# Appendix 9.E: Assessment of Effects on Wild Land

# 1. Introduction

1.1. This Appendix sets out the assessment of the potential effects of the Revised Consented Development on Wild Land. The Revised Consented Development is not located in a Wild Land Area (WLA) but lies close to the northern boundary of the East Halladale Flows WLA as shown on Figure 9.4. This WLA has been defined by NatureScot (formerly Scottish Natural Heritage (SNH)).

1.2. Four Wild Land Areas (WLA) occur in the 40 km study area, namely; the East Halladale Flows to the immediate west, south-west and south of the Revised Consented Development, the Causeymire - Knockfin Flows WLA to the more distant south, the Ben Klibreck – Armine Forest WLA to the south-west, and the Ben Hope – Ben Loyal WLA to the west.

1.3. Through the scoping process, it has been agreed with NatureScot and The Highland Council (THC), that only the East Halladale Flows WLA has the potential to undergo significant effects as a result of the Revised Consented Development, and, therefore, that the other three WLAs can be scoped out of the LVIA. The ZTV in **Figure 9.13** illustrates the extent to which the Revised Consented Development will be theoretically visible across the four WLAs, while the ZTV in Figure 9.14 illustrates the extents across East Halladale Flows WLA.

1.4. The assessment contained in this appendix, therefore, focuses on the potential effects of the Revised Consented Development on the East Halladale Flows WLA. It covers an area of 159 $km^2$ that extends from Strath Halladale in the west, to Ben Dorrery in the east, and from Limekiln Forest in the north, to Altnabreac Forest in the south. It is made distinct by the broad and open expanse of sweeping moorland and flat peatland which characterises this area.

1.5. The following assessment follows guidance set out in NatureScot's 'Assessing Impacts on Wild Land Technical Guidance' (2020) with reference to SNH's 'Description of Wild Land Areas' (2017).

1.6. The WLA description lists four key attributes and qualities for WLA 39 (East Halladale Flows), which have been numbered 1 to 4 for the purpose of this assessment:

1. *"An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci."*

2. *"A remote, discrete interior, with limited access and a strong sense of solitude."*

3. *"A rugged and complex pattern of hidden burns, lochans and pools at the local level, despite the landscape's simple composition at the broad scale."*

4. *"A remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible."*

1.7. These key attributes and qualities (hereafter, referred to as Wild Land Qualities, or WLQs) form the basis of the wild land assessment as they express the distinctive and specific wildness qualities that are found in this WLA. SNH's WLA description provides further information on each of these WLQs as an explanation of how the various aspects of the landscape contribute to the WLQ.

1.8. This appendix is accompanied by a series of figures which are referenced throughout the text.

- **Figure 9.4:** Wild Land Areas;
- **Figure 9.13:** ZTV with Wild Land Areas;
- **Figure 9.14**: ZTV with East Halladale Flows Wild Land Area Viewpoints;
- **Figure 9.31:** Level of Wildness: Composite Relative Wildness;
- **Figure 9.32:** Level of Wildness: Lack of Built Modern Artefacts;
- **Figure 9.33:** Level of Wildness: Perceived Naturalness;
- **Figure 9.34:** Level of Wildness: Remoteness from Public Mechanical Access;
- **Figure 9.35:** Level of Wildness: Rugged or Challenging Terrain;
- **Figure 9.36:** Wild Land Areas and Landform
- **Figure 9.109a-g:** Viewpoint A: Clachgeal Hill;
- **Figure 9.110a-g:** Viewpoint B: Cnoc Bad Mhairtein;
- **Figure 9.111a-g:** Viewpoint C: Cnoc An Fhuarain Bhain;
- **Figure 9.112a-g**: Viewpoint D: Lochan Ealach Beag;
- **Figure 9.113a-g:** Viewpoint E: Caol Loch;
- **Figure 9.114a-g:** Viewpoint F: Loch Meadhoin;
- **Figure 9.115a-g:** Viewpoint G: Braich Feith Hemigal; and
- **Figure 9.116a-g:** Viewpoint H: Beinn nam Bad Beag.

1.9. The visualisations presented to inform this Appendix (Viewpoints A to H) have been prepared in accordance with the same SNH Visualisation Standards used for the main assessment. Whilst technically accurate, it is important to appreciate that they do not capture the true sense of scale and vastness that is exhibited in and across the expansive Flow Country. They should be used on site in order to gain the fullest impression of likely effects of the Revised Consented Development. Furthermore, they are each representative of only one location within the WLA which has been selected to represent visibility of the wind farm.

1.10. Of the overall area of WLA 39, 53% will have no visibility at all of any part of the Revised Consented Development, while a further 11.70% will have visibility of parts of only four of the 21 turbines. This results in 64.70% with no or very limited visibility (see Table 9.E.1).

1.11. The extensive fieldwork carried out by OPEN has been an essential component of the assessment process and has enabled the assessors to develop the depth of appreciation and understanding necessary to underpin a valid and credible assessment.

# 2. Assessing Impacts on Wild Land Technical Guidance

2.1. The NatureScot technical guidance (2020) sets out the suggested approach to the assessment of effects on wild land. As noted in paragraph 4 of the guidance, the assessment methodology broadly follows that of GLVIA3, and is based around the following five stages, as described in Table 1 of NatureScot guidance:

*"Step 1 - Define the study area and scope of the assessment;*

*Step 2 – Verify the WLA baseline;*

*Step 3 – Assess the sensitivity of the qualities;*

*Step 4 – Assess the magnitude of the effects; and*

*Step 5 – Judge the significance of effects"*

2.2. Paragraph 13 of the guidance notes that

*"the assessment approach…should be concise and proportionate, focused on likely significant effects on the qualities;"*

2.3. While the wild land assessment methodology broadly follows that set out in GLVIA3, there are several points that are beneficially explained prior to the assessment itself, as discussed below.

<u>The Status of WLAs</u>

2.4. The status of WLAs is clearly set out in paragraph 8;

*"WLAs have not been identified on scenic grounds and are not a statutory designation."*

2.5. There is also an acceptance in paragraph 9 that WLAs are not *"wilderness"* and that human influences can and do form part of the baseline character of WLAs:

*"…Whilst the WLA map identifies areas where wildness is most strongly expressed, these are not 'wilderness', empty of any human activities or influence. They reflect Scotland's long history of past occupation and current use and management, albeit that evidence of such is often light and limited in extent."*

2.6. An important phrase in this paragraph is *"light and of limited extent"* as this presents a measure with which to assess the existing external influence of development, and operational wind farms in particular, on the WLA, and indicates to what degree this influence can be accommodated within an area that is considered to be 'wild land'.

<u>The Need for a WLA Assessment</u>

2.7. The need for a WLA assessment is discussed in Paragraphs 5 and 6 of the NatureScot guidance, which note that:

*"This guidance should only be applied to proposals whose nature, siting, scale or design are likely to result in a significant effect on the qualities of a WLA. Given this, assessments are more likely for proposals within a WLA, and are less-likely for proposals outwith the WLA.*

*An assessment will only be required where it has been deemed necessary by the competent authority. You are encouraged to discuss the need for an assessment with the competent authority at an early stage."*

2.8. While the Revised Consented Development lies outwith this WLA, both NatureScot and The Highland Council (THC) have requested that a wild land assessment be carried out.

