



Copeland Wind Energy Technical Document

Copeland Borough Council

September 2020

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1. Introduction

- 1.1 The purpose of this paper is to address policy and guidance included within the National Planning Policy Framework and Planning Practice Guidance which states that Local Planning Authorities are required to identify an area suitable for wind energy development within the development plan.
- 1.2 It is recognised that the planning system has an important role to play in mitigating the effects of climate change and in ensuring new developments minimise carbon emissions. The Local Plan is particularly important as it will provide the policy framework within which planning decisions are made; part of the development of the Local Plan is the national requirement to identify an area suitable for wind energy development.
- 1.3 This paper has been prepared to support Policy CC3PO of the Copeland Borough Council Local Plan (2017-2035), with a specific focus on how the area suitable for wind energy has been identified. It uses evidence base documents to provide a high level assessment of the planning and environmental considerations that could affect areas within Copeland to accommodate wind energy development.
- 1.4 The UK has a requirement to produce 15% of its energy from renewable energy sources by 2020¹. In 2019, it was recorded that 12.3% of the total energy consumption came from renewable energy sources².
- 1.5 Nationally in 2019, there was a continued switch from coal (-29%) to renewables (+10%), although there was a slight increase in the generation of gas (+0.3%)³. The UK produced 37.1% of its electricity from renewable sources; generation from onshore and offshore wind increased by 6.5% and 20% respectively⁴.
- 1.6 Locally, there has been a long standing commitment to reducing carbon emissions within Copeland.
- 1.7 In 2008, the Council made a commitment to reduce its own carbon emissions in line with the Climate Change Act and the Cumbria Strategic Partnership's Climate Change Commitment. The Council also signed up to the Nottingham Declaration in 2009 which was a voluntary pledge to address the causes and effects of climate change within the Borough.

¹ European Directive 2009/28/EC

² Paragraph 6.51 of the Digest of UK Energy Statistics 2020
(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/905060/DUKES_2020_MASTER.pdf)

³ Page 11 of the Digest of UK Energy Statistic 2020
(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/905060/DUKES_2020_MASTER.pdf)

⁴ Digest of UK Energy Statistic 2020 – summary
(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904545/DUKES_2020_Press_Note_.pdf)

- 1.8 More recently, in April 2019 all Cumbrian local authorities and the Lake District National Park Authority formally adopted the Cumbria Joint Public Health Strategy incorporating a pledge for Cumbria to become a carbon neutral county and to mitigate the likely impact of existing climate change.
- 1.9 The Council has further committed to reducing carbon by introducing a Carbon Reduction Target of 5% between 2017 and 2020 through its Environmental Policy. This Policy commits the Council to identify and consider the environmental impacts of its day to day activities and decision making as it recognises that “the move to a low carbon economy is the right thing to do”⁵.

⁵ Copeland Borough Council's Environmental Policy
(https://copeland.moderngov.co.uk/documents/s4173/Environmental%20Policy%20FINAL-V.02_%20March%202017.pdf)

2. Background

- 2.1 Copeland has a wind resource that has attracted developers who wanted to construct and operate wind turbines.
- 2.2 Table 1 shows the development of the production of renewable electricity in Copeland between 2014 and 2018. Please note that this information is for the whole of the Copeland district, including data from the Lake District National Park as it has not been possible to separate the statistics. This shows that the total number of sites producing renewable energy increased by 266 within this five year period, with the majority of the increase coming from photovoltaic sites (95.9%). Whilst there has been an increase of sites producing wind energy, the number has remained static since December 2016. Despite the fact that the increase in wind energy sites has been much lower than the increase in photovoltaic sites, the majority of the increase in capacity has come from wind energy sites (65.2%).
- 2.3 As of December 2018, Government data shows that there were 1,009 sites in Copeland producing renewable electricity; these sites produced 62,315MWh (approximately 7.11MW) from a potential installed capacity of 29.8MW.

Table 1: Levels of Renewable Energy in Copeland between 2014 and 2018

	Photovoltaics	Onshore Wind	Hydro	Anaerobic Digestion	Landfill Gas		Totals
Number of sites							
December 2014	702	35	4	1	1		743 sites
December 2015	868	41	5	1	1		916 sites
December 2016	891	44	6	1	1		943 sites
December 2017	930	44	6	1	1		982 sites
December 2018	957	44	6	1	1		1009 sites
Capacity							
December 2014	2.8	20.8	0.6	0.3	1.9		26.289MW
December 2015	3.4	22.3	0.7	0.3	1.9		28.558MW
December 2016	3.6	23.0	0.7	0.3	1.9		29.45MW
December 2017	3.8	23.0	0.7	0.3	1.9		29.595MW
December 2018	3.9	23.0	0.7	0.3	1.9		29.694MW
Generation							
December 2014	2,349	49,746	1,595	937	7,650		62,276.71MWh
December 2015	2,805	61,190	1,782	1,380	6,170		73,326.222MWh
December 2016	3,201	52,086	1,781	1,383	4,815		63,266.928MWh
December 2017	3,320	56,763	2,119	1,378	3,524		67,104.368MWh
December 2018	3,746	52,781	1,958	1,376	2,454		62,314.776MWh

(Source: <https://www.gov.uk/government/statistics/regional-renewable-statistics> September 2019)

- 2.4 A review of planning applications for wind turbines which were determined between the period of 1st April 2011 and 31st March 2020 has been undertaken (see Appendix 1). Although it should be noted that within this period, the most recent planning application determined was in September 2015; this reflects the significant reduction in demand for wind turbines following the withdrawal of national subsidies for wind energy.

- 2.5 Overall, there were 57 planning applications received for determination by Copeland Borough Council, with one consultation received on an application determined by Cumbria County Council. Of the 57 applications, 26 (45.6%) were approved, with three (5.3%) allowed at appeal. 24 (42.1%) were refused, with four (7%) withdrawn.
- 2.6 Assessing all the applications made within the Copeland borough (including the application determined by Cumbria County Council), 58 applications were made for a total of 79 turbines, with an average tip height of 59.1m and an average power output of 412.6kW per turbine.
- 2.7 The majority of the applications were for outputs of less than 99kW; only four applications had a total power output larger than 1MW:
- 0-99kW total power – 31 applications (53.4%)
 - 101-499kW total power – 8 applications (13.8%)
 - 500-999kW total power – 15 applications (25.9%)
 - 1MW and over total power – 4 applications (6.9%)
- 2.8 In terms of tip height, the majority of the 58 applications were for small scale (63.8%), with only 5.2% of applications for large scale⁶:
- Small scale (up to 50m) – 37 applications (63.8%)
 - Medium scale (51m-100m) – 18 applications (31%)
 - Large scale (101m and over) – 3 applications (5.2%)
- 2.9 There were a total of 35 turbines approved (either by the Council or at appeal) from 29 applications. These 35 turbines had an average tip height of 45.8m and an average power output of 640.9kW.

⁶ Definitions of small, medium and large scale taken from paragraph 1.3.5 of the Cumulative Impacts of Vertical Infrastructure Study (<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/42089105056.PDF>)

3. Policy Context

- 3.1 This section summarises planning policy and guidance which is applicable to planning for onshore wind energy.

National Planning Policy Framework (2019)

- 3.2 The National Planning Policy Framework sets out the Government's planning policies and identifies how these should be used as a framework when preparing Local Plans.
- 3.3 It identifies that the planning system "should support the transition to a low carbon future", including through the support of "renewable and low carbon energy and associated infrastructure"⁷. To help increase the use and supply of renewable and low carbon energy, Local Plans should consider identifying suitable areas for renewable and low carbon energy sources⁸.
- 3.4 Footnote 49 of the National Planning Policy Framework incorporates the provisions of the 2015 Written Ministerial Statement⁹ which states that planning applications for new wind turbines (i.e. not repowering schemes) should not be considered acceptable unless the application site lies within an area identified as suitable for wind energy development within a development plan (local plans and/or neighbourhood plans). Whilst repowering schemes are not required to be in an area which is identified as suitable for wind energy development, they will be subject to a full assessment against local and national policies.
- 3.5 Applicants are also required to demonstrate that any planning impacts identified by the affected local community have been fully addressed. In addition, the proposal should also have the backing of the affected local community.

Planning Practice Guidance

- 3.6 The Planning Practice Guidance provides guidance which supports the National Planning Policy Framework. The Planning Practice Guidance for Renewable and Low Carbon Energy¹⁰ identifies that the planning system has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable. It re-iterates that a planning application for a wind energy development should not be approved unless there is an identified suitable area in either a Local Plan or a Neighbourhood Plan.

⁷ Paragraph 148 of the National Planning Policy Framework

⁸ Paragraph 151(b) of the National Planning Policy Framework

⁹ Written Ministerial Statement of 18th June 2015 - <https://www.parliament.uk/documents/commons-vote-office/June%202015/18%20June/1-DCLG-Planning.pdf>

¹⁰ Renewable and Low Carbon Energy Planning Practice Guidance - <https://www.gov.uk/guidance/renewable-and-low-carbon-energy>

- 3.7 The Guidance acknowledges that there are no set criteria for how to identify areas suitable for wind energy development but however the area is identified, the views of the local communities should be listened to. The area proposed by the Council will be subject to public consultation during the Preferred Options consultation of the Local Plan (2017-2035).
- 3.8 Local Planning Authorities will need to take into account the requirements of the technology and, critically, the potential impacts on the local environment, including from cumulative impacts.
- 3.9 When identifying an area through the Local Plan, and determining planning applications for wind turbines, the local planning authority should consider the following:
- the need for renewable or low carbon energy does not override environmental protections;
 - cumulative impacts require particular attention, especially the increasing impact wind turbines can have on landscape and local amenity;
 - local topography;
 - heritage assets and their setting;
 - proposals in National Park and Areas of Outstanding Natural Beauty, and in areas close to them where there could be an adverse impact on the protected area, will need careful consideration;
 - the protection of local amenity is an important consideration which should be given appropriate weight in planning decisions.
- 3.10 In terms of the use of buffer zones and separation distances, local planning authorities should not make them so inflexible as to rule out otherwise acceptable renewable energy developments (unless set back distances are used for safety purposes).

