024-2030 (SLBS)[2] (refer to **Section 3.0**).

The key habitats considered in this OBEMP, and for which habitat restoration, enhancement and creation measures are proposed, include moorland habitats (including blanket bog), broadleaved woodland and grassland. Focus is afforded to enhancing and preserving the habitat mosaics, which are characteristic of the Southern Uplands.

Habitat restoration and enhancement measures proposed would also have beneficial effects for the breeding bird assemblage identified locally, including ground-nesting waders, black grouse, nightjar and foraging raptors, .

1.2 Biodiversity Enhancement Area

This OBEMP 1.2anagement measures proposed.

These HMUs have been identified through discussions with the Applicant, landowners, and relevant technical specialists. The current HMUs may however, be refined and finalised post-consent into the overarching Biodiversity Enhancement Area (BEA) for the Proposed Development, following any further specialist surveys, feedback from relevant consultees, and further discussions with relevant landowners and tenant farmers.

The Applicant would however remain committed to delivering significant biodiversity enhancement as part of the Proposed Development, over its operational lifetime.

1.3 Finalisation of the BEMP and Reporting

Following receipt of planning consent for the Proposed Development, the OBEMP would be refined and developed into a final BEMP.

[1] National Planning Framework 4 – Available at: https://www.gov.scot/publications/national-planning-framework-4/

[2] South Lanarkshire Biodiversity Strategy 2024-2030. Available at: https://www.southlanarkshire.gov.uk/downloads/file/16574/biodiversity_strategy_2024_-_2030

The final BEMP would confirm the overarching BEA encompassing all habitat management proposals, and any finalised management units therein (i.e., the refined HMUs for specific habitat management proposals), where the aims, objectives and management prescriptions delivered by the BEMP would apply.

The final BEMP would be agreed with South Lanarkshire Council (SLC) in consultation with NatureScot and any other relevant stakeholders (as deemed necessary) prior to the commencement of construction of the Proposed Development.

A Biodiversity Advisory Committee (BAC), including representatives from SLC, NatureScot and the Applicant, would be set up to oversee and monitor the implementation of the agreed BEMP.

A BEMP report (initially for Years 1, 3 and 5 of implementation) would be submitted by the Applicant to the BAC detailing the tasks (management and monitoring) completed over the last year(s) and those planned for the year(s) ahead. This review process would ensure that local biodiversity within the BEA is enhanced over the lifetime of the Proposed Development to a demonstrably better state than without intervention.

The implementation and funding of the agreed BEMP will be the responsibility of the Applicant.

2.0 Baseline Characteristics

The following section provides a summary of baseline ecological and ornithological conditions established at the Site, which have informed the identification of aims and objectives of this OBEMP and the assessment of effects presented in **Chapter 6: Ecology and Chapter 7: Ornithology (EIAR Volume 2)**.

Full details of baseline studies, which has included desk study and field surveys, are presented in **Technical Appendices 6.2 to 6.5 (EIAR Volume 4)** and **Technical Appendix 7.1 (EIAR Volume 4) and 7.2 (EIAR Volume 5),** along with consultation with relevant stakeholders which are presented in **Technical Appendix 1.2 (EIAR, Volume 4).**

2.1 Ecology (Non-Avian)

The Proposed Development is located immediately north of the Shiel Dod SSSI[3], which is designated for its upland habitat assemblage.

The Site is mainly open upland habitats, the most common and widespread making up the bulk of the landscape are wet heath, acid grassland, marshy grassland and fragmented areas of blanket bog. Breaking up the expanses of these habitat types are patches and pockets of other habitat types such as wet modified bog, acid / neutral flushes, unimproved calcareous grassland, broadleaved plantation woodland and dry dwarf shrub heath. Although some large relatively homogeneous stands of vegetation occur, most of the communities often form complex mosaics and transitional areas across the Site.

The blanket bog within the Site is considered to be a degraded resource and for the most part of no better than 'modified' condition. There is no 'near-natural' peatland on-site (detailed in **Technical Appendix 6.2b, EIAR Volume 4** and shown on **Figure 6.5, EIAR Volume 3a**).

During the Peatland Condition Assessment (PCA) surveys there was evidence of grazing, trampling or poaching by large herbivores (i.e., deer, cattle and sheep) at all 87 peatland

[3] https://sitelink.nature.scot/site/1422

sample locations. Given the abundance, distribution, height and character of the dwarf shrubs present, it is likely the Site has a long history of intensive upland grazing and which may have been higher in the past, which has resulted in the current baseline of relatively sparse and low growing dwarf shrub cover. There is actively eroding peat present with hags and / or gullies recorded. Much of this highly degraded peatland is clustered in the severely eroding and deeper peatland, south and south-east of Hirstane Rig; these areas have been a particular target for restoration within the OBEMP and without intervention the peatland would continue to erode and lose carbon.

Within **Chapter 6: Ecology (EIAR Volume 2)** it is predicted that the Proposed Development could potentially impact up to 6.71 hectares (ha) of blanket bog / wet modified bog (2.99 ha of direct permanent loss and 3.72 ha of temporary direct loss), and potentially indirectly affect up to 5.73 ha of blanket bog / wet modified bog using indirect drainage assumptions.

There are numerous minor watercourses within the Site: the south of the Site drains into Daer Water, upstream of Daer Reservoir; the central area drains into Daer Reservoir, via Kirkhope Cleuch; and the north drains into Daer Water, downstream of Daer Reservoir. A small part of the Site (the Western access track) is within the Potrail Water catchment. All watercourses lie within the wider Clyde catchment.

The electrofishing surveys (fully detailed in **Technical Appendix 6.5, EIAR Volume 4**) caught no migratory fish species, due to the impassable Falls of Clyde downstream. The fish community was dominated by brown trout (*Salmo trutta*), with minnow (*Phoxinus phoxinus*) and stone loach (*Barbatula barbatula*) also noted. American signal crayfish (*Pacifastacus leniusculus*), an invasive non-native species (INNS), were recorded on Coom Burn, Calf Burn, Old Town Burn, Meikle Burn, Potrail Water and Daer Water.

