
Millennium East Wind Farm

Environmental Impact Assessment (EIA) Report

Technical Appendix 6.7: Outline Biodiversity Enhancement Management Plan (OBEMP)



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1 INTRODUCTION

- 1.1.1 This Technical Appendix presents an Outline Biodiversity Enhancement Management Plan (OBEMP) and has been prepared to accompany **Chapter 6: 'Ecology'** of the Millennium East Wind Farm (hereafter the 'Proposed Development') Environmental Impact Assessment Report (EIA) Report.
- 1.1.2 In accordance with the EIA, the following reference terms are used in relation to the Proposed Development:
- The 'Site' – Refers to everything within the application red line boundary.
 - The 'Development Area' – Where new infrastructure is proposed to be placed (turbines, new track section, substation compound etc.
 - The 'Access Route' - that part of the Site encompassing the existing Millennium Wind Farm access track from the A887 to the Development Area.
- 1.1.3 This OBEMP should be read in conjunction with **Figure 6.7 Outline Biodiversity Enhancement Management Plan (OBEMP): Habitat Restoration and Enhancement Search Areas** and identifies candidate habitat creation and enhancement search areas.
- 1.1.4 This OBEMP establishes the proposed creation, enhancement and ongoing management of habitats at the Site to benefit biodiversity (including but not limited to habitats, terrestrial mammals, birds, fish and invertebrates) in accordance with the principles outlined in the National Planning Framework (NPF)4, Policy 3, the intent of which is to '*protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks*', with the outcome that '*biodiversity is enhanced and better connected including through strengthened nature networks and nature-based solutions*'.
- 1.1.5 The final details of biodiversity enhancements and associated habitat management measures to be implemented, including specific locations, extents and method statements would be subject to agreements reached with the landowners and other relevant stakeholders (Section 1.4) and informed by detailed site investigations and input by relevant specialists.
- 1.1.6 The document would be finalised as the 'Millennium East Wind Farm Biodiversity Enhancement Management Plan', hereafter referred to as the BEMP. The BEMP would accord with the relevant NatureScot policies and guidance that are in place at the time of the BEMP preparation. Finalisation of the BEMP would be required to discharge pre-commencement planning condition in advance of construction works. The Highland Council and NatureScot would be consulted on the BEMP. . Once finalised, the BEMP would remain in place as agreed, subject to reviews for effectiveness, for the operational lifetime of the Proposed Development as consented (anticipated to be 35 years) and in accordance with the planning condition.

1.2 Structure of the Biodiversity Enhancement Management Plan

- 1.2.1 It is proposed that there would be five Aims and related Objectives of the BEMP in relation to the Proposed Development, to be achieved through the implementation of management prescriptions and habitat creation practices outlined herein. Proposed Aims and Objectives presented within this OBEMP have been identified based on ecological and ornithological features present, consultation responses received to date and planning documents, including the Highland-wide Local Development Plan (HwLDP) and National Planning Framework 4 (NPF4).
- 1.2.2 Suitable habitat creation and enhancement proposals have been developed making reference both to the character and condition of the habitats present on Site and also to wider objectives for biodiversity at a regional level.

- 1.2.3 The success of management prescriptions and habitat creation in achieving the Aims and Objectives of the BEMP would be monitored, with the results reported to an advisory group (the ‘Habitat Management Steering Group’; HMSG), in accordance with timings and protocols to be agreed with NatureScot and The Highland Council (THC). The BEMP once finalised would be a live document, with the habitat management measures implemented being adaptive throughout the lifetime of the Proposed Development in response to the findings of ongoing monitoring.