2.9. It is also important to note that, according to NatureScot guidance, effects on WLAs can only be experienced within WLAs and not on the area surrounding them. Paragraph 3 of the guidance notes that:

*"This guidance sets out a methodology and general principles for assessing the impact of development and other proposals on WLAs, as they are experienced from within the WLA, not from outwith it."*

Cumulative Effects

2.10. At paragraph 16, NatureScot guidance notes the following in relation to cumulative effects on WLAs:

*"The potential for cumulative effects. Other proposals (either of the same or different type) which are likely to contribute to significant cumulative effects should be identified in discussion with the decision maker. The principles within our guidance document Assessing the cumulative impact of onshore wind energy developments specific to onshore wind energy development can be applied to other development and should aid this assessment."*

2.11. And at paragraph 33: *"In judging significance, the following factors should be considered - the nature and extent of any likely cumulative effects."*

2.12. There is a cluster of operational wind farms located a minimum of approximately 7 km to the south-east of the south-eastern boundary of the WLA, Strathy North a minimum of approximately 8 km to the west of the western boundary of the WLA, and Baillie Hill a minimum of approximately 7 km to the north of the northern boundary, as shown in **Figure 9.17**. These wind farms are relevant to the assessment as they exert some baseline influence on the WLA.

2.13. Application stage Limekiln Extension is of particular relevance to the assessment owing to its location to the immediate east of the Revised Consented Development. Other application stage wind farms of relevance include Drum Hollistan (resubmission) at a minimum of approximately 5 km to the west, Ackron (resubmission) at a minimum of approximately 3 km to the west, and Forss III at a minimum of approximately 8 km to the north-east from the Revised Consented Development.

2.14. It is relevant to note that Causeymire, Baillie Hill and Forss Wind Farms were operational at the time of the SNH site assessment of this WLA, which was carried out in September 2014, but that Strathy North was not included.

# 3. Methodology

## NatureScot Guidance

3.1. As noted in NatureScot's 2020 Guidance, the wild land assessment methodology broadly follows that of GLVIA3 and is based around the five stages described in Table 1 of the Guidance, replicated as Table 9.E.1 below.

**Table 9.E.1: Overview of Wild Land Area Assessment**

| Step | Summary |
|---|---|
| **Step 1 - Define the study area and the scope of the assessment** | Identify a study area appropriate to the scale of the proposal and extent of likely significant effects on the WLA. Output: Brief justification and map or description of the area that will be assessed. |
| **Step 2 – Verify the WLA baseline** | Confirm the wild land qualities (set out in the WLA description) relevant to the study area, describing any major changes that have occurred since the description was prepared and the nature of their contribution to the WLA. Output: Identification of relevant qualities and explanation of how any changes since preparation of the WLA Description have affected them. |
| **Step 3 – Assess the sensitivity of the qualities** | Through detailed field assessment within the study area, assess the sensitivity of the wild land qualities scoped in (including their physical attributes and perceptual responses), to the type and scale of change proposed. Output: A clear and concise narrative explaining the susceptibility of individual qualities and / or combinations of qualities where there is some commonality between their contributing attributes and responses, and their overall sensitivity. |
| **Step 4 – Assess the magnitude of the effects** | Assess the effects on individual and / or combinations of qualities, drawing out which physical attributes and perceptual responses will be affected, how and to what degree. This should reflect the size or scale of change, its extent and duration. Output: A clear and concise narrative explaining the effects of the various elements of the proposal on individual qualities and / or combinations of qualities. |
| **Step 5 – Judge the significance of the effects** | Conclude on the overall significance (taking into account any mitigation), in terms of the study area and where relevant the wider WLA. Output: A clear narrative explaining the overall significance of residual effects identified on the individual qualities and / or combination of qualities. |

3.2. Steps 1 and 2 do not require detailed explanation of methodology and are carried out subsequently in this Appendix. The methodology for Steps 3, 4 and 5 is described below. These steps are assessed in accordance with GLVIA3 and largely follow OPEN's methodology, which is described in full in **Appendix 9.A**.

3.3. In this methodology, WLAs are considered as landscape character receptors rather than visual receptors. This is because the landscape of the WLA is a resource in itself and effects are assessed in terms of the effects on the WLQs of the WLA, in line with NatureScot guidance, and not in terms of the effects on views gained by people who may be within the WLA.

**Step 3: Assess the Sensitivity of WLA Qualities**

3.4. NatureScot guidance summarises this step as follows: *"Through detailed field assessment within the study area, assess the sensitivity of the wild land qualities scoped in (including their physical attributes and perceptual responses), to the type and scale of change proposed".*

Value of Wild Land Areas

3.5. In applying GLVIA3 to the assessment, and as noted by NatureScot, it is necessary to attribute a value to the receptor – these are classified as high, medium-high, medium, medium-low or low, as described in **Appendix 9.A**. The value attributed to nationally important designations, including National Parks (NP) and National Scenic Areas (NSA) is normally found to be at the upper end of the scale and classified as high.

3.6. Wild land is not an environmental designation and is not statutorily protected in the way that NPs and NSAs are for their scenic qualities. It is, however, recognised in SPP and planning policy as a nationally important mapped resource, which should be afforded protection for its wildness qualities.

3.7. In order to apply objectivity to the attribution of value in wild land areas, it is helpful to have regard to the weighting that SPP gives to it. Whereas in SPP Table 1: Spatial Frameworks, Scottish Ministers place NSAs and NPs in the Group 1 category, Wild Land Areas are identified as a Group 2 consideration, recognising the difference in their respective values. As a matter of national policy, Wild Land is, therefore, less highly valued than NSAs and NPs.

3.8. SNH provides some further guidance on this matter in its publication 'Spatial Planning for Onshore Wind Turbines – Natural Heritage Considerations, Guidance' (June 2015). Annex 1 to this document provides advice on the potential landscape objectives that may be applicable in different landscapes within Scotland in terms of their ability to accommodate wind farms, suggesting that some landscapes should be subject to a higher level of protection than others.

3.9. Annex 1 places WLAs in the middle category, where some landscape 'accommodation' of windfarms may be considered appropriate, noting that:

3.10. *"Within local landscape designations and Wild land Areas, the degree of landscape protection will be less than for National Scenic Areas. In these areas, an appropriate objective may be to accommodate windfarms, rather than seek landscape protection."*

3.11. WLAs are therefore considered to have a lower inherent baseline value, in landscape terms, than nationally designated landscapes. In the terms of GLVIA3 and OPEN's methodology, it is reasonable to attribute a theoretical medium-high value to WLA 39 East Halladale Flows.

3.12. These levels of value are combined with individual assessments of susceptibility, which are described below, to inform the overall assessment of sensitivity within the WLA.

Susceptibility within Wild Land Areas

3.13. Susceptibility relates to the nature of the landscape receptor and how susceptible it is to the potential effects of the Revised Consented Development, as described in GLVIA3. Susceptibility varies across the WLA depending on the nature and strength of the WLQs, the particular perceptions that are experienced in different areas, and in the context of different external and internal influences.

3.14. OPEN's methodology assesses the susceptibility of landscape character receptors through a series of three criteria, as set out in **Appendix 9.A**. Two of these are relevant to the assessment of susceptibility of WLQs:

- The specific nature of the Revised Consented Development: the susceptibility of landscape receptors is specific to the change arising from the particular development that is proposed, including its individual components and features, and its size, scale, location, context and characteristics.
- Landscape character: the key characteristics of the existing landscape character of the receptor are considered in the evaluation of susceptibility as they determine the degree to which the receptor may accommodate the influence of the Revised Consented Development (in the wild land assessment this criterion relates to the documented WLQs, physical attributes and perceptual responses of the WLA).