Cumbria Wind Energy Supplementary Planning Document

- 3.11 A number of planning authorities in Cumbria jointly produced the Cumbria Wind Energy Supplementary Planning Document in 2007; this was adopted by Copeland Borough Council in January 2008.
- 3.12 This guidance was developed to support the development and implementation of renewable energy policies in planning policy documents and provide consistent guidance for wind energy development within Cumbria. The document consists of two parts; Part 1 provides general planning guidance for wind energy schemes covering a range of factors including: biodiversity; highways; landscape; visual impact; and cumulative effects. Part 2 provides specific guidance on landscape and visual issues and an assessment of the landscape capacity for each of the main landscape types in Cumbria.

Copeland Borough Council Local Plan

- 3.13 Copeland Borough Council is currently preparing a new Local Plan for the Borough (for areas outside of the Lake District National Park). The Local Plan will contain planning policies which will be used in the determination of planning applications, as well as providing strategic guidance on the scale and distribution of development. The Local Plan will also allocate sites for specific development uses (e.g. housing, retail and employment). This Local Plan will cover the period 2017-2035 and, once adopted, will replace the current Copeland Local Plan 2013-2028 Core Strategy and Development Management Policies and any saved policies from the 2001-2016 Local Plan.
- 3.14 The Issues and Options consultation for the new Local Plan was released in November 2019. Question CC4 of the consultation asked respondents 'Which parts of the borough should be excluded when identifying land as Suitable Areas for Wind Energy development?' Respondents were provided with 12 options and could choose as many options as they wanted; Table 2 summarises the responses.

Table 2: Responses to Question CC4 of the Copeland Issues and Options Paper, November 2019

Option		Number of responses	Option		Number of responses
1	All Natura 2000 Sites and 250m buffer	8	7	Landscapes sensitive to change as informed by the Council's Landscape Assessment and the County Council LCA	8
2	Sites of Special Scientific Interest and 250m buffer	10	8	Nationally important nature conservation sites	8
3	All Conservation Areas and sites containing listed buildings or scheduled ancient monuments	10	9	Areas of land less than 0.5 hectares	6
4	Local Geological Sites	9	10	High pressured gas pipelines	8
5	All built up areas including proposed allocations	8	11	Areas where evidence shows there is no wind capacity	6
6	A specific buffer around all built up areas including proposed allocations	8	12	Other option, please state	See below

- 3.15 For Option 12, comments were received that the St. Bees and Whitehaven Heritage Coast and the setting of the Lake District National Park and World Heritage sites should be excluded, with all having buffers identified too.

4. Options Considered

- 4.1 Following the release of the Ministerial Statement, there are three options which the Council can explore in response to its requirements:
- Option 1 – do nothing.
 - Option 2 – identify the whole borough (excluding the Lake District National Park) as an area suitable for wind energy development.
 - Option 3 – identify the whole borough (excluding the Lake District National Park) as suitable for all types of wind energy development, with the exclusion of some sensitive areas.
- 4.2 The decision not to include an area suitable for wind energy within the Policies Map of the Local Plan (Option 1) would be inconsistent with the National Planning Policy Framework; therefore this option has not been taken forward as it would raise soundness issues.
- 4.3 To identify the whole borough (excluding the Lake District National Park) as suitable for wind energy development (Option 2) would satisfy the requirements of the National Planning Policy Framework insofar as the Local Plan would include an area. No sites were put forward for consideration for wind energy developments in the Call for Sites process; therefore, it is assumed that there is no demand for site specific allocations for this land use. As the whole borough would be identified as 'suitable', the Council would continue to use adopted planning policies to determine planning applications for wind development.
- 4.4 Copeland contains areas which are high value in terms of ecology, landscape and the environment. Therefore it is considered that the most suitable choice is to identify the whole borough (with the exception of the Lake District National Park) as suitable for wind energy development, but to also identify areas which are considered to be sensitive to this type of development (Option 3); these identified areas would be subject to restrictions on the scale of wind development. It is considered that this is the most flexible approach as it will provide an opportunity within the borough for appropriate wind energy development whilst providing protection for sensitive landscapes.

5. Assessment of evidence base documents

- 5.1 In order to identify the areas which could be classified as 'sensitive', an assessment has been undertaken utilising existing evidence base documents. These documents will assess the technical capacity within Copeland's landscape to accommodate wind energy, as well as assessing the sensitivity of the landscape and the environment to such development.

Technical Capacity

Potential wind capacity

- 5.2 In 2011, the Cumbria Renewable Energy Capacity and Deployment Study was produced; this technical study was designed to support the development of appropriate and robust renewable energy planning policies. The Study provides an assessment of the amount of resources available that could be used to generate renewable energy up to 2030, identifying the overall potential technical capacity within Cumbria.
- 5.3 Table 5.4¹¹ within the Study shows that Cumbria has an onshore wind resource of 2,885.6MW until 2030; 5.4% of this (154.5MW) lies within Copeland. Of the 154.5MW, 2.1MW is small scale onshore wind, with 152.4MW being large scale onshore wind.
- 5.4 The Study then identified landscape constraints which could limit the potential for commercial wind farm development for the large scale onshore wind capacity. Table 3 shows that by taking these constraints into account, the initial potential capacity within Copeland reduces from 152.4MW to 81.8MW, a reduction of 46.3%.

Table 3: Potential Wind Capacity in Copeland

	Large (MW) (125m to blade tip)	Medium (MW) (90m to blade tip)	Small (MW) (65m to blade tip)	Total (MW)
Initial potential capacity	86.6	6	59.8	152.4
Potential capacity taking into account landscape constraints	35.6	4	42.3	81.8
Reduction in capacity once landscape constraints are considered	-51MW (-58.9%)	-2MW (-33.3%)	-17.5MW (-29.3%)	-70.6MW (-46.3%)

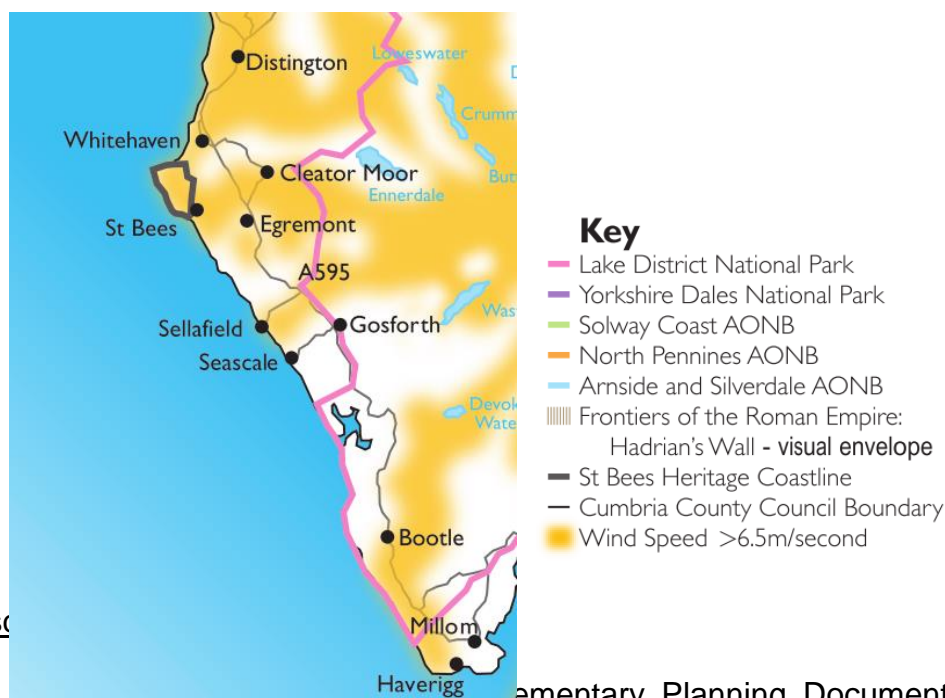
Source: Tables 5-9, 5-10 and 5-11 of the Cumbria Renewable Energy Capacity and Deployment Study

¹¹ Page 51 of the Cumbria Renewable Energy Capacity and Deployment Study
(<https://www.copeland.gov.uk/sites/default/files/attachments/cumbrenewencapanddeploystudy11.pdf>)

Wind speeds

- 5.5 6.5 metres per second is the speed considered suitable for wind energy development (although it is recognised that some turbines can operate at lower wind speeds)¹². The Cumbria Wind Energy Supplementary Planning Document (SPD) identifies that generally in Cumbria the wind resource is the greatest on west facing upland sites and along the coast.
- 5.6 The SPD identifies that many of the windiest parts of Cumbria actually fall within national landscape designations; Figure 1 shows the areas of wind speed greater than 6.5 metres per second in Copeland¹³.
- 5.7 This shows that along the coastline between Workington and St. Bees there are wind speeds which average more than 6.5 metres per second. There are lower wind speeds south of St. Bees, although speeds do increase around Sellafield. In the south of the borough, there is a higher wind speed resource to the west of Haverigg. Inland, there are higher wind speeds around Distington, Whitehaven, Cleator Moor and Egremont.