Evidence of otter (*Lutra lutra*), pine marten (*Martes martes*), common lizard (*Zootoco vivipara*), water vole (*Arvicola amphibious*) and mountain hare (*Lepus timidus*) were recorded within the Site (refer to **Technical Appendix 6.3, EIAR Volume 4**). The automated bat surveys recorded a total of five bat species and one genus within the Site; soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*P. pipistrellus*), *Nyctalus spp*[4], Daubenton's (*Myotis daubentonii*), Natterer's (*M. nattereri*) and brown long-eared bat (*Plecotus auritus*) (refer to **Technical Appendix 6.5, EIAR Volume 4**).

2.2 Ornithology

The Proposed Development is not located within or adjacent to any statutory designated site for nature conservation with qualifying ornithological interests, nor is it located within potential connectivity distance of any Special Protection Area (SPA).

Baseline studies have established the Site and adjacent habitats are used by foraging and breeding raptors.

An assemblage of breeding ground nesting waders has also been recorded. The Site is noted to be located within the monitoring and advisory area for the Clyde Valley Wader Initiative (CVWI) and Agri-environment Climate Scheme (AECS) options for breeding waders have previously been under agreement within some of the involved landowner boundaries.

Lekking black grouse and breeding nightjar were not recorded within the Site during baseline surveys, but are known to have been previously recorded and / or are present within the wider surrounding areas.

[4] The Ecobat report only records to genus level for *Nyctalus* spp.

The Site and immediate surrounding area are not identified as being important for migratory waterfowl.

3.0 South Lanarkshire Biodiversity Strategy

Along with the results of surveys and the assessment of IOFs and IEFs, management recommendations within this OBEMP also consider the aims of the fourth South Lanarkshire Biodiversity Strategy 2024-2030 (SLBS)[2].

The SLBS 2024-2030 sets out a partnership approach to guide the conservation and enhancement of biodiversity in South Lanarkshire to 2030. It sets out 10 strategic outcomes and actions of local biodiversity conservation, which cover six ecosystems of the greatest importance within South Lanarkshire. The SLBS also sets out the actions proposed by the South Lanarkshire Biodiversity Partnership (SLBP)[5] to achieve its strategic outcomes and which will contribute to national and global priorities.

The key strategic outcomes and actions of the SLBS and the proposed aims of the OBEMP for the Proposed Development which support them are summarised in **Table 1**.

Table 1: Strategic Outcomes and Key Actions of the SLBS, with Related Aims of the OBEMP

SLBS Strategic Outcome	Key Actions	Key Relevant Aims of the OBEMP
Strategic Outcome 2: Designated and locally important sites are conserved	Actions are taken to maintain and / or improve the condition of nationally designated sites.	Aim 1: Restore and enhance moorland habitat and improve bog condition
Strategic Outcome 4: Freshwater habitats are improved and preserved	Improve the ecological status of water bodies. Continue to work on establishing nature network for wetland habitats in partnership with Glasgow and Clyde Valley Green Network.	Aim 1: Restore and enhance moorland habitat and improve bog condition Aim 2: Create native broadleaved woodland edges and riparian woodland corridors
Strategic Outcome 5: The biodiversity value of low-lying farmland is improved	As part of the Clyde Valley Wader Initiative, continue to work with the farming community to conserve important wading bird populations, by managing the agricultural grasslands and wetlands on which they depend.	Aim 1: Restore and enhance moorland habitat and improve bog condition Aim 3: Enhance grassland habitats for breeding waders
Strategic Outcome 6: Peatlands are protected and improved	Monitor the restoration of peatland habitats that is stipulated in windfarm habitat management plans (HMP). Clyde Peatlands - Peatland officer to work with landowners to identify areas of lowland peat to be restored.	Aim 1: Restore and enhance moorland habitat and improve bog condition
Strategic Outcome 7: Uplands are managed in a sustainable way	Ensure Habitat Management Plans (HMP) from renewable energy	Aim 1: Restore and enhance moorland habitat and improve bog condition

[5] Formed in 1997, with members including the Butterfly Conservation Scotland (BC), Clyde River Foundation (CRF), Froglife (FL), Forestry and Land Scotland (FLS), Glasgow and Clyde Valley Green Network (GVC), NatureScot (NS), Royal Society for the Protection of Birds (RSPB), Scottish Environment Protection Agency (SEPA), South Lanarkshire Council (SLC), Scottish Wildlife Trust (SWT) and the Tweed Forum (TF).

SLBS Strategic Outcome	Key Actions	Key Relevant Aims of the OBEMP
	developments are used to secure landscape scale habitat restoration. In partnership with others, seek funding mechanisms to develop conservation initiatives aimed at the conservation of upland birds including black grouse, waders and raptors in southern Scotland including Lowther Hills, as part of landscape scale project delivery.	Aim 2: Create native broadleaved woodland edges and riparian woodland corridors Aim 3: Enhance grassland habitats for breeding waders
Strategic Outcome 10: Woodlands are restored and managed	Increasing woodland cover and native woodland expansion contributing to our Nature Networks and the Clyde Climate Forest. Target new woodland creation schemes to manage the impact of sitka spruce regeneration on wetlands, peatlands and open space habitats.	Aim 2: Create native broadleaved woodland edges and riparian woodland corridors

4.0 Biodiversity Enhancement Area (BEA)

4.1 Overview

This OBEMP proposes a BEA covering 1,213 ha, with a further 11.38 km of linear management and comprising four overarching Habitat Management Units (HMU) (A – D inclusive); see **Figure 6.14 (EIAR Volume 3a),** each focusing on a particular habitat or feature type, within which management and monitoring works would be implemented.