1.3 Implementation

- 1.3.1 The BEMP shall be implemented for the operational period of the Proposed Development, with associated works commencing prior to the commissioning of the wind farm, where necessary.
- 1.3.2 Responsibility of the finalisation and implementation of the BEMP would be borne by the “Owner(s)” of the Millennium East Wind Farm, as consented, and/or any subsequent “Owner(s)”.
- 1.3.3 All works associated with the implementation of the BEMP would be undertaken by the “Owner(s)” of the Millennium East Wind Farm, as consented, and/or any subsequent “Owner(s)”, or by their appointed agents.
- 1.3.4 The “Owner(s)” of the Millennium East Wind Farm shall be responsible for the cost of implementing the BEMP; including the cost of carrying out any monitoring, except where otherwise specified or agreed with the HMSG.

1.4 Habitat Management Steering Group

- 1.4.1 A HMSG would be established prior to the finalisation of the BEMP to meet or correspond regularly to discuss the effectiveness of prescribed management measures and monitoring techniques, monitoring results and recommendations for any amendments to the BEMP.
- 1.4.2 For the first five years of implementation, the HMSG would meet or correspond at least annually.
- 1.4.3 The following bodies shall be invited to form part of the steering group and review committee:
- The Owners of the Proposed Development;
 - The Landowners (or their representatives);
 - NatureScot;
 - Scottish Environment Protection Agency (SEPA);
 - Ness District Salmon Fisheries Board (NDSFB); and
 - The Highland Council (THC).
- 1.4.4 An ecologist appointed by the Owner(s) (at their cost), shall also form part of the HMSG and review panel in an advisory capacity.

1.5 Site Location

- 1.5.1 The Proposed Development is located within the administrative area of The Highland Council Local Authority (hereafter referred to as ‘the Council’). The Site’s centre point is at National Grid Reference: E228745, N809613). The Site is located approximately 5.2 km west of Fort Augustus, southwest of Invermoriston, and north of Invergarry.

- 1.5.2 The Site sits within broadly undulating upland moorland, gently sloping downwards from southwest to northeast. The elevations of the Site range from 670 m Above ordnance datum (AOD) at the mid-western section of the Site, to the Site access junction by A887 at 129 m AOD.
- 1.5.3 The twenty-six wind turbines of the operational Millennium Wind Farm lie immediately to the southwest. The operational wind turbines are arranged in three arrays, at elevations ranging from 460 m AOD to 700 m AOD.

1.6 Current Site Conditions

- 1.6.1 Full habitat descriptions are provided within **Technical Appendix 6.1: Habitats and Vegetation** of the EIA Report for the Proposed Development and are not repeated here, but a summary is provided below. Baseline habitats are presented in **Figures 6.2 (a – e) Volume 2a** of the EIA Report.
- 1.6.2 The Site is currently used for the generation of renewable energy (existing operational Millennium Wind Farm) as well as for livestock grazing and deer stalking. Surrounding land uses also include upland grazing and commercial forestry.
- 1.6.3 The Site predominantly consists of a mix of upland moorland and blanket bog habitat, plantation woodland and grassland.
- 1.6.4 Notably, it contains communities which correspond with habitat types described in Annex 1 of the Habitats Directive, including blanket bog (including montane bog), alkaline fens, Alpine pioneer formations of the *Caricion bicoloris-atrofuscae*, European dry heath, Northern Atlantic wet heaths with *Erica tetralix* and Alpine and Boreal heath. Priority habitats listed on the Scottish Biodiversity List (SBL) include blanket bog, upland heathland, mountain heath and willow scrub, plus upland flushes, fens and swamps.
- 1.6.5 Two species (great sundew and alpine bearberry) recorded on Site are listed as ‘near threatened’ on the IUCN Red List (BSBI, 2009¹) and two species (dwarf birch and three-ranked spear moss) are listed as ‘nationally scarce’ in Great Britain based on lists compiled by the Botanical Society of Britain & Ireland and the British Bryological Society respectively (BSBI, 2009; Pescott, 2016²).
- 1.6.6 Areas of blanket bog on Site represent priority peatland, some of which are of potential national interest. The peatland on Site was noted to be of varied condition; some as good (near natural), moderate (modified) and poor (highly modified). In some areas, peat modification and erosion is significant, indicated by peat hags, erosion channels and bare peat.
- 1.6.7 Details of all permanent and temporary, direct and indirect loss of habitats considered to represent Important Ecological Features for the Proposed Development are provided in **Chapter 6: Ecology of the EIA Report**, and include loss of:
- 0.27 ha dry dwarf shrub heath;
 - 5.24 ha wet dwarf shrub heath;
 - 11 ha blanket bog; and
 - 0.06 ha wet modified bog.

