17. Forestry

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17. Forestry

17.1 Abstract

17.1.1 This EIA Report chapter describes the current forestry baseline of the site and considers the potential effects of the Proposed Development on these forested areas. In addition, it describes the proposed mitigation to compensate for the required felling.

17.1.2 Should the Proposed Development not be consented, the “do-nothing scenario” will apply to the current baseline environment, in that the Applicant will construct the Consented Development. The Consented Development was environmentally assessed and consented in 2015 and the assessment is reported within the Sandy Knowe Wind Farm Environmental Statement (2015).

17.1.3 This chapter outlines the potential effects of the Proposed Development on forestry and an assessment is provided based on the value of the receptor and the magnitude of the impact giving the significance of the effect. Where appropriate, mitigation measures to enhance, prevent, minimise or control identified effects are presented. The mitigation measures include the management and felling of existing woodland and the planting of new woodland. Following the implementation of the mitigation measures there would be residual beneficial effects of negligible significance on the forestry coverage of the site.

17.1.4 The predicted residual significant effects for the Proposed Development are exactly the same as those which would arise from the ‘do-nothing scenario’, which would result in the implementation of the Consented Development.

17.1.5 The EIA Regulations, at Schedule 4, require the EIA Report to provide a "description of the likely significant effects of the development on the environment resulting from, inter alia:

... (e) the cumulation of effects with other existing and/or approved development, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;"

17.1.6 In this regard, the Proposed Development would be indiscernible from the Consented Development.

17.2 Legislation, Policy and Guidance

Legislation

17.2.1 The Forestry Act 1967 (UK Government, 1967) appoints Commissioners (in the case of the Proposed Development the Forestry Commission Scotland) to achieve the following:

- a reasonable balance between the development and afforestation;
- the management of forests and the production and supply of timber;
- the conservation and enhancement of natural beauty;
- the conservation of flora, fauna and geological or physiographical features of special interest; and
the granting of felling licences.

**Policy**

17.2.2 Chapter 5 of the EIA Report sets out the planning policy framework that is relevant to the Proposed Development. The policies set out include those from the Dumfries and Galloway Local Development Plan (LDP) (Dumfries and Galloway 2014a), those relevant aspects of Scottish Planning Policy (SPP) (Scottish Government, 2014), Planning Advice Notes and other relevant guidance. Of relevance to the forestry assessment presented within this chapter, regard has been had to the following policies:

- LDP Policies IN1, IN2, NE6, NE7;
- Dumfries and Galloway Forestry and Woodland Strategy SG;
- SPP paragraphs 163, 217 and 218; and
- Scottish Government’s Policy on Control of Woodland Removal (Forestry Commission Scotland, 2009).

**Guidance**

17.2.3 There is no specific guidance for the forestry assessment of wind farms; however, EIA best practice has been followed whilst undertaking this assessment.

17.3 **Consultation**

17.3.1 Relating to the submission of the EIA Scoping Opinion the following consultation responses were received.

<table>
<thead>
<tr>
<th>Consultee</th>
<th>Scoping Response</th>
<th>Applicant Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry Commission for Scotland</td>
<td>On that basis, there being no net loss of woodland as a result of those planting proposals, FCS is content that the proposal complied with the SG Policy on the control of Woodland Removal.</td>
<td>The Applicant can confirm that there will be no net loss of woodland.</td>
</tr>
<tr>
<td>Scottish Environmental Protection Agency (SEPA)</td>
<td>If forestry is present on the site, we prefer a site layout which avoids large scale felling as this can result in large amounts of waste material and a peak in release of nutrients which can affect local water quality. The submission must include a map with the boundaries of where felling will take place and a description of what is proposed for this timber in accordance with Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS.</td>
<td>The design of the Proposed Development has aimed to reduce felling where possible. This chapter contains details of the total area of woodland removal and the proposed disposal of the timber.</td>
</tr>
</tbody>
</table>

17.4 **Methodology**

**Study Area**

17.4.1 The study area for the forestry assessment is the area of land within the site boundary.
Consultation
17.4.2 Consultation has been undertaken throughout the EIA process with statutory consultees and the FCS (refer to Table 17.1 for further details).

