

The Highland Council

Planning, Development and Infrastructure Committee

14 May 2014

Agenda Item	12
Report No	PDI 9/14

Cumulative Landscape and Visual Assessment of Wind Energy in Caithness

Report by Director of Development and Infrastructure

Summary

This report presents conclusions and recommendations from a draft Cumulative Landscape and Visual Assessment of Wind Energy in Caithness, which has been produced for the Council. The assessment has been funded by Scottish Government grant, for which The Highland Council and Argyll & Bute Council submitted a joint bid. Landscape and visual impacts, including cumulative impacts, are typically key considerations for wind energy proposals and Caithness has experienced considerable development pressure. The report presents the initial conclusions and recommendations to Committee. Members are asked to agree the next steps in finalising the report, to enable it to be published and have weight within the planning process.

1. Background

- 1.1 Members will recall that The Highland Council was successful, with Argyll & Bute Council, in bidding for Scottish Government funding to undertake cumulative landscape and visual assessment of wind energy developments in parts of the two Councils' areas. Land Use Consultants (LUC) were engaged to undertake the work. In Highland the bid was focussed on Caithness and on the Ardrross (Easter Ross) area, both being areas which have experienced considerable development pressure. Work to date has been focussed mainly on Caithness in order to advance that sufficiently within the resource available. Officers have reviewed LUC's draft material for Caithness and provided technical feedback to LUC, who have now produced a second draft for that area. This report presents the initial conclusions and recommendations contained in the latest version – see Appendix 1.
- 1.2 The consultant's report is a technical study. It has been produced to inform our policy/guidance. In particular it will feed in to revision of the Onshore Wind Energy Supplementary Guidance, which is currently in 'Interim' form as approved by Committee in March 2012. It provides evidence on which we can base our spatial steer – and assessment – of development proposals. In doing so it will help in the identification of further development potential, as well as development limitation.
- 1.3 This report asks members to agree the next steps in finalising the report, to

enable it to be published and (whilst it is not in itself the policy or guidance of the Council) have weight as a consideration within the planning process.

2. LUC's Draft Report – Initial Conclusions and Recommendations

2.1 LUC's draft report provides broad guidance on how future development may be steered towards or away from certain areas, in order that the spread of cumulative effects is limited. The extract appended to the Committee report provides a brief overview of the assessment undertaken, a description of existing and potential cumulative patterns across the study area, identifies categories of cumulative effect and makes recommendations for areas where those categories are considered to apply. The four categories (which are explained in more detail within appendix 1) are:

- Areas where receptor sensitivity to potential cumulative effects is a limiting factor to further development;
- Areas where additional development may give rise to the extension of cumulative effects in relation to existing and emerging development patterns;
- Areas where additional development could be sited with reduced potential for cumulative effects in association with existing development patterns; and
- Areas where cumulative effects could be limited by siting additional development in association with existing patterns of development.

Officers will talk through the initial conclusions and recommendations in presentation to Committee, with the assistance of slides.

2.2 As referred to at paragraph 10.5 of their draft report, LUC have provided more detail elsewhere in their report by way of strategic assessment of cumulative effects, following a landscape sensitivity evaluation. This will be used alongside their conclusions and recommendations. It should be noted that the strategic assessment of cumulative effects is presented by landscape character type (LCT); a particular LCT may be present in one or more specific parts of the study area, but the materials prepared by LUC do go on to refer to those specific parts.

2.3 As stated at paragraph 10.13 of LUC's draft report, their assessment is a strategic study and their recommendations are not a substitute for project-specific landscape and visual impact assessment and cumulative assessment. The study should not be taken as indicating that any particular application that has yet to be determined is or is not acceptable. The recommendations do not provide a 'traffic-light' style indication of the acceptability, or otherwise, of development – and the wording of the recommendations (and colours used for the conclusions in figure 10.3) are in no way intended to imply such an approach. However, some of the recommendations are more suggestive of development limitation whilst others are more suggestive of development potential. There is clear emphasis on the importance of siting and design of individual proposals. Important to the degree of effect of the recommendations in helping to manage development and its cumulative effects spatially across

the study area will be the extent to which regard is had to all of the recommendations as we move forward with use of the study. The study will help us develop a clear basis for the assessment of proposals.