The overall goal of the BEMP is to restore, enhance, create and conserve habitats of ecological value within these HMUs, which in turn would benefit existing flora and fauna as well as increase biodiversity in general through strengthening and building nature networks and connections.

HMUs have also been identified to include areas within 1.5 km of identified black grouse lek locations, and areas away from operational infrastructure to increase the likelihood of uptake by other target bird species including breeding waders and foraging raptors.

The precise objectives and detailed management prescriptions for the finalised HMUs will depend on the condition, at the time, of the habitat and the existing factors acting upon it or contributing to the condition. To further inform the objectives and detail appropriate management prescriptions, further specific surveys and desk-based assessment may be required to develop the final BEMP.

These surveys may include, but are not limited to, the following:

- further peatland condition assessments considering NatureScot guidance[12] and Peatland Action guidance[6];

[6] NatureScot (2021). Peatland Action: Peat Depth and Peatland Condition Survey. https://www.nature.scot/doc/peatland-action-peat-depth-and-peat-condition-survey-guidance-and-recording-form-guidance

- Joint Nature Conservation Committee (JNCC) Common Standards Monitoring of Upland Habitats[7] or habitat condition assessments utilising the latest Biodiversity Metric condition assessment pro-forma and methodology[8];
- hydrology / ecology walkover to identify opportunities for non-native conifer removal, drain blocking / reprofiling, erosion feature restoration / reprofiling, and restoration of the peatland water table;
- Herbivore Impact Assessment (HIA);
- GIS mapping exercises (e.g., additional mapping of drains / moor grips and density mapping of self-seeded non-native conifers);
- forestry surveys to further inform and refine woodland creation and planting proposals and details; and
- pre-commencement ornithology surveys and consultation with third-party recording groups to update baseline conditions and further inform targeted species measures and management prescriptions.

4.2 HMU A – Moorland Habitat Management / Enhancement

HMU A incorporates 956.83 ha of moorland habitats, including blanket bog, dry and wet heath and grasslands, across the Site Boundary and neighbouring Shiel Dod SSSI[9]. It will also encompass HMU B where further targeted peatland restoration works (damming / peat reprofiling) are proposed to be undertaken.

A breakdown of habitats within HMU A is provided in **Annex A**.

The wider HMU A (outwith HMU B) contains habitat which does not appear to have clear or obvious damage to features that could be restored and are therefore considered as unsuitable for specific peatland restoration works[10]. These areas have however been subject to a long history of hill grazing by livestock, with visible effects of over grazing, trampling / poaching, etc. and are therefore considered to be extensively 'modified' as a result (see **Technical Appendix 6.2a, EIAR Volume 4**) and **Figure 6.5, EIAR Volume 3a**).

Habitats targeted for management within HMU A compliment the upland habitat assemblage that the Shiel Dod SSSI is designated for, notably blanket bog and dry dwarf-shrub heath. The key restoration measure of significance available for the enhancement of these broader areas relates to the following:

- Implementation of a more sympathetic grazing management; and
- Removal of self-seeding conifer trees (young *Picea sitchensis* that have self-seeded from the large commercial forestry blocks found adjacent to the Site).

Surveys noted that given the abundance, distribution, height and character of the dwarf shrubs present, it is likely the Site had a long history of intensive upland grazing, which may have been higher in the past, and has resulted in the current baseline of relatively sparse and low growing dwarf shrub cover; the heather on Site, in particular, has been heavily grazed and is much reduced in places (**Technical Appendix 6.2a, EIAR Volume 4**). Some

[7] https://jncc.gov.uk/our-work/common-standards-monitoring

[8] https://publications.naturalengland.org.uk/publication/6049804846366720

[9] The HMU's outwith the extent of the Site Boundary is within the Land Ownership Boundary of the Applicant as shown on **Figure 6.14 (EIAR Volume 3a).**

[10] www.nature.scot/sites/default/files/2023-02/Guidance-Peatland-Action-Peatland-Condition-Assessment-Guide-A1916874.pdf

areas are now perhaps recovering, but the process is slow and extra management would ensure success / speed up the recovery.

Stock management is important for allowing the growth of heather and other plants, particularly during winter when dwarf shrubs are most likely to be damaged by browsing; excessive trampling can suppress the growth of heather and other plants leading to more grazing-resistant plants e.g., *Molinia*, and can lead to erosion of the peat soil.

Areas within the Shiel Dod SSSI have previously been included in an Agri-environment Climate Scheme (AECS) but are not currently, and the OBEMP provides a secure opportunity to reinstate or improve management of these areas in the long term under the advisory of the appointed BAC.

The improved management of HMU A would result in the preservation and enhancement of the existing upland habitat mosaic, providing increased foraging resources and / or nesting opportunities locally for target bird species particularly ground nesting waders, black grouse and raptors, including in areas away from operational infrastructure.

4.3 HMU B – Peatland Restoration

HMU B includes 124.72 ha in area and targets the most eroded / degraded peatland habitat as well as areas where there has been historical draining; including an area of highly eroded / hagged blanket bog in the west, and a number of areas within the Shiel Dod SSSI, south of the Site Boundary[9] and away from operational infrastructure, where hagging and drainage are present (as confirmed by NatureScot).[11] (**Figure 6.5, EIAR Volume 3a**). Using the same buffer to assess loss and restored areas (i.e. 10 m buffer for indirect effects) the area would increase to 140.41 ha.

Habitats within the Site often appear in complex mosaics and transitional areas and the breakdown of habitats within HMU B is presented in **Table 2**. Blanket bog, wet modified bog and mosaics of these with other habitats comprise 92.12 ha of the 124.72 ha management unit. Within the wider HMU A, blanket bog, wet modified bog and associated mosaics comprise a total of 181.70 ha (**Annex A**).

Within HMU B the aim would be to restore the existing and degraded peatland habitats and create favourable conditions for the re-establishment of peat and peatland vegetation.