Baseline
17.4.3 The forestry baseline was identified through consultation with consultees and the landowner and a number of site surveys including forestry, hydrology, peat and habitat surveys (refer to Chapters 7 and 9 for further details).

Potential Effects Assessment Methodology
17.4.4 The assessment of the potential effects took into consideration the sensitivity of the woodland which was identified by considering the following factors:

- the type of woodland (coniferous, deciduous, mixed);
- the age of the woodland (recently, ancient woodland, etc.);
- the current and future use of the woodland (recreational, commercial, community value, etc.); and
- the connectivity and habitat value of the woodland.

17.4.5 A sensitivity of negligible, low, medium or high was applied to each area woodland depending on the factors identified above using professional judgement. Therefore, a deciduous ancient woodland identified as a high priority habitat would receive a greater sensitivity than a coniferous commercial woodland with a low habitat value.

17.4.6 The assessment also took into consideration the magnitude of the impact upon the woodland by considering the woodland loss as an overall percentage of the woodland on site and of the woodland in the wider Dumfries and Galloway Region.

17.4.7 The significance of the effect on the woodland was then assessed through the combination of the sensitivity of the woodland and the magnitude of the impact to give a significance that can range from low to major. All effects are considered to be adverse unless otherwise stated.

Mitigation
17.4.8 Mitigation measures to avoid, reduce, mitigate and/or offset the potential effects were identified and these are described in full.

Residual Effects Assessment Methodology
17.4.9 The residual effects were assessed in a similar manner to the potential effects but taking into consideration the implementation of the mitigation measures.

17.5 Baseline
17.5.1 The woodland at Libry Moor was planted in 1999 as commercial woodland (primarily spruce). The woodland within the site boundary consist of sitka spruce (Picea sitchensis) mixed broadleaf, and hybrid larch (Larix decidua) as detailed in Table 17.2 and Figure 17.1
Table 17.2 – Baseline Woodland within the Proposed Development Site Boundary

<table>
<thead>
<tr>
<th>Species/compilation</th>
<th>Area (ha)</th>
<th>Percentage of total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitka spruce / hybrid larch mix</td>
<td>5.30</td>
<td>8.1</td>
</tr>
<tr>
<td>Sitka spruce</td>
<td>56.81</td>
<td>86.5</td>
</tr>
<tr>
<td>Mixed woodland</td>
<td>3.02</td>
<td>4.6</td>
</tr>
<tr>
<td>Hybrid larch</td>
<td>0.53</td>
<td>0.8</td>
</tr>
<tr>
<td>Total forestry</td>
<td>65.66</td>
<td>100</td>
</tr>
</tbody>
</table>

17.5.2 The growth characteristics of the crop are characterised by a considerable portion of the crop growing at a slow rate (year 8 to 12). Only about a third of the forestry is currently growing at an estimated year 16 and will be ready for harvesting during the period of the Proposed Development.

17.5.3 The woodland has limited recreational value and is classified as a habitat of low value (refer to Chapter 7). The woodlands are not considered to contribute greatly to the wider landscape. As they sit on a plateau it is the localised landscape that they affect.

17.5.4 The total area of woodland in Dumfries and Galloway Region is 170,848 ha and of this 78% is coniferous woodland with broadleaved woodland forming 9% with the remaining being mixed woodland and open space with woodland (Forestry Commission, 1999).

17.5.5 Therefore, given the nature of woodland, is size in proportion to the wider area and its current usage it is classified as of low sensitivity.

17.6 Assessment of Do-Nothing Scenario

17.6.1 Should the Proposed Development not be consented, the “do-nothing scenario” will apply to the current baseline environment, in that the Applicant will construct the Consented Development.

17.6.2 The Consented Development was environmentally assessed and consented in 2015 and the assessment is reported within the Sandy Knowe Wind Farm Environmental Statement (2015).