*Figure 1: Areas of Wind Speed
Greater than 6.5 metres per
second in Copeland*



Landscape

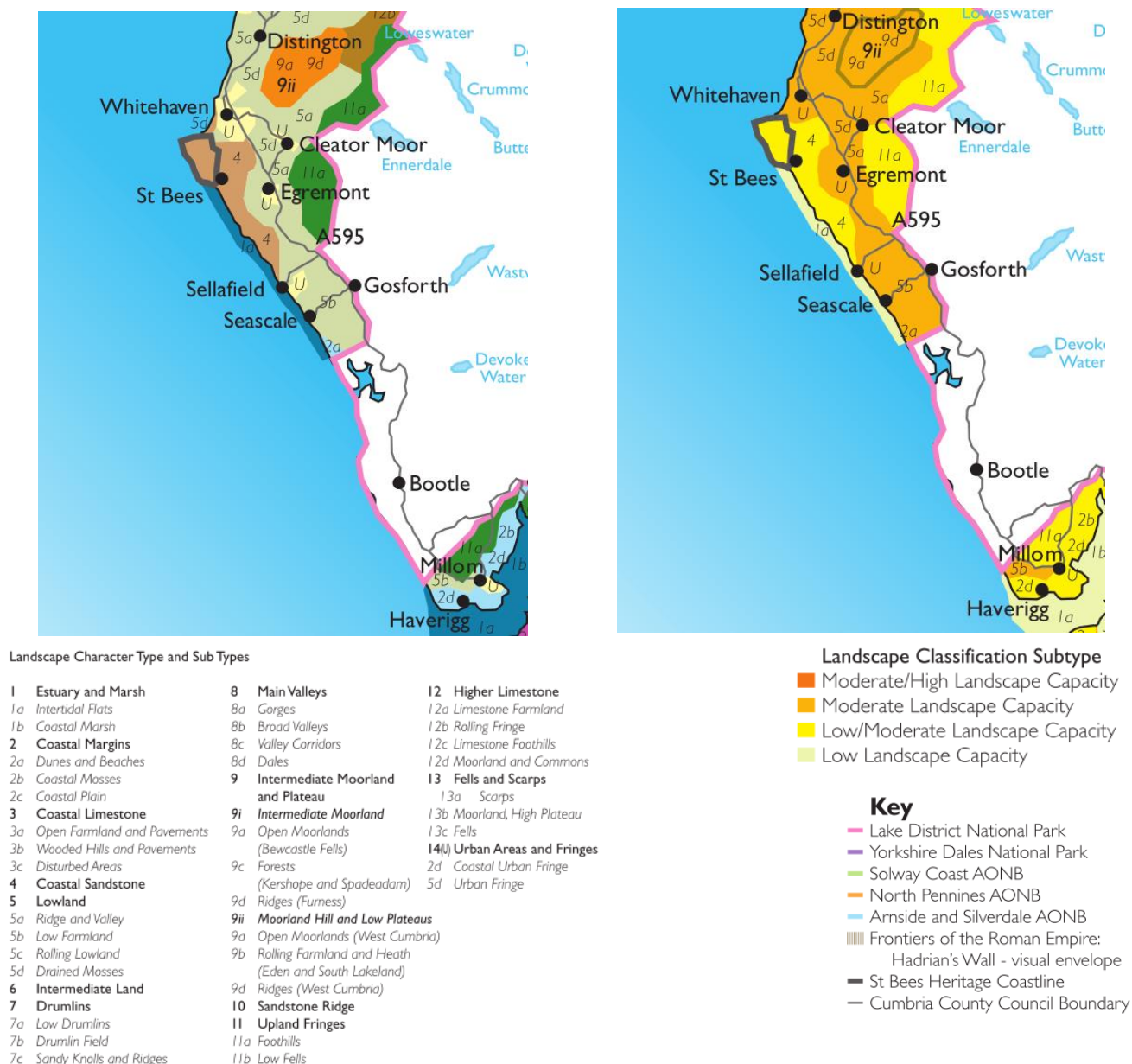
- 5.8 The Cumbria Wind Energy Supplementary Planning Document includes a number of maps, including one which displays the landscape character

¹² Paragraph 1.26 of the Cumbria Wind Energy Supplementary Planning Document (<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/39435124412.PDF>)

¹³ Excerpt taken from Map 1 of the Cumbria Wind Energy Supplementary Planning Document

classification across Cumbria (see Figure 2)¹⁴ and another map which identifies the landscapes capacity for wind energy development (see Figure 3)¹⁵.

Figure 2: Landscape Character Classification **Figure 3: Landscape Capacity for Wind Energy Development**



5.9 Table 4 summarises the landscape types within Copeland in relation to their overall sensitivity to development and their capacity for wind energy

¹⁴ Map 7 of the Cumbria Wind Energy SPD
(<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/39435141628.PDF>)

¹⁵ Map 8 of the Cumbria Wind Energy SPD
(<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/39435141836.PDF>)

development¹⁶; Appendix 3 contains the full details of each landscape type. This summary shows that there are no landscape areas within Copeland which have low sensitivity, or high capacity for wind energy development.

Table 4: Landscape Characteristics and their overall sensitivity and capacity for wind energy development

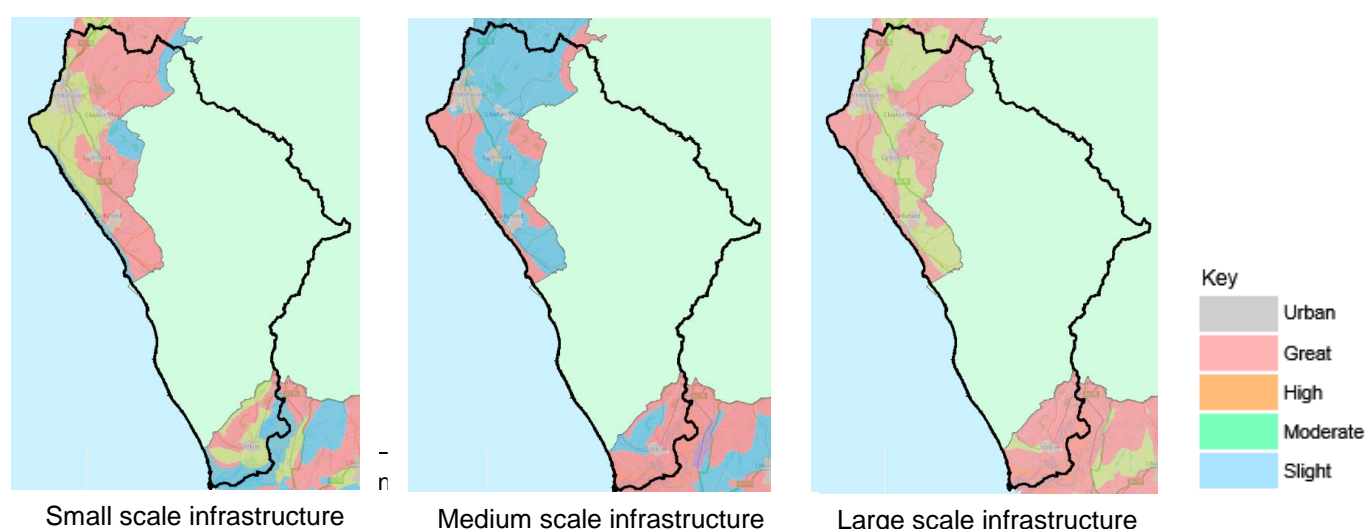
Landscape Type	Overall Sensitivity	Capacity
1 – Estuary and Marsh	Moderate/High	Low
2 – Coastal and Margins	Moderate/High	Low/Moderate
4 – Coastal Sandstone	Moderate/High	Low/Moderate
5 – Lowland	Moderate	Moderate
9ii – Moorland Hills and Low Plateaus	Moderate	Moderate
11 – Upland Fringes	Moderate	Low/Moderate
12 – Higher Limestone	Moderate/High	Low/Moderate

Cumulative Impacts

5.10 In October 2014, the ‘Cumulative Impact and Vertical Infrastructure Study’ was released. This Study assessed the impact of all vertical energy and communications infrastructure over 15m across Cumbria. The Study assessed how developments introducing vertical elements into the landscape would result in cumulative effects on landscape character and visual amenity. It assessed the impacts of different scales of infrastructure: small scale (15m-50m), medium scale (51m-100m) and large scale (101m and over).

5.11 Figure 4 shows the sensitivity of landscape areas to vertical infrastructure installations¹⁷, whilst Figure 5¹⁸ shows the significance of landscape effects to different scales of vertical infrastructure.