NatureScot guidance[12] suggests that effects on peatland habitats should be compensated in the order of 1:10 (lost:restored) with a further 10% restoration of the Site baseline extent of priority peatland[13] habitats to deliver additional enhancement.

The Proposed Development could directly impact up to 6.71 ha of blanket bog / wet modified bog and potentially indirectly affect up to 5.73 ha of blanket bog / wet modified bog. Using NatureScot guidance, the compensation requirements for peatland at the Proposed

[11] Macmillan, S. NatureScot Operations Officer – West Central Scotland. Email to Robinson, N., 19 June 2025

[12] NatureScot (2023). Advising on peatland, carbon-rich soils and priority peatland habitats in development management. Available at: https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management

[13] Priority peatland is defined in NatureScot guidance as peatland that corresponds to NVC communities M1, M2, M3, M7, M17, M18, M19, M20, M15 and M25 and '*shows evidence of being undisturbed and actively forming peat*'. The NVC and PCA surveys determined that the blanket bog within the Site is considered to be a degraded resource, with no 'near-natural' peatland on-site (detailed in **Technical Appendix 6.2a and 6.2b, EIAR Volume 4**); the peatland is not therefore considered 'priority peatland', but numbers are presented here as a worst-case scenario and to give context to the amount of restoration/enhancement proposed.

Development would therefore be in the region of 124.4 ha if accounting for the full predicted and potential direct and indirect effects stated[14].

In terms of additional enhancement the guidance suggests a further 10% restoration of the Site baseline extent of priority peatland[13] habitats, however site boundaries are often arbitrary lines, and in the case of the Proposed Development the Site Boundary is significantly larger than the area where proposed infrastructure would be sited; the scale of the Site Boundary for the Proposed Development allows for large scale habitat management to be feasible and to be undertaken. Consequently, the 10% peatland enhancement value based on the Site Boundary is largely a function of the area of a Site Boundary line (which is open to adjustment or manipulation). It is therefore considered that a more proportionate approach, related to the degree of impact on peatland, would be a further 10% enhancement on the area of predicted / potential impact; in this case that would require restoration of an additional 1.24 ha of peatland for enhancement[15].

Total compensation and enhancement requirements for peatland, based on this, would therefore be 125.64 ha[16]. Furthermore, as discussed in **Chapter 6: Ecology (EIAR Volume 2)**, indirect drainage effects are not certain, and if they do occur, are unlikely to be fully realised for various reasons; consequently, application of the 1:10 ratio inclusive of indirect effects calculations would likely lead to greater than 1:10 compensation. It should also be noted that current Scottish Government guidance[17] does not specify any ratios with regards peatland restoration and enhancement, instead taking a more holistic view regards biodiversity and a project / site specific characteristics or circumstances. If it is considered that the 1:10 ratio should be more appropriately applied to the known direct permanent and temporary losses, the compensation and enhancement requirements for peatland would be in the region of 67.77 ha[18].

A high-water table is essential to the formation of new peat. Blocking of ditches by installing peat dams can restore the peatland function where bogs have been drained in the past. Restoring gullies / hagging and bare peat through re-profiling and re-vegetation stops further loss of peat from the bare peat surface and enables active peat-forming habitats to be re-established. While specific peatland restoration through ditch blocking / re-profiling etc. is proposed within HMU B, there may be further suitable areas identified for using these techniques within the wider HMU A.

Peatlands are important for preventing and mitigating the effects of climate change, preserving biodiversity and minimising flood risk. The improvement of these habitats would also be of benefit to local flora and fauna, including the upland bird assemblage.

Peatland restoration is a nature-based solution, which would have multiple synergistic benefits including the expansion and preserving of carbon sinks and reduction of net carbon emissions, providing enhanced habitats locally for breeding and foraging bird species.

[14] i.e., 1:10 ratio: (6.71 ha + 5.73 ha) x 10 = 124.4 ha.

[15] 12.44 * 0.1 = 1.24 ha.

[16] 124.4 + 1.24 = 125.64 ha.

[17] Scottish Government (2023). Biodiversity: draft planning guidance. https://www.gov.scot/publications/scottish-government-draft-planning-guidance-biodiversity/pages/1/

[18] i.e. (6.71 x 10) + (6.71*0.1) ha

Table 2: Breakdown of Phase 1 Habitat Type Within HMU B

Phase 1 Code	Phase 1 Description	Area (ha)
B1.1	Unimproved Acid Grassland	3.53
B1.1/B3.1	Unimproved Acid Grassland/Unimproved Calcareous Grassland Mosaic	0.15
B1.1/B5	Unimproved Acid Grassland/Marsh/Marshy Grassland Mosaic	0.14
B1.1/E1.6.1	Unimproved Acid Grassland/Blanket Bog Mosaic	1.06
B5	Marsh/Marshy Grassland	7.34
B5/D2	Marsh/Marshy Grassland /Wet Dwarf Shrub Heath Mosaic	0.24
B5/E2.1	Marsh/Marshy Grassland /Acid Neutral Flush Mosaic	0.15
D2	Wet Dwarf Shrub Heath	2.42
D2/E1.7	Wet Dwarf Shrub Heath/Wet Modified Bog Mosaic	1.10
D5/J4	Dry Heath/Acid Grassland Mosaic/Bare Ground Mosaic	0.00
D6	Wet Heath/Acid Grassland Mosaic	18.19
D6/E1.6.1	Wet Heath/Acid Grassland Mosaic/Blanket Bog Mosaic	3.47
E1.6.1	Blanket Bog	73.47
E1.6.1/E1.7	Blanket Bog/Wet Modified Bog Mosaic	2.86
E1.7	Wet Modified Bog	9.83
E2.1	Acid Neutral Flush	0.37
E4	Bare Peat	0.34
G2	Running Water	0.02
J4	Bare Ground	0.04

4.4 HMU C – Native Broadleaved Woodland and Riparian Corridor Creation

HMU C collectively covers a linear corridor of approximately 11.38 km; comprising 5.59 km of woodland edge planting, and 5.79 km of riparian planting along Kirkhope Cleuch and Rodger Cleuch[19].