3.15. The third criterion, 'landscape association', is not identified as a separate factor in the judgement of susceptibility within WLAs; this is because the WLQs make specific mention of landscape association where it is a relevant factor, and it is, therefore, not necessary to include it again when considering susceptibility.

3.16. A useful tool in the assessment of the levels of susceptibility across the WLA is SNH's 2014 analysis of the data that was gathered in order to inform the identification of WLAs. SNH gathered data for each of the 'physical attributes' of wild land and used these to create a 'relative wildness map'. The 'Jenks Natural Breaks Optimisation method' was then used to identify the natural breaks in the distribution of the relative wildness data in order that levels of wildness could be identified and mapped. As a result, eight classes of wildness were identified, with 8 being the highest and 1 being the lowest. Maps showing relative wildness are presented in **Figures 9.31** to **9.35**.

**Step 4: Assess the Effects**

3.17. NatureScot guidance notes this step as follows in Table 1: *"Assess the effects on individual and / or combinations of qualities, drawing out which physical attributes and perceptual responses will be affected, how and to what degree. This should reflect the size or scale of change, its extent and duration."*

3.18. OPEN's methodology for assessing magnitude of change on landscape character receptors is carried out through the application of a set of criteria as set out in **Appendix 9.A**.

3.19. Broadly, the magnitude of change that the Revised Consented Development will have on landscape receptors is assessed in terms of the size or scale of the change, the geographical extent of the area influenced and its duration and reversibility. The key elements of the Revised Consented Development that will influence the level of change on landscape character are the

movement, form, material, colour and scale of the turbines, although infrastructure is also considered.

**Step 5: Judgement of the Significance of Effects**

3.20. NatureScot guidance summaries this step as follows in Table 1: *"Conclude on the overall significance (taking into account any mitigation), in terms of the study area and where relevant the wider WLA."*

3.21. On the basis that the NatureScot guidance follows the principles of GLVIA3, OPEN's methodology for the assessment of the significance of effects (as described in **Appendix 9.A**) has also been used for the assessment of the significance of effects on wild land. OPEN's methodology describes the significance of effects as quoted below.

3.22. *"A significant effect will occur where the combination of the variables results in the Revised Consented Development having a defining effect on the view or receptor. A not significant effect will occur where the effect of the Revised Consented Development is not definitive, and the view or receptor continues to be characterised principally by its baseline characteristics. In this instance, a not significant effect would indicate that the Revised Consented Development may have an influence, but this influence will not be a defining one."*

# 4. Assessment of Impacts on WLA 39

4.1. The following sections of this report assess the effects of the Revised Consented Development on WLA 39 East Halladale Flows following the five steps as described in NatureScot's 2020 Guidance.

**Step 1: Define the Study Area and Scope of the Assessment**

4.2. NatureScot guidance summarises this step as follows:

*"Identify a study area appropriate to the scale of the proposal and extent of likely significant effects on the WLA."*

4.3. Paragraph 16 of the guidance notes that:

*"The rationale for the selection of the study area and scope of the assessment should be clearly stated and consider the following.*

*The extent of visibility and recognised routes / movement through the WLA. The scale of the proposal may not equate to the extent of effects (for example, a large proposal where visibility is limited to part of the WLA, a more focused study area may be appropriate).*

*The wild land qualities likely to be significantly affected. The focus of the assessment should be on the qualities likely to be affected rather than where the proposal is located.*

*The potential for cumulative effects."*

4.4. The Study Area for the wild land assessment is discussed below in relation to these three considerations.

Extent of Visibility

4.5. Prior to carrying out the assessment of effects on the WLA, it is important to establish the theoretical extent of the influence that the Revised Consented Development will have on the WLA. This is dependent on the extent of visibility; where the Revised Consented Development is not visible, it will have a limited influence on wild land characteristics. The level of visibility of the Revised Consented Development from the WLA can be seen in **Figure 9.14**, which shows the ZTV in relation to the WLA. Table 9.E.2 below, presents the percentage of the overall area of WLA 39 in relation to the different levels of visibility. This shows that 53% will gain no visibility and a further 11.70% will gain visibility of only four of the 21 turbines. The viewpoints A to H shown in **Figures 9.109** to **9.116** are representative of the different parts of the WLA and help to build an impression of the nature of the visibility.

**Table 9.E.2: Area percentage of WLA in relation to % levels of visibility**

| No. of Turbines Visible | Area of WLA 39 (ha) | % of WLA with visibility of Limekiln | ZTV Bands % WLA with visibility of Limekiln |
|---|---|---|---|
| 0 | 8491.10 | 53.41 | 53.41 |
| 1 | 611.65 | 3.85 | 11.71 |
| 2 | 381.75 | 2.40 | |
| 3 | 493.65 | 3.11 | |
| 4 | 373.64 | 2.35 | |
| 5 | 482.94 | 3.04 | 10.65 |

| | | | |
|---|---|---|---|
| 6 | 413.41 | 2.60 | |
| 7 | 410.66 | 2.58 | |
| 8 | 386.96 | 2.43 | |
| 9 | 450.19 | 2.83 | 7.99 |
| 10 | 387.31 | 2.44 | |
| 11 | 246.34 | 1.55 | |
| 12 | 186.60 | 1.17 | |
| 13 | 214.77 | 1.35 | 3.35 |
| 14 | 183.07 | 1.15 | |
| 15 | 63.23 | 0.40 | |
| 16 | 71.92 | 0.45 | |
| 17 | 85.03 | 0.53 | 12.89 |
| 18 | 132.01 | 0.83 | |
| 19 | 101.26 | 0.64 | |
| 20 | 96.57 | 0.61 | |
| 21 | 1634.82 | 10.28 | |
| **TOTALS** | **15898.88** | **100%** | **100%** |

4.6. The ZTV in **Figure 9.14** shows that the majority of the WLA will gain no visibility. This relates to the division created by the northern ridgeline of hills, which effectively screens visibility of the Revised Consented Development from the majority of the WLA. The ridgeline also has the effect of reducing the extent of visibility in those parts of the WLA where visibility does occur. The ZTV shows that beyond the northern ridgeline, levels of visibility are typically in the bands of 1 to 4 turbines or 5 to 8 turbines. This represents a relatively small proportion of the total 21 turbines. The wirelines and photomontages for the majority of the viewpoints show how the northern ridgeline reduces visibility by not only screening many of the turbines completely, but also partially screening those that will be visible, so that they would not be seen to their full extent.

4.7. The pattern of visibility across the WLA comprises high levels of visibility across the north and north-east facing slopes to the north of the northern ridgeline. This occurs almost continuously from Beinn Ratha through Clachgeal Hill to Beinn nam Bad Mor, albeit with patchy visibility in the valley between Clachgeal Hill and Beinn nam Bad Mor. Patches of high visibility also extend across the north and north-east facing slopes of the series of small hills out to Cnoc Bad Mhaitein (Viewpoint B) and Cnoc an Fhuarain Bhain (Viewpoint C). Visibility from the ridge is of the Revised Consented Development at its full extents while from the slopes visibility gradually reduces down to a limited number of blade tips. From the closest edge of this patch of visibility, the turbines will be seen at the range of approximately 4 km while from the top of Cnoc an Fhuarain Bhain the range will be approximately 7 km.