Figure 4: Sensitivity of landscapes to different scales of vertical infrastructure

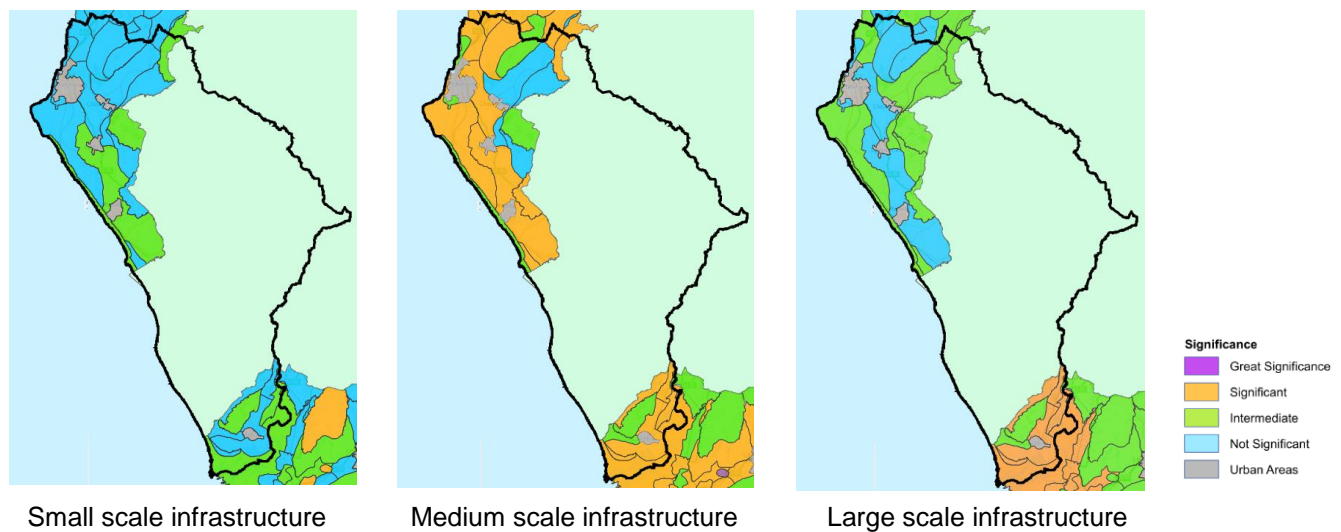


(<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/420901435.PDF>)

¹⁸ Maps SIG.01, SIG.02 and SIG.03 of the Cumulative Impact and Vertical Infrastructure Study

(<https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/4209014655.PDF>)

Figure 5: Significance of landscape effects to different scales of vertical infrastructure



Summary of findings

- 5.12 Using the evidence, it is considered the most appropriate method of identifying the landscape areas which would benefit from extra protection from wind energy development is to use the capacity assessment (see Table 4). This capacity assessment considers sensitivity to development, landscape values, international and national designations and, where applicable, other interests such as historical, ecological, cultural and geological.
- 5.13 Therefore, Landscape Types 1, 2, 4, 11 and 12 have been identified as having low or low-moderate capacity to accommodate turbine development (see Figure 6). These landscape types are particularly sensitive to the development of small scale infrastructure and, for some types, there would be intermediate significant effects if small scale infrastructure was constructed within these areas.

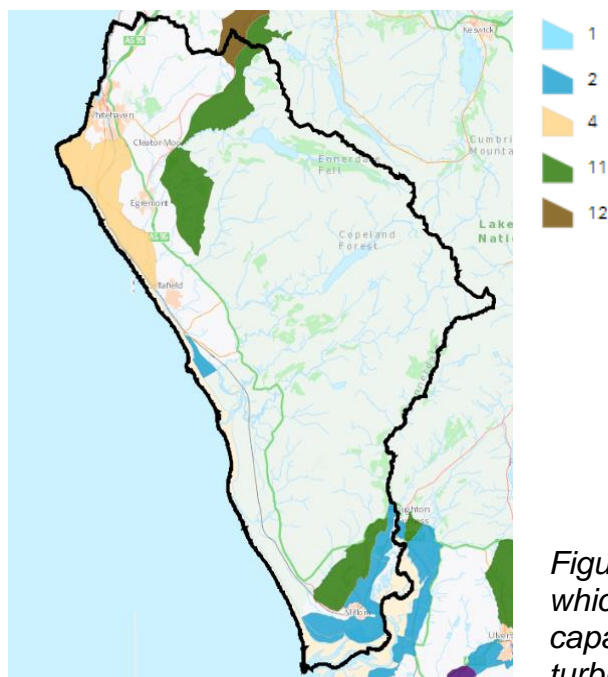


Figure 6: Landscapes types which have low or low-moderate capacity to accommodate turbine development

6. Identifying constraints

- 6.1 Chapter 5 assessed the current evidence base to identify capacity and landscape constraints for wind energy development. It identified which landscape types were particularly susceptible to the effects wind energy development within the borough using capacity, landscape sensitivities and cumulative impacts.
- 6.2 This chapter will look at identifying constraints within the borough which may be more sensitive to wind energy development.
- 6.3 The Issues and Options paper for the Local Plan (2017-2035) was released for consultation in November 2019. Within this, there was a question about which constraints should be used to identify a suitable area for wind energy development, with a list provided of potential constraints. From this list, and the responses received to the consultation, three constraint options were considered (see Table 5).

Table 5: Constraints Considered

Constraints Option 1	Constraints Option 2	Constraints Option 3
World Heritage Sites plus a buffer	World Heritage Sites plus a buffer	World Heritage Sites plus a buffer
St. Bees Head Heritage Coast	St. Bees Head Heritage Coast	St. Bees Head Heritage Coast
	All Natura 2000 Sites (SPA's and SAC's)	All Natura 2000 Sites (SPA's and SAC's)
	Sites of Special Scientific Interest	Sites of Special Scientific Interest
	All Conservation Areas and sites containing listed buildings or scheduled ancient monuments	All Conservation Areas and sites containing listed buildings or scheduled ancient monuments
	Nationally important nature conservation sites	Nationally important nature conservation sites
	Local Geological Sites	Local Geological Sites
		Landscapes sensitive to change (as identified in Chapter 5)
		High pressured gas pipelines (plus 135m buffer for safety purposes)
		Green Wedges

- 6.4 Option 3 was taken forward as it was considered to be the approach which best reflected international, national and local designations and considerations.

6.5 In order to provide flexibility, not all of the constraints considered when assessing the suitability of a wind energy development have been mapped; when determining planning applications, the Council will look at the Local Plan as a whole, and other policies will be used in conjunction with the identified Suitable Area. Examples of issues which will be assessed through the planning application process could include the following (please note that this is a non-exhaustive list and other appropriate constraints will be considered):

- | | | |
|------------------|------------------------------|---------------------------|
| • Noise | • Overhead electricity lines | • Registered Battlefields |
| • Shadow flicker | • Local wildlife sites | • Bodies of water |
| • Visual amenity | • Historic parks and gardens | • Aviation flight paths |
| • Railways | • Impact Risk Zones | |
| • Roads | | |
| • PROWs | | |

6.6 When planning applications are determined, the Council will liaise with relevant external consultees such as Cumbria County Council, Ministry of Defence, OFCOM and National Grid with regards to issues such as impact on the strategic road network, electromagnetic transmissions (e.g. radio and television signals) and overhead lines. Developers will also be expected to liaise with such organisations when developing their scheme to ensure issues are addressed prior to the submission of a planning application. When determining planning applications, the Council will undertake the required public consultation so that members of the public can submit their comments.

6.7 Some of the constraints included within the Issues and Options paper were removed; the reasoning for this is set out below.

6.8 The Council originally considered adding a 250m buffer to all Natura 2000 Sites (SPA's and SAC's) and Sites of Special Scientific Interest. However, the Council has decided not to add a buffer to these designations; the buffer was to be used to reflect Impact Risk Zones, a GIS tool used by Natural England to make a rapid assessment of the potential risks posed by development proposals to certain designations. As each designated site has a different zone, and Natural England must be consulted each time a planning application falls within one of these zones, it was decided not to map the buffer as a constraint, instead leaving it as a matter for consideration when planning applications are determined.

6.9 The Issues and Options paper included an option which suggested that the identified Suitable Area could exclude areas where evidence shows there is no wind capacity. It was decided not to map this evidence as a constraint as it is considered that this is a technical consideration which would be assessed by developers when choosing a site.

- 6.10 Another option included in the Issues and Option consultation was to exclude areas of land less than 0.5 hectares from the identified suitable area. This has not been taken forward as it was considered that this may prevent suitable small scale development which may otherwise have no or little adverse impact.
- 6.11 Option 6 of Question CC4 in the Issues and Options paper questioned if there should be a buffer placed around all built up areas, including proposed allocations. A buffer for this has not been included within the constraint mapping as it is considered that potential impacts of a proposed wind energy development upon a settlement would be better assessed through a planning application.
- 6.12 Green Wedges have been included as a constraint because the purpose of them is to preserve the open character of limited gaps between settlements and to prevent development eroding this. Seven Green Wedges have been identified as key within the borough as part of the Copeland Settlement Landscape Character Assessment 2020.
- 6.13 Some responses to the Issues and Options paper requested that the St. Bees and Whitehaven Heritage Coast should also be included as a constraint; as the proposed change to extend the existing St. Bees Head Heritage Coast boundary to Whitehaven¹⁹ has yet to be agreed by Natural England, it is considered that it cannot be identified as a formal constraint. However, should the boundary extension be formally agreed, then this will be a material planning consideration when determining planning applications.
- 6.14 The Council received requests to exclude the area of the borough which has been submitted as part of a proposal to extend the Lake District National Park at its southern boundary²⁰; in Copeland, this would affect the Millom Without parish. A formal request for this extension was submitted by Friends of the Lake District to Natural England for consideration in June 2019. Given that there has been no formal response by Natural England to this proposal, the Council does not consider that excluding the proposed extension area on this basis is sufficient justification. However, it should be noted that the majority of the proposed extension area fall within Landscape Area types 2 and 11, which were identified in Chapter 5 as having ‘low-moderate’ capacity for wind energy development.

¹⁹ <https://colourfulcoast.org.uk/about/heritage-coast-extension/>

²⁰ Friends of the Lake District – Southern Boundary Extension proposals
(<https://www.friendsofthelakedistrict.org.uk/southern-boundary-extension>)

7. Identification of Preferred Option

- 7.1 As outlined in Chapter 4, the Council identified Option 3 as the preferred option in determining how a suitable area for wind development should be identified. Option 3 sought to identify the whole borough (excluding the Lake District National Park) as suitable for wind energy, with the exclusion of some sensitive areas.
- 7.2 The evidence has shown that there are areas within Copeland which would be particularly sensitive to the installation of wind turbines. Chapter 5 identified that Landscape Character Types 1, 2, 4, 11 and 12 would benefit from extra protection from wind energy development. In addition, there are a number of constraints (see Chapter 6) which have been identified as sensitive which the Council will afford extra protection to from wind energy development.
- 7.3 These areas and constraints which have been identified as having higher sensitivity will be excluded from the area identified as suitable for wind energy development in Copeland in terms of medium and large scale structures. However, rather than prohibiting all types of wind energy development in these areas, the Council intends to identify these areas as suitable for appropriate small scale wind development (see Figure 7).
- 7.4 It is important to note that if a site falls within an area identified as 'suitable', it does not mean that planning applications within this site for wind energy development will be automatically granted permission. All applications will be considered against all adopted Local Plan policies, as well as national planning policy and guidance. Should there be issues/constraints which cannot be satisfactorily addressed, then permission will be refused.
- 7.5 Whilst there are currently no adopted Neighbourhood Plans in Copeland, should communities bring forward proposals to create such plans, they may seek to amend the areas identified as suitable for wind energy development within the designated Neighbourhood Area.
- 7.6 Overall, it is considered that this approach is the most positive and flexible, in line with national planning policy, whilst protecting Copeland's valuable landscape, heritage, ecological, geological and environmental assets.

