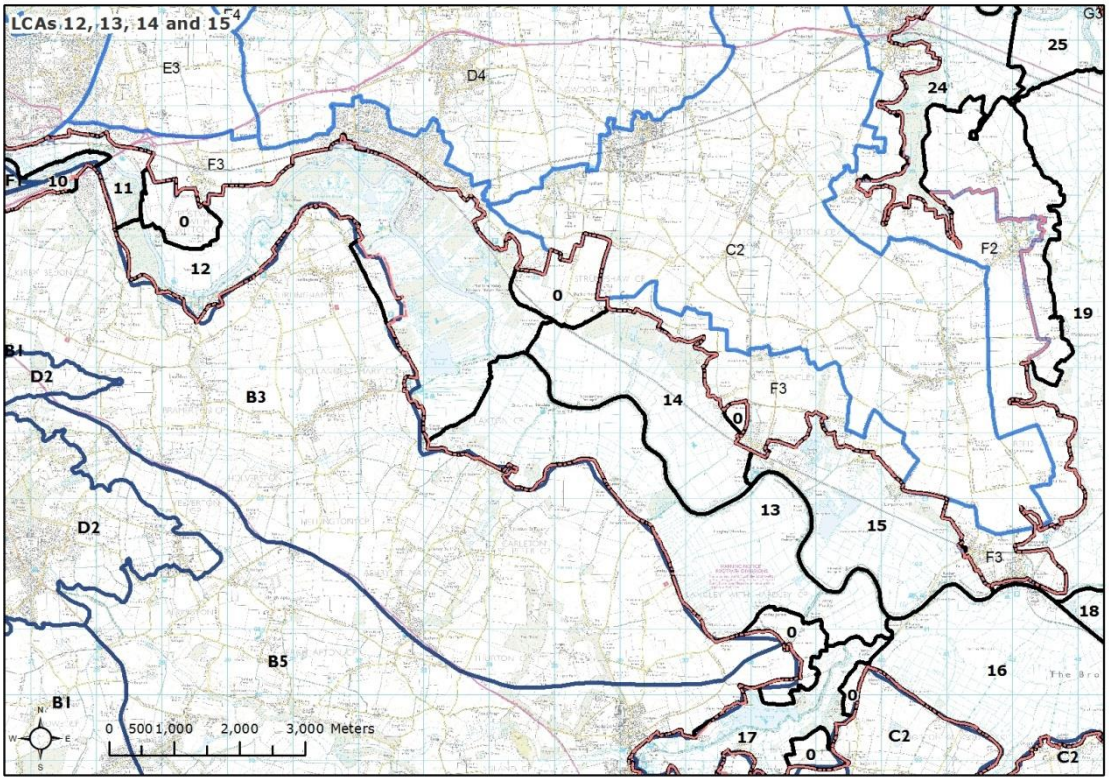
# LCA 12: Yare Valley -Kirby/Postwick to Rockland/Strumpshaw, LCA 13: Yare Valley - Claxton to Hardley Marshes, LCA 14: Yare Valley – Buckenham and Cantley Marshes and Carrs, LCA 15: Yare Valley – Cantley to Reedham

## Location and landscape character context



**Landscape Sensitivity Assessment for Wind Turbines**

| Criteria | Lower sensitivity | ⟷ | Higher sensitivity |
|---|---|---|---|
| **1.Scenic and special qualities** | | | |
| | Special qualities sensitive to wind turbines and which are represented in these areas are as follows – wide open landscapes, big skies and sense of space represented in area 13. This and the associated sense of tranquillity are also represented in area 14 and 15. The habitat diversity in area 12 is indicative of an intricate landscape mosaic which would be sensitive to turbines in terms of scale. All of the special qualities set out above would be vulnerable to the introduction of turbines – high sensitivity. | | |
| **2.Enclosure and scale** | | | |
| | Much of area 12 is of an enclosed, wooded character, although local contrast is created by the wide flat valley floor around Postwick Marsh and Strumpshaw Fen. The sense of enclosure would be sensitive to turbines. Other areas where a more open character persists would have lower sensitivity in these terms e.g. area 13 and 14, although area 13 also has localised enclosure and finer grain landscape scale – Langley Staithe. Some elements create a human scale in the landscape which would be sensitive to turbines by virtue of their size e.g. carr woodlands and seasonal boating/sailing on the river in all areas within this grouping. Within area 15, the sense of enclosure created by valley sides and carr woodlands increases sensitivity to turbines in these terms. Given the above, sensitivity to turbines in terms of enclosure and scale is judged moderate-high. | | |
| **3.Landscape and land cover pattern** | | | |
| | Many of the areas in this grouping exhibit a varied landscape mosaic and landcover pattern which would be sensitive to wind turbines due to the potential effect they would have on the cohesiveness of such landscape patterns. For example, the network of dykes and rectilinear grazing interspersed with carr woodland blocks and fens in area 12, the wetland vegetation and contrast created by carr woodlands in the arable landscape of area 13 and carr woodlands and water bodies in area 14. A more discontinuous and disjointed landscape pattern characterises part of area 15 – industrial uses associated with the Cantley Factory and associated settling basins. These would locally reduce the landscape sensitivity of this area, in these terms, to moderate-high, although it is high for the area group overall, given the above. | | |
| **4.Skylines** | | | |
| | Many of the skylines in these areas are undeveloped and as such would be sensitive to wind turbine development. Exceptions are provided by Brundall Riverside Estate and villages such as Postwick and Surlingham in area 12 and the Cantley Sugar Beet Factory Complex in area 14. This is a prominent skyline element which is intervisible with a number of other character areas including area 13 and 15. Such elements reduce the sensitivity of the skyline to development including wind turbines. The drainage mills and pumps present in a number of these areas would also form sensitive skyline elements. Taken together, these areas have a moderate-high sensitivity to wind turbines in skyline terms. | | |
| **5.Perception and experience of the landscape** | | | |
| | Many parts of the areas which make up this group are of tranquil rural character which would be sensitive to wind turbines. Aspects which would locally reduce sensitivity are transport corridors and communications routes in the western part of area 12 and the Cantley Sugar Beet Factory, the presence of which influences areas 13, 14 and 15. Considering the above, the area group has a moderate-high landscape sensitivity to turbines in perceptual terms. | | |