4.8. The only other area that will gain high levels of visibility occurs across the north facing slopes of Beinn nam Bad Beag, albeit an area of very limited extent. This occurs along the northern ridgeline at a range of approximately 5.5 km, with lower levels of visibility occurring across the middle and lower slopes.

4.9. Much of the western and central parts of the WLA will gain no visibility with the exception of small patches of low-level visibility occurring on localised high points. and it is only towards the eastern and southern parts that patches of

visibility occur. Visibility occurs in large patches albeit typically of less than 8 turbines which will be seen as blades behind the ridge of low hills and at distances in excess of 7 km. The partial concealment of the turbines and containment by the landform will reduce the influence they have on this area.

4.10. Visibility of existing wind farm developments already occurs across the WLA; Baillie Hill and Forss Wind Farms both located in the same sector to the north-east (shown on cumulative ZTVs in **Figures 9.18** and **9.20**), and Causeymire, Halsary, Bad a Cheo and Achlachan Wind Farms located to the east (shown in **Figure 9.22**). Strathy North Wind Farm is also a noticeable feature in views from the western parts of the WLA (shown in **Figure 9.21**). Visibility of these developments is slightly patchier than that of the Revised Consented Development, although they do largely coincide with visibility of the Revised Consented Development such that it is seldom seen on its own. Across most of the ridges and upper slopes around Cnoc an Fhuarain Bhain, visibility of the Revised Consented Development coincides with that of Baillie Hill Wind Farm such that they will be seen in the same north-east sector of the view.

4.11. From the more distant range areas that gain visibility of the Revised Consented Development to the south, inter-visibility occurs with Causeymire Halsary, Bad a Cheo and Achlachan to the east. While the addition of the Revised Consented Development will not appear as a new or unfamiliar feature, it will be seen to introduce wind farm development into a new sector.

4.12. The cumulative ZTV for operational Strathy North in **Figure 9.21** shows how the ridgeline in the WLA forms a viewshed, such that visibility of Strathy North occurs to the west and visibility of the Revised Consented Development occurs to the east with inter-visibility occurring only as a fine line along the ridgeline.

4.13. It can be concluded that the effects of the Revised Proposed Development will vary notably across the extent of WLA 39 and that the areas in the north are more relevant to the assessment as they are closer and have greater potential to be significantly affected. The sensitivity of WLA 39 as a whole does, however, suggest that despite variable visibility, the Study Area should cover the entire area.

Recognised Routes and Movement

4.14. In respect of recognised routes and movement, the WLA 39 description states *"There are a limited number of tracks or paths entering the WLA and it tends to be visited by few people, except for the peak of Beinn Ràtha in the far north, or for fishing, deer stalking, land management or habitat survey."*

4.15. Access tracks are evident in the northern and eastern parts of WLA 39 but not the more remote western part. An access track runs along the eastern side of Beinn Ratha from where visibility of the Revised Consented Development will be experienced. While a network of access tracks occurs within the coniferous plantations, these lie outwith the WLA and only one extends a short distance over the WLA boundary.

4.16. Access tracks from Shurrery, in the north-east, and Dorrery in the east, extend into this eastern part of WLA 39; the Shurrery route passing by Loch Scye and onto Loch Tuim Ghlais; the Dorrery route extending to Loch Caluim. The ZTV in **Figure 9.14** shows that there is no visibility of the Revised Consented Development for the majority of both these routes, with occasional small patched of low-level visibility occurring and a small patch of higher-level

visibility occurring where the track passes around the western flank of Beinn nam Bad Beig.

4.17. It can be concluded that the effects of the Revised Consented Development on recognised routes and movement will be limited owing to the limited extent of theoretical visibility shown along those few routes that occur. Furthermore, the use of these routes is also limited to a small number of people as set out in SNH's Description. The consideration of recognised routes and movement will, therefore, have a limited bearing on the definition of the Study Area.

Wild Land Qualities

4.18. In respect of WLQs, NatureScot guidance states "*rationale for the selection of the study area and scope of the assessment*" includes consideration of the *"wild land qualities likely to be significantly affected".*

4.19. WLA 39 has four WLQs. These are set out in Table 9.E.3 below, along with a judgement as to whether or not there is potential for them to be significantly affected by the Revised Consented Development.

**Table 9.E.3 Wild Land Qualities with Potential to be Affected**

| Wild Land Quality (defined in SNH's WLA 39 Description) | Potential to be affected by the Proposed Consented Development |
|---|---|
| WLQ1 "An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci." | Yes – the presence of the Revised Consented Development to the north of WLA 39 could affect this WLQ. |
| WLQ2 "A remote, discrete interior, with limited access and a strong sense of solitude." | Yes – although the Revised Consented Development would have no direct effect on the remote interior or the limited access, there is the potential that it could have indirect effects on the strong sense of solitude. |
| WLQ3 "A rugged and complex pattern of hidden burns, lochans and pools at the local level, despite the landscape's simple composition at the broad scale." | Yes – although this WLQ relates to physical attributes within WLA 39 that could not be affected by the Revised Consented Development located outwith WLA, the Revised Consented Development could affect the 'landscape's simple composition at the broad scale'. |
| WLQ4 "A remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible." | Yes – the presence of the Revised Consented Development to the north of WLA 39 could affect this WLQ. |

4.20. It can be concluded that all four WLQs have some degree of susceptibility to the effects of the Revised Consented Development and, therefore, that all four should be considered in the detailed assessment. The consideration of WLQs suggests that WLA39 as a whole should form the Study Area as these WLQs are evident to varying degrees across this area.

Potential for Cumulative Effects

4.21. The third point noted in NatureScot guidance as being relevant in the "*rationale for the selection of the study area and scope of the assessment"* is consideration of the "*The potential for cumulative effects".*

4.22. The relevant projects that the Revised Consented Development may interact with cumulatively, and that have the potential to give rise to significant cumulative effects on wildness qualities, include the following developments:

- Operational Baillie Hill Wind Farm;
- Operational Strathy North Wind Farm;
- Application Strathy South Wind Farm;
- Application Drum Hollistan Wind Farm; and
- Application Ackron Wind Farm.

4.23. While the cluster of projects including Causeymire, Halsary, Bad a Cheo and Achlachan, are evident as a substantial group to the south-east, their influence is strongest across the south-east and south of WLA 39, where the influence of the Revised Consented Development will be much weaker, and this will reduce the potential for a significant cumulative interaction to occur. A full list of the cumulative sites within the 40 km Study Area is provided in Chapter 9 LVIA at Table 9.4.

4.24. Baillie Hill Wind Farm already has an influence on the perceived wildness qualities of WLA 39, on its eastern side, along with many other human influences described in this Appendix. Strathy North has an influence on the perceived wildness qualities across the western parts of WLA 39 and is perhaps more notable - despite its greater distance from WLA 39 - when compared with Baillie Hill Wind Farm, as it is the primary element of human influence that is seen from the western side, whereas on the eastern side Baillie Hill Wind Farm is one of a number of land uses that contributes to a significant diminution in the strength of the baseline wildness qualities in the northern part, and particularly the north eastern part, of WLA 39.

4.25. The cumulative assessment on WLA 39 also considers the potential effect of the addition of the Revised Consented Development to a scenario where application stage Drum Hollistan and Ackron are included in the baseline. While Limekiln Extension could only ever be constructed after Limekiln Wind Farm is constructed, the in-combination effect of these two developments is considered.