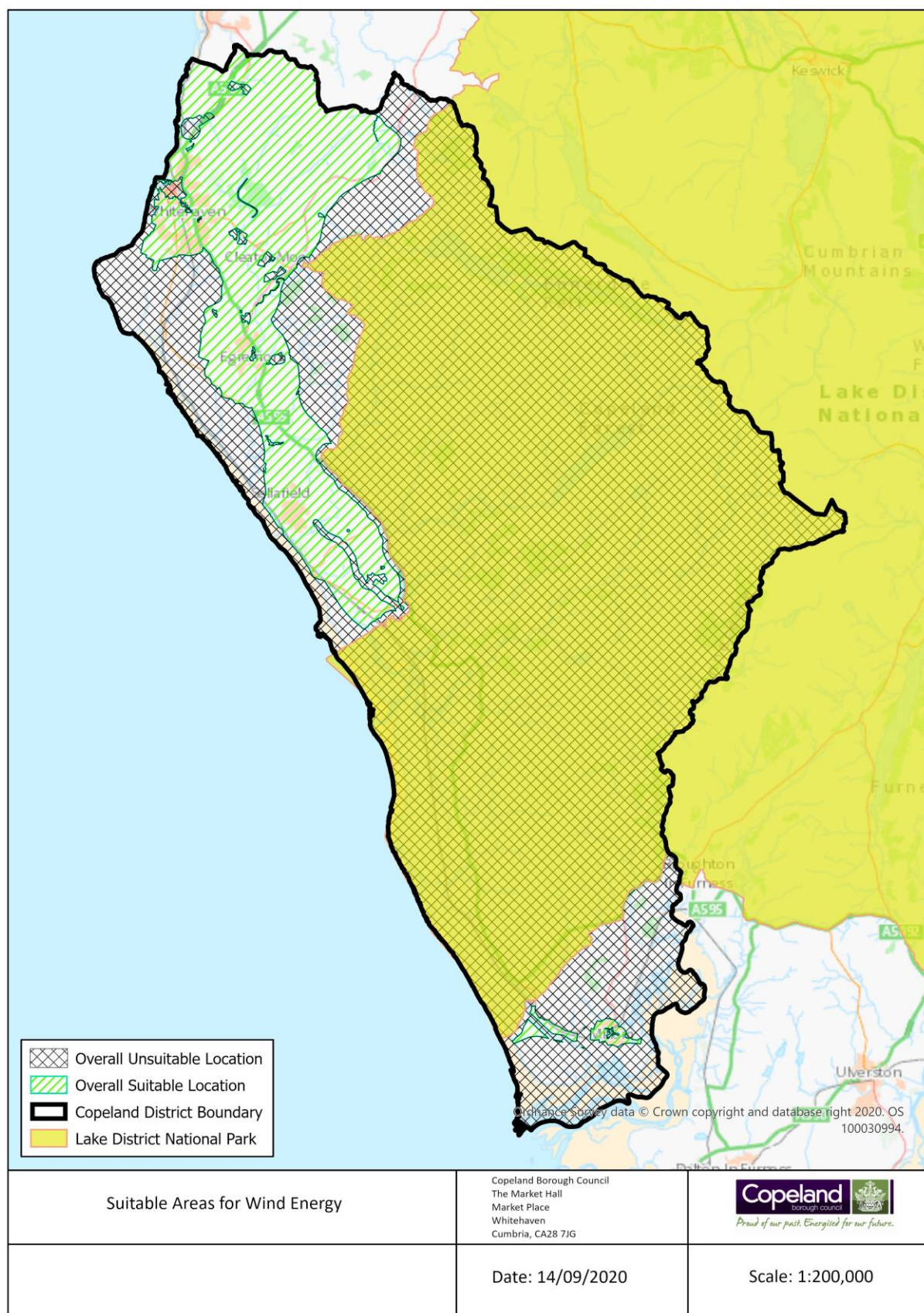


Figure 7: Preferred Option for Area Suitable for wind energy development

Appendix 1 Planning applications for wind energy in Copeland between 2011 and 2020

Reference	Decision Date	Description	Address	No. of turbines	Height to tip (m)	Power	Decision
4/11/2183/0F1	02/06/2011	Erection of three 15m micro wind turbines	Yeorton Hall Farm, Egremont	3	15	11.5kW	Refused
4/11/2111/0F1	09/09/2011	Erection of a micro wind turbine	Land near to 5 Ellerbeck Barns, Egremont	1	15	5kW	Approved on Appeal
4/11/2361/0F1	13/10/2011	Erection of a wind turbine	Land at High Thorny, Carleton, Egremont	3	79.6	500kW	Refused
4/11/2377/0F1	13/10/2011	New stadium (3 200 capacity) with associated grandstand and clubhouse facilities and ancillary accommodation	County Ground, Coach Road, Whitehaven	1	6.5	2.5kW	Approved
4/11/2439/0F1	10/11/2011	Erection of a single 100kw wind turbine	North of Beck Farm, Millom	1	47.5	100kW	Refused
4/11/2478/0F1	10/11/2011	Erection of a micro wind generator	Land at Moor Close, Outrigg Road, St. Bees/Egremont	1	16	5kW	Approved
4/11/2469/0F1	18/11/2011	Erection of a domestic wind turbine	Sea Breeze, South Beach, Braystones, Beckermest	1	6	0.4kW	Withdrawn
4/11/2534/0F1	05/01/2012	Erection of 2 small wind turbines	Land at Whangs Farm, Egremont	2	34.2	50kW	Approved
4/11/2535/0F1	05/01/2012	Erection of a small wind turbine	Land at Marlborough Hall Farm, Egremont	1	34.2	50kW	Withdrawn
4/11/2593/0F1	02/02/2012	Erection of one 15kw wind turbine	Field no. 4381, Land to south of Huntinghow Cottage/west of Quality Corner Moresby, Whitehaven	1	19.25	15kW	Approved
4/12/2096/0F1	28/03/2016	Erection of a 22.52m high wind turbine	Land at Springfield Farm, Bigrigg, Egremont	1	22.52	12kW	Approved
4/12/2119/0F1	26/04/2012	Erection of small scale wind turbine	Land near Ellerbeck Barns, Egremont	1	15.05	5kW	Approved
4/12/2123/0F1	26/04/2012	Erection of a single wind turbine	Land near Yeorton Hall Farm, Haile, Egremont	1	79.6	500kW	Refused
4/12/2124/0F1	30/04/2012	Erection of domestic wind turbine (retrospective)	Seabreeze, South Beach, Braystones, Beckermest	1	6.0	0.4kW	Approved
4/12/2173/0F1	23/05/2012	Erection of a wind turbine	Land at Bailey Ground	1	39	80kW	Approved

			Farm, Seascale				
4/12/2120/0F1	24/05/2012	Erection of single wind turbine	Land at Drigg Moorside Farm, Drigg, Holmrook	1	79.6	500kW	Refused
4/12/2250/0F1	20/06/2012	Erection of a single wind turbine	Land to north west of Distington	1	34.2	50kW	Approved
4/11/2480/0F1	16/07/2012	Erection of a wind turbine	Land at Green House Farm, Lowca, Whitehaven	1	79.6	500kW	Approved on Appeal
4/12/2223/0F1	19/07/2012	Erection of wind turbine	Land at High House Farm, Wilton, Egremont	1	34.4	50kW	Refused
4/12/2170/0F1	15/08/2012	Erection of a single wind turbine	Fields 4400 & 6382, land adjacent to Watch Hill, Low Moresby, Whitehaven	1	74	500kW	Approved
4/12/2246/0F1	16/08/2012	Erection of a single wind turbine	Land to the north west of Kidburngill Farm, Lamplugh	1	67	900kW	Refused
4/12/2222/0F1	03/09/2012	Installation of a single small wind turbine	Land at Marlborough Hall Farm, Egremont	1	34.2	50kW	Withdrawn
4/11/2485/0F1	17/10/2012	Construction and operation of a wind farm consisting of 6 no wind turbines, control building and anemometer	Land to the west of Steel Brow Road (known as Weddicar Rigg), Arlecdon, Frizington	6	115	2MW	Refused
4/12/2547/0F1	30/01/2013	Erection of wind turbine	Land at High House Farm, Wilton, Egremont	1	34.4	50kW	Refused
4/12/2557/0F1	30/01/2013	Erection of a single wind turbine	Land at Lowca Top Road, Lowca, Whitehaven	1	79.6	500kW	Approved
4/12/2397/0F1	31/01/2013	Erection of single 67m wind turbine	Land to north east of Middle Gill Farm, Howgate, Whitehaven	1	67	900kW	Refused
4/12/2566/0F1	27/03/2013	Installation of a single 11kw Gaia wind turbine	Land at Low Thorney Farm, Carleton, Egremont	1	24.8	11kW	Approved
4/13/2026/0F1	22/05/2013	Installation of a 500kw wind turbine	Land to south west of Fairladies Farm, Outrigg Road, Egremont	1	66	500kW	Refused
4/13/2071/0F1	23/05/2013	Installation of single wins turbine	Marlborough Hall Farm, Egremont	1	34.2	50kW	Approved
4/13/2061/0F1	11/06/2013	Erection of wind turbine	Drigg Moorside Farm, Drigg, Holmrook	1	79.6	400kW	Approved
4/13/2091/0F1	19/06/2013	Erection of a single wind	Land near Yeorton Hall	1	45.5	400kW	Approved