3. Next Steps

- 3.1 The second draft of LUC's report for Caithness has been checked by officers and LUC will be asked to make some final changes particularly in the interests of accuracy, clarity and ease-of-use. In addition, we have identified that it would be valuable to do some further work to set out the key, relevant information in an accessible form by geographic area; this will assist both the Council, agencies such as SNH and developers assess individual proposals, taking into consideration the LUC report. This further work will primarily be a matter of drawing together from the LUC report the relevant recommendations and related LCT-based conclusions and guidance for each of the sub-areas on the conclusions map (as identified by the bullet-points in paragraphs 10.18, 10.21, 10.24 and 10.27 of LUC's draft report). Where appropriate, reference will also be made to relevant established guidance, in particular to SNH's "Siting and Designing Windfarms in the Landscape" (2009). Undertaking these steps will enable LUC's report to be published and have weight within the planning process. LUC will provide training to officers in its use.
- 3.2 Our intention is to revise our Onshore Wind Energy Interim Supplementary Guidance after the finalised version of the new Scottish Planning Policy has been published in June 2014. This revision of our Interim Supplementary Guidance will include taking into account LUC's report for Caithness and the significance, for its recommendations, of any changes to the pattern of consents and proposals since the snapshot was taken of development on which the LUC study is based. Members will recall that Draft SPP proposed a number of changes to planning policy for onshore wind, particularly to the methodology for preparing the spatial framework which is part of our Interim SG. Finalised SPP is expected in June 2014. We therefore anticipate bringing draft revisions to the Interim SG to Committee for consideration at its meeting in November 2014; this will bring together cumulative landscape and visual considerations with a wide range of other considerations within the planning balance, such as those already within our Interim Supplementary Guidance.
- 3.3 Once we receive from LUC their part-assessment for Ardross, we will consider what steps would remain to be undertaken to get useful outputs to inform our policy and guidance for that area and options for delivery, and subject to that we will seek to progress it.
- 3.4 Our report to Committee in November 2014 will therefore include updating members on progress for the Ardross area and also on options for producing cumulative landscape and visual guidance for other areas of Highland.

4. Implications

- 4.1 Resource: We have resource to finalise the Caithness study. Upon receipt of initial work for Ardross we will consider options for completion of that. We will

also need to consider options for producing relevant assessment and guidance for other pressured areas of Highland. Resource pressures mean that we will need to consider alternative approaches to delivery. Discussions are also underway with Scottish Natural Heritage on the potential for joint work being done in future.

- 4.2 Legal: Planning law sets out requirements for development plans and development management. A distinction is made between documents forming part of the development plan (our adopted Local Development Plans, adopted Local Plans as continued in force and adopted Supplementary Guidance) and any other material considerations.
- 4.3 Equalities: The landscape and visual assessment is strategic and is unlikely to lead to significant adverse or differential effect on particular equality groups. Our Onshore Wind Energy Interim SG has previously been subject of Equalities Screening.
- 4.4 Carbon Clever / Climate Change: The assessment assists in the identification of opportunities for renewable energy development, which will contribute towards Carbon Clever and in responding to Climate Change.

5. Conclusions

- 5.1 Receipt of a second draft of LUC's assessment for the Caithness area is an important step forward. Some further work will be done to finalise that report for publication and to set out the key, relevant information in an accessible form by geographic area. Committee will receive a further report at a future meeting with associated recommendations for our Onshore Wind Energy Supplementary Guidance (which, once statutorily adopted, will carry 'development plan' weight) and an update on similar work for elsewhere in Highland.

Recommendation

Committee is asked to:

- (a) Note the initial conclusions and recommendations from the consultant's draft report on the Cumulative Landscape and Visual Assessment of Wind Energy in Caithness;
- (b) Agree the next steps in finalising the report, to enable it to be published and have weight within the planning process; and
- (c) Note the intention that a further report will be brought to a future meeting of the Committee to consider revision of the Onshore Wind Energy Interim Supplementary Guidance in the light of this work and on options for producing cumulative landscape and visual guidance for other areas of Highland.