The aim within HMU C is to create areas of native broadleaved woodland in a semi-natural pattern, along riparian corridors and the edges of plantation woodland, to enhance and expand existing areas and create and connect new areas.

The proposals in HMU C would generally involve the low-density planting and establishment of a range of small-seeding broadleaved species in non-uniform patterns and densities within suitable habitats. Some patches of open ground would be retained to form openings and woodland glades in the long term.

Planting would largely aim to reflect the canopy composition and character of NVC types W7 *Alnus glutinosa – Fraxinus excelsior – Lysimachia nemorum* woodland, W11 *Quercus*

[19] Compensatory planting within areas associated with HMU C is proposed to complement enhancement proposals for native broadleaved woodland and riparian corridor creation, and would be in addition to any planting proposals under the BEMP. Refer to **Technical Appendix 2.3 (EIAR Volume 4)**

petraea - Betula pubescens - Oxalis acetosella and W4 *Betula pubescens – Molinia caerulea* woodland types depending on the character and respective soil conditions within the HMU[20].

The mixture of native broadleaved trees would likely primarily include birch (*Betula* spp.), rowan (*Sorbus aucuparia*), oak (*Quercus* spp.) and willows (*Salix* spp.); however, it is proposed to increase diversity by also including smaller proportions of species such as alder (*Alnus glutinosa*), aspen (*Populus tremula*), wild cherry (*Prunus avium*), hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), crab apple (*Malus sylvestris*), small-leaved lime (*Tilia cordata*), wych elm (*Ulmus glabra*) and holly (*Ilex aquifolium*).

The small-seeding broadleaf planting proposed would serve to benefit local black grouse populations through the provision of foraging resources and natural shelter opportunities. Feathering of the conifer plantation edges by planting scattered broadleaves and the creation of woodland glades, would also enhance habitat locally for nightjar.

In the longer term, woodland creation may also benefit the local red squirrel network through increasing habitat extent and connectivity for this species. There are also many secondary benefits of woodland creation, such as natural flood attenuation, shade, carbon sequestration and helping to mitigate the effects of climate change.

Watercourses within the Site are generally very open and lack any shading or shelter. Riparian planting has multiple beneficial biodiversity effects, such as creating structure and breeding, shelter and foraging habitats for a range of species, from terrestrial and aquatic invertebrates to birds (notably black grouse), otter, bats and fish.

Specifically, riparian planting would improve the following:

- ecological quality of watercourses (e.g., through allochthonous material inputs, thermoregulation, erosion reduction);
- create shelter opportunities (e.g., for otter);
- establish improved habitat corridors (e.g., for bats);
- provide shading to watercourses and a source of nutrient inputs and aiding in temperature regulation and cover for fish; and
- improve bank stability with established root systems to allow banks to tolerate higher water flows without erosion, and to prevent choking of riverine sediments / gravel with finer soil particles which in turn will benefit insect assemblages.

Surveys found evidence of water vole in the lower section of Kirkhope Cleuch (**Figure 6.6.3, EIAR Volume 3a**). Pre-construction surveys will be carried out prior to construction of the wind farm and all associated works (including habitat enhancement works) (**Technical Appendix 6.6, EIAR Volume 4**). Riparian planting would take into account the presence of water vole populations where relevant, for example, leaving a suitable buffer unplanted on both banks.

Signal crayfish are not present above the Daer reservoir, i.e., within Kirkhope Cleauch or Rodger Cleuch. Strict biosecurity methods will be followed to ensure the invasive species is not introduced to new watercourses (**Technical Appendix 6.6, EIAR Volume 4**).

[20] W7 would be suitable for marshy grassland areas dominated by rushes, W4 would be suitable for marshy grassland areas dominated by *Molinia* and W11 would be suitable for the areas more dominated by dry grasslands on thinner riparian soils.

4.5 HMU D – Breeding Wader Grassland Management

Baseline studies have established that the Site and adjacent habitats support an assemblage of breeding ground nesting waders including curlew, golden plover, lapwing, oystercatcher, redshank and snipe. The Site is also located within the monitoring and advisory area for the CVWI.

HMU D is identified for breeding wader grassland management due to suitability of being on lower slopes and away from operational infrastructure. Some of the fields within HMU D (adjacent to the Daer Water) have previously been used successfully for breeding wader management under AECS and are included to ensure their long-term management for breeding waders over the operational lifetime of the Proposed Development.

Measures would focus on the creation, enhancement and maintenance of safe places for breeding waders to nest and feed and the sharing of information to inform future management requirements of AECS options.

5.0 Aims, Objectives and Management Prescriptions

The aims define the general BEMP goals, and the related objectives further define the aims into quantifiable targets. The prescriptions (i.e., measures) detail the indicative management works to be implemented to achieve these aims and objectives. **Annex B** provides an indicative timetable for the implementation of the associated prescriptions.

As discussed, detailed appropriate objectives and prescriptions would be further developed for the final BEMP based on additional survey findings, consultation and in accordance with best practice at the time of finalising the BEMP. However, the experience gained from providing and delivering plans for similar sites and habitats would suggest that as an outline, the aims, objectives and prescriptions would likely include or be similar to the below for the Proposed Development.

- Aim 1: Restore and enhance moorland habitat and improve bog condition (HMU A and B)
- Aim 2: Create native broadleaved woodland edges and riparian woodland corridors (HMU C)
- Aim 3: Enhance grassland habitats for breeding waders (HMU D)

This section sets out the objectives and outline of management prescriptions that are proposed to achieve these aims.

Annex B provides an indicative timetable for the implementation of the proposed management prescriptions under Aims 1 to 3.