			Farm, Haile, Egremont				
4/13/2145/0F1	18/07/2013	Installation of a single wind turbine	Land near Bonny Farm, Moresby Parks, Whitehaven	1	66	500kW	Refused
4/13/2157/0F1	22/07/2013	Installation of a single wind turbine	Land at Highfield Farm, Egremont	1	45.5	250kW	Approved
4/13/2209/0F	05/08/2013	Installation of a single 500kw wind turbine	Land at Winder, Frizington	1	70	500kW	Withdrawn
4/13/2173/0F1	15/08/2013	Installation of a single 250kw wind turbine	Land at Stubsgill Farm, Distington	1	45.5	250kW	Approved
4/13/2217/0F1	12/09/2013	Installation of a 5kw small wind turbine	Land at Hawes Farm, Kirkland	1	15	5kW	Approved
4/13/2318/0F1	09/10/2013	Installation of single wind turbine	Land south of Langhorn Farm, Bigrigg, Egremont	1	46.3	50kW	Approved
4/13/2240/0F1	18/12/2013	Proposed siting of a single wind turbine to replace planning permission 4/12/2199/OF1	Land at Green Lonning, St. Bees	1	34.2	50kW	Approved
4/14/2019/0F1	20/01/2014	Erection of a single wind turbine	Land at Drigg Moorside, Drigg, Holmrook	1	57	500kW	Withdrawn
4/13/2392/0F1	21/01/2014	Proposed siting of a single wind turbine	Land at Oxenriggs Farm, Egremont	1	34.5	50kW	Approved
4/13/2440/0F1	27/02/2014	Proposed siting of a single wind turbine	Land at Bailey Ground Farm, Santon Way, Seascale	1	45	225kW	Refused
4/13/2511/0F1	27/02/2014	Erection of single wind turbine	Land near Yeorton Hall Farm, Haile, Egremont	1	57	500kW	Refused
4/13/2125/0F1	16/04/2014	Erection of one wind turbine	Land at Castlerigg Farm, Moresby Parks, Whitehaven	1	77	50kW	Approved on Appeal
4/14/2102/0f1	21/05/2014	Erection of single wind turbine	Drigg Moorside Farm, Drigg, Holmrook	1	57	500kW	Refused
4/14/9005/0F2	15/07/2014	Installation of a single 5kw wind turbine on a 15m mast	Arlecdon Wastewater Treatment Works, Arlecdon, Frizington	1	17.75	5kW	No Objection (CCC application – approved)

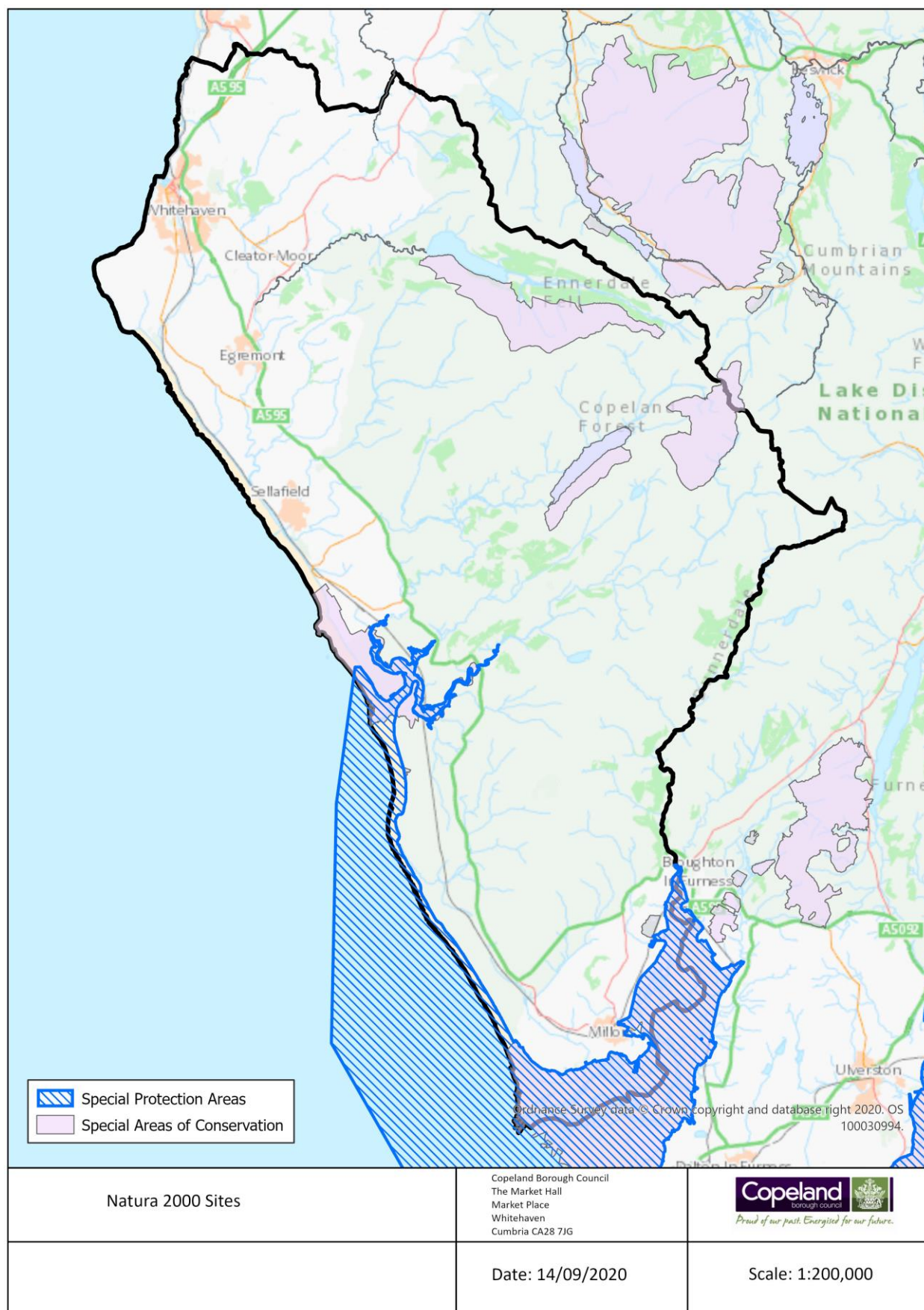
4/12/2251/0F1	10/09/2014	Five wind turbines with a maximum height of 120.5 metres new access track alterations to existing	Land to west and south of HMP Haverigg, off North Lane, Haverigg, Millom	5	120.5	3MW	Refused
4/14/2250/0F1	25/09/2014	Installation of a single wind turbine	Langthwaite Farm, Millom	1	21.6	10kW	Approved
4/14/2374/0F1	12/11/2014	Installation of 1 no. wind turbine with blade tip height of 50m	Land off Byersteads Road, Sandwith, Whitehaven	1	50	50kW	Refused
4/14/2241/0F1	10/12/2014	Installation of two 11kw Gaia wind turbines	High House, Wilton, Egremont	2	21.5	11kW	Approved
4/14/2251/0F1	10/12/2014	Proposed siting of a single wind turbine	Petersburgh Farm, Beckermest	1	45	225kW	Approved
4/14/2375/0F1	25/02/2015	Erection of one wind turbine	Land near Cobra Castle, Egremont	1	48.1	62kW	Refused
4/14/2502/0F1	05/03/2015	Erection of a single wind turbine	Land to south of Boonwood Farm, Distington	1	48.01	62kW	Refused
4/14/2475/0F1	25/03/2015	Proposed siting of a single wind turbine	Land to south of Green Lonning, St. Bees	1	36.6	50kW	Refused
4/14/2487/0F1	25/03/2015	Installation of a single wind turbine	Land near Cobble Hall Farm, Cleator	1	48.01	50kW	Refused
4/15/2022/0F1	10/06/2015	Erection of a wind energy development of 5 wind turbines	Land south of HMP Prison, off North Lane, Haverigg, Millom	5	100	15MW	Approved
4/14/2105/0F1	08/07/2015	Erection of two wind turbines	Land at Church House Farm, Calderbridge, Seascale	2	110	1.14MW	Refused
4/14/2511/0F1	05/08/2015	Installation of one wind turbine	Land to south of Bell House Farm, Sandwith, Whitehaven	1	36.6	50 kW	Approved
4/15/2187/0F1	05/08/2015	Erection of a single wind turbine	Land at High Farm, Low Moresby, Whitehaven	1	74	500kW	Refused
4/15/2246/0F1	02/09/2015	Installation and operation of a single wind turbine	Stubsgill Farm, Distington	1	45.5	250kW	Refused