Designation: Director of Development and Infrastructure

Date: 1st May 2014

Author: David Cowie, Principal Planner (01463-702827)

APPENDIX 1:

**EXTRACTS OF LUC'S DRAFT REPORT "CUMULATIVE LANDSCAPE AND
VISUAL ASSESSMENT OF WIND ENERGY IN CAITHNESS – APRIL 2014"**

10 Recommendations

- 10.1 The study analyses existing and potential patterns of cumulative effect associated with wind energy development in Caithness. It explores whether there is scope to accommodate additional development without giving rise to unacceptable levels of cumulative effect. The question of acceptability will ultimately rest with The Highland Council, and will depend on the specific details of the proposed project.
- 10.2 Landscape sensitivity is described in Section 5, with accompanying detailed text on overall sensitivity to the three turbine size categories, in Appendix 2. Overall, areas were less sensitive to smaller and medium size categories than to the large turbine size category. The Landscape Character Type (LCT) with the highest sensitivity was Lone Mountains, and the LCT with the lowest sensitivity was Intensive and Mixed Agriculture and Settlement.
- 10.3 Section 6 describes designated landscapes and areas with higher levels of perceived wildness as being of higher sensitivity. Visual receptors were also identified in Section 7 as a means of representing groups of people likely to be sensitive to changes in their visual amenity. Visual receptors were broken down into viewpoints and routes, in order to represent different types of cumulative visibility whether static (from viewpoints, combined or successive) or sequential (from routes).
- 10.4 Cumulative patterns of visibility were examined in Section 8, with reference to two scenarios. Scenario 1 includes existing and consented developments, and Scenario 2 included all baseline developments together with existing and proposed schemes (including applications and those at scoping). The current pattern of wind energy development in the study area and buffers gives rise to certain cumulative effects. These will have been weighed in the balance during the relevant decision-making processes, and the fact that each of these developments received consent provides a strong indication that this current level of cumulative effect is acceptable in the wider landscape and planning contexts.
- 10.5 Finally, Section 9 provides a strategic assessment of cumulative effects, set out in Tables 9.1 to 9.24. Each table brings together a consideration of the sensitivity of landscape and visual receptors, in relation to cumulative visibility, in order to arrive at judgements with regards to likely cumulative effect and guidance for the location of future development. The findings of Section 9 are summarised by the following recommendations. Therefore, in reviewing overall recommendations, reference should be made back to Section 9 for more detailed information.

Existing and potential cumulative patterns

- 10.6 There are some distinct cumulative patterns emerging in Scenario 1, with concentrations of wind energy development northwest of Wick; adjacent to the A9 south of Mybster; and west of Wick south of the A882. Additionally, a single wind farm is located in the northeast between Wick and John O' Groats, and two developments are located west of the A9 between Dunbeath and Ulbster. Existing development is generally located within the Sweeping Moorland, Flat Peatland and Intensive and Mixed Agriculture and Settlement LCTs, largely outside designated landscapes, or areas of wildness. Other patterns include the association of turbines of the larger size category and groups, with larger-scale man-made features such as coniferous forest or industrial and commercial settings, and the turbines of the smaller size category associated with agriculture.
- 10.7 Figures 10.1 and 10.2 illustrate where turbines of 150m to tip, located across the study area, would be theoretically visible from viewpoints and from routes (whether the whole turbine or part of the turbine). This gives an impression of where turbines of the largest size category are most likely to be highly visible from these receptors, and is therefore representative of a possible worse-case scenario. Both figures demonstrate that the highest levels of visibility of turbines