4.26. It can be concluded that the broad extent of operational and proposed cumulative developments around WLA 39 and the extent to which they would be visible across WLA 39, suggests that the Study Area should cover WLA 39 as a whole to enable a full assessment of all potential cumulative effects.

Identification of the Study Area

4.27. In considering the extent of theoretical visibility, the potential effect on routes and movement through WLA 39, the potential for the WLQs to be affected and the potential for cumulative effects to arise, it is evident that some parts of the WLA would be affected, potentially significantly, while other parts would not be significantly affected or not be affected at all.

4.28. NatureScot's Guidance requires the establishment of a Study Area at the outset of the assessment, that is *"appropriate to the scale of the proposal and extent of likely significant effects on the WLA".* If this guidance is followed, the Study Area would form one part of WLA 39 related to the known extent of likely significant effects of the Consented Development. This corresponds with the areas of highest visibility and cumulative visibility, as represented in the ZTV in Figure 9.14 and cumulative ZTVs in **Figures 9.18 to 9.30**. The Study Area would form a relatively small part of the whole of WLA 39 and would generally coincide with areas where WLQs are less strongly expressed.

4.29. OPEN does not think that such an approach would address the information that is required to enable a full and detailed assessment of the likely effects on WLA 39 as a whole, so it has instead applied the whole of WLA 39 as the Study Area but has subdivided it into three relevant sub areas, that are marked on **Figure 9.14**, and listed below.

**Step 2: Establish the Baseline**

4.30. NatureScot guidance summarises this step as follows in Table 1: *"Confirm the wild land qualities (set out in the WLA description) relevant to the study area, describing any major changes that have occurred since the description was prepared and the nature of their contribution to the WLA."*

4.31. The baseline study is informed by SNH's description of the WLA, the mapping of the eight classes of wildness (SNH, 2014), OPEN's site visits, and Wild Land Viewpoints A to H, which illustrate the outlook across the WLA. It is important to note that while Wild Land Viewpoints A to H provide a useful illustration of the views that can be gained from within the Study Area, the assessment of effects on viewpoints and on WLAs is carried out separately and according to specific methodologies that vary in some respects. Viewpoints A to H have, therefore, been referenced simply to provide an illustration of views within the Study Area.

Baseline Description

4.32. In order to understand the key characteristics and special qualities that have led to the WLA classification, this section presents a brief description of the landscape of the East Halladale Flows WLA. The description focuses on the experiential qualities of the landscapes included in the WLA, as well as their relationship with those landscapes which form the wider setting.

4.33. WLA 39, East Halladale Flows forms the northern part of the wider area known as 'The Flow Country' which includes WLA 36 Causeymire – Knockfin Flows to the south. The Flow Country is characterised by a distinct and well-defined landform. It comprises broad extents of low and gently undulating sweeping moorlands and flat peatlands, which are enclosed to the south by large lone mountains and to the west and north by smaller scale hills. The relative lowness of the landform means that the sweeping moorlands and flat peatlands are experienced collectively as one large space, the scale of which can appear vast when seen from more elevated vantage points. This is an important factor in the appreciation of WLA 39, as the boundaries of the area are not always perceived as clear edges on the ground, but frequently seen as part of a much larger expanse of landscape.

4.34. The simplicity of the landform, combined with the simplicity of the landcover adds to appearance of the East Halladale Flows as one vast space. The

absence of trees means the rough grasses mixed with moorland heather form a blanket covering, and this contributes to the uninterrupted sense of openness. There is a distinct absence of development within the WLA and few field enclosures, and this preserves the seamless flow of land. Tracks are one of the few human interventions which occur across this landscape, although very limited in number and extent, leaving the vast majority of the marshy Flows difficult to access.

4.35. Despite the pronounced definition of the landform of The Flow Country by the underlying landform, the boundaries of the WLA 39 which cover it, are largely defined by human interventions. The northern and southern boundaries are defined by the geometric edge of forestry plantations, the western and north-western edges by an electricity transmission line and the south-eastern boundary by the Inverness to Wick railway line. The broad band of coniferous forestry which lies to the south of WLA 39 has been omitted from the WLA areas and as such forms the divide between the East Halladale Flows and Causeymire – Knockfin Flows to the south. This division is contrary to the experience of this landscape, in which The Flow Country is experienced as one large expanse whereby the Flows are seen to extend much further south than WLA 36 to include the extent of WLA 36 as well.

4.36. Along the northern edge of WLA 36, the ridgeline that is formed along the high ground between Beinn Ratha, Sean Airigh, Clachgeal Hill, Beinn nam Bad Mor and Beinn nam Bad Beag forms a physical and visual divide between the landscape to the north and the Flows to the south. While the landscape to the north comprises an area of sweeping moorland, it is more notably characterised by the extent of coniferous forestry. Furthermore, the settled and cultivated landscapes of the northern coastal edge are evident, along with a cluster of wind farm developments and Dounreay Nuclear Power Plant. This finding is supported by the Levels of Wildness mapping shown in **Figures 9.31 to 9.36**, where Levels of Wildness are shown to be notably lower to the north of this ridgeline.

Physical Attributes and Perceptual Responses

4.37. Establishing the baseline involves a review of the strength of attributes and responses and their contribution to the identified WLQS of WLA 39. These are verified against NatureScot's WLA Description, noting that the strength to which the WLQS are expressed will vary in different parts of the WLA.

4.38. OPEN's baseline is also informed by its extensive fieldwork within WLA 39, without which it could not have undertaken this assessment. OPEN considers that wild land qualities in WLA 39 are derived from a combination of the following physical attributes and perceptual responses, shown in Table 9.E.4 below, all of which are displayed to differing degrees within the sub-areas (i) to (iii).

**Table 9.E.4 – Physical Attributes and Perceptual Responses of WLA 39**

| Physical Attribute | Perceptual Response |
|---|---|
| A high degree of perceived naturalness derived from its extensive low lying, gently undulating peatland and simple vegetation cover. Simplicity of landscape at an expansive scale, with a strong horizontal emphasis and 'wide skies'. A | A strong sense of solitude and sanctuary that strengthens towards the core of the WLA. A sense of risk is derived from the openness and vast scale of the landscape. |

| | |
|---|---|
| remarkably open landscape with extensive visibility beyond the boundaries of the WLA. | |
| A lack of modern human artefacts and foci within the WLA but evidence of human occupation/ foci to the north east of the WLA including the village of Reay, high voltage power lines, wind farms, telecom masts, fences and the Dounreay Nuclear establishment, located to the north east. The railway line along the southern boundary is only experienced at close range. | An awe-inspiring simplicity of landscape that extends to the south and west well beyond the boundaries of the WLA to include other more distant WLA. The modern human artefacts, including Strathy North and Baillie wind farms diminish some of the area's sense of remoteness. |
| Little evidence of contemporary land uses within the WLA, but extensive evidence around parts of the perimeter, including forestry plantations | A strong sense of solitude and sanctuary that strengthens towards the core of the WLA, but which is diminished in some areas of WLA 39 by proximity and visibility of some contemporary land uses. The forestry plantations diminish some of the area's awe-inspiring qualities of openness, as well as its perceived naturalness. |
| A rugged and complex pattern of peat hags, hidden burns, lochans and pools at the local level, despite the landscape's simple composition at the broad scale. | Perceptions that the landscape has inspiring qualities, that strengthen towards the core of the WLA and which appear to extend well beyond its (often imperceptible) boundaries, especially to the south and west. |
| A remote, discrete interior, with limited formalised access other than occasional tracks near Shurrery and Dorrery to the north-east and east. | Physically challenging terrain to access, due to the peat coverage and incised water courses, especially in the core. |

Review of NatureScot's WLA Description

4.39. This step of the assessment carries out a review of the baseline physical attributes and perceptual responses of WLA 39 and their contribution to the identified WLQs of the area, as identified in NatureScot's WLA description. OPEN agree that the four WLQs set out in the WLA Description are representative of WLA 39, to varying degrees, and does not dispute the factual accuracy of the information that is contained within the WLA Description.