17.7 Assessment of Proposed Development Potential Effects

17.7.1 While the do-nothing scenario is construction of the Consented Development, ECU have requested that the EIA assess the Proposed Development against the current baseline. As the reader will see this assessment confirms that the effects of Proposed Development and Consented Development are identical.

17.7.2 In order to construct the Proposed Development felling of the woodland is required. Felling for the access tracks will be restricted to a width of 10 m with a wider area requiring felled around turbine T24. Details of the felling including the species to be felled are provided in Table 17.3 and shown on Figure 17.2.
Table 17.3 – Felling Requirements

<table>
<thead>
<tr>
<th>Species</th>
<th>Area to be felled (ha)</th>
<th>Percentage of total species/compilation area on site</th>
<th>Percentage of total woodland on site</th>
<th>Percentage of woodland in Dumfries and Galloway Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitka spruce</td>
<td>3.7</td>
<td>6.5%</td>
<td>5.6%</td>
<td>0.002%</td>
</tr>
<tr>
<td>Sitka spruce / hybrid larch</td>
<td>0.03</td>
<td>0.6%</td>
<td>0.05%</td>
<td>0.00002%</td>
</tr>
<tr>
<td>Hybrid larch</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mixed broadleaf</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>3.73</td>
<td>7.1%</td>
<td>5.7%</td>
<td>0.002%</td>
</tr>
</tbody>
</table>

17.7.3 Given the small area of woodland to be felled, both in comparison with the area of woodland on site and compared to woodland in the wider Dumfries and Galloway Region the magnitude of impact is assessed as medium for the site and low for the wider Dumfries and Galloway Region. This, in addition to the woodland being assessed as of low sensitivity, gives an effect of **minor** significance for woodland loss for the site and an effect of **negligible** significance for the Dumfries and Galloway Region.

17.8 Mitigation

17.8.1 In order to mitigate for the woodland loss due to the Proposed Development, to offer a habitat enhancement and to ensure compliance with the Scottish Government’s Policy on Control of Woodland Removal (Forestry Commission Scotland, 2009), the Applicant intends to undertake controlled, thinning, felling and re-planting throughout the lifetime of the Proposed Development.

17.8.2 The Applicant will submit a Forestry Management Plan to Dumfries and Galloway Council for approval.

17.8.3 The management procedures above are summarised in Table 17.4 below.

Table 17.4 – Forestry Management Plan Summary

<table>
<thead>
<tr>
<th>Management</th>
<th>Time-frame (years)</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felling and no new planting</td>
<td>1</td>
<td>3.73</td>
</tr>
<tr>
<td>New planting of native shrubs and trees</td>
<td>1-5</td>
<td>10.47</td>
</tr>
<tr>
<td>Felling and re-planting with low stature trees and shrub woodlands</td>
<td>1-5</td>
<td>0.3</td>
</tr>
<tr>
<td>Ongoing management of existing woodland</td>
<td>1-25</td>
<td>58.81</td>
</tr>
</tbody>
</table>
### Assessment of Proposed Development Residual Effects

#### 17.9.1
The planned felling, both for the Proposed Development construction and the area re-planting, will consist of an area of 3.73 ha.

#### 17.9.2
Taking into consideration the proposed mitigation, both the re-planting and the new planting it is anticipated that the Proposed Development will have an effect of negligible beneficial significance on the forestry coverage of the site and no effect on the Dumfries and Galloway Region.

### Assessment of Proposed Development Cumulative Effects

#### 17.10.1
There are a number of wind farm developments, operational, consented or in planning in the immediate vicinity of the Proposed Development (refer to Figure 3.2):

- Lethans Wind Farm (application);
- Sanquhar Community Wind Farm (consented);
- Sanquhar Six Wind Farm (consented);
- Sunnyside Wind Farm (operational);
- Glenmuckloch Wind Farm (consented);
- Hare Hill Wind Farm (operational); and
- Hare Hill Extension (operational).

#### 17.10.2
Table 17.5 below details the information that is available on the above developments with regards to their planned and undertaken forestry felling and planting.