- from viewpoints and routes are likely to arise as a result of turbines located in the northeast, between Thurso and Duncansby Head.
- 10.8 Consideration of Scenario 2 seeks to identify where future pressure for additional wind energy development may lead to unacceptable levels cumulative effect. Analysis suggests that one area where cumulative effects could result from additional development is in the southeast of the study area, within around 5km of the Caithness coastline. This is due to the nearby presence of a large number of sensitive landscape and visual receptors, and the likelihood of successive and sequential cumulative effects. Another area where cumulative effects may increase is in the northeast of the study area, north of the A882. While there is likely to be some scope to accommodate further turbines inland, there are a number of sensitive coastal receptors that are likely to experience cumulative effects as a result of the high levels of intervisibility in this area. Cumulative effects are also likely to increase as a result of turbines adjacent to Causeymire, particularly on views from the A9 should turbines be located to the east as well as the west of the road.
- 10.9 As a general rule, it is likely to be desirable to accommodate future turbines within these existing patterns, to limit unacceptable cumulative effects arising with new turbine groupings. There may also be scope to accommodate turbines where the sensitivity of receptors is likely to be low, and cumulative effects are currently limited. It may be appropriate to limit new development between existing single turbines or turbine groups that are already relatively close together, to prevent groups merging into a more extensive group of turbines that may result in unacceptable levels of cumulative effect.

Categories of cumulative effect

- 10.10 There are a number of variable factors which will affect whether or not a given area can accommodate additional development. These include the sensitivity of landscape and visual receptors in the area and its context, as well as existing patterns of cumulative development, and potential future development. Cumulative effects may occur as a result of interaction with existing development, or as a result of spreading development into new areas.
- 10.11
- 10.12 To reflect these variables, the study has considered four recommendations which apply to different parts of the study area, as follows:
- Areas where receptor sensitivity to potential cumulative effects is a limiting factor to further development;
 - Areas where additional development may give rise to the extension of cumulative effects in relation to existing and emerging development patterns;
 - Areas where additional development could be sited with reduced potential for cumulative effects in association with existing development patterns; and
 - Areas where cumulative effects could be limited by siting additional development in association with existing patterns of development.
- 10.13 The areas where each of these recommendations have been applied are described in below. It should be noted that this is a strategic study, and that these recommendations are not a substitute for project-specific landscape and visual impact assessment and cumulative assessment. Areas of constraint do not correspond to areas where no development could be acceptable; similarly areas of opportunity do not indicate that any proposal could be accepted.
- 10.14 The recommendations present general conclusions on the different parts of the study area, but will require more detailed interpretation to apply to specific sites, particularly where these lie close to the boundaries between areas. Individual proposals will continue to be judged on their own merits.
- 10.15 As stated from the outset, this report is not a landscape capacity study. It does not form The Highland Council's policy/guidance on the location of wind energy developments, but has been prepared to inform it.

Recommendations for Caithness

- 10.16 The following sections describe each of the recommendations in more detail, and outline where they apply within the Caithness study area. Figure 10.3 presents this information on a map of the area. It should be noted that the boundaries depicted on Figure 10.3 do not represent distinct changes in patterns of cumulative effect, but represent zones of gradual transition from one category of potential effect to another.

Areas where receptor sensitivity to potential cumulative effects is a limiting factor to further development

- 10.17 In certain parts of the study area there is heightened landscape and visual sensitivity associated with particular landforms and key views. In these areas, even relatively small levels of cumulative effect may be considered unacceptable. In these areas it is landscape and visual sensitivity, rather than the level of cumulative development, which presents the main limit to further development.
- 10.18 Areas where additional development may give rise to unacceptable cumulative effects due to high landscape and visual sensitivity have been defined as follows:
- The north coast between Dunnet and John O' Groats, including Dunnet Head and Duncansby Head;
 - The area surrounding Thurso, and to the south of Thurso, including Halkirk;
 - Wick and surrounding area, including areas between Noss Head and Ulbster; and
 - The Flow Country between Loch More and Braemore, including parts of the Berriedale coast.
- 10.19 The development of wind turbines in these areas may be out of keeping with landscape character, and/or highly visible to high numbers of sensitive visual receptors. Any proposals for wind energy development in these areas would have to consider landscape and visual sensitivities in detail, and be very carefully sited and designed in response.