5.1 Aim 1: Restore and enhance moorland habitat and improve bog condition (HMU A and B)

Objective 1.1	Maintain / increase the abundance and distribution of major peat forming species, particularly *Sphagna*.
Objective 1.2	Enhance and improve blanket bog condition.
Objective 1.3	Improve cover and condition of sub-shrubs, such as heather.
Objective 1.4	Reduce extent of bare peat.

Prescription 1.1	Peat dam, reprofile, or wave dam / zipper any active drains[21] (even if vegetated) in HMU B, and HMU A where appropriate, as appropriate for the location specific drain in order that the water level is raised sufficiently and to restore natural flow paths to create conditions suitable for a range of blanket bog species. This should be carried out under the supervision of a suitably qualified Ecological Clerk of Works (ECoW). Methods as detailed within relevant guidance[21].
Prescription 1.2	Undertake peat hagg and gully restoration and peat surface re-profiling in HMU B where appropriate with a low-pressure excavator and in line with relevant guidance[21, 22, 23].
Prescription 1.3	Remove invading self-seeded non-native conifer trees and any new broadleaved seedlings from HMU A (including HMU B) annually, by hand or clearance saw, until a time that monitoring shows that regeneration is no longer an issue, or the frequency of intervention can be reduced.
Prescription 1.4	Manage livestock numbers, via livestock fencing or other means within HMU A (including HMU B) in agreement with the landowners. Consider removal of livestock over winter months.
Prescription 1.5	The following activities would be prohibited within HMU A (including HMU B) (with the exception of activities required for the construction of the Proposed Development): • clearing out of existing ditches; • supplementary feeding of livestock; • application of any insecticides, fungicides or molluscicides; • application of lime or any other substance to alter the soil acidity; • cutting or topping of peatland / heathland vegetation except to control injurious weed species or to improve the biodiversity of the habitat; • burning of vegetation or other materials; • use of roll or chain-harrow; • planting trees (with the exception of riparian planting within HMU C); • carrying out any earth moving activities in peatland; • use of off-road vehicle activities in peatland with the exception of use of low impact agricultural vehicles required for ongoing agricultural activities (e.g., quad bike); • construction of tracks, roads, yards, hardstandings or any new structures; and • storage of materials or machinery.
Prescription 1.6	See Prescription 3.5 below.

[21] According to methodology detailed in: Peatland Action (2024) Technical Compendium. Available at: https://www.nature.scot/doc/peatland-action-technical-compendium

[22] NatureScot (2019). Peatland Action - Guidance for land managers - installing peat and plastic dams. Available at: https://www.nature.scot/doc/peatland-action-guidance-land-managers-installing-peat-and-plastic-dams

[23] Thom, T., Hanlon, A., Lindsay, R., Richards, J., Stoneman, R. & Brooks, S. (2019). Conserving Bogs: The Management Handbook. (2nd Edition). Available at: https://www.iucn-uk-peatlandprogramme.org/resources/restoration-practice/conservation-handbook

5.2 Aim 2: Create native broadleaved woodland edges and riparian woodland corridors (HMU C)

Objective 2.1	Create linear strips of native broadleaved woodland and increase tree diversity within the Site through the planting of up to 5.59 km of new low-density native woodland along the edges of conifer plantations.
Objective 2.2	Create riparian woodland corridors through the planting of up to 5.79 km[19] of new native broadleaved woodland along Kirkhope Cleuch and Rodgers Cleuch.
Objective 2.3	Increase and enhance faunal diversity within and around the Site by providing more habitat structure and new breeding, shelter and foraging habitats for birds, bats and other small mammals, and invertebrates.
Prescription 2.1	Undertake new native broadleaved woodland planting within HMU C (riparian and plantation feathering) with a diverse mix of native broadleaved species. Planting to be in non-uniform patterns and of variable densities and may include areas of retained open ground to avoid woodland homogeneity on advice from a professional forester. Planting to utilise low impact ground preparation techniques such as screefing or inverted mounding[24]. Given the Site location, soils and prevailing baseline habitats of the HMU C, and to reflect the character and structure of the existing broadleaved woodlands locally, it is anticipated that the species mixes here would primarily contain oak, birch, rowan and willows. However, it is proposed to increase diversity by also including smaller proportions of species such as alder, aspen, wild cherry, hazel, crab apple, small-leaved lime, wych elm, hawthorn and holly. Proportions of species and their planting locations would be determined by a forester, in agreement with a suitably qualified ecologist, during preparation of the final BEMP. Tree planting would be initiated during construction and be completed by the end of the operational Year 1. Tree planting would be carried out between the months of November and March when trees are dormant and more likely to establish successfully. Days when the ground is frozen or when snow or excessive surface water is present are to be avoided.
Prescription 2.2	Fencing of the planting areas is likely to be required to protect new trees from deer and livestock browsing during the establishment phase. Any new fencing within 1 km of known black grouse leks would follow guidelines in Trout & Kortland (2012)[25] and be marked to minimise collision risk for black grouse. Trees to be planted in 1 m to 1.2 m biodegradable tree tubes to further protect from potential browsing damage.

[24] Scottish Forestry. (2021). Cultivation for upland productive woodland creation sites: applicants' guidance. https://forestry.gov.scot/publications/1032-cultivation-for-upland-productive-woodland-creation-sites-applicant-s-guidance

[25] Trout, R. and Kortland, K. (2012). Fence marking to reduce grouse collisions. Forestry Commission Technical Note.

	Tree tubes to be removed after approximately 10 years or after adequate establishment of the trees.
Prescription 2.3	Removal of self-seeding conifers.
Prescription 2.4	Prohibited activities noted in Prescription 1.5 above apply (with the exception of planting trees).
Prescription 2.5	See Prescription 3.5 below.