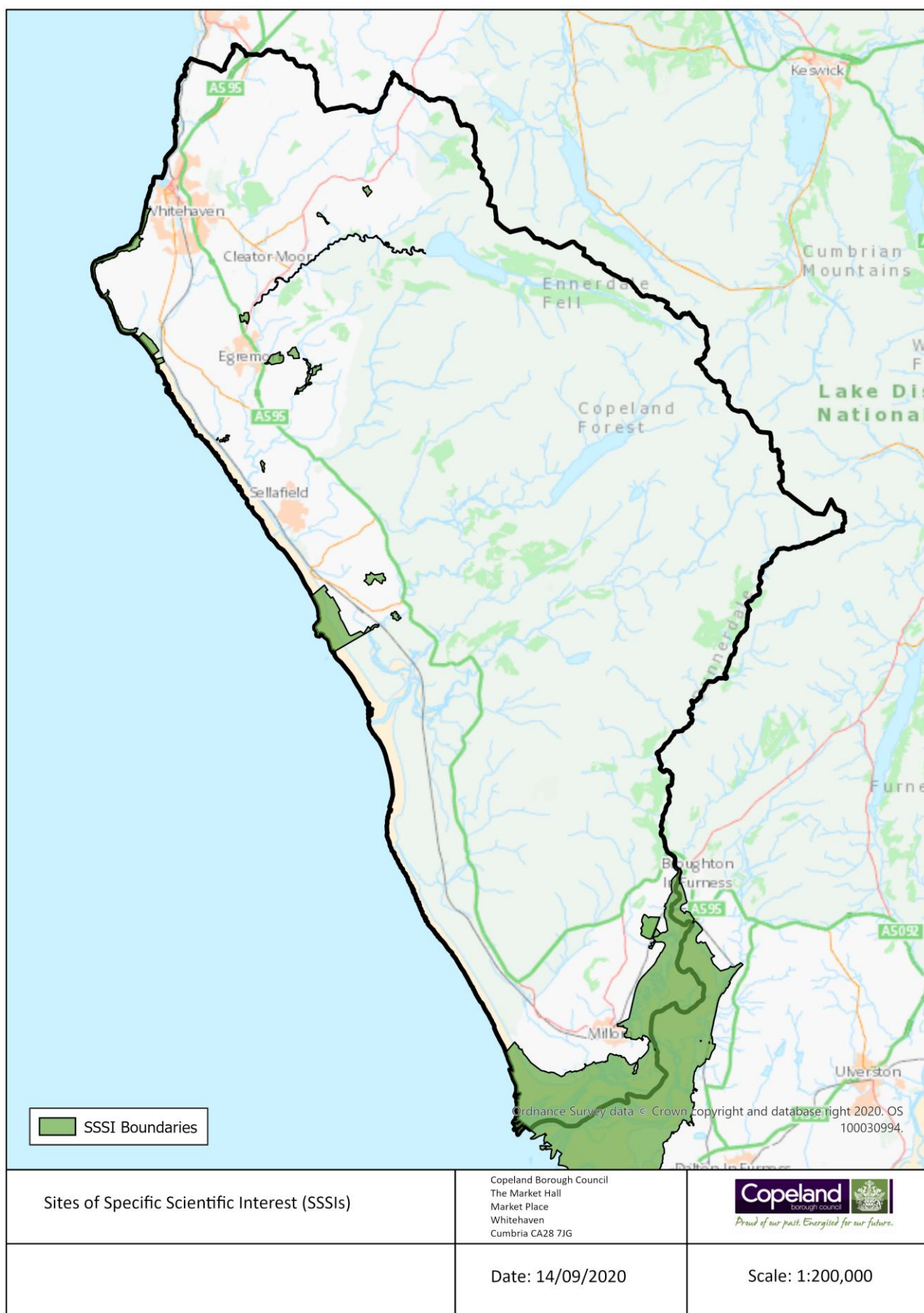
N.B. – it should be noted that some of the permitted turbines may not have been constructed