¹ Botanical Society of Britain & Ireland. 2009. Conservation statuses for all UK plants. Available online: https://bsbi.org/wp-content/uploads/dlm_uploads/TaxonDesignationsVascularPlants.xlsx

² Pescott, O.L. 2016. Revised lists of nationally rare and scarce bryophytes for Britain. *Field Bryology*, 115, 22-30.

2 AIMS AND OBJECTIVES

2.1 Approach to BEMP

- 2.1.1 The Proposed Development has been designed to minimise potentially significant effects on sensitive ecological and ornithological features and peat reserves, and no significant adverse effects are predicted for any important ecological or ornithological features. However, it has long been considered good practice to propose measures to reduce non-significant effects and to provide overall biodiversity enhancements associated with a proposed development, and provision of biodiversity enhancements is also a requirement under NPF4 Policy 3.
- 2.1.2 Restoration and enhancement measures as presented within this OBEMP are focussed on improving the overall condition and connectedness of bog, heath, native woodland and riparian habitats at and adjacent to the Site.

2.2 Aims and Objectives

- 2.2.1 The BEMP comprises five key Aims:

- Aim 1: Restoration of degraded peatland and heath habitats;
- Aim 2: Enhancement of riparian habitats;
- Aim 3: Native woodland planting;
- Aim 4: Bracken control;
- Aim 5: Reduction in attraction risks for eagles.

- 2.2.2 The effectiveness of management prescriptions and habitat improvements in achieving the Aims and Objectives of the BEMP would be monitored, with the results reported, in accordance with timings and protocols to be agreed through the HMSG.

- 2.2.3 It is proposed that the Aims, Objectives and management prescriptions outlined herein would be further refined in consultation with NatureScot and the HMSG following pre-construction baseline surveys (if required) and/or site investigation works and specialist input as necessary.

- 2.2.4 Livestock grazing within the Site and access for deer are assumed to continue throughout the operational lifetime of the Proposed Development and, as such, any habitat management principles to be implemented need to incorporate a sensitive grazing regime, via reduced stocking density and/or an environmentally sensitive means of exclusion/protection measures in areas being actively managed.

Aim 1: Restoration of Degraded Peatland Habitats

Objective 1: Promote Improved Structural Diversity of Blanket Bog

- 2.2.5 Habitat within the Development Area in the upper reaches of the Site consists almost entirely of blanket bog, made up principally of priority peatland comprising M17 and M19 NVC habitat communities, interspersed with extensive areas of M1, M2 and M3 bog pools. Quality and condition of the bog varies widely across the Site; bog pools are features associated with blanket bog in near natural condition, as are some of the bog moss species recorded in some locations within the Site. However, substantial erosion impacts are evident and widespread across the Development Area, indicated by peat hags, erosion channels and bare peat (see **Photo 1**). Of the 109 areas of bog that

were assessed for peatland condition, only 28 were found to be in good (near natural) condition. Thirty-four polygons (and the largest extent in terms of area coverage) are in moderate condition, and 47 polygons (smaller in extent and scattered throughout the Site) are assessed as being in poor condition. Peatland conditions of polygons is presented in Figure 6.3 of Volume 2a of the EIA Report.

- 2.2.6 Polygons that were classed as poor condition are highly modified (often from erosion); peat forming vegetation is still present, though only locally frequent. Most of the polygons that were classed as moderate are capable of actively forming peat but show some sign of modification, either from erosion or drainage (or both).