4.40. On the basis of OPEN's extensive fieldwork, the WLA Description has been found to not accurately, or fully, capture the influence from human activity that exists around parts of the perimeter and how this diminishes the perceptual qualities of wildness in some areas, particularly to the north, north-east of WLA 39.

4.41. The only reference to external human influences within the WLA Description is contained in the following two paragraphs.

4.42. *"Within the open views, distant mountains often form key foci and landmarks, as discussed previously. In some places, these views also include human artefacts and contemporary land uses that are tall or elevated, and thus appear prominent in contrast to the horizontal emphasis of the peatlands. These elements are mainly located at or beyond the edge of the WLA and include high voltage power lines, wind farms, telecom masts, fences and conifer trees. Where visible across the open expanse of the WLA, these elements can seem to shrink the perceived extent of the area."*

4.43. *"Conifer plantations currently have cumulative effects around the margins of this WLA, seeming to collectively edge the area in an arc from the north east, to the east and south west. The plantations diminish some of the area's awe-inspiring qualities of openness, as well as its perceived naturalness, and are particularly prominent due to their contrast of colour, texture and form (highlighted further during snow cover upon the peatland)."*

4.44. No mention is made of the influence from Dounreay Nuclear Power Plant, the settled landscape around Reay, nor of Baillie Hill, Causeymire, Buolfruich Wind Farms, which have a discernible influence on the strength of the wildness qualities that are expressed in different parts of WLA 39, and all of which were present at the time of the WLA Description site work. Since then, external influences have increased with the construction of Strathy North, Halsary, Bad a Cheo, Achlachan and other more distant wind farms.

4.45. A matter that is not explained in the WLA Description - nor which can be fully appreciated without visiting the area - is the degree to which the perception of the attributes and resultant wildness qualities in WLA 39 draws on the influence of landscapes which lie well outside the boundaries of the WLA, particularly when viewed from the north, looking south and west.

4.46. Although much of the southern edge of WLA 39 is defined by commercial plantations, these tend to be insignificant visual edges in the expansive views seen to the south, which extend well beyond the boundary of WLA 39, up to the edge of the Flow Country, and the lone mountains of Morven and Scaraben in the south (c30 km), to the Ben Griams in the south west (c25 km) and to Ben Loyal (c40 km) and Ben Hope (c50 km) in the west.

4.47. These extremely long-distance views give WLA 39 an added dimension of vastness, albeit they lie outside WLA 39 (and include WLA 36), and completely alter the perception of the wildness qualities of the area, which are not constrained by the WLA 39 boundaries. There is presently very little human influence in the views south, with the exception of distant wind farms to the south east at Causeymire, Halsary, Bad a Cheo, Aclachan and Buolfruich, and the forestry plantations appear almost inconsequential, except at close range.

4.48. To the west of WLA 39, the operational Strathy North Wind Farm, outwith wild land, is conspicuous from the Beinn Ratha ridgeline as it cuts across the simple, open, peatlands which otherwise seems to extend all the way to Ben Loyal and Hope and the north coast, appearing to seamlessly connect WLAs 39, 35 and 38 (although in reality there is a substantial gap in between). Strathy Wood and Strathy South Wind Farms, if consented, will serve to extend this influence much deeper into the expanse of apparent wild land, and will appear across the full horizon defined by these distant mountains, as can be seen in the cumulative wireline for Viewpoint C in **Figure 9.111**.

4.49. In contrast, from the undulating and more elevated parts of the northern edge of WLA 39, a completely different perception is achieved to the east of Beinn Ratha and the ring of hills that connect from the south east up to it (including Ben nam Bad Beag), where the human influences of close range forestry, the Dounreay Nuclear Power Plant, Baillie Hill and Forss Wind Farms all physically curtail the WLA boundary and strongly affect the perception of wildness qualities within the edge of WLA 39.

4.50. To the north and west of Beinn Ratha, where the WLA appears to extend north to the coast (but in fact stops short of it), these human patterns are less influential, albeit a transmission line demarcates the boundary of the wild land area in the middle distance, beyond which the Drum Hollistan Wind Farm site is located. Long-range views to Ben Loyal and Ben Hope in the west bear more similarity to the type of views of Morven and Scaraben that are seen in the south, in terms of their depth and extensiveness, save for the influence of Strathy North Wind Farm which appears to extend appreciably into the core.

4.51. While on paper, the extent of WLA 39 may be relatively small, this does not reflect the impression that is gained in reality, on the ground, in which it is experienced as one part of a vast and much more extensive landscape resource covering much of Caithness and northern Sutherland, which includes at long range WLA 36 too. This is an important consideration when evaluating the degree to which the Revised Consented Development affects the perception of the already diminished wildness qualities along the northern edge of WLA 39, and whether this is regarded to affect or undermine the whole of the WLA, as the whole of WLA 39 is actually appreciated as one part of a much larger context.

**Step 3: Assess the Sensitivity of the Wild Land Qualities**

4.52. The sensitivity of WLA 39 is assessed by combining the value of the WLA and its susceptibility to the Revised Consented Development. NatureScot guidance summarises this step as follows in Table 1:

4.53. *"Through detailed field assessment within the study area, assess the sensitivity of the wild land qualities scoped in (including their physical attributes and perceptual responses), to the type and scale of change proposed".*

4.54. The value of the WLA has been established previously as medium-high.

4.55. NatureScot's 2020 Guidance requires the assessor to establish which WLQs, including the physical attributes and perceptual responses that contribute to those qualities, are most sensitive to the type and scale of change proposed.

4.56. The WLQs vary across WLA 39, in terms of their strength and/ or the intensity to which they can be perceived. This means that the sensitivity that is attached to them must also vary across WLA 39. Within sub area (i) the sensitivity is affected by the perception of human influences which are seen from, but which lie outside the WLA 39 boundary, including Dounreay Nuclear Power Plant, commercial forestry plantations; Baillie Hill and Forss Wind Farms and the settlement at Reay.

4.57. The presence of these influences in the baseline reduces the susceptibility of this part of the WLA to Medium, in OPEN's opinion, and this, in the terms of GLVIA 3, reduces the overall sensitivity of sub area (i). The combination of a

medium-high value with a medium susceptibility, produces a **medium** sensitivity for all four WLQs in Sub-Area (i).

4.58. In relation to Sub-Area (ii), all of the WLQs are expressed to varying degrees and all have the potential to be significantly affected. Within Sub-Area (ii) the sensitivity of some of the wildness qualities is diminished by visibility of Baillie Hill and Strathy North Wind Farms (as well as Strathy South, if consented), which are seen in particular from the high points at Viewpoints B and C. The presence of these influences in the baseline reduces the susceptibility of this part of the WLA to medium-high, in OPEN's opinion, and this, in the terms of GLVIA 3, reduces the overall sensitivity of Sub-Area (ii). The combination of a medium-high value with a medium-high susceptibility, produces a **medium-high** sensitivity for all four WLQs in Sub-Area (ii).