Appendix 2 Mapped constraints

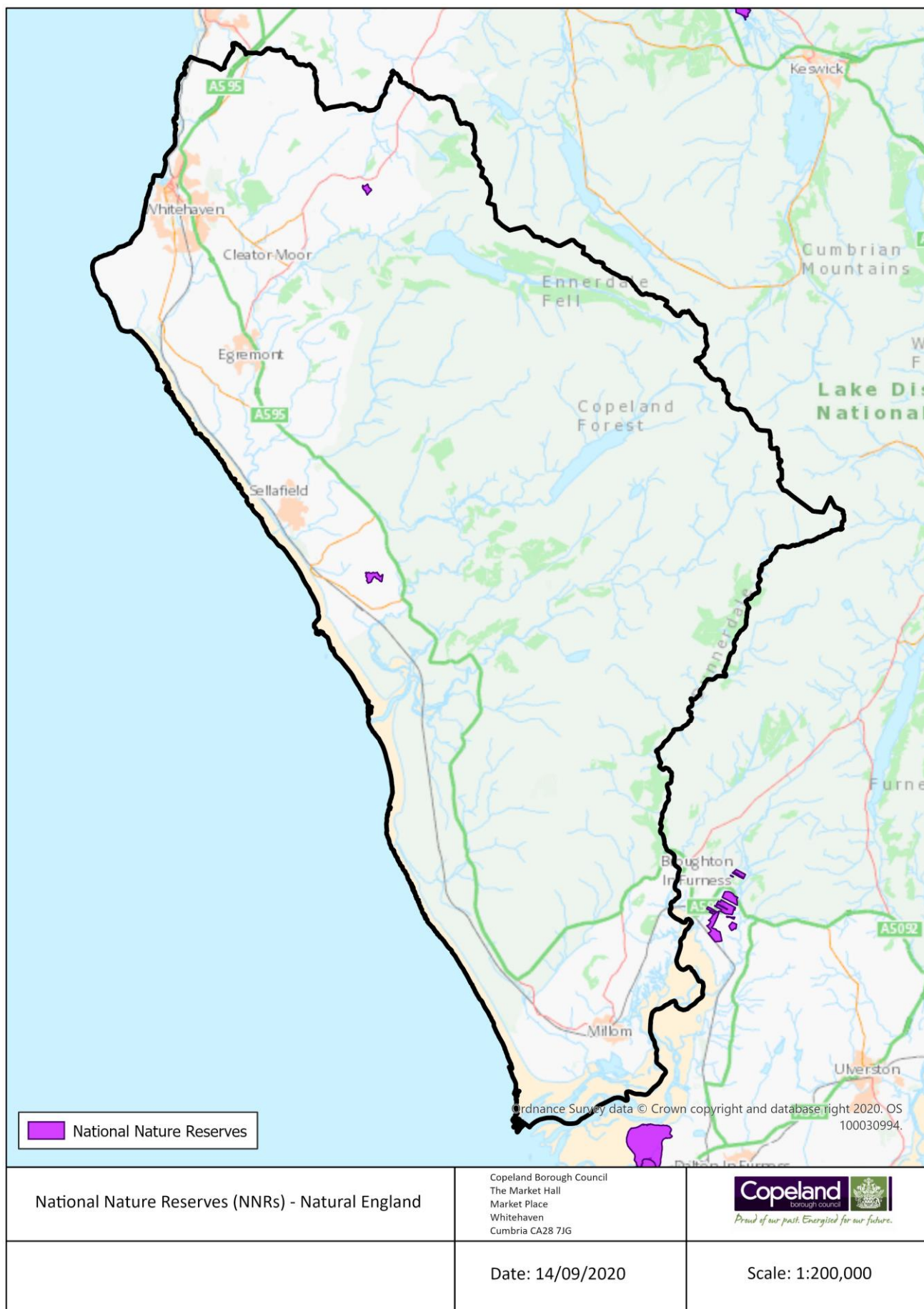


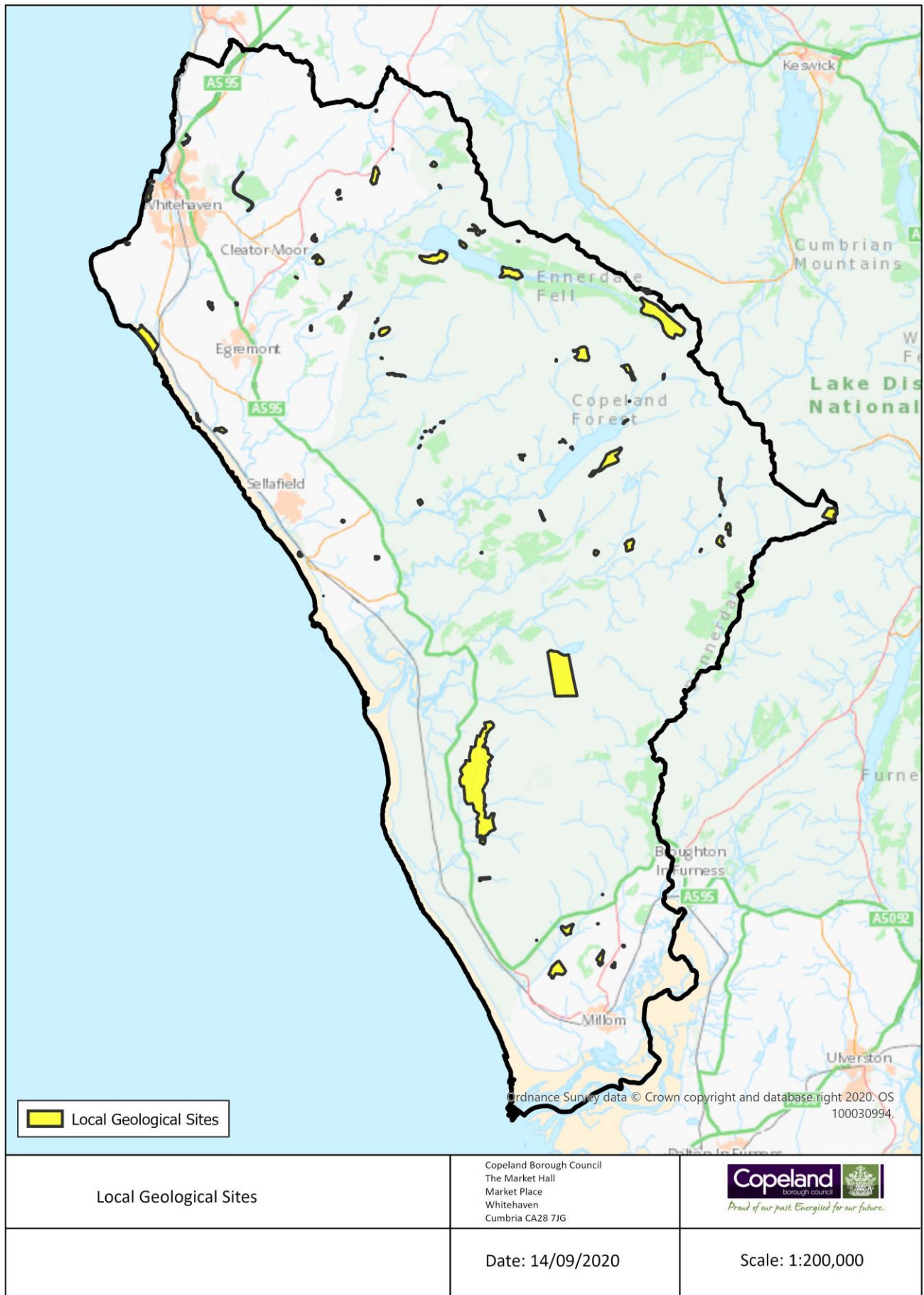


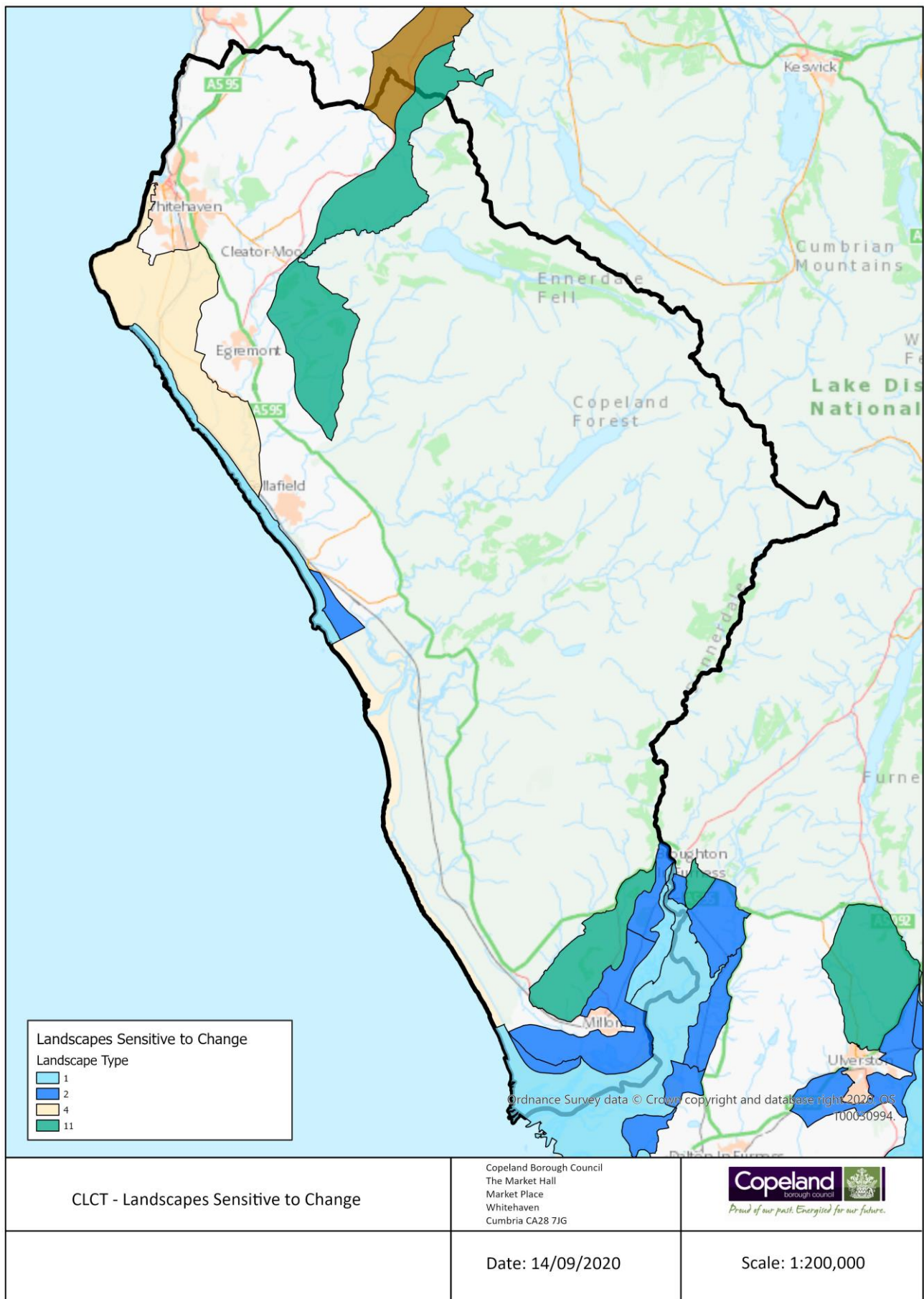
















Appendix 3 Details of landscape character areas

Landscape Character Type	Sensitive Characteristics or Features	Link to full Landscape Character Details
1. Estuary and Marsh ²¹	The largely undeveloped horizons, naturalness and tranquillity of the wide open seas and mudflats contribute to its sensitivity. Daily inundation provides a feeling of wildness and remoteness which is sensitive to man-made development. Nature conservation and birds reinforce the naturalness of area and is sensitive to significant changes in management and use. The large and expansive backdrop of the Lakeland and Scottish fells add to the drama of the area.	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/4065115218.PDF
2. Coastal Margins	The wildness and high ecological value of the sand dunes and dune grassland are likely to be sensitive to coastal dynamics, shoreline management responses and changes in management regimes. The small scale traditional coastal villages and farms are sensitive to medium to large scale expansion of modern housing and industry. The open and expansive views to a largely undeveloped horizon both inland and offshore are sensitive to large scale wind energy development. The feeling of tranquillity arising from 'naturalness' of the landscapes is sensitive to unsympathetic development and noisy land uses. The organic form and line along the coastal edge could be sensitive to hard realignment and changes in sea level and coastal dynamics.	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/4065115320.PDF
3. Coastal Sandstone	The dramatic cliffs of St Bees Heritage Coast, their colonies of breeding sea birds that provide a strong link with the open sea and sense of 'naturalness', and the discrete siting of the railway line along the lower coastal edge are all sensitive to the dynamic forces of the	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/4065114150.PDF

²¹ This is the title used in the Cumbria Wind Energy Supplementary Planning Document, 2007. This landscape character type is now referred to as Bay and Estuary.

	sea. The networks of native hedges are sensitive to changes in land management and farm diversification. Discrete settlements, the distinctive sandstone of traditional buildings and fossilised medieval strip fields are sensitive to village expansion.	
5 Lowland	The peaceful pastoral atmosphere away from busier parts is sensitive to large scale development. Native broadleaved woodlands, shelterbelts and remnant parklands, species rich hedges and hedge banks, and the interest they provide to the farmed landscape, are sensitive to changes in land management. Discrete and dispersed farmsteads are sensitive to unsympathetic expansion. Ridge top locations of settlements are sensitive to village expansion. Undeveloped areas of ridge tops and valley rims are sensitive to large scale ridge line development where significant contrast could arise between small scale settlements and large scale features such as large scale wind turbines and pylons. Open and uninterrupted views from ridge tops to the Solway Firth and Lakeland Fells are sensitive to large scale infrastructure development.	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/4065114319.PDF
9. Moorland Hills and Low Plateaus	The open character and expansive views across moorland and higher farmed areas are sensitive to large scale infrastructure development that could obscure or significantly interrupt the views. The small wooded valleys and shelterbelts that intersperse the open moorland and farmland are sensitive to changes in land management. The species rich hedgerows and wet mossland and flushes that provide biodiversity interest away from moorland and the archaeological remains and earthworks that provide cultural interest are sensitive to changes in land management. Contrast of rough moorland with improved pasture provides interest and is sensitive to changes in land management	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/40651143947.PDF
11 Upland Fringes	The strong matrix of stone walls and hedges provide a framework to the improved and semi improved pasture. Wooded ghylls, woodland and hedgerow trees provide interest and support biodiversity. These	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/40651144644.PDF

	are sensitive to changes in land management. Farmsteads and villages are discrete and dispersed and follow the grain of the rolling topography and are sensitive to unsympathetic expansion and redevelopment. Rural roads connect farmsteads and settlements following the flow of the topography and are sensitive to highway safety improvements or access to new developments. The remote, peaceful and rural farmland is sensitive to additional large scale coniferous plantations. The contrast in scale with Pennine Scarps and Lakeland Fells and more intimate farms and woodland are sensitive to large scale infrastructure development.	
12. Higher Limestone	The limestone vernacular from field walls, lime kilns and traditional farm and village buildings is sensitive to changes in land management and new development patterns and materials. Species rich hay meadows and roadside verges, and the matrix of walls that reinforce the rolling landscape grain and varied historic field patterns are sensitive to changes in land management. Small, traditional villages, with a rural character and village greens are sensitive to village expansion. Discrete rural roads winding along contours are sensitive to highway improvements. Archaeological remains and historic farm buildings and features are sensitive to changes in landscape management and village/farmstead expansion. Long open views to the Fells, Pennines and Howgills are sensitive to large scale and prominent development that could significantly interrupt views.	https://cumbria.gov.uk/elibrary/Content/Internet/538/755/2789/40651144950.PDF