| | | | | | |
|---|---|---|---|---|---|
| **6.Historic landscape character** | | | | | |
| | Aspects of historic landscape character in these areas which would be sensitive to wind turbine development include the wind pumps/drainage mills and aspects of the historic functional landscape such as the historic staithes in area 13, plus intact areas of rectilinear dyke patterns as in areas 14 and 15. This is due to the effect that wind turbines would have on the coherence of such historic landscape features. | | | | |
| **7.Visual sensitivities and intervisibility with areas outside the Broads** | | | | | |
| | The presence of carr woodlands in a number of these areas would provide visual containment although areas of more open marshes with higher levels of intervisibility would have greater sensitivity to turbines in visual terms, e.g. Postwick Marsh within area 12 and the largely open areas of landscape in area 13 and area 14. Area 15 has strong intervisibility with adjacent areas in South Norfolk District (character area B3 Rockland Tributary Farmland), whilst area 12 is intervisible with parts of the Reedham to Thorpe Marshes Fringe (area F3) within Broadland District, and this would increase sensitivity to turbines in visual terms. Overall, given the level of intervisibility across these areas, sensitivity to turbines in visual terms is judged to be high. | | | | |
| **Discussion on landscape sensitivity** | | | | | |
| | Overall landscape sensitivity of these areas to wind turbine development is judged to be high. This is due to the sensitive special qualities represented in the areas such as sense of tranquillity and the wide open landscape of big skies, together with related aspects such as areas of undeveloped skylines. Other factors important to this sensitivity judgement are the varied landscape and historic landscape patterns, the coherence of which would be vulnerable to turbines, as well as the areas of open landscape which provide greater intervisibility with adjacent areas and therefore potentially increase the influence of wind turbines.<br><br>This judgement also applies to large infrastructure for off shore wind farm schemes, such as pylons. | | | | |

| **Sensitivity to different turbine heights** | **Land within the character areas** | | **Land outside the Executive Area** | |
|---|---|---|---|---|
| | Small (15-20m) | **M-H** | Small (15-20m) | **M-H** |
| | Medium (20-50m) | **H** | Medium (20-50m) | **H** |
| | Large (50-70m) | **H** | Large (50-70m) | **H** |
| | Very large (70m+) | **H** | Very large (70m+) | **H** |

**Commentary:**

Small turbines would relate more closely to existing skyline/scale references such as wind pumps and would be perceptibly less dominating in relation to skylines. However, the larger turbines in the typology would appear to dominate such elements as well as the landscape and historic pattern, hence the highest sensitivity rating.

***Landscapes outside the Executive Area***

Relevant landscape character areas and sensitivities are:

South Norfolk -

B3 Rockland Tributary Farmland: Fieldwork confirmed distant views out over the Yare Valley and into the Broads indicating a greater vulnerability to visual intrusion associated with tall elements.

Broadland District –

F3 Reedham to Thorpe Marshes Fringe: Fieldwork confirmed intervisibility between the valley sides in this area and Broads character area 12.

Turbines at the smallest end of the range (15-20 metres to tip height) would have less effect on landscape character and perceptual aspects within the Broads, due to closer relationship to existing landscape scale elements (i.e. carr woodland). However, fieldwork confirms that intervisibility with the adjacent areas and the expansive views out from the marshes means that larger turbines would appear more dominant in relation to the Broads, resulting in a high landscape sensitivity.

**Commentary on different cluster sizes**

***Single turbine***
***Small clusters (<5 turbines)***
***Medium (6-10)***
***Large (11-25)***
***Very large (>26)***

| **Land within the character areas** | | **Land outside the Executive Area** | |
|---|---|---|---|
| Single turbine | **M-H** | Single turbine | **M-H** |
| <5 turbines | **H** | <5 turbines | **H** |
| 6-10 turbines | **H** | 6-10 turbines | **H** |
| 11-25 turbines | **H** | 11-25 turbines | **H** |
| >26 turbines | **H** | >26 turbines | **H** |

**Commentary:**

Single turbines would respond more closely to existing skyline elements such as wind pumps, although larger groups of turbines would create visual clutter in relation to open landscapes and simple skylines of these areas, hence the highest sensitivity rating.

***Landscapes outside the Executive Area***

Relevant landscape character areas and sensitivities are:

South Norfolk -

| | |
|---|---|
| | B3 Rockland Tributary Farmland: Fieldwork confirmed distant views out over the Yare Valley and into the Broads indicating a greater vulnerability to visual intrusion associated with tall elements.<br><br>Broadland District –<br><br>F3 Reedham to Thorpe Marshes Fringe: Fieldwork confirmed intervisibility between the valley sides in this area and Broads character area 12.<br><br>Fieldwork confirms that the degree of intervisibility with adjacent areas as they overlook the Broads means that multiple turbine clusters could be more dominant in relation to skyline character and intervisibility, resulting in a high landscape sensitivity. Single turbines would however have less effect on landscape character and perceptual aspects within the Broads, due to closer relationship to existing landscape scale elements (i.e. carr woodland). |