Photo 1: Example of peatland erosion adjacent to the track between operational Millennium turbines T14 and T15

- 2.2.7 Rewetting measures are most successful on relatively flat areas where water flow is slower, and consideration also needs to be given to accessibility of proposed restoration areas by vehicles to be used in the restoration, such as excavators, and in relation to transportation of peat within the Site. On this basis, preliminary peatland restoration search areas totalling 143ha have been identified based on survey data (see **Figure 6.7**), satellite imagery cross referenced with GIS data, and taking consideration of logistical constraints such as proximity to existing or proposed tracks, to provide accessibility to enable restoration works to be carried out without causing further damage to other areas of peatland via tracking of vehicles across it. Specific locations and extents within this search area where effective restoration would be possible, and specific methods to be used, would be determined following more detailed survey and investigation by hydrological and ecological specialists during the construction phase, and would be defined in the BEMP to be agreed by NatureScot, THC and other relevant stakeholders.
- 2.2.8 Although some drainage, and so some potential for ditch blocking, is present within the Site, much of the modification within the restoration search areas is due to erosion in the form of hags and gullies, with bare exposed peat allowing ongoing erosion to take place within these features. As such

restoration would be principally focussed on reprofiling of hags and gullies, with damming of gullies as appropriate also investigated on shallower slopes (<7.5°). Hand restoration of areas of micro-erosion may also be possible elsewhere within the Site, in areas more distant from tracks and inaccessible to heavy plant. Where necessary, and in consultation with the steering group (HMSG), reseedling may be recommended for reprofiled features, to assist revegetation and prevent further washout and erosion. Where appropriate, shallow depressions would be created in appropriate locations to allow bog pools to form, which would in time create new areas of M2 and M3 habitat and provide important chick rearing habitat for breeding waders including greenshank and wood sandpiper.

- 2.2.9 Calculating actual potential rewetted area that would be achieved within the search areas would require further detailed investigation by peatland and hydrology specialists. Such further investigation would provide detail as to the methods and types of dams to be used in any given area of restoration within the search area, and likely buffer areas associated with reprofiling and dams (i.e. linear and lateral extent of rewetting) that would be achieved.
- 2.2.10 Access for deer within the Site would continue throughout the operational lifetime of the Proposed Development and, as such, means of protecting restoration areas from browsing would need to include management of deer numbers and/or a means of exclusion. Potential deer population density estimates of 10.5 to 14.5 deer per km² within the Site are higher than the density of 3 to 5 deer per km² generally considered appropriate for blanket bog restoration and woodland establishment, and which would not be obtained on the basis of existing deer management strategies as it is understood the Achlain Estate target is currently 10 deer per km². However, the Achlain Estate Deer Management Plan includes measures designed to reduce deer occupancy on higher hill ground, and includes proposals for monitoring via regular annual counts across the Estate on foot and/or by drone. In the event fencing is considered to be necessary on the basis of this density monitoring and results of monitoring within the bog restoration areas, these would need to be marked to make them visible to grouse species in line with Forestry Commission (2012³) guidance. For further details, please refer to **Technical Appendix 6.6: Deer Assessment**.

Aim 2: Enhancement of Riverine Habitats

- 2.2.11 Native riparian planting can help deliver a multitude of benefits for the environment and biodiversity including trapping sediments and filtering out pollutants, slowing the flow of runoff and rivers to mitigate flood risk, and shading and maintenance of cool water temperatures, provision of cover and sources of food from in-falling litter to provide benefits for fish.
- 2.2.12 Further biodiversity benefit is provided by increasing habitat diversity, strengthening habitat connectivity and by creating nature networks and enhanced wildlife corridors. The Scottish Government has stated it is supportive of more planting of broadleaves around rivers and streams⁴.
- 2.2.13 Riparian planting can also deliver opportunities for other wildlife, including foraging and commuting bats, terrestrial mammals (including otter), birds (including black grouse) and reptiles. Riparian planting using appropriate native tree species would provide additional food sources for black grouse, suitable cover from predation and connectivity between foraging, lekking and breeding habitats. Otter, a designated feature of the nearby Ness Woods Special Area of Conservation (SAC), are present within the Site, albeit at low density and they would be using the watercourses and lochans within and surrounding the Site for foraging and commuting. Extending riparian planting along watercourses