Areas where additional development may give rise to the extension of cumulative effects in relation to existing and emerging development patterns

- 10.20 In certain parts of the study area there is potential for cumulative effects to arise as a result of new development conflicting with or interrupting existing patterns of development. New development in these areas may serve to spread cumulative effects into new areas, or may begin to confuse existing patterns of development. In these areas it is the level of cumulative development, rather than underlying landscape and visual sensitivity, which presents the main limit to further development.
- 10.21 Areas where additional development may give rise to the extension of cumulative effects in relation to existing and emerging development patterns have been defined as follows:
- North of the A882, areas generally associated with main road or rail routes and areas of settlement;
 - West of the A9, including areas around Reay, Loch Calder, and Scotscaid and Altnabreac railway stations;
 - Areas between Watten, Achavanich, and Camster, and extending east south of Hill of Oliclett; and
 - The southeast coast, between Newport and Ulbster, including Dunbeath, Latheron and Lybster.
- 10.22 The development of wind turbines in these areas may result in the merging of wind turbine clusters, thus extending the spread of turbines and confusing the image of separate, discrete developments. Any proposals within these areas would have to be very carefully sited and designed to take account of the existing wind farms, and to avoid further cumulative effects on landscape character and views, particularly sequential effects on routes.

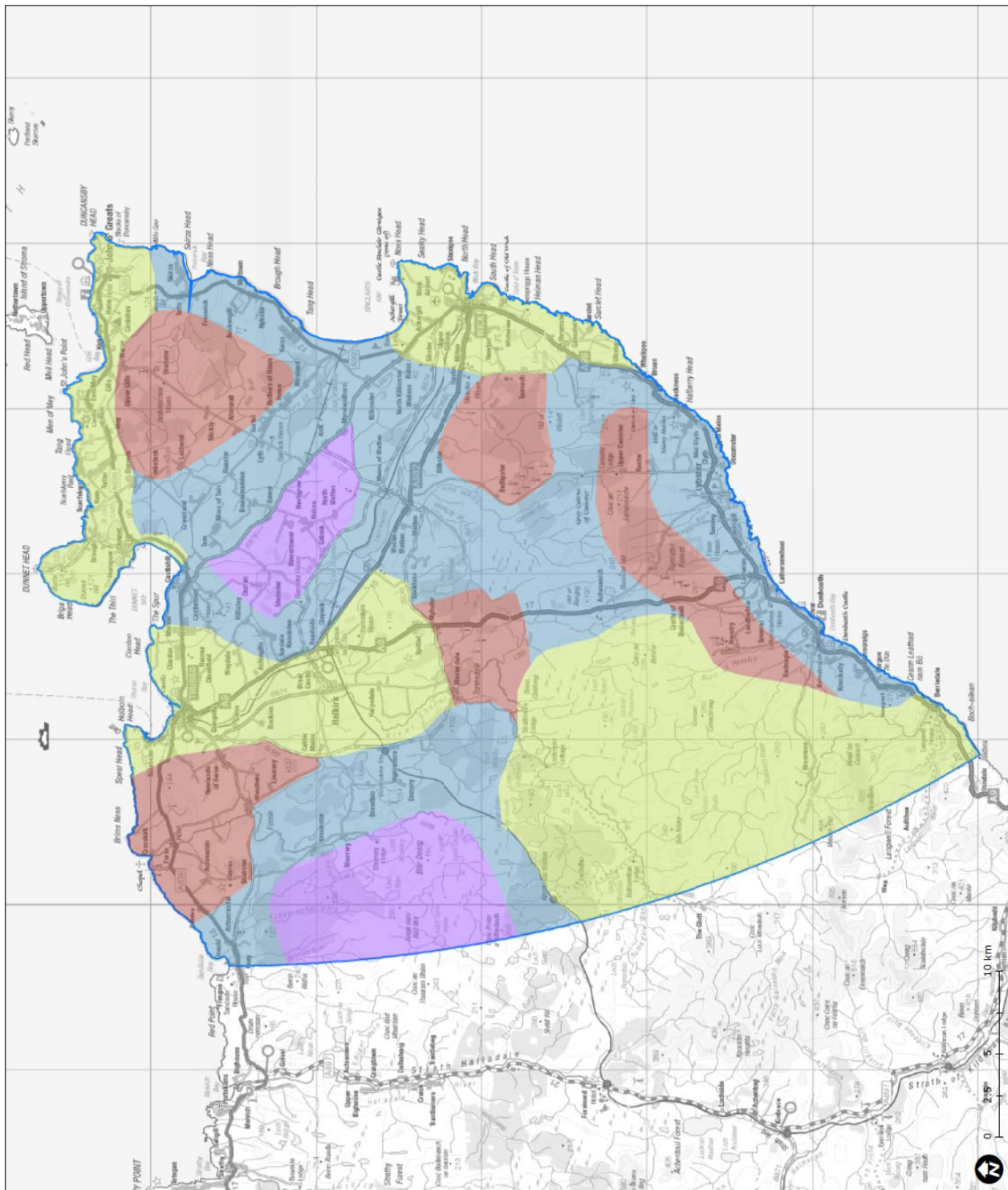
Areas where additional development could be sited with reduced potential for cumulative effects in association with existing development patterns