4.59. In respect of Sub-Area (iii) it is the case that the wildness qualities are most strongly expressed in the area to the south of Sub-Area (ii), due to the lack of influence from external human activities and development, although towards the southern edge of Sub-Area (iii) the influence from the forestry plantations along the boundary becomes more influential. To the west and north of Sub-Area (ii) the wildness qualities are relatively strongly expressed although there is a tempering influence from the Strathy North wind farm, as well as the transmission line which forms the north-western edge to WLA 39, as that boundary is approached. The relative absence of these influences in the baseline increases the susceptibility of this part of the WLA to high, in OPEN's opinion, and this, in the terms of GLVIA 3, increases the overall sensitivity of sub area (iii). Combining a medium-high value with a high susceptibility, produces a **high** sensitivity for all four WLQs in Sub-Area (iii).

4.60. The ZTV in **Figure 9.14** combined with the visualisations for Viewpoints D, E, F and G in **Figures 9.114** to **9.115** demonstrate that the Revised Consented Development does not have the potential to significantly affect Sub-Area (iii), as supported by the assessment that has been carried out at these locations in Appendix 9.E of the 2017 SI. However, for completeness, the assessment below includes Sub-Area (iii) to ensure the assessment covers the likely significance of effects across WLA 39.

4.61. In OPEN's assessment, the wildness qualities expressed in WLQ1 and WLQ2 are the most sensitive qualities in terms of how WLA 39 is defined and perceived and, where expressed most strongly, they carry the highest susceptibility to change.

**Step 4: Assess the Magnitude of Change**

4.62. A key component in assessing the significance of effects is to attribute the likely magnitude of change that may arise on each of the Sub-Areas (i) to (iii). The eight representative viewpoints (A to H) used in OPEN's Wild Land Assessment (augmented by VP17 Beinn Ratha), provides a good indication of the potential to which the Revised Consented Development may influence the perception of wildness qualities. Each Sub-Area contains the following representative viewpoints, as shown in **Figure 9.14**:

- Sub-Area (i): Viewpoints 17; A; H;
- Sub-Area (ii): Viewpoints B; C;
- Sub-Area (iii): Viewpoints D; E; F and G.

4.63. The visualisations for these viewpoints are presented in **Figures 9.109** to **9.116**, and these, in addition to OPEN's extensive field assessment, has informed the following assessment of magnitude of change for each Sub-Area presented in Table 9.E.5 below.

**Table 9.E.5 – Magnitude of Change in Sub-Area (i) to (iii) of WLA39**

| Sub-Area Wildness Quality | Magnitude of Change to Baseline Wildness Quality |
|---|---|
| **Sub-Area i** | |
| **WLQ 1:** *An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci visible from within the core. Low-lying peatlands in the core contrast with the more elevated rim of drier hills along the north-eastern boundary, including Beinn Ratha.* | The location of the Revised Consented Development outwith the WLA means it will have no direct effect on the 'low lying peatlands' found within the core of the WLA. Its location close to the northern WLA boundary means that it will have an indirect effect in respect of the perception of the 'few foci' quality in the northern part of the WLA and particularly from Beinn Ratha and the ridgeline extending south from it. However, it will be seen in the same sector as the existing Baillie Hill and Forss wind farms and Dounreay Nuclear Power Plant, albeit at a much closer range and with broader extent of visibility. The magnitude of change will be **medium-high** due to the proximity of the Revised Consented Development. |
| **WLQ 2:** *A remote, discrete interior/ core, with limited access and a strong sense of solitude and sanctuary that is derived not only from within WLA 39, but also from the vast, expansive 'borrowed' landscape which stretches south and east beyond it to distant lone mountains.* | The Revised Consented Development will not impact on the perception of the 'remote, discrete core' of the WLA, nor will it affect an appreciation of the 'vast, expansive 'borrowed landscape which stretches south' from the WLA. The degree to which it affects the perception of the qualities of 'solitude' and 'sanctuary' will result in a magnitude of change that is **low**. |
| **WLQ 3:** *A rugged and complex pattern of hidden burns, lochans and pools within the core (at the local level) which are difficult to traverse, despite the landscape's simple composition at the broad scale.* | The Revised Consented Development will not impact on the perception of the complex patterns of land cover that define the core of the WLA. Neither will it affect the perceptions of being 'difficult to traverse' the WLA, as a track provides access into Sub-Area (i) via Helshetter. The magnitude of change on this wildness quality will be **negligible.** |
| **WLQ 4:** *A remarkably open landscape with extensive visibility, meaning tall or high features in the distance can be clearly visible which can influence how and to what strength the wildness qualities that are perceived. Human influences, including the Dounreay Facility and existing wind farms and plantation forestry* | The Revised Consented Development will be highly visible from most (but not all) parts of Sub-Area (i). Along with existing human influences, including extensive commercial plantations that are also visible from most parts of Sub-Area (i), and Dounreay and Baillie Hill wind farm, the Revised Consented Development will reinforce the degree of human influence that will further diminish the perceptions of wildness, insofar as they are present in Sub-Area (i). The magnitude of change will be **medium-high**, except |

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| *- especially to the north east of WLA 39 – diminish the wildness qualities along the north-eastern edge.* | in areas to the south east of Sub-Area (i) where the Revised Consented Development wind farm will be less visible. |
| **Sub-Area ii** | |
| **WLQ 1:** *An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci visible from within the core. Low-lying peatlands in the core contrast with the more elevated rim of drier hills along the north-eastern boundary, including Beinn Ratha.* | The Revised Consented Development will be experienced in views to the north east from this area, as shown in Viewpoints B and C, at a range of 5km to 7km. It will be partially concealed by the escarpment that contains the Limekiln Forest 'bowl, but will nonetheless affect the perceptions of 'horizontal emphasis'; 'wide skies' and the 'awe inspiring simplicity of the landscape, although these qualities are best experienced in view directions to the west and south. The Strathy North and Baillie Hill wind farms are seen from Sub-Area (ii) and provide an element 'foci' that will be reinforced, albeit at a distance of 5 to7 km by Revised Consented Development. The magnitude of change will be **medium**. |
| **WLQ 2:** *A remote, discrete interior/ core, with limited access and a strong sense of solitude and sanctuary that is derived not only from within WLA 39, but also from the vast, expansive 'borrowed' landscape which stretches south and east beyond it to distant lone mountains.* | Perceptions of 'solitude' and 'sanctuary' are more strongly expressed in Sub-Area (ii), compared with Sub-Area (i), albeit that the greatest impressions are gained when viewing south across the 'vast, expansive 'borrowed' landscape which stretches south and east beyond it to distant lone mountains', and the Revised Consented Development will not compromise those perceptions. The magnitude of change will be **medium**, given the presence of Strathy North which weakens the baseline strength of this quality. |
| **WLQ 3:** *A rugged and complex pattern of hidden burns, lochans and pools within the core (at the local level) which are difficult to traverse, despite the landscape's simple composition at the broad scale.* | The Revised Consented Development will not impact on the perception of the complex patterns of land cover that define the core of the WLA, as these are expressed most clearly in views looking south. It will affect perceptions of the 'landscape's simple composition' although, again, these are more strongly experienced in views south than they are to the north, where Baillie Hill wind farm is a distant but recognisable feature. The magnitude of change on this wildness quality will be **low**. |
| **WLQ 4:** *A remarkably open landscape with extensive visibility, meaning tall or high features in the distance can be clearly visible which can influence how and to what strength the wildness qualities that are perceived. Human influences, including the Dounreay Facility and existing* | The perception of being in a 'remarkably open landscape' is strongly expressed within Sub-Area (ii), particularly the elevated parts around viewpoints B and C. From the northern part of Sub-Area (ii) 'the Dounreay Facility and existing wind farms and plantation forestry - especially to the north east of WLA 39 – diminish the wildness qualities' although this influence drops away as separation from the escarpment to the Limekiln 'bowl' increases. Strathy North remains a clear influence albeit |