³ Forestry Commission (2012) Fence marking to reduce grouse collisions. Forestry Commission. Available at: <https://cdn.forestryresearch.gov.uk/2012/12/fctn019.pdf>.

⁴ Scottish Forestry (2023). Boosting tree planting around rivers and streams. Scottish Forestry. Available at: [Scottish Forestry - Boosting tree planting around rivers and streams](#)

within the Site would provide cover for commuting otters and potentially rest site locations in denser areas of planting.

Objective 1: Riparian Planting

- 2.2.14 Search areas totalling 6.5ha proposed for potential riparian planting have been identified along the Allt an Eòin (a tributary of the River Moriston SAC) to the south of the A887, and also on an area of flood plain alongside the River Moriston to the north of the A887 where scour and ongoing active erosion of the riverbank is evident in several locations (see **Photo 2**).



Photo 2: Example of erosion of the banks on the River Moriston

- 2.2.15 The watercourse present in the search area is already bordered by scattered scrub or woodland in some locations, however, is largely devoid of riparian woodland planting and instead surrounded by a combination of marshy grassland and bracken. The search area stretches from existing riparian planting associated with the River Moriston in the north, to a large area of coniferous plantation woodland approximately 1.5km south (see **Figure 6.7**). As such, locations identified for potential riparian planting have sought to extend these corridors and to link up with other areas of wooded watercourse or otherwise suitable habitat, to create new areas of cover, extend movement corridors and extend nature networks.
- 2.2.16 It is proposed that riparian planting to be implemented would include both continuous and discontinuous shrub and tree dominated planting of broad-leaved species of local provenance, and to provide continuation of riparian woodland character as currently sparsely present along the

watercourse within the Site. Planting would include tree species known to provide food resources for black grouse such as birch, alder willow, rowan, hawthorn and juniper. Density of planting would seek to provide areas of bankside cover but not overshadowing.

- 2.2.17 Biodegradable or plastic tree protection tubes, and/or deer fencing, would not be used in this location, with trees instead protected with robust wooden tree guards that blend with the landscape. Planting alongside the River Moriston would be denser to provide soil stabilisation, and would be protected by upgraded deer fencing, marked along its length with droppers.
- 2.2.18 In identifying appropriate areas within which to carry out riparian planting, consideration has also been given to not exacerbating potential impacts upon species, i.e. not increasing collision risk to bats by providing foraging habitat in close proximity to proposed turbine locations. It is also important to avoid compromising underlying habitats, and so avoids planting on sensitive habitats such as blanket bog.
- 2.2.19 Prescriptive measures for inclusion within the finalised BEMP, including the details of species to be planted, planting density and monitoring and maintenance regime, would be decided in consultation with specialist contractors and would be agreed with NatureScot and other relevant stakeholders within the HMSG.
- 2.2.20 Subsequent follow-up establishment operations would be carried out to ensure riparian planting is established satisfactorily and in accordance with current industry good practice guidelines.

Objective 2: Management of Fish Cover

- 2.2.21 The offsite River Moriston designated as a SAC for salmon and freshwater pearl mussel, which is functionally linked to Site via a series of tributaries including the above forementioned Allt an Eòin.
- 2.2.22 Opportunities to increase habitat complexity for fisheries within watercourses within Site would be identified in consultation with NDSFB with prescriptive measures agreed with NatureScot, THC and additional relevant stakeholders. Measures would seek to complement and support conservation efforts by local fisheries interest groups within the wider river catchments.
- 2.2.23 Measures for improving and/or creating fish cover to be explored would comprise techniques such as placing boulders and wood debris in watercourse channels which, whilst providing refugia for both juvenile and adult fish, can also provide opportunities for macroinvertebrates. Locations for placement of material would be chosen - and refugia sensitively designed - to avoid blocking free passage of fish and other wildlife.