- 10.23 Opportunities for siting further wind energy development in the study area may occur in relation to the existing development pattern. By focusing development on locations where turbines already exist, the spread of cumulative effects may be limited. In these areas, it may therefore be desirable to accept greater localised cumulative effect, in order to reduce cumulative effect on the wider area.
- 10.24 Areas where additional development could be sited with reduced potential for cumulative effects in association with existing development patterns have been defined as follows:
- Northwest of Thurso, in association with existing turbines at Baillie and Forss, continuing a pattern that associates development with existing large-scale man-made features;
 - Inland areas of the northeast, in association with Stroupster, continuing a pattern that associates development with localised areas of lower sensitivity, such as within areas of coniferous forest;
 - The area surrounding the section of the A9 south of Mybster, associating development with Causeymire, where it is likely to be clearly read as an extension due to the even lie of the topography;
 - South of Bilbster, in association with Achairn, Bilbster, Wathegar and Camster, where additional development is likely to be clearly read as part of this group; and
 - In the southeast of the study area, where there may be opportunities for development within moorland areas set back from, and with limited cumulative effect on the sensitive coastline.
- 10.25 Proposals for wind energy development in these areas will limit cumulative effects only if they are very carefully sited and designed to tie in with the existing pattern of development. New proposals should ideally reflect the existing wind farms in terms of turbine arrangement, form and height. Analysis of key views will be required to demonstrate compatibility with the existing pattern of development.

Areas where cumulative effects could be limited by siting additional development in association with existing patterns of development

- 10.26 Opportunities for siting further wind energy development in the study area may occur in areas which are not associated with emerging clusters of development. In these areas, new proposals could be sited in such a way as to avoid conflict with existing development patterns, but with reduced effects due to separation from other schemes.
- 10.27 Areas where cumulative effects could be limited by siting additional development in association with existing patterns of development have been defined as follows:
- Areas west of Dorrery, including forest south of Dounreay and area around Loch Scye;
 - Area between B874 and B876, south of Castletown.
- 10.28 The siting and design of any proposed wind energy developments in these areas would need to respond primarily to landscape and visual sensitivities of the chosen site and its context, but would also need to carefully consider the potential for cumulative effects.

Please Note: The above headings require to be interchanged – the one at the top of the page should come after 10.25, and vice versa.



The Highland Council Cumulative Landscape and Visual Assessment

Caithness Conclusions

Study Area

Conclusions

- Areas where receptor sensitivity to potential cumulative effects is a limiting factor to further development
- Areas where additional development may give rise to the extension of cumulative effects in relation to existing and emerging development patterns
- Areas where cumulative effects could be limited by siting additional development in association with existing patterns of development
- Areas where additional development could be sited with reduced potential for cumulative effects in association with existing development patterns

Figure 10.3

Map Scale @ A3:1:225,000