5.3 Aim 3: Enhance grassland habitats for breeding waders (HMU D)

Objective 3.1	Manage grassland habitats for the benefit of nesting and foraging breeding waders.
Objective 3.2	Support research and innovation in changes in agricultural management that can improve breeding wader hatching success to help inform national AECS schemes.
Prescription 3.1	As a minimum, or else as advised by the BAC and subject to trials as necessary, for HMU D implement a grazing regime that: • excludes livestock from 1 April to 12 May inclusive, followed by a period of grazing; or • excludes livestock from 15 April to 26 May inclusive, followed by a period of grazing; or • restricts livestock by stocking with up to <1 LU / hectare from 15 March to 15 June inclusive; • no harrowing, rolling or topping grass from 15 March until 30 June inclusive; • no application of lime, fertiliser, slurry or farmyard manure from 15 March to 15 May inclusive; • the sward (which may contain occasional tussocks of taller vegetation) must be grazed down to remove annual growth to avoid a build-up of matted dead plant material; • no spraying, except for the spot-treatment of injurious weeds (requires prior written notification) or treatment of invasive species (requires prior written approval); and • no establishment of new drainage. It is proposed that the restrictions of livestock (including grazing and trampling) would be managed through the use of temporary fencing or if appropriate virtual fencing, with funding for livestock neckbands and training provided by the BEMP.
Prescription 3.2	Creation of wader scrapes within HMU D (or alternative locations where agreed with landowners): • each scrape must be a minimum size of 20 square metres and hold water from at least 1 March to 31 May, or as otherwise informed through the advisory of the BAC; and

	• scrapes should be created and managed in such a way, that they would hold value for other biodiversity interests including reptiles, amphibians and invertebrates.
Prescription 3.3	Facilitate the public dissemination of non-sensitive monitoring reports via an online project portal.
Prescription 3.4	Provide an annual salary contribution to the funding of a locally-based seasonal gamekeeper to undertake or otherwise advise on predator control within relevant HMUs and monitoring area of the CVWI.
Prescription 3.5	Provide an annual salary contribution to the funding of a seasonal ornithological field surveyor to undertake regular ornithological monitoring within the Site and to assist in the wider monitoring and advisory work of the CVWI and South of Scotland Golden Project (SSGEP).

6.0 Monitoring

6.1 Aim 1: Restore and enhance moorland habitat and improve bog condition (HMU A and B)

The following likely monitoring measures would be undertaken to evaluate and report on the success of this aim:

- Habitat / vegetation monitoring would evaluate the success of restoration and enhancement of moorland habitats. This would be achieved by recording changes to the structure and composition of the vegetation and species abundance, evenness and diversity, and extent of self-seeded non-native conifers with the use of permanent quadrats or line transects. Recording of impacts from deer / livestock would also be included in the monitoring programme.
- In addition to general and wider scale walkover surveys, a representative sample of permanent quadrats or line transects would be established within the respective HMU to gather sufficient data to inform future management and assess the trajectory of plant species and habitats. The respective monitoring surveys would be carried out at the most appropriate times of year (e.g., flora surveys versus browsing impact surveys). Repeat surveys would be carried out in the same month in each monitoring year (Years 1, 3, 5, 10 and 15) to gather comparable data. Photographs would also be taken of each sample quadrat / line transect, as well as overview photographs of the HMU.
- In addition, should finalised HMU B be fenced off and livestock excluded / managed, a number of quadrat monitoring locations would also be set up outwith the enclosed HMU and in nearby and similar habitat in order to allow a temporal comparison of the habitats inside and outside the enclosures over the lifetime of the BEMP.
- Moorland habitat condition assessments utilising i) the latest Biodiversity Metric condition assessment pro-forma and methodology[8], and / or ii) a CSM site condition survey[7], at representative locations within HMU A.
- Any peat hag or surface reprofiling works, and any installed peat dams or drain blocking, would be monitored to ensure works are successful over the first three years after works are completed. Remedial measures would be undertaken if restoration works have failed.

- The presence of regenerating and encroaching self-seeded conifer trees and new broadleaved seedlings, and the success or removal measures, would be monitored.
- Breeding bird surveys to monitor the abundance and distribution of breeding bird species including black grouse, waders and raptors, and support species monitoring in the area.

6.2 Aim 2: Create native broadleaved woodland edges and riparian woodland corridors (HMU C)

Monitoring would be undertaken in HMU C to ensure the establishment of the broadleaved planting.

A professional forester would monitor the planted areas in Years 1 to 5 following planting to ensure successful establishment, specifically looking for evidence of damage (e.g., browsing) or disease. Failed specimens would be replaced in the consecutive winter (i.e., between November and March). The forester would also advise on whether any further management or maintenance is required to ensure the establishment of the trees.

HMU C would be monitored again by a professional forester in operational Year 10 to ensure that there are no issues with disease or invasive species and to determine if any thinning at this stage would benefit woodland establishment.

Monitoring would be undertaken again in operational Year 20 when some thinning operations may be required in the woodland in order to encourage growth of better trees and create more open woodland, further new enhancement / enrichment planting may also be considered at this stage. This would aid regeneration of seedlings and begin the process of establishing a mixed age structure.

Breeding nightjar surveys would also be proposed to monitor habitat uptake and support species monitoring in the area.

6.3 Aim 3: Enhance grassland habitats for breeding waders (HMU D)

Monitoring would likely include:

- Breeding wader surveys undertaken in accordance with species-specific methodologies.
- Monitoring surveys would be annually, at least initially e.g. for at least the first five years, and then at a frequency agreed with the BAC.
- Compliance monitoring of habitat management prescriptions would also be undertaken in accordance with protocols agreed in consultation with the BAC. Monitoring would be carried out annually, at least initially, and then at a frequency agreed with the BAC over the duration of the BEMP implementation.

7.0 Reporting and BEMP Review

A report would be submitted by the Applicant (to the BAC in Years 1, 3 and 5 of operation, the frequency of reporting after Year 5 would be agreed with the BAC. This report would detail:

- management undertaken in the past year(s);
- monitoring undertaken, results and discussion of results; and

- management and monitoring proposed for the following year(s).