Aim 3: Native Woodland Creation

- 2.2.24 No woodland would be lost for the Proposed Development. However, the HwLDP notes the importance of trees and woodlands for provision of multiple benefits including contributions to landscape character and distinctiveness, biodiversity, and the climate change agenda.
- 2.2.25 As such, native woodland creation and enhancement in appropriate areas is proposed to provide a net increase in suitable tree cover locally, where this does not compromise the integrity of existing underlying habitats.

Objective 1: Infill an Area of Disused Track with Trees

- 2.2.26 Should the Proposed Development be consented and built, a 0.9ha area of track through the conifer block at the north-west of the Site would be no longer used or required, and it is proposed to plant this with native broadleaved trees (see **Photo 3** with location identified in **Figure 6.7**). Planting density and species would be designed to provide habitat suitability and food resources for black grouse, in

accordance with the principles set out by the Game and Wildlife Conservation Trust (GWCT)⁵, and to include species such as birch, rowan, hawthorn and juniper. Tree species bearing large seeds (e.g. oak, hazel, sycamore and beech) would be avoided so as to not encourage grey squirrels.



Photo 3: Disused area of track, to be planted with scattered native broadleaved trees

- 2.2.27 The details of species to be planted, planting density and locations and monitoring and maintenance regime would be decided in consultation with specialist contractors and included in the final BEMP to be agreed with THC, NatureScot and other relevant stakeholders, post-consent.

Aim 4: Bracken Control

Objective 1: Selective Removal of Bracken

- 2.2.28 Bracken can have conservation benefits and can provide a valuable habitat for wildlife, especially where the bracken canopy is relatively open. It is an important component of habitat for pearl-bordered fritillary, and small patches can be used by black grouse for cover. However, bracken is a successful coloniser and can spread into grassland, moorland and heathland, and reduce habitat quality of sensitive habitats it encroaches on. Additionally, bracken can increase wildfire risk and often creates a reservoir for ticks which may cause disease in livestock and humans.

⁵ <https://www.gwct.org.uk/advisory/guides/creating-woodlands-for-black-grouse/>

- 2.2.29 Management of vigorous bracken growth can help to restore, enhance or maintain the open nature of heathland and moorland of conservation value, and also benefit some priority species including black grouse and ground nesting birds such as hen harrier or skylark.
- 2.2.30 Dense bracken was noted to be the principal component of several areas of habitat in the north-west of the Site, where it is interspersed with, and in places encroaches on, adjacent areas of heath and acid grassland.
- 2.2.31 Areas totalling 3.75ha have been identified within which to carry out bracken control (see **Figure 6.7**). The scope of bracken management in specific locations within the search areas, and methods to be employed, would be determined based on detailed surveys of the extent of bracken cover in identified areas, as well as practical considerations of factors such as accessibility and topography in target areas, and whether removal of bracken may increase the risk of soil erosion in a given location. Areas considered to provide biodiversity benefit would also be identified and excluded, such as areas providing good quality pearl bordered fritillary butterfly habitat i.e. violets growing in shallow bracken litter (<15 cm depth) and low to medium bracken density (<c.20 fronds/m²), in steep south facing sunny, sheltered locations.
- 2.2.32 Bracken control would be planned and conducted in accordance with the most up to date relevant guidelines, e.g. the Scottish Environmental and Rural Services (SEARS) bracken control guidance⁶. Chemical treatment is no longer an option for bracken management in Scotland and is not generally appropriate for biodiversity management plans under most circumstances. Other potential forms of control include manual (hand cutting, hand pulling, whipping) or mechanical (cutting/rolling/crushing) treatments (where accessibility and slope allow), as well as the use of livestock. Initial treatment would be followed by repeated follow-up treatments, with dense and vigorous stands requiring cutting/flailing/rolling up to three times per year outside the bird breeding season. Following primary treatment, livestock grazing can be used as part of an ongoing control strategy, complementing mechanical methods. Where removal of bracken leaves bare or sparsely vegetated ground, removal of litter and reseedling of underlying habitats may be recommended as appropriate.