<table>
<thead>
<tr>
<th>Wind Farm</th>
<th>Forestry Felling</th>
<th>Forestry Planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lethans Wind Farm</td>
<td>257.3 ha to be felled</td>
<td>A total of 136.7 ha will be re-planted.</td>
</tr>
<tr>
<td>Sanquhar Community Wind Farm</td>
<td>No information available but felling considered unlikely.</td>
<td>No information available.</td>
</tr>
<tr>
<td>Sanquhar Six Wind Farm</td>
<td>No felling.</td>
<td>No planting proposed.</td>
</tr>
<tr>
<td>Sunnyside Wind Farm</td>
<td>No information available but felling considered unlikely.</td>
<td>No information available.</td>
</tr>
<tr>
<td>Glenmuckloch Wind Farm</td>
<td>No felling.</td>
<td>No planting proposed.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Wind Farm</th>
<th>Forestry Felling</th>
<th>Forestry Planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hare Hill Wind Farm</td>
<td>No information available but felling considered unlikely.</td>
<td>No information available.</td>
</tr>
<tr>
<td>Hare Hill Extension</td>
<td>No information available but felling considered unlikely.</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

17.10.3 Based on the information detailed within Table 17.4, and the obligation placed on wind farm developers to meet Scottish Government’s Policy on Control of Woodland Removal (Forestry Commission Scotland, 2009) and local planning policy it is anticipated that the cumulative effect of the Proposed Development and other wind farm developments in the local area is of **minor** beneficial significance.

17.11 Conclusions

17.11.1 Construction of the Proposed Development will require the felling of around 3.73 ha of coniferous plantation woodland. To mitigate for this loss and to provide habitat improvements across the site the Applicant intends to plant around 10.47 ha of mixed native species and to fell re-plant with native species an additional 0.3 ha.

17.11.2 The Applicant will agree a Forestry Management Plan with DGC, which will form part of the overall HMP of the site. The Forestry Management Plan will ensure the control and disposal of felling and the establishment and maintenance of the new planting.

17.11.3 The felling and replanting proposals presented above adhere to the Scottish Government’s Policy on Control of Woodland Removal, which was developed to support the maintenance and expansion of forest cover in Scotland.

17.11.4 Tables 17.6 and 17.7 below provide a summary of the residual effects as a result of the Proposed Development.

17.11.5 There are no changes to the residual effects identified between the Consented Development and the Proposed Development with regards to forestry.

17.11.6 The predicted residual significant effects for the Proposed Development are exactly the same as those which would arise from the ‘do-nothing scenario’, which would result in the implementation of the Consented Development.

17.11.7 The EIA Regulations, at Schedule 4, require the EIA Report to provide a

“description of the likely significant effects of the development on the environment resulting from, inter alia:

... (e) the cumulation of effects with other existing and/or approved development, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;”

17.11.8 In this regard, the Proposed Development would be indiscernible from the Consented Development.
### Table 17.6 - Summary Table (Construction/Decommissioning and Operation)

<table>
<thead>
<tr>
<th>Description of Effect</th>
<th>Significance of Potential Effect</th>
<th>Mitigation Measure</th>
<th>Significance of Residual Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent loss of woodland</td>
<td>Minor for the site and negligible for the Dumfries and Galloway Region</td>
<td>Adverse</td>
<td>Minimise permanent felling. Replanting and planting of native species across the site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 17.7 - Summary Table (Cumulative Effects)

<table>
<thead>
<tr>
<th>Construction, Operation or Decommissioning of the Proposed Development</th>
<th>Description of Effect</th>
<th>Proposed, Consented and Operational Developments</th>
<th>Significance</th>
<th>Beneficial/ Adverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction, Operation and Decommissioning</td>
<td>Permanent loss of woodland</td>
<td>Consented and operational wind farms local to the Proposed Development.</td>
<td>Minor</td>
<td>Beneficial</td>
</tr>
</tbody>
</table>
17.12 References


Dumfries and Galloway (2014b) *Dumfries and Galloway Forestry and Woodland Strategy Supplementary Guidance*. Available at: http://www.dumgal.gov.uk/CHttpHandler.ashx?id=15086&_=0


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