If considered necessary by the members of the BAC, the BAC would meet periodically to discuss the reports and management of the Site.

Where monitoring indicates any management objectives are not met, further management prescriptions or interventions would be agreed by the BAC.

The requirement for the measures, monitoring and reporting following Year 15 of the operational phase would be dependent on the results of the monitoring which would be discussed and agreed within the Year 15 review report and agreed in writing with the BAC.

The BEMP would be reviewed every five years from its commencement. The purpose of the review would be to assess the effectiveness of the proposed management prescriptions at achieving the aims and objectives of the BEMP. If necessary, such measures may be amended by the BAC.

ANNEX A Breakdown of Phase 1 Habitat Type Within HMU A

Phase 1 Code	Phase 1 Description	Area (ha)
A1.1.1	Broad-Leaved Semi-Natural Woodland	0.06
B1.1	Unimproved Acid Grassland	72.23
B1.1/B3.1	Unimproved Acid Grassland / Unimproved Calcareous Grassland Mosaic	1.59
B1.1/B5	Unimproved Acid Grassland / Marsh / Marshy Grassland Mosaic	5.31
B1.1/E1.6.1	Unimproved Acid Grassland/Blanket Bog Mosaic	16.71
B1.2	Semi-Improved Acid Grassland	5.62
B1.2/B5	Semi-Improved Acid Grassland / Marsh / Marshy Grassland Mosaic	0.07
B3.1	Unimproved Calcareous Grassland	4.73
B5	Marsh / Marshy Grassland	171.80
B5/D2	Marsh / Marshy Grassland / Wet Dwarf Shrub Heath Mosaic	13.79
B5/D6	Marsh / Marshy Grassland / Wet Heath / Acid Grassland Mosaic	14.84
B5/E2.1	Marsh/Marshy Grassland / Acid Neutral Flush Mosaic	4.56
C3.1	Tall Ruderal	0.03
C3.2	Non-Ruderal	0.69
C3.2/D2	Non-Ruderal / Wet Dwarf Shrub Heath Mosaic	1.94
D1.1	Acid Dry Dwarf Shrub Heath	1.53
D2	Wet Dwarf Shrub Heath	107.99
D2/E1.6.1	Wet Dwarf Shrub Heath / Blanket Bog Mosaic	2.71
D2/E1.7	Wet Dwarf Shrub Heath / Wet Modified Bog Mosaic	1.12
D2/E2.1	Wet Dwarf Shrub Heath / Acid Neutral Flush Mosaic	18.19
D3	Lichen / Bryophyte Heath	0.10
D5	Dry Heath / Acid Grassland Mosaic	28.00
D5/J4	Dry Heath / Acid Grassland Mosaic / Bare Ground Mosaic	0.30
D6	Wet Heath / Acid Grassland Mosaic	307.98
D6/E1.6.1	Wet Heath / Acid Grassland Mosaic / Blanket Bog Mosaic	20.97
E1.6.1	Blanket Bog	113.89
E1.6.1/E1.7	Blanket Bog / Wet Modified Bog Mosaic	4.14
E1.7	Wet Modified Bog	21.82
E2.1	Acid Neutral Flush	10.48
E2.2	Basic Flush	0.58
E4	Bare Peat	0.34
G1	Standing Water	0.01
G2	Running Water	1.09
I1.4.1	Acid/Neutral Exposure	0.99
J3.6	Building	0.04
J4	Bare Ground	0.60

ANNEX B Management and Monitoring Timetable

Year	0*	1**	2	3	4	5	6	7	8	9	10	11	12	13	14	15…
Work Item	**Year of Implementation**															
Management Prescriptions																
Peatland restoration measures e.g., drain blocking, damming, and/or reprofiling, and peat hagg / gully reprofiling, if appropriate (HMU B)	✓	✓														
Livestock management/exclusion (HMU A and B)		✓	Throughout lifetime of BEMP, as necessary and informed by BEMP monitoring													
Self-seeded non-native conifer encroachment / regeneration removal (HMU A and B, and C)		✓	Throughout lifetime of BEMP, as necessary and informed by BEMP monitoring													
Excluded activities as per Prescription 1.5 (HMU A, B, C)		Throughout lifetime of BEMP														
Livestock / deer exclusion fencing and riparian and woodland edge planting (HMU C)	✓	✓														
Removal of tree tubes (HMU C)											✓[26]					
Wader grassland management (HMU D)		✓	✓	✓	✓	✓	Throughout lifetime of BEMP, as necessary and informed by BEMP monitoring									
Predator control (HMU A, B, C and D)		✓	Throughout lifetime of BEMP, as necessary and informed by BEMP monitoring													
Monitoring																
Inspection of peatland restoration areas and integrity / success of hagg / gully reprofiling, drain and gully blocking/reprofiling (HMU B)		✓	✓	✓												
Vegetation monitoring and bog condition assessments (HMU A, B and C)		✓		✓		✓					✓					✓
Self-seeded non-native conifer extent mapping/monitoring (HMU A)		✓		✓		✓	As required depending on frequency of regeneration.									
Riparian and woodland edge planting establishment/growth monitoring – (HMU C[27])		✓	✓	✓	✓	✓	As required and informed by forestry monitoring									
Breeding bird monitoring (HMU D)		✓	✓	✓	✓	✓	As agreed by the BAC.									
Reporting / Reviews																
BEMP Report		✓		✓		✓	Reporting schedule after Year 5 to be agreed with the BAC									
BAC 5-year review of BEMP						✓					✓					✓

* Construction Phase

**First year after final commissioning of the Proposed Development / Operational

[26] Fast growing species may require the removal of trees guards before Year 10, to prevent damage. This would be informed by forestry monitoring surveys.

[27] Following initial planting, any failed specimens recorded during forestry monitoring surveys would be replaced during a 'beating up' second planting period to be determined.

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