Aim 5: Reduction in Attraction Risks for Eagles

- 2.2.33 Golden and white-tailed eagles have nest sites within 5 km and 10 km of Site respectively, with golden eagle regularly recorded in flight over the Site. There is no habitat within the Site suitable for nest locations for these species, but it is likely that they forage within and surrounding the Site throughout the year, with hares and deer carrion likely providing attractive food resources. Presence of carrion may therefore act as an attractant and encourage eagles into areas where they could be at risk of collision with operational turbine blades.

Objective 1: Carrion Removal

- 2.2.34 Regular searches for deer carrion would be undertaken within an area extending to at least 200 m from the Proposed Development's turbine locations, with the frequency of these searches to be determined in consultation with NatureScot and THC. Any carrion found would be removed (where possible without compromising other objectives of the OBEMP, in relation to the use of all terrain vehicles (ATVs) on habitat restoration areas) and grallochs would not be left within the vicinity of the turbines, in order to reduce carrion availability which could otherwise attract eagles as well as other species to the vicinity of the turbines over the lifetime of the Proposed Development.

⁶ Scottish Environmental and Rural Services (SEARS) 2008. Bracken Control: A Guide to Best Practice. Available at <https://www.ruralpayments.org/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/primary-treatment-of-bracken---manual/guidance-for-bracken-management/>

2.3 Restricted Operations within BEMP Areas

2.3.1 The following operations would be prohibited within the BEMP areas (as shown on **Figure 6.7**):

- Clearing of existing ditches and watercourses;
- Application of any insecticides, fungicides or molluscicides;
- Application of lime or any other substance to alter the soil acidity;
- Application of artificial fertilizer, manure or slurry;
- No supplementary feeding of livestock within the managed areas;
- Burning of vegetation or other materials;
- Construction of tracks roads, yards, hard standing or other structures; and,
- Storage of materials or machinery.

2.3.2 The following operations would be prohibited within the BEMP areas (as shown on **Figure 6.7**) other than where necessary for implementation of BEMP measures or for operational phase management in furtherance of achieving BEMP objectives:

- Carrying out any earth moving activities;
- Use for off-road vehicles (if strictly necessary, for example for remediation of bog restoration, then appropriate low-pressure machines will be used);
- Cutting or topping vegetation; and,
- Use of roll or chain-harrow.

2.3.3 Within the BEMP areas the above derogations would only be permitted for specific purposes or tasks, based on agreement of a requirement by the HMSG.

3 MONITORING AND REVIEW

3.1.1 This OBEMP would be updated to reflect site investigation works prior to construction, with the BEMP produced in accordance with this and agreed with the HMSG.

3.1.2 Proposed monitoring prescriptions to assess progress towards achieving the Aims and Objectives are summarised herein and would be agreed through consultation with the HMSG.

3.1.3 The monitoring schedule would comprise regular monitoring during establishment of the habitat creation and enhancement measures (generally taken as years 1 to 5, dependent on specific measures implemented), with ongoing monitoring at decreased frequency carried out for the remainder of the operational lifetime of the Proposed Development, as appropriate to the agreed methods to be applied. The frequency of monitoring thereafter would be agreed with NatureScot and the HMSG. The monitoring schedule would allow for assessment of the effectiveness of implemented measures, and remediation, if required.