| | |
|---|---|
| *wind farms and plantation forestry - especially to the north east of WLA 39 – diminish the wildness qualities along the north-eastern edge.* | at some distance but perceived in a part of the view where extensive visibility can be appreciated to the west. At distances of 6 km to 7 km, the magnitude of change from Revised Consented Development on this quality will be **medium**. |
| **Sub-Area iii** | |
| **WLQ 1:** *An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci visible from within the core. Low-lying peatlands in the core contrast with the more elevated rim of drier hills along the north-eastern boundary, including Beinn Ratha.* | In general terms, the ZTV in Figure 9.14 demonstrates that Revised Consented Development will have a limited impact on almost all of Sub-Area (iii). The visualisations for viewpoints D to G confirm this.<br><br>It is within the core of Sub-Area (ii) that the perception of 'awe-inspiring simplicity' and 'strong horizontal emphasis' and 'wide skies' can be most strongly experienced. Due to its limited visibility and separation distance (5 km to 13 km) the magnitude of change on this wildness quality will be **low**. |
| **WLQ 2:** *A remote, discrete interior/ core, with limited access and a strong sense of solitude and sanctuary that is derived not only from within WLA 39, but also from the vast, expansive 'borrowed' landscape which stretches south and east beyond it to distant lone mountains.* | These qualities are strongly expressed in Sub-Area (iii), where they define the essence of WLA 39, particularly the 'strong sense of solitude and sanctuary that is derived not only from within WLA 39, but also from the vast, expansive 'borrowed' landscape which stretches south and east beyond it to distant lone mountains'. The Revised Consented Development, comprising predominantly a few blades tips, would have a **low** magnitude of effect on this quality. |
| **WLQ 3:** *A rugged and complex pattern of hidden burns, lochans and pools within the core (at the local level) which are difficult to traverse, despite the landscape's simple composition at the broad scale.* | The Revised Consented Development will not impact on the perception of the complex patterns of land cover that define the core of the WLA, including the 'hidden burns, lochans and pools' and these are expressed most clearly in Sub-Area (iii). It will not affect perceptions of the 'landscape's simple composition'. The magnitude of change on this wildness quality will be **negligible**. |
| **WLQ 4:** *A remarkably open landscape with extensive visibility, meaning tall or high features in the distance can be clearly visible which can influence how and to what strength the wildness qualities that are perceived. Human influences, including the Dounreay Facility and existing wind farms and plantation forestry - especially to the north east of WLA 39 – diminish the wildness qualities along the north-eastern edge.* | The quality of 'A remarkably open landscape with extensive visibility' is strongly expressed in Sub-Area (iii). The influences from 'Dounreay Facility and existing wind farms and plantation forestry' are generally much weaker or not present, except along the southern boundary where at close range the existing plantations become more apparent.<br><br>The Revised Consented Development will have a **low** magnitude of change on this quality of Sub-Area (iii) due to its limited visibility and increased separation distance where blade tips are seen. |

4.64. The assessment of effects on WLA 39 is presented in Table 9.E.6 below, drawing on the assessment of sensitivity and magnitude of change set out previously.

**Table 9.E.6: Assessment of Effects on WLQs within WLA 39**

| Sub-Area WLQ | Sensitivity of WLQ | Magnitude of Change to Baseline WLQ | Significance of Effect on WLQ |
|---|---|---|---|
| **Sub-Area (i):** | | | |
| WLQ 1 | Medium | Medium-high | Significant |
| WLQ 2 | Medium | Low | Not Significant |
| WLQ 3 | Medium | Negligible | Not Significant |
| WLQ 4 | Medium | Medium-high | Significant |
| **Sub-Area (ii)** | | | |
| WLQ 1 | Medium-high | Medium | Significant |
| WLQ 2 | Medium-high | Medium | Significant |
| WLQ 3 | Medium-high | Low | Not Significant |
| WLQ 4 | Medium-high | Medium | Significant |
| **Sub-Area (iii)** | | | |
| WLQ 1 | High | Low | Not Significant |
| WLQ 2 | High | Low | Not Significant |
| WLQ 3 | High | Negligible | Not Significant |
| WLQ 4 | High | Low | Not Significant |

Cumulative effects

4.65. The assessment indicated in Table 9.E.6 above reflects the cumulative effect that the Revised Consented Development would give rise to in addition to the baseline wind farm context (ie operational and consented wind farms). If Drum Hollistan, Ackron, Strathy Wood and Strathy South are included within that baseline, as existing sites, then it is unlikely that any additional significant effects would arise in respect of the intensity of Revised Consented Development effects, with the exception of the summit and ridgeline to Beinn Ratha. This is because Drum Hollistan, Ackron, Strathy Wood and Strathy South affect parts of WLA 39 that lie to the west of the ridgeline, which the Revised Consented Development does not affect.

The combined effect on WLA 39 would inevitably be greater, if all five projects were consented, as all areas in the northern part of WLA 39 would experience greater visibility of one or other of the five wind farms. The wildness context -

in which the effects from Revised Consented Development would be experienced - is already subject to a considerable degree of diminution from other human influences and this would be increased with further cumulative developments present in this north-westerly and westerly sector.

**Step 5: Judge the Significance of Effects**

4.66. The Revised Consented Development would lead to some significant effects, singly and cumulatively, on the wildness qualities – as far as they exist – within, predominantly the north-eastern part of WLA 39, as represented by Sub-Areas (i) and (ii) in **Figure 9.14**, which capture highest ZTV coverage.

4.67. The wildness qualities in these areas are displayed to different strengths, with a relatively weak expression within Sub-Area (i) due to the external influence from a range of built elements and land uses. These influences reduce within Sub-Area (ii) as they become progressively screened by the ridgeline which extends around the 'bowl' from Beinn Ratha to Beinn nam Bad Beag. Sub-Area (ii) is not devoid of influence though, as Strathy North and Baillie Hill Wind Farms continue to have visibility in this area. Strathy South and Strathy Wood, if approved, would increase this perception.

4.68. Within Sub-Area (iii), Revised Consented Development would not give rise to any significant effects on the perception of wildness qualities. This is the largest part of WLA 39 and also, in OPEN's assessment the most sensitive part, where wildness qualities are expressed to their greatest strength.

4.69. In conclusion, OPEN is of the professional opinion that while the Revised Consented Development would affect the perception of wildness qualities in parts of WLA 39, these effects would arise, in the main, in locations where the wildness qualities are not expressed to their optimum and where other external influences have resulted in a diminution of their strength. In areas where wildness qualities are better expressed and high levels of visibility arise (Viewpoints B and C) the extent of these areas is small and localised, and they are areas subject to visibility from other wind farms. Importantly, in the parts of WLA 39 which display wildness qualities to their optimum, Revised Consented Development Wind Farm would not cause any significant effects. On this basis, OPEN considers that Revised Consented Development would not harm the integrity of WLA 39 as a whole.