- 3.1.4 The requirement for any updated baseline surveys to act as Year 0 for monitoring purposes would also be identified and undertaken at the appropriate time (such as, within the first year of operation of the Proposed Development and during the growing/ breeding season March to August, inclusive).
- 3.1.5 The monitoring plan shall be agreed through the HMSG and would seek to collect consistent and standard environmental information to enable monitoring comparisons between sample years and to allow comparisons between different sites and scientific literature as required. Monitoring would consist of the following actions:
- Vegetation Monitoring: a habitat condition assessment would be undertaken during the summer months (June-August inclusive) at Year 0 to establish baseline habitats and repeated in each monitoring year (Year1, Year 3, Year 5, Year 10 and every five years thereafter for the lifetime of the Proposed Development). Photograph reference locations would be used to monitor habitats and surveys would only be undertaken.
 - Riparian and native woodland planting: successful establishment would be monitored annually during the establishment phase (Years 1-5), including beating up and re planting any failed stock if/when necessary. Thereafter, a further survey would be conducted in Year 10 after which the trees would be determined to have established.
 - Self-seeded woodland: identification of self-seeded woodland and scrub would be identified and removed or managed, as required and appropriate, with checks conducted and further removal as required every five years for the lifetime of the Proposed Development.
 - Bracken control: identification of bracken cover above 'Occasional' frequency would be identified and removed or managed, as necessary, in accessible areas, with control carried out every two years up to Year 10, and every five years thereafter as necessary.
 - Deer management and livestock densities would be reviewed, as necessary to reduce or increase grazing, as required for both sensitive habitats (bog and heath) and newly created habitats (woodland and riparian planting).
 - Ornithological monitoring: targeted monitoring surveys to be undertaken on Site, the scope and protocol for survey and reporting to be agreed with NatureScot and THC. Evidence of eagle collisions with wind turbines would be reported to NatureScot annually. Other monitoring to include records of abundance, productivity and distribution of Important Ornithological Features in comparison to baseline conditions and would aim to identify whether any changes may be attributable to management measures. This would occur over Years 1-5, with frequency of effort in subsequent years to be agreed by the HMSG.
- 3.1.6 The HMSG would meet or correspond at least annually. Reports detailing results and providing recommendations based on these results would be provided in all years where monitoring is carried out, including Years 1, 3, 5, and 10 of the operational life of the Proposed Development. Frequency of monitoring and reporting may be adjusted as deemed appropriate by the HMSG based on the results of monitoring.
- 3.1.7 The BEMP is intended to remain a live document which would be updated and amended, as necessary on result of site investigation works and monitoring.

4 SUMMARY

- 4.1.1 The OBEMP provides a mechanism to reduce adverse environmental effects and also to provide demonstrable enhancements for important ecological and ornithological features and biodiversity in general across the Site and surrounding area.
- 4.1.2 This would be achieved by increasing habitat diversity, connectedness and condition via the following aims and associated objectives:
- Aim 1: Restoration of Degraded Peatland and Heath Habitats:
 - Objective 1: Promote improved structural diversity of blanket bog.
 - Aim 2: Enhancement of Riverine Habitats:
 - Objective 1: Riparian planting;
 - Objective 2: Management of fish cover.
 - Aim 3: Native Woodland Creation:
 - Objective 1: Infill an area of disused track with trees.
 - Aim 4: Bracken Control:
 - Selective removal of bracken.
 - Aim 5: Reduction in Attraction Risks for Eagles:
 - Objective 1: Carrion removal.
- 4.1.3 The success of management prescriptions and habitat creation in achieving the aims and objectives of the BEMP would be monitored, with the results reported to the HMSG, in accordance with timings and protocols to be agreed with NatureScot and THC.
- 4.1.4 The BEMP, once finalised, would be a live document, with the habitat management measures implemented being adaptive throughout the lifetime of the Proposed Development in response to the findings of ongoing monitoring.